



Washers, Spacers and Shims Made to Order

Choose from a wide variety of sizes and materials with no tooling charges when you order non-standard washers and spacers from Boker's 2014 Catalog. With outside diameters of 0.080" to 5.140" and a wide variety of inside diameters and thicknesses as well as material variations, you have endless possibilities. In the 1.000" OD size alone, there are over 200 options available.



Superalloys Available

Boker's offers wrought cobalt, iron and nickelbase superalloys together with the company's industry-best selection of over 2,000 washer and spacer materials. Superalloys provide superior mechanical strength, good surface stability, corrosion resistance, and can withstand high temperatures without oxidizing or losing mechanical properties. The new materials include 3 varieties of wrought cobaltbase, 7 varieties of wrought iron-base, and 11 varieties of wrought nickel-base superalloys. Boker's features the capabilities to produce short, medium or long run washer and spacer orders in over 28,000 non-standard sizes with no tooling charges.



Special Shapes and Sizes

As the photo above shows, Boker's can make special washer shapes and sizes, up to 12" in outside diameter. These custom items are made with very low tooling costs. They can be easily quoted by sending, faxing or emailing us your print. Tell us what you need and we'll make it to your exact specifications.

Metric Sizes No Problem!

All Boker's washer sizes are also available in metric measurements and searchable at bokers.com To specify a specific metric size simply send us your prints or call toll-free at (800) 927-4377.



Fast Delivery

At Boker's, fast delivery is the standard practice. Boker's can also meet your delivery and stocking requirements with flexible "Just-In-Time" (J.I.T.) and "Dock-to-Stock" programs. In case of an urgent requirement, your order can also be expedited for even faster delivery.

Minimum Quantity

Orders require a minimum production run of 100 pieces, though deliveries of lesser quantities can be arranged. Per-unit costs rapidly decrease as the quantity increases.

High Volume Orders

Increased washer production capacity and enhanced technology allow Boker's quality non-standard washers to be manufactured quickly well into the millions.



AS9100C/ISO 9001:2008 Registered

Boker's takes their manufacturing practices very seriously and maintains an AS9100C/ISO 9001:2008 registered status. This means when you purchase your products from Boker's you will have the confidence our processes are efficient and effective.



Secondary Operations

Boker's provides the secondary operations you require including deburring, tapping, reaming, counterboring, and spotfacing to name a few. Boker's also has approved vendors for heat treating and plating. See page 4 for a full list of equipment and capabilities.



Non-Metallic Washers & Spacers

The thickness ranges stated in this catalog are minimum and maximum values for metallic washers and spacers but may be suitable for non-metallic pieces as well. For easy reference, tools listed in **BOLD TYPE** can be considered for non-metallic items from .005" to .125" thick.

When determining the proper sized tool for your washer or spacer, the outside diameter (O.D.) listed in the catalog typically remains the same for both the metallic and non-metallic part. The inside diameter (I.D.), however, may shrink by as much as ten percent of the material thickness depending on the material used and its thickness.

Boker's estimates of these shrinkage factors are as follows:

| us ioliows. | |
|------------------|------------|
| MATERIAL | FACTOR (%) |
| Polycarbonate | 10-12 |
| Nylon | 10 |
| Polyethylene | 10 |
| Acetal | 10 |
| PVC | 10 |
| A.B.S. | 10 |
| MD Nylon | 10 |
| Polypropylene | 5-10 |
| PTFE | 5 |
| Polyester | 5 |
| Linen Phenolic | 5 |
| Vulcanized Fiber | 0-5 |
| FR-4 | 0-5 |
| G-10 | 0-5 |
| | |

For assistance in determining the actual tool to be used, please contact one of our estimators at (800) 927-4377.

Environmental Stewardship

Boker's, Inc. is committed to responsible business practices that reflect our dedication to our employees, customers and country. Boker's, Inc. is working toward sourcing all material and services that are validated to be from conflict free smelters.



Owner Operated Since 1919

BOKER'S, INC.



Over 2,000 Materials

To expedite your order and shorten delivery time, Boker's has immediate access to over 2.000 commonly specified and hard-to-find materials including low carbon, cold rolled strip and sheet steel; SAE 1050, 1075, and 1095 spring steel; blue and black temper spring steel; low alloy steel sheets; brass; copper; nickel silver; beryllium copper; phosphor bronze; stainless steel; aluminum; and several non-metallic materials such as acetal, PTFE, polyester, nylon, fiber, polyethylene, and NEMA grade laminates. Plus varieties of wrought cobalt, iron and nickel-base superalloys for demanding, high-performance applications. Certificates of Compliance or chemical/physical analysis are available upon request. Whatever your needs, if it can be stamped, Boker's can turn it into your washer or spacer.



Precision Fabrication

It's important for you to know that the washers and spacers you get from Boker's are going to meet your specifications. From the first part to the last... Those aren't just words at Boker's, but the goal of the quality-conscious personnel who produce your precision parts with tolerances as close as the specifications demand, and sometimes even closer. Metallic washers and spacers are flat, tumble deburred, and can be heat treated or plated. As a final check, your parts are sent to the inspection department before your order is shipped.

Equipment and Capabilities List

Housed in over 90,000 square feet of buildings, the equipment listed below, as well as all tooling, are protected by a central station security and fire system.



Tool & Engineering Department

- CAD CAM Drawing System
- Kitamura Vertical Machine Center
- Mori Seiki Vertical Machine Center (20" x 40")
- Mori Seiki High Precision C.N.C. Lathes
- Digital Optical Comparator
- Cylindrical & Automatic Surface Grinders
- (3) Charmilles Wire E.D.M.s (14" x 21" x 8")
- Charmilles E.D.M. Drill

Washer Department

- 18 Punch Presses (10 to 60 tons)
- Digital Servo Feeders
- Electric Coil Reels (1,200 lb. capacity)
- Coil Straighteners
- Tonnage Monitors

Stamping Department

- 46 Punch Presses (10 to 200 tons)
- 2 High Speed Minster Progressive Die Presses (60 to 150 tons)
- Digital Servo Feeders
- Electric Coil Reels (6,000 lb. capacity)
- 48" Press Brake
- Optical Part Detection Systems
- Tonnage Monitors

Raw Stock & Shear Department

- 2-10' Shears (.25" thick maximum)
- Stanat Model Rolling Mill
- Cooper Weymouth Roller Levelers
- Coil Set Straightener
- Wilder Coil Slitter
- Computer Inventory & Control System

Heat Treating Department

- Electric High Temperature Hardening Furnaces
- Electric Tempering Furnaces (all furnaces calibrated)

Cleaning & Deburring Department

- Agitated Chemical Washing System
- Rotary Deburring Machines
- Vibratory Deburring Machines
- Centrifugal Tumblers
- Heated Centrifugal Dryers
- Lewis Ultrasonic Cleaner
- High Energy Deburring Machines

Secondary Operations Department

- Trimming Lathes
- Production Milling Machines
- Pneumatic Presses
- Tapping Machines
- 6 Spindle Machine Centers (multiple head drilling, tapping, and reaming)
- 4 Straight-liners up to 18"
- Parts Washing System

Shipping Department

- Toledo Electronic Scales & Printer
- Precision Mettler Electronic Scale
- Sartaurious Precision Electronic Scale & Printer
- Automated Protective Packaging Bagger
- Polychem Automatic Plastic Strapping System
- Hercules Ergo Container Handling System
- Wulftec Pallet Wrapper



Inspection Department

- Numerex Coordinate Measuring Machine
- Digital Optical Comparator
- Hardness Testers
- Digital Profilometer
- Ceramic Gauge Block Sets
- Plug Gauge Sets
- Height Gauges
- Thread Gauges
- *Statistical Process Control & Capability Studies Available.



Material Capabilities

• Material Thickness: .005" to .134"

• Blank Size: 12" x 12" maximum (flat)

• Draws: 8" diameter, 3" deep maximum



Credit Cards Accepted









Call Toll Free: 1-800-927-4377



3104 Snelling Avenue Minneapolis, MN 55406-1937 (612) 729-9365 • Fax (800) 321-3462 Call 1-800-WASHERS www.bokers.com • sales@bokers.com

Boker's Non-Standard Washers and Spacers

This is our list of stock tools from which our washers are made to your order in any quantity without a tooling charge. We do NOT carry any washers in stock. You can choose an exact thickness for metal washers within the tool range indicated. For easy reference, tools in **BOLD TYPE** can be considered for non-metallic items from .005" to .125" thick. For the most up-to-date list of sizes, please visit **bokers.com**

| | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any |
|----------------------|----------------------|----------------------------|----------------------|---------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| .080 | .049 | .005010 | .109 | .067 | .008018 | .124 | .073 | .005010 | .138 | .070 | .005010 | .150 | .087 | .010015 | .157 | .088 | .005010 |
| .081 | .033 | .005010 | .110 | .032 | .010015 | .125 | .049 | .005010 | .138 | .073 | .005010 | .150 | .088 | .005010 | .157 | .091 | .010020 |
| .084 | .043 | .005010 | .110 | .054 | .005010 | .125 | .052 | .005012 | .138 | .075 | .015030 | .150 | .089 | .015025 | .157 | .092 | .010020 |
| .084 . 084 | .048 .065 | .012020 .005010 | .110 .110 | .055 .073 | .010020 .005010 | .125 .125 | .054 .055 | .015025 .020030 | .138 .138 | .088 .102 | .005010 .005010 | .150 .150 | .090 .091 | .015030 .005012 | .157 .157 | .094 .096 | .020030 .005030 |
| .085 | .040 | .005010 | .111 | .061 | .010020 | .125 | .060 | .015030 | .139 | .047 | .005010 | .150 | .099 | .020025 | .157 | .120 | .005010 |
| .085 | .048 | .010015 | .111 | .067 | .015025 | .125 | .062 | .010020 | .139 | .053 | .005012 | .150 | .116 | .016020 | .157 | .127 | .005010 |
| .086 | .027 | .010020 | .112 | .039 | .005010 | .125 | .063 | .005020 | .139 | .056 | .010020 | .151 | .056 | .015025 | .158 | .040 | .010020 |
| .086 | .036 | .005008 | .112 | .044 | .012020 | .125 | .064 | .010020 | .139 | .057 | .005012 | .151 | .069 | .005010 | .158 | .046 | .012025 |
| .086 | . 045 .048 | .010015 | .112 .112 | .059 .061 | .015025 .005010 | .125 .125 | .065 .066 | .005030 | . 139 .139 | .063 .066 | .005010 .015030 | . 151 .151 | . 073 .077 | .005010 .015020 | .158 .158 | .050 .057 | .020035 .010020 |
| .087 | .043 | .015030 | .112 | .062 | .015025 | .125 | .067 | .015025 | .139 | .000 | .010020 | .151 | .078 | .010020 | .158 | .060 | .020030 |
| .088 | .066 | .005015 | .112 | .067 | .015025 | .125 | .068 | .010032 | .139 | .097 | .005010 | .151 | .083 | .025030 | .158 | .089 | .020032 |
| .089 | .044 | .005010 | .112 | .073 | .005010 | .125 | .069 | .005010 | .140 | .062 | .005010 | .152 | .094 | .020025 | .158 | .094 | .025035 |
| .089 | .065 | .005015 | .113 | .052 | .005010 | .125 | .072 | .012020 | .140 | .073 | .005010 | .152 | .095 | .015025 | .158 | .095 | .005010 |
| .090 | .030 .050 | .010015 .010015 | .113 .114 | .074 .044 | .005010 .005010 | .125 .125 | .076 .078 | .020025 .005010 | .140 .140 | .082 .090 | .005032 .005010 | .152 .152 | .098 .100 | .005010 .005010 | .158 .158 | .098 .100 | .005015 .015020 |
| .090 | .054 | .010015 | .114 | .066 | .005010 | .125 | .042 | .008032 | .140 | .095 | .005010 | .152 | .056 | .010020 | .158 | .101 | .005010 |
| .090 | .064 | .008012 | .114 | .073 | .005010 | .126 | .050 | .005012 | .140 | .109 | .010015 | .153 | .061 | .005010 | .158 | .119 | .015025 |
| .091 | .031 | .005010 | .115 | .031 | .010020 | .126 | .052 | .008025 | .141 | .061 | .005010 | .153 | .062 | .005010 | .159 | .077 | .005010 |
| .091 | .065 | .005010 | .115 | .033 | .005010 | .126 | .057 | .025032 | .141 | .065 | .015025 | .153 | .073 | .015025 | .159 | .081 | .005010 |
| .092 .092 | .027 .041 | .010015 .008012 | . 115 .115 | .061 .079 | .005010 .005015 | .126 .126 | .062 .064 | .008020 | .141 | .067 .076 | .010016 .005010 | .153 .153 | .077 .078 | .025035 .005015 | . 159 .159 | .095 .100 | . 005010 .010025 |
| .092 | .043 | .010020 | .116 | .079 | .005010 | .126 | .065 | .005015 | . 141 .141 | .079 | .015025 | .153 | .078 | .020035 | .159 | .110 | .010025 |
| .092 | .044 | .005010 | .116 | .055 | .010020 | .126 | .068 | .005010 | .141 | .092 | .015025 | .153 | .095 | .020030 | .160 | .060 | .005015 |
| .092 | .047 | .005010 | .116 | .066 | .015025 | .126 | .073 | .005010 | .142 | .038 | .015030 | .153 | .100 | .010025 | .160 | .088 | .010020 |
| .092 | .060 | .005010 | .116 | .067 | .005010 | .126 | .095 | .005015 | .142 | .073 | .005010 | .154 | .073 | .020040 | .160 | .090 | .005010 |
| .093 | .036 .049 | .010020 .010020 | .116 .117 | .073 .032 | .005010 .005010 | . 126 .127 | .096 .039 | .005010 .020032 | .142 .142 | .076 .078 | .005010 .005010 | .154 .154 | .095 .101 | .005010 .005010 | .160 .161 | .095 .063 | .025040 .015030 |
| .093 | .051 | .005020 | .117 | .035 | .005012 | .127 | .039 | .010020 | .142 | .083 | .005010 | .154 | .110 | .020030 | .161 | .069 | .010020 |
| .094 | .062 | .010015 | .117 | .056 | .010015 | .127 | .047 | .015030 | .142 | .089 | .020030 | .155 | .064 | .015030 | .161 | .076 | .015030 |
| .095 | .024 | .010015 | .118 | .058 | .010020 | .127 | .065 | .012020 | .142 | .098 | .010015 | .155 | .066 | .005010 | .162 | .061 | .005020 |
| .095 | .043 | .005010 | .118 | .073 | .005020 | .127 | .067 | .010020 | .143 | .052 | .005010 | .155 | .069 | .005015 | .162 | .077 | .012020 |
| .095 .095 | .049 .052 | .005010 .005010 | .118 .118 | .075 .080 | .005015 .005012 | .127 .127 | .077 .083 | .015025 .015030 | .143 .143 | .083 | .015025 .010020 | .155 .155 | .072 .076 | .020040 .010020 | .162 .162 | .086 .097 | .020032 .010020 |
| .095 | .056 | .015020 | .118 | .091 | .005012 | .127 | .093 | .010015 | .143 | .097 | .005015 | .155 | .078 | .008012 | .162 | .112 | .005010 |
| .097 | .060 | .005010 | .120 | .039 | .010020 | .127 | .094 | .008015 | .144 | .065 | .005010 | .155 | .081 | .005010 | .163 | .082 | .015030 |
| .097 | .074 | .005010 | .120 | .040 | .010020 | .128 | .056 | .015025 | .144 | .073 | .005010 | .155 | .084 | .005010 | .163 | .110 | .015020 |
| .098 | .040 | .005010 | .120 | .041 | .005010 | .128 | .073 | .005010 | .144 | .076 | .010020 | .155 | .094 | .015025 | .163 | .128 | .005010 |
| .098 .098 | .064 .065 | .010020 .005010 | . 120 .120 | .050 .062 | .005010 .010020 | .128 .128 | .076 .089 | .015030 .005010 | . 145 .145 | .056 .068 | .005010 .005012 | . 155 .155 | . 111 .124 | .005010 .010020 | . 163 .164 | . 129 .081 | .005010 .010020 |
| .099 | .050 | .005010 | .120 | .063 | .015030 | .128 | .103 | .005010 | .145 | .090 | .005012 | .156 | .044 | .015035 | .164 | .087 | .005010 |
| .100 | .026 | .010015 | .120 | .065 | .005010 | .129 | .083 | .010020 | .145 | .097 | .005010 | .156 | .049 | .005015 | .164 | .100 | .005012 |
| .100 | .035 | .005010 | .120 | .070 | .015030 | .130 | .061 | .010020 | .145 | .116 | .005010 | .156 | .052 | .010032 | .164 | .114 | .010020 |
| .100 | .040 | .005010 | .120 | .073 | .005010 | .130 | .073 | .005010 | .146 | .046 | .010020 | .156 | .053 | .005012 | .165 | .040 | .010015 |
| .100 .100 | .055 .062 | .020030 . 005010 | .120 .121 | .080 .043 | .010016 .005012 | .131 .132 | .059 .073 | .005012 .005010 | .146 .146 | .065 .073 | .005010 .005010 | .156 .156 | .062 .064 | .020040 .016025 | .165 .165 | .051 .061 | .010015 |
| .100 | .065 | .005020 | .121 | .047 | .005010 | .133 | .052 | .005010 | .146 | .107 | .005010 | .156 | .065 | .020040 | .165 | .073 | .005015 |
| .100 | .067 | .015025 | .121 | .054 | .010025 | .133 | .088 | .005010 | .147 | .067 | .020032 | .156 | .066 | .020035 | .165 | .075 | .005010 |
| .101 | .036 | .015025 | .121 | .062 | .010020 | .133 | .096 | .010020 | .147 | .111 | .010025 | .156 | .067 | .008018 | .165 | .080 | .015025 |
| . 101 .101 | . 045 .049 | . 005030 .015020 | .121 .121 | .072 .092 | .005010 .005010 | . 134 .134 | .041 .070 | . 005010 .010020 | .148 | .068 | .010020 .005010 | .156 .156 | .068 .070 | .010040 .010025 | .165 .165 | .083 .090 | .005010 .005010 |
| .101 | .050 | .005010 | .121 | .049 | .010020 | .134 | .070 . 071 | .010020 | .148 .148 | . 073 .077 | .010020 | .156 | .071 | .005020 | .165 | .096 | .015030 |
| .102 | .040 | .020030 | .122 | .056 | .005010 | .134 | .073 | .005010 | .149 | .036 | .005010 | .156 | .077 | .015035 | .165 | .100 | .015025 |
| .102 | .053 | .020030 | .122 | .066 | .020030 | .134 | .095 | .005010 | .149 | .079 | .005010 | .156 | .078 | .005010 | .165 | .125 | .005010 |
| .104 | .044 | .020030 | .122 | .073 | .005010 | .135 | .035 | .005010 | .149 | .086 | .005010 | .156 | .080 | .025035 | .165 | .126 | .015025 |
| . 105 .105 | .030 .037 | .005015 .015025 | .122 .122 | .076 .095 | .010020 .008015 | .135 .135 | .059 .060 | .005010 .005010 | .149 .149 | .095 .097 | . 005010 .015025 | .156 .156 | .088 .094 | .006015 .010015 | . 166 .166 | .062 .073 | . 005010 .010020 |
| .105 | .044 | .005010 | .123 | .032 | .005015 | .135 | .066 | .005010 | .150 | .037 | .015025 | .156 | .095 | .005010 | .166 | .073 | .005010 |
| .105 | .047 | .005010 | .123 | .034 | .020030 | .135 | .072 | .005015 | .150 | .035 | .010020 | .156 | .098 | .010020 | .166 | .081 | .005010 |
| .105 | .056 | .015025 | .123 | .035 | .010020 | .135 | .085 | .005010 | .150 | .041 | .005030 | .156 | .100 | .016025 | .166 | .108 | .010020 |
| .105 | .057 | .005010 | .123 | .036 | .005010 | .136 | .064 | .015030 | .150 | .044 | .005010 | .156 | .103 | .015030 | .166 | .125 | .005010 |
| .105 .106 | .063 .065 | .010020 .010020 | .123 .123 | .052 .058 | .020040 . 005010 | .136 | .073 .090 | .005010 .005010 | .150 .150 | . 046 .056 | . 005010 .015020 | .156 .156 | .106 .115 | .005010 .005010 | .166 .167 | .129 .031 | .005010 .005010 |
| .106 | .069 | .010020 | .123 | .080 | .010020 | . 136 .136 | .095 | .012020 | .150 | .057 | .010020 | .157 | .043 | .020030 | .167 | .065 | .010020 |
| .106 | .077 | .005012 | .123 | .082 | .010020 | .137 | .049 | .005010 | .150 | .059 | .005010 | .157 | .057 | .005025 | .167 | .078 | .005010 |
| .107 | .055 | .005012 | .124 | .028 | .005010 | .137 | .066 | .012025 | .150 | .065 | .005010 | .157 | .061 | .010020 | .167 | .085 | .010020 |
| .108 | .055 | .005020 | .124 | .063 | .005010 | .137 | .077 | .020030 | .150 | .066 | .006010 | .157 | .064 | .005010 | .167 | .108 | .010020 |
| .109 .109 | .047 .058 | .012020 .010020 | .124 | .065 | .015025 | .137 | .091 n49 | .008016 | . 150 .150 | .073 .077 | . 005010 .010020 | .157 .157 | .066 .086 | .010020 . 005010 | .168 | .082 .096 | . 005010 .025040 |
| . 109 | .000 | .010020 | .124 | .066 | .015030 | .138 | .049 | .010020 | . 100 | .077 | .010020 | .107 | .000 | .000010 | .168 | .090 | .020040 |

NO TOOLING CHARGE FOR ANY OF THE SIZES LISTED

| Col. I.D. Choose Avy Col. I.D. I.D. I.D. Choose Avy Col. I.D. Choose Avy Col. I.D. I.D. I.D. Choose Avy Col. I.D. | O.D. | I.D. Choose Thickne 144 .010147 .005099 .010120 .005127 .015128 .040129 .020130 .005147 .005155 .005163 .010078 .005114 .005116 .025117 .005118 .015128 .015143 .012146 .015 - |
|---|--|--|
| 186 130 0.05 - 0.00 180 0.05 - 0.00 188 127 0.01 - 0.05 1.91 0.75 0.40 - 0.60 2.00 0.09 0.01 - 0.02 1.70 0.034 0.05 - 0.10 180 114 0.02 - 0.44 1.86 1.36 0.01 - 0.20 1.91 0.02 0.22 - 0.55 2.00 0.98 0.05 - 0.01 1.70 0.05 | .207 .5 .208 .208 .208 .208 .208 .208 .208 .208 | .144 .010147 .005099 .010120 .005127 .015128 .040129 .020130 .005147 .005155 .005163 .010078 .005114 .005114 .005116 .025117 .005128 .015128 .015143 .012 - |
| 195 115 015 025 180 100 025 040 188 129 020 040 181 077 005 030 020 005 005 010 170 044 015 032 180 118 005 040 188 136 010 020 191 104 020 030 020 030 005 010 170 067 070 020 030 180 141 005 010 187 070 020 030 180 141 005 010 187 077 020 030 180 141 005 010 187 077 020 030 180 141 005 010 187 077 020 040 181 078 005 010 187 077 020 040 181 078 005 010 187 077 020 040 181 078 005 010 187 077 020 040 181 078 007 016 187 078 020 040 181 078 007 016 187 078 020 040 181 078 007 016 187 078 020 040 181 078 007 040 | .207 .5 .208 .208 .208 .208 .208 .208 .208 .208 | .147 .005099 .010120 .005127 .015128 .040129 .020130 .005155 .005163 .010078 .005114 .005116 .025117 .005118 .025117 .005128 .015128 .015143 .012 - |
| 170 0.034 0.05 - 0.10 180 114 0.20 0.040 188 155 0.05 - 0.00 1.91 0.082 0.032 0.050 0.00 0.05 - 0.01 1.97 0.067 | 55 .208 .208 .208 .208 .208 .208 .208 .208 | .099 .010120 .005127 .015128 .040130 .005137 .005155 .005163 .010078 .005114 .005114 .005116 .025117 .005128 .015128 .015143 .012 - |
| 170 | .208 .208 .208 .208 .208 .208 .208 .208 | .120 .005127 .015128 .040129 .020130 .005147 .005155 .005163 .010078 .005090 .015114 .005116 .025117 .005128 .015143 .012 - |
| 170 0.07 0.01 0.020 180 128 0.05 0.01 187 0.42 0.15 0.30 1.91 1.92 0.10 0.20 0.20 0.09 0.015 0.30 1.91 1.92 0.10 0.20 0.08 0.15 0.20 0.08 0.15 0.20 0.08 0.15 0.20 0.08 0.15 0.20 0.08 0.15 0.20 0.00 0.10 0.05 0.10 0.18 0.05 0.00 0.18 0.05 0.00 0.18 0.05 0.00 0.18 0.05 0.00 0.18 0.05 0.00 0.18 0.05 0.00 0.18 0.05 0.00 0.18 0.05 0.00 0.18 0.05 0.00 0.18 0.05 0.00 0.05 0.10 0.18 0.05 0.00 0.10 0.18 0.05 0.00 0.10 0.18 0.05 0.00 0.18 0.05 0.10 0.18 0.05 0.00 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0.05 0.10 0.18 0. | 208 208 208 208 208 208 208 208 208 208 | .127 .015128 .040129 .020130 .005147 .005163 .010078 .005090 .015114 .005116 .025117 .005128 .015143 .012 - |
| 170 0.070 0.020 0.030 180 141 0.05 0.010 187 0.074 0.15 0.030 191 142 0.05 0.010 0.00 0.010 0.040 0.05 0.011 0.097 0.05 0.010 181 0.078 0.05 0.010 192 192 0.011 0.020 0.040 0.05 0.011 0.078 0.05 0.010 192 192 0.020 0.040 0.05 0.010 170 1.090 0.05 0.010 181 0.05 0.05 0.010 181 0.05 0.05 0.010 181 0.05 0.05 0.010 181 0.05 0.010 187 0.080 0.05 0.010 192 1120 0.020 0.040 2.00 1.05 0.010 0.05 0.011 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 1.020 0.05 0.010 0.020 1.020 1.05 0.010 0.020 1.05 0.010 0.020 1.05 0.010 0.020 1.05 0.010 0.020 1.05 0.010 0.020 1.05 0.010 0.020 1.05 0.010 0.020 1.05 0.010 0.020 1.05 0.010 0.020 1.05 0.010 0.020 1.05 0.010 0.020 0.05 0.010 0.020 0.05 0.05 0.010 0.020 0.05 0.05 0.05 0.010 0.020 0.05 | 55 .208 00 .208 00 .208 00 .208 55 .208 55 .208 66 .209 66 .209 60 .209 00 .209 | .128 .040129 .020130 .005147 .005155 .005163 .010078 .005090 .015114 .005116 .025117 .005128 .015143 .012 - |
| 1770 0.98 0.05 0.05 0.05 0.05 0.05 0.05 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.06 0.07 0.07 0.05 0.07 0.07 0.05 0.05 0.07 0.05 | 00 .208 00 .208 .208 .208 .208 .208 .5 .209 .6 .209 .6 .209 .210 .210 .210 .210 .210 .210 .210 | .129 .020130 .005147 .005155 .005163 .010078 .005090 .015114 .005116 .025117 .005128 .015143 .012 - |
| 170 0.997 0.05 - 0.01 181 0.078 0.05 - 0.01 182 0.078 0.05 - 0.01 192 118 0.05 - 0.01 0.02 0.05 - 0.01 170 0.05 0.05 0.01 181 0.087 0.05 - 0.01 187 0.08 0.05 - 0.01 0.05 - 0.01 192 118 0.05 - 0.01 2.00 1.02 0.05 - 0.01 171 0.05 0.05 - 0.01 181 0.05 0.05 - 0.01 181 0.05 0.05 - 0.01 182 183 0.05 - 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 0.01 0.05 | 0 .208 0 .208 .208 .208 .209 .200 .210 | .130 .005147 .005155 .005163 .010078 .005090 .015114 .005116 .025117 .005128 .015143 .012 - |
| 1770 1.09 0.25 0.05 0.05 181 0.087 0.05 0.010 187 0.081 0.05 0.010 192 118 0.05 0.010 105 0.010 0.05 0.010 177 0.05 0.05 0.010 181 0.05 0.05 0.016 187 0.081 0.05 0.010 192 118 0.05 0.010 0.020 110 0.25 0.03 171 0.08 0.05 0.010 0.010 0.010 0.010 0.020 110 0.25 0.03 0.05 0.010 0.00 0.010 0.00 0.011 0.010 0.020 0.05 0.010 0.00 0.011 0.00 0.05 0.010 0.00 0.011 0.00 0.011 0.010 0.020 0.011 0.010 0.020 0.011 0.010 0.020 0.010 0.01 | 0 .208 5 .208 5 .208 6 .209 6 .209 0 .210 0 .210 0 .210 0 .210 0 .210 | .147 .005155 .005163 .010078 .005090 .015114 .005116 .025128 .015143 .012 - |
| 171 121 0.05 - 0.01 181 0.93 0.05 - 0.10 187 0.081 0.05 - 0.10 192 123 0.05 - 0.01 200 110 0.25 - 0.25 0.05 1.17 0.086 0.03 - 0.05 0.181 1.16 0.15 - 0.03 1.87 0.084 0.05 - 0.01 1.92 1.33 0.05 - 0.01 2.00 1.16 0.01 - 0.02 1.71 0.086 0.03 - 0.05 0.181 1.18 0.05 - 0.05 1.87 0.084 0.05 - 0.05 1.92 1.49 0.05 - 0.05 2.00 1.26 0.02 - 0.03 1.71 0.09 0.05 - 0.03 1.81 1.28 0.05 - 0.02 1.87 0.09 0.00 - 0.03 0.05 0.19 1.49 0.05 - 0.05 0.00 0.05 0.00 1.20 0.05 0.02 0.00 1.20 0.00 0 | 5 .208 5 .208 5 .209 6 .209 0 .209 0 .209 0 .209 0 .209 0 .209 0 .209 0 .209 0 .209 0 .209 0 .210 0 .210 | .155 .005163 .010078 .005090 .015114 .005116 .025128 .015143 .012 - |
| 171 .065 .005010 .181 .095 .010016 .187 .082 .005042 .192 .125 .005010 .200 .116 .005 .005 .171 .096 .005030 .181 .116 .015035 .187 .086 .005050 .192 .149 .005025 .200 .125 .02003 .171 .098 .007015 .181 .128 .005025 .187 .086 .030050 .192 .149 .005025 .200 .125 .02003 .171 .100 .002 .182 .055 .025 .016 .002 .187 .099 .002040 .200 .020 .020 .202 .202 .203 .171 .128 .010020 .182 .057 .012020 .187 .099 .005001 .193 .111 .005010 .200 .128 .025 .026 .031 .171 .128 .010020 .182 .057 .012020 .187 .095 .005010 .193 .111 .005010 .200 .153 .005010 .171 .130 .005010 .182 .083 .040050 .187 .095 .005010 .193 .111 .005010 .200 .153 .005010 .171 .130 .005010 .182 .083 .040050 .187 .095 .005010 .193 .111 .005010 .200 .153 .005010 .172 .074 .005020 .182 .044 .015030 .187 .098 .015025 .193 .133 .005010 .200 .167 .005020 .122 .021 .038 .005010 .122 .021 .038 .005010 .172 .098 .020032 .182 .110 .010020 .187 .105 .005010 .193 .112 .005010 .200 .177 .100 .172 .098 .020032 .182 .134 .005010 .187 .104 .032 .042 .194 .065 .020030 .201 .067 .005010 .172 .098 .020032 .182 .134 .005010 .187 .106 .105040 .194 .006 .006 .006 .007 .007 .172 .109 .020 .031 .183 .096 .010 .202 .187 .116 .116 .101 .020 .195 .075 .020 .030 .201 .082 .020 .030 .173 .100 .173 .100 .101 .133 .096 .010 .187 .122 .005010 .195 .076 .005010 .201 .083 .020 .031 .173 .096 .015 .030 .187 .13 | 55 .208 .209 .210 .210 .210 .210 .210 .210 .210 .210 .210 .210 | .163 .010078 .005090 .015114 .005116 .025117 .005128 .015143 .012 - |
| 171 086 030 - 050 181 116 015 - 030 187 084 005 - 010 192 133 005 - 010 200 116 010 - 020 171 099 007 - 005 181 128 005 - 025 187 088 030 - 050 193 149 149 149 020 125 020 - 030 171 100 010 - 020 182 052 010 - 020 187 091 010 - 030 193 075 015 - 025 200 125 020 - 030 171 101 010 - 020 182 055 010 - 020 187 091 015 - 025 193 103 010 - 020 020 148 025 - 040 171 129 010 - 020 182 056 010 - 020 187 091 015 - 025 193 103 010 - 020 020 143 015 - 025 017 171 129 010 - 020 182 068 010 - 020 187 091 015 - 025 193 103 010 - 020 020 143 015 - 025 017 171 129 010 - 020 182 068 040 - 020 187 096 010 - 025 193 131 005 - 010 200 160 0200 172 030 172 074 005 - 020 182 030 040 - 050 187 096 010 - 025 193 133 005 - 010 200 160 0200 172 020 172 080 015 - 025 182 110 010 - 020 187 100 005 - 010 193 183 100 - 010 200 160 0200 172 020 172 096 020 - 032 182 134 005 - 016 187 106 015 - 025 183 133 005 - 010 200 177 010 - 020 172 098 020 - 032 182 134 005 - 016 187 106 015 - 040 194 068 040 - 060 201 078 005 - 010 172 109 020 - 040 183 097 012 - 025 187 108 005 - 010 194 094 006 020 032 032 035 010 032 035 0 | .209 .210 | .078 .005090 .015114 .005116 .025117 .005128 .015143 .012 - |
| 171 0.99 0.05 - 0.05 181 127 0.15 - 0.25 187 0.98 0.03 - 0.05 | 66 .209 66 .209 00 .209 00 .209 00 .209 00 .209 00 .209 00 .209 00 .210 00 .210 00 .211 | .090 .015114 .005116 .025117 .005128 .015143 .012 - |
| 171 .098 .007015 .181 .128 .005025 .187 .098 .010030 .193 .075 .015030 .200 .126 .020030 .171 .101 .010020 .182 .052 .010020 .187 .091 .015025 .193 .103 .005010 .200 .128 .025040 .171 .128 .010020 .182 .068 .010020 .187 .091 .015025 .193 .103 .010020 .200 .143 .005010 .171 .130 .005010 .182 .083 .040050 .187 .096 .010025 .193 .131 .005010 .200 .153 .005010 .171 .130 .005010 .182 .083 .040050 .187 .096 .010025 .193 .130 .005010 .020 .163 .005010 .172 .074 .005020 .182 .094 .015035 .187 .100 .005010 .193 .111 .005010 .200 .153 .005010 .172 .074 .005020 .182 .101 .010020 .187 .000 .005010 .193 .162 .005010 .102 .005 .010 .122 .003 .005010 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .177 .010020 .187 .100 .015010 .183 .005010 .187 .104 .032 .042 .194 .065 .020030 .201 .067 .010020 .177 .010020 .177 .010020 .187 .100 .187 .104 .015 .020 .030 .020 .030 .021 .086 .020030 .121 .020 .030 .187 .116 .015032 .195 .032 .005010 .201 .082 .020030 .187 .121 .020 .030 .187 .121 .020 .030 .187 .121 .035 .032 .005010 .201 .083 .020 .030 .187 .121 .035 .035 .101 .135 .032 .005010 .135 .035 .133 .035 .035 .101 .135 .035 .035 .101 .135 .035 .035 .135 .035 .035 .135 .035 .035 .035 .135 . | 66 .209 00 .209 00 .209 00 .209 00 .209 00 .209 00 .210 00 .210 00 .211 | .114 .005 - .116 .025 - .117 .005 - .128 .015 - .143 .012 - |
| 171 101 010 020 182 052 010 020 187 099 025 040 193 095 020 040 200 128 025 040 171 128 010 020 182 057 012 020 187 095 005 010 193 101 100 020 200 128 025 040 171 171 172 010 020 182 083 040 050 087 095 005 010 193 101 100 020 100 020 160 020 030 | 0 .209 0 .209 0 .209 0 .209 0 .209 0 .209 0 .209 0 .210 0 .210 0 .211 | .116 .025 - .117 .005 - .128 .015 - .143 .012 - |
| 171 128 010 020 182 0.67 0.12 0.20 187 0.95 0.05 0.01 193 111 0.05 0.01 0.20 153 0.05 0.01 171 173 0.05 0.01 182 0.083 0.04 0.05 187 0.95 0.05 0.01 193 111 0.05 0.01 200 153 0.05 0.01 0.20 133 0.05 0.01 0.20 0.30 182 0.94 0.05 0.05 0.01 0.02 193 133 0.05 0.05 0.01 0.20 0.30 182 0.94 0.05 0.05 0.01 0.20 187 0.95 0.05 0.01 0.93 133 0.05 0.05 0.01 0.20 0.30 0.05 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.5 0.01 0.20 0.30 0.30 | .209 .209 .209 .209 .209 .209 .209 .210 .210 .210 .211 | .117 .005 - .128 .015 - .143 .012 - |
| 171 129 0.010 - 0.020 1.82 0.68 0.010 - 0.20 1.87 0.95 0.05 - 0.010 1.93 1.111 0.05 - 0.010 2.00 1.53 0.05 - 0.01 1.71 1.72 0.06 0.05 - 0.01 1.82 0.94 0.05 - 0.00 1.87 0.98 0.05 - 0.01 1.93 1.33 0.05 - 0.01 2.00 1.60 0.020 0.03 1.77 0.00 0.02 1.77 0.00 0.02 1.77 0.00 0.05 0.01 1.93 1.62 0.01 0.01 0.02 0.03 0.05 - 0.01 0.05 0.05 0.01 0.05 0.01 0.05 0.05 0.05 0.01 0.05 0.05 0.01 0.05 0. | .209 .209 .209 .209 .209 .210 .210 .210 .211 | .128 .015 - .143 .012 - |
| 171 130 005 - 010 182 083 040 - 050 187 098 010 - 025 193 130 005 - 010 200 160 0220 - 030 177 010 - 025 172 080 015 - 025 182 110 010 - 020 187 100 005 - 010 193 162 010 - 012 201 038 005 - 011 177 010 - 025 172 081 020 - 030 182 130 005 - 016 187 100 005 - 010 193 162 010 - 012 201 057 010 - 020 172 096 020 - 030 182 130 005 - 016 187 100 005 - 010 194 096 020 - 030 201 067 010 - 020 172 096 020 - 030 183 087 012 - 025 187 108 005 - 010 194 094 005 - 010 020 082 020 - 034 020 - 034 010 - 020 187 115 015 - 032 195 032 005 - 010 021 082 020 - 040 183 096 020 - 030 187 116 010 - 020 195 075 020 - 030 201 086 020 - 034 020 - 034 035 | .209 .209 .209 .209 .210 .210 .210 .211 | .143 .012 - |
| 172 074 005 - 020 182 109 015 - 030 187 009 015 - 025 193 133 005 - 010 200 177 010 - 020 177 010 - 020 177 010 005 - 010 193 162 010 - 012 201 038 005 - 010 172 096 020 - 030 182 130 005 - 016 187 104 032 - 042 194 068 040 - 060 2201 067 010 - 020 172 103 010 - 020 183 067 012 - 025 187 108 005 - 010 194 0.68 0.40 - 060 2201 078 005 - 010 172 103 010 - 020 183 0.67 012 - 0.25 187 108 0.05 - 010 194 0.68 0.40 - 0.60 2201 0.67 0.05 - 0.00 172 128 0.05 - 010 183 0.96 0.20 - 0.30 187 115 0.05 - 0.00 1.94 0.94 0.05 - 0.00 0.20 0.83 0.20 - 0.30 1.72 128 0.05 - 0.00 183 0.96 0.20 - 0.30 187 116 0.01 - 0.20 1.95 0.32 0.05 - 0.00 0.20 0.83 0.20 - 0.30 1.73 0.75 0.20 - 0.30 1.83 0.97 0.05 - 0.00 1.87 1.16 0.01 - 0.20 1.95 0.75 0.20 - 0.30 2.01 0.86 0.05 - 0.01 1.73 0.05 0.05 0.01 0.183 1.05 0.05 - 0.01 1.87 1.25 0.05 - 0.01 1.95 0.076 0.05 - 0.08 2.201 1.15 0.15 - 0.20 0.173 0.02 0.03 0.03 1.83 1.05 0.05 - 0.01 1.87 1.25 0.05 - 0.01 1.95 0.09 0.03 - 0.05 0.02 1.15 0.15 - 0.20 0.173 0.05 0.00 0.183 1.05 0.05 - 0.01 1.87 1.26 0.05 - 0.01 1.95 0.09 0.03 - 0.05 0.20 1.141 0.05 - 0.01 1.73 0.05 0.00 0.00 1.83 1.18 0.15 - 0.03 0.187 1.28 0.05 - 0.01 1.95 1.08 0.15 - 0.30 2.201 1.41 0.05 - 0.11 1.73 0.05 0.00 0.00 1.83 1.32 0.05 - 0.01 1.87 1.28 0.05 - 0.01 1.95 1.28 0.05 - 0.30 2.201 1.41 0.05 - 0.11 1.73 1.02 0.00 - 0.02 1.83 1.32 0.05 - 0.01 1.87 1.28 0.05 - 0.01 1.95 1.28 0.05 - 0.30 2.201 1.41 0.05 - 0.11 1.73 1.02 0.00 - 0.02 1.83 1.32 0.05 - 0.01 1.88 0.05 - 0.01 1.95 1.28 0.05 - 0.30 2.201 1.41 0.05 - 0.11 1.73 1.02 0.00 - 0.02 1.83 1.33 0.05 - 0.01 1.88 0.05 - 0. | .209 .209 .209 .210 .210 .210 .210 .211 | |
| 172 0.98 0.15 - 0.25 1.82 1.10 0.10 - 0.20 1.87 1.00 0.05 - 0.10 1.93 1.62 0.10 - 0.12 2.01 0.38 0.05 - 0.10 1.72 0.81 0.20 - 0.30 1.82 1.34 0.05 - 0.10 1.87 1.06 0.015 - 0.40 1.94 0.06 0.02 - 0.30 2.01 0.67 0.10 - 0.02 1.72 1.03 0.10 - 0.20 1.83 0.06 0.12 - 0.25 1.87 1.06 0.015 - 0.40 1.94 0.06 0.04 - 0.06 2.01 0.78 0.05 - 0.10 1.72 1.03 0.10 - 0.20 1.83 0.06 0.02 - 0.30 1.87 1.16 0.10 - 0.20 1.95 0.32 0.05 - 0.10 0.20 0.82 0.20 - 0.40 1.83 0.90 0.10 - 0.20 1.87 1.16 0.10 - 0.20 1.95 0.32 0.05 - 0.10 0.20 0.83 0.20 - 0.30 1.72 1.28 0.05 - 0.10 1.83 0.96 0.20 - 0.30 1.87 1.16 0.10 - 0.20 1.95 0.75 0.20 - 0.30 2.01 0.86 0.05 - 0.11 0.20 1.73 0.05 0.10 0.20 1.83 1.01 0.20 - 0.36 1.87 1.22 0.05 - 0.10 1.95 0.76 0.15 - 0.30 2.01 0.86 0.05 - 0.11 0.13 0.97 0.20 - 0.30 1.83 1.05 0.05 - 0.10 1.87 1.22 0.05 - 0.10 1.95 0.76 0.15 - 0.30 2.01 0.96 0.20 - 0.40 1.33 0.06 0.10 - 0.20 1.87 1.25 0.05 - 0.10 1.95 0.78 0.05 - 0.08 2.01 1.15 0.15 0.20 1.73 0.96 0.02 - 0.40 1.83 1.18 0.15 - 0.30 1.87 1.27 0.05 - 0.10 1.95 0.78 0.05 - 0.20 0.20 1.44 0.05 - 0.1 1.73 0.06 0.02 - 0.40 1.83 1.12 0.05 - 0.10 1.87 1.28 0.05 - 0.10 1.95 1.08 0.15 - 0.30 2.01 1.44 0.05 - 0.1 1.73 1.00 0.10 - 0.20 1.83 1.31 0.15 - 0.02 1.87 1.27 0.10 - 0.20 1.95 1.08 0.15 - 0.30 2.01 1.41 0.05 - 0.1 1.73 1.00 0.10 - 0.20 1.83 1.31 0.15 - 0.25 1.87 1.29 0.05 - 0.10 1.95 1.26 0.05 - 0.30 2.01 1.41 0.05 - 0.1 1.73 1.10 0.10 - 0.20 1.83 1.31 0.15 - 0.25 1.87 1.29 0.05 - 0.10 1.95 1.26 0.05 - 0.30 2.01 1.41 0.05 - 0.1 1.73 1.10 0.10 - 0.20 1.83 1.34 0.05 - 0.10 1.88 0.34 0.05 - 0.10 1.95 1.26 0.05 - 0.30 1.61 0.05 - 0.10 1.20 | 0 .209 0 .210 0 .210 0 .210 0 .211 | .146 .015 - |
| 172 .081 .020030 .182 .134 .005016 .187 .104 .032042 .194 .065 .020030 .201 .067 .010020 .172 .096 .020032 .182 .134 .005016 .187 .106 .015040 .194 .068 .040060 .201 .078 .005010 .172 .103 .010020 .183 .067 .012025 .187 .108 .005010 .194 .094 .005010 .201 .082 .020040 .172 .109 .020040 .183 .096 .002030 .187 .115 .015032 .195 .032 .005010 .201 .083 .020030 .172 .128 .005010 .183 .096 .020030 .187 .116 .010020 .195 .075 .020030 .201 .086 .005010 .173 .005 .015 .030 .183 .101 .020036 .187 .122 .005010 .195 .076 .015030 .201 .096 .020030 .183 .101 .020036 .187 .124 .020030 .195 .078 .005030 .201 .096 .020030 .173 .079 .020030 .183 .105 .005010 .187 .125 .005010 .195 .076 .005030 .201 .126 .020030 .137 .031 .032 .035 .030 .050 .020 .126 .020 .035 .137 .032 . | .210 .210 .210 .210 .211 | |
| 1.72 0.96 0.20 - 0.32 1.82 1.34 0.05 - 0.10 1.87 1.06 0.15 - 0.40 1.94 0.68 0.40 - 0.60 2.01 0.78 0.05 - 0.11 0.17 0.10 0.020 0.183 0.67 0.12 - 0.25 1.87 1.18 0.05 - 0.10 1.94 0.94 0.05 - 0.10 2.01 0.82 0.20 - 0.40 0.183 0.90 0.10 - 0.20 1.87 1.15 0.15 - 0.32 1.95 0.32 0.05 - 0.10 2.01 0.88 0.20 - 0.30 1.72 1.28 0.05 - 0.10 1.83 0.99 0.02 - 0.30 1.87 1.16 0.10 - 0.20 1.95 0.75 0.20 - 0.30 2.01 0.86 0.05 - 0.11 0.13 0.95 0.05 - 0.10 1.87 1.22 0.05 - 0.10 1.95 0.76 0.15 - 0.30 2.01 0.96 0.02 - 0.44 0.173 0.77 0.77 0.20 - 0.30 1.83 1.01 0.20 - 0.36 1.87 1.12 0.05 - 0.10 1.95 0.76 0.05 - 0.00 2.01 1.15 0.15 - 0.30 0.2 | 0 .210 0 .210 0 .211 | .151 .005 - |
| 172 103 010 - 020 183 067 012 - 025 187 108 005 - 010 194 094 005 - 010 201 0.82 0.20 - 0.40 1.72 1.73 0.05 - 0.01 1.83 0.96 0.20 - 0.30 1.87 1.15 0.05 - 0.02 1.95 0.75 0.20 - 0.30 0.20 0.83 0.20 - 0.35 0.20 - 0.33 0.20 - 0.35 0.20 - 0.35 0.20 - 0.35 0.20 - 0.33 0.20 - 0.35 0.20 - 0.33 0.20 - 0.35 0.20 - 0.35 0.20 - 0.33 0.20 - 0.35 0.20 - 0.35 0.20 - 0.33 0.20 - 0.35 0.20 - 0.33 0.20 - 0.35 0.20 - 0.33 0.20 - 0.35 0.20 - 0.33 0.20 - 0.33 0.20 - 0.35 0.20 - 0.33 0.20 - 0.35 0.20 0.2 | 0 .210 0 .211 | .102 .005 - |
| 1.72 1.09 0.20 - 0.40 1.83 0.90 0.10 - 0.20 1.87 1.15 0.15 - 0.02 1.95 0.02 0.05 - 0.01 0.08 0.05 - 0.01 1.83 0.96 0.20 - 0.30 1.87 1.16 0.10 - 0.20 1.95 0.75 0.02 0.30 0.20 0.08 0.05 - 0.01 1.73 0.06 0.15 - 0.30 0.18 0.97 0.05 - 0.01 1.87 1.22 0.05 - 0.01 1.95 0.76 0.05 - 0.08 0.20 0.96 0.02 - 0.04 1.73 0.70 0.20 - 0.30 1.83 1.01 0.20 - 0.36 1.87 1.22 0.05 - 0.01 1.95 0.76 0.05 - 0.08 2.01 1.15 0.15 - 0.02 1.73 0.79 0.20 - 0.30 1.83 1.05 0.05 - 0.01 1.87 1.22 0.05 - 0.01 1.95 0.07 0.05 - 0.08 2.01 1.15 0.15 - 0.02 1.73 0.79 0.20 - 0.35 1.83 1.06 0.10 - 0.20 1.87 1.26 0.05 - 0.01 1.95 0.09 0.30 - 0.50 2.01 1.26 0.20 - 0.30 1.73 0.92 0.20 - 0.35 1.83 1.18 0.15 - 0.30 1.87 1.27 0.05 - 0.01 1.95 1.00 0.20 0.35 2.01 1.34 0.02 - 0.33 1.73 0.92 0.20 - 0.035 1.83 1.18 0.15 - 0.30 1.87 1.28 0.05 - 0.01 1.95 1.08 0.15 - 0.30 2.01 1.44 0.05 - 0.01 1.73 0.96 0.20 0.40 1.83 1.32 0.05 - 0.01 1.87 1.28 0.05 - 0.01 1.95 1.26 0.05 - 0.02 2.01 1.44 0.05 - 0.01 1.73 1.00 0.10 - 0.20 1.83 1.31 0.15 - 0.25 1.87 1.29 0.05 - 0.10 1.95 1.26 0.05 - 0.30 2.01 1.46 0.05 - 0.1 1.73 1.02 0.10 - 0.20 1.83 1.32 0.05 - 0.01 1.87 1.35 0.05 - 0.01 1.95 1.26 0.05 - 0.30 2.01 1.61 0.05 - 0.01 1.73 1.04 0.16 - 0.25 1.83 1.14 0.05 - 0.01 1.87 1.35 0.05 - 0.010 1.95 1.45 0.15 - 0.40 2.02 0.57 0.10 0.20 1.73 1.14 0.10 - 0.20 1.83 1.43 0.08 - 0.10 1.88 0.33 0.20 - 0.32 1.96 0.55 0.25 0.40 2.02 0.67 0.05 0.11 0.15 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 0.25 0.40 | 0 .211 | .128 .005 - |
| 1.72 1.28 0.05 - 0.10 1.83 0.96 0.20 - 0.30 1.87 1.16 0.10 - 0.20 1.95 0.75 0.20 - 0.30 2.01 0.86 0.05 - 0.01 0.173 0.070 0.20 - 0.30 1.83 1.01 0.20 - 0.36 1.87 1.22 0.05 - 0.10 1.95 0.76 0.05 - 0.08 2.01 1.09 0.020 - 0.30 1.33 1.01 0.20 - 0.36 1.87 1.24 0.20 - 0.30 1.95 0.78 0.05 - 0.08 2.01 1.15 0.15 - 0.20 1.73 0.79 0.20 - 0.30 1.83 1.01 0.05 - 0.010 1.87 1.25 0.05 - 0.10 1.95 0.09 0.030 - 0.50 2.01 1.26 0.20 - 0.33 1.73 0.98 0.05 - 0.010 1.83 1.16 0.15 - 0.20 1.87 1.26 0.05 - 0.10 1.95 1.00 0.20 - 0.35 2.20 1.34 0.20 - 0.33 1.73 0.99 0.20 - 0.04 1.83 1.18 0.15 - 0.30 1.87 1.27 0.10 - 0.20 1.95 1.08 0.15 - 0.30 2.01 1.41 0.05 - 0.11 1.73 1.00 0.10 - 0.20 1.83 1.13 0.15 - 0.32 1.87 1.27 0.10 - 0.20 1.95 1.08 0.15 - 0.30 2.01 1.41 0.05 - 0.11 1.73 1.02 0.10 - 0.20 1.83 1.32 0.05 - 0.10 1.87 1.28 0.05 - 0.10 1.95 1.26 0.05 - 0.20 2.01 1.48 0.05 - 0.11 1.73 1.02 0.10 - 0.20 1.83 1.32 0.05 - 0.00 1.87 1.25 0.05 - 0.10 1.95 1.26 0.05 - 0.30 2.01 1.61 0.05 - 0.11 1.73 1.02 0.10 - 0.20 1.83 1.14 0.05 - 0.20 1.88 0.30 0.20 - 0.32 1.96 0.55 0.25 0.40 2.02 0.66 0.15 - 0.20 1.73 1.14 0.10 - 0.20 1.83 1.41 0.05 - 0.20 1.88 0.34 0.05 - 0.10 1.96 0.75 0.10 - 0.20 0.67 0.05 - 0.11 1.73 1.14 0.10 - 0.20 1.83 1.44 0.05 - 0.03 1.88 0.34 0.05 - 0.10 1.96 0.05 0.05 0.00 0.05 0.01 0.15 0.03 0.05 0 | | .162 .020 - |
| 173 .065 .015 .030 .183 .097 .005 .010 .187 .122 .005 .010 .195 .076 .015 .030 .201 .096 .020 .040 .021 .079 .020 .030 .183 .101 .020 .036 .187 .124 .020 .030 .195 .078 .005 .006 .008 .201 .115 .015 .022 .033 .173 .088 .005 .010 .183 .105 .005 .010 .187 .125 .005 .010 .195 .078 .005 .006 .001 .126 .020 .033 .173 .088 .005 .010 .183 .106 .010 .020 .187 .126 .005 .010 .195 .100 .020 .035 .201 .134 .020 .033 .173 .096 .020 .040 .183 .120 .005 .010 .187 .128 .005 .010 .195 .108 .015 .030 .201 .141 .005 .011 .173 .096 .020 .040 .183 .120 .005 .010 .187 .128 .005 .010 .195 .126 .005 .020 .021 .141 .005 .011 .173 .100 .010 .020 .183 .131 .015 .025 .187 .129 .005 .012 .195 .128 .005 .030 .201 .141 .005 .011 .173 .102 .010 .020 .183 .141 .005 .020 .183 .131 .005 .010 .187 .135 .005 .010 .195 .126 .005 .030 .201 .161 .005 .011 .173 .114 .010 .020 .183 .141 .005 .020 .188 .033 .020 .032 .196 .055 .025 .040 .202 .067 .005 .011 .173 .114 .010 .020 .183 .141 .005 .010 .188 .031 .005 .010 .196 .075 .010 .020 .202 .067 .005 .011 .173 .117 .005 .025 .184 .086 .005 .013 .188 .045 .035 .036 .036 .035 .002 .035 .002 .101 .1015 .032 .174 .077 .010 .020 .185 .076 .025 .030 .188 .061 .025 .040 .196 .005 .010 .202 .126 .005 .011 .174 .095 .020 .032 .185 .076 .025 .030 .188 .061 .025 .040 .196 .105 .010 .020 .126 .005 .011 .174 .095 .020 .032 .185 .076 .025 .030 .188 .061 .025 .040 .196 .105 .015 .030 .010 .202 .126 .005 .010 .174 .095 .020 .185 .076 .025 .030 | 1 211 | .084 .015 - |
| 173 070 0.20 0.30 1.83 1.01 0.20 0.36 1.87 1.24 0.20 0.30 1.95 0.78 0.05 0.06 0.201 1.15 0.15 0.02 0.30 1.83 1.05 0.05 0.00 1.87 1.25 0.05 0.01 1.95 0.99 0.30 0.50 0.201 1.26 0.20 0.33 0.31 0.33 0.35 0.38 0.05 0.01 1.83 1.06 0.01 0.20 1.87 1.25 0.05 0.01 1.95 1.08 0.05 0.03 0.20 0.35 2.01 1.34 0.20 0.33 0.31 0.31 0.05 0.01 1.87 1.27 0.10 0.020 1.95 1.08 0.05 0.03 0.201 1.41 0.05 0.01 1.73 0.09 0.20 0.040 1.83 1.18 0.15 0.05 0.10 1.87 1.28 0.05 0.10 1.95 1.26 0.05 0.02 0.201 1.41 0.05 0.11 1.73 1.00 0.10 0.20 1.83 1.31 0.15 0.25 1.87 1.29 0.05 0.10 1.95 1.42 0.05 0.02 0.201 1.41 0.05 0.11 1.73 1.02 0.10 0.20 1.83 1.32 0.05 0.01 1.87 1.35 0.05 0.10 1.95 1.45 0.05 0.02 0.57 0.10 0.22 1.73 1.14 0.16 0.25 1.83 1.41 0.05 0.20 1.88 0.31 0.05 0.01 1.95 1.45 0.05 0.04 0.20 0.57 0.10 0.20 0.57 0.10 0.20 1.83 1.33 0.05 0.01 1.88 0.31 0.05 0.01 1.96 0.55 0.25 0.40 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.57 0.10 0.20 0.32 0.18 0.15 0.30 0.18 0.05 0.10 0.15 0.05 0. | _ | .088 .005 - |
| 1.73 0.79 0.20 0.30 1.83 1.05 0.05 0.010 1.87 1.25 0.05 0.010 1.95 0.09 0.30 0.55 0.20 1.26 0.20 0.30 0.37 0.95 0.30 0.05 0.010 1.83 0.05 0.010 0.020 0.187 1.26 0.05 0.010 0.195 1.00 0.020 0.35 0.20 1.34 0.020 0.33 0.35 0.35 0.20 0.35 0.20 0.35 | | .091 .020 - |
| 1.73 0.88 0.05 - 0.10 1.83 1.06 0.10 - 0.20 1.87 1.26 0.05 - 0.10 1.95 1.00 0.20 - 0.35 2.01 1.34 0.20 - 0.35 1.73 0.92 0.20 - 0.35 1.83 1.18 0.15 - 0.30 1.87 1.27 0.10 - 0.20 1.95 1.08 0.15 - 0.30 2.01 1.41 0.05 - 0.11 1.73 0.96 0.20 - 0.40 1.83 1.20 0.05 - 0.10 1.87 1.28 0.05 - 0.10 1.95 1.26 0.05 - 0.30 2.01 1.41 0.05 - 0.11 1.73 1.00 0.10 - 0.20 1.83 1.31 0.15 - 0.25 1.87 1.29 0.05 - 0.12 1.95 1.28 0.05 - 0.30 2.01 1.61 0.05 - 0.11 1.73 1.02 0.10 - 0.20 1.83 1.32 0.05 - 0.10 1.87 1.35 0.05 - 0.10 1.95 1.45 0.05 - 0.40 2.02 0.57 0.10 - 0.20 1.73 1.14 0.01 - 0.25 1.83 1.41 0.05 - 0.01 1.88 0.31 0.05 - 0.10 1.96 0.55 0.25 - 0.40 2.02 0.67 0.05 - 0.11 1.73 1.14 0.10 - 0.20 1.83 1.43 0.08 - 0.12 1.88 0.31 0.05 - 0.10 1.96 0.75 0.10 - 0.20 0.67 0.05 - 0.11 1.74 0.44 0.20 0.30 1.84 0.86 0.15 - 0.30 1.88 0.54 0.30 - 0.50 1.96 0.90 0.05 - 0.10 2.02 1.16 0.15 - 0.2 1.74 0.77 0.10 - 0.20 1.85 0.75 0.20 - 0.30 1.88 0.61 0.25 - 0.40 1.96 0.05 - 0.10 2.02 1.26 0.05 - 0.11 1.74 0.95 0.20 - 0.32 1.85 0.76 0.25 - 0.40 1.88 0.61 0.25 - 0.40 1.96 1.02 0.05 - 0.10 2.02 1.26 0.05 - 0.11 1.74 0.95 0.20 - 0.32 1.85 0.76 0.25 - 0.40 1.88 0.61 0.25 - 0.40 1.96 1.02 0.05 - 0.10 2.02 1.26 0.05 - 0.11 1.74 0.95 0.20 - 0.32 1.85 0.76 0.25 - 0.40 1.88 0.77 0.05 - 0.15 1.96 1.05 0.15 - 0.30 2.02 1.26 0.05 - 0.11 1.74 0.95 0.20 - 0.32 1.85 0.76 0.25 - 0.40 1.88 0.77 0.05 - 0.15 1.96 1.05 0.15 - 0.30 2.02 1.26 0.05 - 0.11 1.74 0.95 0.20 - 0.32 1.85 0.76 0.25 0.40 1.88 0.77 0.05 - 0.15 1.96 1.05 0.15 - 0.30 2.02 1.36 0.05 - 0.11 1.74 0.95 0.20 0.35 1.85 0.80 0.05 - 0.10 1.88 0.77 0.05 - 0.15 1.96 1.05 0 | | .104 .005 - |
| 1.73 .092 .020035 .183 .118 .015030 .187 .127 .010020 .195 .108 .015030 .201 .141 .005011 .173 .096 .020040 .183 .120 .005010 .187 .128 .005011 .195 .126 .005020 .201 .148 .005011 .173 .100 .010020 .183 .131 .015025 .187 .129 .005012 .195 .128 .005030 .201 .161 .005011 .173 .102 .010020 .183 .131 .015020 .187 .135 .005010 .195 .145 .015040 .202 .057 .010020 .173 .104 .016025 .183 .141 .005020 .188 .031 .005010 .195 .145 .015040 .202 .066 .015020 .173 .114 .010020 .183 .143 .008012 .188 .031 .005010 .196 .075 .010020 .202 .067 .005010 .173 .117 .005025 .184 .065 .005010 .188 .046 .005010 .196 .075 .010020 .202 .067 .005010 .174 .044 .020030 .184 .065 .005010 .188 .046 .005010 .196 .095 .025035 .202 .101 .015020 .174 .097 .010020 .185 .075 .020030 .188 .064 .025040 .196 .102 .005010 .202 .126 .005014 .174 .095 .020032 .185 .076 .025040 .188 .071 .005015 .196 .104 .005010 .202 .126 .005014 .174 .097 .025040 .185 .078 .025040 .188 .071 .005015 .196 .104 .005010 .202 .126 .005014 .174 .097 .025040 .185 .078 .025040 .188 .071 .005015 .196 .104 .005010 .202 .126 .005014 .174 .097 .025040 .185 .078 .015030 .188 .075 .030050 .196 .117 .008015 .202 .134 .005014 .174 .097 .025040 .185 .080 .005010 .188 .077 .010015 .196 .117 .008015 .202 .136 .020031 .175 .008 .015030 .185 .080 .005010 .188 .077 .010015 | | .106 .020 - |
| 1.73 .096 .020040 .183 .120 .005010 .187 .128 .005010 .195 .126 .005020 .201 .148 .005011 .173 .100 .010020 .183 .131 .015025 .187 .129 .005010 .195 .128 .005030 .201 .161 .005011 .173 .102 .010020 .183 .131 .015025 .187 .135 .005010 .195 .145 .015040 .202 .057 .010020 .173 .104 .016025 .183 .141 .005020 .188 .030 .020032 .196 .055 .025040 .202 .066 .015020 .173 .114 .010020 .183 .143 .008012 .188 .031 .005010 .196 .075 .010020 .202 .067 .005011 .173 .117 .005025 .184 .065 .005010 .188 .046 .005010 .196 .075 .010020 .202 .067 .005011 .174 .044 .020030 .184 .086 .015030 .188 .054 .030050 .196 .090 .005010 .202 .116 .015020 .174 .077 .010020 .185 .075 .020030 .188 .063 .010015 .196 .102 .005010 .202 .126 .005011 .174 .093 .040060 .185 .075 .020030 .188 .063 .010015 .196 .104 .005010 .202 .126 .005011 .174 .095 .020032 .185 .076 .025040 .188 .071 .005015 .196 .104 .005010 .202 .126 .005011 .174 .137 .010020 .185 .078 .025040 .188 .071 .005015 .196 .105 .015030 .202 .128 .005011 .174 .137 .010020 .185 .080 .005010 .188 .077 .010015 .196 .105 .015030 .202 .136 .020031 .175 .089 .015030 .185 .080 .005010 .188 .087 .010020 .196 .122 .010020 .203 .063 .005031 .175 .099 .005030 .185 .080 .005030 .188 .083 .025040 .196 .122 .010020 .203 .093 .095 .005031 .185 .098 .015030 .188 .081 .095 .005010 .196 .122 | | .111 .010 - |
| 1.73 1.00 0.010 - 0.020 1.83 1.31 0.015 - 0.025 1.87 1.29 0.05 - 0.012 1.95 1.28 0.05 - 0.30 0.201 1.61 0.05 - 0.01 1.73 1.02 0.010 - 0.020 1.83 1.32 0.05 - 0.010 1.87 1.35 0.05 - 0.010 1.95 1.45 0.015 - 0.040 2.02 0.057 0.010 - 0.02 0.057 0.010 - 0.02 0.057 0.010 - 0.02 0.057 0.010 - 0.02 0.057 0.010 - 0.02 0.057 0.05 - 0.01 0.05 - 0.02 0.057 0.05 - 0.01 0.05 | | .112 .005 - |
| 173 102 0.10 - 0.20 1.83 1.32 0.05 - 0.10 1.87 1.35 0.05 - 0.10 1.95 1.45 0.15 - 0.40 2.02 0.057 0.10 - 0.02 1.73 1.14 0.10 - 0.20 1.83 1.41 0.05 - 0.20 1.88 0.30 0.20 - 0.32 1.96 0.55 0.25 - 0.40 2.02 0.66 0.15 - 0.02 1.73 1.14 0.10 - 0.20 1.83 1.43 0.08 - 0.12 1.88 0.31 0.05 - 0.10 1.96 0.75 0.10 - 0.20 2.02 0.67 0.05 - 0.11 0.17 0.05 - 0.25 1.84 0.65 0.05 - 0.10 1.88 0.46 0.05 - 0.10 1.96 0.05 0 | | .120 .005 - |
| 173 104 0.16 - 0.025 1.83 1.41 0.05 - 0.20 1.88 0.30 0.20 - 0.32 1.96 0.055 0.025 - 0.40 0.202 0.66 0.015 - 0.02 0.75 0.10 - 0.020 0.202 0.67 0.05 - 0.01 0.75 0.10 - 0.20 0.202 0.67 0.05 - 0.01 0.75 0.10 - 0.20 0.202 0.67 0.05 - 0.01 0.75 0.10 - 0.20 0.202 0.67 0.05 - 0.01 0.05 - 0.05 - 0.05 0.05 - 0.05 - 0.05 0.05 - | | .129 .015 - |
| .173 .114 .010020 .183 .143 .008012 .188 .031 .005010 .196 .075 .010020 .202 .067 .00501 .173 .117 .005025 .184 .065 .005010 .188 .046 .005010 .196 .086 .025035 .202 .101 .01502 .174 .044 .020030 .184 .086 .015030 .188 .054 .030050 .196 .090 .005010 .202 .116 .01502 .174 .077 .010020 .185 .070 .025050 .188 .061 .025040 .196 .104 .005010 .202 .120 .015030 .174 .093 .040060 .185 .075 .020030 .188 .061 .196 .104 .005010 .202 .122 .015030 .015030 .015030 .018010 .017010015 .196 .1170 | | .133 .020 - |
| .173 .117 .005025 .184 .065 .005010 .188 .046 .005010 .196 .086 .025035 .202 .101 .01502 .174 .044 .020030 .184 .086 .015030 .188 .054 .030050 .196 .090 .005010 .202 .116 .01502 .174 .077 .010020 .185 .070 .025050 .188 .061 .025040 .196 .102 .005010 .202 .120 .01503 .174 .093 .040060 .185 .075 .020030 .188 .063 .010015 .196 .104 .005010 .202 .126 .00501 .174 .097 .025040 .188 .077 .005015 .196 .105 .015030 .202 .134 .00501 .174 .137 .010020 .185 .083 .015030 .188 .077 | | .142 .025 - |
| .174 .044 .020030 .184 .086 .015030 .188 .054 .030050 .196 .090 .005010 .202 .116 .01502 .174 .077 .010020 .185 .070 .025050 .188 .061 .025040 .196 .102 .005010 .202 .120 .01503 .174 .093 .040060 .185 .075 .020030 .188 .063 .010015 .196 .104 .005010 .202 .126 .00501 .174 .095 .020032 .185 .076 .025040 .188 .071 .005015 .196 .105 .015030 .202 .128 .00501 .174 .097 .025040 .185 .080 .005010 .188 .077 .010015 .196 .117 .008015 .202 .134 .00501 .175 .056 .005025 .185 .083 | | .158 .005 - |
| .174 .077 .010020 .185 .070 .025050 .188 .061 .025040 .196 .102 .005010 .202 .120 .01503 .174 .093 .040060 .185 .075 .020030 .188 .063 .010015 .196 .104 .005010 .202 .126 .00501 .174 .095 .020032 .185 .076 .025040 .188 .071 .005015 .196 .105 .015030 .202 .128 .00501 .174 .097 .025040 .185 .078 .015030 .188 .077 .030050 .196 .117 .008015 .202 .134 .00501 .175 .056 .005025 .185 .083 .015030 .188 .083 .025040 .196 .122 .010020 .203 .063 .00503 .175 .089 .015030 .185 .086 | | .163 .020 - |
| .174 .093 .040060 .185 .075 .020030 .188 .063 .010015 .196 .104 .005010 .202 .126 .00501 .174 .095 .020032 .185 .076 .025040 .188 .071 .005015 .196 .105 .015030 .202 .128 .00501 .174 .097 .025040 .185 .080 .015030 .188 .075 .030050 .196 .117 .008015 .202 .134 .00501 .174 .137 .010020 .185 .080 .005010 .188 .087 .010015 .196 .122 .010020 .202 .136 .02003 .175 .056 .005025 .185 .083 .015030 .188 .083 .025040 .196 .122 .005025 .203 .072 .01504 .175 .089 .015030 .188 .093 | | .167 .005 - |
| .174 .095 .020032 .185 .076 .025040 .188 .071 .005015 .196 .105 .015030 .202 .128 .00501 .174 .097 .025040 .185 .078 .015030 .188 .075 .030050 .196 .117 .008015 .202 .134 .00501 .174 .137 .010020 .185 .080 .005010 .188 .077 .010015 .196 .122 .010020 .202 .136 .02003 .175 .056 .005025 .185 .083 .015030 .188 .083 .025040 .196 .128 .005010 .203 .063 .00503 .175 .089 .015030 .188 .087 .010020 .196 .128 .005010 .203 .072 .01503 .175 .090 .005030 .185 .089 .015035 .188 .093 | | .084 .005 - |
| .174 .097 .025040 .185 .078 .015030 .188 .075 .030050 .196 .117 .008015 .202 .134 .00501 .174 .137 .010020 .185 .080 .005010 .188 .077 .010015 .196 .122 .010020 .202 .136 .02003 .175 .056 .005025 .185 .083 .015030 .188 .083 .025040 .196 .128 .005010 .203 .063 .00503 .175 .089 .015030 .185 .086 .008020 .188 .087 .010020 .196 .129 .005025 .203 .072 .01504 .175 .090 .005030 .185 .089 .015030 .188 .093 .005010 .196 .130 .010020 .203 .091 .015025 .175 .092 .005010 .185 .092 | | .093 .015 - |
| .174 .137 .010020 .185 .080 .005010 .188 .077 .010015 .196 .122 .010020 .202 .136 .02003 .175 .056 .005025 .185 .083 .015030 .188 .083 .025040 .196 .128 .005010 .203 .063 .00503 .175 .089 .015030 .185 .086 .008020 .188 .087 .010020 .196 .129 .005025 .203 .072 .01504 .175 .090 .005030 .185 .089 .015030 .188 .093 .005010 .196 .130 .010020 .203 .091 .01004 .175 .092 .005030 .185 .092 .005035 .188 .094 .005010 .196 .140 .010020 .203 .092 .03004 .175 .099 .005010 .185 .093 | | .120 .010 - |
| .175 .056 .005025 .185 .083 .015030 .188 .083 .025040 .196 .128 .005010 .203 .063 .00503 .175 .089 .015030 .185 .086 .008020 .188 .087 .010020 .196 .129 .005025 .203 .072 .01504 .175 .090 .005030 .185 .089 .015030 .188 .093 .005010 .196 .130 .010020 .203 .091 .01004 .175 .092 .005030 .185 .092 .005035 .188 .094 .005020 .196 .140 .010020 .203 .091 .01004 .175 .099 .005010 .185 .093 .020035 .188 .095 .005010 .196 .145 .005012 .203 .093 .04006 .175 .102 .020030 .185 .095 | | .124 .005 - |
| .175 .089 .015030 .185 .086 .008020 .188 .087 .010020 .196 .129 .005025 .203 .072 .01504 .175 .090 .005030 .185 .089 .015030 .188 .093 .005010 .196 .130 .010020 .203 .091 .01004 .175 .092 .005035 .188 .094 .005020 .196 .140 .010020 .203 .092 .03004 .175 .099 .005010 .185 .093 .020035 .188 .095 .005010 .196 .145 .005012 .203 .093 .04006 .175 .102 .020030 .185 .095 .005025 .188 .102 .005015 .197 .055 .015025 .203 .114 .01504 .175 .121 .010020 .185 .097 .010020 .188 .103 | | .131 .005 - |
| .175 .090 .005030 .185 .089 .015030 .188 .093 .005010 .196 .130 .010020 .203 .091 .01004 .175 .092 .005030 .185 .092 .005035 .188 .094 .005020 .196 .140 .010020 .203 .092 .03004 .175 .099 .005010 .185 .093 .020035 .188 .095 .005010 .196 .145 .005012 .203 .093 .04006 .175 .102 .020030 .185 .095 .005025 .188 .102 .005015 .197 .055 .015025 .203 .114 .01504 .175 .121 .010020 .185 .097 .010020 .188 .103 .020030 .197 .005010 .203 .114 .015025 .175 .123 .030040 .185 .098 .005010< | | .135 .005 - |
| .175 .092 .005030 .185 .092 .005035 .188 .094 .005020 .196 .140 .010020 .203 .092 .03004 .175 .099 .005010 .185 .093 .020035 .188 .095 .005010 .196 .145 .005012 .203 .093 .04006 .175 .102 .020030 .185 .095 .005025 .188 .102 .005015 .197 .055 .015025 .203 .114 .01504 .175 .121 .010020 .185 .097 .010020 .188 .103 .020030 .197 .077 .005010 .203 .124 .01502 .175 .124 .025030 .185 .010 .020030 .188 .113 .020040 .197 .091 .020040 .203 .124 .025010 .203 .128 .015030 .188 .118 .0150 | | .137 .015 - |
| .175 .099 .005010 .185 .093 .020035 .188 .095 .005010 .196 .145 .005012 .203 .093 .04006 .175 .102 .020030 .185 .095 .005025 .188 .102 .005015 .197 .055 .015025 .203 .114 .01504 .175 .121 .010020 .185 .097 .010020 .188 .103 .020030 .197 .077 .005010 .203 .123 .00501 .175 .123 .030040 .185 .098 .005010 .188 .106 .010020 .197 .091 .020040 .203 .124 .01002 .175 .124 .025030 .185 .110 .020030 .188 .113 .020040 .197 .099 .005010 .203 .128 .01502 .175 .128 .015020 .185 .118 | | .138 .005 - |
| .175 .102 .020030 .185 .095 .005025 .188 .102 .005015 .197 .055 .015025 .203 .114 .01504 .175 .121 .010020 .185 .097 .010020 .188 .103 .020030 .197 .077 .005010 .203 .123 .005010 .203 .124 .010020 .197 .091 .020040 .203 .124 .01002 .175 .124 .025030 .185 .110 .020030 .188 .113 .020040 .197 .099 .005010 .203 .128 .01502 .175 .127 .005010 .185 .118 .015030 .188 .118 .015025 .197 .103 .005010 .203 .137 .02004 .175 .128 .015020 .185 .119 .015030 .188 .118 .015025 .197 .116 .0050 | | .158 .015 - |
| .175 .121 .010020 .185 .097 .010020 .188 .103 .020030 .197 .077 .005010 .203 .123 .00501 .175 .123 .030040 .185 .098 .005010 .188 .106 .010020 .197 .091 .020040 .203 .124 .01002 .175 .124 .025030 .185 .110 .020030 .188 .113 .020040 .197 .099 .005010 .203 .128 .01502 .175 .128 .015020 .185 .118 .015030 .188 .118 .015025 .197 .103 .005010 .203 .137 .02004 .175 .128 .015020 .185 .119 .015030 .188 .118 .015025 .197 .116 .005010 .203 .137 .02004 .175 .128 .015020 .185 .119 | | .043 .005 - |
| .175 .123 .030040 .185 .098 .005010 .188 .106 .010020 .197 .091 .020040 .203 .124 .010020 .175 .124 .025030 .185 .110 .020030 .188 .113 .020040 .197 .099 .005010 .203 .128 .01502 .175 .127 .005010 .185 .118 .015030 .188 .118 .015025 .197 .103 .005010 .203 .137 .02004 .175 .128 .015020 .185 .119 .015030 .188 .119 .005012 .197 .116 .005010 .203 .170 .00502 | | .066 .025 - |
| .175 .124 .025030 .185 .110 .020030 .188 .113 .020040 .197 .099 .005010 .203 .128 .01502 .175 .127 .005010 .185 .118 .015030 .188 .118 .015025 .197 .103 .005010 .203 .137 .02004 .175 .128 .015020 .185 .119 .015030 .188 .119 .005012 .197 .116 .005010 .203 .170 .00502 | | .077 .015 - |
| .175 .127 .005010 .185 .118 .015030 .188 .118 .015025 .197 .103 .005010 .203 .137 .02004 .175 .128 .015020 .185 .119 .015030 .188 .119 .005012 .197 .116 .005010 .203 .170 .00502 | | .100 .005 - |
| .175 .128 .015020 .185 .119 .015030 .188 .119 .005012 .197 .116 .005010 .203 .170 .00502 | | .108 .005 - |
| | | .110 .010 - |
| .176 .053 .005 .010 185 126 (120 - 030 188 121 010 - 025 197 121 005 - 010 203 175 005 - 01 | | .130 .025 - |
| | | .154 .005 - |
| .176 .081 .005010 .185 .127 .005010 .188 .122 .005010 .197 .122 .020040 .203 .176 .00501 | | .162 .020 - |
| . 176 . 119 . 010 020 .185 . 128 . 010 020 .188 . 128 . 005 036 .197 . 129 . 005 010 .204044005 01 | | .050 .005 - |
| .177 .053 .005010 .185 .129 .005015 .188 .129 .020030 .197 .139 .030040 .204 .075 .02504 | | .062 .015 - |
| .177 .070 .005010 .185 .131 .005010 .188 .131 .020030 .197 .147 .015025 .204 .100 .00501 | | .089 .010 - |
| .177 .081 .005010 .185 .134 .005010 .189 .043 .025040 .198 .088 .010020 .204 .105 .03004 | | .098 .010 - |
| .177 .094 .007 -015 .185 .136 .015025 .189 .053 .030040 .198 .092 .010030 .204 .125 .02504 | _ | .100 .015 - |
| .177 .099 .005015 .186 .028 .006010 .189 .064 .010050 .198 .097 .005010 .204 .143 .02003 | | .109 .020 - |
| .177 .113 .005015 .186 .035 .005010 .189 .094 .040060 .198 .114 .005010 .204 .157 .01002 | | .126 .005 - |
| .177 .119 .030042 .186 .038 .005010 .189 .095 .025045 .186 .005010 .205 .038 .01502 | | .163 .010 - |
| .177 .122 .015020 .186 .046 .010020 .189 .102 .005010 .198 .126 .020030 .205 .050 .03004 | | .166 .005 - |
| .177 .127 .005010 .186 .064 .008020 .189 .108 .010020 .198 .131 .020040 .205 .079 .02003 | | .169 .010 - |
| .178 .050 .030040 .186 .075 .015025 .189 .109 .005010 .198 .147 .005010 .205 .094 .01002 | | .180 .005 - |
| .178 .077 .015030 .186 .079 .015040 .189 .119 .005010 .199 .050 .005010 .205 .097 .01002 | | .034 .010 - |
| .178 .113 .005015 .186 .086 .005010 .189 .136 .010020 .199 .088 .030050 .205 .112 .01002 | | .088 .010 - |
| .178 .119 .030042 .186 .088 .015025 .190 .048 .005010 .199 .105 .030050 .205 .115 .01502 | | .090 .042 - |
| .178 .137 .010020 .186 .093 .015030 .190 .091 .005010 .199 .122 .010020 .205 .131 .01002 | | .091 .010 - |
| .178 .139 .005 010 .186 .094 .025 035 .190 .095 .040 060 .199 .154 .005 015 .205 .137 .025 04 | | .100 .010 - |
| .179 .039 .005010 .186 .096 .005010 .190 .113 .010020 .199 .158 .015020 .205 .147 .02503 | | .104 .010 - |
| .179 .101 .010020 .186 .098 .012025 .190 .128 .010015 .200 .026 .005010 .206 .051 .00501 | | .106 .005 - |
| .179 .103 .005010 .186 .099 .005010 .190 .130 .015030 .200 .053 .005010 .206 .094 .00501 | _ | .112 .020 - |
| .179 .113 .005010 .186 .103 .005010 .190 .132 .005010 .200 .066 .005010 .206 .154 .00501 | - | .123 .015 - |
| .179 .115 .025030 .186 .108 .010020 .191 .038 .005010 .200 .072 .020030 .206 .161 .00501 | | .127 .005 - |
| .180 .081 .020035 .186 .119 .005010 .191 .039 .010020 .078 .020030 .207 .112 .00501 | | .137 .010 - |
| .180 .089 .005032 .186 .124 .020030 .191 .063 .010016 .200 .079 .010020 .207 .127 .01502 | .215 | .138 .020 - |
| .020 - 0.20 1.86 1.25 0.10 - 0.25 0.25 - 0.50 0.25 - 0.50 0.25 - 0.40 0.26 0.25 - 0.40 0.26 0.2 | | .144 .030 - |
| .180 .094 .010025 .186 .126 .005010 .191 .069 .025040 .200 .087 .025040 .207 .133 .02003 | 0 .215 | .162 .005 - |

| .215 .215 .215 .215 .216 .216 | I.D. .164 .166 .168 | Choose Any Thickness* From To .005010 .005010 | O.D. | I.D. .166 | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* |
|--|------------------------------|---|----------------------|----------------------|-------------------------------------|---------------------|----------------------|-------------------------------------|----------------------|----------------------|-------------------------------------|--------------|--------------|-------------------------------------|----------------------|--------------|----------------------------|
| .215 .215 .215 .216 .216 | .166 .168 | .005010 .005010 | | .166 | | | | | | | From To | | | From To | | | |
| .215 .215 .215 .216 .216 | .166 .168 | .005010 | | | | 222 | 100 | .005010 | 006 | 100 | 00E 010 | .244 | .150 | .015030 | .249 | .100 | .020032 |
| .215 .215 .216 .216 | .168 | | .220 | .177 | .015020 .015020 | .230 .230 | .120 .121 | .010020 | . 236 .236 | . 129 .130 | . 005010 .015030 | .244 | .191 | .015030 | .249 | .100 | .020032 |
| .215 .216 .216 .216 | | .010020 | .220 | .179 | .005010 | .230 | .130 | .005060 | .236 | .155 | .015030 | .244 | .192 | .005010 | .249 | .112 | .010018 |
| .216 .216 .216 | | .005010 | .221 | .061 | .050060 | .230 | .145 | .025040 | .236 | .160 | .005010 | .244 | .195 | .005010 | .249 | .116 | .020040 |
| .216 .216 | .054 | .015032 | .221 | .065 | .005010 | .230 | .152 | .010020 | .236 | .161 | .005010 | .244 | .205 | .010020 | .249 | .121 | .015025 |
| .216 | .055 | .005010 | .221 | .084 | .020035 | .230 | .160 | .010020 | .236 | .182 | .005010 | .245 | .032 | .010015 | .249 | .123 | .015030 |
| | .057 | .020030 | .221 | .099 | .020030 | .230 | .167 | .005010 | .236 | .192 | .005010 | .245 | .045 | .005010 | .249 | .124 | .005010 |
| .216 | .110 | .010020 | .221 | .106 | .010020 | .230 | .176 | .005010 | .236 | .210 | .005010 | .245 | .055 | .005010 | .249 | .127 | .010050 |
| .216 | .120 | .010020 | .221 | .117 | .005010 | .231 | .046 | .005010 | .237 | .070 | .010020 | .245 | .097 | .025040 | .249 | .128 | .020035 |
| .216 | .126 | .005010 | .221 | .122 | .020035 | .231 | .096 | .050070 | .237 | .108 | .040060 | .245 | .127 | .010030 | .249 | .135 | .005010 |
| .216 | .148 | .005010 | .221 | .125 | .020035 | .231 | .116 | .040060 | .237 | .112 | .005010 | .245 | .136 | .025040 | .249 | .137 | .025050 |
| .216 | .162 | .010020 | .221 | .126 | .020035 | .231 | .120 | .035048 | .237 | .127 | .005030 | .245 | .141 | .005010 | .249 | .139 | .005040 |
| .217 | .080 | .020030 | .221 | .130 | .030042 | .231 | .130 | .010020 | .237 | .130 | .005020 | .245 | .185 | .005010 | .249 | .143 | .015030 |
| .217 | .084 | .015030 | .221 | .135 | .005010 | .231 | .146 | .005010 | .237 | .148 | .030050 | .245 | .204 | .010020 | .249 | .144 | .030050 |
| .217 | .100 | .030050 | .221 | .144 | .005010 | .231 | .155 | .010020 | .237 | .157 | .025036 | .246 | .055 | .005012 | .249 | .152 | .005010 |
| .217 | .106 | .015030 | .221 | .156 | .020030 | .231 | .160 | .010015 | .237 | .162 | .005010 | .246 | .080 | .005010 | .249 | .158 | .020030 |
| .217 | .116 | .008016 | .222 | .093 | .020030 | .231 | .173 | .005010 | .237 | .164 | .008035 | .246 | .094 | .010020 | .249 | .160 | .020040 |
| .217 | .118 | .050070 | .222 | .095 | .008012 | .232 | .060 | .030050 | .237 | .193 | .010020 | .246 | .122 | .025040 | .249 | .170 | .025040 |
| .217 | .120 | .025040 | .222 | .114 | .010020 | .232 | .120 | .015025 | .237 | .194 | .010020 | .246 | .128 | .005010 | .249 | .172 | .010020 |
| .217 | .166 | .005010 | .222 | .116 | .025045 | .232 | .133 | .005010 | .238 | .071 | .015030 | .246 | .131 | .005010 | .249 | .186 | .005010 |
| .217 | .191 | .005010 | .222 | .129 | .020030 | .232 | .134 | .010020 | .238 | .126 | .030050 | .246 | .134 | .005010 | .249 | .189 | .015032 |
| .218 | .069 | .015025 | .222 | .140 | .010020 | .232 | .136 | .005010 | .238 | .143 | .005010 | .246 | .142 | .015030 | .249 | .190 | .005008 |
| .218 | .078 | .025042 | .222 | .142 | .010020 | .232 | .159 | .006016 | .238 | .146 | .030040 | .246 | .170 | .005010 | .249 | .193 | .008012 |
| .218 | .090 | .015030 | .223 | .059 | .015040 | .233 | .040 | .005010 | .238 | .181 | .020030 | .246 | .180 | .010020 | | | |
| .218 | .095 | .010050 | .223 | .100 | .005010 | .233 | .060 | .010025 | .239 | .068 | .008016 | .246 | .182 | .020030 | | | |
| .218 | .097 | .012025 | .223 | .102 | .025035 | .233 | .110 | .005010 | .239 | .094 | .005010 | .246 | .197 | .015025 | | | - 6 |
| .218 | .101 | .020030 | .223 | .118 | .005015 | .233 | .118 | .020040 | .239 | .131 | .032050 | .247 | .051 | .010020 | | | 50 |
| .218 | .105 | .005032 | .223 | .127 | .025042 | .233 | .124 | .010020 | .239 | .141 | .015030 | .247 | .063 | .030050 | 4 | |)(] |
| .218 | .106 | .020032 | .223 | .130 | .005010 | .233 | .127 | .005010 | .239 | .142 | .015030 | .247 | .080 | .010040 | | _ | |
| .218 | .108 | .008020 | .223 | .132 | .025035 | .233 | .130 | .005015 | .239 | .148 | .005010 | .247 | .090 | .020030 | 050 | | 005 515 |
| .218 | .113 | .025040 | .223 | .135 | .010020 | .233 | .155 | .005010 | .239 | .161 | .030050 | .247 | .091 | .030050 | .250 | .027 | .005010 |
| .218 | .116 | .005020 | .223 | .139 | .015025 | .233 | .163 | .010015 | .239 | .163 | .030040 | .247 | .095 | .040060 | .250 | .039 | .005025 |
| .218 | .119 | .005008 | .223 | .155 | .005010 | .233 | .170 | .020030 | .239 | .181 | .005010 | .247 | .097 | .005020 | .250 | .044 | .005015 |
| .218 | .127 | .005010 | .223 | .191 | .005010 | .233 | .173 | .005010 | .239 | .190 | .005015 | .247 | .100 | .005010 | .250 | .052 | .005012 |
| .218 | .128 | .005020 | .224 | .075 | .025040 | .233 | .191 | .005010 | .240 | .024 | .005010 | .247 | .118 | .005020 | .250 | .063 | .005010 |
| .218 | .132 | .008015 | .224 | .139 | .005012 | .234 | .039 | .005010 | .240 | .072 | .005010 | .247 | .119 | .025040 | .250 | .072 | .005012 |
| .218 | .138 | .020040 | .224 | .141 | .005010 | .234 | .066 | .042062 | .240 | .090 | .020030 | .247 | .125 | .020032 | .250 | .077 | .012025 |
| .218 .218 | .140 .141 | .015025 .025036 | . 225 .225 | .063 .090 | .005010 | .234 | .096 | .042060 | .240 | .102 | .010020 | .247 .247 | .126 .127 | .023032 .025042 | . 250 .250 | .082 .083 | . 005010 .015020 |
| .218 | .143 | .025030 | .225 | .090 . 092 | .015030 .005010 | .234 .234 | . 121 .126 | .005020 | .240 | .105 | .010020 | .247 | .132 | .020030 | .250 | .085 | .005030 |
| .218 | .169 | .015025 | .225 | .101 | .015030 | .234 | .128 | .015025 .015030 | .240 | .108 | .025040 | .247 | .138 | .005010 | .250 | .091 | .020030 |
| .219 | .070 | .020030 | .225 | .111 | .015030 | .234 | .120 | .015030 | .240 .240 | . 109 .125 | . 005010 .025060 | .247 | .140 | .005010 | .250 | .093 | .062083 |
| .219 | .085 | .005010 | .225 | .113 | .005010 | .234 | .134 | .020030 | .240 | .123 | | .247 | .141 | .020032 | .250 | .094 | .005025 |
| .219 | .090 | .005010 | .225 | .125 | .015032 | .234 | .135 | .030050 | .240 | .135 | .005010 .005030 | .247 | .144 | .005010 | .250 | .095 | .007040 |
| .219 | .103 | .010020 | .225 | .129 | .030050 | .234 | .138 | .010020 | .240 | .136 | .005030 | .247 | .147 | .005010 | .250 | .097 | .030080 |
| .219 | .106 | .005020 | .225 | .135 | .005015 | .234 | .142 | .035050 | .240 | .139 | .005010 | .247 | .158 | .030040 | .250 | .098 | .010025 |
| .219 | .124 | .020040 | .225 | .141 | .005015 | .234 | .192 | .010020 | .240 | .160 | .015040 | .247 | .159 | .010020 | .250 | .099 | .032050 |
| .219 | .126 | .010030 | .225 | .144 | .015030 | .235 | .048 | .005010 | .240 | .188 | .005010 | .247 | .164 | .005010 | .250 | .100 | .025040 |
| .219 | .127 | .030040 | .225 | .147 | .025040 | .235 | .068 | .010050 | .241 | .103 | .005010 | .247 | .169 | .020030 | .250 | .102 | .015060 |
| .219 | .129 | .010015 | .225 | .150 | .005010 | .235 | .086 | .020030 | .241 | .119 | .020035 | .247 | .185 | .005010 | .250 | .103 | .015060 |
| .219 | .130 | .015030 | .226 | .087 | .005010 | .235 | .088 | .020030 | .241 | .148 | .005010 | .247 | .205 | .005010 | .250 | .105 | .005035 |
| | .142 | .005010 | .226 | .098 | .015050 | .235 | .090 | .005010 | .241 | .162 | .005010 | .247 | .206 | .005010 | .250 | .108 | .005010 |
| | .147 | .025040 | .226 | .108 | .020030 | .235 | .099 | .005010 | .241 | .180 | .005010 | .248 | .052 | .035050 | .250 | .110 | .005030 |
| .219 | .156 | .010020 | .226 | .114 | .025040 | .235 | .102 | .015030 | .242 | .072 | .005010 | .248 | .063 | .015025 | .250 | .116 | .020040 |
| .219 | .161 | .005035 | .226 | .129 | .005030 | .235 | .108 | .030050 | .242 | .118 | .010020 | .248 | .067 | .015030 | .250 | .117 | .020040 |
| .219 | .171 | .005010 | .226 | .175 | .005010 | .235 | .114 | .010030 | .242 | .128 | .005010 | .248 | .078 | .015030 | .250 | .120 | .030050 |
| .219 | .173 | .005010 | .226 | .193 | .005010 | .235 | .126 | .030050 | .242 | .129 | .015025 | .248 | .087 | .005015 | .250 | .122 | .005060 |
| .220 | .040 | .005010 | .227 | .050 | .010020 | .235 | .130 | .015030 | .242 | .145 | .010015 | .248 | .089 | .020035 | .250 | .124 | .010032 |
| .220 | .051 | .025035 | .227 | .127 | .005010 | .235 | .131 | .025040 | .242 | .146 | .005010 | .248 | .091 | .030040 | .250 | .125 | .010050 |
| .220 | .063 | .010020 | .227 | .153 | .020032 | .235 | .134 | .020035 | .242 | .147 | .010020 | .248 | .092 | .005015 | .250 | .126 | .005020 |
| .220 | .065 | .020032 | .228 | .051 | .020030 | .235 | .138 | .015025 | .242 | .163 | .025035 | .248 | .093 | .005030 | .250 | .127 | .007050 |
| .220 | .070 | .020030 | .228 | .091 | .005010 | .235 | .139 | .025040 | .242 | .172 | .025040 | .248 | .094 | .040060 | .250 | .128 | .005062 |
| .220 | .090 | .005010 | .228 | .096 | .010020 | .235 | .152 | .020032 | .242 | .192 | .012020 | .248 | .098 | .005010 | .250 | .129 | .010050 |
| .220 | .091 | .005040 | .228 | .106 | .020035 | .235 | .156 | .010020 | .242 | .194 | .005010 | .248 | .100 | .015030 | .250 | .130 | .005042 |
| .220 | .099 | .005010 | .228 | .118 | .010050 | .235 | .161 | .005010 | .243 | .095 | .015025 | .248 | .106 | .060080 | .250 | .131 | .005060 |
| .220 | .106 | .005015 | .228 | .121 | .010020 | .235 | .164 | .010020 | .243 | .130 | .010050 | .248 | .118 | .015032 | .250 | .132 | .032052 |
| .220 | .108 | .010020 | .228 | .129 | .020030 | .235 | .167 | .020036 | .243 | .133 | .005010 | .248 | .120 | .025040 | .250 | .134 | .005010 |
| .220 | .109 | .005010 | .228 | .131 | .015030 | .235 | .202 | .005010 | .243 | .136 | .005010 | .248 | .122 | .015032 | .250 | .135 | .030048 |
| .220 | .113 | .032048 | .228 | .148 | .005010 | .236 | .061 | .005010 | .243 | .145 | .010020 | .248 | .123 | .020030 | .250 | .136 | .005010 |
| .220 | .114 | .010020 | .228 | .167 | .005010 | .236 | .070 | .010020 | .243 | .146 | .010020 | .248 | .128 | .005040 | .250 | .140 | .005060 |
| .220 | .117 | .025042 | .229 | .096 | .010020 | .236 | .078 | .005010 | .243 | .162 | .020035 | .248 | .129 | .030050 | .250 | .146 | .010020 |
| .220 | .122 | .025040 | .229 | .139 | .015025 | .236 | .080 | .020030 | .243 | .170 | .010020 | .248 | .130 | .005010 | .250 | .147 | .005050 |
| .220 | .125 | .020030 | .229 | .149 | .005010 | .236 | .082 | .015030 | .243 | .188 | .005010 | .248 | .133 | .015030 | .250 | .150 | .005015 |
| .220 | .127 | .025048 | .229 | .166 | .010020 | .236 | .091 | .020030 | .243 | .198 | .005020 | .248 | .135 | .015025 | .250 | .153 | .010020 |
| .220 | .128 | .040050 | .230 | .038 | .020030 | .236 | .094 | .015030 | .244 | .070 | .020030 | .248 | .152 | .030050 | .250 | .154 | .015025 |
| .220 | .129 | .020035 | .230 | .050 | .020030 | .236 | .097 | .015030 | .244 | .088 | .005010 | .248 | .155 | .005010 | .250 | .157 | .025040 |
| .220 | .140 | .010020 | .230 | .073 | .015030 | .236 | .098 | .030048 | .244 | .106 | .015030 | .248 | .158 | .025042 | .250 | .158 | .015030 |
| .220 | .144 | .025035 | .230 | .094 | .042062 | .236 | .107 | .020030 | .244 | .119 | .005010 | .248 | .176 | .010020 | .250 | .159 | .020036 |
| .220 | .147 | .015025 | .230 | .097 | .010020 | .236 | .118 | .005010 | .244 | .127 | .010015 | .248 | .208 | .010020 | .250 | .161 | .005010 |
| .220 | .159 | .005010 | .230 | .108 | .005010 | .236 | .127 | .005010 | .244 | .147 | .005015 | .249 | .075 | .015030 | .250 | .162 | .032042 |



| | | Choose Any | | | Choose Any | | | Choose Any | 110 | | Choose Any | ., | | Choose Any | | | Choose Any |
|---------------------|----------------------|--------------------|----------------------|---------------------|----------------------------|----------------------|----------------------|----------------------------|---------------------|---------------------|----------------------------|---------------------|---------------------|----------------------------|----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| .250 | .164 | .010020 | .255 | .097 | .005010 | .265 | .183 | .025040 | .274 | .052 | .005010 | .279 | .140 | .030040 | .283 | .250 | .005010 |
| .250 | .165 | .010020 | .255 | .101 | .030050 | .265 | .189 | .005010 | .274 | .093 | .005040 | .279 | .144 | .025040 | .284 | .095 | .015025 |
| .250 | .166 | .005012 | .255 | .105 | .025040 | .266 | .082 | .015030 | .274 | .095 | .005010 | .279 | .156 | .020030 | .284 | .119 | .025040 |
| .250 .250 | .167 .172 | .010045 .005010 | .255 .255 | .109 .135 | .010020 .015030 | .266 .266 | .090 .106 | .005010 .005010 | .274 | .121 | .005010 | .279 .279 | .170 .195 | .015025 . 005040 | .284 .284 | .125 .191 | .005015 .010018 |
| .250 | .173 | .025040 | .255 | .149 | .040050 | .266 | .110 | .010020 | .274 .274 | .127 .132 | .030060 .025035 | .279 | .197 | .015030 | .284 | .200 | .010010 |
| .250 | .176 | .025040 | .255 | .164 | .035050 | .266 | .123 | .031048 | .274 | .170 | .030050 | .279 | .217 | .015030 | .284 | .212 | .005010 |
| .250 | .186 | .010020 | .255 | .167 | .005010 | .266 | .131 | .036060 | .274 | .172 | .040060 | .279 | .232 | .005010 | .285 | .079 | .005010 |
| .250 | .189 | .010020 | .255 | .195 | .040060 | .266 | .134 | .025040 | .274 | .174 | .035050 | .279 | .247 | .010015 | .285 | .088 | .005010 |
| .250 | .190 | .010020 | .256 | .119 | .040060 | .266 | .168 | .025040 | .274 | .191 | .005020 | .280 | .067 | .005015 | .285 | .107 | .020032 |
| .250 .250 | .191 .192 | .010020 .025030 | .256 .257 | .164 .067 | .025042 .015030 | .266 | .171 | .020035 .020030 | .274 | .211 .237 | .005010 .005010 | .280 .280 | .079 .105 | .030050 .015032 | .285 .285 | .115 .127 | .015030 .010035 |
| .251 | .036 | .010020 | .257 | .007 | .025040 | .266 .266 | .179 .185 | .020030 | .274 .275 | .079 | .010020 | .280 | .115 | .015032 | .285 | .128 | .010035 |
| .251 | .057 | .005012 | .257 | .191 | .010020 | .266 | .218 | .005010 | .275 | .081 | .020040 | .280 | .118 | .010020 | .285 | .131 | .005010 |
| .251 | .059 | .005010 | .257 | .213 | .005010 | .267 | .059 | .010020 | .275 | .091 | .020040 | .280 | .122 | .025048 | .285 | .147 | .030050 |
| .251 | .063 | .025040 | .258 | .067 | .015030 | .267 | .100 | .030050 | .275 | .096 | .005010 | .280 | .126 | .020030 | .285 | .161 | .005010 |
| .251 .251 | .074 .076 | .025050 | .258 | .163 | .015030 | .267 | .125 | .005010 | .275 | .098 | .030050 | .280 .280 | .127 .128 | .005010 | .285 | .165 | .015030 |
| .251 | .093 | .005010 .005010 | .258 .258 | .169 .177 | .020030 .005015 | .267 .267 | .140 .143 | .015030 .010025 | .275 .275 | .118 .122 | .020040 .020040 | .280 | .133 | .010032 .020040 | .285 .285 | .175 .192 | .025048 .020035 |
| .251 | .101 | .025040 | .259 | .116 | .005010 | .267 | .144 | .020030 | .275 | .135 | .005012 | .280 | .134 | .005010 | .285 | .194 | .005010 |
| .251 | .108 | .020040 | .259 | .160 | .005010 | .267 | .168 | .005010 | .275 | .143 | .010020 | .280 | .135 | .020035 | .285 | .204 | .010020 |
| .251 | .113 | .030050 | .259 | .213 | .005010 | .267 | .170 | .030050 | .275 | .144 | .040050 | .280 | .145 | .032050 | .285 | .207 | .020030 |
| .251 | .115 | .040060 | .260 | .089 | .010020 | .267 | .178 | .025040 | .275 | .163 | .015025 | .280 | .148 | .005010 | .285 | .239 | .010015 |
| .251 .251 | .122 .125 | .035050 .010020 | .260 | .108 .113 | .015030 | .267 | .190 | .005008 | .275 | .166 | .020030 | .280 | .155 | .025045 | .286 | .125 | .032048 |
| .251 | .125 | .010020 | .260 .260 | .120 | .015030 | .267 .267 | .205 .211 | .015030 .020030 | .275 .275 | .170 .189 | .032048 .030050 | .280 .280 | .156 .161 | .040060 | .286 .286 | .150 .170 | .032050 .010020 |
| .251 | .130 | .015030 | .260 | .121 | .007015 | .268 | .109 | .015030 | .275 | .190 | .005010 | .280 | .169 | .005015 | .286 | .186 | .010020 |
| .251 | .131 | .005050 | .260 | .128 | .040060 | .268 | .124 | .015030 | .275 | .192 | .005010 | .280 | .193 | .010015 | .286 | .188 | .005010 |
| .251 | .136 | .005010 | .260 | .129 | .025040 | .268 | .147 | .032050 | .275 | .200 | .005010 | .280 | .201 | .005010 | .286 | .195 | .005010 |
| .251 | .138 | .005010 .015048 | .260 | .144 | .020040 | .268 | .173 | .005010 | .275 | .203 | .030050 | .280 | .202 | .025040 | .286 | .211 | .005010 |
| .251 .251 | .145 .146 | .015048 | .260 . 260 | .148 .158 | .005012 .005020 | . 268 .268 | .179 .199 | . 005010 .010020 | .275 .276 | .242 .081 | .010020 . 005010 | .280 .281 | .236 .052 | .010032 .010020 | .287 .287 | .118 .183 | .005010 .005010 |
| .251 | .149 | .040050 | .260 | .163 | .020040 | .268 | .202 | .010020 | .276 | .091 | .015025 | .281 | .067 | .032050 | .287 | .195 | .006012 |
| .251 | .151 | .025040 | .260 | .167 | .005010 | .268 | .213 | .010020 | .276 | .109 | .015040 | .281 | .094 | .040060 | .287 | .196 | .005020 |
| .251 | .157 | .040060 | .260 | .170 | .040060 | .269 | .139 | .020030 | .276 | .112 | .030050 | .281 | .096 | .005010 | .288 | .128 | .030050 |
| .251 | .158 | .005015 | .260 | .173 | .020040 | .269 | .156 | .015025 | .276 | .114 | .040060 | .281 | .117 | .025040 | .288 | .131 | .025040 |
| .251 .251 | .160 .162 | .005010 .025042 | .260 | .175 | .005010 | .269 | .158 | .010020 | .276 | .122 | .008016 | .281 .281 | .122 .126 | .010020 .005010 | .288 | .197 | .015030 |
| .251 | .187 | .010020 | .260 .260 | .176 .188 | .020040 .005015 | .269 .269 | .160 .161 | .015030 .048062 | .276 .276 | .126 .133 | .020030 . 005010 | .281 | .132 | .005010 | .289 .289 | .037 .046 | .020030 . 005010 |
| .251 | .188 | .005008 | .260 | .190 | .010020 | .269 | .179 | .025040 | .276 | .141 | .040060 | .281 | .134 | .040060 | .289 | .084 | .005010 |
| .251 | .190 | .005015 | .260 | .205 | .010020 | .269 | .190 | .005010 | .276 | .142 | .005010 | .281 | .142 | .010030 | .289 | .090 | .075090 |
| .251 | .192 | .005010 | .261 | .104 | .050070 | .269 | .213 | .005010 | .276 | .143 | .015030 | .281 | .143 | .005010 | .289 | .091 | .060075 |
| .251 | .195 | .005010 | .261 | .110 | .005010 | .270 | .096 | .005025 | .276 | .146 | .005015 | .281 | .156 | .005010 | .289 | .123 | .005010 |
| .251 .251 | .200 .205 | .015025 .007015 | .261 . 261 | .111 .201 | .030050 . 005010 | .270 .270 | .099 .109 | .020030 .015030 | .276 .276 | .153 .159 | .020035 .030050 | .281 .281 | .159 .162 | .015030 .010050 | .289 .289 | .126 .175 | . 005030 .025040 |
| .252 | .078 | .060072 | .261 | .206 | .005010 | .270 | .113 | .005010 | .276 | .161 | .005015 | .281 | .170 | .016032 | .289 | .189 | .040050 |
| .252 | .099 | .005010 | .262 | .062 | .020030 | .270 | .132 | .025035 | .276 | .162 | .010020 | .281 | .173 | .005010 | .289 | .192 | .010020 |
| .252 | .103 | .015025 | .262 | .117 | .015030 | .270 | .135 | .031042 | .276 | .167 | .005010 | .281 | .185 | .015030 | .290 | .103 | .005010 |
| .252 | .120 | .010020 | .262 | .129 | .005010 | .270 | .148 | .010020 | .276 | .192 | .030040 | .281 | .186 | .005010 | .290 | .126 | .005030 |
| .252 | .127 .128 | .030050 | .262 .262 | .156 .188 | .015030 .025040 | .270 | .160 | .005010 .005010 | .276 | .196 | .005010 | .281 .282 | .187 .082 | .015030 | .290 .290 | .128 .137 | .015030 .010020 |
| .252 | .141 | .020040 | .262 | .192 | .020030 | .270 .270 | .207 .210 | .020040 | .276 .277 | .209 .088 | .010020 . 005010 | .282 | .089 | .075093 | .290 | .137 | .005010 |
| .252 | .146 | .008016 | .262 | .199 | .020040 | .271 | .127 | .015025 | .277 | .092 | .010020 | .282 | .096 | .015025 | .290 | .151 | .032042 |
| .252 | .159 | .025040 | .263 | .061 | .005010 | .271 | .130 | .008015 | .277 | .108 | .005010 | .282 | .123 | .005015 | .290 | .199 | .015030 |
| .252 | .191 | .010040 | .263 | .091 | .025040 | .271 | .138 | .005040 | .277 | .126 | .005010 | .282 | .126 | .015025 | .290 | .201 | .030040 |
| .252 .252 | .195 .197 | .012020 .020030 | .263 | .129 | .010020 | . 271 | .146 | .005010 | .277 | .127 | .005008 | .282 .282 | .127 .130 | .040060 . 005010 | .290 | .209 | .025040 .010020 |
| .252 | .197 . 205 | .020030 | .263 . 263 | .158 .191 | .030050 . 005010 | .271 .271 | .175 .190 | .030050 .015025 | .277 .277 | .129 .132 | .050070 .015025 | .282 | .173 | .025040 | .291 .291 | .032 .078 | .010020 |
| .253 | .048 | .040050 | .263 | .193 | .005010 | .271 | .199 | .015025 | .277 | .140 | .020030 | .282 | .176 | .005010 | .291 | .159 | .040060 |
| .253 | .056 | .025040 | .263 | .195 | .005010 | .271 | .221 | .020030 | .277 | .143 | .005010 | .282 | .180 | .025040 | .291 | .176 | .020040 |
| .253 | .096 | .025040 | .263 | .199 | .010025 | .272 | .093 | .025042 | .277 | .146 | .050070 | .282 | .184 | .006016 | .291 | .184 | .008015 |
| .253 | .115 | .005012 | .264 | .108 | .025040 | .272 | .095 | .015030 | .277 | .161 | .015030 | .282 | .187 | .040050 | .291 | .190 | .025050 |
| .253 .253 | .116 .125 | .005012 .040060 | .264 .264 | .139 .147 | .015025 . 005010 | .272 .272 | .121 .132 | .020040 .015030 | .277 .277 | .163 .166 | .015025 .005008 | .282 .282 | .191 .197 | .025040 .010020 | .291 .291 | .195 .244 | . 005010 .015025 |
| .253 | .125 | .020030 | .264 | .162 | .025040 | .272 | .156 | .030048 | .277 | .170 | .005008 | .282 | .223 | .010020 | .291 | .250 | .015025 |
| .253 | .132 | .025040 | .264 | .168 | .015025 | .272 | .169 | .032042 | .277 | .195 | .005010 | .283 | .095 | .005010 | .292 | .114 | .040060 |
| .253 | .145 | .025040 | .264 | .174 | .050060 | .272 | .192 | .015032 | .277 | .201 | .010020 | .283 | .096 | .015030 | .292 | .145 | .025040 |
| .253 | .166 | .020040 | .264 | .240 | .005010 | .272 | .194 | .010020 | .278 | .087 | .005010 | .283 | .098 | .032062 | .292 | .146 | .005010 |
| .253 | .190 | .020040 | .265 | .101 | .020040 | .272 | .220 | .005010 | .278 | .135 | .040062 | .283 | .111 | .010020 | .292 | .148 | .020040 |
| .253 | .191 . 192 | .020040 .005010 | .265 .265 | .115 .122 | .040050 .020040 | . 273 .273 | . 104 .108 | .005010 .015030 | .278 .278 | .141 .142 | .010020 .025040 | .283 | .140 | .025042 | .292 . 292 | .149 . 171 | .030040 .005010 |
| .253 | .197 | .005010 | .265 | .125 | .005010 | .273 | .118 | .015030 | .278 | .151 | .015030 | .283 | .165 | .008015 | .292 | .192 | .010015 |
| .254 | .051 | .030050 | .265 | .126 | .020040 | .273 | .141 | .015025 | .278 | 155 | .005010 | .283 | .166 | .005010 | .292 | .193 | .020030 |
| .254 | .117 | .010020 | .265 | .129 | .005010 | .273 | .144 | .005010 | .278 | .190 | .005010 | .283 | .168 | .025040 | .292 | .197 | .040050 |
| .254 | .127 | .025040 | .265 | .141 | .005010 | .273 | .148 | .005010 | .278 | .191 | .015032 | .283 | .173 | .030040 | .292 | .236 | .005010 |
| .254 .254 | .159 .160 | .005010 .025042 | .265 .265 | .143 .153 | .040062 . 005010 | .273 | .149 | .020030 .020040 | .278 .279 | .224 .045 | .010020 .005015 | .283 .283 | .184 .190 | . 005010 .008015 | .293 .293 | .034 | .015025 |
| .254 | .194 | .025042 | .265 | .160 | .005010 | .273 .273 | .163 . 173 | .020040 . 005010 | .279 | .116 | .010020 | .283 | .200 | .010020 | .293 . 293 | .124 .129 | .010020 .005010 |
| .254 | .201 | .005010 | .265 | .161 | .010030 | .273 | .203 | .020030 | .279 | .129 | .010015 | .283 | .216 | .005030 | .293 | .147 | .005010 |
| .254 | .205 | .005010 | .265 | .166 | .010015 | .274 | .032 | .005010 | .279 | .139 | .032048 | .283 | .218 | .005025 | .293 | .188 | .030050 |
| | | | *\^(:+ - D.C | | | | | | | | | | | | | | |

| | | Choose Any | | | Choose Any | | | Choose Any | 1 3 IVIL | IAL | Choose Any | IO AIII | _ | Choose Any | OWIDE | | Choose Any |
|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|---------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| .293 | .192 | .040050 | .300 | .166 | .005010 | .305 | .221 | .005010 | .310 | .132 | .015030 | .312 | .129 | .010030 | .313 | .255 | .015025 |
| .293 | .219 | .005010 | .300 | .167 | .030042 | .305 | .225 | .010020 | .310 | .134 | .015030 | .312 | .130 | .005015 | .314 | .039 | .010020 |
| .294 .294 | .086 .089 | .015030 .015030 | .300 .300 | .169 .175 | .015030 .025040 | .306 .306 | .045 .127 | .010025 .025040 | .310 .310 | .140 .147 | .015025 .005010 | .312 .312 | .132 .134 | .010025 .010015 | . 314 .314 | .043 .088 | .005010 .015035 |
| .294 | .122 | .015030 | .300 | .176 | .005010 | .306 | .138 | .020040 | .310 | .152 | .015025 | .312 | .139 | .005008 | .314 | .103 | .025045 |
| .294 | .126 | .015030 | .300 | .177 | .010020 | .306 | .140 | .005010 | .310 | .155 | .030042 | .312 | .142 | .006030 | .314 | .111 | .010025 |
| .294 | .177 | .040060 | .300 | .180 | .015025 | .306 | .190 | .015030 | .310 | .161 | .005010 | .312 | .143 | .005012 | .314 | .114 | .032050 |
| .294 .294 | .187 .192 | .030050 .005012 | . 300 .300 | . 182 .185 | . 005010 .010020 | .306 | .194 | .030050 | .310 | .162 | .030040 | . 312 .312 | .144 .146 | . 005020 .008016 | .314 .314 | .122 .128 | .025048 .005015 |
| .294 | .224 | .005012 | .300 | .192 | .005010 | .306 .306 | .203 .228 | .005015 .016025 | .310 .310 | .171 .174 | .010020 .010020 | .312 | .148 | .040060 | .314 | .139 | .040060 |
| .295 | .106 | .008016 | .300 | .200 | .005010 | .306 | .243 | .005010 | .310 | .188 | .030050 | .312 | .154 | .005060 | .314 | .148 | .025062 |
| .295 | .127 | .025040 | .300 | .203 | .010020 | .307 | .080 | .005010 | .310 | .189 | .010020 | .312 | .156 | .016080 | .314 | .152 | .035050 |
| .295 .295 | .130 .138 | .010040 .015030 | .300 .300 | .216 .220 | .016025 .015025 | .307 | .081 .095 | .060080 .020040 | .310 .310 | .190 .191 | .012025 . 005010 | . 312 .312 | .157 .158 | . 005035 .010020 | .314 .314 | .158 .161 | .060080 .040060 |
| .295 | .148 | .030040 | .300 | .230 | .010020 | .307 .307 | .130 | .080100 | .310 | .193 | .025040 | .312 | .160 | .040060 | .314 | .162 | .040060 |
| .295 | .162 | .020040 | .300 | .248 | .015030 | .307 | .143 | .025080 | .310 | .195 | .005010 | .312 | .165 | .020040 | .314 | .176 | .030050 |
| .295 | .167 | .025040 | .300 | .260 | .005012 | .307 | .159 | .030050 | .310 | .199 | .030050 | .312 | .167 | .015025 | .314 | .189 | .015032 |
| .295 .295 | .169 .170 | . 005010 .040050 | .301 .301 | .109 .127 | .025040 .015025 | .307 .307 | .161 .166 | .005010 .005010 | .310 | .201 | .032050 | .312 .312 | .171 .172 | .040060 .020030 | .314 .314 | .219 .220 | .030050 .015030 |
| .295 | .173 | .030050 | .301 | .130 | .015025 | .307 | .174 | .005010 | .310 .310 | .213 .214 | .030050 .010020 | .312 | .172 | .005010 | .314 | .225 | .015030 |
| .295 | .174 | .020032 | .301 | .132 | .005010 | .307 | .177 | .015025 | .310 | .232 | .005010 | .312 | .182 | .010020 | .314 | .236 | .005010 |
| .295 | .177 | .010020 | .301 | .142 | .060080 | .307 | .189 | .005020 | .310 | .235 | .005010 | .312 | .188 | .020040 | .314 | .242 | .010020 |
| . 295 .295 | .187 .192 | .005010 .005040 | .301 . 301 | .144 .146 | .020040 .005010 | .307 .307 | .203 .204 | .025042 .025040 | .310 | .242 | .010040 | .312 .312 | .189 .190 | .005062 .005030 | .314 .315 | .256 .025 | .010020 .006010 |
| .295 | .192 | .005040 | .301 | .1 46 .152 | .020030 | .307 | .204 . 207 | .025040 | .310 .310 | . 250 .254 | . 005020 .015030 | .312 | .190 | .008020 | .315 | .025 | .006010 |
| .295 | .195 | .005010 | .301 | .161 | .025040 | .307 | .254 | .010020 | .310 | .255 | .005020 | .312 | .192 | .005035 | .315 | .068 | .010020 |
| .295 | .199 | .020030 | .301 | .165 | .005015 | .308 | .043 | .005012 | .310 | .256 | .010020 | .312 | .193 | .005010 | .315 | .087 | .020040 |
| .295 .296 | .210 .119 | .010020 .015030 | .301 .301 | .167 .168 | .040060 .040060 | .308 .308 | .099 .108 | .010020 .005015 | .310 .310 | .257 .258 | .005030 .005010 | .312 .312 | .194 .195 | .025040 .020035 | .315 .315 | .092 .095 | .045065 .032062 |
| .296 | .120 | .020030 | .301 | .185 | .020030 | .308 | .108 | .015030 | .310 | .260 | .005010 | .312 | .195 | .020035 | .315 | .095 | .005030 |
| .296 | .122 | .005010 | .301 | .190 | .005020 | .308 | .131 | .005010 | .311 | .118 | .050075 | .312 | .200 | .040060 | .315 | .124 | .050060 |
| .296 | .130 | .030050 | .301 | .203 | .015030 | .308 | .136 | .005010 | .311 | .125 | .005010 | .312 | .204 | .005010 | .315 | .127 | .050070 |
| .296 .296 | .144 . 173 | .025040 . 005010 | .301 | .215 | .005010 | .308 | .140 | .005015 | .311 | .126 | .030050 | .312 | .206 .208 | .010020 .005010 | .315 | .129 | .030050 |
| .296 | .188 | .015030 | .301 .301 | .225 .245 | .005010 .005010 | .308 .308 | .143 .145 | .015030 .020030 | .311 .311 | .127 .128 | .012025 .060080 | . 312 .312 | .216 | .010020 | .315 .315 | .138 .147 | .060080 .020030 |
| .296 | .189 | .015030 | .301 | .255 | .010016 | .308 | .148 | .030050 | .311 | .129 | .025048 | .312 | .219 | .015030 | .315 | .157 | .005015 |
| .296 | .190 | .015025 | .302 | .125 | .070090 | .308 | .175 | .040060 | .311 | .130 | .005025 | .312 | .221 | .005010 | .315 | .160 | .005010 |
| .296 .296 | .198 .258 | .025042 .005015 | .302 .302 | .130 .131 | .050070 .040060 | .308 .308 | .188 .199 | .040060 .005010 | .311 | .137 | .030050 | . 312 .312 | .223 .227 | .005042 | .315 | .162 .163 | .020030 .005010 |
| .297 | .062 | .010025 | .302 | .141 | .005010 | .308 | .204 | .020040 | .311 .311 | .142 .147 | .040070 .080090 | .312 | .228 | .030042 | . 315 .315 | .170 | .020040 |
| .297 | .086 | .005010 | .302 | .151 | .005010 | .308 | .205 | .005025 | .311 | .155 | .015050 | .312 | .231 | .025040 | .315 | .190 | .005010 |
| .297 | .120 | .050070 | .302 | .167 | .035050 | .308 | .209 | .015025 | .311 | .159 | .005025 | .312 | .251 | .005010 | .315 | .223 | .030050 |
| .297 | .135 | .020035 | .302 | .168 | .015025 | .308 | .210 | .015025 | .311 | .160 | .010020 | .312 | .252 | .025042 .015030 | .315 | .238 | .010020 .005020 |
| .297 .297 | .159 .190 | .030050 .010020 | .302 .302 | .172 .190 | .015025 .005040 | . 308 .309 | .254 .031 | . 005010 .010020 | .311 .311 | .166 .167 | .040062 .005015 | .312 .313 | .254 .082 | .015030 | . 315 .316 | .250 .098 | .030050 |
| .297 | .203 | .020040 | .302 | .198 | .015030 | .309 | .070 | .015025 | .311 | .177 | .005010 | .313 | .096 | .075090 | .316 | .105 | .025048 |
| .297 | .209 | .005010 | .302 | .205 | .030050 | .309 | .094 | .010020 | .311 | .183 | .042062 | .313 | .100 | .008042 | .316 | .124 | .060075 |
| .297 .298 | . 255 .062 | . 005010 .010020 | .302 .303 | .252 | .005015 | .309 | .109 | .025040 | .311 | .187 | .025042 | .313 .313 | .101 .105 | .040060 .008020 | .316 | .134 | .005010 .005010 |
| .298 | .139 | .005010 | .303 | .114 .128 | .005010 .005010 | .309 .309 | .147 .159 | .010020 .020030 | .311 .311 | .188 .190 | . 005050 .015030 | .313 | .110 | .008020 | .316 .316 | .140 .153 | .005010 |
| .298 | .155 | .005010 | .303 | .171 | .020040 | .309 | .161 | .040062 | .311 | .191 | .008040 | .313 | .120 | .005010 | .316 | .157 | .005010 |
| .298 | .158 | .008016 | .303 | .181 | .030050 | .309 | .172 | .020035 | .311 | .195 | .005010 | .313 | .123 | .050070 | .316 | .167 | .005010 |
| .298 .298 | .161 .164 | .025040 .030050 | .303 | .191 | .025040 | .309 | .176 | .020030 | .311 | .204 | .005020 | 313 | .126 | .020040 .005010 | .316 | .199 | .030050 |
| .298 | .180 | .030030 | .303 .303 | .197 .198 | .030050 . 005010 | .309 .309 | .191 .194 | .030050 .025040 | .311 .311 | .215 .217 | . 005010 .020040 | .313 .313 | .129 .130 | .025040 | .316 .316 | .201 .207 | .005050 .005010 |
| .298 | .181 | .030050 | .303 | .200 | .005010 | .309 | .195 | .050070 | .311 | .219 | .020035 | .313 | .133 | .015030 | .316 | .209 | .005010 |
| .298 | .193 | .015025 | .303 | .220 | .030050 | .309 | .202 | .030050 | .311 | .231 | .025040 | .313 | .138 | .025040 | .316 | .252 | .005010 |
| .298 .298 | .200 .205 | .005010 .005010 | .303 | .225 .234 | .005010 .005010 | .309 .309 | .210 .247 | .010020 . 005010 | .311 | .238 | . 005010 .005012 | .313 | .140 .147 | .040060 .030050 | .316 .317 | .255 .095 | .006010 .008020 |
| .298 | .241 | .005010 | .303 | .240 | .020030 | .309 | .251 | .015030 | .312 .312 | .039 .054 | .005012 .005010 | .313 | .151 | .005010 | .317 | .100 | .006020 |
| .299 | .105 | .030040 | .303 | .251 | .010020 | .309 | .254 | .010030 | .312 | .062 | .015030 | .313 | .156 | .040050 | .317 | .114 | .005010 |
| .299 | .116 | .010020 | .304 | .083 | .025040 | .309 | .255 | .015030 | .312 | .066 | .010020 | .313 | .157 | .005010 | .317 | .132 | .005010 |
| .299 .299 | .145 .202 | .010030 . 005010 | .304 .304 | .163 .174 | .010020 .005010 | .310 | .047 | .025035 | .312 | .072 | .005010 | .313 | .158 .160 | .015030 .006030 | .317 .317 | .148 .205 | .050070 .010020 |
| .300 | .045 | .005010 | .304 | .174 | .030050 | .310 .310 | .060 .071 | .010025 . 005010 | .312 .312 | .073 .090 | .015025 .025050 | .313 .313 | .160 | .006030 | .317 | .205 . 229 | .010020 |
| .300 | .065 | .008040 | .304 | .241 | .010020 | .310 | .076 | .020040 | .312 | .093 | .005062 | .313 | .170 | .060080 | .317 | .240 | .025035 |
| .300 | .081 | .005010 | .304 | .245 | .015020 | .310 | .088 | .015025 | .312 | .094 | .020030 | .313 | .173 | .025050 | .317 | .281 | .005010 |
| .300 | .095 .097 | .010020 .016090 | .304 | .250 | .020030 | .310 | .090 | .012025 | .312 | .095 | .032042 | 313 | .179 | .005025 .005010 | .318 | .125 | .010020 |
| .300 | .100 | .016090 | .305 .305 | .087 .125 | .025040 .005010 | .310 .310 | .093 .095 | .025040 .025035 | .312 .312 | .096 .098 | .015025 .060070 | .313 .313 | .185 .187 | .005010 | .318 .318 | .132 .143 | .010020 .008020 |
| .300 | .116 | .020040 | .305 | .140 | .032060 | .310 | .096 | .005010 | .312 | .099 | .010020 | .313 | .190 | .010015 | .318 | .191 | .010020 |
| .300 | .117 | .025040 | .305 | .153 | .015025 | .310 | .102 | .015030 | .312 | .100 | .050060 | .313 | .200 | .010020 | .318 | .198 | .030060 |
| .300 | .119 | .005010 | .305 | .156 | .010020 | .310 | .104 | .020040 | .312 | .104 | .005008 | .313 | .206 | .030050 | .318 | .228 | .008016 |
| . 300 .300 | . 128 .130 | . 005060 .030050 | .305 .305 | .160 .162 | .025040 .015030 | .310 .310 | .106 .119 | .025050 .025050 | .312 .312 | .105 .112 | .015025 .010020 | .313 .313 | .207 .208 | .020040 .005010 | . 318 .319 | .237 .140 | . 005010 .015030 |
| .300 | .138 | .020060 | .305 | .169 | .025040 | .310 | .120 | .030060 | .312 | .116 | .005010 | .313 | .224 | .020040 | .319 | .146 | .020030 |
| .300 | .144 | .015030 | .305 | .188 | .010020 | .310 | .122 | .025035 | .312 | .122 | .015030 | .313 | .230 | .005015 | .319 | .178 | .005010 |
| .300 | .145 | .005012 | .305 | .197 | .005010 | .310 | .124 | .005010 | .312 | .126 | .005010 | .313 | .232 | .005015 | .319 | .228 | .010020 |
| .300 | .157 .162 | .020030 .025040 | .305 .305 | .204 .205 | .025048 .025042 | .310 .310 | .127 .130 | .020075 .030050 | .312 .312 | .127 .128 | .010020 .020040 | . 313 .313 | . 242 .253 | .005010 .020030 | . 320 .320 | .061 .067 | .005010 .030042 |
| .500 | .102 | .020040 | | | | | | .030050 20042 can u | | | | | | | • | .007 | .000042 |

| | | Choose Any | 1 | | Choose Any | | | Choose Any | 140 | 7100 | Choose Any | IAIIGE | . 1 01 | Choose Any | 11112 | JIZE | Choose Any |
|----------------------|--------------------------------------|-------------------------------|----------------------|----------------------|-------------------------------|----------------------|----------------------|----------------------------|---------------------|----------------------|----------------------------|----------------------|----------------------|--------------------|---------------------|----------------------|--------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| .320 | .078 | .005010 | .327 | .217 | .030050 | .334 | .295 | .010015 | .342 | .198 | .015030 | .347 | .234 | .040060 | .353 | .237 | .005010 |
| .320 | .084 | .030040 | .327 | .250 | .050060 | .335 | .034 | .010020 | .342 | .201 | .025040 | .347 | .253 | .016025 | .353 | .242 | .015025 |
| .320 | .093 | .042060 | .327 | .258 | .010025 | .335 | .129 | .015025 | .342 | .206 | .015030 | .347 | .256 | .006016 | .353 | .254 | .005010 |
| .320 | .113 | .005010 | .327 | .262 | .005010 | .335 | .159 | .060075 | .342 | .212 | .015025 | .347 | .263 | .005010 | .353 | .281 | .005010 |
| .320 .320 | .122 .124 | .015030 .005010 | . 328 .328 | . 105 .162 | .005010 .040060 | .335 | .169 .172 | .015030 .010020 | .342 | .2 <u>55</u> .087 | .020030 | . 347 .348 | . 287 .168 | .005010 .020040 | .354 .354 | .048 .052 | .005010 .030050 |
| .320 | .131 | .005010 | .328 | .175 | .030050 | .335 | .172 | .010020 | .343 | .087 | .060075 | .348 | .172 | .005010 | .354 | .052 | .015025 |
| .320 | .145 | .025042 | .328 | .177 | .005010 | .335 | .200 | .020040 | .343 | .092 | .005010 | .348 | .173 | .010042 | .354 | .070 | .015025 |
| .320 | .146 | .015030 | .328 | .179 | .015030 | .335 | .204 | .005040 | .343 | .094 | .025040 | .348 | .174 | .005010 | .354 | .099 | .010020 |
| .320 | .149 | .005010 | .328 | .192 | .030050 | .335 | .215 | .030050 | .343 | .097 | .010020 | .348 | .225 | .025042 | .354 | .125 | .005070 |
| .320 | .170 | .015025 | .328 | .197 | .025040 | .335 | .235 | .010020 | .343 | .110 | .025040 | .349 | .123 | .010020 | .354 | .128 | .025040 |
| .320 .320 | .178 .182 | .010020 .050070 | .328 .328 | .200 .214 | .005015 .010032 | .335 .335 | .257 .258 | .010030 .005010 | .343 | .116 .134 | .015030 .007016 | .349 .349 | .176 .191 | .010015 .035050 | .354 .354 | .144 .145 | .030050 .020040 |
| .320 | .220 | .040050 | .328 | .214 | .030050 | .335 | .259 | .005015 | .343 .343 | .134 | .040060 | .349 | .192 | .015030 | .354 | .145 | .020040 |
| .320 | .221 | .050062 | .328 | .222 | .010025 | .336 | .048 | .005010 | .343 | .161 | .005008 | .349 | .197 | .020030 | .354 | .161 | .010020 |
| .321 | .062 | .005010 | .328 | .225 | .005040 | .336 | .117 | .040060 | .343 | .167 | .010020 | .349 | .220 | .015030 | .354 | .162 | .010020 |
| .321 | .077 | .020030 | .328 | .245 | .007016 | .336 | .118 | .040060 | .343 | .193 | .005060 | .349 | .252 | .015030 | .354 | .204 | .040060 |
| .321 | .135 | .020035 | .328 | .252 | .020031 | .336 | .138 | .032048 | .343 | .194 | .060078 | .349 | .285 | .020030 | .354 | .226 | .005010 |
| .321 .321 | .147 .203 | .010020 .005010 | .328 .328 | .253 | .005010 | .336 | .191 .197 | .030050 | .343 | .195 | .006070 | .349 .349 | .290 .297 | .005010 .005010 | .354 .354 | .238 .245 | .005040 |
| .321 | .226 | .010020 | .328 | .256 | .010020 | .336 | .218 | .005010 | .343 | .196 .197 | .010020 .025040 | .350 | .060 | .005010 | .355 | .070 | .005010 .015030 |
| .321 | .253 | .020030 | .328 | .273 | .005010 | .336 | .230 | .010020 | .343 | .217 | .040050 | .350 | .089 | .005010 | .355 | .083 | .030050 |
| .322 | .050 | .005010 | .329 | .030 | .010020 | .336 | .257 | .020040 | .343 | .219 | .032050 | .350 | .090 | .005010 | .355 | .103 | .070080 |
| .322 | .128 | .010020 | .329 | .100 | .025040 | .336 | .270 | .005010 | .343 | .229 | .005010 | .350 | .121 | .010020 | .355 | .131 | .050078 |
| .322 | .145 | .015030 | .329 | .108 | .005010 | .336 | .275 | .005010 | .343 | .230 | .025035 | .350 | .122 | .005010 | .355 | .158 | .025042 |
| .322 | .206 | .005010 | .329 | .111 | .010020 | .336 | .306 | .005010 | .343 | .245 | .005010 | .350 | .154 | .005010 | .355 | .159 | .040060 |
| .322 .322 | .224 .228 | .010020 .025040 | . 329 .329 | .206 .209 | .005010 .030050 | .337 .337 | .129 .165 | .005012 .015025 | .343 .343 | .261 .274 | .010020 .020040 | .350 .350 | .167 .168 | .015030 .030050 | .355 .355 | .160 .175 | .040060 .040060 |
| .322 | .241 | .010020 | .329 | .209 | .005010 | .337 | .252 | .020030 | .343 .344 | .102 | .020040 | .350 | .171 | .005010 | .355 | .185 | .005010 |
| .322 | .242 | .025040 | .329 | .245 | .020040 | .337 | .277 | .015030 | .344 | .152 | .025045 | .350 | .181 | .025040 | .355 | .198 | .030050 |
| .322 | .287 | .010020 | .329 | .253 | .005010 | .337 | .285 | .015030 | .344 | .165 | .015030 | .350 | .194 | .005010 | .355 | .201 | .020040 |
| .323 | .094 | .010020 | .329 | .288 | .005010 | .338 | .115 | .005010 | .344 | .167 | .015025 | .350 | .195 | .060080 | .355 | .203 | .020050 |
| .323 | .099 | .020040 | .330 | .093 | .005010 | .338 | .168 | .072090 | .344 | .172 | .035050 | .350 | .203 | .032042 | .355 | .226 | .008016 |
| .323 .323 | .130 .160 | .025042 .005025 | .330 | .124 .140 | .020032 .042062 | .338 .338 | .170 .201 | .010020 .050060 | .344 | .184 | .025040 | .350 .350 | .213 .231 | .020030 .015030 | .355 .355 | . 230 .255 | .005010 .010020 |
| .323 | .166 | .020030 | .330 | .143 | .020040 | .338 | .238 | .005010 | <u>.344</u> .344 | .189 .190 | .015025 .005008 | .350 | .252 | .005010 | .355 | .260 | .030040 |
| .323 | .171 | .015030 | .330 | .193 | .005010 | .338 | .251 | .015030 | .344 | .196 | .020060 | .350 | .253 | .005010 | .355 | .281 | .015025 |
| .323 | .180 | .042090 | .330 | .206 | .005015 | .338 | .253 | .010020 | .344 | .252 | .025040 | .350 | .255 | .025040 | .355 | .282 | .005025 |
| .323 | .196 | .005010 | .330 | .217 | .005010 | .339 | .150 | .010020 | .344 | .267 | .025040 | .350 | .276 | .025040 | .356 | .111 | .025040 |
| .323 | .200 | .020032 | .330 | .229 | .025040 | .339 | .151 | .005010 | .344 | .290 | .010020 | .350 | .291 | .020045 | .356 | .198 | .030060 |
| .323 .323 | .211 .213 | .020030 . 005010 | .330 | .250 .251 | .005010 .005020 | .339 .339 | .157 .176 | . 005010 .020040 | .344 | .291 | .005010 | .351 .351 | .064 .091 | .005010 .030050 | .356 .356 | . 255 .282 | .005010 .025040 |
| .323 | .223 | .005010 | .330 | .253 | .020040 | .339 | .223 | .005010 | .345 .345 | . 043 .125 | .005010 .020032 | .351 | .094 | .005010 | .357 | .093 | .005012 |
| .324 | .035 | .005010 | .330 | .257 | .020036 | .340 | .085 | .015030 | .345 | .132 | .032048 | .351 | .097 | .005010 | .357 | .142 | .020040 |
| .324 | .099 | .005010 | .330 | .261 | .005010 | .340 | .150 | .015025 | .345 | .135 | .032048 | .351 | .130 | .005020 | .357 | .150 | .030050 |
| .324 | .126 | .020040 | .331 | .067 | .010025 | .340 | .158 | .020040 | .345 | .150 | .030042 | .351 | .145 | .005010 | .357 | .173 | .070090 |
| .324 | .145 | .010020 | .331 | .140 | .030050 | .340 | .164 | .030060 | .345 | .159 | .005010 | .351 | .166 | .008015 | .357 | .191 | .060080 |
| .324 .324 | .162 .165 | .060080 .060080 | .331 .331 | .158 .167 | .005010 .020030 | .340 .340 | .189 .190 | .012020 . 005010 | .345 .345 | .170 .189 | .005010 .005010 | .351 .351 | .171 .184 | .005015 .005010 | .357 .357 | .195 .260 | .060080 .040050 |
| .324 | .190 | .005010 | .331 | .196 | .005010 | .340 | .191 | .025050 | .345 | .109 | .005010 | .351 | .200 | .025050 | .357 | .303 | .010020 |
| .324 | .200 | .010020 | .331 | .198 | .015030 | .340 | .194 | .005010 | .345 | .193 | .025060 | .351 | .201 | .020030 | .357 | .318 | .005010 |
| .324 | .204 | .040060 | .331 | .200 | .040060 | .340 | .196 | .020040 | .345 | .205 | .005010 | .351 | .208 | .030060 | .358 | .126 | .025040 |
| .324 | .206 | .040060 | .331 | .236 | .015030 | .340 | .197 | .005035 | .345 | .216 | .005010 | .351 | .230 | .040060 | .358 | .127 | .015025 |
| .324 | .207 | .020030 | .331 | .237 | .020030 | .340 | .204 | .036050 | .345 | .223 | .030050 | .351 | .241 | .020040 | .358 | .170 | .006010 |
| .324 .324 | .242 . 254 | .025042 .005010 | .331 | .254 | .005008 .005010 | .340 | .207 | .030050 | .345 | .228 | .015030 | .351 | .252 | .010020 | .358 | .178 | .030050 |
| .324 | .118 | .005010 | .332 .332 | .164 .175 | .050075 | .340 .340 | .210 .212 | .030050 .020040 | .345 .345 | .252 .276 | .010020 .015030 | .351 .351 | .309 | .020030 | .358 .358 | . 203 .204 | .005010 .020030 |
| .325 | .125 | .015025 | .332 | .173 | .016030 | .340 | .222 | .025062 | .345 | .276 .277 | .005010 | .352 | .031 | .010020 | .358 | .238 | .025040 |
| .325 | .130 | .015025 | .332 | .213 | .005008 | .340 | .233 | .050060 | .346 | .046 | .025040 | .352 | .090 | .010015 | .358 | .252 | .005010 |
| .325 | .140 | .040060 | .332 | .236 | .005030 | .340 | .240 | .030050 | .346 | .084 | .030050 | .352 | .129 | .020030 | .358 | .257 | .010020 |
| .325 | .142 | .008018 | .333 | .123 | .020080 | .340 | .257 | .010020 | .346 | .116 | .005010 | .352 | .167 | .030050 | .359 | .069 | .030050 |
| .325 | .164 | .015030 | .333 | .173 | .032048 | .340 | .283 | .015025 | .346 | .128 | .050070 | .352 | .168 | .008020 | .359 | .127 | .025040 |
| .325 .325 | . 169 .200 | .005010 .005050 | .333 | .175 | .020050 .020036 | .341 | .052 | .025040 | .346 | .143 | .040060 | .352 .352 | .184 | .015030 .035050 | .359 .359 | .137 | .010020 |
| .325 .325 | .200 | .005050 | .333 | .212 .225 | .020036 | .341 .341 | .061 .090 | .005010 .060080 | .346 .346 | .149 .152 | .075090 . 005010 | .352 | .191 .236 | .035050 | .359 | .158 .159 | .010020 .020035 |
| .325 | .236 | .025040 | .333 | .257 | .015025 | .341 | .093 | .020040 | .346 | .158 | .005025 | .352 | .240 | .040060 | .359 | .190 | .020035 |
| .325 | .244 | .015025 | .334 | .039 | .015025 | .341 | .120 | .005010 | .346 | .163 | .006015 | .352 | .254 | .005010 | .359 | .195 | .030050 |
| .325 | .254 | .015025 | .334 | .040 | .005010 | .341 | .131 | .070090 | .346 | .166 | .005010 | .352 | .255 | .030050 | .359 | .204 | .010025 |
| .326 | .138 | .005010 | .334 | .046 | .005010 | .341 | .141 | .080090 | .346 | .172 | .040090 | .352 | .263 | .010020 | .359 | .210 | .025042 |
| .326 | .150 | .030050 | .334 | .122 | .005010 | .341 | .158 | .025040 | .346 | .180 | .005010 | .353 | .062 | .015025 | .359 | .221 | .025040 |
| .326 .326 | .180 | .005010 .005010 | .334 | .127 | .005010 | .341 | .161 | .015035 | .346 | .196 .207 | . 005010 .030060 | .353 .353 | .128 .143 | .020040 .020075 | .359 | .257 | .010020 |
| .326 | . 181 .189 | .050070 | .334 .334 | .160 .196 | .015030 .005010 | .341 .341 | .164 .202 | .010025 .015030 | .346 .346 | .216 | .030060 | .353 | .143 | .020075 | .359 .359 | .258 .260 | .020040 .031042 |
| .326 | | .005010 | .334 | .197 | .032048 | .341 | .202 | .025035 | .346 | .219 | .010020 | .353 | .158 | .005030 | .359 | .267 | .020032 |
| .326 | .196 | | | | | .342 | .092 | .005020 | .346 | .253 | .005010 | .353 | .159 | .030050 | .359 | .284 | .010020 |
| .320 | .196 .256 | .005010 | .334 | .220 | .005050 | | | | | | | | | | | | |
| .327 | | .005010 .025042 | .334 | .226 | .025040 | .342 | .118 | .032048 | .346 | .289 | .005010 | .353 | .172 | .025040 | .359 | .293 | .005015 |
| .327 .327 | . 256 .113 .120 | .025042 .025040 | .334 .334 | .226 .242 | .025040 .010020 | .342 .342 | .118 .145 | .005008 | .347 | .157 | .020030 | .353 | .190 | .015030 | .360 | .038 | .005010 |
| .327 .327 .327 | . 256 .113 .120 .130 | .025042 .025040 .030050 | .334 .334 .334 | .226 .242 .258 | .025040 .010020 .020030 | .342 .342 .342 | .118 .145 .162 | .005008 .030050 | .347 .347 | .157 .174 | .020030 .030050 | .353 .353 | .190 .225 | .015030 .032050 | .360 .360 | .038 .080 | .005010 .005010 |
| .327 .327 | . 256 .113 .120 | .025042 .025040 | .334 .334 | .226 .242 | .025040 .010020 | .342 .342 | .118 .145 | .005008 | .347 | .157 | .020030 | .353 | .190 | .015030 | .360 | .038 | .005010 |

| | | Observe Ameri | | | Oh | | | | 1 3 IVIE | IAL | | 3 Ani | FLA | AT AND T | UIVIBL | E DE | |
|------------------------------|--------------------------------------|--|------------------------------|------------------------------|--|----------------------|----------------------|-------------------------------|--------------------------------------|------------------------------|--|----------------------|----------------------|-------------------------------|-----------------------------|-------------------------------------|---|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| .360 | .136 | .005020 | .367 | .105 | .015025 | .371 | .150 | .005010 | .374 | .099 | .005010 | .375 | .203 | .015060 | .377 | .047 | .030042 |
| .360 | .164 | .020032 | .367 | .125 | .090125 | .371 | .176 | .005010 | .374 | .120 | .040060 | .375 | .204 | .060080 | .377 | .068 | .030042 |
| .360 | .171 | .025040 | .367 | .176 | .050062 | .371 | .184 | .010020 | .374 | .130 | .010020 | .375 | .205 | .008015 | .377 | .071 | .005010 |
| .360 | .175 | .005020 | .367 | .186 | .005010 | .371 | .195 | .050070 | .374 | .138 | .005015 | .375 | .209 | .025062 | .377 | .100 | .015030 |
| .360 .360 | .177 .185 | .050070 .005010 | .367 | .258 | .050060 .015030 | .371 .371 | .201 .206 | .060083 | .374 | .149 | .010015 | .375 .375 | .211 .213 | .010020 | .377 | .101 .110 | .020030 |
| .360 | .186 | .040060 | .367 .367 | .260 | .005010 | .371 | .206 | .030050 | .374 .374 | .157 .168 | .025040 .025040 | .375 | .218 | .060080 | .377 | .114 | .020030 |
| .360 | .190 | .030050 | .367 | .272 | .020040 | .371 | .233 | .005010 | .374 | .172 | .040060 | .375 | .220 | .005010 | .377 | .115 | .005010 |
| .360 | .192 | .060090 | .367 | .273 | .005010 | .371 | .245 | .050075 | .374 | .173 | .040060 | .375 | .223 | .050070 | .377 | .134 | .015030 |
| .360 | .193 | .005015 | .368 | .061 | .005010 | .371 | .250 | .005032 | .374 | .175 | .040060 | .375 | .226 | .015030 | .377 | .140 | .005010 |
| .360 | .203 | .030042 | .368 | .063 | .005010 | .371 | .252 | .035050 | .374 | .180 | .020080 | .375 | .235 | .010020 | .377 | .145 | .050060 |
| .360 .360 | .207 .230 | .050062 .010020 | .368 .368 | .080 .122 | .020030 .025042 | .371 .371 | .253 .255 | .015030 .005012 | .374 .374 | .185 .191 | .015030 .005060 | .375 .375 | .237 .238 | .005075 .005030 | .377 .377 | .147 .156 | .010020 .030060 |
| .360 | .245 | .005010 | .368 | .124 | .040050 | .371 | .256 | .005012 | .374 | .194 | .005010 | .375 | .245 | .050060 | .377 | .157 | .070090 |
| .360 | .260 | .025042 | .368 | .154 | .005010 | .371 | .260 | .005020 | .374 | .196 | .025040 | .375 | .248 | .010020 | .377 | .171 | .025040 |
| .360 | .277 | .005010 | .368 | .168 | .025040 | .371 | .269 | .005010 | .374 | .199 | .005010 | .375 | .250 | .005060 | .377 | .173 | .030050 |
| .360 .361 | .312 .243 | .015025 .025040 | .368 | .193 | .020040 | .371 | .281 | .020030 | .374 | .200 | .005010 | .375 | .252 .253 | .005015 .005025 | .377 | .182 | .025048 |
| .361 | .243 | .025040 | .368 .368 | .194 .195 | .050070 .070090 | .371 .371 | .283 .314 | .010020 . 005010 | .374 .374 | .202 .206 | .025040 . 005010 | .375 .375 | .254 | .005025 | .377 .377 | .185 .189 | .010020 .030060 |
| .361 | .296 | .005010 | .368 | .199 | .015050 | .372 | .060 | .010020 | .374 | .222 | .005010 | .375 | .255 | .020030 | .377 | .190 | .015030 |
| .362 | .121 | .005010 | .368 | .223 | .060080 | .372 | .071 | .020040 | .374 | .225 | .008016 | .375 | .257 | .025040 | .377 | .191 | .025040 |
| .362 | .143 | .015030 | .368 | .226 | .007015 | .372 | .083 | .040060 | .374 | .232 | .005040 | .375 | .258 | .010020 | .377 | .194 | .025060 |
| . 362 .362 | .220 .221 | . 005010 .010020 | .368 | .256 | .005010 | .372 | .097 | .040060 | .374 | .236 | .050060 | .375 | .267 .274 | .020030 .010020 | .377 | .219 | .032042 |
| .362 | .235 | .010020 | .368 .368 | .257 .263 | .020040 .005010 | .372 .372 | .099 .106 | .020040 .025040 | .374 .374 | .237 .252 | .030060 .015040 | .375 .375 | .274 | .010020 | .377 .377 | .220 .223 | .020040 |
| .362 | .247 | .015030 | .368 | .265 | .005030 | .372 | .124 | .005010 | .374 | .255 | .005010 | .375 | .281 | .005040 | .377 | .225 | .015030 |
| .362 | .257 | .030050 | .368 | .287 | .020040 | .372 | .153 | .025042 | .374 | .257 | .025060 | .375 | .282 | .005010 | .377 | .230 | .010020 |
| .362 | .267 | .025040 | .368 | .298 | .005010 | .372 | .158 | .025048 | .374 | .280 | .005010 | .375 | .285 | .008015 | .377 | .253 | .015060 |
| .362 .363 | .283 .152 | .005010 .005010 | . 368 .369 | .323 .084 | . 005010 .030040 | .372 .372 | .162 | .020040 .015030 | .374 | .320 .041 | .010020 .040050 | .375 .375 | .292 .303 | .015025 .025040 | .377 .377 | .254 .255 | .025040 .040062 |
| .363 | .191 | .008016 | .369 | .117 | .015030 | .372 | <u>.164</u> .174 | .025040 | .375 .375 | .041 | .006015 | .375 | .313 | .005010 | .377 | .262 | .030050 |
| .363 | .254 | .010040 | .369 | .177 | .050070 | .372 | .177 | .060080 | .375 | .086 | .015030 | .375 | .316 | .020040 | .377 | .265 | .005010 |
| .363 | .255 | .010020 | .369 | .181 | .040060 | .372 | .179 | .015030 | .375 | .091 | .005030 | .375 | .318 | .020032 | .377 | .267 | .006012 |
| .363 | .259 | .010020 | .369 | .190 | .005015 | .372 | .180 | .015030 | .375 | .095 | .090104 | .375 | .382 | .005010 | .377 | .276 | .010020 |
| .363 .363 | .286 .314 | .025036 .005010 | .369 .369 | .194 .197 | .005010 .005010 | .372 . 372 | .196 .199 | .062080 .005016 | . 375 .375 | .100 .101 | .005030 .070080 | .376 .376 | .084 | .008016 | .377 .378 | .315 .061 | .010020 .005010 |
| .364 | .120 | .020040 | .369 | .205 | .005010 | .372 | .202 | .015030 | .375 | .103 | .030050 | .376 | .122 | .015030 | .378 | .062 | .005010 |
| .364 | .151 | .090110 | .369 | .208 | .025040 | .372 | .204 | .030050 | .375 | .110 | .030040 | .376 | .126 | .012020 | .378 | .064 | .015025 |
| .364 | .181 | .010020 | .369 | .215 | .005010 | .372 | .208 | .015030 | .375 | .111 | .005010 | .376 | .130 | .025040 | .378 | .127 | .005010 |
| .364 | .205 | .015030 | .369 | .224 | .005010 | .372 | .221 | .050075 | .375 | .114 | .030042 | .376 | .141 | .020040 | .378 | .130 | .010020 |
| .364 .364 | .258 | .005015 | .369 . 369 | .257 .313 | .050070 . 005010 | .372 .372 | .230 .239 | .015030 .050070 | .375 .375 | .120 .123 | .030060 .030075 | .376 .376 | .156 .157 | .010020 | .378 .378 | .160 .164 | .010020 .010030 |
| .365 | .046 | .010020 | .369 | .324 | .005010 | .372 | .253 | .010020 | .375 | .125 | .010070 | .376 | .158 | .050070 | .378 | .171 | .032050 |
| .365 | .062 | .005010 | .370 | .034 | .020025 | .372 | .254 | .010060 | .375 | .126 | .010020 | .376 | .159 | .050075 | .378 | .178 | .005010 |
| .365 | .098 | .020040 | .370 | .088 | .010025 | .372 | .255 | .005010 | .375 | .129 | .010036 | .376 | .161 | .005010 | .378 | .200 | .010020 |
| .365 .365 | .178 .189 | . 005010 .007015 | . 370 .370 | .101 .110 | . 005020 .025040 | .372 .372 | .256 .257 | .005015 .020030 | .375 .375 | .132 .133 | .080090 .050062 | .376 .376 | .169 .172 | .005010 .005060 | .378 .378 | .202 .244 | .015030 .005010 |
| .365 | .200 | .007013 | .370 | .119 | .005010 | .372 | .258 | .040050 | .375 | .135 | .005010 | .376 | .174 | .075090 | .378 | .251 | .020030 |
| .365 | .208 | .020040 | .370 | .125 | .005060 | .372 | .272 | .005010 | .375 | .143 | .075090 | .376 | .177 | .020035 | .378 | .252 | .010060 |
| .365 | .212 | .050070 | .370 | .126 | .005010 | .372 | .278 | .025042 | .375 | .144 | .005040 | .376 | .182 | .010020 | .378 | .255 | .015025 |
| .365 | .226 | .005010 | .370 | .140 | .010042 | .372 | .311 | .015030 | .375 | .145 | .025040 | .376 | .186 | .060080 | .378 | .258 | .020030 |
| .365 .365 | .247 .250 | .050070 .005020 | .370 .370 | .146 .158 | .025048 .010020 | .372 .372 | .312 .315 | .005035 . 005010 | .375 .375 | .147 .148 | .030050 .030050 | .376 . 376 | .187 .189 | .030050 . 005010 | .378 .378 | .260 .269 | .005010 .008016 |
| .365 | .253 | .025040 | .370 | .159 | .035060 | .372 | .039 | .025035 | .375 | .150 | .020050 | .376 | .190 | .020080 | .378 | .289 | .012025 |
| .365 | .254 | .005010 | .370 | .160 | .070080 | .373 | .041 | .010020 | .375 | .152 | .080100 | .376 | .191 | .040060 | .378 | .292 | .005010 |
| .365 | .255 | .015025 | .370 | .171 | .005020 | .373 | .068 | .015030 | .375 | .153 | .005050 | .376 | .194 | .030050 | .379 | .143 | .050070 |
| .365 .365 | .257 .265 | .015030 .042062 | .370 | .173 | .020040 .020030 | .373 | .081 | .040062 | .375 | .156 | .005012 .005010 | .376 376 | .196 .197 | .005010 .005010 | .379 | .162 .163 | .015035 .020035 |
| .365 | .265 . 268 | .042062 | .370 .370 | .180 .189 | .020030 | .373 .373 | .127 .142 | .005015 .062078 | .375 .375 | . 158 .160 | .010010 .010020 | . 376 .376 | .204 | .010020 | .379 .379 | .163 | .020035 |
| .365 | .270 | .020040 | .370 | .191 | .005010 | .373 | .157 | .020040 | .375 | .161 | .020040 | .376 | .205 | .005010 | .379 | .173 | .005010 |
| .365 | .307 | .005010 | .370 | .196 | .010020 | .373 | .159 | .020040 | .375 | .162 | .006100 | .376 | .217 | .040060 | .379 | .198 | .005010 |
| .365 | .312 | .005020 | .370 | .199 | .015025 | .373 | .165 | .005015 | .375 | .163 | .005010 | .376 | .220 | .020032 | .379 | .200 | .005010 |
| .365 .366 | .315 .077 | .005010 .005010 | .370 .370 | .202 .205 | .060080 .005010 | .373 .373 | .168 .174 | .010020 . 005010 | .375 .375 | .165 .169 | .042062 .015050 | .376 .376 | .222 .223 | .005010 .005042 | .379 .379 | .221 .250 | .005010 .005010 |
| .366 | .129 | .015025 | .370 | .206 | .025040 | .373 | .174 | .050078 | .375 | .172 | .005050 | .376 | .234 | .030050 | .379 | .252 | .005010 |
| .366 | .158 | .015030 | .370 | .211 | .060080 | .373 | .189 | .030050 | .375 | .173 | .020030 | .376 | .244 | .032050 | .379 | .257 | .040062 |
| .366 | .190 | .040060 | .370 | .212 | .040050 | .373 | .191 | .030072 | .375 | .175 | .005012 | .376 | .251 | .020032 | .379 | .297 | .030042 |
| . 366 .366 | .206 .218 | . 005020 .016032 | .370 | .218 | .040060 | .373 | .192 | .010060 | .375 .375 | .177 .180 | .060075 .060080 | .376 | .252 | .040050 .025048 | .380 | .093 | .015030 |
| .366 | .218 | .016032 | .370 . 370 | .220 .252 | .015030 .005010 | .373 .373 | .193 .196 | .005060 .005010 | .375 .375 | .180 .188 | .060080 | .376 .376 | .254 .255 | .040060 | .380 .380 | .095 .096 | .015030 .060080 |
| .366 | .225 | .020040 | .370 | .254 | .020040 | .373 | .200 | .005010 | .375 | .189 | .080104 | .376 | .260 | .005032 | .380 | .097 | .040060 |
| .366 | | .005015 | .370 | .256 | .015030 | .373 | .210 | .005010 | .375 | .190 | .080104 | .376 | .261 | .010020 | .380 | .116 | .005010 |
| | .253 | | | .261 | .005010 | .373 | .222 | .015030 | .375 | .191 | .040090 | .376 | .263 | .005020 | .380 | .126 | .030050 |
| .366 | .254 | .005030 | .370 | | | | | | -> 7 = | .192 | .005090 | | 260 | DDE 010 | 200 | 440 | .025040 |
| .366 | .254 .268 | .005030 .030050 | .370 | .269 | .040060 | .373 | .238 | .030050 | .375 | | | .376 | .269 | .005010 | .380 | .148 | |
| .366 .366 .366 | . 254 .268 .272 | .005030 .030050 .025035 | .370 .370 | .269 .300 | .040060 .020030 | .373 | .253 | .040060 | .375 | .193 | .005015 | .376 | .271 | .010040 | .380 | .149 | .080100 |
| .366 | .254 .268 | .005030 .030050 | .370 | .269 | .040060 | | | | | | | | | | | | |
| .366 .366 .366 | .254 .268 .272 .274 | .005030 .030050 .025035 .010020 .005012 .016025 | .370 .370 | .269 .300 | .040060 .020030 .005010 .025040 .050070 | .373 .373 | .253 .256 | .040060 .042060 | .375 .375 .375 .375 | .193 .194 .195 .196 | .005015 .040060 .005042 .005060 | .376 .376 | .271 .276 | .010040 .040060 | .380 .380 | .149 .162 .173 .175 | .080100 .040060 .005010 .015090 |
| .366 .366 .366 .366 | .254 .268 .272 .274 .294 | .005030 .030050 .025035 .010020 .005012 | .370 .370 .370 .371 | .269 .300 .330 .099 | .040060 .020030 .005010 .025040 | .373 .373 .373 | .253 .256 .317 | .040060 .042060 .010020 | . 375 .375 . 375 | .193 .194 .195 | .005015 .040060 .005042 | .376 .376 | .271 .276 .301 | .010040 .040060 .005010 | .380 .380 .380 | .149 .162 .173 | .080100 .040060 .005010 |



| | | Choose A | | | Chassa A | | | Chacas A | | 100 | | Artor | | Change Any | | JIZEC | |
|---------------------|----------------------|----------------------------|----------------------|----------------------|-------------------------------------|---------------------|----------------------|-------------------------------------|----------------------|----------------------|-------------------------------------|---------------------|----------------------|----------------------------|---------------------|----------------------|----------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| .380 | .190 | .005010 | .387 | .258 | .020040 | .393 | .277 | .005010 | .398 | .225 | .005010 | .403 | .203 | .005010 | .407 | .265 | .015036 |
| .380 | .191 | .020040 | .387 | .280 | .005010 | .393 | .279 | .005010 | .398 | .241 | .040060 | .403 | .263 | .030050 | .407 | .320 | .010020 |
| .380 | .192 .194 | .005010 | .387 | .318 | .008020 | .393 | .285 | .010020 | .398 | .286 | .025048 | .404 | .100 | .005010 | .408 | .083 | .020050 |
| .380 .380 | .194 | .005010 .005025 | .387 .388 | .328 .090 | .010020 .015025 | .393 .393 | .287 .314 | .005015 .025035 | .398 .398 | . 303 .304 | . 005010 .015030 | .404 .404 | .128 .173 | .005010 .060080 | .408 .408 | .134 .166 | .025040 .015040 |
| .380 | .204 | .012025 | .388 | .127 | .008020 | .393 | .315 | .005010 | .399 | .169 | .005010 | .404 | .180 | .060080 | .408 | .172 | .005015 |
| .380 | .215 | .030050 | .388 | .136 | .005010 | .394 | .083 | .005010 | .399 | .200 | .020040 | .404 | .189 | .025040 | .408 | .173 | .005010 |
| .380 | .226 | .005010 | .388 | .171 | .075090 | .394 | .095 | .005020 | .399 | .223 | .005010 | .404 | .190 | .025040 | .408 | .194 | .040060 |
| .380 .380 | .262 .264 | . 005010 .025040 | .388 .388 | .205 .211 | .025040 .005010 | .394 .394 | .157 .158 | .040060 .040060 | .399 .399 | .226 .260 | .050070 .070090 | .404 .404 | .195 .197 | .010020 . 005010 | .408 .408 | .202 .240 | .030040 .020040 |
| .380 | .276 | .005010 | .388 | .215 | .040060 | .394 | .168 | .050075 | .399 | .284 | .010020 | .404 | .210 | .030050 | .408 | .261 | .005015 |
| .380 | .277 | .010020 | .388 | .252 | .015030 | .394 | .183 | .010020 | .399 | .290 | .005010 | .404 | .220 | .025040 | .408 | .297 | .010020 |
| .380 | .280 | .030040 | .388 | .264 | .025040 | .394 | .196 | .050075 | .399 | .362 | .005010 | .404 | .246 | .005010 | .409 | .129 | .015030 |
| .380 .381 | .285 .094 | .032050 . 005010 | . 388 .388 | .280 .288 | . 005030 .015030 | .394 .394 | .207 .208 | .050075 .070090 | .400 .400 | .066 .091 | .025048 . 005010 | .404 .404 | . 252 .260 | . 005010 .015025 | .409 .409 | .167 .172 | .015025 .020040 |
| .381 | .099 | .025040 | .389 | .078 | .015030 | .394 | .237 | .005010 | .400 | .119 | .005010 | .404 | .265 | .015030 | .409 | .194 | .035050 |
| .381 | .114 | .005010 | .389 | .130 | .020035 | .394 | .239 | .025040 | .400 | .124 | .005010 | .404 | .280 | .060080 | .409 | .210 | .060083 |
| .381 .381 | . 116 .124 | . 005010 .005012 | .389 | .198 | .020040 | .394 | .240 | .005025 | .400 | .131 | .020030 | .404 .404 | .313 .320 | .005012 .005020 | .409 | .244 | .030040 |
| .381 | .124 | .005012 | .389 .389 | .199 .200 | .015030 .015030 | .394 .394 | .243 .251 | .015030 .005080 | .400 .400 | .139 .142 | .020035 .005010 | .404 | .099 | .005020 | .409 .409 | .313 .322 | .015030 .015030 |
| .381 | .131 | .040060 | .389 | .205 | .005012 | .394 | .255 | .045064 | .400 | .147 | .025048 | .405 | .107 | .005010 | .410 | .063 | .005010 |
| .381 | .138 | .005010 | .389 | .223 | .012020 | .394 | .260 | .040060 | .400 | .151 | .010060 | .405 | .108 | .030050 | .410 | .188 | .030040 |
| .381 | .148 | .025040 .005010 | .389 | .227 | .005010 | .394 | .319 | .005010 | .400 | .153 | .005010 | . 405 | .137 | .005010 .040060 | .410 | .201 | .005105 |
| .381 .381 | . 150 .153 | .060070 | .389 .390 | .276 .039 | .020030 .005010 | .395 .395 | .099 .165 | .030050 .015030 | .400 .400 | .168 .172 | .042062 .005010 | .405 .405 | .156 .162 | .040060 | .410 .410 | .220 .223 | .025040 .010020 |
| .381 | .163 | .030050 | .390 | .077 | .010020 | .395 | .172 | .020035 | .400 | .182 | .016032 | .405 | .168 | .005010 | .410 | .254 | .005010 |
| .381 | .175 | .075090 | .390 | .087 | .020030 | .395 | .174 | .015030 | .400 | .192 | .005060 | .405 | .175 | .040060 | .410 | .256 | .030042 |
| .381 | .178 | .015030 | .390 | .129 | .015030 | .395 | .175 | .090105 | .400 | .198 | .015030 | .405 | .184 | .005010 | .410 | .261 | .005010 |
| .381 .381 | .186 .195 | .015030 .040060 | .390 .390 | .145 .157 | .015080 .005010 | .395 .395 | .186 .191 | .070090 .025093 | .400 .400 | .200 .202 | .015025 .005010 | .405 .405 | .201 .202 | .005010 .020072 | .410 .410 | . 300 .306 | . 005010 .015030 |
| .381 | .200 | .020030 | .390 | .162 | .020030 | .395 | .195 | .005010 | .400 | .203 | .005010 | .405 | .243 | .010015 | .410 | .314 | .005010 |
| .381 | .203 | .005010 | .390 | .169 | .025050 | .395 | .200 | .005010 | .400 | .206 | .050070 | .405 | .250 | .020030 | .410 | .317 | .020035 |
| .381 | .212 | .005010 | .390 | .181 | .030050 | .395 | .210 | .025040 | .400 | .210 | .005020 | .405 | .252 | .030050 | .410 | .358 | .020030 |
| .381 .381 | .255 .260 | .015030 .015030 | . 390 .390 | .185 .195 | . 005010 .020050 | .395 .395 | .219 .220 | .010020 .015035 | . 400 .400 | .216 .225 | . 005010 .050070 | .405 .405 | .253 .257 | .025040 .005040 | .411 .411 | .091 .127 | . 005010 .020040 |
| .381 | .290 | .005010 | .390 | .198 | .015030 | .395 | .225 | .010020 | .400 | .240 | .015020 | .405 | .261 | .010020 | .411 | .225 | .005010 |
| .381 | .294 | .005010 | .390 | .201 | .070090 | .395 | .236 | .040060 | .400 | .252 | .005010 | .405 | .276 | .025048 | .411 | .258 | .020050 |
| .381 | .300 | .020035 | .390 | .217 | .015030 | .395 | .243 | .005015 | .400 | .254 | .010020 | .405 | .279 | .050060 | .411 | .292 | .010020 |
| .381 .382 | .315 .132 | .020036 .025040 | .390 . 390 | .235 .236 | .050080 .005080 | .395 .395 | .246 .248 | .015030 .060075 | .400 .400 | .255 .260 | .005030 .005010 | .405 .406 | .303 .094 | .015025 . 005010 | .411 .411 | .310 .314 | .010020 .030050 |
| .382 | .163 | .030050 | .390 | .241 | .060080 | .395 | .251 | .020030 | .400 | .268 | .030050 | .406 | .120 | .032048 | .411 | .315 | .005020 |
| .382 | .175 | .015030 | .390 | .257 | .015030 | .395 | .277 | .040050 | .400 | .273 | .025040 | .406 | .124 | .020040 | .412 | .136 | .007015 |
| .382 | .189 | .050072 | .390 | .258 | .005010 | .395 | .280 | .040060 | .400 | .286 | .030040 | .406 | .127 | .025040 | .412 | .161 | .030050 |
| .382 .382 | .195 .204 | .005010 .005010 | . 390 .390 | .260 .262 | . 005020 .040060 | .395 .395 | .284 .294 | .005048 .036050 | .400 .400 | .288 .314 | .015030 .025040 | .406 .406 | .128 .140 | .015030 .025042 | .412 .412 | . 190 .196 | .005070 .005015 |
| .382 | .207 | .030050 | .390 | .266 | .025040 | .395 | .322 | .005010 | .400 | .347 | .005010 | .406 | .155 | .050075 | .412 | .231 | .060080 |
| .382 | .225 | .030050 | .390 | .284 | .005010 | .395 | .338 | .005010 | .400 | .360 | .005010 | .406 | .161 | .050075 | .412 | .236 | .005010 |
| .382 | .252 | .015025 | .390 | .306 | .005010 | .396 | .055 | .010020 | .401 | .102 | .005010 | .406 | .170 | .010025 | .412 | .290 | .040060 |
| .382 .382 | .300 .328 | .048062 .015025 | .390 .391 | .314 .105 | .025040 . 005010 | .396 .396 | .194 .203 | .010015 .020040 | .401 .401 | .121 .125 | .030050 .030105 | .406 .406 | .171 .189 | .048072 .012020 | .412 .413 | .326 . 169 | .010040 . 005010 |
| .383 | .099 | .030050 | .391 | .132 | .120140 | .396 | .221 | .005015 | .401 | .128 | .025040 | .406 | .190 | .005010 | .413 | .187 | .010020 |
| .383 | .155 | .030050 | .391 | .163 | .040060 | .396 | .259 | .030050 | .401 | .130 | .005010 | .406 | .201 | .050070 | .413 | .212 | .010020 |
| .384 | .127 | .020030 | .391 | .177 | .040060 | .396 | .260 | .030050 | .401 | .165 | .005010 | .406 | .203 | .005010 | .413 | .222 | .042072 |
| .384 .384 | .144 .159 | .030050 .030050 | .391 .391 | .197 .226 | .015030 .010020 | .396 .396 | .277 .278 | .020040 .020040 | .401 | .169 | .031048 | .406 .406 | .204 .209 | .030050 .030050 | .413 .413 | .223 .229 | .005010 .005010 |
| .384 | .214 | .030050 | .391 | .242 | .005010 | .396 | .285 | .020040 | .401 .401 | . 171 .202 | .005010 .020060 | .406 | .218 | .025040 | .413 | .319 | .005010 |
| .384 | .238 | .020030 | .391 | .285 | .020035 | .396 | .318 | .005010 | .401 | .219 | .020040 | .406 | .220 | .025042 | .413 | .326 | .005010 |
| .384 | .271 | .015020 | .391 | .306 | .005010 | .396 | .333 | .005030 | .401 | .221 | .060075 | .406 | .221 | .010020 | .413 | .379 | .010020 |
| .384 .385 | .285 .156 | .015030 .020032 | .391 .392 | .314 .129 | .015020 .025040 | .396 | .338 | .005008 | .401 | .237 | .035050 | .406 .406 | .224 .242 | .005010 .062080 | .414 .414 | .081 .162 | .030050 |
| .385 | .188 | .025040 | .392 | .129 | .005010 | <u>.397</u> .397 | .025 .032 | .005010 .005010 | <u>.401</u> .401 | .241 .251 | .030050 .025040 | .406 | .250 | .020035 | .414 | .212 | .030050 .080100 |
| .385 | .194 | .060080 | .392 | .207 | .015030 | .397 | .105 | .008016 | .401 | .258 | .015025 | .406 | .252 | .050070 | .414 | .252 | .005060 |
| .385 | .241 | .030070 | .392 | .219 | .005010 | .397 | .109 | .005015 | .401 | .263 | .005010 | .406 | .257 | .025042 | .414 | .261 | .005010 |
| .385 .385 | .249 .252 | .025048 .005012 | .392 | .280 | .035050 | .397 | .153 | .025040 | .401 .401 | .298 .328 | .005010 .005030 | . 406 | .260 | .005010 .025040 | .414 | .277 | .035045 .020030 |
| .385 | .260 | .005012 | .392 .392 | .328 .337 | .005010 .005010 | .397 .397 | . 176 .183 | .005010 .010020 | .402 | .099 | .015025 | .406 .406 | .262 .264 | .036050 | .414 .414 | .282 .315 | .010020 |
| .385 | .262 | .050060 | .393 | .042 | .005010 | .397 | .196 | .010015 | .402 | .145 | .015060 | .406 | .269 | .005010 | .415 | .092 | .040060 |
| .385 | .290 | .010020 | .393 | .103 | .010020 | .397 | .212 | .005015 | .402 | .157 | .005010 | .406 | .276 | .042062 | .415 | .179 | .040070 |
| .386 | .130 | .020030 | .393 | .111 | .025040 | .397 | .231 | .005010 | .402 | .162 | .060080 | . 406 | .278 | .005010 | .415 | .192 | .070090 |
| .386 | .141 .162 | .010020 .050062 | . 393 .393 | . 120 .158 | .005010 .005020 | .397 .397 | . 250 .255 | .005010 .070090 | .402 .402 | .193 .235 | .015025 .050070 | .406 | .284 | .020040 .005010 | .415 .415 | .243 .250 | .008020 |
| .386 | .181 | .040060 | .393 | .196 | .040050 | .397 | .267 | .020040 | .402 | .256 | .030050 | .407 | .063 | .005010 | .415 | .253 | .005010 |
| .386 | .225 | .020040 | .393 | .201 | .030050 | .397 | .280 | .040050 | .402 | .270 | .040060 | .407 | .175 | .005010 | .415 | .265 | .050070 |
| .386 | .250 | .015040 | .393 | .209 | .005010 | .397 | .298 | .015030 | .402 | .281 | .048062 | .407 | .207 | .005015 | .415 | .281 | .050072 |
| .386 .386 | .301 .313 | .020040 | . 393 .393 | . 214 .230 | .005010 .025040 | .397 .397 | .315 .320 | .032042 | .402 .402 | .300 .359 | .015030 .005010 | .407 .407 | .225 .237 | .020040 | .415 .415 | .285 .324 | .015025 .025035 |
| .387 | .091 | .030050 | .393 | .237 | .005010 | .397 | .325 | .015025 | .403 | .144 | .005010 | .407 | .253 | .010015 | .416 | .121 | .005010 |
| .387 | .118 | .020030 | .393 | .239 | .005010 | .398 | .117 | .020035 | .403 | .189 | .025036 | .407 | .257 | .010020 | .416 | .128 | .040060 |
| .387 | .171 | .060090 .032048 | . 393 .393 | .240 .256 | .005050 .020040 | .398 | .188 | .005010 | .403 .403 | .192 .193 | .020040 | .407 | .261 | .008016 | .416 | .160 | . 005010 .020030 |
| .387 | .189 | | | | | .398 | .200 | .070080 | 4113 | 193 | .016025 | .407 | .262 | .005040 | .416 | .180 | 030 - 030 |

| All 205 Col. Co | | | Choose Any | I | | Choose Any | | | Choose Any | 1 5 IVIE | ·IAL | Choose Any | IO AI II | _ | Choose Any | <u> </u> | | |
|--|------|------|------------|------|------|------------|------|------|------------|----------|------|------------|----------|------|------------|----------|------|----------------------------|
| 446 246 069 069 069 045 147 029 030 | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 446 241 | 416 | 205 | | 125 | 1/17 | | 420 | 276 | | 125 | 080 | | 437 | 219 | | 438 | 322 | .010020 |
| 448 241 068 - 020 | | | | | | | | | | | | | | | | I | | .025040 |
| 4416 250 057 040 042 197 050 040 431 127 025 040 435 174 055 040 435 174 045 | | | | | | | | | | | | | | | | I | | .005010 |
| 417 251 684 592 695 696 796 438 518 518 519 695 696 438 438 338 508 696 696 438 338 508 696 696 438 338 308 696 696 438 338 308 696 696 438 338 308 696 696 438 338 308 696 696 438 338 308 696 696 438 338 308 696 696 438 338 308 696 696 438 338 308 696 696 438 338 308 696 696 438 338 308 696 696 438 438 338 308 696 696 438 438 338 308 696 696 438 | | | | | | | | | | | | | | | | I | | .010020 |
| 447 355 048 - 062 425 250 050 - 070 431 159 050 - 040 435 149 260 - 040 435 230 200 - 042 436 337 201 441 | | | | | | | | | | | | | | | | I | | .005010 |
| 448 | | | | | | | | | | | | | | .232 | | | | .025040 |
| 448 200 0.02 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.07 0.05 0.07 0.05 0. | .417 | .356 | .010020 | .425 | .256 | .050070 | .431 | .158 | .005010 | .435 | .182 | .060083 | .437 | .238 | .006016 | .438 | .339 | .025040 |
| AH8 2006 010 - 1015 A225 319 040 - 050 A31 238 300 - 100 A35 220 050 - 050 A37 238 038 - 100 A38 340 A34 A | .418 | .149 | .050070 | .425 | .261 | .050062 | .431 | .195 | .005010 | .435 | .190 | .070090 | .437 | .251 | .010015 | .438 | .365 | .005015 |
| 4418 289 602 - 904 425 319 640 - 960 431 238 239 - 600 - 903 435 239 430 - 930 441 441 4418 608 600 - 903 435 238 600 - 903 435 238 430 - 930 441 4418 4418 600 - 905 724 436 338 200 - 903 432 238 | .418 | .190 | .025050 | .425 | .284 | .030050 | .431 | .197 | .020030 | .435 | .198 | .005072 | .437 | .252 | .010020 | .438 | .381 | .020030 |
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| 4419 148 682 692 692 623 344 685 695 | | | | | | | | | | | | | | | | I | | .010020 |
| 449 148 082 080 042 344 005 010 432 117 030 050 435 250 015 030 437 280 007 025 439 185 091 449 224 040 060 426 140 015 030 432 120 015 030 435 250 015 030 437 281 005 042 439 180 190 449 313 365 048 428 218 070 030 432 128 035 030 630 435 251 035 040 437 281 035 042 439 190 080 449 313 365 048 428 218 070 030 432 128 035 032 032 448 241 035 | | | | | | | | | | | | | | | | I | | .025040 |
| 419 173 000 - 100 425 345 005 - 010 432 118 015 - 030 435 252 015 - 030 437 280 010 - 025 439 189 010 441 303 005 - 010 426 215 005 - 010 432 120 015 - 030 435 254 005 - 006 437 280 005 - 004 439 189 010 439 189 010 439 189 010 439 189 010 439 189 010 439 189 010 439 189 010 439 189 010 439 189 010 439 189 010 439 439 189 010 439 439 189 010 430 439 189 010 430 439 189 010 430 439 189 010 430 439 189 010 430 439 439 189 010 430 439 | | | | | | | | | | | | | | | | I | | .030050 |
| 419 224 0.05 - 0.00 | | | | | | | | | | | | | | | | | | .005050 .090105 |
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| 419 333 0.05 - 0.06 | | | | | | | | | | | | | | | | I | | .060080 |
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| 490 345 005 - 010 426 225 010 - 020 432 133 605 - 080 435 288 010 - 020 437 281 042 - 082 249 207 044 420 129 005 - 010 015 - 030 426 256 040 - 060 432 199 005 - 010 435 290 025 - 050 437 287 010 - 020 439 255 040 420 119 005 - 010 426 270 055 - 075 432 260 805 - 010 435 290 005 - 050 437 287 010 - 020 439 255 044 420 420 420 030 - 050 426 257 055 - 070 432 283 015 - 025 436 253 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 435 235 420 420 224 420 | | | | | | | | | | | | | | | | I | | .040090 |
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| 420 170 005 - 010 426 256 040 - 060 432 199 005 - 010 435 290 025 - 060 437 287 101 - 020 439 252 060 420 193 005 - 010 426 270 050 - 070 432 283 015 - 025 438 355 005 - 010 437 312 005 - 010 439 252 040 440 240 420 244 005 - 010 426 272 005 - 010 432 313 020 - 046 435 321 030 - 050 437 312 005 - 010 439 254 040 440 | | | | | | | | | | | | | | | | I | | .060080 |
| 420 179 005 - 010 426 257 050 - 076 432 269 086 - 100 435 296 005 - 010 437 312 005 - 010 439 280 025 281 420 294 005 - 010 436 272 005 - 010 432 237 005 - 010 435 321 030 - 050 437 312 005 - 010 439 226 005 420 224 005 - 010 436 320 010 - 020 432 313 020 - 048 435 321 030 - 050 437 321 020 - 040 439 276 006 420 231 005 - 010 432 313 020 - 048 435 321 030 - 050 437 321 020 - 040 439 315 006 420 231 030 - 040 439 315 006 436 | | | | | | | | | | | | | | | | I | | .060080 |
| 420 193 0.095 - 0.10 | .420 | .179 | .005010 | | | | | | | | | | | .302 | .005012 | I | | .010025 |
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| 420 254 005 - 010 426 330 010 - 020 432 315 005 - 010 435 330 010 - 020 437 332 005 - 010 439 315 004 420 255 006 - 012 427 107 010 - 020 432 317 005 - 010 438 268 010 - 025 437 332 040 - 060 440 022 024 020 030 040 040 042 040 040 042 040 | .420 | .204 | | .426 | .272 | .005010 | .432 | .297 | .005010 | | | | .437 | .316 | | .439 | .264 | .060075 |
| 420 251 030 040 426 345 010 020 432 316 040 060 043 318 070 0.00 437 328 020 030 439 317 044 420 225 006 010 427 134 030 050 432 319 030 050 436 226 010 037 343 005 060 044 022 020 420 229 005 006 047 223 300 050 043 336 015 025 036 241 030 030 037 343 005 006 044 028 030 420 229 006 006 047 223 030 050 043 336 015 025 036 030 050 037 343 005 005 010 440 020 030 420 311 005 000 047 225 005 000 038 039 035 030 | | | | | | | | | | | | .030050 | | | | I | | .005010 |
| A20 258 0.06 0.012 A27 347 0.07 0.010 0.202 A32 317 0.05 0.010 A38 241 0.05 0.010 A37 338 0.05 0.040 0.40 0.024 0.004 0.024 0.004 0.024 | .420 | .241 | .005010 | .426 | .320 | | .432 | .315 | .005010 | .435 | .380 | .010020 | .437 | .325 | | .439 | .315 | .005010 |
| A20 258 .005010 .427 .134 .030050 .432 .336 .035050 .436 .241 .025025 .437 .343 .305050 .440 .005 .025 .420 .229 .005010 .437 .236 .005010 .438 .251 .303050 .437 .336 .005025 .440 .005 .005 .420 .231 .005010 .438 .253 .030050 .437 .336 .005025 .440 .105 .006 .420 .231 .005010 .427 .226 .005010 .433 .042 .031048 .438 .254 .010001 .438 .048 .005010 .440 .127 .007 .420 .311 .005010 .427 .225 .015030 .433 .052 .015030 .436 .226 .005010 .438 .048 .005010 .440 .127 .007 .421 .236 .005010 .427 .225 .015030 .433 .052 .015 .030 .436 .226 .005010 .438 .048 .005010 .440 .127 .005 .421 .221 .005010 .427 .237 .005010 .433 .178 .105125 .436 .229 .015025 .438 .093 .005010 .440 .128 .044 .421 .121 .005010 .427 .235 .337 .005010 .433 .202 .005010 .438 .226 .005010 .438 .226 .005010 .428 .234 .005010 .433 .202 .005010 .436 .236 .225 .005010 .428 .232 .005010 .438 .232 .005010 .438 .238 .005010 .438 .238 .005010 .438 .234 .025042 .440 .017 .005 .0 | | | | | | | | | | | | | | | | l | | .040060 |
| 420 279 005 - 016 427 231 030 - 050 432 356 005 - 010 432 365 005 - 010 432 365 005 - 010 436 235 300 - 050 437 365 005 - 010 440 105 005 437 337 6005 - 025 440 105 005 437 338 035 | | | | | | | | | | | | | | | | | | .005010 |
| A20 280 010 - 025 A27 233 050 - 070 A32 364 005 - 010 A36 A36 256 030 - 050 A37 376 005 - 025 A40 105 006 A20 311 005 - 010 A27 265 015 - 030 A33 052 015 - 030 A36 256 005 - 010 A38 048 005 - 010 A40 127 010 A40 A40 | | | | | | | | | | | | | | | | I | | .025040 |
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| A21 298 095 - 010 427 279 0.40 - 0.60 433 0.54 0.15 - 0.30 4.36 2.83 0.05 - 0.01 4.38 0.93 0.05 - 0.01 4.40 1.40 0.22 4.31 1.21 1.005 - 0.01 4.27 3.25 0.05 - 0.01 4.33 1.57 0.30 - 0.05 4.36 2.82 0.05 - 0.05 4.38 0.93 0.05 - 0.01 4.40 1.68 0.04 4.21 1.78 0.05 - 0.01 4.28 0.34 0.06 - 0.02 4.33 3.20 0.05 - 0.03 4.36 2.83 0.05 - 0.05 4.38 0.05 0.05 4.40 1.68 0.04 4.21 1.21 0.05 - 0.01 4.28 0.03 0.06 - 0.05 | | | | | | | | | | | | | | | | l | | .010020 |
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| 421 121 005 - 010 | | | | | | | | | | | | | | | | I | | .025040 |
| 421 178 0.20 - 0.40 428 0.34 0.16 - 0.25 4.33 2.02 0.15 - 0.30 4.36 2.83 0.10 - 0.20 4.88 1.19 0.15 - 0.30 4.40 1.70 0.22 4.40 0.25 0.20 0.25 0.20 0.2 | | | | | | | | | | | | | | | | I | | .040060 |
| 421 294 020 - 040 | | | | | | | | | | | | | | | | I | | .025050 |
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| 421 251 015 - 030 428 179 090 - 105 433 237 030 - 050 436 318 005 - 010 438 138 005 - 010 440 202 070 421 252 005 - 010 428 241 005 - 010 433 239 005 - 010 436 334 015 - 030 438 162 030 - 060 440 221 005 421 229 229 005 - 010 428 311 025 - 040 433 239 005 - 010 436 375 015 - 030 438 162 030 - 060 440 2211 005 421 229 229 005 - 010 428 311 025 - 040 433 221 007 - 030 436 375 005 - 010 438 162 030 - 060 440 2217 070 421 229 005 - 010 428 318 010 - 020 433 251 010 - 030 436 397 005 - 010 438 139 505 - 070 440 218 070 421 319 020 - 030 429 135 005 - 010 433 253 008 - 070 437 039 005 - 010 438 195 030 - 040 440 228 015 421 319 020 - 030 429 161 020 - 040 433 315 005 - 030 437 120 040 - 060 438 198 005 - 020 440 2237 035 422 123 005 - 010 429 161 020 043 315 005 - 030 437 125 005 - 050 438 198 025 - 035 440 245 000 422 129 010 - 025 429 257 010 - 020 433 331 005 - 010 437 125 005 - 050 438 200 005 - 090 440 250 000 422 130 015 - 025 429 257 010 - 020 433 331 005 - 010 437 125 005 - 050 438 200 005 - 090 440 250 000 422 133 005 - 050 433 348 030 - 050 437 126 025 - 050 438 200 025 - 050 440 225 000 422 133 005 - 050 433 348 030 - 050 437 127 015 - 050 438 200 025 - 050 440 225 000 422 135 005 - 050 438 330 005 - 050 437 127 015 - 050 438 200 025 - 050 440 225 026 015 026 438 348 030 - 050 438 200 025 - 050 440 225 026 015 026 438 348 030 - 050 438 205 020 - 030 440 225 026 016 026 036 0 | .421 | .209 | .005010 | | .132 | .005010 | | .220 | .005010 | | | | .438 | .129 | .015030 | .440 | .190 | .100125 |
| 421 252 005 - 010 428 213 020 - 040 433 238 005 - 010 436 334 015 - 030 438 147 030 - 050 440 210 016 421 268 225 - 040 433 239 005 - 010 436 378 015 - 030 438 162 030 - 050 040 2217 075 - 010 428 311 025 - 040 433 223 005 - 010 436 378 005 - 010 438 169 005 - 010 440 2217 075 - 010 428 318 010 - 020 433 251 010 - 030 436 397 005 - 010 438 193 050 - 070 440 2217 074 421 319 020 - 030 429 135 005 - 010 433 251 005 - 010 437 030 055 - 010 438 196 005 - 070 440 223 030 440 228 010 422 030 438 200 005 - 000 4 | .421 | .234 | .025040 | .428 | .143 | .050070 | .433 | .224 | .005010 | .436 | .316 | .010042 | .438 | .136 | .010015 | .440 | .195 | .035050 |
| 421 268 0.025 - 0.040 4.28 2.41 0.05 - 0.10 4.33 2.39 0.05 - 0.10 4.36 3.75 0.15 - 0.30 4.38 1.62 0.30 - 0.60 4.40 2.211 0.00 4.21 2.79 0.05 - 0.10 4.28 3.11 0.025 - 0.040 4.33 2.21 0.00 - 0.050 4.36 3.97 0.05 - 0.10 4.38 1.69 0.05 - 0.10 4.40 2.12 0.07 4.21 2.28 0.05 - 0.10 4.28 3.16 0.05 - 0.04 4.33 2.51 0.06 - 0.05 4.36 3.97 0.05 - 0.10 4.38 1.93 0.05 - 0.07 4.40 2.12 0.05 0.05 0.10 0.28 0.05 - 0.10 4.28 3.18 0.10 - 0.02 4.33 2.53 0.08 - 0.70 4.37 0.39 0.05 - 0.10 4.38 1.95 0.03 - 0.40 4.40 2.28 0.15 4.21 3.19 0.02 - 0.30 4.29 1.15 0.05 - 0.10 4.33 3.15 0.05 - 0.30 4.37 1.20 0.04 4.38 1.95 0.05 - 0.20 4.40 2.28 0.15 4.21 3.19 0.02 - 0.36 4.29 1.18 0.10 - 0.02 4.33 3.15 0.05 - 0.30 4.37 1.25 0.05 - 0.15 4.38 1.96 0.05 - 0.20 4.40 2.25 0.05 4.22 1.23 0.05 - 0.10 4.29 1.19 0.05 - 0.10 4.33 3.15 0.05 - 0.10 4.37 1.25 0.05 - 0.15 4.38 2.00 0.05 - 0.00 4.40 2.25 0.05 4.22 1.29 0.10 - 0.02 4.33 3.31 0.05 - 0.10 4.37 1.26 0.25 - 0.50 4.38 2.01 0.25 - 0.50 4.40 2.25 0.05 4.22 1.29 0.10 - 0.02 4.22 3.15 0.05 - 0.10 4.37 1.26 0.25 - 0.50 4.38 2.03 0.25 - 0.50 4.40 2.25 0.05 4.22 1.29 0.05 - 0.10 4.33 3.34 0.05 - 0.10 4.37 1.28 0.05 - 0.05 4.38 2.03 0.25 - 0.50 4.40 2.25 0.05 4.22 1.23 0.05 - 0.10 4.33 3.34 0.05 - 0.10 4.37 1.28 0.05 - 0.05 4.38 2.03 0.75 - 0.90 4.40 2.25 0.05 4.22 1.23 0.05 - 0.10 4.33 3.34 0.05 - 0.10 4.37 1.28 0.05 - 0.05 4.38 2.03 0.75 - 0.90 4.40 2.25 0.05 4.22 1.23 0.05 - 0.10 4.33 3.34 0.05 - 0.10 4.37 1.33 0.05 - 0.06 4.38 2.03 0.75 - 0.90 4.40 2.25 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.0 | .421 | .251 | .015030 | .428 | .179 | .090105 | .433 | .237 | .030050 | .436 | .318 | .005010 | .438 | .138 | .005010 | .440 | .202 | .070090 |
| 421 229 0.05 - 0.00 428 3.11 0.25 - 0.40 4.33 2.43 0.20 - 0.50 4.36 3.78 0.05 - 0.00 4.38 1.69 0.05 - 0.00 4.40 2.17 0.77 421 280 0.05 - 0.00 4.28 3.16 0.05 - 0.00 4.33 2.51 0.01 - 0.030 4.36 3.97 0.05 - 0.00 4.38 1.95 0.30 - 0.04 4.40 2.28 0.01 421 3.19 0.20 - 0.30 4.29 1.35 0.05 - 0.00 4.33 2.51 0.05 - 0.00 4.37 0.39 0.05 - 0.00 4.38 1.95 0.30 - 0.04 4.40 2.28 0.01 421 3.22 0.05 - 0.00 4.29 1.35 0.05 - 0.00 4.33 2.51 0.05 - 0.00 4.37 0.96 0.15 - 0.25 4.38 1.96 0.05 - 0.20 4.40 2.27 0.50 4.22 0.38 0.20 - 0.36 4.29 1.89 0.01 - 0.20 4.33 3.15 0.05 - 0.30 4.37 1.20 0.04 - 0.60 4.38 1.98 0.25 - 0.35 4.40 2.25 0.00 4.22 1.23 0.05 - 0.00 4.29 1.99 0.05 - 0.00 4.33 3.17 0.05 - 0.00 4.37 1.25 0.05 - 0.05 4.38 2.00 0.05 - 0.90 4.40 2.25 0.00 4.22 1.29 0.01 - 0.25 4.29 2.57 0.01 - 0.20 4.33 3.31 0.35 - 0.50 4.37 1.26 0.25 - 0.50 4.38 2.00 0.05 - 0.90 4.40 2.25 0.00 4.22 1.30 0.015 - 0.25 4.29 2.57 0.01 - 0.20 4.33 3.34 0.05 - 0.00 4.37 1.28 0.30 - 0.50 4.38 2.00 0.05 - 0.90 4.40 2.25 0.00 4.22 1.39 0.05 - 0.00 4.30 1.11 0.05 - 0.00 4.33 3.48 0.30 - 0.40 4.37 1.28 0.30 - 0.50 4.38 2.03 0.75 - 0.90 4.40 2.25 0.00 4.22 1.39 0.05 - 0.00 4.30 1.11 0.05 - 0.00 4.33 3.48 0.30 - 0.40 4.37 1.28 0.30 - 0.50 4.38 2.03 0.75 - 0.90 4.40 2.25 0.00 4.22 1.39 0.05 - 0.00 4.30 1.11 0.05 - 0.00 4.33 3.48 0.30 - 0.40 4.37 1.28 0.30 - 0.50 4.38 2.05 0.70 - 0.90 4.40 2.25 0.00 4.22 1.39 0.05 - 0.00 4.30 1.11 0.05 - 0.00 4.33 3.48 0.30 - 0.40 4.37 1.29 0.00 - 0.42 4.38 2.05 0.70 - 0.90 4.40 2.25 0.00 4.22 1.39 0.05 - 0.00 4.30 1.15 0.00 4.33 3.48 0.30 - 0.40 4.37 1.29 0. | .421 | .252 | .005010 | .428 | .213 | .020040 | .433 | .238 | .005010 | .436 | .334 | .015030 | .438 | .147 | .030050 | .440 | .210 | .010020 |
| 421 280 0.05 - 0.010 428 3.16 0.25 - 0.40 4.33 2.51 0.10 - 0.30 4.36 3.97 0.05 - 0.00 4.38 1.93 0.50 - 0.70 4.40 2.218 0.00 4.21 2.91 0.005 - 0.010 4.28 3.18 0.10 - 0.20 4.33 2.53 0.08 - 0.70 4.37 0.39 0.005 - 0.01 4.38 1.95 0.03 - 0.40 4.40 2.228 0.05 4.21 3.22 0.05 - 0.01 4.29 1.135 0.05 - 0.00 4.33 3.15 0.05 - 0.30 4.37 1.20 0.40 - 0.60 4.38 1.98 0.025 - 0.35 4.40 2.25 0.05 4.21 3.22 0.05 - 0.01 4.29 1.99 0.05 - 0.01 4.33 3.15 0.05 - 0.01 4.37 1.25 0.05 - 0.05 4.38 2.01 0.25 - 0.05 4.40 2.25 0.05 4.22 1.23 0.05 - 0.01 4.29 1.99 0.05 - 0.01 4.33 3.11 0.05 - 0.01 4.37 1.25 0.05 - 0.05 4.38 2.01 0.25 - 0.05 4.40 2.25 0.05 4.22 1.29 0.10 - 0.025 4.29 2.57 0.10 - 0.20 4.33 3.31 0.05 - 0.01 4.37 1.27 0.15 - 0.60 4.38 2.02 0.20 - 0.40 4.40 2.25 0.05 4.22 1.35 0.05 - 0.01 4.30 1.11 0.05 - 0.01 4.33 3.48 3.30 0.05 - 0.01 4.37 1.27 0.15 - 0.60 4.38 2.03 0.75 - 0.99 4.40 2.25 0.05 4.22 1.35 0.05 - 0.01 4.30 1.11 0.05 - 0.01 4.33 3.34 3.35 0.05 - 0.01 4.37 1.27 0.05 - 0.04 4.38 2.03 0.075 - 0.99 4.40 2.25 0.05 4.22 2.35 0.05 - 0.01 4.30 1.11 0.05 - 0.01 4.33 3.48 3.30 - 0.05 4.37 1.28 0.05 - 0.04 4.38 2.03 0.75 - 0.99 4.40 2.265 0.00 4.22 1.28 0.05 - 0.01 4.30 1.11 0.05 - 0.01 4.33 3.48 3.05 - 0.01 4.37 1.29 0.05 - 0.02 4.38 2.05 0.70 - 0.99 4.40 2.265 0.00 4.22 3.35 0.05 - 0.01 4.30 1.11 0.05 - 0.01 4.33 3.48 0.05 - 0.01 4.37 1.30 0.025 - 0.42 4.38 2.05 0.70 - 0.99 4.40 2.265 0.00 4.22 3.35 0.05 - 0.01 4.30 1.30 0.30 - 0.50 4.34 0.04 0.05 - 0.05 4.37 1.14 0.04 - 0.06 4.38 2.05 0.70 - 0.99 4.40 2.265 0.00 4.22 3.35 0.05 - 0.01 4.30 1.30 0.30 - 0.50 4.34 0.04 0.05 0.05 0. | | | | | | | | | | | | | | | | | | .005010 |
| 421 291 005 - 010 428 318 .010020 433 253 .008070 .437 .039 .005010 .438 .195 .030040 .440 .228 .015 .421 .319 .020030 .429 .161 .020040 .433 .315 .005030 .437 .120 .040060 .438 .198 .025025 .440 .224 .038 .020036 .429 .189 .010020 .433 .317 .005010 .437 .125 .005015 .438 .200 .005090 .440 .250 .005 .030 .422 .123 .005010 .429 .189 .010020 .433 .331 .005010 .437 .126 .025055 .438 .201 .025055 .440 .224 .024 .025 .025 .035 .030 .040 .440 .253 .005 .010 .025 .429 .257 .010020 .433 .331 .005010 .437 .126 .025050 .438 .202 .025050 .440 .253 .005 .010 .225 .153 .005010 .430 .111 .005010 .433 .347 .015030 .437 .128 .030050 .438 .203 .075090 .440 .256 .006 .422 .153 .005010 .430 .111 .005010 .433 .348 .030040 .437 .128 .030050 .438 .205 .070090 .440 .256 .006 .422 .282 .040060 .430 .115 .010020 .433 .351 .015030 .437 .130 .025042 .438 .205 .070090 .440 .256 .006 .422 .335 .010020 .430 .128 .032042 .434 .079 .030050 .437 .141 .048072 .438 .201 .042060 .440 .283 .044 .242 .335 .010020 .430 .128 .032042 .434 .079 .030050 .437 .141 .048072 .438 .210 .042060 .440 .344 .044 .245 .040 .060 .438 .232 .035050 .440 .344 .044 .245 .040 .060 .438 .232 .035050 .440 .344 .044 .244 . | | | | | | | | | | | | | | | | I | | .070090 |
| 421 319 020 - 030 429 135 005 - 010 433 276 020 - 040 437 0.96 0.15 - 0.25 438 1.96 0.05 - 0.20 440 2.37 0.56 421 322 0.05 - 0.010 429 1.89 0.10 - 0.020 433 3.15 0.05 - 0.010 4.37 1.25 0.05 - 0.05 4.38 2.00 0.05 - 0.05 4.40 2.25 0.00 4.22 1.23 0.05 - 0.010 4.29 1.89 0.05 - 0.010 4.33 3.21 0.05 - 0.010 4.37 1.25 0.05 - 0.05 4.38 2.00 0.05 - 0.05 4.40 2.25 0.00 4.22 1.23 0.05 - 0.010 4.29 1.99 0.05 - 0.010 4.33 3.21 0.05 - 0.05 4.37 1.26 0.05 - 0.05 4.38 2.01 0.25 - 0.50 4.40 2.25 0.01 4.22 1.29 0.10 - 0.025 4.29 2.25 0.10 - 0.020 4.33 3.30 0.05 - 0.010 4.37 1.27 0.15 - 0.06 4.38 2.02 0.02 - 0.04 4.40 2.25 0.01 4.22 1.30 0.15 - 0.25 4.29 2.60 0.15 - 0.60 4.33 3.47 0.15 - 0.30 4.37 1.28 0.30 - 0.50 4.38 2.03 0.75 - 0.90 4.40 2.25 0.01 4.22 1.25 0.05 - 0.010 4.30 1.11 0.05 - 0.010 4.33 3.48 0.30 - 0.40 4.37 1.29 0.10 - 0.42 4.38 2.05 0.70 - 0.90 4.40 2.25 0.01 4.22 2.26 0.40 - 0.60 4.30 1.15 0.10 - 0.20 4.33 3.51 0.15 - 0.30 4.37 1.33 0.50 - 0.02 4.38 2.05 0.70 - 0.90 4.40 2.25 0.05 4.22 2.26 0.40 - 0.60 4.30 1.20 0.05 - 0.12 4.34 0.43 0.05 - 0.10 4.37 1.33 0.50 - 0.02 4.38 2.05 0.70 - 0.90 4.40 2.25 0.02 4.22 3.35 0.05 - 0.01 4.30 1.30 0.30 - 0.50 4.34 0.94 0.40 - 0.60 4.37 1.41 0.48 - 0.72 4.38 2.07 0.05 - 0.10 4.40 3.14 0.44 4.22 3.25 0.05 - 0.01 4.30 1.30 0.30 - 0.50 4.34 0.94 0.40 - 0.60 4.37 1.41 0.40 - 0.60 4.38 2.21 0.04 - 0.60 4.40 3.14 0.44 0.25 0.25 0.35 4.30 4.40 3.25 0.05 0.01 4.40 3.14 0.44 0.25 0.05 4.22 3.25 0.05 - 0.01 4.30 1.75 0.15 - 0.30 4.34 1.60 0.95 - 0.15 4.37 1.41 0.40 - 0.60 4.38 2.32 0.05 - 0.01 4.40 3.25 0.05 0.01 4.40 3.25 0.05 | | | | | | | | | | | | | | | | I | | .005020 |
| .421 .322 .005010 .429 .161 .020040 .433 .315 .005030 .437 .120 .040060 .438 .198 .025035 .440 .245 .00 .422 .038 .020036 .429 .189 .010020 .433 .317 .005010 .437 .125 .005015 .438 .201 .025050 .440 .255 .00 .422 .129 .010025 .429 .297 .010020 .433 .330 .005010 .437 .125 .056 .438 .202 .025040 .440 .253 .00 .422 .130 .015025 .429 .257 .010 .433 .347 .015030 .437 .128 .030050 .438 .203 .075090 .440 .255 .001 .433 .344 .030010 .437 .130 .025042 .438 .205 .070090 .440 .255 | | | | | | | | | | | | | | | | l | | .015040 |
| A22 .038 .020036 .429 .189 .010020 .433 .317 .005010 .437 .125 .005015 .438 .200 .005090 .440 .250 .006 .422 .123 .005010 .429 .199 .005010 .433 .321 .035050 .437 .126 .025050 .438 .201 .025050 .440 .252 .010 .025 .429 .257 .010020 .433 .330 .005010 .437 .127 .015060 .438 .202 .020040 .440 .253 .006 .422 .130 .015025 .429 .260 .015060 .433 .347 .015030 .437 .128 .030050 .438 .203 .075090 .440 .260 .016 .422 .153 .005010 .430 .111 .005010 .433 .348 .030040 .437 .129 .010042 .438 .205 .070090 .440 .265 .006 .422 .282 .040060 .430 .120 .005012 .434 .043 .005010 .437 .133 .050062 .438 .207 .005010 .440 .283 .044 .422 .335 .010020 .430 .128 .032042 .434 .079 .030050 .437 .141 .048 .072 .438 .210 .042060 .440 .304 .034 .044 .243 .044 .044 .044 .065 .055 .055 .438 .236 .005010 .440 .314 .044 .044 .044 .045 .055 .055 .055 .440 .316 .025 . | | | | | | | | | | | | | | | | | | .050075 . 005010 |
| 422 123 .005010 .429 .199 .005010 .433 .321 .035050 .437 .126 .025050 .438 .201 .025050 .440 .252 .010 .422 .129 .010025 .429 .257 .010020 .433 .330 .005010 .437 .127 .015060 .438 .202 .020040 .440 .253 .005 .422 .153 .005010 .430 .111 .005010 .433 .348 .030040 .447 .129 .010042 .438 .203 .075090 .440 .265 .000 .422 .189 .025035 .430 .115 .010020 .433 .331 .015030 .437 .130 .025042 .438 .206 .020030 .440 .265 .000 .422 .282 .040060 .430 .120 .005012 .434 .079 .030050 .437 .130 .025042 .438 .207 .005010 .440 .283 .044 .422 .335 .010020 .430 .128 .032042 .434 .079 .030050 .437 .141 .048072 .438 .216 .005010 .440 .304 .034 .423 .129 .005010 .430 .159 .020040 .434 .103 .040060 .437 .143 .040060 .438 .236 .005010 .440 .316 .024 .423 .226 .040060 .430 .159 .020040 .434 .103 .040060 .437 .144 .025035 .438 .236 .005010 .440 .328 .044 .423 .226 .040060 .430 .175 .015030 .434 .196 .005010 .437 .147 .020040 .438 .236 .005010 .440 .381 .016 .024 .423 .254 .020033 .430 .189 .030050 .434 .196 .005010 .437 .157 .015030 .438 .236 .005010 .440 .381 .016 .024 .423 .254 .020033 .430 .190 .020040 .434 .198 .005010 .437 .157 .015030 .438 .255 .005030 .440 .381 .016 .024 .423 .254 .020033 .430 .190 .020040 .434 .198 .005010 .437 .157 .015030 .438 .255 .005030 .440 .381 .016 .024 .328 .324 .325 .025050 .441 .328 .016 .024 .328 .024 .328 .0 | | | | | | | | | | | | | | | | | | .005010 |
| 422 129 0.10 - 0.25 4.29 2.57 0.10 - 0.20 4.33 3.30 0.05 - 0.10 4.37 1.27 0.15 - 0.60 4.38 2.02 0.20 - 0.40 4.40 2.53 0.00 4.22 1.30 0.15 - 0.25 4.29 2.60 0.15 - 0.60 4.33 3.47 0.15 - 0.30 4.37 1.28 0.30 - 0.50 4.38 2.03 0.75 - 0.90 4.40 2.60 0.10 4.22 1.89 0.25 - 0.35 4.30 1.11 0.05 - 0.10 4.33 3.48 0.30 - 0.40 4.37 1.29 0.10 - 0.42 4.38 2.05 0.70 - 0.90 4.40 2.265 0.00 4.22 1.89 0.25 - 0.35 4.30 1.15 0.10 - 0.20 4.33 3.51 0.15 - 0.30 4.37 1.33 0.55 - 0.42 4.38 2.05 0.70 - 0.90 4.40 2.75 0.02 4.22 2.82 0.40 - 0.60 4.30 1.20 0.05 - 0.12 4.34 0.43 0.05 - 0.10 4.37 1.33 0.55 - 0.62 4.38 2.07 0.05 - 0.10 4.40 2.83 0.44 4.22 3.35 0.10 - 0.20 4.30 1.28 0.32 - 0.42 4.34 0.79 0.30 - 0.50 4.37 1.41 0.48 - 0.72 4.38 2.10 0.42 - 0.60 4.40 3.04 0.34 4.22 3.75 0.05 - 0.10 4.30 1.30 0.30 - 0.50 4.34 0.94 0.40 - 0.60 4.37 1.42 0.40 - 0.60 4.38 2.32 0.35 - 0.50 0.44 0.34 0.44 4.23 1.29 0.05 - 0.15 4.30 1.61 0.10 - 0.20 4.34 1.60 0.90 - 1.25 4.37 1.44 0.25 - 0.35 4.38 2.36 0.05 - 0.10 4.40 3.28 0.44 4.23 2.26 0.40 - 0.60 4.30 1.75 0.15 - 0.30 4.34 1.76 0.20 - 0.40 4.37 1.47 0.20 - 0.40 4.38 2.24 0.05 - 0.10 4.40 3.28 0.44 4.23 2.25 0.20 - 0.35 4.30 1.80 0.20 - 0.40 4.34 1.96 0.05 - 0.10 4.37 1.57 0.15 - 0.30 4.38 2.25 0.05 - 0.35 4.38 2.27 0.05 - 0.35 4.30 1.80 0.20 - 0.40 4.34 1.96 0.05 - 0.10 4.37 1.57 0.15 - 0.30 4.38 2.25 0.05 - 0.30 4.30 1.80 0.20 - 0.40 4.34 1.96 0.05 - 0.10 4.37 1.57 0.15 - 0.30 4.38 2.25 0.05 - 0.30 4.40 3.31 0.10 4.23 2.26 0.00 - 0.78 4.30 1.80 0.20 - 0.40 4.34 1.96 0.05 - 0.10 4.37 1.57 0.15 - 0.30 4.38 2.25 0.05 - 0.30 4.40 3.31 0.10 4.23 2.25 0.25 - 0 | | | | | | | | | | | | | | | | I | | .010025 |
| .422 .130 .015025 .429 .260 .015060 .433 .347 .015030 .437 .128 .030050 .438 .203 .075090 .440 .266 .016 .422 .153 .005010 .430 .111 .005010 .433 .348 .030040 .437 .129 .010042 .438 .205 .070090 .440 .265 .00 .422 .189 .025035 .430 .115 .010020 .433 .351 .015030 .437 .133 .055042 .438 .206 .020030 .440 .275 .021 .422 .335 .010020 .434 .043 .005010 .437 .141 .048072 .438 .207 .005010 .440 .444 .040060 .437 .141 .048072 .438 .210 .042060 .440 .344 .044 .044 .044 .044 .044 .044 .044 .04 | | | | | | | | | | | | | | | | I | | .005010 |
| .422 .153 .005010 .430 .111 .005010 .433 .348 .030040 .437 .129 .010042 .438 .205 .070090 .440 .265 .00 .422 .189 .025035 .430 .115 .010020 .433 .351 .015030 .437 .130 .025042 .438 .206 .020030 .440 .275 .022 .422 .282 .040060 .430 .120 .005012 .434 .073 .050062 .438 .207 .005010 .440 .283 .044 .422 .335 .010020 .430 .128 .032042 .434 .079 .030050 .437 .141 .048072 .438 .216 .005010 .440 .340 .094 .040060 .437 .142 .040060 .438 .216 .005010 .440 .316 .022 .423 .153 .005015< | | | | | | | | | | | | | | | | I | | .010070 |
| .422 .189 .025035 .430 .115 .010020 .433 .351 .015030 .437 .130 .025042 .438 .206 .020030 .440 .275 .021 .422 .282 .040060 .430 .120 .005012 .434 .043 .005010 .437 .133 .050062 .438 .207 .005010 .440 .283 .044 .422 .335 .010020 .430 .128 .032042 .434 .079 .030050 .437 .141 .048072 .438 .210 .042060 .440 .314 .044 .040060 .438 .216 .005100 .440 .314 .040060 .437 .142 .040060 .438 .216 .005100 .440 .314 .044 .043 .040060 .437 .143 .040060 .438 .232 .035050 .440 .316 .022 .024 .437 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>I</td><td></td><td>.005010</td></t<> | | | | | | | | | | | | | | | | I | | .005010 |
| .422 .282 .040060 .430 .120 .005012 .434 .043 .005010 .437 .133 .050062 .438 .207 .005010 .440 .283 .044 .422 .335 .010020 .430 .128 .032042 .434 .079 .030050 .437 .141 .048072 .438 .210 .042060 .440 .304 .034 .034 .094 .040060 .437 .142 .040060 .438 .216 .005100 .440 .314 .044 .044 .040060 .437 .142 .040060 .438 .216 .005050 .440 .316 .040060 .438 .232 .035050 .440 .316 .040060 .433 .133 .005015 .430 .161 .010020 .434 .160 .090125 .437 .144 .025035 .438 .236 .005010 .440 .355 .016 .440 | .422 | .189 | | | | | | | | | | | .438 | | .020030 | | | .020045 |
| .422 .375 .005010 .430 .130 .030050 .434 .094 .040060 .437 .142 .040060 .438 .216 .005100 .440 .314 .044 .423 .129 .005010 .430 .159 .020040 .434 .103 .040060 .437 .143 .040060 .438 .232 .035050 .440 .316 .022 .423 .153 .005015 .430 .161 .010020 .434 .160 .090125 .437 .144 .025035 .438 .236 .005010 .440 .328 .044 .423 .250 .020060 .434 .166 .020040 .437 .144 .025035 .438 .247 .005010 .440 .325 .014 .422 .205 .020040 .434 .196 .005010 .437 .150 .010020 .438 .249 .050075 .440 . | | | | .430 | .120 | | .434 | | .005010 | | | | .438 | .207 | | .440 | .283 | .040062 |
| .423 .129 .005010 .430 .159 .020040 .434 .103 .040060 .437 .143 .040060 .438 .232 .035050 .440 .316 .020 .423 .153 .005015 .430 .161 .010020 .434 .160 .090125 .437 .144 .025035 .438 .236 .005010 .440 .328 .044 .423 .226 .040060 .430 .175 .015030 .434 .176 .020040 .437 .147 .020040 .438 .247 .005010 .440 .381 .016 .423 .250 .020035 .430 .180 .020040 .434 .196 .005010 .437 .157 .010020 .438 .249 .050075 .440 .381 .010 .423 .254 .020030 .430 .190 .020040 .434 .296 .005010 .437 . | | | | | | | | | | .437 | | | | | | I | | .030050 |
| .423 .153 .005015 .430 .161 .010020 .434 .160 .090125 .437 .144 .025035 .438 .236 .005010 .440 .328 .044 .423 .226 .040060 .430 .175 .015030 .434 .176 .020040 .437 .147 .020040 .438 .247 .005010 .440 .355 .015 .432 .250 .020035 .430 .180 .020040 .434 .196 .005010 .437 .150 .010020 .438 .249 .050075 .440 .381 .016 .423 .254 .020030 .430 .189 .030050 .434 .198 .005010 .437 .157 .015030 .438 .255 .005050 .440 .390 .00 .423 .269 .060078 .430 .190 .020040 .434 .224 .005010 .437 .158 .005010 | | | | | | | | | | | | | | | | I | | .040060 |
| .423 .226 .040060 | | | | | | | | | | | | | | | | | | .020050 |
| .423 .254 .020035 | | | | | | | | | | | | | | | | I | | .040060 |
| .423 .254 .020030 | | | | | | | | | | | | | | | | I | | .015025 |
| .423 .269 .060078 .430 .190 .020040 .434 .224 .005010 .437 .158 .005010 .438 .256 .025050 .441 .042 .010 .423 .270 .060080 .430 .191 .020080 .434 .236 .032062 .437 .166 .010050 .438 .257 .030050 .441 .093 .00 .423 .271 .050070 .430 .200 .070090 .434 .253 .005010 .437 .169 .008016 .438 .258 .005010 .441 .143 .00 .423 .278 .025050 .430 .206 .080100 .434 .255 .005010 .437 .171 .030050 .438 .259 .005010 .441 .151 .033 .423 .314 .010020 .430 .215 .032042 .434 .271 .050070 .437 </td <td></td> <td>I</td> <td></td> <td>.010020</td> | | | | | | | | | | | | | | | | I | | .010020 |
| .423 .270 .060080 .430 .191 .020080 .434 .236 .032062 .437 .166 .010050 .438 .257 .030050 .441 .093 .000 .423 .271 .050070 .430 .200 .070090 .434 .253 .005010 .437 .169 .008016 .438 .258 .005010 .441 .143 .00 .423 .278 .025050 .430 .206 .080100 .434 .255 .005010 .437 .171 .030050 .438 .259 .005010 .441 .151 .030 .423 .314 .010020 .430 .215 .032042 .434 .271 .050070 .437 .183 .050062 .438 .262 .030050 .441 .168 .030 .423 .319 .015025 .430 .230 .005010 .434 .282 .005010 .437 .191 .010104 .438 .265 .030060 .441 .172< | | | | | | | | | | | | | | | | I | | .005010 |
| .423 .271 .050070 .430 .200 .070090 .434 .253 .005010 .437 .169 .008016 .438 .258 .005010 .441 .143 .00 .423 .278 .025050 .430 .206 .080100 .434 .255 .005010 .437 .171 .030050 .438 .259 .005010 .441 .151 .031 .423 .314 .010020 .430 .215 .032042 .434 .271 .050070 .437 .183 .050062 .438 .262 .030050 .441 .168 .031 .423 .319 .015025 .430 .230 .005010 .434 .282 .005010 .437 .191 .010104 .438 .265 .030060 .441 .172 .060 .423 .328 .030042 .430 .258 .020040 .434 .286 .020030 .437 .192 .050075 .438 .266 .015030 .441 .190< | | | | | | | | | | | | | | | | | | .010020 .005020 |
| .423 .278 .025050 .430 .206 .080100 .434 .255 .005010 .437 .171 .030050 .438 .259 .005010 .441 .151 .031 .423 .314 .010020 .430 .215 .032042 .434 .271 .050070 .437 .183 .050062 .438 .262 .030050 .441 .168 .030 .423 .319 .015025 .430 .230 .005010 .434 .282 .005010 .437 .191 .010104 .438 .265 .030060 .441 .172 .060 .423 .328 .030042 .430 .258 .020040 .434 .286 .020030 .437 .192 .050075 .438 .266 .015030 .441 .190 .000 | | | | | | | | | | | | | | | | I | | .005020 |
| .423 .314 .010020 .430 .215 .032042 .434 .271 .050070 .437 .183 .050062 .438 .262 .030050 .441 .168 .031 .423 .319 .015025 .430 .230 .005010 .434 .282 .005010 .437 .191 .010104 .438 .265 .030060 .441 .172 .060 .423 .328 .030042 .430 .258 .020040 .434 .286 .020030 .437 .192 .050075 .438 .266 .015030 .441 .190 .000 | | | | | | | | | | | | | | | | I | | .030050 |
| .423 .319 .015025 .430 .230 .005010 .434 .282 .005010 .437 .191 .010104 .438 .265 .030060 .441 .172 .060 .423 .328 .030042 .430 .258 .020040 .434 .286 .020030 .437 .192 .050075 .438 .266 .015030 .441 .190 .000 | | | | | | | | | | | | | | | | I | | .030050 |
| .423 .328 .030042 .430 .258 .020040 .434 .286 .020030 .437 .192 .050075 .438 .266 .015030 .441 .190 .00 | | | | | | | | | | | | | | | | I | | .062083 |
| | | | | | | | | | | | | | | | | | | .005010 |
| | | | | | | | | | | | | | | | | I | | .005030 |
| | | .139 | .030050 | | | | | | | | | | | | | I | | .050075 |
| .424 .169 .005030 .430 .285 .020030 .434 .318 .005010 .437 .198 .005010 .438 .281 .060080 .441 .242 .020 | | .169 | | .430 | .285 | .020030 | .434 | .318 | .005010 | .437 | | .005010 | .438 | .281 | .060080 | .441 | .242 | .020030 |
| | | | | | | | | | | | | | | | | | | .020040 |
| | | | | | | | | | | | | | | | | I | | .005010 |
| | | | | | | | | | | | | | | | | I | | .020048 |
| | | | | | | | | | | | | | | | | I | | .030050 |
| | | | | | | | | | | | | | | | | I | | .042072 |
| .425 .138 .030050 .430 .372 .005020 .435 .077 .005010 .437 .218 .015062 .438 .316 .005010 .441 .270 .020 | .425 | .138 | .030050 | .430 | .3/2 | .005020 | .435 | .077 | .010010 | .437 | .218 | .015062 | .438 | .316 | .010010 | .441 | .270 | .025040 |

| | | Change A | 1 | | Change A | | | Change A | INU | 100 | Chassa Anu | IANGI | | | INE | JIZE | |
|--|--------------------------------------|--|--------------------------------------|------------------------------|-------------------------------------|----------------------|----------------------|-------------------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|-------------------------------|-----------------------------|-----------------------------|---------------------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| .441 | .273 | .005010 | .450 | .114 | .015030 | .456 | .235 | .005010 | .465 | .221 | .005010 | .470 | .149 | .005010 | .473 | .039 | .005010 |
| .441 | .316 | .040060 | .450 | .120 | .010015 | .456 | .257 | .020030 | .465 | .222 | .060070 | .470 | .150 | .060090 | .473 | .070 | .010020 |
| .441 | .319 | .005010 | .450 | .138 | .005015 | .456 | .261 | .005010 | .465 | .252 | .006015 | .470 | .158 | .050070 | .473 | .157 | .005010 |
| .441 | .320 | .005008 | .450 | .143 | .005010 | .456 | .378 | .005010 | .465 | .261 | .005010 | .470 | .159 | .050070 | .473 | .172 | .120135 |
| .442 | .195 | .005010 | .450 | .162 | .050075 | .456 | .390 | .010020 | .465 | .283 | .075125 | .470 | .176 | .060080 | .473 | .205 | .005010 |
| .442 .442 | .260 .286 | .010020 . 005010 | .450 .450 | .174 .182 | .025040 . 005010 | .457 .457 | .252 .254 | .050075 .005010 | .465 | .314 .345 | .015025 .005010 | .470 .470 | .187 .200 | .110130 . 005010 | .473 .473 | .238 .240 | .030050 .010020 |
| .442 | .317 | .040060 | .450 | .192 | .005010 | .457 | .311 | .030040 | .465 .465 | .402 | .005010 | .470 | .210 | .035050 | .473 | .242 | .030050 |
| .443 | .190 | .025040 | .450 | .200 | .015080 | .457 | .313 | .050060 | .466 | .125 | .015030 | .470 | .218 | .010040 | .473 | .243 | .010020 |
| .443 | .191 | .025040 | .450 | .201 | .005010 | .457 | .363 | .005010 | .466 | .127 | .020040 | .470 | .228 | .010020 | .473 | .248 | .020030 |
| .443 | .223 | .005010 | .450 | .216 | .005010 | .457 | .407 | .015025 | .466 | .189 | .020040 | .470 | .239 | .005010 | .473 | .262 | .005010 |
| .443 | .224 | .040060 | .450 | .223 | .015025 | .458 | .172 | .062090 | .466 | .191 | .020045 | .470 | .255 | .047085 | .473 | .284 | .030050 |
| .443 .443 | .295 .336 | .016025 .040060 | .450 .450 | .237 .240 | .030050 . 005010 | .458 .459 | .250 .172 | .040062 .050075 | .466 .466 | .198 .205 | .040060 .020030 | .470 .470 | .265 .271 | .032048 .010020 | .473 .473 | .289 .315 | .030050 .005010 |
| .444 | .165 | .005010 | .450 | .251 | .020100 | .459 | .172 | .005050 | .466 | .210 | .020035 | .470 | .276 | .050075 | .473 | .317 | .010020 |
| .444 | .196 | .015030 | .450 | .252 | .005020 | .459 | .194 | .040050 | .466 | .218 | .050070 | .470 | .290 | .015030 | .473 | .318 | .005010 |
| .444 | .318 | .030050 | .450 | .254 | .025040 | .459 | .290 | .060080 | .466 | .251 | .025040 | .470 | .312 | .020030 | .473 | .319 | .005010 |
| .444 | .347 | .020040 | .450 | .256 | .010020 | .459 | .312 | .040060 | .466 | .259 | .080100 | .470 | .316 | .005010 | .473 | .320 | .005020 |
| .444 | .349 | .005010 .030050 | .450 | .260 | .025040 | .459 | .337 | .040060 | .466 | .264 | .005010 | .470 | .317 | .005010 | .473 | .321 | .005010 |
| .445 | .095 | .050050 | .450 .450 | .264 | .050070 .050075 | .459 .459 | .347 | .020030 | .466 .466 | .290 .293 | .020030 | .470 .470 | .319 | .015030 | .473 .474 | .397 .126 | .005030 |
| .445 | .136 | .010020 | .450 | .290 | .080075 | .460 | .040 | .020030 | .466 | .293 | .010020 | .470 | .330 | .020040 | .474 | .238 | .005010 |
| .445 | .142 | .040050 | .450 | .292 | .015025 | .460 | .143 | .020040 | .466 | .321 | .005010 | .470 | .338 | .005010 | .474 | .260 | .020070 |
| .445 | .206 | .035050 | .450 | .295 | .015030 | .460 | .159 | .005010 | .466 | .344 | .015030 | .470 | .340 | .005012 | .474 | .261 | .040060 |
| .445 | .212 | .005010 | .450 | .316 | .005030 | .460 | .194 | .005010 | .466 | .380 | .005010 | .470 | .341 | .050075 | .474 | .278 | .005010 |
| .445 | .252 | .015025 | .450 | .317 | .005025 | .460 | .306 | .005010 | .467 | .103 | .010020 | .470 | .350 | .006015 | .474 | .279 | .005010 |
| .445 .445 | .265 .325 | .040060 .010020 | . 450 .450 | . 320 .350 | . 005060 .015025 | .460 .460 | .319 .378 | .020040 .030042 | .467 | .189 | .075105 | .470 .470 | .360 .369 | .005010 .005010 | .474 .474 | .284 .317 | .005010 .005015 |
| .445 | .325 | .010020 | .450 | .368 | .015025 | .460 | .378 | .030042 | .467 .467 | .201 .204 | .015030 .005010 | .470 | .373 | .020035 | .474 | .317 | .030050 |
| .445 | .348 | .020040 | .450 | .370 | .015030 | .461 | .091 | .005010 | .467 | .213 | .015030 | .470 | .380 | .030040 | .474 | .381 | .005012 |
| .445 | .383 | .005040 | .450 | .375 | .025042 | .461 | .215 | .045060 | .467 | .218 | .015020 | .470 | .384 | .015025 | .474 | .396 | .015025 |
| .445 | .385 | .005010 | .451 | .146 | .020030 | .461 | .334 | .005010 | .467 | .245 | .025040 | .470 | .418 | .005010 | .475 | .147 | .020040 |
| .445 | .390 | .010015 | .451 | .188 | .020030 | .461 | .355 | .015025 | .467 | .251 | .050072 | .471 | .126 | .040050 | .475 | .192 | .060080 |
| .446 | .049 | .010020 | .451 | .241 | .025040 | .462 | .062 | .030050 | .467 | .260 | .030050 | .471 | .130 | .030080 | .475 | .196 | .005010 |
| .446 .446 | .151 .162 | .062090 .005010 | .451 . 451 | .267 . 274 | .030050 . 005010 | .462 .462 | .090 .158 | .025042 .040060 | .467 .467 | .294 .323 | .020030 .005015 | . 471 .471 | . 149 .170 | .00 5010 | .475 .475 | .227 | .020030 |
| .446 | .171 | .040060 | .451 | .315 | .040062 | .462 | .165 | .005010 | .467 | .380 | .005010 | .471 | .174 | .005010 | .475 | .279 | .005010 |
| .446 | .197 | .010020 | .451 | .317 | .005010 | .462 | .203 | .010030 | .467 | .382 | .005010 | .471 | .197 | .030040 | .475 | .286 | .005010 |
| .446 | .208 | .050070 | .451 | .334 | .020030 | .462 | .288 | .005010 | .467 | .420 | .005010 | .471 | .203 | .115135 | .475 | .306 | .005010 |
| .446 | .256 | .005010 | .451 | .344 | .030050 | .462 | .318 | .070080 | .468 | .084 | .010025 | .471 | .205 | .100125 | .475 | .334 | .040060 |
| .446 .446 | .270 .307 | .005040 .030050 | .451 .451 | .353 .378 | .010020 .020030 | . 462 .462 | . 324 .336 | . 005010 .050060 | .468 | .128 | .005015 | .471 .471 | .206 .218 | .005010 .005010 | . 475 .475 | .360 .368 | . 005010 .015040 |
| .446 | .319 | .030050 | .451 | .395 | .005010 | .462 | .377 | .015025 | .468 .468 | .150 .222 | .030050 .040060 | .471 | .222 | .020030 | .475 | .378 | .015040 |
| .446 | .325 | .032060 | .452 | .036 | .010020 | .463 | .073 | .015030 | .468 | .254 | .010015 | .471 | .223 | .040050 | .475 | .380 | .010020 |
| .447 | .127 | .020040 | .452 | .102 | .015030 | .463 | .166 | .015030 | .468 | .257 | .005010 | .471 | .224 | .020040 | .475 | .397 | .020030 |
| .447 | .194 | .030050 | .452 | .257 | .010020 | .463 | .188 | .060080 | .468 | .259 | .010090 | .471 | .254 | .005010 | .475 | .400 | .020040 |
| .447 | .202 | .025040 | .452 | .284 | .005010 | .463 | .189 | .025040 | .468 | .261 | .005015 | .471 | .256 | .035050 | .475 | .411 | .010020 |
| .447 | .223 .230 | .025050 | .452 | .328 | .040060 | .463 | .222 | .025040 | .468 | .287 | .005010 | .471 | .259 | .005010 | .475 | .424 | .015040 |
| .447 .447 | .236 | .025040 . 005010 | .453 .453 | .236 .243 | .030050 .020030 | .463 .463 | .224 .245 | .010020 .030060 | .468 .468 | .312 .320 | .050070 . 005010 | .471 .471 | .287 .318 | .005015 .050070 | .476 .476 | .144 .163 | .032060 .015030 |
| .447 | .250 | .020040 | .453 | .275 | .010020 | .463 | .258 | .050075 | .468 | .321 | .005072 | .471 | .319 | .010020 | .476 | .169 | .070080 |
| .447 | .254 | .010020 | .453 | .300 | .030050 | .463 | .263 | .060075 | .468 | .390 | .015030 | .471 | .322 | .005010 | .476 | .181 | .030040 |
| .447 | .270 | .020030 | .453 | .330 | .031048 | .463 | .267 | .030050 | .468 | .400 | .020040 | .471 | .348 | .025042 | .476 | .190 | .015030 |
| .447 | .313 | .015025 | .453 | .354 | .040060 | .463 | .270 | .005010 | .468 | .405 | .005010 | .471 | .378 | .005012 | .476 | .210 | .105125 |
| .447 | .337 | .005010 | .453 | .378 | .031042 | .463 | .288 | .005010 | .469 | .100 | .020040 | .471 | .387 | .005010 | .476 | .240 | .010025 |
| .447 .447 | .375 .380 | .020036 .015030 | .453 .454 | .398 .107 | .010020 . 005010 | .463 .463 | .320 .321 | .040050 .030050 | .469 | .149 .184 | .080104 . 005010 | .472 .472 | .097 .099 | .005020 .020040 | .476 .476 | .289 .324 | .010030 .025040 |
| .447 | .094 | .005010 | .454 | .136 | .030050 | .463 | .321 | .030030 | .469 .469 | .184 | .005010 | .472 | .125 | .020040 | .476 | .324 | .025040 |
| .448 | .139 | .030040 | .454 | .193 | .070090 | .463 | .333 | .030050 | .469 | .206 | .075100 | .472 | .157 | .005010 | .476 | .404 | .005010 |
| .448 | .181 | .006012 | .454 | .228 | .005010 | .463 | .391 | .020030 | .469 | .228 | .010020 | .472 | .160 | .010020 | .477 | .140 | .005010 |
| .448 | .189 | .005010 | .454 | .320 | .025040 | .464 | .129 | .005010 | .469 | .254 | .030050 | .472 | .165 | .015030 | .477 | .168 | .005010 |
| .448 | .191 | .030048 | .454 | .356 | .020030 | .464 | .159 | .060080 | .469 | .263 | .030050 | .472 | .169 | .025050 | .477 | .178 | .005010 |
| .448 | .203 .205 | .015030 .030060 | .454 | .390 | .005010 .005010 | .464 | .160 | .015030 | .469 | .269 | .015025 | .472 .472 | .196 .200 | .032048 . 005010 | .477 | .201 .302 | .020030 .025040 |
| .448 .448 | .205 | .030060 | .454 .455 | .421 .080 | .005010 | .464 .464 | .190 .210 | .030050 .020036 | .469 .469 | .281 .320 | .005020 .004008 | .472 | .200 .211 | .005010 | .477 .477 | .302 | .025040 |
| .448 | .223 | .025040 | .455 | .145 | .005010 | .464 | .218 | .005010 | .469 | .321 | .005010 | .472 | .236 | .005010 | .478 | .170 | .010020 |
| .448 | .251 | .032060 | .455 | .186 | .025040 | .464 | .237 | .015030 | .469 | .322 | .010020 | .472 | .237 | .015030 | .478 | .222 | .025040 |
| .448 | .271 | .030050 | .455 | .187 | .025035 | .464 | .244 | .005020 | .469 | .325 | .020035 | .472 | .238 | .005010 | .478 | .253 | .005010 |
| .448 | .312 | .005010 | .455 | .195 | .015030 | .464 | .252 | .005010 | .469 | .343 | .005010 | .472 | .239 | .005010 | .478 | .315 | .050070 |
| .448 | .323 | .010020 | .455 | .235 | .020030 | .464 | .265 | .010020 | .469 | .349 | .010020 | .472 | .241 | .075090 | .478 | .316 | .025040 |
| 448 | .331 | .010020 .035050 | .455 | .257 | .020032 | .464 | .318 | .015025 | .469 | .379 | .020030 | .472 .472 | .245 | .030040 | .478 | .322 | .005010 |
| | .367 | .035050 | .455 .455 | .261 .265 | .007016 .015030 | .464 .464 | .367 .393 | .010020 . 005010 | .469 .470 | .384 .042 | .010020 .015025 | .472 .472 | .246 .265 | .030050 . 005010 | .478 .478 | .325 .343 | .050070 . 005010 |
| .448 | 368 | .000 .040 | .455 | .302 | .015030 | .465 | .062 | .030050 | .470 | .042 | .020030 | .472 | .282 | .020040 | .478 | .343 | .050062 |
| | .368 .377 | .005010 | | | | | | | .470 | .094 | .005015 | .472 | .289 | .005010 | .479 | .127 | .005010 |
| .448 .448 | | .005010 .005010 | .455 | .383 | .025040 | .465 | .117 | .040060 | | | | | | | | | |
| .448 .448 .448 .449 | .377 .259 .351 | .005010 .005010 | .455 . 456 | .074 | .005010 | .465 | .171 | .025040 | .470 | .116 | .035050 | .472 | .315 | .025040 | .479 | .160 | .050075 |
| .448 .448 .448 .449 .449 | .377 .259 .351 .412 | .005010 .005010 .005010 | .455 .456 .456 | .074 .153 | .005010 .025040 | .465 .465 | .171 .188 | .025040 .060070 | .470 .470 | .116 .118 | .025042 | .472 .472 | .315 .319 | .025040 . 005030 | .479 .479 | .160 .178 | .050075 .005010 |
| .448 .448 .448 .449 .449 .450 | .377 .259 .351 .412 .062 | .005010 .005010 .005010 .030050 | .455 . 456 .456 .456 | . 074 .153 .190 | .005010 .025040 .025062 | .465 .465 .465 | .171 .188 .210 | .025040 .060070 .040060 | .470 .470 .470 | .116 .118 .119 | .025042 .010025 | .472 .472 .472 | .315 .319 .379 | .025040 .005030 .005010 | .479 .479 .479 | .160 .178 .210 | .050075 . 005010 .025036 |
| .448 .448 .448 .449 .449 | .377 .259 .351 .412 | .005010 .005010 .005010 | .455 .456 .456 | .074 .153 | .005010 .025040 | .465 .465 | .171 .188 | .025040 .060070 | .470 .470 | .116 .118 | .025042 | .472 .472 | .315 .319 | .025040 . 005030 | .479 .479 | .160 .178 | .050075 .005010 |

| | | Observa Aver | | | Obsess Asses | | | | 1 3 IVIL | IAL | | IS AIII | - 1 - | AT AND T | OWIDE | LDL | |
|----------------------|----------------------|----------------------------|----------------------|---------------------|----------------------------|----------------------|----------------------|-------------------------------------|---------------------|---------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| .479 | .377 | .015030 | .485 | .347 | .020030 | .491 | .136 | .020040 | .495 | .040 | .005010 | .497 | .215 | .005010 | .499 | .194 | .005010 |
| .479 | .380 | .005008 | .485 | .350 | .020030 | .491 | .172 | .005010 | .495 | .063 | .020035 | .497 | .220 | .020070 | .499 | .201 | .050075 |
| .479 | .385 | .005010 | .485 | .354 | .010020 | .491 | .207 | .020030 | .495 | .073 | .040062 | .497 | .250 | .015030 | .499 | .203 | .080100 |
| .479 | .412 | .005010 | .485 | .376 | .015025 | .491 | .250 | .005010 | .495 | .136 | .030050 | .497 | .252 | .005025 | .499 | .215 | .010020 |
| .479 | .424 | .020025 | .485 .485 | .386 .411 | .015025 .020040 | .491 .491 | .252 . 253 | .100134 .005075 | .495 .495 | .143 .158 | .100125 .030060 | . 497 .497 | . 253 .254 | .005010 .015060 | . 499 .499 | . 229 .239 | .005010 .030040 |
| .480 | .159 | .005010 | .485 | .412 | .020040 | .491 | .254 | .050075 | .495 | .162 | .030000 | .497 | .259 | .010040 | .499 | .240 | .048070 |
| .480 | .170 | .005010 | .485 | .431 | .005010 | .491 | .256 | .040060 | .495 | .170 | .005010 | .497 | .280 | .015030 | .499 | .243 | .005010 |
| .480 | .192 | .005010 | .486 | .062 | .030050 | .491 | .265 | .090105 | .495 | .184 | .070090 | .497 | .287 | .005015 | .499 | .246 | .005010 |
| .480 | .196 | .040060 | .486 | .128 | .015030 | .491 | .266 | .010030 | .495 | .190 | .010020 | .497 | .315 | .005012 | .499 | .254 | .035060 |
| .480 | .215 | .030050 | .486 | .220 | .025040 | .491 | .267 | .005010 | .495 | .191 | .020030 | .497 | .316 | .035050 | .499 | .258 | .015030 .030050 |
| .480 .480 | .237 .250 | .040060 .005010 | .486 .486 | .224 .230 | .040060 .030050 | .491 .491 | .268 .317 | . 005010 .010020 | .495 .495 | .195 .200 | .005010 .030050 | .497 .497 | .318 .319 | .015030 .015030 | .499 .499 | .259 .264 | .030050 |
| .480 | .251 | .030050 | .486 | .260 | .010020 | .491 | .320 | .010020 | .495 | .203 | .050070 | .497 | .324 | .005010 | .499 | .265 | .025040 |
| .480 | .260 | .015030 | .486 | .315 | .015030 | .491 | .338 | .030050 | .495 | .210 | .025040 | .497 | .337 | .005010 | .499 | .281 | .080100 |
| .480 | .276 | .010020 | .486 | .327 | .005050 | .491 | .385 | .015030 | .495 | .215 | .010020 | .497 | .344 | .062075 | .499 | .313 | .005010 |
| .480 | .350 | .020040 | .486 | .355 | .005010 | .491 | .393 | .005010 | .495 | .223 | .050070 | .497 | .347 | .005030 | .499 | .318 | .050070 |
| . 480 .480 | . 354 .368 | . 005010 .015025 | .486 .487 | .404 .042 | .010020 .025042 | .492 .492 | .124 .193 | .110130 .030050 | .495 .495 | .225 .236 | .075090 .010020 | . 497 .497 | .406 .410 | . 005010 .020030 | .499 .499 | .323 .329 | .010060 . 005010 |
| .480 | .370 | .015030 | .487 | .071 | .010020 | .492 | .201 | .040050 | .495 | .252 | .040060 | .497 | .437 | .005010 | .499 | .373 | .005010 |
| .480 | .371 | .020030 | .487 | .120 | .005010 | .492 | .204 | .105125 | .495 | .282 | .042072 | .497 | .442 | .005030 | .499 | .381 | .005060 |
| .480 | .380 | .005010 | .487 | .225 | .010032 | .492 | .250 | .020040 | .495 | .285 | .015040 | .498 | .063 | .050062 | .499 | .394 | .005010 |
| .480 | .391 | .005010 | .487 | .233 | .040060 | .492 | .254 | .030060 | .495 | .286 | .015040 | .498 | .078 | .040060 | .499 | .409 | .025042 |
| .480 .481 | .417 .089 | .005010 .005010 | .487 .487 | .256 .257 | .025040 .010020 | .492 .492 | .255 .260 | .030050 .070090 | .495 .495 | .298 .310 | .025045 .010030 | .498 .498 | .082 .096 | .042062 .030050 | | | |
| .481 | .126 | .020040 | .487 | .270 | .090110 | .492 | .276 | .005010 | .495 | .312 | .005010 | .498 | .122 | .020040 | | | |
| .481 | .161 | .005010 | .487 | .272 | .005010 | .492 | .281 | .030050 | .495 | .322 | .020040 | .498 | .126 | .010015 | | | |
| .481 | .188 | .020030 | .487 | .321 | .040060 | .492 | .328 | .012020 | .495 | .325 | .020030 | .498 | .130 | .005010 | | | 00 |
| .481 | .245 | .015030 | .487 | .327 | .030040 | .492 | .377 | .030050 | .495 | .327 | .080100 | .498 | .134 | .010020 | | | |
| .481 .481 | .247 .256 | .025040 .005010 | .487 .487 | .336 | .025040 | .492 .492 | .379 .380 | .005010 .005010 | .495 | .329 .337 | .015030 .060080 | .498 .498 | .148 .173 | .060080 | .500 | .035 | .005008 |
| .481 | .318 | .005010 | .487 | .355 | .020040 | .492 | .393 | .020042 | .495 .495 | .347 | .035050 | .498 | .175 | .100125 | .500 | .050 | .005010 |
| .481 | .336 | .005010 | .487 | .364 | .005010 | .493 | .125 | .015030 | .495 | .361 | .050065 | .498 | .184 | .005010 | .500 | .070 | .005010 |
| .481 | .361 | .040060 | .487 | .399 | .005010 | .493 | .131 | .020040 | .495 | .363 | .040060 | .498 | .187 | .015030 | .500 | .071 | .005010 |
| .481 | .383 | .010020 | .487 | .402 | .005010 | .493 | .145 | .070090 | .495 | .381 | .010020 | .498 | .197 | .040062 | .500 | .072 | .040062 |
| .481 .481 | .387 .390 | .010020 .050060 | .488 .488 | .054 .096 | .025040 .060090 | .493 .493 | .193 .198 | .075090 . 005010 | .495 | .401 .440 | .010025 .005008 | .498 .498 | .215 .216 | .010032 .025042 | .500 .500 | .082 .086 | .008025 .005010 |
| .481 | .402 | .005010 | .488 | .118 | .080090 | .493 | .190 | .005010 | .495 .496 | .041 | .005008 | .498 | .220 | .050072 | .500 | .088 | .040060 |
| .482 | .173 | .030050 | .488 | .193 | .050070 | .493 | .244 | .050070 | .496 | .085 | .005010 | .498 | .230 | .020042 | .500 | .089 | .015025 |
| .482 | .190 | .020040 | .488 | .281 | .032062 | .493 | .282 | .050075 | .496 | .128 | .020040 | .498 | .232 | .020036 | .500 | .093 | .005010 |
| .482 | .315 | .020040 | .488 | .315 | .005010 | .493 | .284 | .030050 | .496 | .130 | .010020 | .498 | .239 | .025042 | .500 | .096 | .005010 |
| .482 .482 | .329 .332 | .050075 .020040 | .488 .488 | .365 .400 | .010020 . 005010 | .493 .493 | .300 .316 | .030050 .025040 | .496 | .156 .162 | .005012 .035050 | .498 .498 | .247 .248 | .015030 .005010 | .500 .500 | .098 .102 | .010020 .008015 |
| .482 | .334 | .005010 | .489 | .180 | .030050 | .493 | .350 | .005010 | .496 .496 | .170 | .020030 | .498 | .251 | .005010 | .500 | .105 | .005010 |
| .482 | .359 | .010040 | .489 | .189 | .025040 | .493 | .354 | .025040 | .496 | .186 | .070090 | .498 | .252 | .005010 | .500 | .112 | .030050 |
| .482 | .396 | .005010 | .489 | .192 | .020030 | .493 | .369 | .005010 | .496 | .194 | .030050 | .498 | .257 | .010020 | .500 | .113 | .020040 |
| .483 | .033 | .010020 | .489 | .205 | .030060 | .493 | .373 | .005010 | .496 | .203 | .005012 | .498 | .259 | .090120 | .500 | .114 | .005030 |
| .483 .483 | .077 .149 | .020040 .005060 | .489 .489 | .206 .230 | .040060 .005010 | .493 .493 | .375 .376 | .020040 . 005010 | .496 .496 | .205 .248 | .005060 .005010 | .498 .498 | .262 .265 | .032104 .050075 | .500 .500 | .116 .121 | .020040 .005012 |
| .483 | .152 | .030060 | .489 | .303 | .010020 | .493 | .388 | .005010 | .496 | .249 | .005010 | .498 | .269 | .050070 | .500 | .125 | .003012 |
| .483 | .202 | .042062 | .489 | .304 | .020040 | .493 | .394 | .025040 | .496 | .252 | .020040 | .498 | .300 | .020030 | .500 | .129 | .025075 |
| .483 | .247 | .005010 | .489 | .315 | .005010 | .494 | .032 | .005010 | .496 | .253 | .020070 | .498 | .302 | .025040 | .500 | .131 | .010060 |
| .483 | .360 | .030040 | .489 | .320 | .040060 | .494 | .081 | .005016 | .496 | .255 | .005010 | .498 | .315 | .005010 | .500 | .132 | .040060 |
| .483 .483 | .375 .379 | .025040 .030040 | .489 .489 | .333 .338 | .020030 .035050 | .494 | .131 | .030050 .020030 | .496 | .260 | .015030 | .498 .498 | .321 .323 | .010020 .020040 | .500 .500 | . 133 .136 | . 005010 .012020 |
| .484 | .119 | .020040 | .489 | .127 | .025040 | .494 .494 | .162 .187 | .050070 | .496 .496 | .262 .263 | .015030 .015030 | .498 | .328 | .060075 | .500 | .140 | .012020 |
| .484 | .143 | .016025 | .490 | .165 | .015030 | .494 | .204 | .005010 | .496 | .265 | .060080 | .498 | .337 | .015030 | .500 | .141 | .008016 |
| .484 | .230 | .005010 | .490 | .167 | .020030 | .494 | .211 | .005010 | .496 | .304 | .060080 | .498 | .339 | .020035 | .500 | .142 | .030125 |
| .484 | .257 | .050075 | .490 | .170 | .007016 | .494 | .224 | .005010 | .496 | .318 | .040080 | .498 | .344 | .015025 | .500 | .144 | .005030 |
| .484 .484 | .285 | .060080 .050072 | .490 .490 | .189 | .030050 .005010 | .494 | .240 | .100125 | .496 | .319 | .005010 | .498 | . 377 .380 | .005010 | .500 | .145 .146 | .007020 |
| .484 | .313 .370 | .005010 | .490 | .252 .259 | .090110 | .494 .494 | .241 .261 | . 005010 .010020 | .496 .496 | .332 .343 | .030050 .030042 | .498 .498 | .392 | .010015 . 005042 | .500 | .140 | .035050 |
| .484 | .379 | .040060 | .490 | .260 | .005010 | .494 | .262 | .025040 | .496 | .346 | .050042 | .498 | .399 | .015025 | .500 | .150 | .008050 |
| .484 | .398 | .040060 | .490 | .265 | .005010 | .494 | .265 | .010060 | .496 | .349 | .050075 | .498 | .408 | .005010 | .500 | .153 | .005010 |
| .484 | .432 | .005010 | .490 | .295 | .005020 | .494 | .273 | .005010 | .496 | .353 | .050070 | .498 | .426 | .005010 | .500 | .155 | .100125 |
| .485 485 | .115 | .015030 | .490 | .301 | .005010 | . 494 | .274 | .005010 | .496 | .377 | .050070 | .499 .499 | .065 | .015025 .050075 | . 500 | . 160 .163 | .005010 |
| .485 .485 | .120 .162 | .010080 .020040 | . 490 .490 | .302 .313 | . 005010 .015030 | .494 .494 | .278 .280 | .010020 . 005010 | .496 .496 | .380 .381 | . 005040 .015075 | .499 .499 | .072 .090 | .040060 | .500 .500 | .163 | .050072 . 005010 |
| .485 | .170 | .040060 | .490 | .315 | .015020 | .494 | .282 | .005010 | .496 | .390 | .030040 | .499 | .094 | .042062 | .500 | .168 | .025075 |
| .485 | .200 | .005010 | .490 | .316 | .015020 | .494 | .314 | .015050 | .496 | .400 | .005010 | .499 | .118 | .060080 | .500 | .170 | .025050 |
| .485 | .257 | .005010 | .490 | .344 | .005010 | .494 | .321 | .010020 | .496 | .433 | .005010 | .499 | .123 | .050060 | .500 | .172 | .006050 |
| .485 | .258 | .005010 | .490 | .353 | .010020 | .494 | .323 | .005078 | . 496 | .437 | .005010 | .499 | .125 | .005010 | .500 | .173 | .005010 |
| .485 .485 | .260 .312 | .015025 .030050 | .490 .490 | .360 .377 | .020040 .050070 | .494 .494 | .325 .367 | .025035 .005010 | .497 .497 | .088 .098 | .020030 .030050 | . 499 .499 | .138 .142 | . 005010 .030050 | .500 .500 | .176 .177 | .050070 .060075 |
| .485 | .312 | .030030 | .490 | .378 | .010042 | . 494 .494 | .370 | .008015 | .497 | .137 | .030030 | .499 | .170 | .020030 | .500 | .180 | .025040 |
| .485 | .317 | .005010 | .490 | .380 | .005010 | .494 | .373 | .005010 | .497 | .138 | .030048 | .499 | .175 | .050072 | .500 | .182 | .060090 |
| .485 | .319 | .010020 | .490 | .391 | .016025 | .494 | .380 | .005010 | .497 | .166 | .010020 | .499 | .189 | .010020 | .500 | .187 | .020125 |
| .485 | .320 | .010040 | .490 | .393 | .030042 | .494 | .399 | .025040 | .497 | .191 | .060080 | .499 | .190 | .020030 | .500 | .188 | .030050 |
| .485 .485 | .328 | .032050 | . 490 | .412 | .005010 | .494 | .420 | .008015 | .497 497 | .193 .196 | .025040 . 005010 | .499 | .192 | .005030 | .500 .500 | .189 .190 | .005125 |
| .400 | .336 | .010020 | .490 | .416 | .005015 | .495 | .034 | .015025 | .497 | .150 | .003010 | .499 | .193 | .005075 | .500 | . 190 | .090104 |



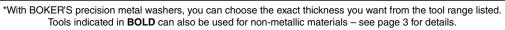
| | | Choose Any | | | Choose Any | | | Choose Any | - 110 | 100 | Choose Any | Ariol | - 1 01 | Choose Any | | JIZEC | Choose Any |
|----------------------|---------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|---------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| .500 | .191 | .005010 | .500 | .356 | .005010 | .502 | .190 | .062100 | .508 | .312 | .005010 | .515 | .378 | .020030 | .525 | .252 | .005010 |
| .500 .500 | .194 .195 | .062090 .005010 | .500 .500 | .360 .361 | .015040 .050060 | .502 .502 | .194 .196 | .060080 .040060 | .508 | .315 | .005010 | .515 .515 | .385 .388 | . 005010 .020040 | .525 .525 | .258 . 308 | .060080 . 005010 |
| .500 | .196 | .010125 | .500 | .368 | .020040 | .502 | .245 | .025036 | .508 .508 | .329 .336 | .050075 . 005010 | .515 | .390 | .010020 | .525 | .346 | .060080 |
| .500 | .197 | .005125 | .500 | .370 | .005010 | .502 | .262 | .040060 | .508 | .355 | .040060 | .515 | .391 | .050060 | .525 | .358 | .070080 |
| .500 | .197 | .126135 | .500 | .373 | .008015 | .502 | .263 | .030050 | .508 | .366 | .005010 | .515 | .394 | .005008 | .525 | .375 | .005010 |
| .500 .500 | .199 .200 | .035050 .040075 | .500 .500 | .375 .376 | .040075 .015030 | .502 .502 | .303 .315 | .075100 .005040 | .508 .509 | .430 .031 | .030040 .030050 | .515 .515 | .397 .420 | .005010 .020032 | .525 .525 | .378 .390 | .030050 .060080 |
| .500 | .201 | .010020 | .500 | .377 | .005060 | .502 | .329 | .020030 | .509 | .064 | .030050 | .516 | .156 | .030050 | .525 | .401 | .020040 |
| .500 | .202 | .060125 | .500 | .378 | .005060 | .502 | .378 | .025040 | .509 | .080 | .030050 | .516 | .195 | .008015 | .525 | .428 | .005015 |
| .500 | .203 | .012020 | .500 | .383 | .030050 | .502 | .386 | .005010 | .509 | .219 | .025042 | .516 | .239 | .005010 | .526 | .195 | .030050 |
| .500 .500 | .204 .205 | .015075 .005050 | .500 .500 | .388 .390 | .020036 .005060 | .503 .503 | .131 .142 | . 005120 .030060 | .509 .509 | .285 .286 | .010020 .010020 | .516 .516 | .246 .315 | .005020 .005010 | .526 .526 | .256 .270 | .030050 .010020 |
| .500 | .209 | .050070 | .500 | .396 | .005030 | .503 | .153 | .040050 | .509 | .298 | .050070 | .516 | .320 | .005010 | .526 | .437 | .015030 |
| .500 | .210 | .010025 | .500 | .402 | .005015 | .503 | .157 | .050062 | .509 | .430 | .020035 | .516 | .387 | .020040 | .527 | .129 | .015025 |
| .500 .500 | .217 .218 | .040060 .005090 | . 500 .500 | .412 .415 | . 005010 .012016 | .503 .503 | .159 .205 | . 005010 .030040 | .510 | .053 .156 | .015025 .025042 | .516 .516 | . 388 .438 | . 005010 .020032 | .527 .527 | . 145 .346 | .005010 .040060 |
| .500 | .220 | .062080 | .500 | .441 | .012010 | .503 | .280 | .075100 | .510 .510 | .210 | .075090 | .516 | .445 | .005010 | .527 | .348 | .032050 |
| .500 | .221 | .020125 | .500 | .446 | .005010 | .503 | .281 | .010020 | .510 | .269 | .005010 | .517 | .331 | .030050 | .527 | .369 | .005010 |
| .500 | .222 | .010020 | .500 | .450 | .005010 | .503 | .315 | .005010 | .510 | .280 | .040075 | .517 | .340 | .015030 | .527 | .393 | .030050 |
| .500 .500 | .226 .230 | .025040 .032048 | .500 .501 | .452 .061 | .010020 .010020 | .503 .503 | .316 .318 | . 005010 .050070 | .510 .510 | .300 .341 | .010020 .042062 | .517 .517 | .341 .346 | .040060 .005070 | .527 .527 | .437 .443 | .010020 .020040 |
| .500 | .231 | .005010 | .501 | .099 | .050075 | .503 | .363 | .005010 | .510 | .398 | .042062 | .517 | .402 | .005010 | .527 | .128 | .020040 |
| .500 | .233 | .100125 | .501 | .130 | .030050 | .503 | .383 | .005010 | .510 | .414 | .007020 | .517 | .417 | .005010 | .528 | .152 | .005012 |
| .500 | .234 | .100120 | .501 | .131 | .025040 | .503 | .387 | .005010 | .511 | .150 | .005010 | .517 | .438 | .005010 | .528 | .209 | .010020 |
| .500 .500 | .235 .237 | .005010 .008125 | . 501 .501 | .136 .139 | . 005020 .075105 | .503 .504 | .411 .125 | . 005010 .090104 | .511 .511 | .165 .237 | .040060 .005010 | .517 .518 | .441 .175 | .020030 .008016 | .528 .528 | .236 .254 | .040060 . 005010 |
| .500 | .238 | .105125 | .501 | .143 | .070090 | .504 | .258 | .030050 | .511 | .250 | .005072 | .518 | .214 | .015030 | .528 | .265 | .030060 |
| .500 | .245 | .020030 | .501 | .158 | .005010 | .504 | .269 | .005010 | .511 | .256 | .005010 | .518 | .253 | .005010 | .528 | .268 | .040060 |
| .500 | .250 .251 | .010134 | .501 | .168 .170 | .045060 .005010 | .504 .504 | .283 .321 | .010020 .030050 | .511 | .259 .316 | .010020 .005010 | .518 .518 | .338 | .005010 | . 528 .528 | . 308 .360 | .005010 .025040 |
| .500 | .253 | .005050 | .501 | .182 | .010104 | .504 | .343 | .030050 | .511 .511 | .320 | .015030 | .518 | .440 | .020030 | .528 | .410 | .040060 |
| .500 | .254 | .005083 | .501 | .191 | .090100 | .504 | .361 | .005010 | .511 | .327 | .020040 | .518 | .447 | .010020 | .528 | .439 | .010020 |
| .500 | .255 | .005030 | .501 | .192 | .020040 | .504 | .362 | .005010 | .511 | .383 | .015030 | .519 | .081 | .015025 | .528 | .453 | .005010 |
| .500 | .257 | .100120 | .501 | .195 .196 | .048062 .005010 | .504 . 504 | .379 .382 | .020030 .005010 | .512 . 512 | .198 . 203 | .050070 .005010 | .519 .519 | . 103 .170 | .005010 .050070 | . 529 .529 | . 132 .175 | .005010 .015030 |
| .500 | .259 | .100125 | .501 | .199 | .005010 | .504 | .390 | .030050 | .512 | .209 | .010020 | .519 | .290 | .030040 | .529 | .234 | .070090 |
| .500 | .260 | .005020 | .501 | .202 | .005010 | .505 | .090 | .015030 | .512 | .238 | .005010 | .519 | .377 | .005010 | .529 | .280 | .015030 |
| .500 .500 | .261 .263 | .050075 . 005120 | .501 | .205 | .030100 | .505 | .101 | .050070 | .512 | .275 | .040060 | .520 | .120 .194 | .010020 .050060 | .529 | .313 | .030048 |
| .500 | .265 | .005120 | .501 .501 | .207 .208 | .025040 .060072 | .505 .505 | .129 .149 | .050070 .010075 | . 512 .512 | . 278 .312 | .005010 .010020 | .520 .520 | .208 | .015020 | .529 .529 | .331 .375 | .020040 .050075 |
| .500 | .266 | .005025 | .501 | .210 | .100125 | .505 | .167 | .025040 | .512 | .317 | .005020 | .520 | .311 | .020035 | .529 | .385 | .005010 |
| .500 | .268 | .005020 | .501 | .223 | .005010 | .505 | .194 | .005010 | .512 | .320 | .005010 | .520 | .324 | .005010 | .529 | .439 | .015030 |
| .500 | .269 | .020036 . 005090 | .501 | .228 | .060080 .005010 | .505 | .250 | .020030 | .512 | .321 | .005010 | .520 | .333 | .005010 | .530 | .066 | .035060 .010020 |
| .500 .500 | .270 .275 | .005010 | . 501 .501 | .230 .241 | .080100 | .505 .505 | .254 .295 | .010020 .080090 | .512 .512 | .322 .394 | .005080 .005010 | .520 .520 | .346 .380 | .020030 .005010 | .530 .530 | .090 .099 | .010020 |
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| .500 | .280 | .042078 | .501 | .254 | .048072 | .505 | .324 | .050070 | .512 | .433 | .005010 | .520 | .430 | .010020 | .530 | .153 | .080104 |
| . 500 .500 | .281 .283 | . 005040 .030104 | .501 .501 | .255 .256 | .080105 .020090 | .505 .505 | .335 .341 | .025040 .025075 | .513 .513 | . 137 .153 | . 005010 .040060 | .520 .520 | .440 .455 | .005010 .005010 | .530 .530 | .180 .191 | .005010 .005010 |
| .500 | .286 | .030050 | .501 | .263 | .005010 | .505 | .355 | .025040 | .513 | .174 | .030050 | .521 | .145 | .075090 | .530 | .206 | .100125 |
| .500 | .288 | .010020 | .501 | .272 | .090105 | .505 | .386 | .020030 | .513 | .197 | .015030 | .521 | .239 | .040050 | .530 | .222 | .020035 |
| .500 | .289 | .015030 | .501 | .281 | .050104 | .505 | .390 | .030050 | .513 | .237 | .070090 | .521 | .325 | .010020 | .530 | .253 | .005010 |
| .500 .500 | .291 .292 | .025040 . 005010 | .501 .501 | .283 .300 | .010100 .005010 | .505 .505 | .396 .399 | . 005010 .020040 | .513 .513 | .240 .268 | .030050 .005012 | .521 .521 | .340 .380 | .072090 .025040 | .530 .530 | .254 .255 | .015030 .015030 |
| .500 | .295 | .025040 | .501 | .313 | .005070 | .505 | .401 | .030050 | .513 | .287 | .050070 | .521 | .440 | .005010 | .530 | .270 | .100125 |
| .500 | .296 | .010025 | .501 | .318 | .005090 | .505 | .457 | .005010 | .513 | .360 | .005010 | .522 | .251 | .042072 | .530 | .272 | .100125 |
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| .500 | .315 | .015104 | .501 | .380 | .005010 | .507 | .107 | .005010 | .514 | .431 | .030040 | .523 | .118 | .025040 | .530 | .344 | .060083 |
| .500 | .316 | .010050 | .501 | .386 | .010020 | .507 | .125 | .030040 | .514 | .454 | .020030 | .523 | .252 | .070090 | .530 | .375 | .005010 |
| .500 | .317 | .005090 | .501 | .397 | .005010 | .507 | .221 | .010020 | .515 | .149 | .005010 | .523 | .396 | .015030 | .530 | .377 | .005010 |
| .500 .500 | .318 .319 | .010020 .025050 | .501 .501 | .402 .404 | .020030 .015030 | .507 .507 | .232 .253 | .060078 .050075 | .515 .515 | .163 .191 | .030050 .050070 | .523 .523 | .402 .406 | .005010 .032050 | .530 .530 | .385 .388 | .050060 .010020 |
| .500 | .320 | .015025 | .501 | .409 | .030048 | .507 | .265 | .060070 | .515 | .206 | .080104 | .523 | .411 | .040060 | .530 | .393 | .005010 |
| .500 | .321 | .005010 | .501 | .413 | .015025 | .507 | .319 | .005010 | .515 | .218 | .005010 | .523 | .428 | .015030 | .530 | .397 | .025035 |
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| .500 | .332 | .080100 | .502 | .142 | .025040 | .507 | .446 | .020030 | .515 | .310 | .008015 | .524 | .396 | .005010 | .530 | .490 | .005030 |
| .500 | .334 | .010020 | .502 | .161 | .012025 | .508 | .201 | .020030 | .515 | .315 | .008015 | .524 | .409 | .010020 | .531 | .143 | .015050 |
| .500 | .338 | .005070 | .502 | .183 | .080104 | .508 | .223 | .050070 | .515 | .316 | .008015 | .524 | .463 | .025040 | .531 | .158 | .032048 |
| .500 .500 | .348 .350 | .015030 .040060 | .502 .502 | .185 .188 | .032062 .062090 | .508 .508 | .269 .280 | .010020 .020040 | .515 .515 | .318 .322 | . 005010 .015025 | .525 .525 | .068 .156 | .015032 .090105 | .531 .531 | .180 .191 | .050075 .012020 |
| .500 | .352 | .040060 | .502 | .189 | .030050 | .508 | .285 | .020040 | .515 | .377 | .005010 | .525 | .187 | .015030 | .531 | .200 | .012020 |
| | | | | | nrecision ma | | | | | | | | | | | | |

| Section Column | | | Choose Any | | | Choose Any | | | | 1 3 IVIL | .IAL | Chance Any | IO AITI | / | Choose Any | CIVIDE | | |
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| Section Control Cont | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 1.53 1.53 1.05 | .531 | .202 | | .538 | .342 | .040060 | .547 | .320 | .030050 | .551 | .378 | .010100 | .558 | .361 | | .561 | .127 | .020040 |
| Sept 1909 | | | | 1 | | | | | | | | | | | | | | .005010 |
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| Section Control Cont | | | | 1 | | | | | | | | | | | | | | .075090 |
| S31 271 025 - 025 039 366 069 - 010 548 371 065 - 010 551 443 010 - 025 559 209 007 - 000 561 149 005 - 105 141 | | | | | | | | | | | | | | | | | | .015030 |
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| SST 377 010 -08 | | | | 1 | | | | | | | | | | | | 1 | | .005060 |
| S31 330 040 080 080 399 399 080 080 080 688 489 090 080 | | | | 1 | | | | | | | | | | | | | | .020040 |
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| 551 350 070 | | | | | | | | | | | | | | | | l | | .030050 |
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| 531 463 015 - 030 540 284 015 - 030 540 284 015 - 030 540 340 005 - 010 552 236 005 - 010 559 388 006 - 080 581 320 200 200 322 200 200 - 200 552 350 200 200 550 351 300 | | | | | | | | | | | | | | .349 | .075090 | | | .040060 |
| 532 166 100 -200 540 339 105 -200 550 329 100 -200 550 331 100 -200 550 331 100 -200 550 331 100 -200 550 331 100 -200 550 331 100 -200 550 331 100 -200 550 331 305 -200 -200 550 331 305 -200 -200 550 331 305 -200 -200 550 331 305 -200 -200 550 331 305 -200 | | | | 1 | | | | | | | | | | | | | | .036060 |
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| 532 285 0.05015 540 388 0.95070 559 148 0.05010 552 387 0.04065 560 118 0.15030 551 381 0.7505 552 385 0.05010 560 130 0.05005 550 387 0.0205 552 385 0.05010 550 130 0.05005 550 130 0.05005 550 381 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 385 0.05005 550 0.05005 550 0.05 0. | .532 | .201 | | | | | | | | | | | | | | | | .005010 |
| 532 383 090 - 0075 540 392 010 - 020 550 158 095 - 010 552 385 005 - 075 550 18 015 - 030 561 397 020 | | | | | | | | | | | | | | | | | | .020030 |
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| 533 636 012 020 540 408 015 025 550 240 010 020 0552 400 010 016 156 035 050 070 0561 439 010 056 025 0561 439 010 056 025 0561 439 010 056 025 0561 439 010 056 025 0561 439 010 056 025 0561 439 010 056 025 0561 439 010 056 025 0561 439 010 056 025 0561 439 010 0561 0361 | .532 | .451 | .005010 | .540 | .395 | .005010 | .550 | .193 | .005060 | | .397 | | .560 | .128 | .015030 | .561 | .421 | .005010 |
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| 533 201 0.010 0.020 5.51 1.52 0.00 0.000 5.500 2.550 0.050 0.000 0.050 0.550 0.050 0.550 0.550 0.050 0.550 0.050 0.550 0.550 0.050 0.550 0.050 0.550 0.050 0.550 0.050 0.550 0.050 0.550 0.050 0.550 0.050 0.550 0.050 0.550 0.050 0.550 0.050 0.550 0.050 0.550 0.050 0.050 0.550 0.050 0.050 0.550 0.0 | | | | 1 | | | | | | | | | | | | | | .035060 .010020 |
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| 533 226 0.99 - 1.05 541 378 0.40 - 0.60 550 222 0.05 - 1.05 552 478 0.05 - 0.10 5.60 1.92 0.03 - 0.60 5.62 1.46 0.04 - 0.60 5.53 3.97 0.05 - 0.10 5.60 1.92 0.03 - 0.60 5.62 1.46 0.04 - 0.60 5.53 3.97 0.05 - 0.10 5.60 1.94 0.02 - 0.48 5.62 1.52 0.05 - 0.05 0 | | | | | | | | | | | | | | | | | | .005010 |
| 533 367 707 909 541 402 905 930 550 300 942 905 500 945 505 944 905 945 505 344 307 945 505 344 307 945 505 345 345 505 344 308 965 345 | | | | 1 | | | | | | | | | | | | | | .030050 |
| 533 387 070 090 541 415 090 090 501 550 315 080 090 090 502 090 500 090 500 505 315 080 090 500 | | | | 1 | | | | | | | | | | | | 1 | | .032050 |
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| 534 181 030 050 542 393 060 080 550 319 005 010 553 360 260 005 000 550 260 005 000 550 260 005 000 560 260 005 000 560 260 005 000 560 260 005 000 560 260 005 000 560 260 005 000 560 260 005 000 560 260 005 000 560 260 005 000 560 260 005 000 560 260 005 000 560 280 005 000 560 280 005 000 560 280 005 000 560 280 005 000 560 280 006 000 560 281 000 000 560 281 000 000 560 281 000 000 <td></td> <td>1</td> <td></td> <td>.008015</td> | | | | | | | | | | | | | | | | 1 | | .008015 |
| 534 186 070 090 542 395 005 010 550 322 030 050 554 154 015 030 560 206 005 016 560 562 191 040 040 534 193 045 030 045 | | | | | | | | | | | | | | | | | | .050070 .005010 |
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| 534 220 006 - 010 543 333 005 - 010 550 344 060 - 083 554 318 090 - 110 560 226 015 - 025 562 226 020 - 030 - 534 348 060 - 083 543 348 030 - 505 550 357 040 - 082 554 379 005 - 010 550 226 040 - 080 562 220 030 - 030 583 377 015 - 025 550 375 085 - 020 554 379 010 - 020 560 226 040 - 080 562 204 075 - 4 324 394 030 - 084 544 226 010 - 020 550 389 070 - 080 554 405 309 - 030 - 084 560 258 080 - 080 562 205 020 - 4 353 064 012 - 020 544 324 305 - 010 550 389 070 - 080 555 330 030 - 030 048 560 258 080 - 080 562 227 005 - 4 353 238 075 - 104 432 305 - 010 550 400 050 - 070 555 134 020 - 040 560 283 080 - 010 562 233 005 - 105 533 238 010 - 020 544 421 005 - 010 550 400 080 - 055 513 300 - 040 560 283 010 - 050 562 233 005 - 105 535 238 010 - 020 544 432 005 - 010 550 409 080 - 075 555 514 020 - 040 560 283 010 - 020 562 241 050 560 245 050 040 - 080 560 285 | | | | | | | | | | .554 | .240 | .005010 | | | | | | .040060 |
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| 535 228 0.075 - 1.04 5.44 3.85 0.05 - 0.01 5.50 4.00 0.50 - 0.70 5.55 1.11 0.05 - 0.00 5.60 2.62 0.05 - 0.01 5.62 2.23 0.05 - 0.01 5.50 2.33 0.05 - 0.05 5.04 4.41 0.05 - 0.01 5.50 4.04 0.02 - 0.40 5.55 1.73 1.05 - 1.35 5.60 2.63 0.01 - 0.20 5.62 2.23 0.05 - 0.05 5.35 2.38 0.05 - 0.01 5.50 4.08 0.04 - 0.05 5.55 5.54 0.05 - 0.05 5.55 2.53 0.05 - 0.04 5.60 2.68 0.05 - 0.01 5.62 2.24 0.50 - 0.05 5.35 3.31 0.25 - 0.42 5.44 5.50 0.05 - 0.02 5.55 4.09 0.60 - 0.75 5.55 2.55 2.55 0.20 - 0.40 5.60 2.68 0.05 - 0.01 5.62 2.21 1.01 - 1.05 5.35 3.31 0.05 - 0.01 5.55 4.09 0.05 - 0.01 5.55 2.55 2.55 0.20 - 0.40 5.60 2.68 0.05 - 0.01 5.62 2.51 1.10 - 1.35 5.35 3.35 0.05 - 0.01 5.55 4.29 0.35 - 0.05 0.05 - 0.01 5.55 2.55 0.20 - 0.40 5.60 2.68 0.05 - 0.01 5.62 2.51 1.00 - 1.35 5.35 3.35 3.05 0.05 - 0.02 5.45 1.87 0.05 - 0.12 5.50 4.79 0.05 - 0.10 5.55 3.20 0.05 - 0.01 5.50 3.05 - 0.05 5.60 3.05 - 0.05 5.60 2.25 0.05 - 0.01 5.62 2.57 0.62 4.53 3.35 0.05 - 0.02 5.45 2.60 0.05 - 0.01 5.55 0.89 0.05 - 0.01 5.55 3.28 0.05 - 0.07 5.60 3.13 0.05 - 0.05 5.62 2.61 0.05 - 0.05 5.55 3.28 0.05 - 0.07 5.50 3.31 0.05 - 0.05 5.62 2.63 0.05 - 0.05 5.60 3.33 0.05 - 0.05 5.62 2.63 0.05 - 0.05 5.62 2.63 0.05 - 0.05 5.62 2.63 0.05 - 0.05 5.62 2.63 0.05 - 0.05 5.62 2.63 0.05 - 0.05 5.62 2.63 0.05 - 0.05 5.62 2.64 0.05 - 0.05 5.62 3.63 0.05 - 0.05 5.62 2.64 0.05 - 0.05 5.63 3.35 0.05 - 0.05 5.64 3.40 0.05 - 0.05 5.55 3.65 0.05 - 0.05 5.55 3.63 0.05 - 0.05 5.55 3.63 0.05 - 0.05 5.62 2.64 0.05 - 0.05 5.62 3.63 0.05 - 0.05 5.62 2.64 0.05 - 0.05 5.62 3.63 0.05 - 0.05 5.62 3.63 0.05 - 0.05 5.62 2.64 0.05 - 0.05 5.62 3.63 0 | | | | 1 | | | | | | | | | | | | | | .005010 |
| 535 238 010 - 020 544 421 005 - 010 550 404 020 - 040 555 154 020 - 040 560 263 010 - 050 562 233 005 - 050 535 244 015 - 030 544 448 015 - 030 550 408 040 - 060 555 253 080 - 104 560 280 040 - 060 562 241 015 - 030 535 331 025 - 042 544 463 005 - 010 550 409 060 - 075 555 253 080 - 104 560 280 040 - 060 562 241 015 - 030 535 331 025 - 042 544 502 010 - 020 550 427 025 - 042 544 502 010 - 020 550 427 025 - 042 545 331 005 - 010 545 345 005 - 010 545 345 005 - 010 550 429 035 - 050 555 338 005 - 010 560 286 005 - 010 562 253 005 - 035 335 335 035 - 035 335 335 035 - 035 335 335 035 - 035 335 335 035 - 035 335 | | | | 1 | | | | | | | | | | | | | | .048072 |
| 535 244 015 - 030 544 449 015 - 030 550 408 040 - 060 555 173 105 - 135 560 280 040 - 060 562 241 015 - 015 035 238 010 - 020 544 463 005 - 010 550 427 025 - 042 555 225 080 - 104 560 286 040 - 060 562 241 015 - 015 035 | | | | 1 | | | | | | | | | | | | 1 | | .005015 |
| 535 310 025 - 042 544 502 010 - 020 550 427 025 - 042 555 265 020 - 040 560 286 005 - 010 562 251 110 - 110 155 320 005 - 010 560 311 005 - 010 562 261 005 - 010 535 338 005 - 010 545 319 030 - 050 551 161 005 - 010 555 440 005 - 010 560 310 020 020 040 562 264 015 - 016 035 | | | | .544 | .449 | | | | | | | | | | | .562 | .240 | .050070 |
| 535 348 005 - 010 545 100 042 - 060 550 429 035 - 050 555 318 005 - 010 560 295 005 - 010 562 253 005 - 010 535 320 016 - 025 545 137 005 - 010 550 479 005 - 010 555 320 006 - 080 560 311 005 - 010 562 257 062 - 010 535 335 305 - 010 545 244 005 - 060 550 498 005 - 010 555 328 050 - 078 560 313 062 - 120 562 261 030 335 335 005 - 010 545 246 005 - 070 551 081 005 - 010 555 438 005 - 010 560 317 040 - 060 562 264 015 - 016 535 333 005 - 010 545 313 005 - 010 551 095 012 - 020 555 440 005 - 010 560 326 005 - 010 562 265 050 - 050 535 337 005 - 010 545 346 042 - 062 551 141 005 - 010 555 475 030 - 045 560 326 005 - 010 562 266 010 - 010 535 378 012 - 025 545 378 040 - 060 551 141 005 - 010 556 120 030 - 050 560 331 005 - 010 562 266 100 - 010 535 379 010 - 020 545 382 040 - 062 551 172 080 - 100 556 136 030 - 050 560 331 005 - 010 562 269 030 - 15 535 379 010 - 020 545 385 005 - 010 551 220 005 - 010 556 172 040 - 060 560 343 040 - 060 562 2275 055 - 15 1535 344 010 - 020 545 385 005 - 010 551 220 015 - 025 556 172 040 - 060 560 345 090 - 110 562 228 080 353 344 010 - 020 545 345 040 - 010 551 220 015 - 025 556 172 040 - 060 560 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 - 070 562 282 080 360 375 050 | | | | 1 | | | | | | | | | | | | | | .015030 |
| 5.55 3.20 | | | | 1 | | | | | | | | | | | | | | .110130 .005010 |
| 5.355 3.25 0.10 - 0.20 5.45 2.44 0.05 - 0.60 5.50 4.98 0.05 - 0.10 5.55 3.28 0.50 - 0.78 5.60 3.13 0.62 - 1.20 5.62 2.61 0.30 - 0.55 3.35 0.35 | | | | 1 | | | | | | | | | | | | 1 | | .062090 |
| 5.55 3.38 0.25 0.40 0.545 3.13 0.05 0.10 0.551 0.95 0.12 0.20 0.555 4.40 0.05 0.10 0.560 3.20 0.20 0.40 0.562 2.64 0.15 0.555 0.555 3.45 0.08 0.05 0.10 0.562 0.265 0.50 0.10 0.555 0.55 | | | | 1 | | | | | | .555 | .328 | | | | | | | .030050 |
| 535 343 008 - 015 545 319 030 - 050 .551 .141 .005010 .555 .475 .030045 .560 .326 .005015 .562 .265 .050055 .535 .357 .005010 .545 .346 .042062 .551 .161 .005010 .556 .123 .030060 .560 .331 .005015 .562 .266 .100055 .535 .378 .012025 .545 .382 .040062 .551 .172 .080100 .556 .123 .030060 .560 .333 .005010 .562 .269 .030050 .553 .384 .010020 .545 .385 .005010 .551 .201 .005010 .556 .172 .040060 .560 .343 .040060 .562 .281 .032055 .355 .445 .005010 .545 .410 .020030 .551 .220 .015010 .556 .172 .040060 .560 .375 .095010 .562 .281 .032055 .345 .095010 .562 .281 .032055 .366 .191 .075090 .545 .442 .005010 .551 .236 .005010 .556 .200 .005010 .560 .375 .050070 .562 .289 .005010 .536 .242 .005010 .545 .442 .005010 .551 .238 .005020 .556 .281 .075010 .560 .377 .005015 .562 .290 .025 .536 .324 .025040 .546 .227 .005010 .551 .238 .005020 .556 .383 .040060 .560 .381 .015060 .562 .391 .020 .035 .304 .005010 .562 .304 .005010 .551 .238 .005010 .556 .317 .040060 .560 .381 .015060 .562 .313 .010010 .562 .304 .005010 .551 .238 .005010 .556 .317 .040060 .560 .381 .015060 .562 .313 .010010 .562 .304 .005010 .551 .253 .005010 .556 .383 .040060 .560 .381 .015060 .562 .313 .010010 .562 .304 .005010 .562 .304 .005010 .562 .304 .005010 .562 .304 .005010 .562 .304 .005010 .562 .304 .005010 .562 .304 .005010 .562 .304 .005010 . | | | | 1 | | | | | | | | | | | | 1 | | .005030 |
| .535 .357 .005010 .545 .346 .042062 .551 .161 .005010 .556 .120 .030050 .560 .331 .005010 .562 .266 .100055 .355 .378 .012025 .545 .378 .040060 .551 .166 .030105 .556 .123 .030060 .560 .336 .005010 .562 .269 .030050 .535 .384 .010020 .545 .382 .040062 .551 .172 .080100 .556 .172 .040060 .560 .343 .040060 .562 .275 .035035 .384 .010020 .545 .385 .005010 .551 .221 .005010 .556 .172 .040060 .560 .345 .040010 .562 .281 .032040 .560 .345 .040010 .562 .281 .032040 .560 .375 .050010 .562 .282 .080053 .536 .105 .030050 .545 .410 .020030 .551 .236 .005010 .556 .200 .005010 .560 .375 .050070 .562 .289 .050050 .536 .242 .005010 .545 .442 .005010 .551 .238 .005020 .556 .281 .075104 .560 .377 .005015 .562 .297 .010050 .536 .242 .005010 .545 .445 .005010 .551 .238 .005010 .556 .317 .040060 .560 .380 .005010 .562 .297 .010050 .566 .259 .005010 .551 .238 .005010 .556 .317 .040060 .560 .377 .005015 .562 .297 .010050 .566 .259 .005010 .551 .238 .005010 .556 .317 .040060 .560 .380 .005010 .562 .313 .010015 .562 .313 .010015 .562 .313 .010015 .562 .313 .010015 .562 .314 .005010 .551 .284 .005010 .556 .337 .020060 .560 .384 .005010 .562 .313 .010016 .562 .313 .010016 .562 .313 .010016 .562 .313 .010016 .562 .313 .010016 .562 .313 .010016 .562 .313 .010016 .562 .313 .010016 .562 .313 .010016 .562 .313 .010016 .562 | | | | | | | | | | | | | | | | | | .050090 |
| 535 378 0.012 - 0.025 5.45 3.78 0.40 - 0.60 5.51 1.66 0.30105 5.56 1.23 0.30060 5.60 3.36 0.05010 5.62 2.69 0.30650 5.55 3.35 3.44 0.10020 5.45 3.82 0.40 - 0.62 5.51 1.72 0.80100 5.56 1.36 0.30050 5.60 3.43 0.40060 5.62 2.75 0.50050 5.55 3.44 0.10020 5.45 3.85 0.05010 5.51 2.20 0.05010 5.56 1.72 0.80050 5.56 1.72 0.40060 5.60 3.45 0.90110 5.62 2.82 0.80050 5.56 1.97 0.30050 5.60 3.45 0.90010 5.62 2.82 0.80050 5.56 1.97 0.30050 5.60 3.45 0.90010 5.62 2.82 0.80050 5.56 1.97 0.30050 5.60 3.70 0.05010 5.62 2.82 0.80050 5.56 1.97 0.30050 5.60 3.75 0.50070 5.62 2.89 0.50050 5.56 1.97 0.30050 5.60 3.75 0.50070 5.62 2.89 0.50050 5.56 2.80 0.05010 5.60 3.77 0.05010 5.62 2.99 0.25050 5.56 2.81 0.75000 5.60 3.77 0.05015 5.62 2.90 0.25000 5.56 2.81 0.75000 5.60 3.79 0.02040 5.62 2.97 0.10050 5.56 2.81 0.75000 5.50 3.70 0.05015 5.62 2.97 0.10050 5.56 2.81 0.75000 5.50 3.77 0.05015 5.62 2.99 0.25000 5.50 3.80 0.05010 5.62 3.005010 5.56 3.83 0.40060 5.60 3.80 0.05010 5.62 3.005010 5.56 3.83 0.40060 5.60 3.80 0.05010 5.62 3.005010 5.56 3.80 0.05010 5.56 3.13 0.05010 5.57 2.24 0.05010 5.50 3.84 0.05010 5.62 3.14 0.80010 5.51 3.15 0.05010 5.57 3.87 0.20060 5.60 3.80 0.05010 5.62 3.14 0.80050 5.57 3.80 0.40060 5.60 3.80 0.05010 5.62 3.14 0.80050 5.57 3.80 0.40060 5.60 3.80 0.05010 5.62 3.14 0.80050 5.57 3.80 0.40060 5.60 3.80 | | | | 1 | | | | | | | | | | | | | | .100125 |
| .535 .384 .010020 .545 .385 .005010 .551 .201 .005010 .556 .172 .040060 .560 .345 .090110 .562 .281 .032055 .535 .445 .005010 .545 .409 .010020 .551 .220 .015025 .556 .197 .030050 .560 .370 .005010 .562 .282 .080055 .536 .105 .030050 .545 .410 .020030 .551 .236 .005010 .556 .200 .005010 .560 .375 .050070 .562 .289 .05505 .536 .242 .005010 .545 .445 .005010 .551 .238 .005020 .556 .281 .075010 .560 .377 .005015 .562 .299 .02505 .536 .242 .005010 .545 .445 .005010 .551 .238 .005010 .556 .281 .075010 .560 .377 .005015 .562 .297 .01005 .536 .259 .100125 .546 .217 .005010 .551 .223 .005010 .556 .317 .040060 .560 .380 .005010 .562 .304 .02003 .536 .324 .025040 .546 .259 .005010 .551 .278 .005010 .556 .383 .040060 .560 .381 .015060 .562 .313 .01005 .536 .346 .010015 .546 .271 .010020 .551 .284 .030050 .557 .242 .010020 .560 .384 .005010 .562 .314 .08005 .537 .243 .105125 .546 .378 .015030 .551 .315 .005010 .557 .380 .040060 .560 .392 .035060 .562 .318 .005050 .537 .370 .040060 .547 .144 .005010 .551 .316 .005050 .557 .387 .025040 .560 .420 .005010 .562 .328 .005050 .537 .375 .005010 .562 .328 .055055 .557 .387 .025040 .560 .420 .005010 .562 .328 .055055 .557 .387 .025040 .560 .420 .005010 .562 .328 .055055 .557 .387 .025040 .560 .420 .005010 .562 .328 .055055 .557 .387 .025040 .560 .420 .005010 .562 | | | | 1 | | | .551 | .166 | | .556 | .123 | .030060 | | | | 1 | .269 | .030050 |
| .535 .445 .005010 .545 .409 .010020 .551 .220 .015025 .556 .200 .056010 .560 .370 .005010 .562 .282 .080010 .536 .105 .030050 .545 .410 .020030 .551 .236 .005010 .556 .200 .005010 .560 .375 .050070 .562 .289 .0500 .536 .191 .075090 .545 .442 .005010 .551 .238 .005020 .556 .263 .005010 .560 .377 .005015 .562 .297 .010020 .536 .292 .005010 .551 .240 .005010 .556 .281 .075104 .560 .379 .020040 .562 .297 .010020 .556 .381 .015060 .380 .005010 .562 .397 .005010 .562 .313 .006050 .557 .242 | | | | 1 | | | | | | | | | | | | 1 | | .050075 |
| .536 .105 .030050 .545 .410 .020030 .551 .236 .005010 .556 .200 .005010 .560 .375 .050070 .562 .289 .050050 .536 .242 .005010 .545 .442 .005010 .551 .238 .005020 .556 .281 .075104 .560 .377 .005015 .562 .290 .025050 .536 .242 .005010 .545 .445 .005010 .551 .240 .005050 .556 .281 .075104 .560 .379 .020040 .562 .297 .010050 .536 .259 .100125 .546 .217 .005010 .551 .253 .005010 .556 .317 .040060 .560 .380 .005010 .562 .304 .020050 .562 .304 .025040 .562 .304 .025040 .566 .271 .010020 .551 .284 .030050 .557 .242 .010020 .560 .384 .005010 .562 .313 .010050 .537 .243 .015025 .546 .375 .030050 .551 .294 .012025 .557 .317 .020060 .560 .384 .005010 .562 .315 .020060 .537 .283 .105125 .546 .378 .015030 .551 .315 .005010 .557 .380 .040060 .560 .390 .030060 .562 .318 .005060 .562 .318 .005060 .562 .318 .005060 .562 .318 .005060 .560 .390 .030060 .562 .318 .005060 .560 .390 .030060 .562 .318 .005060 .560 .560 .390 .030060 .562 .318 .005060 .560 .560 .390 .030060 .562 .318 .005060 .560 .560 .390 .030060 .562 .318 .005060 .560 .560 .390 .030060 .562 .318 .005060 .560 .390 .030060 .562 .318 .005060 .560 .560 .390 .030060 .562 .318 .005060 .560 | | | | 1 | | | | | | | | | | | | | | .032050 |
| .536 .191 .075090 .545 .442 .005010 .551 .238 .005020 .556 .263 .005010 .560 .377 .005015 .562 .290 .025056 .284 .075104 .560 .379 .020040 .562 .297 .0100556 .281 .075104 .560 .379 .020040 .562 .297 .0100556 .281 .075104 .560 .379 .020040 .562 .297 .0100556 .281 .075010 .550 .381 .015010 .562 .304 .020050 .560 .384 .025040 .564 .259 .005010 .551 .284 .005010 .555 .383 .040060 .560 .381 .015060 .562 .313 .0100556 .381 .015060 .562 .314 .0800556 .381 .015060 .562 .314 .0800556 .381 .015060 .562 .315 .020060 .567 .242 .010020 .560 .384 .005010 .562 .315 .020060 .567 .324 .020060 .560 .384 .005010 .562 .315 .020060 .567 .381 .055060 .562 .315 .020060 .567 .381 .055060 .562 .315 .020060 .567 .381 .055060 .562 .315 .020060 .567 .381 .025060 .560 .390 .030060 .562 .315 .020060 .567 .381 .025040 .560 .390 .035060 .562 .318 .005010 .557 .387 .025040 .560 .390 .035060 .562 .318 .005010 .557 .387 .025040 .560 .401 .005010 .562 .326 .005010 .557 .387 .025040 .560 .401 .005010 .562 .326 .005005 .557 .387 .025040 .560 .401 .005010 .562 .326 .005005 .557 .387 .025040 .560 .401 .005010 .562 .326 .005005 .557 .387 .025040 .560 .401 .005010 .562 .326 .005005 .551 .318 .050070 .557 .421 .005010 .557 .386 .005010 .557 .386 .005010 .557 .421 .005010 .551 .321 .005010 .557 .421 .005010 .550 .420 .005010 .562 .328 . | | | | 1 | | | | | | | | | | | | | | .050070 |
| .536 .259 .100125 .546 .217 .005010 .551 .253 .005010 .556 .317 .040060 .560 .380 .005010 .562 .304 .020040 .536 .324 .025040 .546 .259 .005010 .551 .278 .005010 .556 .383 .040060 .560 .381 .015060 .562 .313 .010060 .536 .346 .010015 .546 .271 .010020 .551 .284 .030050 .557 .242 .010020 .560 .384 .005010 .562 .314 .080080 .537 .243 .105125 .546 .378 .015030 .551 .315 .005010 .557 .380 .040060 .560 .392 .035060 .562 .318 .005080 .537 .283 .105125 .546 .410 .020030 .551 .316 .005050 .557 .387 .025040 .560 .401 .005010 .562 .320 .005080 .537 .375 .005010 .547 .144 .005010 .551 .318 .005010 .557 .396 .050070 .560 .420 .005010 .562 .328 .050010 .537 .394 .010020 .547 .244 .005010 .551 .320 .005010 .557 .446 .020040 .560 .421 .030050 .562 .328 .050050 .537 .409 .025040 .547 .256 .005010 .551 .321 .005010 .557 .446 .020040 .560 .421 .030050 .562 .329 .025040 .537 .409 .025040 .547 .256 .005010 .551 .321 .005010 .558 .288 .005010 .560 .421 .030050 .562 .329 .025040 .538 .210 .030060 .547 .258 .005010 .551 .321 .005010 .558 .327 .050010 .560 .485 .020032 .562 .331 .080050 .562 .332 .020032 .562 .333 .080033 .562 .334 .005010 .558 .288 .257 .015030 .547 .312 .005010 .551 .325 .005010 .558 .331 .020050 .560 .560 .560 .560 .500 .020032 .562 .334 .005010 .551 .332 .005010 .558 .331 .020050 .560 .560 .560 .560 | .536 | .191 | | .545 | .442 | .005010 | .551 | .238 | .005020 | .556 | .263 | | .560 | .377 | .005015 | .562 | .290 | .025040 |
| .536 .324 .025040 .546 .259 .005010 .551 .278 .005010 .556 .383 .040060 .560 .381 .015060 .562 .313 .010020 .536 .346 .010015 .546 .271 .010020 .551 .284 .030050 .557 .242 .010020 .560 .384 .005010 .562 .314 .080080 .537 .044 .016025 .546 .375 .030050 .551 .294 .012025 .557 .317 .020060 .560 .390 .030060 .562 .315 .020060 .537 .243 .105125 .546 .378 .015030 .551 .315 .005010 .557 .380 .040060 .560 .392 .035060 .562 .318 .005060 .537 .283 .105125 .546 .410 .020030 .551 .317 .005010 .557 .387 .025040 .560 .401 .005010 .562 .320 .005060 .562 .320 .005060 .537 .375 .005010 .547 .144 .005010 .551 .318 .005070 .557 .396 .050070 .560 .420 .005010 .562 .328 .050060 .562 .328 .050060 .562 .328 .050060 .562 .328 .050060 .562 .328 .050060 .562 .328 .050060 .562 .328 .055060 .562 .328 .050060 | | | | 1 | | | | | | | | | | | | 1 | | .010020 |
| .536 .346 .010015 .546 .271 .010020 .551 .284 .030050 .557 .242 .010020 .560 .384 .005010 .562 .314 .080080 .537 .104 .016025 .546 .375 .030050 .551 .294 .012025 .557 .317 .020060 .560 .390 .030060 .562 .315 .02006 .557 .380 .040060 .560 .390 .035060 .562 .318 .00501 .557 .380 .040060 .560 .392 .035060 .562 .318 .00501 .557 .387 .025040 .560 .401 .005010 .551 .316 .005050 .557 .387 .025040 .560 .401 .005010 .562 .320 .00501 .557 .375 .070 .560 .401 .005010 .562 .320 .00501 .557 .386 . | | | | 1 | | | | | | | | | | | | 1 | | .020030 |
| .537 .104 .016025 .546 .375 .030050 .551 .294 .012025 .557 .317 .020060 .560 .390 .030060 .562 .315 .02006 .557 .380 .040060 .560 .392 .035060 .562 .318 .00501 .557 .380 .040060 .560 .392 .035060 .562 .318 .00505 .557 .387 .025040 .560 .392 .035060 .562 .318 .00505 .557 .387 .025040 .560 .401 .005010 .562 .320 .00505 .557 .387 .025040 .560 .401 .005010 .562 .320 .00505 .557 .396 .050070 .560 .401 .005010 .562 .326 .00505 .557 .396 .050070 .560 .401 .005010 .562 .328 .05005 .557 .421 .010020 | | | | 1 | | | | | | | | | | | | 1 | | .080104 |
| 537 .283 .105125 .546 .410 .020030 .551 .316 .005050 .557 .387 .025040 .560 .401 .005010 .562 .320 .005050 .537 .375 .005010 .547 .144 .005010 .551 .317 .005010 .557 .396 .050070 .560 .410 .005010 .562 .326 .005050 .587 .375 .005010 .547 .160 .010015 .551 .318 .050070 .557 .421 .010020 .560 .420 .005010 .562 .328 .050050 .537 .394 .010020 .547 .214 .005010 .551 .321 .005010 .557 .446 .020040 .560 .421 .030050 .562 .328 .050050 . | | | .016025 | .546 | .375 | .030050 | .551 | .294 | .012025 | | | | | | | .562 | .315 | .020070 |
| .537 .370 .040060 .547 .144 .005010 .551 .317 .005010 .557 .396 .050070 .560 .410 .005010 .562 .326 .005010 .557 .421 .010020 .560 .420 .005010 .562 .328 .050010 .537 .394 .010020 .547 .214 .005010 .551 .320 .005010 .557 .446 .020040 .560 .421 .030050 .562 .328 .050010 .557 .446 .020040 .560 .421 .030050 .562 .328 .050010 .557 .446 .020040 .560 .421 .030050 .562 .329 .025010 .551 .321 .005010 .558 .288 .005010 .560 .421 .030050 .562 .331 .080010 .558 .288 .005010 .560 .459 .005015 .562 .332 .020 | | | | | | | | | | | | | | | | | | .005075 |
| .537 .375 .005010 .547 .160 .010015 .551 .318 .050070 .557 .421 .010020 .560 .420 .005010 .562 .328 .050010 .557 .537 .394 .010020 .547 .214 .005010 .551 .320 .005010 .557 .446 .020040 .560 .421 .030050 .562 .329 .02501 .537 .409 .025040 .547 .256 .005010 .551 .321 .005010 .558 .288 .005010 .560 .421 .030050 .562 .331 .080015 .558 .288 .005010 .560 .459 .005015 .562 .331 .080015 .558 .327 .050070 .560 .485 .020032 .562 .332 .020032 .562 .332 .020032 .562 .332 .020032 .562 .332 .020032 | | | | 1 | | | | | | | | | | | | 1 | | .005060 .005030 |
| .537 .394 .010020 .547 .214 .005010 .551 .320 .005010 .557 .446 .020040 .560 .421 .030050 .562 .329 .025010 .537 .409 .025040 .547 .256 .005010 .551 .321 .005010 .558 .288 .005010 .560 .459 .005015 .562 .331 .080 .538 .210 .030060 .547 .258 .005010 .551 .322 .005010 .558 .327 .050070 .560 .485 .020032 .562 .331 .080 .538 .257 .015030 .547 .312 .005010 .551 .322 .005010 .558 .327 .050070 .560 .485 .020032 .562 .332 .020032 .538 .257 .015030 .547 .312 .005010 .551 .357 .015030 .558 .331 .020050 .560 .500 .000032 .5 | | | | 1 | | | | | | | | | | | | 1 | | .050070 |
| .538 .210 .030060 .547 .258 .005010 .551 .322 .005010 .558 .327 .050070 .560 .485 .020032 .562 .332 .020000 .538 .257 .015030 .547 .312 .005010 .551 .357 .015030 .558 .331 .020050 .560 .500 .020032 .562 .343 .005000 .500 .500 .500 .500 .500 .5 | .537 | .394 | .010020 | .547 | .214 | .005010 | .551 | .320 | .005010 | .557 | | .020040 | .560 | .421 | .030050 | .562 | .329 | .025040 |
| .538 .257 .015030 .547 .312 .005010 .551 .357 .015030 .558 .331 .020050 .560 .500 .020032 .562 .343 .005 - .000 | | | | 1 | | | | | | | | | | | | | | .080100 |
| | | | | 1 | | | | | | | | | | | | | | .020040 . 005050 |
| 060. 344. 562. 030 105. 105. 105. 120 000. عدد. 020 010. 050. 0 | .538 | .340 | .030050 | .547 | .317 | .050070 | .551 | .377 | .010020 | .558 | .360 | .005012 | .561 | .105 | .015030 | .562 | .344 | .060080 |

| | | Chance Ame | | | Chance Ami | | | Choose Amy | NC | , 100 | | ANGE | | Chance Any | INE | JIZE | |
|----------------------|---------------------|-------------------------------|----------------------|----------------------|-------------------------------|----------------------|----------------------|-------------------------------------|---------------------|---------------------|---------------------------------------|------------------------------|------------------------------|-------------------------------|---------------------|------------------------------|-------------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| .562 | .374 | .005010 | .565 | .316 | .060080 | .573 | .525 | .015025 | .580 | .450 | .025040 | .590 | .339 | .035060 | .594 | .506 | .015025 |
| .562 | .375 | .050070 | .565 | .353 | .050072 | .574 | .199 | .025042 | .581 | .197 | .090125 | .590 | .340 | .010050 | .595 | .144 | .008016 |
| .562 | .376 | .005062 | .565 | .453 | .025035 | .574 | .296 | .015030 | .581 | .223 | .050070 | .590 | .344 | .032050 | .595 | .186 | .070090 |
| .562 .562 | .381 .382 | .040060 .040060 | .566 | .151 .201 | .040060 . 005010 | .574 | .297 .298 | .090105 | .581 | .437 | .030050 | .590 | .345 | .040060 | .595 | .193 | .075090 |
| .562 | .383 | .030050 | .566 .566 | .266 | .005010 | . 574 .574 | .300 | .005010 .032062 | .582 .582 | .063 .286 | .020040 .020040 | .590 .590 | .355 .376 | .005010 .020032 | .595 .595 | .195 .251 | .010020 |
| .562 | .385 | .015070 | .566 | .299 | .050075 | .574 | .397 | .005010 | .582 | .400 | .015030 | .590 | .378 | .005010 | .595 | .253 | .020030 |
| .562 | .386 | .020040 | .566 | .321 | .005010 | .574 | .406 | .020030 | .583 | .344 | .070090 | .590 | .379 | .025040 | .595 | .256 | .015030 |
| .562 | .387 | .040060 | .566 | .328 | .010015 | .574 | .482 | .070090 | .583 | .378 | .015030 | .590 | .386 | .005010 | .595 | .353 | .025040 |
| .562 | .388 | .005015 | .566 | .330 | .040060 | .575 | .151 | .040062 | .583 | .410 | .030050 | .590 | .390 | .032062 | .595 | .413 | .050070 |
| .562 .562 | .391 .392 | .075090 . 005010 | . 566 .566 | .334 .342 | . 005060 .093104 | .575 .575 | .180 .186 | .010020 .070090 | .584 .584 | .301 .327 | .005010 .005010 | .590 .590 | .396 .397 | .005012 .005050 | .595 .595 | .430 .436 | .040060 .005010 |
| .562 | .396 | .025040 | .566 | .378 | .060090 | .575 | .189 | .080100 | .584 | .350 | .005010 | .590 | .410 | .040060 | .595 | .437 | .040060 |
| .562 | .420 | .020070 | .566 | .446 | .040060 | .575 | .199 | .060080 | .584 | .358 | .005010 | .590 | .426 | .070080 | .595 | .495 | .030050 |
| .562 | .437 | .015075 | .566 | .447 | .040060 | .575 | .200 | .025042 | .584 | .431 | .005010 | .590 | .439 | .005010 | .596 | .099 | .030050 |
| .562 | .439 | .010025 | .566 | .448 | .010020 | .575 | .251 | .010020 | .584 | .446 | .030050 | .590 | .471 | .015025 | .596 | .129 | .025040 |
| . 562 .562 | .500 .505 | .005010 .020030 | .566 .566 | .450 .505 | .015030 .015025 | .575 .575 | .258 .260 | . 005010 .075090 | .585 .585 | .104 .183 | .025040 .015030 | .590 .590 | .480 .498 | . 005020 .025040 | .596 .596 | .401 .409 | .020040 .010020 |
| .563 | .101 | .025040 | .566 | .505 | .005010 | .575 | .287 | .005010 | .585 | .264 | .015030 | .590 | .523 | .005008 | .596 | .443 | .050075 |
| .563 | .145 | .005010 | .567 | .190 | .010020 | .575 | .312 | .100125 | .585 | .290 | .090105 | .591 | .079 | .020030 | .596 | .485 | .005040 |
| .563 | .176 | .025040 | .567 | .227 | .007012 | .575 | .320 | .020040 | .585 | .327 | .050070 | .591 | .115 | .020040 | .596 | .503 | .020040 |
| .563 | .186 | .100125 | .567 | .234 | .010020 | .575 | .322 | .010020 | .585 | .328 | .070090 | .591 | .200 | .040060 | .596 | .510 | .025040 |
| .563 | .191 | .020030 | .567 | .260 | .040060 | .575 | .335 | .016025 | .585 | .364 | .060080 | .591 | .216 | .050070 | .597 | .130 | .005015 |
| .563 .563 | .194 .197 | .100125 .030050 | .567 .567 | .263 .301 | .030050 .040060 | .575 .575 | .346 .360 | . 005030 .025042 | .585 .585 | .366 .372 | .040050 .025040 | .591 .591 | .217 .240 | .015025 .075090 | .597 .597 | .251 .305 | .062078 .025040 |
| .563 | .218 | .005125 | .567 | .336 | .090104 | .575 | .394 | .060080 | .585 | .377 | .005010 | .591 | .277 | .005010 | .597 | .388 | .005015 |
| .563 | .247 | .020030 | .567 | .379 | .015025 | .575 | .399 | .060090 | .585 | .380 | .005010 | .591 | .296 | .050070 | .597 | .406 | .025040 |
| .563 | .253 | .005015 | .567 | .408 | .040060 | .575 | .412 | .010020 | .585 | .397 | .005010 | .591 | .317 | .010020 | .597 | .452 | .016040 |
| .563 | .259 | .030050 | .567 | .409 | .030050 | .575 | .440 | .040060 | .585 | .405 | .050070 | .591 | .321 | .015030 | .597 | .512 | .020030 |
| .563 .563 | .277 .285 | .100125 | .567 .568 | .504 .109 | .020030 .040060 | .575 .575 | <u>.446</u> .464 | .010030 .020040 | .586 .586 | .132 .327 | .010020 .015030 | .591 .591 | .324 .326 | .040060 .005010 | .597 .598 | .513 . 180 | .020030 .005010 |
| .563 | .313 | .005042 | .568 | .138 | .005010 | .575 | .485 | .005040 | .586 | .415 | .005010 | .591 | .435 | .050070 | .598 | .215 | .032062 |
| .563 | .317 | .010040 | .568 | .210 | .042072 | .576 | .147 | .090104 | .586 | .433 | .040060 | .591 | .511 | .010020 | .598 | .264 | .010020 |
| .563 | .318 | .005010 | .568 | .224 | .005010 | .576 | .218 | .030040 | .586 | .447 | .005010 | .592 | .147 | .005010 | .598 | .271 | .025040 |
| .563 | .320 | .015030 | .568 | .255 | .050070 | .577 | .096 | .012025 | .586 | .477 | .005010 | .592 | .221 | .005010 | .598 | .304 | .025040 |
| .563 .563 | .321 .350 | .072090 .015025 | . 568 | .305 .312 | .005010 | .577 | .199 .253 | .060090 | .586 | .484 | .005010 | . 592 .592 | .236 .258 | .005010 .030050 | .598 | . 313 .321 | .005020 |
| .563 | .359 | .025040 | .568 | .317 | .050062 . 005010 | .577 .577 | .325 | .050070 .042062 | .586 .586 | .500 .525 | .030040 .005010 | .592 | .315 | .010015 | .598 .598 | .340 | .010020 .005010 |
| .563 | .373 | .015030 | .568 | .360 | .005010 | .577 | .328 | .090120 | .587 | .195 | .032050 | .592 | .317 | .005010 | .598 | .387 | .025040 |
| .563 | .377 | .010020 | .568 | .378 | .010030 | .577 | .353 | .025040 | .587 | .231 | .015025 | .592 | .322 | .005010 | .598 | .412 | .031048 |
| .563 | .379 | .015060 | .568 | .413 | .015025 | .577 | .376 | .010025 | .587 | .345 | .030050 | .592 | .330 | .040062 | .598 | .442 | .025040 |
| .563 .563 | .380 .381 | .015090 .010020 | .568 .569 | .414 .205 | .020040 .050070 | .578 .578 | .173 .203 | .025042 .005060 | .587 | .373 | .005010 | .592 .592 | .332 .389 | .005010 .005010 | .598 .598 | .504 .511 | .005010 .005015 |
| .563 | .385 | .020030 | .569 | .203 | .025040 | .578 | .239 | .080090 | .587 .587 | .400 .411 | .050070 .040060 | .592 | .394 | .040060 | .598 | .527 | .005010 |
| .563 | .387 | .020050 | .569 | .243 | .010015 | .578 | .257 | .050075 | .587 | .437 | .010020 | .592 | .396 | .040060 | .599 | .128 | .060080 |
| .563 | .398 | .030050 | .569 | .257 | .005010 | .578 | .266 | .020060 | .588 | .245 | .015030 | .592 | .397 | .020040 | .599 | .149 | .025042 |
| .563 | .405 | .030080 | .569 | .324 | .015075 | .578 | .355 | .005010 | .588 | .250 | .005010 | .592 | .453 | .020042 | .599 | .189 | .010020 |
| .563 | .408 .439 | .020030 | .569 | .447 | .020040 | .578 | .407 | .050070 | .588 | .260 | .040060 | .592 | .472 .497 | .040060 | .599 | .201 | .075090 |
| .563 .563 | .459 | .005015 .005010 | .569 .569 | .470 .472 | .015025 .012020 | .578 .578 | .468 .526 | .010020 .010020 | .588 .588 | .386 .406 | .010020 .040060 | .592 .593 | .082 | . 005010 .032062 | .599 .599 | .257 .378 | .050070 .030050 |
| .563 | .467 | .025042 | .569 | .474 | .005010 | .579 | .138 | .031042 | .588 | .417 | .040060 | .593 | .096 | .005010 | .599 | .383 | .030050 |
| .564 | .118 | .005010 | .569 | .481 | .030050 | .579 | .174 | .020040 | .589 | .178 | .060080 | .593 | .129 | .005012 | .599 | .400 | .035050 |
| .564 | .195 | .090105 | .570 | .193 | .015030 | .579 | .188 | .020040 | .589 | .232 | .070090 | .593 | .190 | .032060 | .599 | .401 | .005010 |
| .564 | .208 | .040050 | .570 | .232 | .025042 | .579 | .265 | .050075 | .589 | .311 | .030050 | .593 | .195 | .015030 | .599 | .408 | .005060 |
| .564 .564 | .214 .252 | .030050 .075090 | .570 .570 | .233 | .050075 .025042 | .579 .579 | .318 .342 | .060070 .090104 | .589 .589 | .314 | .005015 .040062 | .593 . 593 | .196 .261 | .015040 .005010 | .599 .599 | .413 .476 | .025040 .050070 |
| .564 | .253 | .040060 | .570 | .230 | .025042 | .579 | .374 | .020030 | .589 | .341 .348 | .040062 | .593 | .265 | .025042 | .599 .599 | .489 | .005010 |
| .564 | .256 | .020040 | .570 | .278 | .030050 | .579 | .378 | .020030 | .589 | .376 | .015030 | .593 | .301 | .050070 | .600 | .046 | .005010 |
| .564 | .284 | .005020 | .570 | .282 | .025042 | .579 | .437 | .025040 | .589 | .410 | .062078 | .593 | .318 | .005010 | .600 | .066 | .020035 |
| .564 | .286 | .015030 | .570 | .316 | .010020 | .579 | .502 | .005010 | .589 | .444 | .040060 | .593 | .392 | .075095 | .600 | .076 | .020030 |
| .564 564 | .311 | .025040 .010020 | .570 | .318 | .015030 | .580 | .096 | .025040 | .589 | .446 | .020030 | .593 | .399 | .010020 .100120 | .600 | .089 | .020040 |
| .564 .564 | .337 .352 | .010020 .005010 | .570 .570 | .369 .377 | .005010 .005010 | .580 .580 | .196 .197 | . 005010 .090120 | .589 .590 | .455 .115 | .030050 .032062 | .593 .593 | .407 .410 | .005010 | .600 .600 | .118 .119 | .015030 .080100 |
| .564 | .384 | .005010 | .570 | .380 | .010020 | .580 | .213 | .050075 | .590 | .147 | .005020 | .593 | .437 | .005010 | .600 | .128 | .032048 |
| .564 | .386 | .030048 | .570 | .433 | .010020 | .580 | .218 | .093125 | .590 | .199 | .060080 | .593 | .453 | .005010 | .600 | .138 | .040105 |
| .564 | .392 | .050072 | .570 | .445 | .025040 | .580 | .250 | .030040 | .590 | .201 | .005010 | .593 | .464 | .015030 | .600 | .156 | .025040 |
| . 564 | .445 | .005010 | .570 | .461 | .030050 | .580 | .251 | .050070 | .590 | .202 | .030050 | .593 | .468 | .020040 | .600 | .157 | .025040 |
| .564 .564 | .500 .504 | .020040 . 005010 | . 570 .571 | .515 .256 | . 005010 .030050 | .580 .580 | .255 .258 | .050070 .080104 | .590 .590 | .209 .237 | .125156 .005010 | .593 .593 | . 472 .478 | . 005010 .005015 | .600 .600 | .168 .176 | .070090 . 005010 |
| .564 | .507 | .005010 | .571 | .283 | .030030 | .580 | .283 | .005010 | .590 | .237 | .005010 | .593 | .497 | .005010 | .600 | .200 | .005010 |
| .565 | .066 | .005010 | .571 | .373 | .020035 | .580 | .324 | .025035 | .590 | .292 | .010020 | .594 | .283 | .005010 | .600 | .203 | .020040 |
| .565 | .093 | .080090 | .572 | .256 | .005008 | .580 | .330 | .080104 | .590 | .295 | .005010 | .594 | .315 | .005010 | .600 | .210 | .075090 |
| .565 | .120 | .015030 | .572 | .470 | .030040 | .580 | .346 | .042062 | .590 | .314 | .060080 | .594 | .325 | .005010 | .600 | .217 | .050075 |
| .565 | .174 | .025040 | .573 | .129 | .050070 | .580 | .377 | .090105 | .590 | .316 | .005010 | .594 | .358 | .015025 | .600 | .236 | .005010 |
| .565 .565 | .186 .236 | .010015 | .573 .573 | .130 .205 | .050070 .050070 | .580 .580 | . 379 .380 | .010020 | .590 | .317 | .040090 | .594 . 594 | .375 .378 | .070090 . 005104 | .600 .600 | .237 . 241 | .040060 .005030 |
| | .240 | .050080 | .573 | .266 | .025040 | .580 .580 | .380 .398 | .010020 .005010 | .590 .590 | .318 .327 | .030050 .050075 | .594 .594 | .383 | .015030 | .600 | .252 | .005030 |
| .565 | | | | | | | | | .000 | | | | | | | | |
| .565 .565 | .280 | .105125 | .573 | .394 | .040060 | .580 | .416 | .042062 | .590 | .329 | .042062 | .594 | .405 | .005010 | .600 | .253 | .005060 |
| | | .105125 .030040 .005015 | .573 .573 .573 | .394 .395 .474 | .040060 .025045 .030050 | .580 .580 | .416 .432 | .042062 .010032 | .590 .590 | .329 .331 | .042062 .010020 . 005010 | . 594 .594 .594 | . 405 .423 .452 | .005010 .025040 .040060 | .600 .600 | .253 .254 . 255 | .005060 .015030 .005010 |

| 0.5 | | Choose Any | 0.5 | | Choose Any | 0.5 | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any |
|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|---------------------|---------------------|----------------------------|---------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| .600 . 600 | .265 .266 | .010020 .005010 | . 607 .608 | .461 .204 | . 005010 .010020 | .614 .614 | .199 .200 | .060078 .060083 | .618 .618 | .440 .475 | .005010 .005010 | .621 .621 | .075 .091 | .005010 .005010 | .622 .622 | .534 .540 | .005010 .005010 |
| .600 | .267 | .005010 | .608 | .249 | .030050 | .614 | .268 | .005010 | .618 | .500 | .005010 | .621 | .125 | .050070 | .623 | .030 | .010020 |
| .600 | .269 | .025040 | .608 | .252 | .015040 | .614 | .330 | .015030 | .618 | .507 | .005010 | .621 | .159 | .030042 | .623 | .062 | .015030 |
| .600 | .270 | .005010 | .608 .608 | .253 .254 | .020040 | .614 .614 | .354 | .050070 .050070 | .618 .618 | .526 . 531 | .032042 .005010 | .621 | .161 .172 | .090120 .005010 | .623 .623 | .094 | .060075 |
| .600 | .285 | .005010 | .608 | .283 | .020040 | .614 | .388 | .015030 | .618 | .549 | .005010 | .621 | .182 | .105125 | .623 | .126 | .040050 |
| .600 . 600 | .296 . 300 | .015105 .005010 | .608 .608 | .293 .350 | .040060 .020032 | .614 | .402 | .010020 | .618 | .551 | .015025 | . 621 .621 | .194 .253 | .005010 .062080 | .623 .623 | .136 .137 | .080104 .030060 |
| .600 | .322 | .030080 | .608 | .392 | .030050 | .614 .614 | .434 .479 | .030050 . 005010 | .618 .618 | .556 .560 | .005010 .015025 | .621 | .253 | .010020 | .623 | .148 | .030050 |
| .600 | .361 | .015030 | .608 | .397 | .005020 | .614 | .482 | .008020 | .619 | .125 | .050070 | .621 | .283 | .015025 | .623 | .156 | .020035 |
| .600 .600 | .380 .401 | .015090 .010020 | .608 .609 | .509 .128 | .010025 .030050 | .614 .614 | .534 .540 | .005010 .005010 | .619 .619 | .158 .171 | .100125 .015075 | .621 .621 | .288 .336 | .050075 .050070 | .623 .623 | .176 .179 | .050070 .050090 |
| .600 | .406 | .020030 | .609 | .274 | .005010 | .615 | .041 | .015030 | .619 | .238 | .030050 | .621 | .363 | .050070 | .623 | .190 | .010125 |
| .600 | .408 | .040060 | .609 | .297 | .020032 | .615 | .099 | .020030 | .619 | .306 | .025040 | .621 | .368 | .030050 | .623 | .191 | .030060 |
| .600 . 600 | .413 .421 | .010020 . 005010 | .609 .609 | .400 .487 | .040060 .030060 | .615 .615 | .110 .126 | .020030 .020030 | .619 .619 | .324 .326 | .020030 .020040 | .621 .621 | .376 .378 | .010020 .010020 | .623 .623 | .202 .220 | .050090 .050090 |
| .600 | .434 | .005010 | .609 | .506 | .020030 | .615 | .137 | .025080 | .619 | .329 | .070090 | .621 | .379 | .025040 | .623 | .240 | .050090 |
| .600 | .450 | .040060 | .609 | .546 | .015025 | .615 | .140 | .015030 | .619 | .353 | .050070 | .621 | .380 | .090105 | .623 | .247 | .020035 |
| .600 | .460 .498 | .030050 .005010 | .609 .610 | .551 .094 | .015025 .060080 | .615 .615 | .153 .212 | .020030 | .619 .619 | . 360 .377 | .005010 .020035 | .621 .621 | .381 .410 | .005010 | . 623 | . 250 .254 | .005010 .080100 |
| .600 | .503 | .005010 | .610 | .100 | .040060 | .615 | .267 | .040060 | .619 | .381 | .105135 | .621 | .437 | .025036 | .623 | .265 | .005075 |
| .600 . 600 | .505 .517 | .020030 .005010 | .610 | .191 | .040060 | .615 | .298 | .020030 .010020 | .619 | .431 | .005010 | .621 .621 | .438 .442 | .032042 .005048 | .623 .623 | .268 | .010015 |
| .600 | .550 | .005010 | .610 .610 | .204 .206 | .010030 .104125 | .615 .615 | .315 .321 | .010020 | .619 .619 | .440 .449 | .005040 .030040 | .621 | . 442 .471 | .005048 | .623 | .281 .304 | .012075 .075105 |
| .601 | .159 | .080100 | .610 | .209 | .104125 | .615 | .322 | .020040 | .619 | .460 | .080100 | .621 | .500 | .015025 | .623 | .317 | .050075 |
| .601 .601 | .165 .227 | .005010 .005030 | .610 .610 | .248 .250 | .020032 .020040 | .615 .615 | .341 .352 | .050070 .005012 | .619 .619 | .481 .500 | .005010 .005020 | .621 .621 | .504 .505 | .020030 . 005030 | . 623 .623 | .320 .326 | .005030 .040060 |
| .601 | .228 | .005030 | .610 | .258 | .040090 | .615 | .352 | .005012 | .619 | .508 | .005020 | .621 | .506 | .040060 | .623 | .328 | .010025 |
| .601 | .257 | .030050 | .610 | .273 | .005010 | .615 | .377 | .070090 | .619 | .540 | .005010 | .621 | .507 | .015030 | .623 | .330 | .050090 |
| .601 .601 | .313 .315 | .020040 .040060 | .610 .610 | .317 .328 | .010020 .050075 | .615 .615 | .386 .395 | .060080 .020040 | .619 .620 | .549 .041 | .015020 .040060 | .621 .622 | .533 .061 | .015030 . 005010 | .623 .623 | .375 .390 | .010020 .050070 |
| .601 | .357 | .060080 | .610 | .335 | .015030 | .615 | .408 | .090105 | .620 | .076 | .010020 | .622 | .147 | .060080 | .623 | .404 | .005010 |
| .601 | .376 | .005020 | .610 | .352 | .020040 | .615 | .420 | .010020 | .620 | .126 | .015030 | .622 | .159 | .048075 | .623 | .460 | .050075 |
| .601 | .377 .378 | .010020 .005010 | .610 .610 | .365 .367 | .010020 .020030 | .615 .615 | .478 .492 | .030040 .020040 | .620 .620 | . 132 .168 | .005010 .050072 | . 622 | . 166 | .005010 .008016 | .623 .623 | <u>.465</u> .474 | .012020 |
| .601 | .391 | .025040 | .610 | .376 | .060125 | .615 | .510 | .025040 | .620 | .184 | .050075 | .622 | .175 | .007015 | .623 | .492 | .005010 |
| .601 .601 | .401 .428 | .040060 .010020 | .610 .610 | .395 .409 | .015030 . 005010 | .615 .615 | .520 .540 | .025035 .010025 | .620 | .191 | .025040 | .622 .622 | .180 .190 | .016025 .020040 | .623 .623 | .500 .501 | .005012 .010020 |
| .601 | .438 | .005010 | .610 | .438 | .050070 | .615 | .551 | .030040 | .620 .620 | .198 .200 | .050070 .005010 | .622 | .191 | .005010 | .623 | .504 | .050062 |
| .601 | .461 | .005010 | .610 | .460 | .040060 | .616 | .044 | .015025 | .620 | .214 | .050070 | .622 | .196 | .030048 | .623 | .505 | .005010 |
| . 601 .602 | .480 .101 | .005010 .080100 | .610 .610 | .472 .476 | .050075 .040060 | .616 .616 | .160 .167 | .015030 .020032 | .620 .620 | .250 .252 | .010035 .020040 | .622 .622 | .205 .206 | .030050 .030060 | . 623 .623 | .515 .531 | .005010 .010020 |
| .602 | .254 | .005010 | .610 | .550 | .005010 | .616 | .192 | .070090 | .620 | .254 | .010020 | .622 | .214 | .015030 | .623 | .532 | .005010 |
| .602 | .255 | .040060 | .611 | .089 | .040060 | .616 | .251 | .005010 | .620 | .255 | .015020 | .622 | .220 | .010020 | .624 | .087 | .010020 |
| .602 .602 | .407 .486 | .025040 .040060 | .611 .611 | .192 .243 | .020030 .062090 | .616 .616 | .256 .259 | .020032 . 005010 | .620 .620 | .257 .260 | .040060 . 005010 | .622 .622 | .230 .250 | .060090 .005015 | .624 .624 | .094 .108 | .070090 . 005010 |
| .603 | .227 | .030050 | .611 | .261 | .005010 | .616 | .268 | .015030 | .620 | .268 | .005010 | .622 | .251 | .005010 | .624 | .109 | .005010 |
| .603 .603 | .479 .504 | .040060 .010020 | .611 | .265 .273 | .105125 . 005010 | .616 | .323 | .010020 .025040 | .620 | .281 | .040060 | .622 .622 | .258 .261 | .025040 .036050 | .624 .624 | .128 .156 | .025040 .050070 |
| .604 | .252 | .005010 | .611 .611 | .278 | .005010 | .616 .616 | .328 .377 | .050090 | .620 .620 | .322 | .040060 .050070 | .622 | .284 | .010042 | .624 | .168 | .060080 |
| .604 | .255 | .005010 | .611 | .315 | .050010 | .616 | .384 | .005010 | .620 | .346 | .016025 | .622 | .302 | .050070 | .624 | .173 | .020050 |
| .604 .604 | .307 .308 | . 005010 .010030 | .611 .611 | .347 .350 | . 005010 .030050 | .616 .616 | .386 .412 | .062083 .020040 | .620 .620 | .348 .350 | .050070 .025062 | .622 .622 | .314 .315 | .075125 .100125 | .624 .624 | .177 .178 | .010020 .015030 |
| .604 | .340 | .040060 | .611 | .352 | .005010 | .616 | .412 | .040050 | .620 | .370 | .025062 | .622 | .317 | .040060 | .624 | .176 | .032042 |
| .604 | .347 | .031042 | .611 | .379 | .025040 | .616 | .480 | .040060 | .620 | .378 | .020035 | .622 | .320 | .025070 | .624 | .204 | .005010 |
| .604 .604 | .381 .384 | .025040 .015030 | .611 .611 | .405 .460 | .060083 .025040 | .616 .617 | .505 .310 | .005010 .005010 | .620 .620 | .380 .381 | .080100 .015025 | .622 .622 | .325 .343 | .007025 .005010 | . 624 .624 | .220 .249 | . 005010 .050070 |
| .604 | .407 | .005030 | .611 | .480 | .050070 | .617 | .318 | .015025 | .620 | .384 | .100125 | .622 | .374 | .005010 | .624 | .250 | .050075 |
| .604 .604 | .439 | .030050 .015030 | .612 .612 | .194 .198 | .100125 | .617 | .351 | .005010 | .620 | .390 | .100125 | .622 .622 | .376 .377 | .015025 .025105 | .624 . 624 | .253 . 254 | .100125 .005010 |
| .605 | .163 | .015030 | .612 | .214 | .030050 | .617 .617 | .359 .362 | .025040 .005010 | .620 .620 | .394 .406 | .010020 .005060 | .622 | .378 | .015030 | .624 | .255 | .040075 |
| .605 | .313 | .015030 | .612 | .433 | .040060 | .617 | .385 | .005010 | .620 | .408 | .030050 | .622 | .384 | .005010 | .624 | .264 | .050070 |
| .605 .605 | .317 .359 | .075090 .025040 | .612 .612 | .440 .444 | .042062 .010030 | .617 .617 | .448 .496 | .065080 .010020 | .620 .620 | .409 .410 | .030050 .080105 | .622 .622 | .389 .390 | .060075 .005010 | .624 .624 | .298 .312 | .050075 . 005010 |
| .605 | .388 | .070090 | .612 | .467 | .005010 | .617 | .514 | .005010 | .620 | .420 | .020060 | .622 | .391 | .050105 | .624 | .313 | .025045 |
| .605 | .453 | .005060 | .612 | .510 | .040050 | .617 | .560 | .005010 | .620 | .440 | .025042 | .622 | .400 | .010020 | .624 | .315 | .100125 |
| .605 .606 | .566 .203 | .005010 .005010 | . 612 .613 | .520 .040 | . 005010 .020030 | .618 .618 | .120 .124 | .015030 .040060 | .620 .620 | .442 .476 | .032048 .005010 | .622 .622 | .407 .409 | .006016 .005015 | .624 .624 | .324 .328 | .030042 .050070 |
| .606 | .285 | .060083 | .613 | .278 | .050070 | .618 | .185 | .040050 | .620 | .484 | .020030 | .622 | .411 | .025040 | .624 | .330 | .060090 |
| .606 | .312 | .075100 .040060 | .613 | .331 | .050070 | .618 | .215 | .005010 | .620 | .490 | .020040 | . 622 | .438 | .005010 | .624 | .334 | .030050 |
| .606 .606 | .380 .389 | .040060 | .613 .613 | .350 .377 | .050070 .015030 | .618 .618 | .216 .259 | .010020 .040060 | .620 .620 | . 500 .503 | . 005010 .010025 | .622 .622 | .445 .450 | .015030 .050070 | .624 .624 | .335 .343 | .010020 .105125 |
| .606 | .400 | .020030 | .613 | .391 | .025040 | .618 | .262 | .005010 | .620 | .509 | .010025 | .622 | .453 | .005010 | .624 | .376 | .080125 |
| .606 | .462 | .020040 | . 613 | . 402 .451 | . 005010 .030050 | .618 | 364 | .005078 .040060 | .620 | .515 | .005015 | .622 | . 461 .488 | .005010 .050070 | . 624 | 378 | .005010 .080100 |
| .607 | .460 | .040060 | .613 | .451 .472 | .030050 | .618 .618 | .381 .382 | .040060 | .620 .620 | .522 .530 | .015030 .005010 | .622 | .500 | .010020 | .624 .624 | .379 .380 | .105125 |
| .607 | .251 | .030050 | .613 | .521 | .020042 | .618 | .393 | .005010 | .620 | .532 | .005010 | .622 | .503 | .005030 | .624 | .392 | .030050 |
| .607 .607 | .333 .388 | . 005010 .080105 | .614 .614 | .094 .198 | .040060 .050090 | .618 618 | .400 435 | .080104 .050075 | .620 .621 | .550 .062 | .005010 .030050 | .622 .622 | .532 .533 | .008015 .005015 | .624 .624 | .398 .399 | .020040 .030050 |
| .007 | .000 | .000105 | | | | .618 | .435 | .050075 | | | | | | | | .533 | .030030 |

| | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any |
|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|---------------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|---------------------|----------------------------|----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| .624 | .403 | .030050 | .625 | .312 | .005125 | .626 | .268 | .020060 | .628 | .238 | .050070 | .631 | .319 | .005010 | .640 | .036 | .015030 |
| .624 | .415 | .025050 | .625 | .314 | .005030 | .626 | .281 | .005020 | .628 | .271 | .005010 | .631 | .320 | .005010 | .640 | .073 | .025040 |
| .624 .624 | .425 .438 | .035050 .030050 | .625 .625 | .315 .316 | .025040 .040060 | .626 .626 | .282 .312 | .020040 .035050 | .628 .628 | .287 .331 | .090105 .105120 | .631 .631 | .374 .378 | .105125 .060080 | .640 .640 | .168 .175 | .025040 .025042 |
| .624 | .440 | .010020 | .625 | .318 | .040060 | .626 | .314 | .035050 | .628 .628 | .331 | .060083 | .631 | .386 | .060080 | .640 | .175 | .030050 |
| .624 | .442 | .006012 | .625 | .319 | .020040 | .626 | .315 | .040060 | .628 | .477 | .005010 | .631 | .387 | .010020 | .640 | .251 | .020040 |
| .624 | .445 | .050070 | .625 | .320 | .010050 | .626 | .317 | .010015 | .628 | .483 | .030050 | .631 | .396 | .005010 | .640 | .256 | .005010 |
| .624 | .448 | .005015 | .625 | .321 | .015070 | .626 | .326 | .020030 | .628 | .510 | .010020 | .631 | .399 | .010020 | .640 | .334 | .005010 |
| .624 | .452 | .031048 | .625 | .322 | .045075 | .626 | .339 | .100125 | .628 | .511 | .040060 | .631 | .403 | .060080 | .640 | .342 | .040060 |
| .624 . 624 | .485 . 500 | .040060 .005010 | .625 | .323 .324 | .060075 .005010 | .626 . 626 | .344 .377 | .025040 | .628 | .555 | .020030 | .631 | .411 .437 | .020030 .005010 | .640 .640 | .361 .377 | .030050 |
| .624 | .533 | .005010 | .625 | .327 | .070080 | .626 | .379 | .005010 .005010 | .629 .629 | .095 .149 | .062078 .015030 | .631 | .452 | .060080 | .640 | .390 | .050040 |
| .624 | .564 | .005010 | .625 | .328 | .005125 | .626 | .381 | .005010 | .629 | .177 | .005010 | .632 | .160 | .030040 | .640 | .400 | .005010 |
| .625 | .063 | .005010 | .625 | .330 | .025040 | .626 | .386 | .005075 | .629 | .226 | .005010 | .632 | .239 | .005010 | .640 | .429 | .012020 |
| .625 | .067 | .008016 | .625 | .331 | .005010 | .626 | .392 | .005010 | .629 | .290 | .050083 | .632 | .253 | .015030 | .640 | .441 | .010020 |
| .625 | .087 | .005010 | .625 | .336 | .090120 | .626 | .394 | .015030 | .629 | .292 | .042060 | .632 | .261 | .020040 | .640 | .443 | .025040 |
| . 625 .625 | .096 .102 | . 005010 .020040 | . 625 .625 | .343 .343 | . 126134 | .626 .626 | .408 .409 | .090105 .020030 | .629 .629 | .316 .319 | .005010 .005010 | .632 .632 | .285 .317 | .005010 .005010 | .640 .640 | .444 .446 | .015030 .015030 |
| .625 | .115 | .005010 | .625 | .348 | .080104 | .626 | .422 | .070090 | .629 | .356 | .010020 | .632 | .320 | .005010 | .640 | .451 | .080090 |
| .625 | .127 | .010020 | .625 | .349 | .083104 | .626 | .442 | .005025 | .629 | .391 | .030050 | .632 | .357 | .005010 | .640 | .485 | .020040 |
| .625 | .128 | .030062 | .625 | .356 | .042062 | .626 | .468 | .005010 | .629 | .472 | .030080 | .632 | .359 | .025040 | .640 | .489 | .040060 |
| .625 | .129 | .020040 | .625 | .372 | .030050 | .626 | .470 | .005010 | .629 | .473 | .005020 | .632 | .387 | .020060 | .640 | .501 | .015048 |
| .625 | .130 | .012020 | .625 | .375 | .005120 | .626 | .478 | .005010 | .629 | .507 | .005030 | .632 | .426 | .070090 | .640 | .508 | .015030 |
| .625 | .136 | .080104 | .625 | .377 | .005010 | .626 | .495 | .040060 | .629 | .512 | .015030 | .632 | .475 | .040060 | . 640 | .540 | .005010 |
| .625 .625 | .139 .145 | .025105 | .625 . 625 | .378 .379 | .015080 .005010 | .626 .626 | .499 .501 | .010020 .010020 | .629 .630 | .517 .128 | .005010 .005010 | .632 .632 | .480 .547 | .005072 .010020 | .640 . 640 | .576 . 579 | .020030 .005010 |
| .625 | .151 | .020032 | .625 | .380 | .025042 | .626 | .504 | .010020 | . 630 | .128 | .030060 | .633 | .119 | .005010 | .641 | .125 | .005010 |
| .625 | .157 | .100125 | .625 | .381 | .100125 | .626 | .505 | .005010 | .630 | .140 | .020040 | .633 | .256 | .060080 | .641 | .243 | .020090 |
| .625 | .158 | .005010 | .625 | .382 | .030120 | .626 | .507 | .005030 | .630 | .141 | .100120 | .633 | .267 | .032050 | .641 | .265 | .005060 |
| .625 | .160 | .075104 | .625 | .385 | .005010 | .626 | .510 | .010025 | .630 | .158 | .050060 | .633 | .282 | .080100 | .641 | .308 | .005010 |
| .625 | .166 | .025042 | .625 | .386 | .032048 | .626 | .528 | .025040 | .630 | .163 | .050060 | .633 | .346 | .060080 | .641 | .320 | .010025 |
| .625 .625 | .171 .187 | .015125 .025050 | .625 .625 | .390 .392 | .015062 .020042 | .626 .626 | .564 .566 | . 005010 .010020 | .630 .630 | .174 .177 | .050075 .030050 | .633 .633 | .377 .439 | .075090 .030050 | .641 .641 | .368 .470 | .020040 .010020 |
| .625 | .189 | .005060 | .625 | .393 | .010020 | .627 | .036 | .025035 | .630 | .204 | .050065 | .633 | .472 | .010020 | .641 | .475 | .005010 |
| .625 | .190 | .060090 | .625 | .394 | .020040 | .627 | .058 | .020032 | .630 | .214 | .065080 | .633 | .501 | .030050 | .641 | .501 | .031048 |
| .625 | .191 | .025042 | .625 | .396 | .020030 | .627 | .125 | .020040 | .630 | .237 | .005020 | .633 | .551 | .015030 | .641 | .522 | .020030 |
| .625 | .192 | .050070 | .625 | .397 | .090120 | .627 | .129 | .025040 | .630 | .238 | .005010 | .634 | .116 | .032042 | .641 | .533 | .030060 |
| .625 | .193 | .100125 | .625 | .399 | .050075 | .627 | .133 | .040060 | .630 | .239 | .005010 | .634 | .155 | .050070 | .642 | .153 | .030050 |
| .625 .625 | .195 .196 | .090125 .020040 | .625 .625 | .400 .401 | .025040 .070090 | . 627 .627 | .166 .196 | . 005010 .050070 | .630 .630 | .254 .275 | .025040 .090105 | .634 .634 | .194 .330 | .015025 .005010 | .642 .642 | .254 .411 | .015030 . 005010 |
| .625 | .200 | .030040 | .625 | .402 | .005015 | .627 | .198 | .010025 | .630 | .279 | .005010 | .634 | .354 | .010030 | .642 | .449 | .005010 |
| .625 | .201 | .005010 | .625 | .406 | .060075 | .627 | .236 | .100125 | .630 | .280 | .005015 | .634 | .459 | .020030 | .642 | .477 | .070090 |
| .625 | .202 | .050075 | .625 | .415 | .005012 | .627 | .248 | .100125 | .630 | .282 | .050070 | .634 | .477 | .008016 | .642 | .482 | .020040 |
| .625 | .205 | .050090 | .625 | .425 | .020035 | .627 | .253 | .005010 | .630 | .283 | .105125 | .634 | .478 | .005010 | .642 | .536 | .007012 |
| .625 | .207 | .005015 | .625 | .437 | .040060 | .627 | .265 | .050070 | .630 | .315 | .005010 | .634 | .512 | .010020 | .643 | .169 | .005010 |
| .625 .625 | .210 .211 | .100125 .040060 | .625 .625 | .440 .441 | .005105 .005010 | .627 .627 | .266 .280 | .030050 .100125 | . 630 .630 | .316 .317 | . 005090 .010020 | .635 .635 | .179 .200 | .010015 .025040 | .643 .643 | .174 .322 | . 005010 .015030 |
| .625 | .220 | .005010 | .625 | .442 | .005010 | .627 | .281 | .100125 | .630 | .319 | .005050 | .635 | .204 | .010020 | .643 | .370 | .005010 |
| .625 | .222 | .050070 | .625 | .445 | .060075 | .627 | .283 | .030048 | .630 | .320 | .005010 | .635 | .312 | .035050 | .643 | .502 | .005010 |
| .625 | .223 | .005010 | .625 | .449 | .070090 | .627 | .285 | .042062 | .630 | .321 | .005010 | .635 | .356 | .010020 | .643 | .503 | .015030 |
| .625 | .225 | .015020 | .625 | .453 | .020030 | .627 | .313 | .090120 | .630 | .326 | .060080 | .635 | .375 | .032042 | .644 | .171 | .005010 |
| .625 | .226 | .032042 | .625 | .455 | .020030 | .627 | .314 | .015030 | .630 | .330 | .010020 | .635 | .376 | .005010 | .644 | .316 | .020035 |
| .625 .625 | .230 .236 | .075090 .025042 | .625 | .456 457 | .030070 | .627 | .323 | .105125 | .630 | .331 | .050070 | . 635 .635 | .410 443 | . 005010 .020030 | .644 644 | .346 | .015030 |
| .625 | .236 | .025042 | .625 .625 | .457 .458 | .010040 .010020 | .627 .627 | .334 .335 | .100125 .100125 | . 630 .630 | . 336 .346 | . 005010 .040060 | .635 | .443 .470 | .030042 | .644 .644 | .396 .454 | .025040 .025040 |
| .625 | .240 | .050070 | .625 | .476 | .040060 | .627 | .344 | .050125 | .630 | .354 | .050070 | .635 | .531 | .025040 | .644 | .477 | .020030 |
| .625 | .251 | .005042 | .625 | .479 | .010050 | .627 | .349 | .080104 | .630 | .368 | .050075 | .636 | .179 | .008015 | .644 | .503 | .020040 |
| .625 | .252 | .036105 | .625 | .485 | .005008 | .627 | .375 | .005010 | .630 | .384 | .005040 | .636 | .381 | .015030 | .645 | .152 | .030050 |
| .625 | .253 | .005042 | .625 | .500 | .032060 | .627 | .376 | .080104 | .630 | .387 | .010020 | .636 | .384 | .005010 | .645 | .170 | .035050 |
| .625 .625 | .255 .259 | .075104 .125156 | .625 .625 | .501 .506 | .020030 .030050 | .627 | .378 | .030050 | .630 | .394 | .060070 | .636 | .393 .410 | .020030 .005015 | .645 .645 | .214 .316 | .010020 .020032 |
| .625 | .259 | .005010 | .625 | .532 | .020030 | .627 .627 | .379 .380 | .030050 .050070 | .630 .630 | .395 .397 | .005020 .005090 | .636 .636 | .410 .454 | .015030 | .645 | .316 | .020032 |
| .625 | .261 | .030075 | .625 | .570 | .015030 | .627 | .385 | .083120 | .630 | .400 | .025090 | .636 | .565 | .005010 | .645 | .393 | .050062 |
| .625 | .264 | .005015 | .626 | .096 | .015025 | .627 | .389 | .005010 | .630 | .401 | .015030 | .637 | .244 | .020040 | .645 | .434 | .032048 |
| .625 | .265 | .040050 | .626 | .100 | .015030 | .627 | .392 | .005010 | .630 | .403 | .005010 | .637 | .356 | .005010 | .645 | .470 | .005010 |
| .625 | .266 | .015100 | .626 | .104 | .005010 | .627 | .406 | .050090 | .630 | .404 | .005010 | .637 | .381 | .025040 | .645 | .510 | .005010 |
| .625 | .268 | .015104 | .626 | .113 | .030050 | .627 | .442 | .005010 | .630 | .415 | .080105 | .637 | .425 | .012020 | .645 | .518 | .040060 |
| .625 .625 | .271 .279 | .025040 .060080 | . 626 .626 | . 129 .129 | . 005125 .126130 | .627 | .475 486 | .020030 | .630 | .417 | .050070 .070090 | .638 .638 | .156 .263 | .032048 .040060 | .646 .646 | .204 .210 | .060070 .060110 |
| .625 | .280 | .030060 | .626 | .129 | .030060 | .627 .627 | .486 .505 | .012025 .050070 | .630 .630 | .440 .475 | .070090 | .638 | .410 | .020040 | .646 | .255 | .020030 |
| .625 | .281 | .120134 | .626 | .156 | .020035 | .627 | .510 | .005040 | .630 | .499 | .005010 | .638 | .506 | .025040 | .646 | .273 | .020035 |
| .625 | .283 | .025060 | .626 | .193 | .020075 | .627 | .527 | .005010 | .630 | .518 | .010020 | .639 | .325 | .010020 | .646 | .316 | .005012 |
| .625 | .284 | .005040 | .626 | .198 | .025040 | .627 | .547 | .007012 | .630 | .554 | .005010 | .639 | .394 | .020040 | .646 | .344 | .020030 |
| .625 | .290 | .090100 | .626 | .204 | .030156 | .628 | .096 | .030050 | .631 | .150 | .040060 | .639 | .415 | .025040 | .646 | .393 | .090105 |
| .625 | .293 | .005040 | .626 | .207 | .050070 | .628 | .125 | .005010 | .631 | .154 | .050070 | .639 | .438 | .030050 | .646 | .447 | .005010 |
| .625 .625 | .298 .299 | .015030 .020050 | .626 . 626 | .217 .229 | .100125 . 005010 | .628 .628 | .166 .191 | .050070 .040060 | .631 .631 | . 238 .240 | . 005010 .010020 | .639 .639 | .439 .453 | .040050 . 005010 | .646 .647 | .539 .131 | .005010 .005010 |
| .625 | .301 | .020030 | .626 | .253 | .060080 | .628 | .191 | .040060 | .631 | .315 | .010020 | .639 | .524 | .025035 | .647 | .191 | .030050 |
| .625 | .302 | .050070 | .626 | .257 | .015030 | .628 | .208 | .020040 | .631 | .316 | .005010 | .639 | .550 | .005010 | .647 | .283 | .030050 |
| .625 | .311 | .042062 | .626 | .262 | .100125 | .628 | .232 | .030050 | .631 | .318 | .005010 | .639 | .576 | .015030 | .647 | .381 | .105125 |
| | | | *\^(:#- DC | | | | | | | | | | | | | | |



| | | Chasas Any | 1 | | Chasas Ami | | | | 1 5 IVIE | | Chassa Any | 71111 | - 1 -/ | | <u> </u> | | |
|---------------------|----------------------|----------------------------|--------------|----------------------|--------------------------|---------------------|----------------------|----------------------------|---------------------|----------------------|----------------------------|---------------------|---------------------|---------------------------|--------------|----------------------|--------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| .647 | .407 | .030050 | .652 | .453 | .005010 | CEO | 214 | From To | 667 | 0.47 | From To | .671 | .391 | .005075 | .679 | .111 | .048062 |
| .647 | .472 | .030030 | .652 | . 453 .501 | .030042 | .658 .658 | .314 .375 | .030050 .010020 | .667 .667 | .347 .496 | .015030 . 005010 | .671 | .395 | .020030 | .679 | .206 | .035060 |
| .647 | .492 | .005010 | .652 | .510 | .010020 | .658 | .437 | .010020 | .667 | .595 | .005010 | .671 | .474 | .005010 | .679 | .221 | .010015 |
| .648 | .093 | .005010 | .653 | .154 | .040062 | .658 | .478 | .015025 | .668 | .218 | .060080 | .671 | .507 | .008015 | .679 | .395 | .030050 |
| .648 | .144 | .020040 | .653 | .238 | .040062 | .658 | .479 | .030042 | .668 | .316 | .005010 | .672 | .128 | .100125 | .679 | .396 | .015030 |
| .648 | .202 | .008015 | .653 | .316 | .010020 | .658 | .511 | .030070 | .668 | .317 | .005010 | .672 | .325 | .015030 | .679 | .403 | .050075 |
| .648 | .209 | .015030 | .653 | .317 | .005010 | .658 | .572 | .005010 | .668 | .333 | .050075 | .672 | .326 | .080125 | .679 | .411 | .005010 |
| .648 | .266 | .005010 | .653 | .376 | .010020 | .659 | .125 | .015025 | .668 | .340 | .035050 | .672 | .346 | .005010 | .679 | .441 | .030050 |
| .648 | .298 | .050075 | .653 | .392 | .050090 | .659 | .256 | .100120 | .668 | .348 | .010015 | .672 | .362 | .005010 | .679 | .457 | .030060 |
| .648 | .382 | .005012 | .653 | .414 | .050070 | .659 | .265 | .020035 | .668 | .406 | .040060 | .672 | .375 | .005010 | .679 | .482 | .015062 |
| .648 | .490 | .010020 | .653 | .442 | .005010 | .659 | .288 | .050070 | .668 | .472 | .010020 | .672 | .407 | .010020 | .679 | .501 | .015030 |
| .648 | .493 | .015030 | .653 | .542 | .005010 | .659 | .313 | .020040 | .669 | .031 | .005010 | .672 | .415 | .005010 | .679 | .509 | .005010 |
| .648 | .521 | .005010 | .654 | .142 | .040060 | .659 | .335 | .060075 | .669 | .114 | .005010 | .672 | .442 | .030040 | .680 | .163 | .005010 |
| .648 | .551 | .005010 | .654 | .267 | .030050 | .659 | .381 | .090100 | .669 | .138 | .005010 | .672 | .445 | .025060 | .680 | .200 | .032050 |
| .649 | .126 | .020050 | .654 | .270 | .005010 | .659 | .501 | .015030 | .669 | .163 | .005010 | .672 | .490 | .050070 | .680 | .253 | .005030 |
| .649 | .201 | .090100 | .654 | .276 | .010020 | .660 | .125 | .020030 | .669 | .200 | .005010 | .672 | .531 | .030040 | .680 | .256 | .040060 |
| .649 | .203 | .025040 | .654 | .363 | .050075 | .660 | .213 | .070090 | .669 | .204 | .020060 | .673 | .098 | .020040 | .680 | .283 | .080105 |
| .649 | .266 | .125135 | .654 | .389 | .025040 | .660 | .225 | .040060 | .669 | .237 | .005010 | .673 | .283 | .005010 | .680 | .300 | .032050 |
| .649 .649 | .281 .286 | . 005010 .070090 | .654 | .480 | .010020 | .660 | .251 | .005010 | .669 | .316 | .005010 | .673 | .408 | .005010 | .680 | .316 | .048062 |
| .649 | .338 | .030050 | .654 .654 | .510 .564 | .025040 .005012 | .660 | . 261 | .005010 .050072 | .669 .669 | .317 | .075105 .005020 | .673 .673 | .412 | .100134 | .680 .680 | .317 .325 | .030040 .005050 |
| .649 | .336 .4 52 | .005010 | .654 | .574 | .005012 | .660 | .208 .313 | .020072 | .669 | . 319 .320 | .010040 | .673 | .437 .446 | .005010 | .680 | .325 | .070090 |
| .649 | .522 | .005010 | .655 | .124 | .015025 | .660 | .314 | .005010 | .669 | .320 | .050070 | .673 | .473 | .010025 | .680 | .330 | .015030 |
| .649 | .562 | .005010 | .655 | .125 | .040060 | .660 | .345 | .015030 | .669 | .338 | .080070 | .673 | .500 | .020036 | .680 | .369 | .050075 |
| .649 | .583 | .005010 | .655 | .142 | .015030 | .660 | .366 | .020030 | .669 | .397 | .005010 | .674 | .095 | .010020 | .680 | .422 | .005015 |
| .650 | .056 | .005010 | .655 | .167 | .030050 | .660 | .390 | .040060 | .669 | .427 | .030050 | .674 | .377 | .025040 | .680 | .442 | .040060 |
| .650 | .062 | .020040 | .655 | .191 | .010020 | .660 | .401 | .020030 | .669 | .430 | .010020 | .674 | .395 | .005010 | .680 | .445 | .005010 |
| .650 | .076 | .005010 | .655 | .223 | .080100 | .660 | .409 | .040060 | .669 | .434 | .070090 | .674 | .441 | .005080 | .680 | .447 | .010020 |
| .650 | .161 | .005015 | .655 | .318 | .005010 | .660 | .436 | .005010 | .669 | .472 | .030050 | .674 | .450 | .040060 | .680 | .470 | .005010 |
| .650 | .162 | .040060 | .655 | .378 | .030060 | .660 | .472 | .005010 | .669 | .487 | .006015 | .674 | .473 | .025040 | .680 | .476 | .030050 |
| .650 | .212 | .005010 | .655 | .379 | .010020 | .660 | .507 | .005010 | .669 | .515 | .005010 | .674 | .480 | .070090 | .680 | .485 | .050060 |
| .650 | .250 | .020030 | .655 | .381 | .020030 | .660 | .563 | .005010 | .669 | .543 | .015030 | .674 | .504 | .075090 | .680 | .500 | .032050 |
| .650 | .260 | .042060 | .655 | .419 | .005010 | .661 | .270 | .060080 | .669 | .550 | .015030 | .674 | .536 | .040060 | .680 | .504 | .020040 |
| .650 .650 | .290 .311 | .015030 .075090 | .655 | .421 | .050070 | .661 | .336 | .020040 | .669 | .552 | .005010 | .674 .675 | .562 .095 | .020030 .005010 | .680 | .514 | .020040 |
| .650 | .312 | .005120 | .655 .655 | .465 .488 | .005010 .005010 | .661 | . 341 .403 | .040060 | .670 .670 | .123 .130 | .005010 .005010 | .675 | .203 | .020040 | .680 .680 | .524 .559 | .030050 .005010 |
| .650 | .315 | .010020 | .655 | .512 | .015025 | .661 | .487 | .040060 | .670 | .168 | .040060 | .675 | .224 | .005010 | .680 | .564 | .030050 |
| .650 | .316 | .005010 | .655 | .525 | .040060 | .661 | .529 | .015025 | .670 | .169 | .040060 | .675 | .280 | .060090 | .680 | .565 | .005050 |
| .650 | .317 | .005010 | .655 | .528 | .005010 | .661 | .531 | .010020 | .670 | .190 | .015032 | .675 | .284 | .032050 | .681 | .190 | .030050 |
| .650 | .319 | .005010 | .655 | .530 | .005010 | .661 | .551 | .005010 | .670 | .234 | .005010 | .675 | .400 | .025040 | .681 | .251 | .050070 |
| .650 | .325 | .050075 | .656 | .118 | .030050 | .661 | .583 | .005010 | .670 | .237 | .005010 | .675 | .416 | .015030 | .681 | .264 | .030050 |
| .650 | .357 | .015030 | .656 | .190 | .075090 | .662 | .201 | .050070 | .670 | .239 | .005010 | .675 | .440 | .005010 | .681 | .391 | .005010 |
| .650 | .374 | .015030 | .656 | .195 | .050075 | .662 | .393 | .040060 | .670 | .240 | .005010 | .675 | .442 | .005010 | .681 | .395 | .005050 |
| .650 | .377 | .020030 | .656 | .196 | .020040 | .662 | .432 | .060080 | .670 | .245 | .020030 | .675 | .447 | .080100 | .681 | .401 | .020040 |
| .650 .650 | .380 .397 | .050070 .005010 | .656 .656 | .258 .267 | .030050 .050075 | .662 .662 | <u>.461</u> .477 | .030050 .010020 | .670 | .253 | .005010 | .675 .675 | .458 .460 | .020040 | . 681 | . 440 .503 | .005010 .015030 |
| .650 | .404 | .040060 | .656 | .207 | .005010 | .662 | .477 | .060070 | .670 .670 | .257 .260 | .040125 .020030 | .675 | .480 | .005060 | .681 | .515 | .005010 |
| .650 | .410 | .080090 | .656 | .290 | .070090 | .663 | .457 | .050070 | .670 | .280 | .010020 | .675 | .500 | .040060 | .682 | .129 | .015025 |
| .650 | .424 | .005010 | .656 | .320 | .025040 | .663 | .504 | .005010 | .670 | .300 | .005010 | .675 | .515 | .025048 | .682 | .333 | .070090 |
| .650 | .469 | .050070 | .656 | .341 | .030050 | .664 | .256 | .100125 | .670 | .315 | .005010 | .675 | .582 | .005010 | .682 | .351 | .050070 |
| .650 | .500 | .005010 | .656 | .377 | .015030 | .664 | .259 | .005125 | .670 | .317 | .005010 | .676 | .288 | .010025 | .682 | .365 | .005010 |
| .650 | .503 | .015030 | .656 | .387 | .030050 | .664 | .413 | .030050 | .670 | .319 | .050070 | .676 | .370 | .070080 | .682 | .395 | .005010 |
| .650 | .505 | .020030 | .656 | .397 | .015025 | .664 | .503 | .025050 | .670 | .330 | .050075 | .676 | .440 | .005010 | .682 | .400 | .032048 |
| .650 | .507 | .010020 | .656 | .404 | .080104 | .665 | .173 | .050075 | .670 | .331 | .005010 | .676 | .500 | .025042 | .682 | .439 | .025040 |
| .650 | .534 | .025040 | .656 | .406 | .090125 | .665 | .249 | .030050 | .670 | .350 | .020100 | .676 | .565 | .020040 | .682 | .440 | .020030 |
| .650 | .553 | .010020 | .656 | .453 | .005040 | .665 | .251 | .075090 | .670 | .360 | .040050 | .677 | .168 | .020030 | .682 | .472 | .062078 |
| .651 | .147 | .042060 | .656 | .460 | .025035 | .665 | .334 | .050130 | .670 | .378 | .060080 | .677 | .387 | .005010 | .682 | .486 | .005010 |
| .651 | .160 | .020030 | .656 | .470 | .035050 | .665 | .374 | .120140 | .670 | .382 | .030060 | .677 | .441 | .060080 | .682 | .578 | .015030 |
| .651 | .229 | . 005010 .010020 | .656 | .489 | .005010 | .665 | .397 | .070090 | .670 | .398 | .040060 | .677 | .458 | .025040 | .682 | .601 | .020030 |
| .651 .651 | .315 .374 | .010020 | .656 .656 | .500 .503 | .030050 .010020 | .665 .665 | .434 .515 | .040060 .025040 | .670 | .406 | .005010 .005010 | .677 .677 | .468 .476 | .010020 | .683 | .121 .172 | .050070 .010025 |
| .651 | .374 | .030050 | .656 | .503 | .005010 | .665 | .550 | .025040 | .670 .670 | . 439 .474 | .070090 | .677 | .523 | .005010 | .683 | .345 | .070025 |
| .651 | .379 | .005010 | .656 | .511 | .005030 | .665 | .576 | .030048 | .670 | .474 | .010020 | .677 | .525 | .005010 | .683 | .376 | .005010 |
| .651 | .380 | .015030 | .656 | .515 | .015030 | .666 | .143 | .015030 | .670 | .481 | .040060 | .677 | .534 | .005010 | .683 | .378 | .015030 |
| .651 | .394 | .005010 | .656 | .528 | .015030 | .666 | .168 | .075090 | .670 | .495 | .040062 | .678 | .193 | .060090 | .683 | .396 | .070090 |
| .651 | .398 | .005010 | .656 | .563 | .020040 | .666 | .196 | .020040 | .670 | .503 | .020040 | .678 | .256 | .035060 | .683 | .400 | .032042 |
| .651 | .450 | .010020 | .656 | .565 | .010020 | .666 | .256 | .075090 | .670 | .545 | .005010 | .678 | .384 | .020032 | .683 | .406 | .040060 |
| .651 | .465 | .010020 | .657 | .216 | .060080 | .666 | .267 | .040062 | .670 | .574 | .030050 | .678 | .405 | .010030 | .683 | .440 | .015030 |
| .651 | .485 | .040060 | .657 | .250 | .080105 | .666 | .430 | .020030 | .671 | .200 | .025042 | .678 | .440 | .005010 | .683 | .478 | .025035 |
| .651 | .505 | .005010 | .657 | .255 | .015030 | .666 | .453 | .015025 | .671 | .239 | .005010 | .678 | .442 | .012020 | .683 | .488 | .080104 |
| .651 | .551 | .005030 | .657 | .330 | .075100 | .666 | .475 | .020040 | .671 | .264 | .005010 | .678 | .449 | .040060 | .683 | .510 | .030062 |
| .652 .652 | .096 .118 | .062078 .062090 | .657 | .338 | .105125 | .666 | .478 | .030050 | .671 .671 | .311 .315 | .078090 . 005010 | .678 .678 | .504 .507 | .015030 .005010 | .683 | .570 575 | .040050 .040060 |
| .652 | .118 | .030050 | .657 .657 | .363 .413 | .005010 .005010 | .666 .666 | .537 .564 | . 005010 .010020 | .671 | .316 | .015030 | . 678 | .507 .529 | .005010 | .683 .683 | .575 .579 | .040060 |
| .652 | .376 | .005010 | .657 | .413 | .005010 | .666 | .504 . 579 | .010020 | .671 | .319 | .005010 | .678 | .530 | .015030 | .684 | .234 | .015025 |
| .652 | .400 | .010020 | .657 | .530 | .020040 | .667 | .213 | .012020 | .671 | .322 | .005010 | .678 | .564 | .035050 | .684 | .247 | .050075 |
| .652 | .406 | .015030 | .657 | .531 | .040060 | .667 | .270 | .025040 | .671 | .325 | .015030 | .678 | .568 | .010020 | .684 | .303 | .005010 |
| .652 | .412 | .005010 | .657 | .538 | .040060 | .667 | .275 | .025042 | .671 | .345 | .020040 | .678 | .591 | .005010 | .684 | .323 | .020040 |
| .652 | .435 | .005010 | .657 | .613 | .016025 | .667 | .319 | .042062 | .671 | .385 | .070090 | .678 | .593 | .005010 | .684 | .399 | .005010 |
| .652 | .439 | .020040 | .658 | .255 | .010020 | .667 | .336 | .005010 | .671 | .386 | .100125 | .678 | .606 | .005010 | .684 | .412 | .100125 |
| | | | | ED10 | | | | | - 41 | | kness vou wa | | | | | | |

NO TOOLING CHARGE FOR ANY OF THE SIZES LISTED

| 0.0 | 15 | Choose Any | 0.5 | 15 | Choose Any | 0.5 | 15 | Choose Any | 0.5 | 1.0 | Choose Any | 0.5 | 15 | Choose Any | | 15 | Choose Any |
|----------------------|---------------------|----------------------------|----------------------|---------------------|---------------------------|---------------------|---------------------|----------------------------|----------------------|----------------------|-----------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* |
| .684 .684 | .443 .510 | .005012 .050070 | .687 .687 | .198 .199 | .090105 .015020 | .688 .688 | .391 .393 | .105125 .075090 | .691 .691 | .194 .203 | .015030 .005010 | .700 .700 | .252 .253 | .010020 .005010 | .702 .702 | .261 .312 | .100120 .010020 |
| .684 | .542 | .035050 | .687 | .200 | .032042 | .688 | .407 | .005010 | .691 | .238 | .030050 | .700 | .256 | .040060 | .702 | .319 | .020030 |
| .684 | .568 | .025045 | .687 | .219 | .036050 | .688 | .452 | .030050 | .691 | .258 | .060080 | .700 | .291 | .005010 | .702 | .325 | .005010 |
| .684 | .581 | .015025 | .687 | .221 | .020062 | .688 | .464 | .080100 | .691 | .475 | .030060 | .700 | .313 | .010020 | .702 | .327 | .105125 |
| .684 .684 | .593 .613 | .030040 .015030 | .687 .687 | .234 .237 | .005010 .005010 | .688 .688 | .468 .469 | .020040 .015030 | .691 .691 | .485 .515 | .005010 .015030 | .700 .700 | .317 .320 | .005020 .005010 | .702 .702 | .401 .437 | .025040 .090105 |
| .685 | .143 | .040060 | .687 | .257 | .080090 | .688 | .513 | .050075 | .691 | .598 | .005010 | .700 | .327 | .015020 | .702 | .487 | .050070 |
| .685 | .158 | .060083 | .687 | .259 | .005010 | .688 | .518 | .005010 | .692 | .286 | .042062 | .700 | .328 | .010025 | .702 | .504 | .012025 |
| .685 | .225 | .005010 | .687 | .267 | .030048 | .688 | .538 | .015040 | .692 | .406 | .020040 | .700 | .330 | .100125 | .702 | .505 | .005010 |
| .685 .685 | .233 .254 | .010020 .010075 | .687 .687 | .296 .306 | .050075 .040060 | .688 .688 | .563 .615 | . 005010 .015030 | .692 .693 | .519 .119 | .005010 | .700 .700 | .344 .356 | .007020 .005010 | .702 .702 | .516 .561 | .050075 .015030 |
| .685 | .263 | .010015 | .687 | .312 | .120156 | .689 | .156 | .040060 | .693 | .236 | .005012 | .700 | .357 | .010020 | .702 | .595 | .025040 |
| .685 | .264 | .005010 | .687 | .316 | .036048 | .689 | .162 | .100120 | .693 | .320 | .005010 | .700 | .358 | .040060 | .703 | .119 | .030050 |
| .685 | .269 | .050070 | .687 | .323 | .048062 | .689 | .222 | .090120 | .693 | .396 | .050075 | .700 | .360 | .030050 | .703 | .206 | .025040 |
| .685 .685 | .325 .344 | .090120 .040060 | .687 .687 | .328 .330 | .005012 .050075 | .689 .689 | .249 .273 | .005010 .005010 | .693 .693 | .410 .438 | .025040 .020030 | .700 .700 | .366 .376 | .090105 .010020 | . 703 .703 | . 263 .409 | . 005010 .010020 |
| .685 | .346 | .070105 | .687 | .339 | .050070 | .689 | .281 | .050070 | .693 | .443 | .005010 | .700 | .377 | .020040 | .703 | .443 | .005010 |
| .685 | .366 | .105125 | .687 | .343 | .005010 | .689 | .313 | .020040 | .693 | .539 | .050070 | .700 | .378 | .005030 | .703 | .480 | .030050 |
| .685 | .371 | .100125 | .687 | .350 | .050075 | .689 | .319 | .025040 | .694 | .379 | .060070 | .700 | .380 | .040060 | .703 | .482 | .050070 |
| .685 .685 | .375 .376 | .032062 .100125 | .687 | .359 | .025048 | .689 | .320 | .005010 | .695 | .195 | .015025 | . 700 .700 | . 381 .383 | . 005010 .040060 | .703 | .516 | .020040 |
| .685 | .378 | .080100 | .687 .687 | .371 .376 | .100125 .010020 | .689 .689 | .325 .345 | .040060 .040060 | .695 .695 | .196 .264 | .032062 .005012 | .700 | .385 | .090105 | .703 .703 | .525 .540 | .030050 .040060 |
| .685 | .379 | .010048 | .687 | .378 | .010020 | .689 | .375 | .010020 | .695 | .265 | .030060 | .700 | .394 | .135156 | .703 | .635 | .010020 |
| .685 | .380 | .025060 | .687 | .379 | .005010 | .689 | .377 | .050070 | .695 | .282 | .005010 | .700 | .397 | .005010 | .704 | .259 | .050070 |
| .685 .685 | .391 .392 | .090110 .090110 | .687 .687 | .380 .384 | .025040 | .689 | .398 | .005010 | .695 | .335 | .025040 | .700 | .405 .406 | .120134 | .704 .704 | .264 .268 | .060080 .060090 |
| .685 | .410 | .060078 | .687 | .384 .385 | .010040 .005010 | .689 .689 | .401 .402 | .015030 .032048 | .695 .695 | .353 .412 | .010020 .080104 | .700 .700 | .406 .411 | .050150 . 005060 | .704 | .268 | .060090 |
| .685 | .423 | .100125 | .687 | .386 | .070090 | .689 | .408 | .100125 | .695 | .414 | .012025 | .700 | .417 | .005020 | .704 | .366 | .010040 |
| .685 | .427 | .032042 | .687 | .393 | .005015 | .689 | .435 | .005010 | .695 | .518 | .030040 | .700 | .435 | .005010 | .704 | .475 | .010025 |
| . 685 .685 | .441 .450 | .005010 .008020 | .687 | .397 | .050075 | .689 | .437 | .005010 | .695 | .520 | .005010 | .700 .700 | .437 .441 | .005010 .005020 | .704 | .478 | .040060 |
| .685 | .430 | .050070 | .687 .687 | .406 .407 | .040050 .060070 | .689 .689 | .468 .471 | .100125 .005010 | .695 .695 | . 557 .558 | .005010 .015030 | .700 | .450 | .005020 | .704 .704 | .480 .497 | .015030 .020035 |
| .685 | .473 | .060080 | .687 | .416 | .050060 | .689 | .472 | .030050 | .695 | .626 | .015025 | .700 | .455 | .005010 | .704 | .503 | .060100 |
| .685 | .475 | .020040 | .687 | .433 | .050125 | .689 | .493 | .040060 | .696 | .037 | .007015 | .700 | .456 | .030050 | .704 | .532 | .030050 |
| .685 | .478 .487 | .015030 | .687 | .438 | .005020 | .689 | .494 | .050075 | .696 | .147 | .005015 | .700 | .465 .473 | .020040 | .704 | .553 | .005010 |
| .685 .685 | .520 | .020030 .010020 | .687 .687 | .441 .443 | .020070 .030125 | .689 .689 | .500 .517 | .005010 .030050 | .696 .696 | . 156 .166 | .005010 .062090 | .700 .700 | .476 | .005010 .005010 | .704 .704 | .600 .626 | .020040 . 005010 |
| .685 | .533 | .060083 | .687 | .445 | .012020 | .689 | .564 | .010030 | .696 | .178 | .062078 | .700 | .500 | .005010 | .705 | .085 | .005012 |
| .685 | .568 | .030050 | .687 | .452 | .010020 | .689 | .565 | .010020 | .696 | .196 | .050070 | .700 | .501 | .070090 | .705 | .098 | .005010 |
| .685 .686 | .609 .066 | .010030 .036050 | .687 .687 | .455 .465 | .050100 .080100 | .689 | .577 | .030050 | .696 | .281 | .090120 | .700 .700 | .502 .504 | .010100 . 005030 | .705 .705 | .253 .265 | .050072 .020040 |
| .686 | .094 | .005010 | .687 | .468 | .040060 | .690 .690 | .076 .167 | .010020 . 005010 | .696 .696 | .458 .498 | .025042 .005010 | .700 | .504 | .015042 | .705 | .203 | .020040 |
| .686 | .135 | .030050 | .687 | .469 | .050080 | .690 | .173 | .050070 | .696 | .531 | .015030 | .700 | .510 | .010025 | .705 | .311 | .005010 |
| .686 | .136 | .040060 | .687 | .475 | .015030 | .690 | .188 | .040060 | .697 | .313 | .090110 | .700 | .514 | .020060 | .705 | .312 | .005010 |
| .686 .686 | .147 .159 | .015025 | .687 .687 | .481 .487 | .050070 .025040 | .690 | .190 | .010020 .060080 | .697 | .532 | .025040 | .700 .700 | .530 .531 | .070080 .020040 | . 705 .705 | .317 .383 | . 005010 .010020 |
| .686 | .161 | .080100 .005010 | .687 | .500 | .025040 | .690 .690 | .192 .202 | .030050 | .698 .698 | .231 .361 | .005010 .005010 | .700 | .532 | .005010 | .705 | .303 .438 | .005010 |
| .686 | .167 | .040135 | .687 | .503 | .005010 | .690 | .206 | .050075 | .698 | .477 | .005010 | .700 | .533 | .030050 | .705 | .516 | .025040 |
| .686 | .198 | .042060 | .687 | .506 | .005010 | .690 | .220 | .020032 | .698 | .500 | .005010 | .700 | .535 | .040050 | .705 | .531 | .005010 |
| .686 | .202 | .100125 | .687 | .511 | .020040 | .690 | .254 | .050070 | .698 | .527 | .005010 | .700 | .550 | .005010 | .705 | .550 | .030050 |
| .686 .686 | .252 .253 | .040060 .042062 | .687 .687 | .513 .517 | .042062 .030048 | .690 .690 | .264 .265 | .105125 .100125 | .698 .698 | .541 .542 | .025040 .030060 | .700 .700 | .555 .560 | .015030 .005030 | .705 .706 | .634 .254 | .015025 .030050 |
| .686 | .269 | .050072 | .687 | .564 | .005010 | .690 | .280 | .050075 | .698 | .564 | .010020 | .700 | .564 | .025072 | .706 | .347 | .005010 |
| .686 | .270 | .005010 | .687 | .566 | .005015 | .690 | .281 | .050070 | .698 | .602 | .005010 | .700 | .565 | .040060 | .706 | .395 | .062083 |
| .686 | .313 | .100120 | .688 | .130 | .050060 | .690 | .317 | .080100 | .698 | .626 | .005010 | .700 | .566 | .015032 | .706 | .398 | .050070 |
| .686 .686 | .345 .346 | .060080 .025035 | .688 .688 | .168 .205 | .050060 .025040 | .690 .690 | .323 .336 | .020070 .060075 | .699 .699 | .070 .076 | .040060 .015025 | .700 .700 | .578 .585 | .005010 .005010 | .706 .706 | .402 .420 | .005010 .005010 |
| .686 | .360 | .015025 | .688 | .206 | .040060 | .690 | .343 | .050070 | .699 | .210 | .060080 | .700 | .600 | .010020 | .706 | .434 | .025040 |
| .686 | .377 | .060080 | .688 | .216 | .050070 | .690 | .344 | .100120 | .699 | .376 | .005010 | .700 | .608 | .005010 | .706 | .453 | .032042 |
| .686 | .379 | .025040 | .688 | .253 | .010020 | .690 | .354 | .005010 | .699 | .380 | .005010 | .700 | .615 | .005010 | .706 | .478 | .040060 |
| .686 .686 | .381 .385 | .080105 .048062 | .688 . 688 | .259 .263 | .040060 .005125 | .690 .690 | .365 .376 | . 005010 .010030 | . 699 .699 | . 483 .500 | .005010 .010020 | . 700 .701 | .631 .130 | .005010 .060080 | .706 .706 | .500 .505 | .075100 .010060 |
| .686 | .390 | .048062 | .688 | .263 | .126190 | .690 | .385 | .090104 | .699 | .500 | .010020 | .701 | .153 | .048090 | .707 | .315 | .100125 |
| .686 | .392 | .050062 | .688 | .284 | .005010 | .690 | .436 | .100125 | .699 | .503 | .070090 | .701 | .168 | .005010 | .707 | .316 | .005010 |
| .686 | .395 | .010020 | .688 | .311 | .010040 | .690 | .475 | .030050 | .699 | .514 | .060080 | .701 | .193 | .040060 | .707 | .320 | .005010 |
| .686 .686 | .398 .421 | .005010 .005010 | .688 .688 | .313 .316 | .020140 .005010 | .690 | .494 .503 | .075090 .050070 | .699 | .562 .093 | .040060 .005010 | .701 .701 | .204 .224 | .050070 .040060 | .707 .707 | .335 .436 | .020040 . 005010 |
| .686 | .437 | .015030 | .688 | .326 | .015030 | .690 .690 | .503 | .050070 | .700 .700 | .093 | .050062 | .701 | .241 | .050070 | .707 | . 436 .472 | .015030 |
| .686 | .438 | .050075 | .688 | .330 | .030050 | .690 | .533 | .072090 | .700 | .120 | .070090 | .701 | .257 | .050100 | .707 | .480 | .005010 |
| .686 | .483 | .050075 | .688 | .334 | .005010 | .690 | .542 | .005010 | .700 | .138 | .010020 | .701 | .259 | .005010 | .708 | .120 | .072120 |
| .686 | .500 | .030070 | .688 | .343 | .070090 | .690 | .566 | .030050 | .700 | .159 | .040060 | .701 | .410 | .005010 | .708 | .136 | .040060 |
| .686 .686 | .502 .512 | .025042 . 005010 | .688 . 688 | .344 .349 | .070090 .005010 | .690 .690 | .569 .575 | .010020 .010020 | .700 .700 | .164 .168 | .010020 .050070 | .701 .701 | .419 .425 | .050070 .050070 | .708 .708 | .170 .218 | .040060 . 005030 |
| .686 | .520 | .015030 | .688 | .350 | .050070 | .690 | .615 | .020030 | .700 | .169 | .040060 | .701 | .438 | .040060 | .708 | .236 | .030050 |
| .687 | .119 | .015030 | .688 | .352 | .050070 | .690 | .625 | .010020 | .700 | .176 | .005010 | .701 | .500 | .010060 | .708 | .238 | .005010 |
| .687 | .187 | .030050 | .688 | .376 | .005042 | .690 | .639 | .005010 | .700 | .193 | .005010 | .701 | .521 | .080100 | .708 | .239 | .030050 |
| .687 .687 | .189 .191 | .010060 . 005010 | .688 .688 | .378 .384 | .050075 .050070 | .691 .691 | .163 .189 | .025040 .050070 | .700 .700 | .210 .221 | .050070 .075090 | .701 .701 | .549 .561 | .020030 .010020 | .708 .708 | .257 .271 | .050070 .105120 |
| .687 | .194 | .125156 | .688 | .386 | .050070 | .691 | .192 | .020040 | .700 | .250 | .075090 | | .614 | .010020 | .708 | .279 | .060080 |
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| 150 | | | Choose Any | 71111 | | Choose Any | <u> </u> | | Choose Any |
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| 1986 1985 | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| 1969 1969 1969 1969 1970 1970 1980 1970 1980 1970 | .708 | .305 | .005010 | .710 | .507 | .020035 | .718 | .189 | .015030 | .723 | .314 | .040060 | .731 | .482 | .020040 | .738 | .538 | .015030 |
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| 709 318 0.05 - 110 713 317 0.05 - 010 719 254 0.08 - 016 727 500 0.15 - 0.20 734 376 0.30 - 0.50 740 390 0.05 - 0.10 779 316 0.05 - 0.00 713 347 0.05 - 0.00 779 329 0.05 - 0.00 727 570 0.04 - 0.60 734 406 0.05 - 1.25 740 410 1.05 - 1.05 770 316 0.05 - 0.00 713 570 595 0.00 - 0.00 719 378 0.05 - 0.00 727 570 0.04 - 0.60 734 406 0.05 - 1.25 740 410 1.05 - 1.05 770 327 0.05 - 0.00 734 375 0.05 - 0.00 740 410 0.05 - 0.05 770 327 0.05 - 0.00 719 378 0.05 - 0.00 728 319 0.05 - 0.00 734 416 0.05 - 0.05 740 439 0.05 - 0.00 770 327 0.05 - 0.00 734 416 0.05 - 0.05 740 439 0.05 - 0.00 770 328 0.05 - 0.00 734 416 0.05 - 0.05 740 439 0.05 - 0.00 770 328 0.05 - 0.00 734 416 0.05 - 0.05 740 439 0.05 - 0.00 738 315 0.05 - 0.00 740 430 0.05 - 0.00 740 440 0.05 0.0 | | | | 1 | | | | | | | | | | | | I | | |
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| 709 327 0.06 - 0.00 | | | | | | | | | | | | | | | | I | | .062075 |
| 7.09 322 0.05 - 0.01 | | | | 1 | | | | | | | | | | | | I | | |
| 7.79 327 0.40 0.60 7.14 118 0.20 0.30 7.19 439 0.00 0.105 7.28 253 0.25 0.40 7.34 5.31 0.05 0.01 7.40 5.01 0.08 0.05 0.07 7.34 5.01 0.05 0.08 0.05 0.07 7.34 5.01 0.05 0.05 0.05 0.07 7.34 5.01 0.05 0.0 | | | | | | | | | | | | | | | | | | .020040 |
| 709 382 015-030 714 140 020-500 719 483 060-070 728 292 025-042 735 193 050-070 740 500 040-080 709 382 010-020 714 223 050-070 719 543 040-080 728 322 025-042 735 222 050-070 740 510 040-080 728 375 060-090 735 324 060-074 080-080 700 080-000 740 260 005-000 740 260 005-000 740 260 005-000 735 346 060-080 740 820 005-000 735 389 000-080 740 820 005-000 735 389 000-080 740 820 005-000 735 389 000-080 740 821 005-000 735 380 005-010 728 471 005-000 730 800 005-000 735 380 005-010 | .709 | .327 | .040060 | 1 | | | | | | | | | | | .005010 | I | | .005080 |
| 709 386 005-010 714 182 005-010 719 548 020-040 728 282 025-042 735 282 050-070 740 510 040-060 726 328 025-042 735 281 030-060 740 030 060-010 740 030 060-010 740 080 060-010 740 030 060-010 740 080 080-010 740 080 060-010 740 080 060-010 740 080 080 080 080 080 080 740 080 080 080 080 740 080 090 735 348 080 090 735 348 080 090 740 282 080 090 735 348 080 105 740 080 090 740 282 080 090 740 282 080 080 080 080 080 080 080 080 080 | | | | 1 | | | | | | | | | | | | I | | |
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| 7.79 .550 .005010 .715 .481 .025040 .720 .564 .020032 .729 .382 .135156 .736 .160 .030050 .741 .505 .660083 .709 .592 .030050 .715 .500 .020035 .720 .568 .015030 .729 .500 .005010 .736 .310 .04800 .741 .515 .040060 .741 .515 .040060 .741 .515 .040060 .741 .529 .010020 .005010 .736 .313 .040060 .741 .531 .050070 .710 .211 .070090 .736 .388 .020040 .741 .552 .050075 .730 .280 .005075 .736 .380 .020030 .741 .553 .025042 .720 .642 .030050 .731 .280 .005075 .736 .380 .020030 .741 .553 .025042 .720< | .709 | .492 | .030050 | .715 | .470 | .060105 | .720 | .502 | .015020 | .729 | .219 | .010020 | .736 | .118 | .015030 | .741 | .395 | .025040 |
| 770 | | | | | | | | | | | | | | | | I | | .080105 |
| 710 133 105 - 010 7.15 5.26 0.15 - 0.25 7.20 5.94 0.50 - 0.75 7.29 5.90 0.05 - 0.10 7.36 3.10 0.48 - 0.70 7.41 5.29 0.10 - 0.20 7.10 2.01 0.50 - 0.70 0.715 5.35 0.25 - 0.40 7.20 6.12 0.05 - 0.10 7.30 2.38 0.06 - 0.08 7.36 3.18 0.15 - 0.30 7.41 5.31 0.50 - 0.70 7.71 0.236 0.05 - 0.10 7.16 2.64 0.20 - 0.40 7.20 6.12 0.05 - 0.10 7.30 2.38 0.06 - 0.08 7.36 3.80 0.20 - 0.30 7.41 5.70 0.20 - 0.40 7.10 2.25 0.08 - 0.76 0.30 0.05 0.10 7.30 2.80 0.10 - 0.20 7.36 3.80 0.20 - 0.30 7.41 5.70 0.20 - 0.40 7.10 2.25 0.08 - 0.76 0.30 0.05 0.10 7.30 2.80 0.10 - 0.20 7.36 3.80 0.20 - 0.30 7.41 5.70 0.20 - 0.40 7.10 2.25 0.08 - 0.76 7.30 0.05 0.70 7.30 2.87 0.50 - 0.75 7.36 3.86 0.40 - 0.60 7.41 5.70 0.05 - 0.10 7.10 2.72 0.05 - 0.10 7.16 0.44 0.05 - 0.10 0.50 0.50 0.75 7.30 0.40 0.05 0.10 7.36 3.80 0.00 - 0.30 7.41 5.70 0.05 - 0.10 7.10 0.27 0.05 - 0.10 7.10 0.27 0.05 - 0.10 7.10 0.27 0.05 - 0.10 7.10 0.27 0.05 - 0.10 7.10 0.27 0.05 - 0.10 7.10 0.27 0.05 - 0.10 7.10 0.05 - 0.10 7.10 0.27 0.05 - 0.10 7.10 0.28 0.15 - 0.10 7.10 0.28 0.15 - 0.10 7.10 0.20 7.21 0.05 - 0.10 0.02 7.30 0.43 0.05 - 0.10 0.02 7.36 0.05 0. | | | | | | | | | | | | | | | | | | |
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| .710 .236 .005010 .716 .264 .020040 .720 .639 .005010 .730 .280 .010020 .736 .380 .020030 .741 .570 .020040 .710 .238 .005010 .716 .405 .025042 .720 .642 .030040 .730 .401 .005010 .736 .386 .040060 .741 .640 .005010 .710 .228 .005010 .716 .474 .006022 .721 .318 .030042 .730 .415 .005010 .736 .504 .007016 .742 .149 .005010 .710 .289 .015125 .717 .223 .050070 .721 .530 .010020 .730 .433 .025040 .736 .516 .030050 .742 .226 .075100 .710 .288 .015125 .717 .223 .050070 .721 .530 .010020 | .710 | .201 | .050070 | .715 | .535 | .025040 | .720 | .612 | .005010 | | | .007016 | .736 | .313 | .040060 | I | .531 | .050070 |
| .710 .238 .005010 .716 .405 .025042 .720 .642 .030040 .730 .287 .050075 .736 .386 .040060 .741 .640 .005010 .710 .252 .008016 .716 .474 .030050 .721 .250 .050075 .730 .401 .005010 .736 .467 .005010 .741 .690 .005010 .710 .278 .005010 .716 .515 .040062 .721 .318 .030042 .730 .415 .005010 .736 .516 .030010 .742 .226 .075100 .710 .288 .015125 .717 .223 .050070 .721 .530 .010020 .730 .460 .010020 .736 .565 .005010 .742 .251 .040060 .710 .315 .005010 .717 .293 .010020 .721 .601 .020040 | | | | 1 | | | | | | | .238 | | | | | I | | .030050 |
| .710 .252 .008016 .716 .474 .030050 .721 .250 .050075 .730 .401 .005010 .736 .467 .005010 .741 .690 .005010 .710 .278 .005010 .716 .515 .040062 .721 .318 .030042 .730 .415 .005010 .736 .504 .007016 .742 .149 .005010 .710 .279 .005010 .716 .624 .030048 .721 .404 .062078 .730 .433 .025040 .736 .516 .030050 .742 .226 .075010 .710 .288 .015125 .717 .223 .050070 .721 .530 .010020 .730 .460 .010020 .736 .565 .005010 .742 .251 .040060 .710 .308 .100120 .717 .290 .030050 .721 .594 .016025 .730 .475 .020040 .736 .555 .005010 .742 .251 .040060 .710 .315 .005010 .717 .293 .010020 .721 .601 .020 .040 .730 .480 .050070 .736 .555 .005 .015025 .742 .346 .020030 .710 .317 .005010 .717 .318 .025040 .722 .221 .080100 .730 .486 .020040 .736 .595 .040062 .742 .380 .050050 .710 .318 .010015 .717 .322 .032050 .722 .233 .050075 .730 .482 .030050 .736 .633 .015030 .742 .380 .030050 .710 .330 .010020 .717 .440 .080100 .722 .265 .050075 .730 .506 .040060 .736 .650 .025040 .742 .380 .030050 .710 .354 .008000 .717 .440 .080100 .722 .314 .050075 .730 .519 .050070 .737 .318 .015025 .742 .389 .042062 .710 .354 .008000 .717 .447 .005010 .722 .324 .030050 .730 .511 .005010 .737 .364 .005010 .742 .434 .025060 .710 .473 .015070 .717 .478 .005010 .722 .324 .030050 .730 .615 .020 .030 .737 .419 .030080 .742 .443 .025060 .710 .473 .015010 .717 .478 .005010 .722 .348 .030050 .731 .206 .030050 .737 .555 .005070 .742 .443 .025060 .710 .474 .005010 .717 .515 .050075 .722 .550 .072090 .731 .426 .010020 .737 .555 .005070 .742 .436 .005010 .742 .446 .005010 .742 .446 .005010 .742 .446 .005010 .742 .450 .005010 .742 .556 .005075 .722 .550 .0072090 .731 .446 .005080 .737 .555 .005070 .742 .474 .08000 | | | | | | | | | | | | | | | | | | |
| .710 .278 .005010 .716 .515 .040062 .721 .318 .030042 .730 .415 .005010 .736 .504 .007016 .742 .149 .005010 .710 .279 .005010 .716 .624 .030048 .721 .404 .062078 .730 .433 .025040 .736 .516 .030050 .742 .226 .075100 .710 .288 .015125 .717 .223 .050070 .721 .530 .010020 .730 .480 .010020 .736 .565 .005010 .742 .251 .040060 .710 .315 .005010 .717 .293 .010020 .721 .594 .016025 .730 .480 .050070 .736 .595 .040062 .742 .346 .020030 .710 .318 .010015 .717 .318 .025040 .722 .221 .080 | | | | | | | | | | | | | | | | I | | .005010 |
| .710 .279 .005010 .716 .624 .030048 .721 .404 .062078 .730 .433 .025040 .736 .516 .030050 .742 .226 .075100 .710 .288 .015125 .717 .223 .050070 .721 .530 .010020 .730 .460 .010020 .736 .565 .005010 .742 .251 .040060 .710 .315 .005010 .717 .293 .010020 .721 .601 .020040 .730 .480 .050070 .736 .595 .040062 .742 .360 .050030 .710 .315 .005010 .717 .318 .025040 .722 .221 .080100 .730 .480 .020040 .736 .601 .015025 .742 .360 .050070 .710 .318 .010015 .717 .438 .030050 .722 .233 .050 | .710 | | .005010 | 1 | | .040062 | | | | | | | | | .007016 | I | | .005010 |
| .710 .308 .100120 .717 .290 .030050 .721 .594 .016025 .730 .475 .020040 .736 .578 .015025 .742 .346 .020030 .710 .315 .005010 .717 .293 .010020 .721 .601 .020040 .730 .480 .050070 .736 .595 .040062 .742 .360 .050060 .710 .317 .005010 .717 .318 .025040 .722 .221 .080100 .730 .486 .020040 .736 .601 .015030 .742 .378 .080104 .710 .338 .010015 .717 .322 .032050 .722 .233 .050070 .730 .492 .030050 .736 .633 .015030 .742 .380 .030050 .710 .330 .010020 .717 .438 .030050 .722 .265 .050075 .730 .506 .040060 .736 .650 .025040 .742 .380 .030050 .710 .334 .020030 .717 .440 .080100 .722 .314 .050075 .730 .506 .040060 .736 .650 .025040 .742 .387 .100135 .710 .354 .008020 .717 .447 .005010 .722 .324 .030050 .730 .519 .050070 .737 .318 .015025 .742 .339 .042062 .710 .376 .020 .040 .717 .473 .015030 .722 .324 .030050 .730 .519 .050010 .737 .364 .005010 .742 .443 .025060 .710 .413 .050072 .717 .476 .025040 .722 .376 .100125 .730 .630 .030042 .737 .503 .060 .083 .742 .466 .060075 .710 .473 .010020 .717 .478 .005010 .722 .376 .100125 .730 .630 .030042 .737 .503 .060 .083 .742 .466 .060075 .710 .473 .010020 .717 .478 .005010 .722 .481 .050060 .731 .206 .030050 .737 .505 .005070 .742 .474 .080100 .710 .473 .010020 .717 .548 .005010 .722 .515 .010020 .731 .416 .005080 .737 .537 .537 .030050 .742 .566 .025040 .710 .475 .015030 .717 .548 .005010 .722 .515 .010020 .731 .446 .010020 .737 .550 .025040 .742 .566 .025040 .710 .475 .015030 .717 .548 .005010 .722 .515 .010020 .731 .426 .010020 .737 .550 .025040 .742 .566 .025040 .710 .475 .015030 .717 .548 .005010 .722 .515 .010020 .731 .426 .010020 .738 .342 .042060 .742 .593 .025040 .740 .593 .025040 .742 .593 .025040 .742 .593 .025040 . | | | | 1 | | | .721 | | .062078 | .730 | .433 | .025040 | | | | I | | .075100 |
| .710 .315 .005010 .717 .293 .010020 .721 .601 .020040 .730 .480 .050070 .736 .595 .040062 .742 .360 .050060 .710 .317 .005010 .717 .318 .025040 .722 .221 .080100 .730 .486 .020040 .736 .601 .015030 .742 .378 .080104 .710 .318 .010015 .717 .322 .050 .722 .233 .050075 .730 .492 .030050 .736 .633 .015030 .742 .380 .030050 .710 .342 .020030 .717 .438 .030050 .722 .255 .050075 .730 .506 .040060 .736 .650 .025040 .742 .387 .100050 .710 .342 .020030 .717 .444 .080010 .722 .320 .050075< | | | | | | | | | | | | | | | | | | |
| .710 .317 .005010 .717 .318 .025040 .722 .221 .080100 .730 .486 .020040 .736 .601 .015030 .742 .378 .080104 .710 .318 .010015 .717 .322 .032050 .722 .233 .050070 .730 .492 .030050 .736 .633 .015030 .742 .380 .030050 .710 .330 .010020 .717 .438 .030050 .722 .265 .050075 .730 .506 .040060 .736 .650 .025040 .742 .387 .100135 .710 .342 .020030 .717 .447 .005010 .722 .320 .050075 .730 .519 .050070 .737 .318 .015025 .742 .389 .042062 .710 .354 .008020 .717 .447 .005010 .722 .324 .030 | | | | | | | | | | | | | | | | I | | |
| .710 .318 .010015 .717 .322 .032050 .722 .233 .050070 .730 .492 .030050 .736 .633 .015030 .742 .380 .030050 .710 .330 .010020 .717 .438 .030050 .722 .265 .050075 .730 .506 .040060 .736 .650 .025040 .742 .387 .100135 .710 .342 .020030 .717 .440 .080100 .722 .314 .050075 .730 .519 .050070 .737 .318 .015025 .742 .389 .042062 .710 .354 .008020 .717 .447 .005010 .722 .320 .050080 .730 .571 .005010 .737 .364 .005010 .742 .426 .050070 .710 .376 .020040 .717 .473 .015030 .722 .324 .030050 .730 .615 .020030 .737 .364 .005010 .742 .443 .025060 .710 .413 .050072 .717 .476 .025040 .722 .376 .100125 .730 .630 .030042 .737 .503 .060 .83 .742 .443 .025060 .710 .454 .005010 .717 .478 .005010 .722 .481 .050060 .731 .206 .030050 .737 .505 .005070 .742 .474 .080100 .710 .474 .005010 .717 .548 .005010 .722 .515 .010020 .731 .410 .070090 .737 .557 .030 .055 .010 .742 .517 .005030 .710 .475 .015030 .717 .548 .005010 .722 .540 .078090 .731 .426 .010020 .737 .550 .025040 .742 .566 .025040 .710 .497 .030050 .718 .131 .030050 .722 .540 .078090 .731 .426 .010020 .737 .550 .025040 .742 .566 .025040 .710 .497 .030050 .718 .131 .030050 .722 .540 .078090 .731 .426 .010020 .738 .342 .042060 .742 .593 .025040 .710 .497 .030050 .718 .131 .030050 .722 .540 .078090 .731 .426 .010020 .738 .342 .042060 .742 .593 .025040 .710 .497 .030050 .718 .131 .030050 .722 .540 .078090 .731 .426 .010020 .738 .342 .042060 .742 .593 .025040 .710 .497 .030050 .718 .131 .030050 .722 .540 .078090 .731 .426 .010020 .738 .342 .042060 .742 .593 .025040 .710 .497 .030050 .718 .131 .030050 .722 .540 .078090 .731 .426 .010020 .738 .342 .042060 .742 .593 .025040 .710 .710 .497 .030050 .718 .131 .030050 .722 .540 .078 - | | | | | | | | | | | | | | | | I | | .080104 |
| .710 .342 .020030 | | | | .717 | .322 | .032050 | .722 | .233 | .050070 | .730 | .492 | .030050 | | | | I | | .030050 |
| .710 .354 .008020 .717 .447 .005010 .722 .320 .050080 .730 .571 .005010 .737 .364 .005010 .742 .426 .050070 .710 .376 .020040 .717 .473 .015030 .722 .324 .030050 .730 .615 .020030 .737 .419 .030060 .742 .443 .025060 .710 .413 .050072 .717 .476 .025040 .722 .376 .100125 .730 .630 .030042 .737 .503 .060083 .742 .466 .060075 .710 .454 .005010 .717 .478 .005010 .722 .481 .050060 .731 .206 .030050 .737 .505 .005070 .742 .474 .080100 .710 .474 .005010 .717 .548 .005010 .722 .515 .010020 .731 .416 .005080 .737 .537 .537 .030050 .742 .517 .005030 .710 .475 .015030 .717 .548 .005010 .722 .540 .078090 .731 .426 .010020 .731 .426 .010020 .737 .550 .025040 .742 .566 .025040 .710 .479 .030050 .718 .131 .030050 .722 .636 .010020 .731 .433 .030050 .738 .342 .042060 .742 .593 .025040 .710 .497 .030050 .718 .131 .030050 .722 .636 .010020 .731 .433 .030050 .738 .342 .042060 .742 .593 .025040 .740 .897 .030050 .742 .593 .025040 .742 .593 .025040 .740 .497 .030050 .742 .593 .025040 .742 .442 .742 .442 .442 .442 .442 .442 | | | | | | | | | | | | | | | | | | .100135 |
| .710 .376 .020040 .717 .473 .015030 .722 .324 .030050 .730 .615 .020030 .737 .419 .030060 .742 .443 .025060 .710 .413 .050072 .717 .476 .025040 .722 .376 .100125 .730 .630 .030042 .737 .503 .060083 .742 .466 .060075 .710 .454 .005010 .717 .478 .005010 .722 .481 .050060 .731 .206 .030050 .737 .505 .005070 .742 .474 .080100 .710 .473 .010020 .717 .515 .050075 .722 .500 .072090 .731 .410 .070090 .737 .537 .030050 .742 .502 .606 .075 .700 .700 .700 .700 .700 .700 .700 | | | | 1 | | | | | | | | | | | | I | | |
| .710 .413 .050072 .717 .476 .025040 .722 .376 .100125 .730 .630 .030042 .737 .503 .060083 .742 .466 .060075 .710 .454 .005010 .717 .478 .005010 .722 .481 .050060 .731 .206 .030050 .737 .505 .005070 .742 .474 .080100 .710 .473 .010020 .717 .515 .050075 .722 .500 .072090 .731 .410 .070090 .737 .537 .537 .030050 .742 .502 .060070 .710 .474 .005010 .717 .548 .005010 .722 .515 .010020 .731 .416 .005080 .737 .546 .005010 .742 .517 .005030 .710 .475 .015030 .717 .628 .005010 .722 .540 .078090 .731 .426 .010020 .731 .550 .025040 .742 .566 .025040 .710 .497 .030050 .718 .131 .030050 .722 .636 .010020 .731 .433 .030050 .738 .342 .042060 .742 .593 .025040 | | | | 1 | | | | | | | | | | | | I | | .025060 |
| .710 .473 .010020 .717 .515 .050075 .722 .500 .072090 .731 .410 .070090 .737 .537 .030050 .742 .502 .060070 .710 .474 .005010 .717 .548 .005010 .722 .515 .010020 .731 .416 .005080 .737 .546 .005010 .742 .517 .005030 .710 .475 .015030 .717 .628 .005010 .722 .540 .078090 .731 .426 .010020 .731 .426 .010020 .737 .550 .025040 .742 .566 .025040 .710 .497 .030050 .718 .131 .030050 .722 .636 .010020 .731 .433 .030050 .738 .342 .042060 .742 .593 .025040 | .710 | .413 | .050072 | | .476 | .025040 | .722 | | .100125 | .730 | .630 | .030042 | .737 | .503 | .060083 | .742 | | .060075 |
| .710 .474 .005010 .717 .548 .005010 .722 .515 .010020 .731 .416 .005080 .737 .546 .005010 .742 .517 .005030 .710 .475 .015030 .717 .628 .005010 .722 .540 .078090 .731 .426 .010020 .737 .550 .025040 .742 .566 .025040 .710 .497 .030050 .718 .131 .030050 .722 .636 .010020 .731 .433 .030050 .738 .342 .042060 .742 .593 .025040 | | | | | | | | | | | | | | | | | | .080100 |
| .710 .475 .015030 .717 .628 .005010 .722 .540 .078090 .731 .426 .010020 .737 .550 .025040 .742 .566 .025040 .710 .497 .030050 .718 .131 .030050 .722 .636 .010020 .731 .433 .030050 .738 .342 .042060 .742 .593 .025040 | | | | 1 | | | | | | | | | | | | | | |
| .710 .497 .030050 .718 .131 .030050 .722 .636 .010020 .731 .433 .030050 .738 .342 .042060 .742 .593 .025040 | | | | | | | | | | | | | | | | I | | |
| | | | | 1 | | | | | | | | | | | | I | | .025040 |
| | | | | 1 | | | | | | .731 | | | | | | I | | .010020 |

| No. Column Colu | | | 01 1 | | | 01 4 | | | 01 4 | 140 | 100 | LING CH | Andi | - 1 01 | | | OIZE | |
|--|------|------|---------|--------------|------|---------|------|------|---------|-------|----------|-----------|------|--------|---------|------|------|---------|
| 144 | O.D. | I.D. | | O.D. | I.D. | | O.D. | I.D. | | O.D. | I.D. | | O.D. | I.D. | | O.D. | I.D. | |
| 14 | .743 | .144 | | .746 | .319 | | 748 | 461 | | .749 | .609 | | .750 | .288 | | .750 | .500 | |
| 14. 14. 15. 15. 14. | | | | 1 | | | | | | | | | | | | | | |
| 14 | | | | .746 | .386 | .060070 | .748 | .473 | .005015 | .749 | .626 | .040060 | | | | .750 | .503 | .005020 |
| 143 145 | | | | ı | | | | | | | | | | | | l | | |
| 343 351 050-010 746 489 090-000 748 500 000-000 740 500 000-000 740 500 740 500 750 311 000-000 740 311 000-000 740 311 000-000 740 310 000-000 | | | | | | | | | | | | | | | | | | |
| 143 154 155 156 156 157 | | | | ı | | | | | | | | | | | | l | | |
| 1885 | | | | ı | | | | | | | | | | | | | | |
| 148 156 | | | | ı | | | | | | .,,43 | .003 | .000 .010 | | | | l | | |
| 743 623 600 600 600 740 490 605 605 748 573 605 605 748 573 605 748 | .743 | .572 | .040060 | .746 | .445 | .040060 | .748 | .553 | .005010 | | | | .750 | .316 | .007125 | .750 | .513 | .010075 |
| 244 187 100 - 120 746 281 105 - 900 748 282 285 - 900 748 282 285 - 900 748 282 285 - 900 748 282 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 285 - 900 740 285 | | | | ı | | | | | | | | | | | | l | | |
| 244 187 100 - 120 746 281 105 - 900 748 282 285 - 900 748 282 285 - 900 748 282 285 - 900 748 282 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 285 - 900 740 285 | | | | ı | | | | | | | 76 | | | | | l | | |
| 244 187 100 - 120 746 281 105 - 900 748 282 285 - 900 748 282 285 - 900 748 282 285 - 900 748 282 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 - 900 740 285 285 285 285 - 900 740 285 | | | | ı | | | | | | - / | <i> </i> | JU | | | | l | | |
| 144 236 030 050 076 231 031 032 035 | | | | ı | | | | | | | | | | | | l | | |
| 244 370 575 575 575 575 576 | | .215 | | | | | | | | .750 | .063 | .025048 | .750 | .325 | | | | |
| 744 3870 015 - 030 746 570 025 - 048 748 670 005 - 015 750 000 000 - 070 760 300 007 - 070 760 580 001 - 070 560 005 - 070 760 330 005 - 010 770 560 005 - 070 760 015 - 000 760 015 - 000 760 015 - 000 760 010 - 000 000 - 000 760 010 - 000 000 - 000 770 010 - 000 760 010 - 000 000 - 000 770 010 - 000 < | | | | .746 | | | .748 | .634 | .005030 | | | | | | | l | | |
| 744 383 035 055 706 386 085 085 075 085 750 102 175 025 750 331 085 005 076 331 085 005 076 035 085 <td></td> <td></td> <td></td> <td>ı</td> <td></td> <td>l</td> <td></td> <td></td> | | | | ı | | | | | | | | | | | | l | | |
| 744 403 001 -010 1-048 146 | | | | ı | | | | | | | | | | | | l | | |
| 244 403 0.03 0.08 0.06 0.05 0 | | | | | | | | | | | | | | | | | | |
| 744 449 089 080 171 131 105 089 178 178 178 080 080 179 180 080 179 180 080 179 180 080 170 750 550 201 080 100 080 170 750 553 010 080 170 180 080 100 750 283 080 100 750 283 080 100 283 080 100 283 080 100 080 <td></td> <td></td> <td></td> <td>ı</td> <td></td> <td>l</td> <td></td> <td></td> | | | | ı | | | | | | | | | | | | l | | |
| 744 413 105 - 105 747 114 025 - 040 749 160 000 - 000 750 128 005 - 010 750 562 00 - 050 760 <th< td=""><td></td><td></td><td></td><td>ı</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<> | | | | ı | | | | | | | | | | | | | | |
| 744 489 680 680 747 214 685 680 749 181 600 690 750 750 148 600 750 750 350 607 600 607 600 600 740 740 750 | | | | ı | .131 | .025040 | .749 | | | | | | | | | .750 | .562 | .040060 |
| 244 450 050 - 075 747 235 005 - 010 749 190 010 - 020 750 146 010 - 075 750 356 070 - 080 750 556 011 - 020 744 500 005 - 010 747 315 005 - 010 749 200 020 - 020 020 - 020 750 140 010 - 020 750 306 007 - 075 320 005 - 076 750 560 007 - 020 744 507 040 050 074 290 005 - 000 750 130 005 - 010 750 582 003 - 000 007 741 137 005 - 010 747 377 005 - 010 743 005 - 010 743 200 000 - 000 778 168 005 - 010 750 374 005 - 010 743 200 000 - 000 778 168 005 - 010 750 374 005 - 010 750 374 005 - 010 750 374 005 - 010 750 374 005 - 010 | | | | | | | | | | | | | | | | | | |
| 744 500 005 005 747 261 016 202 749 194 090 125 750 149 010 202 062 070 100 200 090 750 384 005 001 750 589 005 006 006 747 316 030 006 749 203 125 170 150 005 000 006 <td></td> <td></td> <td></td> <td>ı</td> <td></td> | | | | ı | | | | | | | | | | | | | | |
| 744 504 604 605 607 747 315 608 601 749 200 602 602 750 150 605 602 750 362 605 605 605 602 605 | | | | ı | | | | | | | | | | | | l | | |
| 744 550 Mod - 0.050 747 316 0.30 0.49 903 1.55 1.50 0.05 .00 .750 350 .005 <th< td=""><td></td><td></td><td></td><td>ı</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>l</td><td></td><td></td></th<> | | | | ı | | | | | | | | | | | | l | | |
| 7.44 552 010 - 0.00 747 224 020 - 0.00 749 220 105 - 105 155 156 750 750 156 005 - 0.00 750 0.00 0. | .744 | .507 | .040075 | .747 | .316 | .030040 | | | | .750 | .150 | .005020 | .750 | .364 | | l | .582 | |
| 744 5861 005 - 010 747 378 010 - 020 749 221 040 - 0.00 750 1750 377 005 - 010 750 378 005 - 010 750 628 005 - 001 750 628 005 - 001 750 628 005 - 001 750 628 005 - 001 750 628 005 - 001 750 628 005 - 001 750 628 005 - 002 750 128 005 - 001 750 379 005 - 010 750 030 005 - 001 750 379 005 - 010 750 030 005 - 002 750 030 005 - 002 750 030 005 - 002 750 030 005 - 002 750 030 005 - 002 750 138 005 - 002 750 030 005 - 002 750 138 005 - 002 750 038 005 - 002 750 038 005 - 002 750 038 005 - 002 750 038 005 - 002 750 038 005 - 002 <t< td=""><td></td><td></td><td></td><td>ı</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>l</td><td></td><td></td></t<> | | | | ı | | | | | | | | | | | | l | | |
| 744 699 005 - 010 747 379 010 - 010 749 229 160 - 101 750 162 015 - 010 750 175 380 085 - 050 015 - 040 747 380 008 - 010 749 238 010 - 020 750 172 010 - 020 750 172 010 - 020 750 379 015 - 040 750 030 005 - 060 005 - 060 744 143 035 - 055 747 468 030 - 050 749 257 072 - 120 750 186 005 - 015 750 381 048 - 020 750 080 370 080 030 - 020 745 186 005 - 010 750 188 005 - 010 750 381 005 - 020 750 030 005 - 020 740 030 006 - 010 740 280 005 - 010 740 280 005 - 010 740 280 005 - 010 740 280 005 - 010 740 005 006 - 010 740 006 0 | | | | ı | | | | | | | | | | | | l | | |
| 745 0.95 0.05010 747 380 .008010 749 237 0.05010 750 .028 .005030 . | | | | ı | | | | | | | | | | | | l | | |
| 745 | | | | ı | | | | | | | | | | | | | | |
| 745 142 0.32 - 0.550 747 387 105 - 0.150 749 252 0.72 - 1.00 750 184 0.03 - 0.550 750 381 0.04 - 0.060 750 6.34 0.05 - 0.010 745 1184 .010 - 0.020 747 478 0.08 .012 749 288 .030 - 0.040 750 .188 .006 - 0.083 .750 .383 .006 - 0.020 .750 .640 .010 - 0.020 745 191 0.02 - 0.060 .747 .478 .005 - 0.10 .749 .280 .005 - 0.00 .750 .190 .015 - 1.25 .750 .848 .005 - 0.00 .750 .191 .050 - 0.75 .750 .385 .005 - 0.00 .750 .015 .005 - 0.00 .750 .188 .005 - 0.00 .750 .828 .025 - 0.00 .750 .015 .005 - 0.00 .750 .191 .050 - 0.00 .750 .838 .055 - 0.00 .750 .182 .050 - 0.00 .750 .192 .050 - 0.00 .750 <td></td> | | | | | | | | | | | | | | | | | | |
| 745 184 010 - 020 747 475 008 - 015 749 288 030 - 040 750 383 060 - 083 750 689 015 - 020 745 191 025 - 035 747 491 005 - 010 749 283 030 - 050 750 180 005 - 010 750 640 010 - 020 745 193 025 - 035 747 491 005 - 010 730 020 005 - 070 747 550 010 - 125 749 222 005 - 010 750 188 005 - 070 750 380 005 - 070 750 681 040 - 020 025 - 040 750 081 040 - 020 025 - 040 750 081 040 - 020 </td <td>.745</td> <td>.126</td> <td>.032050</td> <td>ı</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>.750</td> <td>.184</td> <td>.030050</td> <td>.750</td> <td>.381</td> <td>.048062</td> <td>l</td> <td></td> <td></td> | .745 | .126 | .032050 | ı | | | | | | .750 | .184 | .030050 | .750 | .381 | .048062 | l | | |
| 145 190 | | | | ı | | | | | | | | | | | | 1 | | |
| 191 | | | | ı | | | | | | | | | | | | 1 | | |
| 145 | | | | | | | | | | | | | | | | | | |
| 745 200 0.50 0.707 747 510 0.15 0.300 749 286 10.5 1.20 750 1.81 0.05 0.077 750 3.88 0.55 0.707 750 6.81 0.40 0.05 0.074 2.14 0.15 0.05 0.10 0.202 745 2.14 0.05 0.010 0.202 749 313 0.05 0.010 750 1.95 0.05 0.10 0.75 750 3.91 0.077 750 0.05 0.070 0.75 0.05 0.070 | | | | ı | | | | | | | | | | | | | | |
| 745 224 0.04 0.06 775 561 0.01 750 1.94 0.04 0.08 750 391 0.07 1.05 750 0.09 1.05 1.05 0.05 0.01 750 1.95 0.05 -010 750 0.09 0.05 0.00 750 0.09 0.05 0.00 750 0.09 0.05 0.00 750 0.09 750 0.05 0.00 750 0.09 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 0.00 750 0.00 750 0.00 750 0.00 750 | | | | ı | | | | | | | | | | | | 1 | | |
| 745 244 005 - 010 747 566 050 - 070 749 316 005 - 010 750 195 005 - 105 750 391 050 - 070 750 070 010 - 020 745 255 032 - 050 .747 681 005 - 010 .749 .322 .05 - 010 .750 .195 .095 - 010 .750 .394 .000 - 105 .200 .030 - 080 .750 .395 .020 - 0.00 .751 .128 .030 - 080 .751 .128 .050 - 0.07 .748 .136 .031 - 042 .749 .330 .080 - 0.90 .750 .200 .030 - 080 .750 .402 .040 - 0.00 .751 .402 .080 - 0.00 .750 .402 .042 - 0.00 .751 .180 .000000 .751 .180 .000000 .751 .180 .000000 .751 .180 .000000 .751 .180 .000000 .750 .000 .000 .751 .180 .000000 .751 .181 </td <td>.745</td> <td>.214</td> <td>.015030</td> <td>.747</td> <td>.517</td> <td>.010020</td> <td></td> <td></td> <td>.005010</td> <td>.750</td> <td>.193</td> <td>.010075</td> <td>.750</td> <td>.389</td> <td>.050070</td> <td>.750</td> <td>.691</td> <td>.010020</td> | .745 | .214 | .015030 | .747 | .517 | .010020 | | | .005010 | .750 | .193 | .010075 | .750 | .389 | .050070 | .750 | .691 | .010020 |
| 745 255 0.032 0.050 0.074 0.05 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | | | | | | | | | | | | | | |
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| | .745 | .320 | | .748 | .147 | .062075 | .749 | .350 | .005010 | .750 | .204 | .050070 | .750 | .406 | .010030 | .751 | .168 | |
| .745 | | | | ı | | | | | | | | | | | | 1 | | |
| .745 .438 .020036 .748 .237 .005010 .749 .379 .036060 .750 .218 .005010 .750 .418 .080100 .751 .188 .060083 .745 .455 .032050 .748 .238 .005010 .759 .386 .005010 .750 .220 .005010 .750 .426 .005010 .751 .194 .090125 .745 .509 .005010 .748 .241 .040060 .749 .397 .015025 .750 .232 .050075 .750 .436 .040062 .751 .200 .042062 .745 .510 .020040 .748 .252 .055010 .749 .403 .005010 .750 .436 .040060 .751 .200 .042062 .745 .568 .010020 .748 .252 .005010 .749 .427 .040060 .750 .251 .005 | | | | ı | | | | | | | | | | | | 1 | | |
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| .745 | | | | l | | | | | | | | | | | | | | |
| .745 | | | | ı | | | | | | | | .005010 | | | | 1 | | |
| .745 .541 .010025 .748 .252 .005010 .749 .403 .005008 .750 .250 .005062 .750 .440 .080104 .751 .205 .060080 .745 .558 .010020 .748 .254 .060090 .749 .408 .005010 .750 .251 .005030 .750 .441 .060090 .751 .206 .040050 .745 .562 .020030 .748 .255 .005010 .749 .424 .040060 .750 .252 .005080 .750 .441 .005090 .751 .218 .020050 .745 .571 .005010 .748 .315 .005010 .749 .438 .010020 .750 .254 .005100 .750 .446 .015030 .751 .239 .005010 .745 .576 .042060 .748 .316 .005100 .749 .446 .005 | | | .005010 | .748 | .241 | .040060 | .749 | .397 | .015025 | | | | | | .005010 | .751 | .200 | .042062 |
| .745 | | | | ı | | | | | | | | | | | | 1 | | |
| .745 .560 .005010 .748 .255 .005010 .749 .424 .040060 .750 .252 .005080 .750 .442 .005090 .751 .218 .020050 .745 .562 .020030 .748 .259 .008016 .749 .437 .042060 .750 .253 .025040 .750 .444 .015030 .751 .229 .015030 .745 .576 .042060 .748 .316 .005125 .749 .440 .005010 .750 .256 .040060 .750 .446 .015030 .751 .229 .005010 .745 .591 .030050 .748 .316 .126190 .749 .445 .005015 .750 .257 .090120 .750 .448 .005010 .751 .242 .080105 .745 .599 .005010 .748 .319 .005010 .749 .471 .050 | | | | | | | | | | | | | | | | | | |
| .745 .562 .020030 .748 .259 .008016 .749 .437 .042060 .750 .253 .025040 .750 .444 .015030 .751 .229 .015030 .745 .576 .042060 .748 .316 .005105 .749 .440 .005070 .750 .256 .040060 .750 .446 .015030 .751 .239 .005010 .745 .576 .042060 .748 .316 .005125 .749 .440 .005070 .750 .256 .040060 .750 .448 .005010 .750 .481 .005010 .750 .484 .005010 .750 .481 .005010 .751 .242 .080070 .745 .599 .005010 .748 .431 .005010 .749 .448 .005070 .750 .259 .005032 .750 .451 .036050 .751 .255 .050070 <td></td> <td></td> <td></td> <td>ı</td> <td></td> <td>1</td> <td></td> <td></td> | | | | ı | | | | | | | | | | | | 1 | | |
| .745 .571 .005010 .748 .315 .005010 .749 .438 .010020 .750 .254 .005100 .750 .445 .030050 .751 .239 .005010 .745 .576 .042060 .748 .316 .005125 .749 .440 .005070 .750 .256 .040060 .750 .446 .015030 .751 .242 .080105 .745 .591 .030050 .748 .317 .055010 .749 .445 .005010 .750 .488 .005010 .751 .244 .050010 .745 .699 .005010 .748 .319 .005010 .749 .471 .050070 .750 .260 .090125 .750 .451 .036050 .751 .255 .050070 .745 .662 .040060 .748 .319 .005010 .749 .471 .050070 .750 .261 .040 | | | | ı | | | | | | | | | | | | 1 | | |
| .745 | | | | ı | | | | | | | | | | | | 1 | | |
| .745 .599 .005010 .748 .317 .005010 .749 .468 .005010 .750 .259 .005032 .750 .450 .025042 .751 .250 .080140 .745 .605 .005010 .748 .319 .005010 .749 .471 .050070 .750 .260 .090125 .750 .451 .036050 .751 .255 .050070 .745 .626 .040060 .748 .322 .005010 .749 .474 .050070 .750 .261 .040080 .750 .454 .042125 .751 .257 .050070 .745 .661 .010015 .748 .328 .105134 .749 .499 .020080 .750 .264 .005104 .750 .457 .070090 .751 .265 .050015 .745 .693 .010020 .748 .357 .070090 .749 .503 .005 | | | | i | | .005125 | .749 | .440 | .005070 | | | | | | | | | |
| .745 .605 .005010 .748 .319 .005010 .749 .471 .050070 .750 .260 .090125 .750 .451 .036050 .751 .255 .050070 .745 .626 .040060 .748 .322 .005010 .749 .474 .050070 .750 .261 .040080 .750 .454 .042125 .751 .257 .050070 .745 .661 .010015 .748 .328 .105134 .749 .499 .020080 .750 .264 .005104 .750 .457 .070090 .751 .265 .005015 .746 .100 .032050 .748 .357 .070090 .749 .504 .090120 .750 .266 .072135 .750 .468 .010125 .751 .266 .032050 .746 .125 .015030 .748 .376 .005010 .749 .507 .008 | | | | ı | | | | | | | | | | | | 1 | | |
| .745 .626 .040060 .748 .322 .005010 .749 .474 .050070 .750 .261 .040080 .750 .454 .042125 .751 .257 .050070 .745 .661 .010015 .748 .328 .105134 .749 .499 .020080 .750 .264 .005104 .750 .457 .070090 .751 .265 .005015 .745 .693 .010020 .748 .331 .015030 .749 .503 .005010 .750 .265 .050120 .750 .468 .010125 .751 .266 .032050 .746 .100 .032050 .748 .376 .005010 .749 .507 .098016 .750 .266 .072135 .750 .470 .020040 .751 .272 .100125 .746 .125 .015030 .748 .377 .156187 .749 .517 .005 | | | | ı | | | | | | | | | | | | | | |
| .745 .661 .010015 .748 .328 .105134 .749 .499 .020080 .750 .264 .005104 .750 .457 .070090 .751 .265 .005015 .745 .693 .010020 .748 .331 .015030 .749 .503 .005010 .750 .265 .050120 .750 .468 .010125 .751 .266 .032050 .746 .100 .032050 .748 .357 .070090 .749 .504 .090120 .750 .266 .072135 .750 .470 .020040 .751 .272 .100125 .746 .125 .015030 .748 .376 .005010 .749 .507 .008016 .750 .267 .010025 .750 .472 .016025 .751 .296 .050070 .746 .166 .050075 .748 .377 .156187 .749 .528 .005 | | | | ı | | | | | | | | | | | | | | |
| .745 | | | | ı | | | | | | | | | | | | 1 | | |
| .746 .125 .015030 | | | | i | | | | | | | | | | | | | | |
| .746 .166 .050075 .748 .377 .156187 .749 .517 .005010 .750 .268 .010080 .750 .476 .060080 .751 .303 .005010 .746 .200 .060080 .748 .384 .020040 .749 .528 .005010 .750 .270 .005010 .750 .477 .005010 .751 .315 .015030 .746 .253 .040060 .748 .385 .005010 .749 .531 .005010 .750 .277 .005010 .750 .478 .100125 .751 .322 .050075 .746 .260 .005010 .748 .393 .060080 .749 .562 .010020 .750 .281 .005078 .750 .480 .030050 .751 .322 .050030 .746 .285 .005010 .748 .397 .005010 .749 .563 .005 | | | | | | | | | | | | | | | | | | |
| .746 .200 .060080 .748 .384 .020040 .749 .528 .005010 .750 .270 .005010 .750 .477 .005010 .751 .315 .015030 .746 .253 .040060 .748 .385 .005010 .749 .531 .005010 .750 .277 .005010 .750 .478 .100125 .751 .322 .050075 .746 .260 .005010 .748 .393 .060080 .749 .562 .010020 .750 .281 .005078 .750 .480 .030050 .751 .325 .015030 .746 .285 .005010 .748 .397 .005010 .749 .563 .005010 .750 .282 .105035 .750 .491 .015030 .751 .331 .075093 .746 .316 .005030 .748 .400 .005010 .749 .594 .010 | | | | ı | | | | | | | | | | | | 1 | | |
| .746 .253 .040060 | | | | | | | | | | | | | | | | 1 | | |
| .746 .260 .005010 .748 .393 .060080 .749 .562 .010020 .750 .281 .005078 .750 .480 .030050 .751 .325 .015030 .746 .285 .005010 .748 .397 .005010 .749 .563 .005010 .750 .282 .105135 .750 .491 .015030 .751 .331 .075093 .746 .316 .005030 .748 .400 .005010 .749 .594 .010020 .750 .283 .170190 .750 .496 .040060 .751 .332 .005010 | | | | | | | | | | | | | | | | | | |
| .746 .285 .005010 .748 .397 .005010 .749 .563 .005010 .750 .282 .105135 .750 .491 .015030 .751 .331 .075093 .746 .316 .005030 .748 .400 .005010 .749 .594 .010020 .750 .283 .170190 .750 .496 .040060 .751 .332 .005010 | | | | ı | | | | | | | | | | | | | | |
| .746 .316 .005030 .748 .400 .005010 .749 .594 .010020 .750 .283 .170190 .750 .496 .040060 .751 .332 .005010 | | | | | | | | | | | | | | | | l | | |
| .746 .318 .078090 .748 .451 .005010 .749 .595 .035062 .750 .285 .015135 .750 .499 .100125 .751 .335 .090125 | .746 | .316 | .005030 | .748 | .400 | .005010 | | | | .750 | | | .750 | .496 | .040060 | .751 | .332 | .005010 |
| | .746 | .318 | .078090 | .748 | .451 | .005010 | .749 | .595 | .035062 | .750 | .285 | .015135 | .750 | .499 | .100125 | .751 | .335 | .090125 |

| | | Choose Any | | | Choose Any | | | | 10 1111 | | | O AIII | | Choose Any | OWIDE | | |
|----------------------|----------------------|----------------------------|----------------------|---------------------|----------------------------|---------------------|----------------------|-------------------------------------|----------------------|----------------------|----------------------------|----------------------|---------------------|----------------------------|---------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Choose Any Thickness* |
| .751 | .343 | .025040 | .753 | .526 | .030060 | .765 | .625 | .050070 | .776 | .197 | .020035 | .781 | .501 | .005015 | .786 | .594 | .010020 |
| .751 | .361 | .005010 | .753 | .527 | .005010 | .766 | .505 | .030050 | .776 | .240 | .025040 | .781 | .518 | .040060 | .786 | .598 | .030050 |
| .751 | .376 | .005015 | .753 | .609 | .025050 | .766 | .518 | .050070 | .776 | .283 | .030050 | .781 | .531 | .008012 | .786 | .626 | .030050 |
| .751 .751 | .379 .380 | .040060 . 005020 | .753 .754 | .627 .265 | .005015 .030060 | .766 .766 | .535 .557 | .080100 .025040 | . 776 .776 | .386 .432 | .005010 .070090 | .781 .781 | .557 .600 | .020040 .015030 | .786 .787 | .631 .129 | .030050 .030050 |
| .751 | .387 | .105125 | .754 | .393 | .005010 | .766 | .585 | .015030 | .776 | .598 | .050070 | .781 | .605 | .032050 | .787 | .141 | .040060 |
| .751 | .395 | .020030 | .754 | .428 | .048062 | .766 | .610 | .030050 | .776 | .646 | .020040 | .781 | .621 | .040060 | .787 | .142 | .030060 |
| .751 | .400 | .050080 | .754 | .460 | .105125 | .766 | .676 | .005010 | .776 | .653 | .040050 | .781 | .625 | .050075 | .787 | .161 | .050070 |
| .751 | .420 | .110130 | .754 | .469 | .040060 | .767 | .073 | .025040 | .777 | .328 | .156187 | .781 | .627 | .040060 | .787 | .203 | .040060 |
| . 751 | . 435 .438 | .005010 .050070 | .754 .754 | .509 .532 | .030050 | .767 .767 | .084 | .015030 .090110 | <u>.777</u> | .392 | .020030 .025040 | .781 | .628 | .005010 | .787 .787 | .228 .238 | .052072 .005010 |
| .751 | .440 | .050070 | .755 | .222 | .005010 | .767 | .301 | .100125 | .777 .777 | .421 .572 | .025040 | .781 .781 | .629 .640 | .025060 .060070 | .787 | .256 | .010020 |
| .751 | .448 | .050070 | .755 | .281 | .005010 | .767 | .576 | .030050 | .777 | .613 | .050070 | .782 | .368 | .010020 | .787 | .257 | .025060 |
| .751 | .455 | .010020 | .755 | .378 | .060080 | .767 | .588 | .015030 | .778 | .221 | .010015 | .782 | .437 | .090105 | .787 | .279 | .005010 |
| .751 | .463 | .050070 | .755 | .385 | .025042 | .767 | .699 | .005010 | .778 | .266 | .062075 | .782 | .440 | .015030 | .787 | .315 | .005020 |
| .751 | .470 | .075090 | .755 | .393 | .005010 | .768 | .235 | .040060 | .778 | .363 | .070090 | .782 | .442 | .070090 | .787 | .317 | .005010 |
| . 751 .751 | .499 .500 | . 005025 .050070 | .755 .755 | .513 .532 | .030040 .020040 | .768 .768 | .378 .415 | .110130 .050070 | .778 .778 | .386 .408 | .030050 .020040 | .782 .782 | .482 .500 | .070090 .030060 | .787 .787 | .318 .319 | .005010 .005010 |
| .751 | .503 | .005110 | .755 | .552 | .030040 | .768 | .416 | .050070 | .778 | .435 | .120135 | .782 | .513 | .030050 | .787 | .324 | .015030 |
| .751 | .504 | .010080 | .755 | .554 | .005010 | .768 | .471 | .010020 | .778 | .534 | .062078 | .782 | .517 | .080100 | .787 | .329 | .005010 |
| .751 | .505 | .010105 | .755 | .586 | .005010 | .768 | .530 | .010030 | .779 | .190 | .030050 | .782 | .530 | .093103 | .787 | .392 | .005010 |
| .751 | .506 | .015025 | .756 | .258 | .075100 | .768 | .545 | .020040 | .779 | .264 | .025040 | .782 | .542 | .005010 | .787 | .395 | .005010 |
| .751 .751 | .508 .513 | .020030 .090120 | .756 .756 | .375 .395 | .040050 .005010 | .769 .769 | .202 .240 | .050070 .050070 | .779 779 | .270 .323 | .060090 .015030 | .782 .782 | .546 .562 | .010020 .060083 | .787 .787 | .397 .398 | .005010 .005020 |
| .751 | .515 | .025040 | .756 | .408 | .020035 | .769 | .240 .256 | .005070 | .779 .779 | .323 | .015030 | .782 | .699 | .005010 | .787 | .399 | .070080 |
| .751 | .516 | .008060 | .756 | .500 | .010020 | .769 | .395 | .070090 | .779 | .395 | .032060 | .783 | .062 | .030050 | .787 | .400 | .040060 |
| .751 | .521 | .048060 | .756 | .564 | .005010 | .769 | .399 | .135156 | .779 | .422 | .030050 | .783 | .254 | .050070 | .787 | .410 | .060080 |
| .751 | .524 | .005010 | .756 | .570 | .020030 | .770 | .141 | .025040 | .779 | .439 | .015030 | .783 | .278 | .010020 | .787 | .424 | .005010 |
| . 751 .751 | . 563 .594 | . 005040 .010020 | . 757 .757 | .139 .243 | .005010 .005020 | .770 .770 | .211 .248 | .040060 . 005010 | .779 .779 | .476 .492 | .100125 .050060 | .783 .783 | .320 .453 | .050070 .080104 | .787 .787 | .433 .453 | .010020 . 005010 |
| .751 | .600 | .030050 | .757 | .243 | .005020 | .770 | .375 | .040060 | .779 | .568 | .010020 | .783 | .488 | .005010 | .787 | .472 | .030050 |
| .751 | .606 | .005010 | .757 | .387 | .060125 | .770 | .377 | .040060 | .779 | .579 | .005010 | .783 | .500 | .030050 | .787 | .473 | .005010 |
| .751 | .626 | .005025 | .757 | .400 | .040060 | .770 | .384 | .020040 | .779 | .632 | .030060 | .783 | .513 | .025040 | .787 | .475 | .010020 |
| .751 | .633 | .005010 | .757 | .468 | .030050 | .770 | .385 | .015030 | .779 | .633 | .005010 | .783 | .604 | .005010 | .787 | .477 | .050070 |
| . 751 .751 | . 634 | .005010 .010015 | .757 .757 | .470 .563 | .020040 | .770 .770 | .430 .474 | .030050 .030040 | <u>.779</u> .779 | <u>.640</u> .700 | .040060 .010020 | .783 .783 | .630 .635 | .060080 | .787 .787 | .490 . 525 | .120130 .005010 |
| .751 | .650 | .010013 | .758 | .234 | .005010 | .770 | .524 | .040060 | .779 | .051 | .010020 | .783 | .645 | .005020 | .787 | .530 | .030050 |
| .752 | .143 | .090120 | .758 | .310 | .015030 | .770 | .525 | .005010 | .780 | .190 | .040060 | .783 | .646 | .005010 | .787 | .547 | .005010 |
| .752 | .145 | .100125 | .758 | .394 | .040060 | .770 | .531 | .050060 | .780 | .267 | .062090 | .783 | .656 | .048062 | .787 | .551 | .005030 |
| .752 | .150 | .090105 | .758 | .608 | .050075 | .770 | .536 | .015030 | .780 | .306 | .015030 | .784 | .592 | .015030 | .787 | .577 | .005010 |
| .752 .752 | .181 .196 | .080104 .040060 | .759 .759 | .462 .606 | .005010 .005010 | .770 | .571 .664 | .025040 . 005010 | .780 | .390 | .080104 | .784 .784 | .599 .601 | .030050 .030050 | .787 .787 | .603 .610 | .005010 .005080 |
| .752 | .212 | .030060 | .759 | .694 | .005010 | .770 .770 | .004 .711 | .015030 | .780 .780 | .391 .403 | .080100 .005010 | .784 | .612 | .020030 | .787 | .630 | .030050 |
| .752 | .250 | .005010 | .760 | .032 | .020032 | .771 | .474 | .050070 | .780 | .408 | .030050 | .785 | .170 | .042062 | .787 | .631 | .005010 |
| .752 | .269 | .100135 | .760 | .126 | .015030 | .771 | .511 | .105125 | .780 | .420 | .060080 | .785 | .238 | .006010 | .787 | .648 | .025040 |
| .752 | .303 | .005012 | .760 | .150 | .020040 | .771 | .554 | .010020 | .780 | .422 | .015040 | .785 | .343 | .005010 | .787 | .661 | .005010 |
| .752 .752 | .315 .317 | .104135 .010020 | .760 .760 | .256 .260 | .080104 .030062 | .771 .771 | .639 | .050060 | .780 | .425 .460 | .010020 | . 785 .785 | .357 .392 | . 005010 .110130 | .787 .787 | .680 .697 | .060080 . 005010 |
| .752 | .319 | .005030 | .760 | .269 | .040060 | .771 | .700 .188 | .005010 .020040 | .780 .780 | .484 | .030060 .005010 | .785 | .406 | .005010 | .788 | .128 | .010020 |
| .752 | .320 | .050070 | .760 | .322 | .050070 | .772 | .250 | .040060 | .780 | .498 | .080104 | .785 | .450 | .050070 | .788 | .218 | .040060 |
| .752 | .322 | .005010 | .760 | .330 | .005010 | .772 | .404 | .005010 | .780 | .500 | .015030 | .785 | .475 | .015050 | .788 | .227 | .005010 |
| .752 | .340 | .005010 | .760 | .385 | .040060 | .772 | .412 | .050060 | .780 | .503 | .006012 | .785 | .482 | .100125 | .788 | .237 | .080100 |
| .752 .752 | .375 .379 | .062075 .090110 | .760 | .482 | .040060 | .772 | .671 | .010020 | .780 | .510 | .005030 | .785 .785 | .512 .523 | .060080 . 005020 | .788 | .243 | .030050 |
| .752 | .380 | .090110 | .760 .760 | .565 .571 | .020040 .070090 | .773 .773 | . 126 .238 | .005010 .062080 | .780 .780 | .511 .520 | .030050 .007015 | .7 85 .785 | .523 .530 | .030050 | .788 .788 | .317 .322 | .010020 . 005010 |
| .752 | .388 | .050070 | .760 | .579 | .005008 | .773 | .370 | .060080 | .780 | .527 | .075090 | .785 | .548 | .042062 | .788 | .355 | .010020 |
| .752 | .389 | .005010 | .760 | .592 | .020035 | .773 | .480 | .015030 | .780 | .529 | .025040 | .785 | .569 | .005010 | .788 | .376 | .005010 |
| .752 | .406 | .060083 | .760 | .624 | .020030 | .773 | .656 | .020040 | .780 | .562 | .031048 | .785 | .594 | .005010 | .788 | .394 | .125156 |
| .752 | .431 | .090125 | .760 | .664 | .005010 | . 773 | . 692 | .005010 | .780 | .566 | .030050 | . 785 | .656 | . 005010 .015030 | . 788 | .395 | .005010 |
| .752 .752 | .461 .475 | .008012 .030050 | .761 .761 | .141 .184 | .005015 .005015 | .774 .774 | .251 .556 | .050070 .050070 | <u>.780</u> .780 | .579 .591 | .005015 .060090 | .786 .786 | .157 .198 | .015030 | .788 .788 | .397 .403 | .005015 .005030 |
| .752 | .502 | .008012 | .761 | .561 | .030050 | .774 | .605 | .010020 | .780 | .593 | .005010 | .786 | .253 | .070090 | .788 | .414 | .020040 |
| .752 | .504 | .010050 | .762 | .250 | .005010 | .774 | .634 | .010020 | .780 | .598 | .050070 | .786 | .257 | .005010 | .788 | .440 | .005010 |
| .752 | .505 | .015030 | .762 | .445 | .040060 | .774 | .705 | .005010 | .780 | .627 | .020030 | .786 | .300 | .005010 | .788 | .452 | .005010 |
| .752 .752 | .516 .555 | .005015 | .762 | .616 | .005010 | .775 | .228 | .050072 | .780 | .640 | .030070 | .786 .786 | .316 .382 | .090135 .005010 | .788 | .473 | .010020 |
| .752 | .564 | .040070 | . 763 .764 | .660 .315 | . 005010 .050075 | .775 .775 | .231 .252 | .042062 . 005010 | .780 .780 | .672 .684 | .015030 .025040 | .786 .786 | .382 | .040060 | .788 .788 | .476 .478 | .030050 .030050 |
| .752 | .591 | .060090 | .764 | .528 | .060080 | .775 | .324 | .100125 | .780 | .685 | .025040 | .786 | .436 | .050070 | .788 | .483 | .070090 |
| .752 | .624 | .050070 | .764 | .707 | .005010 | .775 | .335 | .015030 | .781 | .111 | .025040 | .786 | .443 | .100120 | .788 | .487 | .040060 |
| .753 | .133 | .075090 | .765 | .117 | .040062 | .775 | .368 | .080090 | .781 | .142 | .010020 | .786 | .446 | .040060 | .788 | .488 | .040050 |
| .753 | .276 | .010020 | .765 | .222 | .030050 | .775 | .379 | .005012 | .781 | .172 | .010020 | .786 | .452 | .010020 | .788 | .512 | .060090 |
| .753 .753 | .318 .330 | .050070 .110130 | .765 .765 | .265 .285 | .100125 .005010 | .775 .775 | .428 .457 | .025040 . 005010 | .781 | .280 | .156190 | .786 .786 | .474 .477 | .005010 .005010 | .788 .788 | .521 .545 | .048062 . 005010 |
| .753 | .337 | .110130 | .765 | .293 | .040060 | .775 .775 | . 457 .464 | .048070 | .781 .781 | .316 .317 | . 005010 .010030 | .786 | .502 | .010020 | .788 | .555 | .040060 |
| .753 | .375 | .100125 | .765 | .312 | .050062 | .775 | .469 | .080100 | .781 | .335 | .005050 | .786 | .505 | .005020 | .788 | .566 | .080100 |
| .753 | .381 | .134187 | .765 | .331 | .025040 | .775 | .500 | .075090 | .781 | .402 | .010020 | .786 | .515 | .010020 | .788 | .596 | .030050 |
| .753 | .384 | .050070 | .765 | .348 | .025035 | .775 | .525 | .100125 | .781 | .430 | .048062 | .786 | .531 | .020030 | .788 | .697 | .010015 |
| .753 | .405 .472 | .050072 .100120 | .765 | .406 | .005010 | .775 | .555 | .020030 | .781 | .448 | .015030 | .786 786 | .535 | .005030 | .789 789 | .114 | .025040 . 005010 |
| .753 .753 | .472 | .025050 | . 765 .765 | .508 .533 | . 005010 .015030 | .775 .776 | .643 .196 | .005030 .015030 | .781 .781 | . 485 .488 | .005010 .050060 | .786 .786 | .556 .572 | .040060 .050070 | .789 .789 | . 221 .255 | .010020 |
| .700 | . 107 | | | | | | | | | | | | | range listed | ., 00 | 00 | .010 .020 |

NO TOOLING CHARGE FOR ANY OF THE SIZES LISTED

| Col. Dis. Processor Col. Dis. | | | 01 1 | | | 0 4 | | | 01 1 | | | 01 4 | | | 01 4 | | | 01 4 |
|--|------|------|--------------------------|------|------|--------------------------|------|------|--------------------------|------|------|--------------------------|------|------|--------------------------|------|------|--------------------------|
| The color | O.D. | I.D. | Choose Any Thickness* |
| 1789 1812 1012 1026 | | | From To | | | From To | | | | | | From To | | | From To | | | From To |
| 1789 286 086 -096 -0 | | | | | | | | .594 | | .806 | .671 | .005010 | | | | _ | | |
| 1789 1784 1795 | .789 | .312 | .042060 | .796 | .525 | .010020 | .800 | .618 | .005010 | .806 | .691 | .020040 | .810 | .600 | .040060 | .812 | .650 | .040060 |
| 1789 1884 1895 | .789 | .316 | .005010 | .796 | .579 | .040060 | .800 | .619 | .005010 | .806 | .692 | .005010 | .810 | .652 | .005010 | .812 | .655 | .020030 |
| 789 780 | .789 | .326 | .005010 | .796 | .602 | .025040 | .800 | .623 | .050075 | .807 | .117 | .015030 | .810 | .690 | .010020 | .812 | .675 | .020040 |
| 789 780 | .789 | .354 | .060080 | .796 | .610 | .005070 | .800 | .628 | | | | | .810 | .703 | .005010 | .812 | .687 | .050070 |
| 1789 | | | | | | | | | | | | | | | | | | |
| 789 543 005 - 010 797 413 005 - 010 000 641 010 - 020 645 005 - 040 877 531 010 - 020 010 | | | | | | | | | | | | | | | | | | |
| 1789 630 010 020 020 030 | | | | I | | | | | | | | | | | | | | |
| 1780 175 | | | | | | | | | | | | | | | | | | |
| 770 270 | | | | | | | | | | | | | | | | | | |
| 1790 | | .630 | .010020 | .797 | .691 | .025040 | .800 | .654 | .040060 | .807 | .534 | .005010 | .811 | | .040060 | .813 | .194 | .100125 |
| 790 | .790 | .175 | .050070 | .798 | .312 | .010025 | .800 | .659 | .010020 | .807 | .625 | .005010 | .811 | .201 | .040060 | .813 | .272 | .100134 |
| 790 339 065 - 010 796 578 065 - 010 300 677 065 - 010 307 308 077 065 - 010 307 308 | .790 | .250 | .032042 | .798 | .378 | .005010 | .800 | .670 | .005020 | .807 | .629 | .020040 | .811 | .282 | .050070 | .813 | .328 | .005010 |
| 1790 320 005 - 010 798 624 070 - 000 300 677 005 - 070 807 695 707 695 - 070 811 343 305 - 010 813 348 100 - 122 815 848 815 | .790 | .319 | .005010 | .798 | .578 | .005090 | .800 | .672 | .005010 | | 638 | | .811 | .322 | .030050 | .813 | .350 | .030050 |
| 1700 370 085 086 788 882 2010 090 090 677 080 090 070 080 070 080 070 080 070 080 070 080 070 080 070 080 070 080 070 080 070 080 070 080 070 080 070 080 070 080 070 08 | | | | | | | | | | | | | | | | | | |
| 1790 375 075 080 040 798 711 070 020 020 020 030 037 080 040 030 040 030 | | | | | | | | | | | | | | | | | | |
| 1790 377 0.02 - 0.04 799 222 0.05010 0.0 | | | | | | | | | | | | | | | | | | |
| 1790 378 076 087 087 089 070 179 390 070 070 080 | | | | | | | | | | | | | | | | | | |
| 790 423 675 696 799 399 401 630 630 801 448 600 707 708 438 620 640 739 439 630 630 801 436 640 630 838 371 615 630 831 448 650 707 709 739 748 747 655 630 630 831 431 630 707 730 748 747 655 630 748 | | | | | | | | | | | | | | | | | | |
| 1790 428 028 - 040 799 401 080 - 050 801 448 010 - 020 808 317 015 - 030 811 449 100 - 128 813 441 050 - 040 608 790 452 030 - 040 808 353 050 - 100 808 355 050 - 140 811 553 404 - 050 813 438 005 - 040 808 414 055 - 040 811 553 404 - 050 813 438 005 - 040 808 414 055 - 040 811 553 404 - 050 813 438 005 - 040 808 414 055 - 040 811 553 404 - 050 813 439 005 - 040 808 414 055 - 040 811 550 625 - 050 813 439 005 - 040 808 414 055 - 040 811 550 625 - 050 813 439 005 - 040 808 414 055 - 040 811 550 625 - 050 813 439 005 - 040 810 625 - 040 811 550 625 - 040 810 625 - 040 810 625 | | | | .799 | | .170190 | .800 | | .005010 | .808 | .228 | .005015 | | | | .813 | .431 | .005010 |
| 790 486 620 -940 799 439 600 -010 801 285 800 -060 808 375 105 -125 811 549 670 -090 813 430 604 -050 608 -010 813 430 604 -050 813 430 604 -050 813 430 604 -050 813 430 605 -010 813 -010 -020 813 -010 -020 813 -010 -020 813 -020 | .790 | .383 | .075090 | .799 | .397 | .010020 | .800 | .711 | .010040 | .808 | .231 | .060080 | .811 | .411 | .010020 | .813 | .435 | .100125 |
| 790 485 030 -040 799 439 000 -010 801 225 803 -960 808 375 105 -125 811 548 670 -090 813 450 040 -060 810 425 040 - | .790 | .423 | .025040 | .799 | .401 | .030050 | .801 | .148 | .010020 | .808 | .317 | .015030 | .811 | .449 | .100125 | .813 | .441 | .050070 |
| 790 | .790 | .438 | .020040 | .799 | .439 | .005010 | | .255 | | | | | .811 | .548 | .070090 | .813 | .450 | |
| 790 | | | | | | | | | | | | | | | | | | |
| 798 509 509 772 798 509 609 509 609 509 609 801 345 505 505 608 532 605 600 811 586 506 500 608 772 798 500 605 700 811 500 505 605 700 811 500 505 700 | | | | | | | | | | | | | | | | | | |
| 790 500 509 707 799 500 508 707 709 506 508 | | | | | | | | | | | | | | | | | | |
| 790 550 500 504 799 501 501 502 501 502 504 505 | | | | | | | | | | | | | | | | | | |
| 790 585 040 080 799 590 5025 040 390 049 005 010 590 590 050 070 079 590 590 050 070 079 590 590 050 070 079 079 590 050 070 079 | | | | | | | | | | | | | | | | | | .105135 |
| 790 686 015 - 025 799 598 050 - 075 075 080 1490 005 - 010 080 090 080 - 010 080 | | | | | | | .801 | .400 | .025040 | .808 | .620 | .015030 | | | | | | .020040 |
| 790 686 015 - 025 799 598 696 - 075 690 | .790 | .565 | .040060 | .799 | .505 | .025040 | .801 | .439 | .005010 | .808 | .692 | .030050 | .811 | .577 | .025042 | .813 | .562 | .080100 |
| 780 623 0.00 0.70 789 589 0.05 0.10 0.01 502 5.05 0.05 | .790 | .586 | .015025 | .799 | .580 | .050075 | | | | | | | .811 | .595 | .035060 | .813 | .563 | .005020 |
| 790 642 010 - 040 799 629 015 - 025 801 505 505 010 801 505 800 507 605 300 - 107 811 630 0005 - 010 811 630 605 - 010 801 630 605 | | | | | | | | | | | | | | | | | | .020040 |
| P80 650 0.930 0.442 7.99 6.53 0.05 0.01 0.01 0.01 0.05 0.01 0.01 0.02 0.00 0.02 0.070 0.01 0.01 0.03 0.03 0.03 0.00 0.02 0.070 0.03 | | | | | | | | | | | | | | | | | | |
| 790 694 040 660 799 871 005 010 801 598 015 030 250 020 030 811 858 020 030 811 859 035 047 047 056 016 030 799 874 005 010 801 865 010 020 030 258 070 090 812 130 015 030 811 818 035 005 030 070 | | | | | | | | | | | | | | | | | | |
| 799 728 010 - 202 799 674 005 - 010 801 629 040 - 0002 809 257 030 - 050 812 130 015 - 030 813 880 005 - 030 791 4323 050 - 070 799 694 005 - 010 801 650 010 - 002 809 321 025 - 042 812 130 015 - 030 814 412 060 - 080 791 401 025 - 040 800 190 020 - 040 801 666 060 - 070 809 337 050 - 010 812 191 020 - 040 814 522 040 - 050 809 377 055 - 010 812 191 020 - 040 814 522 040 - 050 809 471 070 - 090 812 221 080 - 076 880 947 070 - 090 812 221 080 - 076 880 947 070 - 090 812 221 080 - 076 880 947 070 - 090 812 221 080 - 076 | | | | | | | | | | | | | | | | | | |
| 791 323 305 307 799 694 305 505 300 501 502 301 505 300 501 300 301 305 | | | | | | | | | | | | | | | | | | |
| 791 323 050 - 070 799 694 005 - 010 801 657 005 - 010 809 321 025 - 042 812 136 040 - 060 814 412 080 - 080 791 401 025 - 040 800 190 020 - 040 801 606 060 - 070 809 377 005 - 010 819 320 005 - 040 814 532 090 - 101 791 531 010 - 020 800 194 050 - 070 802 257 060 - 080 809 387 005 - 010 814 532 090 - 101 791 531 070 070 791 634 010 - 020 800 225 040 - 080 802 261 040 - 082 809 414 070 - 090 812 221 080 - 075 814 628 020 - 035 792 317 080 - 030 800 225 040 - 080 802 367 060 - 035 809 414 070 - 090 812 221 080 - 035 814 637 042 - 036 814 637 042 - 036 814 637 042 - 036 818 | | | | | | | | | | | | | | | | | | |
| 791 400 010 020 079 701 005 010 801 674 005 070 802 336 050 070 812 131 005 040 814 522 040 0.06 791 401 020 030 800 130 050 070 802 257 060 080 809 385 005 070 812 131 005 040 814 532 090 079 079 674 070 020 030 800 250 025 040 802 261 040 062 809 414 070 090 812 221 080 100 814 628 020 079 079 279 279 070 080 250 020 030 802 347 050 075 809 483 032 032 812 249 080 100 814 631 020 079 079 479 479 079 | | | | | | | | | | | | | | | | | | |
| 791 .401 .025 .404 .800 .190 .020 .040 .801 .896 .660 .070 .809 .377 .005 .070 .812 .129 .005 .010 .814 .532 .095 .017 .791 .531 .010 .020 .800 .200 .025 .040 .802 .267 .060 .080 .809 .284 .020 .035 .809 .244 .070 .099 .812 .219 .062 .075 .814 .628 .020 .020 .025 .040 .800 .226 .040 .800 .286 .005 .035 .809 .286 .020 .035 .809 .286 .025 .040 .809 .286 .025 .040 .086 .087 .086 . | | | | | | | | | | | | | | | | | | |
| 791 531 010 0.020 800 194 650 0.070 802 257 060 0.080 809 388 005 0.010 812 192 005 0.010 814 628 020 0.079 | .791 | | .010020 | .799 | .701 | .005010 | .801 | .674 | .005010 | .809 | .336 | .050070 | .812 | .141 | .005040 | .814 | .522 | .040060 |
| 799 674 010 - 020 800 220 - 025 - 040 802 246 - 020 - 035 89 - 414 077 - 080 812 - 219 062 - 075 814 - 628 - 022 - 032 792 420 020 - 030 800 - 222 - 040 - 060 802 - 346 - 025 - 040 89 - 453 - 070 - 80 812 - 245 - 020 - 036 814 - 641 - 005 - 010 792 480 - 025 - 040 800 - 252 - 040 - 060 802 - 536 - 80 80 - 954 - 005 - 010 812 - 245 - 020 - 036 814 - 641 - 005 - 010 792 - 517 - 010 - 020 - 800 - 252 - 008 - 015 - 802 - 540 - 809 - 804 - 005 - 010 802 - 546 - 005 - 010 802 - 546 - 005 - 010 809 - 670 - 005 - 070 812 - 253 - 080 - 070 815 - 221 - 020 - 03 792 - 672 - 010 - 020 - 800 - 256 - 005 - 010 802 - 546 - 005 - 010 802 - 546 - 005 - 010 802 - 546 - 005 - 010 803 - 625 - 040 809 - 625 - 005 - 001 812 - 315 - 005 - 070 815 - 210 - 000 - 010 815 - 221 - 020 - 030 792 - 657 - 010 - 020 - 800 - 256 - 005 - 010 802 - 526 - 005 - 010 802 - 526 - 005 - 010 802 - 526 - 005 - 010 802 - 526 - 005 - 010 803 - 625 - 000 - 010 812 - 315 - 005 - 010 815 - 329 - 005 - 000 815 - 230 - 005 - 010 815 - 200 - 000 - 010 810 - 200 - 000 - 010 | .791 | .401 | .025040 | .800 | .190 | .020040 | .801 | .696 | .060070 | .809 | .377 | .005010 | .812 | .191 | .020040 | .814 | .532 | .090105 |
| 792 437 062 - 083 800 222 065 - 080 802 346 020 - 038 809 475 070 - 080 812 221 080 - 100 814 637 042 - 087 072 485 020 - 036 800 225 040 - 080 080 2387 050 - 076 809 483 032 - 042 812 225 020 - 030 814 641 005 - 010 070 | .791 | .531 | .010020 | .800 | .194 | .050070 | .802 | .257 | .060080 | .809 | .385 | .005010 | .812 | .192 | .005010 | .814 | .598 | .050075 |
| 792 317 062 - 083 800 222 065 - 080 802 346 022 - 036 809 475 070 - 090 812 221 080 - 100 814 637 042 - 080 792 486 025 - 040 800 250 020 - 030 802 387 050 - 075 809 483 032 - 042 812 225 080 - 104 814 475 020 - 036 7792 517 010 - 020 800 255 020 - 030 802 548 025 - 040 809 504 005 - 010 812 253 080 - 104 814 475 020 - 036 7792 517 010 - 020 800 254 025 - 040 802 556 005 - 010 809 505 070 812 259 050 - 070 815 129 020 - 044 679 020 044 025 042 045 040 800 805 070 070 812 269 050 - 070 815 129 020 - 044 025 042 040 04 | .791 | .674 | .010020 | .800 | .200 | .025040 | .802 | .261 | .040062 | .809 | .414 | .070090 | .812 | .219 | .062075 | .814 | .628 | .020030 |
| 792 420 020 030 800 225 040 066 802 387 050 075 809 483 032 042 048 | | | | | | | | | | | | | | | | - | | |
| 792 485 025 - 040 800 250 020 - 030 802 453 025 - 040 809 570 050 005 - 010 812 253 080 - 104 814 751 020 - 030 792 806 005 - 010 800 254 025 - 040 802 596 005 - 010 809 570 0812 259 050 - 010 817 270 | | | | | | | | | | | | | | | | | | |
| 792 516 010 020 800 252 008 015 802 516 040 060 070 050 070 812 289 050 070 080 261 022 040 812 289 061 020 080 281 080 080 281 080 080 281 080 080 281 080 080 281 080 080 280 080 <td></td> | | | | | | | | | | | | | | | | | | |
| 792 606 .005010 800 256005040 .802514 .025040 .812312 .040060 .81525102003 792 672010020 .800256005010 .802611030 .810025042815255060007 .792672020020 .810057010010010012025042815255060007 .810025042815255060040060812375150180815250040080020040080020051025040025040025040810422040060812376156900815309005011033005011033005011033005011033005011033005012033005012033005012033005012033005012033005012033005012033005012033005012033005012033005012033005012033005012033005012033005014002030010012031006013006006006006006006006006006006006000006 - | | | | | | | | | | | | | | | | | | |
| 792 672 010 0.20 0.80 0.256 0.05 0.01 0.802 6.21 0.25 0.040 0.802 6.22 0.20 0.300 8.10 0.657 0.05 0.01 0.812 315 0.05 0.30 8.15 2.55 0.60 0.04 0.05 0.04 0.05 | | | | | | | | | | | | | | | | | | |
| 798 695 015 030 030 0315 010 020 030 030 0305 030 0305 030 0305 | | | | | | | | | | | | | | | | | | |
| 793 386 050 060 800 316 005 010 802 701 005 010 810 116 015 032 812 375 150 180 815 309 005 010 793 438 080 100 800 327 020 040 802 752 005 006 810 150 040 060 812 378 056 083 815 339 005 040 075 040 080 377 075 | | | | | | | .802 | | .025040 | .809 | .625 | .005010 | | | | | | |
| 793 438 080 - 100 800 320 105 - 125 802 774 025 - 040 810 142 040 - 060 812 378 050 - 083 815 339 005 - 040 793 439 080 - 090 800 327 020 - 040 802 752 005 - 008 810 150 040 - 060 812 378 050 - 083 815 439 025 - 040 793 439 080 - 090 800 337 005 - 010 803 261 050 - 075 810 166 025 - 040 812 378 050 - 083 815 444 005 - 040 793 795 795 032 - 050 800 377 005 - 010 803 345 800 - 105 810 185 050 - 010 812 390 031 - 060 815 488 025 - 030 794 285 005 - 010 800 378 005 - 078 803 422 015 - 030 810 192 050 - 062 812 391 080 - 100 815 527 080 - 100 794 477 135 - 160 800 378 005 - 078 803 422 015 - 030 810 198 030 - 050 812 398 015 - 030 815 527 080 - 100 794 477 135 - 160 800 387 020 - 040 803 375 005 - 010 804 315 522 030 - 050 812 398 015 - 030 815 527 080 - 100 795 160 005 - 010 800 397 005 - 010 803 315 005 - 010 810 218 100 - 125 812 409 050 - 090 815 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 555 030 - 050 816 556 035 - 035 | .792 | .695 | .015030 | .800 | .315 | .010020 | .802 | .622 | .020030 | .810 | .057 | .005010 | .812 | .315 | .015030 | .815 | .260 | .048062 |
| 793 439 060 090 800 327 020 040 803 261 050 075 810 150 040 060 812 378 050 033 815 439 025 041 075 | .793 | .386 | .050060 | .800 | .316 | .005010 | .802 | .701 | .005010 | .810 | .116 | .015032 | .812 | .375 | .150180 | .815 | .281 | .105120 |
| 793 471 025 - 048 800 345 075 - 104 803 226 050 - 075 810 166 025 - 040 812 379 025 - 032 815 444 005 - 017 793 505 025 - 040 800 370 005 - 012 803 264 010 - 020 810 180 192 050 - 062 812 339 031 - 080 815 500 015 - 037 794 285 005 - 078 800 377 005 - 010 803 345 080 - 105 810 192 050 - 062 812 339 031 - 080 815 500 015 - 030 794 228 005 - 078 803 422 015 - 030 810 192 050 - 062 812 339 015 - 030 815 550 030 - 055 794 477 135 - 160 800 337 005 - 078 803 422 015 - 030 810 198 030 - 050 812 339 015 - 030 815 555 030 - 055 794 477 135 - 160 800 337 020 - 040 803 569 005 - 010 810 210 025 - 042 812 406 075 - 090 815 555 030 - 055 794 477 135 - 160 800 337 020 - 040 803 569 005 - 010 810 218 100 - 125 812 410 060 - 070 815 556 015 - 022 615 | .793 | .438 | .080100 | .800 | .320 | .105125 | .802 | .704 | .025040 | .810 | .142 | .040060 | .812 | .376 | .156190 | .815 | .309 | .005010 |
| 793 471 025 - 048 800 345 075 - 104 803 226 050 - 075 810 166 025 - 040 812 379 025 - 032 815 444 005 - 017 793 505 025 - 040 800 370 005 - 012 803 264 010 - 020 810 180 192 050 - 062 812 339 031 - 080 815 500 015 - 037 794 285 005 - 078 800 377 005 - 010 803 345 080 - 105 810 192 050 - 062 812 339 031 - 080 815 500 015 - 030 794 228 005 - 078 803 422 015 - 030 810 192 050 - 062 812 339 015 - 030 815 550 030 - 055 794 477 135 - 160 800 337 005 - 078 803 422 015 - 030 810 198 030 - 050 812 339 015 - 030 815 555 030 - 055 794 477 135 - 160 800 337 020 - 040 803 569 005 - 010 810 210 025 - 042 812 406 075 - 090 815 555 030 - 055 794 477 135 - 160 800 337 020 - 040 803 569 005 - 010 810 218 100 - 125 812 410 060 - 070 815 556 015 - 022 615 | .793 | .439 | .060090 | .800 | .327 | .020040 | 802 | 752 | 005 - 008 | 810 | 150 | 040 - 060 | .812 | .378 | .050083 | .815 | .439 | .025040 |
| 793 5.05 0.025 - 0.40 800 370 0.05 - 0.10 8.03 345 806 - 105 810 185 5.05 0.05 0.05 800 377 0.05 - 0.10 803 345 806 - 105 810 192 0.50 - 0.62 812 391 806 - 103 815 5.00 15 - 0.30 816 420 105 - 0.30 816 420 42 | 793 | 471 | 025 - 048 | | | | | | | | | | | | | | | |
| 794 285 0.055 | | | | | | | | | | | | | | | | | | |
| 794 428 0.005 - 0.110 8.00 378 0.05 - 0.078 8.03 4.22 0.15 - 0.30 8.10 1.98 0.30 - 0.50 8.12 3.98 0.15 - 0.30 8.15 5.57 0.80 - 1.05 0.75 0.90 1.110 8.00 3.79 0.10 - 0.20 8.03 5.59 0.05 - 0.10 8.10 2.10 0.25 - 0.42 8.12 4.06 0.75 - 0.90 8.15 5.55 0.30 - 0.55 0.79 0.75 | | | | I | | | | | | | | | | | | | | |
| 794 420 090 - 110 800 379 010 - 020 803 517 105 - 125 810 210 0.25 - 0.42 812 406 0.75 - 0.90 815 5.55 0.30 - 0.55 794 477 135 - 160 800 387 0.02 - 0.40 803 5.69 0.05 - 0.10 810 2.80 0.62 - 0.78 812 4.10 0.60 - 0.70 8.15 5.56 0.15 - 0.02 795 116 0.05 - 0.10 800 387 0.02 - 0.40 803 7.15 0.10 - 0.02 8.10 2.55 0.90 - 1.25 812 4.11 1.05 - 1.25 815 6.69 0.025 - 0.44 795 1.79 0.05 - 0.10 8.00 3.98 0.05 - 0.10 8.04 1.34 0.50 - 0.72 8.10 2.55 0.90 - 1.25 8.12 4.11 1.05 - 1.25 8.15 6.69 0.25 - 0.44 795 1.79 0.05 - 0.10 8.00 3.98 0.05 - 0.10 8.04 3.13 0.05 - 0.10 8.10 3.55 0.05 - 0.55 8.12 4.37 0.15 - 0.30 8.16 4.39 0.75 - 0.90 795 175 0.05 - 0.10 8.00 4.37 0.05 - 0.10 8.04 3.33 0.50 - 0.72 8.10 3.55 0.05 - 0.90 8.12 4.41 0.32 - 0.48 8.16 5.10 0.05 - 0.11 795 1.97 0.08 - 0.16 8.00 4.49 0.05 - 0.10 8.04 6.02 0.05 - 0.10 8.10 3.85 0.05 - 0.10 8.12 4.42 0.62 - 0.75 8.16 5.20 0.15 - 0.25 795 2.67 0.48 0.62 8.00 4.44 0.05 - 0.10 8.04 6.02 0.05 - 0.10 8.10 3.85 0.05 - 0.10 8.12 4.42 0.62 - 0.75 8.16 5.20 0.15 - 0.32 795 3.40 0.05 - 0.12 8.00 4.44 0.05 - 0.10 8.05 5.64 0.90 - 1.10 8.10 4.13 0.05 - 0.12 8.10 4.13 0.05 - 0.12 8.10 4.13 0.05 - 0.12 8.10 4.13 0.05 - 0.12 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.12 4.42 0.062 0.05 8.17 3.19 0.06 - 0.08 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0.10 8.10 4.13 0.05 - 0 | | | | | | | | | | | | | | | | | | |
| 794 477 135 - 160 800 380 040 - 060 803 569 0.05010 810 .218 100125 812 .409 .050090 815 .556 .015025 .794 .552 .795 .175 .016016 .800 .387 .020040 .803 .715 .010025 .810 .255 .090125 .812 .410 .060070 .815 .578 .080101 .795 .175 .015016 .800 .397 .005010 .804 .344 .050072 .810 .255 .090125 .812 .411 .105125 .815 .669 .025044 .795 .795 .175 .005010 .800 .398 .005010 .804 .313 .005010 .801 .355 .095050 .812 .436 .100125 .816 .439 .015030 .795 .175 .005010 .800 .426 .105135 .804 .313 .005010 .810 .355 .095050 .812 .437 .015030 .816 .456 .070090 .795 .187 .005010 .804 .339 .005010 .804 .303 .050072 .810 .379 .005090 .812 .441 .032048 .816 .510 .005011 .005 .015 .025 | | | | I | | | | | | | | | | | | | | |
| 794 552 070 - 090 800 387 020 - 040 803 715 010 - 025 810 250 062 - 078 812 410 .060 - 070 815 .578 806 - 100 .795 .116 .005 - 010 .800 .397 .005 - 010 .804 .191 .060 - 080 .810 .315 .020 - 040 .812 .436 .100 - 125 .816 .439 .015 - 030 .795 .175 .005 - 010 .800 .426 .105 - 135 .804 .313 .005 - 010 .810 .355 .005060 .812 .437 .015030 .816 .456 .070 - 090 .795 .175 .005 - 010 .800 .426 .105135 .804 .330 .050 - 072 .810 .379 .005060 .812 .437 .015030 .816 .456 .070090 .795 .187 .030050 .800 .437 .005010 .804 .409 .100 - 125 .810 .385 .080 - 105 .812 .441 .032 - 048 .816 .520 .015021 .795 .197 .008 - 016 .800 .440 .005010 .804 .602 .005010 .810 .395 .080 - 105 .812 .442 .062075 .816 .520 .015021 .795 .267 .048062 .800 .441 .010020 .805 .312 .005010 .810 .405 .060080 .812 .447 .015020 .817 .359 .060080 .817 .359 .060080 .817 .359 .055 | | | | | | | | | | | | | | | | | | |
| 1.795 1.16 0.05010 .800 .397 .005010 .804 .134 .050072 .810 .255 .090125 .812 .411 .105125 .815 .669 .025044 .795 .795 .717 .090125 .800 .426 .105135 .804 .313 .005010 .810 .335 .005050 .812 .437 .015030 .816 .456 .070090 .795 .795 .795 .795 .795 .005010 .800 .437 .005010 .804 .330 .050072 .810 .379 .005090 .812 .441 .032048 .816 .510 .005012 .795 | | | | | | | | | | .810 | | | | | | | | .015025 |
| 1.795 1.79 | .794 | .552 | .070090 | .800 | .387 | .020040 | .803 | .715 | .010025 | .810 | .250 | .062078 | .812 | .410 | .060070 | .815 | .578 | .080100 |
| 1.795 1.79 | .795 | .116 | .005010 | .800 | .397 | .005010 | .804 | .134 | .050072 | .810 | | .090125 | .812 | .411 | .105125 | .815 | .669 | .025040 |
| 1795 170 090 - 125 800 426 105 - 135 804 313 005 - 010 810 355 005 - 050 812 437 .015 - 030 816 .456 .070095 .075 .187 .030050 .800 .437 .005010 .804 .330 .050072 .810 .379 .005090 .812 .441 .032048 .816 .510 .005012 .795 .187 .030050 .804 .439 .030050 .804 .409 .100125 .810 .385 .080105 .812 .442 .062075 .816 .520 .015025 .795 .197 .008016 .800 .440 .005010 .804 .602 .005010 .810 .395 .005010 .812 .456 .104125 .817 .319 .060080 .795 .281 .040060 .800 .441 .010020 .805 .312 .005010 .810 .413 .005012 .812 .456 .104125 .817 .321 .015030 .795 .340 .005012 .800 .464 .040060 .805 .564 .090110 .810 .413 .005012 .812 .473 .015020 .817 .455 .060090 .795 .392 .010020 .800 .490 .030050 .805 .656 .005010 .810 .413 .005012 .812 .473 .015020 .817 .505 .050070 .795 .482 .030050 .800 .504 .005030 .805 .656 .005010 .810 .443 .005010 .812 .501 .005020 .817 .505 .050070 .795 .482 .030050 .800 .504 .005030 .805 .672 .005010 .810 .475 .025042 .812 .509 .050075 .817 .661 .005011 .795 .509 .030060 .800 .504 .005030 .805 .672 .005010 .810 .475 .025 .042 .812 .509 .050075 .817 .661 .005011 .795 .795 .680 .005040 .800 .550 .005010 .806 .209 .005010 .810 .501 .810 .501 .810 .501 .810 .501 .810 .501 .810 .501 .810 .501 .005010 .810 .501 | | .159 | | | | .005010 | | | | | | | | | | | | .015030 |
| .795 .175 .005010 .800 .437 .005010 .804 .330 .050072 .810 .379 .095090 .812 .441 .032048 .816 .510 .005012 .795 .187 .030050 .800 .439 .030050 .804 .409 .100125 .810 .385 .080105 .812 .442 .062075 .816 .520 .015021 .795 .267 .048062 .800 .441 .010020 .805 .312 .005010 .810 .405 .060080 .812 .469 .030050 .817 .321 .005010 .810 .405 .060080 .812 .473 .015020 .817 .355 .060080 .812 .473 .015020 .817 .355 .060090 .812 .473 .015020 .817 .505 .060090 .812 .473 .015020 .817 .505 .060090 .810 | | | | | | | | | | | | | | | | | | |
| 1.795 | | | | | | | | | | | | | | | | | | |
| .795 .197 .008016 .800 .440 .005010 .804 .602 .005010 .810 .395 .005010 .812 .456 .104125 .817 .319 .060086 .795 .267 .048062 .800 .441 .010020 .805 .564 .090110 .810 .405 .060080 .812 .469 .030050 .817 .321 .015020 .795 .340 .005012 .800 .464 .040060 .805 .573 .060080 .810 .413 .005012 .817 .455 .060080 .795 .340 .005012 .800 .464 .040060 .805 .563 .005010 .810 .419 .062078 .812 .473 .015020 .817 .505 .050077 .795 .392 .010020 .800 .505 .632 .005010 .810 .455 .060093 .812 .506< | | | | | | | | | | | | | | | | | | |
| 1.795 1.79 | | | | | | | | | | | | | | | | | | |
| 795 281 0.40 - 0.60 800 442 0.05 - 0.10 805 5.64 0.90 - 1.10 810 4.13 0.05 - 0.12 812 4.73 0.15 - 0.20 817 4.55 0.60 - 0.99 7.95 3.40 0.05 - 0.12 8.00 4.64 0.40 - 0.60 8.05 5.73 0.60 - 0.80 8.10 4.19 0.62 - 0.78 8.12 5.01 0.05 - 0.20 8.17 5.05 0.50 - 0.70 7.95 3.92 0.10 - 0.20 8.00 4.90 0.30 - 0.50 8.05 6.32 0.05 - 0.10 8.10 4.43 0.05 - 0.10 8.12 5.06 0.60 - 0.80 8.17 6.61 0.05 - 0.10 7.95 4.27 0.90 - 1.05 8.00 5.02 0.10 - 0.20 8.05 6.65 0.05 - 0.10 8.10 4.45 0.060 - 0.93 8.12 5.08 0.15 - 0.25 8.17 6.61 0.05 - 0.10 7.95 4.82 0.30 - 0.50 8.00 5.04 0.05 - 0.30 8.05 6.672 0.05 - 0.10 8.10 4.45 0.05 - 0.04 8.12 5.09 0.50 - 0.75 8.17 6.61 0.05 - 0.10 7.95 5.57 0.90 - 0.105 8.00 5.50 0.05 - 0.10 8.05 6.92 0.10 - 0.20 8.10 4.80 0.05 - 0.10 8.12 5.15 0.42 - 0.60 8.17 6.90 0.12 - 0.20 7.95 5.77 0.90 - 0.105 8.00 5.51 0.20 - 0.40 8.06 2.09 0.05 - 0.10 8.10 5.01 0.80 - 1.00 8.12 5.17 0.30 - 0.40 8.17 7.71 0.05 - 0.11 7.95 6.80 0.05 - 0.40 8.00 5.30 0.30 - 0.50 8.86 3.00 0.05 - 0.10 8.10 5.01 0.80 - 1.25 8.12 5.30 0.32 - 0.42 8.18 2.64 0.30 - 0.44 7.95 7.30 0.25 - 0.35 8.00 5.44 0.05 - 0.10 8.06 3.50 0.05 - 0.10 8.10 5.22 0.40 - 0.60 8.12 5.30 0.32 - 0.42 8.18 2.64 0.30 - 0.44 7.95 7.31 0.30 - 0.40 8.00 5.51 0.05 - 0.10 8.06 3.78 0.60 - 0.83 8.10 5.33 0.25 - 0.50 8.12 5.51 0.05 - 0.30 8.18 3.21 0.10 - 0.20 7.96 2.86 0.05 - 0.10 8.06 6.36 0.05 - 0.10 8.10 5.41 0.20 - 0.40 8.12 5.91 0.20 - 0.40 8.18 3.30 0.05 - 0.10 7.96 3.53 0.30 - 0.40 8.06 5.55 0.05 - 0.10 8.06 6.36 0.05 - 0.10 8.10 5.51 0.05 - 0.10 8.12 5.91 0.20 - 0.30 8.18 3.31 0.30 - 0.04 7.96 3.59 0.05 - 0.07 8.00 5.55 0.05 - 0.10 8.06 | | | | I | | | | | | | | | | | | | | |
| .795 .340 .005012 .800 .464 .040060 .805 .573 .060080 .810 .419 .062078 .812 .501 .005020 .817 .505 .050076 .795 .392 .010020 .800 .490 .030050 .805 .632 .005010 .810 .443 .005010 .812 .506 .060080 .817 .631 .005010 .795 .427 .090105 .800 .504 .005030 .805 .656 .005010 .810 .455 .060093 .812 .508 .015025 .817 .661 .005010 .795 .509 .030060 .800 .504 .005010 .805 .672 .005010 .810 .475 .025042 .812 .515 .042060 .817 .661 .005010 .795 .577 .090105 .800 .510 .806 .299 .005010 .810< | | | | | | | | | | | | | | | | | | |
| .795 .392 .010020 .800 .490 .030050 .805 .632 .005010 .810 .443 .005010 .812 .506 .060080 .817 .631 .005010 .795 .427 .090105 .800 .502 .010020 .805 .656 .005010 .810 .455 .060093 .812 .508 .015025 .817 .660 .005010 .795 .482 .030050 .800 .505 .005010 .805 .692 .005010 .810 .475 .025042 .812 .509 .050075 .817 .661 .005010 .795 .577 .090105 .800 .505 .005010 .806 .209 .005010 .810 .480 .005010 .817 .690 .012020 .795 .655 .030040 .806 .262 .040060 .810 .507 .010025 .812 .524 .050 | | | | .800 | .442 | | .805 | .564 | .090110 | .810 | .413 | | .812 | .473 | | .817 | | .060090 |
| .795 .392 .010020 .800 .490 .030050 .805 .632 .005010 .810 .443 .005010 .812 .506 .060080 .817 .631 .005010 .795 .427 .090105 .800 .502 .010020 .805 .656 .005010 .810 .455 .060093 .812 .508 .015025 .817 .660 .005011 .795 .482 .030050 .800 .504 .005010 .805 .672 .005010 .810 .475 .025042 .812 .509 .050075 .817 .661 .005010 .795 .577 .090105 .800 .510 .020040 .806 .292 .005010 .810 .480 .005010 .812 .515 .042060 .817 .690 .012020 .795 .655 .030040 .800 .528 .005010 .806 .262 .040 | | | | .800 | .464 | .040060 | .805 | .573 | .060080 | .810 | .419 | .062078 | .812 | .501 | | .817 | .505 | .050070 |
| .795 .427 .090105 .800 .502 .010020 .805 .656 .005010 .810 .455 .060093 .812 .508 .015025 .817 .660 .005010 .795 .482 .030050 .800 .504 .005010 .805 .692 .010020 .810 .475 .025042 .812 .509 .050075 .817 .661 .005010 .795 .509 .030060 .800 .505 .005010 .805 .692 .010020 .810 .480 .005010 .812 .515 .042060 .817 .690 .012020 .795 .655 .030040 .800 .528 .005010 .806 .209 .005010 .810 .501 .880100 .812 .517 .030040 .801 .528 .005010 .806 .209 .005010 .810 .501 .8812 .524 .050070 .817 . | .795 | .392 | | .800 | .490 | .030050 | .805 | .632 | | | .443 | | .812 | .506 | .060080 | .817 | .631 | .005010 |
| .795 .482 .030050 .800 .504 .005030 .805 .672 .005010 .810 .475 .025042 .812 .509 .050075 .817 .661 .005010 .795 .509 .030060 .800 .505 .005010 .805 .692 .010020 .810 .480 .005010 .812 .515 .042060 .817 .690 .012020 .795 .577 .090105 .800 .510 .020040 .806 .209 .005010 .810 .501 .802100 .812 .517 .030040 .817 .711 .005010 .795 .685 .030040 .800 .528 .005010 .806 .300 .005010 .810 .514 .080125 .812 .524 .050070 .817 .750 .010026 .795 .730 .025035 .800 .544 .005010 .806 .350 .005 | .795 | .427 | .090105 | .800 | .502 | .010020 | | | | | | | .812 | .508 | .015025 | .817 | .660 | .005010 |
| .795 .509 .030060 .800 .505 .005010 .805 .692 .010020 .810 .480 .005010 .812 .515 .042060 .817 .690 .012020 .795 .577 .090105 .800 .510 .020040 .806 .209 .005010 .810 .501 .080100 .812 .517 .030040 .817 .711 .005010 .795 .655 .030040 .800 .528 .005010 .806 .262 .040060 .810 .507 .010025 .812 .524 .050070 .817 .750 .010020 .795 .680 .005040 .800 .530 .030050 .806 .300 .005010 .810 .514 .080125 .812 .530 .032042 .818 .264 .030040 .795 .731 .030040 .800 .550 .060075 .806 .378 .060 | | | | | | | | | | | | | | | | | | |
| .795 .577 .090105 .800 .510 .020040 .806 .209 .005010 .810 .501 .080100 .812 .517 .030040 .817 .711 .005010 .795 .655 .030040 .800 .528 .005010 .806 .262 .040060 .810 .507 .010025 .812 .524 .050070 .817 .750 .010026 .795 .680 .005040 .800 .530 .030050 .806 .300 .005010 .810 .514 .080125 .812 .530 .032042 .818 .264 .030044 .795 .730 .025035 .800 .544 .005010 .806 .350 .005010 .810 .522 .040060 .812 .540 .010020 .818 .317 .030044 .795 .731 .030040 .800 .550 .060075 .806 .378 .060 | | | | I | | | | | | | | | | | | | | |
| .795 .655 .030040 .800 .528 .005010 .806 .262 .040060 .810 .507 .010025 .812 .524 .050070 .817 .750 .010026 .795 .680 .005040 .800 .530 .030050 .806 .300 .005010 .810 .514 .080125 .812 .530 .032042 .818 .264 .030044 .795 .730 .025035 .800 .544 .005010 .806 .350 .005010 .810 .522 .040060 .812 .540 .010020 .818 .317 .030044 .795 .731 .030040 .800 .550 .060075 .806 .378 .060083 .810 .533 .025050 .812 .561 .005030 .818 .321 .010020 .796 .286 .005010 .806 .407 .030050 .810 .543 .020 | | | | | | | | | | | | | | | | | | |
| .795 .680 .005040 .800 .530 .030050 .806 .300 .005010 .810 .514 .080125 .812 .530 .032042 .818 .264 .030044 .795 .730 .025035 .800 .544 .005010 .806 .350 .005010 .810 .522 .040060 .812 .540 .010020 .818 .317 .030044 .795 .731 .030040 .800 .550 .060075 .806 .378 .060083 .810 .533 .025050 .812 .561 .005030 .818 .321 .010020 .796 .286 .005010 .800 .557 .005010 .806 .407 .030050 .810 .543 .020040 .812 .577 .020040 .818 .330 .005010 .796 .353 .030040 .800 .558 .005015 .806 .631 .020 | | | | 1 | | | | | | | | | | | | | | |
| .795 .730 .025035 .800 .544 .005010 .806 .350 .005010 .810 .522 .040060 .812 .540 .010020 .818 .317 .030044 .795 .731 .030040 .800 .550 .060075 .806 .378 .060083 .810 .533 .025050 .812 .561 .005030 .818 .321 .010020 .796 .286 .005010 .800 .551 .005010 .806 .407 .030050 .810 .543 .020040 .812 .577 .020040 .818 .330 .005010 .796 .290 .025040 .800 .557 .005010 .806 .469 .030050 .810 .543 .020040 .812 .591 .020030 .818 .391 .125150 .796 .353 .030040 .800 .558 .005015 .806 .636 .005 | | | | | | | | | | | | | | | | | | |
| .795 .731 .030040 .800 .550 .060075 .806 .378 .060083 .810 .533 .025050 .812 .561 .005030 .818 .321 .010020 .796 .286 .005010 .806 .407 .030050 .810 .543 .020040 .812 .577 .020040 .818 .330 .005010 .796 .290 .025040 .800 .557 .005010 .806 .469 .030050 .810 .545 .020040 .812 .591 .020030 .818 .391 .125150 .796 .353 .030040 .800 .558 .005015 .806 .631 .020040 .810 .551 .005010 .812 .592 .005050 .818 .432 .060080 .796 .397 .050070 .800 .560 .070090 .806 .636 .005010 .810 .561 .120 | | | | I | | | | | | | | | | | | | | |
| .796 .286 .005010 .800 .551 .005010 .806 .407 .030050 .810 .543 .020040 .812 .577 .020040 .818 .330 .005010 .796 .290 .025040 .800 .557 .005010 .806 .469 .030050 .810 .545 .020040 .812 .591 .020030 .818 .391 .125150 .796 .353 .030040 .800 .558 .005015 .806 .631 .020040 .810 .551 .005010 .812 .592 .005050 .818 .432 .060081 .796 .397 .050070 .800 .560 .070090 .806 .636 .005010 .810 .561 .120140 .812 .596 .025040 .818 .480 .005010 .796 .509 .040060 .800 .575 .025040 .806 .641 .060 | | | | I | | | | | | | | | | | | .818 | | .030040 |
| .796 .286 .005010 .800 .551 .005010 .806 .407 .030050 .810 .543 .020040 .812 .577 .020040 .818 .330 .005010 .796 .290 .025040 .800 .557 .005010 .806 .469 .030050 .810 .545 .020040 .812 .591 .020030 .818 .391 .125150 .796 .353 .030040 .800 .558 .005015 .806 .631 .020040 .810 .551 .005010 .812 .592 .005050 .818 .432 .060080 .796 .397 .050070 .800 .560 .070090 .806 .636 .005010 .810 .561 .120140 .812 .596 .025040 .818 .480 .005010 .796 .509 .040060 .800 .575 .025040 .806 .641 .060 | .795 | .731 | .030040 | .800 | .550 | .060075 | .806 | .378 | .060083 | .810 | | | .812 | .561 | .005030 | .818 | .321 | .010020 |
| .796 .290 .025040 .800 .557 .005010 .806 .469 .030050 .810 .545 .020040 .812 .591 .020030 .818 .391 .125150 .796 .353 .030040 .800 .558 .005015 .806 .631 .020040 .810 .551 .005010 .812 .592 .005050 .818 .432 .060081 .796 .397 .050070 .800 .560 .070090 .806 .636 .005010 .810 .561 .120140 .812 .596 .025040 .818 .480 .005010 .796 .509 .040060 .800 .575 .025040 .806 .641 .060083 .810 .564 .005015 .812 .625 .015025 .818 .549 .005010 | .796 | .286 | .005010 | .800 | .551 | .005010 | .806 | .407 | .030050 | .810 | .543 | .020040 | .812 | .577 | .020040 | .818 | .330 | .005010 |
| .796 .353 .030040 .800 .558 .005015 .806 .631 .020040 .810 .551 .005010 .812 .592 .005050 .818 .432 .060081 .796 .397 .050070 .800 .560 .070090 .806 .636 .005010 .810 .561 .120140 .812 .596 .025040 .818 .480 .005010 .796 .509 .040060 .800 .575 .025040 .806 .641 .060083 .810 .564 .005015 .812 .625 .015025 .818 .549 .005010 | | | | 1 | | | | | | | .545 | | | | | | | .125156 |
| .796 .397 .050070 .800 .560 .070090 .806 .636 .005010 .810 .561 .120140 .812 .596 .025040 .818 .480 .005010 .796 .509 .040060 .800 .575 .025040 .806 .641 .060083 .810 .564 .005015 .812 .625 .015025 .818 .549 .005010 | | | | | | | | | | | | | | | | | | |
| .796 .509 .040060 .800 .575 .025040 .806 .641 .060083 .810 .564 .005015 .812 .625 .015025 .818 .549 .00501 6 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| . היים היים היים או שלט. ביו היים היים היים היים היים היים היים הי | | | | | | | | | | | | | | | | | | |
| | .796 | .520 | .005012 | .800 | .582 | .005010 | .806 | .650 | .050070 | .610 | .505 | .025050 | .812 | .641 | .015080 | .818 | .591 | .090110 |

| | | Choose Anv | 1 | | Choose Any | | | Choose Any | 1 3 IVIL | IAL | Chance Any | IS Ani | - 1 - | Choose Any | OWIDE | LUL | |
|----------------------|---------------------|--------------------|----------------------|----------------------|----------------------------|---------------------|----------------------|----------------------------|---------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|---------------------|---------------------|--------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Choose Any Thickness* |
| .818 | .644 | .010020 | .827 | .236 | .005010 | .835 | .685 | .030060 | .844 | .610 | .030060 | .850 | .566 | .005010 | .856 | .650 | .010020 |
| .818 | .690 | .040060 | .827 | .238 | .005010 | .835 | .782 | .020030 | .844 | .666 | .070090 | .850 | .574 | .060080 | .856 | .671 | .010020 |
| .818 .819 | .720 .065 | .025040 .025040 | .827 | .317 | .005125 | .836 | .416 | .010020 | .844 | .703 | .005010 | .850 | .595 .612 | .090105 .005010 | .856 | .688 | .005010 |
| .819 | .005 | .025040 | .827 .827 | .328 .331 | .060080 .120135 | .836 .836 | .450 .680 | .040060 .005060 | .844 .845 | .711 .313 | .015030 .015090 | .850 .850 | .627 | .005010 | .856 .856 | .689 .734 | .030050 .010020 |
| .819 | .250 | .005010 | .827 | .332 | .156187 | .836 | .705 | .032060 | .845 | .466 | .005010 | .850 | .630 | .015020 | .857 | .312 | .005010 |
| .819 | .260 | .010020 | .827 | .393 | .005010 | .837 | .527 | .040060 | .845 | .482 | .005010 | .850 | .635 | .015030 | .857 | .409 | .005010 |
| .819 | .531 | .005010 | .827 | .407 | .090120 | .837 | .530 | .048075 | .845 | .495 | .020030 | .850 | .664 | .005030 | .857 | .555 | .015025 |
| .819 .819 | .675 .690 | .025040 .020035 | . 827 .827 | .412 .415 | .005010 .060080 | .837 .837 | .591 .633 | .005010 .025040 | .845 | .497 | .015030 | .850 .850 | .673 .711 | .015030 .015030 | .857 .857 | .640 .665 | .025040 .010020 |
| .819 | .700 | .040060 | .827 | .473 | .005010 | .837 | .679 | .025040 | .845 .845 | <u>.513</u> .651 | .015030 .030050 | .850 | .731 | .020040 | .857 | .692 | .030050 |
| .820 | .090 | .005010 | .827 | .509 | .050075 | .838 | .281 | .032060 | .845 | .660 | .010020 | .850 | .735 | .005030 | .858 | .352 | .100125 |
| .820 | .125 | .015030 | .827 | .632 | .005010 | .838 | .290 | .050075 | .845 | .758 | .005035 | .850 | .750 | .010020 | .858 | .564 | .030060 |
| .820 | .159 | .105135 | .827 | .749 | .005010 | .838 | .376 | .015030 | .845 | .782 | .005010 | .850 | .809 | .010020 | .858 | .596 | .030050 |
| . 820 .820 | . 198 | .005010 .060075 | . 828 | . 108 .317 | .010015 | .838 .838 | .482 .483 | .031048 .050075 | .846 .846 | .242 . 273 | .032050 .005010 | . 851 .851 | . 093 .164 | .005010 .050070 | .858 .858 | .619 .630 | .050070 .005010 |
| .820 | .310 | .005010 | .828 | .407 | .015030 | .838 | .508 | .005010 | .846 | .320 | .015030 | .851 | .173 | .005010 | .858 | .649 | .030050 |
| .820 | .315 | .005010 | .828 | .447 | .060080 | .838 | .618 | .040060 | .846 | .327 | .005010 | .851 | .184 | .040090 | .858 | .650 | .008020 |
| .820 | .320 | .040060 | .828 | .499 | .005008 | .838 | .665 | .005010 | .846 | .455 | .030060 | .851 | .185 | .060090 | .858 | .653 | .025040 |
| .820 .820 | .348 | .005010 | .828 .828 | .502 . 504 | .030040 .005020 | .838 .839 | .706 .316 | .015020 .015030 | .846 .846 | .456 . 639 | .035050 .005040 | .851 .851 | .384 | .104134 | .858 .858 | .720 .725 | .030050 |
| .820 | .392 | .010020 | .828 | .530 | .005010 | .839 | .502 | .005010 | .846 | .658 | .032050 | .851 | .401 | .005010 | .858 | .773 | .010020 |
| .820 | .395 | .050075 | .828 | .590 | .015030 | .839 | .591 | .010015 | .846 | .662 | .010020 | .851 | .421 | .105120 | .859 | .064 | .030050 |
| .820 | .405 | .135160 | .828 | .655 | .005010 | .839 | .628 | .050070 | .846 | .663 | .030060 | .851 | .450 | .030050 | .859 | .171 | .010020 |
| .820 | .442 | .025040 | .828 | .727 | .005010 | .839 | .652 | .005010 | .846 | .670 | .040060 | .851 | .503 | .005010 | .859 | .265 | .075090 |
| .820 .820 | .450 .453 | .012025 .015025 | .829 .829 | .137 .250 | .025048 .030050 | .840 .840 | .246 .292 | .104125 .020040 | .846 .846 | .697 .757 | .015030 . 005010 | .851 .851 | .513 .571 | .040060 .005010 | .859 .859 | .380 .439 | .005015 .020030 |
| .820 | .482 | .070090 | .829 | .283 | .020030 | .840 | .313 | .105125 | .847 | .193 | .090105 | .851 | .640 | .005010 | .859 | .450 | .005020 |
| .820 | .500 | .005010 | .829 | .414 | .007090 | .840 | .316 | .015030 | .847 | .253 | .005010 | .851 | .655 | .005010 | .859 | .454 | .015030 |
| .820 | .536 | .050070 | .829 | .430 | .100125 | .840 | .340 | .010025 | .847 | .323 | .005010 | .851 | .671 | .040060 | .859 | .489 | .020030 |
| .820 .820 | .559 .564 | .050075 .100125 | .829 | .468 | .100125 | .840 | .384 | .010025 | .847 | .416 | .005010 | .852 | .187 | .040060 | .859 | .508 | .025050 |
| .820 | .565 | .100125 | .829 .829 | .475 .480 | .080104 .105135 | .840 .840 | .387 .390 | .015030 . 005010 | .847 .847 | .422 .500 | .005010 .005010 | .852 .852 | .257 .409 | .062090 .005020 | .859 .859 | .515 .628 | .032042 .020030 |
| .820 | .566 | .005010 | .829 | .500 | .005010 | .840 | .470 | .060083 | .847 | .522 | .005010 | .852 | .503 | .020030 | .859 | .629 | .005010 |
| .820 | .572 | .105125 | .829 | .503 | .025040 | .840 | .503 | .005010 | .848 | .067 | .010020 | .852 | .528 | .015030 | .859 | .646 | .020040 |
| .820 | .600 | .005010 | .829 | .648 | .050070 | .840 | .515 | .025040 | .848 | .199 | .025040 | .852 | .534 | .015025 | .859 | .650 | .030070 |
| .820 .820 | .678 .698 | .010020 .005030 | .829 .829 | .653 .761 | .030060 .020030 | .840 .840 | .535 .545 | . 005010 .100135 | .848 .848 | .317 .323 | .005010 .005020 | .852 .852 | .543 .628 | .025040 .020040 | .859 .859 | .671 .675 | .040060 .030050 |
| .820 | .726 | .015025 | .830 | .160 | .060090 | .840 | .556 | .032040 | .848 | .492 | .050070 | .852 | .685 | .020062 | .859 | .705 | .005010 |
| .821 | .144 | .032048 | .830 | .187 | .020040 | .840 | .558 | .005010 | .848 | .540 | .005010 | .853 | .266 | .030060 | .859 | .779 | .005010 |
| .821 | .266 | .010020 | .830 | .379 | .005035 | .840 | .569 | .005010 | .848 | .685 | .032062 | .853 | .357 | .005010 | .860 | .036 | .032042 |
| .821 .821 | .416 .596 | .100125 .005030 | .830 .830 | .405 .461 | .040060 .015030 | .840 .840 | .575 .631 | .060070 .030060 | .848 .849 | .750 .151 | .010020 .030060 | .853 .853 | .401 .408 | .040060 .050070 | .860 .860 | .171 .192 | .015030 .090125 |
| .821 | .625 | .005010 | .830 | .475 | .025040 | .840 | .633 | .007015 | .849 | .386 | .050075 | .853 | .438 | .016025 | .860 | .225 | .030040 |
| .821 | .636 | .060080 | .830 | .515 | .005010 | .840 | .643 | .075090 | .849 | .401 | .040060 | .853 | .467 | .010020 | .860 | .252 | .015030 |
| .821 | .727 | .030048 | .830 | .530 | .090120 | .840 | .650 | .048062 | .849 | .413 | .005010 | .853 | .628 | .040060 | .860 | .261 | .010030 |
| .822 .822 | .200 .523 | .020030 .060080 | .830 .830 | .556 .564 | .010025 .100125 | .840 .840 | .674 .675 | .010020 .015030 | .849 .849 | .497 .520 | .005010 .005010 | .853 .853 | .632 .750 | .005010 .005010 | .860 .860 | .265 .314 | .075090 .075090 |
| .822 | .693 | .050070 | .830 | .565 | .030050 | .840 | .676 | .020035 | .849 | .606 | .005010 | .854 | .077 | .005030 | .860 | .321 | .062090 |
| .823 | .407 | .005010 | .830 | .590 | .070090 | .840 | .682 | .015030 | .849 | .631 | .010020 | .854 | .329 | .050075 | .860 | .338 | .005010 |
| .823 | .523 | .070090 | .830 | .605 | .025040 | .840 | .711 | .020040 | .850 | .155 | .005010 | .854 | .352 | .100125 | .860 | .340 | .020030 |
| .823 .823 | .755 .756 | .005020 .005010 | .830 | .628 | .025040 | .840 | .731 | .030050 | .850 | .174 | .025040 | .854 .854 | .578 .583 | .010020 .030050 | .860 | .384 .428 | .005015 |
| .824 | .321 | .005010 | .830 .830 | .632 .636 | .025040 .015030 | .840 .841 | .748 .440 | .015025 .025040 | .850 .850 | .175 .180 | .050070 .120135 | .854 | .605 | .005010 | .860 .860 | .420 | .100125 .020035 |
| .824 | .333 | .005010 | .830 | .649 | .010020 | .841 | .631 | .030050 | .850 | .200 | .020080 | .854 | .650 | .005010 | .860 | .458 | .010020 |
| .824 | .543 | .025040 | .830 | .693 | .020035 | .841 | .651 | .005010 | .850 | .240 | .048072 | .854 | .655 | .005010 | .860 | .488 | .010020 |
| .824 | .605 | .042062 | .830 | .696 | .005010 | .841 | .663 | .015030 | .850 | .250 | .015030 | .854 | .808 | .015020 | .860 | . 496 | .005010 |
| .825 .825 | .238 .317 | .005010 .005010 | .830 . 831 | .711 .239 | .015030 . 005010 | .841 .842 | .752 .378 | .010020 .025042 | .850 .850 | .251 .252 | .120140 . 005010 | . 855 .855 | .078 .130 | . 005010 .060080 | .860 .860 | .540 .562 | .040060 .015030 |
| .825 | .319 | .005020 | .831 | .584 | .015025 | .842 | .470 | .050070 | .850 | .283 | .005010 | .855 | .229 | .050075 | .860 | .563 | .005015 |
| .825 | .399 | .005010 | .831 | .649 | .005010 | .842 | .593 | .080095 | .850 | .302 | .105125 | .855 | .242 | .020040 | .860 | .592 | .005010 |
| .825 | .400 | .015030 | .832 | .461 | .010025 | .842 | .631 | .005008 | .850 | .316 | .090105 | .855 | .327 | .048072 | .860 | .600 | .005010 |
| .825 .825 | .414 .483 | .105125 .040060 | .832 .832 | .520 .551 | .050070 . 005010 | .842 .842 | .632 .690 | .010020 .005010 | .850 .850 | .319 .330 | .060080 .020040 | .855 .855 | .331 .375 | .030050 .005062 | .860 .860 | .625 .629 | .050070 .030050 |
| .825 | . 511 | .005010 | .832 | .595 | .005010 | .842 .842 | .729 | .005010 | .850 | .350 | .020040 | .855 | .503 | .010080 | .860 | .634 | .020030 |
| .825 | .525 | .010020 | .832 | .598 | .005010 | .842 | .764 | .005010 | .850 | .356 | .010020 | .855 | .512 | .005010 | .860 | .645 | .040060 |
| .825 | .527 | .090125 | .832 | .751 | .030040 | .843 | .142 | .010020 | .850 | .377 | .005020 | .855 | .531 | .010020 | .860 | .676 | .005030 |
| .825 .825 | .543 .577 | .015030 .020040 | . 833 | . 607 | .005010 .030042 | .843 | .210 | .040060 | .850 .850 | .378 .380 | . 005010 .030040 | .855 .855 | .562 .598 | .005010 .005010 | .860 .860 | .691 .698 | .005010 .030050 |
| .825 | .624 | .020040 | .833 | .730 .770 | .030042 | .843 .843 | . 260 .390 | . 005010 .070090 | .850 | .382 | .100125 | .855 | .599 | .105135 | .860 | .705 | .030050 |
| .825 | .709 | .005010 | .834 | .462 | .020040 | .843 | .453 | .100125 | .850 | .384 | .100125 | .855 | .651 | .050062 | .860 | .711 | .025040 |
| .826 | .314 | .030050 | .834 | .562 | .005010 | .843 | .500 | .005010 | .850 | .433 | .005010 | .855 | .691 | .050070 | .860 | .742 | .030050 |
| .826 | .319 | .030050 | .834 | .590 | .030050 | .843 | .559 | .050072 | .850 | .495 | .015025 | .856 | .088 | .010020 | .860 | .750 | .005010 |
| .826 .826 | .401 .414 | .010020 .025040 | .834 .835 | .596 .200 | .030050 .020035 | .843 .843 | .630 .656 | . 005010 .010020 | .850 .850 | .502 .503 | .005010 .005010 | .856 .856 | .123 .265 | .005010 .048062 | .860 .860 | .757 .778 | .005010 .005010 |
| .826 | .536 | .090105 | .835 | .221 | .005010 | .843 | .689 | .030040 | .850 | .509 | .005010 | .856 | .286 | .050070 | .860 | .785 | .010020 |
| .826 | .620 | .030050 | .835 | .390 | .040060 | .843 | .782 | .020030 | .850 | .510 | .005012 | .856 | .380 | .010020 | .861 | .499 | .030050 |
| .826 | .711 | .025040 | .835 | .480 | .010020 | .844 | .099 | .025040 | .850 | .513 | .040062 | .856 | .443 | .020040 | .861 | .527 | .040060 |
| .827 | .187 .215 | .010020 | .835 | .570 .595 | .005050 | .844 | .397 | .005010 | .850 .850 | .523 .535 | .040060 .050075 | .856 | .616 .628 | .025040 | .861 | .601 | .030050 |
| .827 | | .005010 | .835 | .595 | .010020 | .844 | .555 | .010020 | .030 | .555 | .000075 | .856 | .028 | .060080 | .861 | .620 | .060080 |

| | | Oharas Assu | | | Obsess Asses | | | Ohanan Amu | 140 | 100 | Charact Asset | IAIIGI | - 1 01 | | 11112 | OIZ E | |
|---------------------|----------------------|-------------------------------------|----------------------|----------------------|-------------------------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|----------------------------|----------------------|---------------------|-------------------------------------|----------------------|---------------------|----------------------------|
| O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* |
| .861 | .636 | .005010 | .866 | .336 | .070080 | .868 | .664 | .060080 | .871 | .582 | .005010 | .874 | .439 | .105125 | .875 | .390 | .060075 |
| .861 | .638 | .050070 | .866 | .350 | .025040 | .868 | .665 | .010030 | .871 | .590 | .005010 | .874 | .501 | .105125 | .875 | .391 | .040060 |
| .861 | .689 | .030050 | .866 | .394 | .005010 | .868 | .687 | .005010 | .871 | .673 | .010020 | .874 | .502 | .105125 | .875 | .393 | .005010 |
| .861 | .749 | .015020 | .866 | .395 | .010020 | .868 | .689 | .005010 | .871 | .675 | .015030 | .874 | .505 | .050070 | .875 | .395 | .090125 |
| .861 .862 | . 763 .256 | .005010 .050072 | .866 .866 | .396 .397 | .005010 .005015 | .868 .868 | .736 .751 | .010020 .010020 | .871 .872 | <u>.771</u> .153 | .025040 .040060 | .874 .874 | .508 | .040060 | .875 .875 | .396 .397 | .010020 |
| .862 | .295 | .040070 | .866 | .401 | .105125 | .868 | .760 | .025040 | .872 | .189 | .005015 | .874 | .510 | .075090 | .875 | .405 | .100120 |
| .862 | .312 | .025042 | .866 | .416 | .005010 | .869 | .279 | .105135 | .872 | .219 | .060083 | .874 | .512 | .060080 | .875 | .406 | .050060 |
| .862 | .407 | .015025 | .866 | .439 | .005010 | .869 | .393 | .020035 | .872 | .221 | .080100 | .874 | .513 | .015030 | .875 | .412 | .100125 |
| .862 | .427 | .020030 | .866 | .444 | .005010 | .869 | .430 | .125187 | .872 | .254 | .010020 | .874 | .514 | .005010 | .875 | .413 | .005015 |
| .862 | .518 | .090125 | .866 | .453 | .030040 | .869 | .508 | .050070 | .872 | .261 | .005010 | .874 | .526 | .050070 | .875 | .415 | .060083 |
| .862 .862 | .529 .538 | .050075 .015030 | .866 .866 | .473 .474 | .005010 .005020 | .869 .869 | .539 .575 | .010020 . 005010 | .872 .872 | .267 .269 | .030050 .032042 | .874 .874 | .533 .535 | .030060 .032048 | .875 .875 | .430 .436 | .015030 .060080 |
| .862 | .572 | .060075 | .866 | .475 | .010020 | .869 | .628 | .020080 | .872 | .306 | .020030 | .874 | .540 | .030050 | .875 | .437 | .050080 |
| .862 | .680 | .020032 | .866 | .484 | .070090 | .869 | .667 | .020030 | .872 | .320 | .042062 | .874 | .579 | .015030 | .875 | .438 | .010020 |
| .862 | .692 | .020030 | .866 | .496 | .100125 | .870 | .125 | .005015 | .872 | .334 | .010050 | .874 | .601 | .070090 | .875 | .439 | .005010 |
| .862 | .751 | .030050 | .866 | .500 | .010020 | .870 | .170 | .025040 | .872 | .376 | .010020 | .874 | .603 | .005010 | .875 | .440 | .015125 |
| .863 .863 | .272 .375 | .062078 .025040 | .866 .866 | .531 .543 | .025040 .030060 | .870 .870 | .184 .186 | .040062 . 005010 | .872 .872 | .394 .399 | .005025 .005010 | .874 .874 | .621 .624 | .005010 .020040 | .875 .875 | .448 .452 | .030050 . 005010 |
| .863 | .422 | .090120 | .866 | .545 | .020040 | .870 | .196 | .005015 | .872 | .402 | .010020 | .874 | .625 | .015025 | .875 | .453 | .025080 |
| .863 | .505 | .005010 | .866 | .562 | .015030 | .870 | .202 | .005010 | .872 | .475 | .060083 | .874 | .627 | .030050 | .875 | .456 | .090125 |
| .863 | .531 | .005050 | .866 | .568 | .040060 | .870 | .239 | .005010 | .872 | .476 | .055085 | .874 | .645 | .030050 | .875 | .473 | .100125 |
| .863 | .540 | .015030 | .866 | .591 | .030050 | .870 | .248 | .040060 | .872 | .562 | .075090 | .874 | .658 | .005010 | .875 | .475 | .025040 |
| .863 | .679 | .040062 .005008 | .866 | .592 | . 005010 .040060 | .870 | .264 | .100125 | .872 | .593 | .075104 | .874 | .660 | .010020 | .875 | .481 | .120135 |
| .863 .863 | .680 .682 | .010020 | .866 .866 | .626 .627 | .040060 | .870 .870 | .280 .307 | .120150 .010030 | .872 .872 | .605 .626 | .005010 .005010 | .874 .874 | .688 .751 | .015030 | .875 .875 | .486 .500 | .020040 .040090 |
| .863 | .687 | .015020 | .866 | .631 | .010020 | .870 | .312 | .013028 | .872 | .687 | .005010 | .875 | .070 | .005010 | .875 | .501 | .006030 |
| .863 | .688 | .005010 | .866 | .637 | .015030 | .870 | .313 | .015025 | .872 | .725 | .040060 | .875 | .086 | .005010 | .875 | .502 | .015030 |
| .863 | .759 | .015050 | .866 | .638 | .060070 | .870 | .316 | .012020 | .872 | .728 | .005010 | .875 | .087 | .020040 | .875 | .504 | .030125 |
| .864 | .208 | .005010 | .866 | .642 | .005010 | .870 | .320 | .040060 | .872 | .755 | .005025 | .875 | .111 | .020040 | .875 | .505 | .005042 |
| .864 .864 | .316 .368 | .005010 .005010 | . 866 .866 | .643 .697 | . 005010 .015025 | .870 | .345 .352 | .025040 . 005010 | .872 .872 | .760 .807 | . 005010 .010015 | .875 .875 | .129 .133 | .020040 .032042 | .875 .875 | .506 .507 | .090125 .030125 |
| .864 | .430 | .040060 | .866 | .750 | .015025 | .870 .870 | .354 | .060080 | .872 | .140 | .010015 | .875 | .140 | .015030 | .875 | .513 | .030125 |
| .864 | .505 | .015025 | .866 | .756 | .005010 | .870 | .381 | .090120 | .873 | .153 | .050075 | .875 | .150 | .005010 | .875 | .517 | .005010 |
| .864 | .536 | .080104 | .866 | .758 | .010030 | .870 | .387 | .135187 | .873 | .194 | .070090 | .875 | .153 | .040060 | .875 | .518 | .090110 |
| .864 | .551 | .005010 | .867 | .129 | .020040 | .870 | .421 | .040060 | .873 | .195 | .005010 | .875 | .158 | .005010 | .875 | .527 | .032048 |
| .864 | .595 | .005008 | .867 | .336 | .090120 | .870 | .437 | .060080 | .873 | .224 | .020040 | .875 | .168 | .072120 | .875 | .562 | .050072 |
| .864 .864 | .620 .628 | .010020 .050070 | .867 .867 | .360 .370 | .020040 .025040 | .870 .870 | .440 .450 | .156187 .090120 | .873 .873 | .307 .312 | .007016 .030050 | .875 .875 | .172 .175 | .048062 .040060 | .875 .875 | .563 .567 | .005105 .005010 |
| .864 | .633 | .005010 | .867 | .381 | .030060 | .870 | .459 | .010020 | .873 | .361 | .105125 | .875 | .180 | .062075 | .875 | .568 | .020048 |
| .864 | .639 | .042062 | .867 | .387 | .005010 | .870 | .461 | .040060 | .873 | .365 | .005010 | .875 | .184 | .020040 | .875 | .580 | .015030 |
| .864 | .781 | .010020 | .867 | .394 | .010020 | .870 | .472 | .005010 | .873 | .378 | .040060 | .875 | .187 | .090105 | .875 | .600 | .090105 |
| .865 | .205 | .005010 | .867 | .398 | .005010 | .870 | .502 | .030040 | .873 | .381 | .005010 | .875 | .192 | .025042 | .875 | .610 | .025040 |
| .865 .865 | .260 .351 | .020040 .020030 | .867 . 867 | .405 .413 | .090105 . 005010 | .870 .870 | .505 .508 | .040075 .105135 | .873 .873 | .387 .388 | .015025 . 005010 | .875 .875 | .196 .203 | .050075 .062090 | .875 .875 | .611 .621 | .050070 .060080 |
| .865 | .398 | .020040 | .867 | .452 | .005010 | .870 | .512 | .005010 | .873 | .405 | .015030 | .875 | .226 | .005010 | .875 | .626 | .050070 |
| .865 | .412 | .060080 | .867 | .474 | .090110 | .870 | .520 | .075090 | .873 | .410 | .105135 | .875 | .236 | .005060 | .875 | .628 | .005060 |
| .865 | .434 | .005010 | .867 | .560 | .040060 | .870 | .540 | .005010 | .873 | .412 | .005010 | .875 | .250 | .005050 | .875 | .630 | .050070 |
| .865 | .471 | .005010 | .867 | .566 | .005010 | .870 | .557 | .005010 | .873 | .436 | .050075 | | .252 | .010020 | .875 | .631 | .015030 |
| .865 .865 | .476 . 477 | .020040 .005010 | .867 .867 | .593 .608 | .015030 .080120 | .870 .870 | .562 .578 | .005060 .040060 | .873 .873 | .440 | .105135 .015030 | .875 .875 | .253 .257 | .050075 .070130 | .875 . 875 | .632 .635 | .100125 |
| .865 | .479 | .070090 | .867 | .632 | .025040 | .870 | .580 | .010020 | .873 | .467 .470 | .030050 | .875 | .260 | .030040 | .875 | .637 | .010104 |
| .865 | .492 | .036060 | .867 | .638 | .012020 | .870 | .581 | .042060 | .873 | .503 | .015070 | .875 | .267 | .090134 | .875 | .650 | .100125 |
| .865 | .493 | .010020 | .867 | .670 | .015030 | .870 | .608 | .030060 | .873 | .522 | .020040 | .875 | .268 | .005010 | .875 | .652 | .031048 |
| .865 | .551 | .080100 | .867 | .688 | .005008 | .870 | .610 | .005012 | .873 | .532 | .170190 | .875 | .281 | .005010 | .875 | .654 | .075100 |
| .865 .865 | .553 .566 | .010020 .005010 | .867 | .690 | .010020 .025040 | .870 | .625 | .015030 | .873 | .546 | .050070 | .875 | .282 .315 | .030050 .100134 | .875 | .660 | .062078 |
| .865 | .50 0 .597 | .042062 | .867 .867 | .704 .710 | .025040 | .870 .870 | .628 .629 | .025040 . 005010 | .873 .873 | .582 .599 | .100125 .075090 | .875 .875 | .318 | .090110 | .875 .875 | .666 .670 | .040060 . 005010 |
| .865 | .626 | .040060 | .867 | .724 | .040060 | .870 | .632 | .010050 | .873 | .604 | .025040 | .875 | .320 | .010020 | .875 | .674 | .010020 |
| .865 | .630 | .005010 | .867 | .753 | .005010 | .870 | .639 | .005010 | .873 | .627 | .030060 | .875 | .324 | .030040 | .875 | .687 | .050080 |
| .865 | .634 | .005070 | .867 | .760 | .015030 | .870 | .640 | .030060 | .873 | .628 | .105125 | .875 | .325 | .050072 | .875 | .690 | .075090 |
| .865 | .635 | .005010 | .867 | .770 | .030050 | .870 | .647 | .005010 | .873 | .632 | .005015 | .875 | .327 | .090125 | .875 | .691 | .040060 |
| .865 .865 | .650 .672 | .020030 .010015 | .868 .868 | .237 .238 | .005010 .005010 | .870 .870 | .649 .650 | .015030 .040060 | .873 .874 | .780 .200 | .025040 .042080 | . 875 .875 | .328 .330 | .005010 .080104 | .875 .875 | .693 .698 | .030050 . 005010 |
| .865 | .698 | .005010 | .868 | .315 | .015060 | .870 | .682 | .040060 | .874 | .203 | .042060 | .875 | .337 | .050104 | .875 | .719 | .005010 |
| .865 | .714 | .005010 | .868 | .317 | .005010 | .870 | .687 | .050062 | .874 | .243 | .030050 | .875 | .340 | .005010 | .875 | .735 | .050070 |
| .865 | .715 | .032042 | .868 | .442 | .005010 | .870 | .695 | .005010 | .874 | .259 | .005010 | .875 | .343 | .016025 | .875 | .746 | .010020 |
| .865 | .755 | .032050 | .868 | .462 | .030050 | .870 | .711 | .025040 | .874 | .266 | .025040 | .875 | .345 | .110130 | .875 | .750 | .030050 |
| .866 .866 | .157 .197 | .020030 .080100 | .868 | .473 | .005010 | . 870 | . 728 | .005010 | .874 | .312 | .005010 | .875 .875 | .347 .354 | .042062 . 005010 | .875 | .751 755 | .005015 |
| .866 | .236 | .010020 | . 868 | . 477 .513 | .005010 .015025 | .870 .870 | .754 .755 | .005012 .042062 | .874 .874 | .316 .329 | .0 05010 .060083 | .875 | .362 | .012020 | .875 .875 | .755 .756 | .010020 .025040 |
| .866 | .239 | .030050 | .868 | .521 | .100134 | .870 | .761 | .020030 | .874 | .330 | .025040 | .875 | .367 | .005010 | .875 | .760 | .020040 |
| .866 | .299 | .005020 | .868 | .527 | .010020 | .870 | .810 | .015025 | .874 | .375 | .060187 | .875 | .375 | .100125 | .876 | .067 | .015030 |
| .866 | .315 | .005020 | .868 | .563 | .080100 | .871 | .211 | .050070 | .874 | .376 | .020040 | .875 | .376 | .005010 | .876 | .093 | .020040 |
| .866 | .316 | .005010 | .868 | .606 | .015030 | .871 | .381 | .090110 | .874 | .377 | .015080 | .875 | .377 | .010020 | .876 | .127 | .060080 |
| .866 | .317 | .005010 | .868 | .607 | .015030 | .871 | .410 | .030050 | .874 874 | .384 | .008016 | .875 | .378 | .020030 | .876 | .130 | .005010 |
| .866 .866 | .318 .319 | .005010 .005010 | .868 .868 | .610 .620 | .090125 . 005010 | .871 .871 | . 455 .477 | . 005010 .060090 | .874 .874 | .392 .398 | .015030 .125156 | .875 .875 | .380 .382 | .105134 | .876 .876 | .164 .173 | .005010 .050070 |
| .866 | .322 | .005010 | .868 | .627 | .080105 | .871 | .579 | .010020 | .874 | .410 | .080100 | .875 | .383 | .150180 | .876 | .282 | .040187 |
| .866 | .325 | .090105 | .868 | .641 | .040060 | .871 | .581 | .070090 | .874 | .420 | .005010 | .875 | .384 | .008016 | .876 | .284 | .040060 |
| | | | | | | | | u can choos | | | | | | | • | | |

| O.D. I.D. .876 .287 .876 .317 .876 .328 .876 .340 .876 .343 .876 .350 .876 .378 | Thic From .100 .030 .000 .160 | 00000000000000000000000000000000000000 | O.D. .878 .878 | I.D. .593 | Choose Any Thickness* From To .025050 | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* From To | O.D. | I.D. | Choose Any Thickness* |
|--|--|--|----------------------|---------------------|--|---------------------|---------------------|-------------------------------------|----------------------|----------------------|-------------------------------------|---------------------|---------------------|-------------------------------------|----------------------|----------------------|---------------------------|
| .876 .317 .876 .328 .876 .340 .876 .343 .876 .350 | .100 .030 .000 | 0125 0050 | | | | | | | | | From To | | | From To | | | |
| .876 .317 .876 .328 .876 .340 .876 .343 .876 .350 | .03 .00 .16 | 0050 | | | .023030 1 | | 606 | 000 040 | 000 | EGO | 00E 010 | .904 | .262 | .070090 | .908 | .564 | .015030 |
| .876 .328 .876 .340 .876 .343 .876 .350 | .00 | | | .627 | .020030 | .885 .885 | .626 .695 | .020040 . 005010 | .899 .899 | .563 .568 | . 005010 .070090 | .904 | .319 | .005020 | .908 | .616 | .020032 |
| .876 .340 .876 .343 .876 .350 | .16 | | .878 | .628 | .005010 | .885 | .705 | .005010 | .899 | .789 | .030040 | .904 | .329 | .005010 | .908 | .688 | .010025 |
| .876 .343 .876 .350 | | 0190 | .878 | .632 | .040060 | .886 | .118 | .030050 | .899 | .810 | .020030 | .904 | .486 | .025042 | .908 | .705 | .030048 |
| .876 .350 | | 5040 | .878 | .648 | .005010 | .886 | .291 | .030050 | .899 | .814 | .005010 | .904 | .629 | .020100 | .908 | .751 | .060080 |
| 876 970 | | 5025 | .878 | .660 | .015030 | .886 | .443 | .005040 | .899 | .841 | .010020 | .904 | .640 | .030040 | .908 | .753 | .005010 |
| .070 .378 | .09 | 0105 | .878 | .689 | .020040 | .886 | .531 | .050070 | .900 | .063 | .010020 | .904 | .649 | .020035 | .908 | .764 | .020030 |
| .876 .397 | .03 | 0050 | .878 | .742 | .005010 | .887 | .265 | .062090 | .900 | .079 | .030050 | .904 | .690 | .015030 | .908 | .765 | .020040 |
| .876 .461 | .00 | 5010 | .878 | .826 | .005010 | .887 | .325 | .035050 | .900 | .100 | .015030 | .904 | .750 | .040060 | .909 | .250 | .030040 |
| .876 .471 | .04 | 0062 | .879 | .125 | .050060 | .887 | .572 | .050070 | .900 | .154 | .005010 | .904 | .805 | .005040 | .909 | .342 | .050075 |
| .876 .503 | | 5010 | .879 | .172 | .090120 | .887 | .714 | .020040 | .900 | .217 | .025040 | .905 | .127 | .090110 | .909 | .364 | .005010 |
| .876 .506 | | 0120 | .879 | .250 | .025040 | .887 | .755 | .005010 | .900 | .252 | .005010 | .905 | .196 | .040060 | .909 | .379 | .005010 |
| .876 .515 | | 0104 | .879 | .327 | .048062 | .887 | .795 | .005010 | .900 | .254 | .040060 | .905 | .238 | .005010 | .909 | .634 | .010020 |
| .876 .516 | | 5156 | .879 | .376 | .010020 | .888 | .382 | .075090 | .900 | .376 | .005030 | .905 | .317 | .005010 | .909 | .676 | .007015 |
| .876 .519 | | 0083 | .879 | .399 | .050070 | .888 | .530 | .005010 | .900 | .377 | .005010 | .905 | .330 | .015030 | .909 | .749 | .040060 |
| .876 .522 | | 0125 | .879 | .431 | .050070 | .888 | .535 | .015030 | .900 | .378 | .015040 | .905 | .344 | .020030 | .909 | .796 | .005010 |
| .876 .533 .876 .551 | | 0130 | .879 | .515 | .025040 | .888 | .622 | .005010 | .900 | .379 | .005078 | .905 | .392 .396 | .010040 | .910 | .250 | .080104 |
| .876 .551 .876 .563 | | 0120 5010 | .879 .879 | .516 .593 | .040060 | .888 .889 | .760 .395 | .010020 | .900 | .380 | .010020 | .905 .905 | .398 | . 005010 .120135 | .910 | .330 | .030040 .010020 |
| .876 .565 | | 0040 | .879 | .635 | .050070 .050075 | .889 | .569 | .105120 . 005010 | .900 .900 | .390 .400 | .030060 .005010 | .905 | .451 | .070090 | .910 .910 | .417 .440 | .005010 |
| .876 .600 | | 0075 | .880 | .165 | .050075 | .889 | .758 | .025040 | .900 | .437 | .005010 | .905 | .473 | .010030 | .910 | .468 | .075090 |
| .876 .616 | | 8062 | .880 | .170 | .110130 | .890 | .192 | .050072 | .900 | .440 | .005010 | .905 | .475 | .105125 | .910 | .490 | .130156 |
| .876 .622 | | 0060 | .880 | .170 | .015030 | .890 | .273 | .070105 | .900 | .441 | .005010 | .905 | .481 | .040060 | .910 | .500 | .025040 |
| .876 .625 | | 5010 | .880 | .219 | .032050 | .890 | .405 | .100125 | .900 | .455 | .050070 | .905 | .493 | .070090 | .910 | .515 | .100125 |
| .876 .626 | | 0075 | .880 | .260 | .005125 | .890 | .438 | .030040 | .900 | .489 | .005010 | .905 | .520 | .020040 | .910 | .540 | .060080 |
| .876 .632 | | 0050 | .880 | .260 | .126187 | .890 | .504 | .015030 | .900 | .500 | .005030 | .905 | .531 | .050060 | .910 | .560 | .110130 |
| .876 .633 | | 2080 | .880 | .265 | .005010 | .890 | .530 | .010030 | .900 | .503 | .005020 | .905 | .558 | .005010 | .910 | .650 | .005015 |
| .876 .672 | .09 | 0105 | .880 | .302 | .005015 | .890 | .580 | .005008 | .900 | .504 | .005008 | .905 | .564 | .040060 | .910 | .667 | .030050 |
| .876 .675 | | 0040 | .880 | .324 | .050070 | .890 | .582 | .005010 | .900 | .510 | .015030 | .905 | .585 | .050075 | .910 | .703 | .030040 |
| .876 .681 | | 080 0 | .880 | .333 | .042060 | .890 | .587 | .005010 | .900 | .562 | .005015 | .905 | .634 | .032060 | .910 | .811 | .020040 |
| .876 .692 | | 0030 | .880 | .340 | .160190 | .890 | .667 | .005010 | .900 | .563 | .040060 | .905 | .637 | .015030 | .910 | .820 | .005010 |
| .876 .694 | | 0040 | .880 | .357 | .005010 | .890 | .711 | .025040 | .900 | .564 | .010100 | .905 | .639 | .040060 | .911 | .256 | .080100 |
| .876 .702 | | 0020 | .880 | .375 | .060080 | .891 | .582 | .030050 | .900 | .570 | .005070 | .905 | .643 | .010020 | .911 | .416 | .062090 |
| .876 .714 .876 .745 | | 0050 5040 | .880 | .376 | .025062 | .891 | .632 | .005010 | .900 | .577 | .015025 | .905 | .657 .672 | .070080 .070090 | .911 | .471 | .030050 |
| .876 .750 | | 0040 | .880 .880 | .380 .381 | .005080 .005015 | <u>.891</u> .891 | <u>.669</u> .711 | .010020 .005015 | .900 .900 | .595 .625 | .080090 .025040 | .905 .905 | .673 | .090125 | .911 . 911 | .564 .568 | .030050 .005010 |
| .876 .751 | | 5030 | .880 | .386 | .070090 | .892 | .073 | .025036 | .900 | .628 | .025040 | .905 | .674 | .075100 | .911 | .710 | .030048 |
| .877 .128 | | 080 0 | .880 | .406 | .005010 | .892 | .273 | .070105 | .900 | .630 | .120135 | .905 | .677 | .105125 | .911 | .780 | .005010 |
| .877 .170 | | 5060 | .880 | .407 | .080105 | .892 | .390 | .005010 | .900 | .634 | .040060 | .905 | .709 | .015030 | .911 | .815 | .005010 |
| .877 .173 | .10 | 0125 | .880 | .426 | .005015 | .892 | .514 | .005010 | .900 | .654 | .060070 | .905 | .728 | .050070 | .912 | .549 | .070105 |
| .877 .250 | .03 | 050 0 | .880 | .430 | .005010 | .892 | .612 | .010025 | .900 | .661 | .070090 | .905 | .785 | .005010 | .912 | .563 | .010020 |
| .877 .254 | | 0125 | .880 | .455 | .005012 | .892 | .632 | .005010 | .900 | .670 | .025048 | .906 | .316 | .005010 | .912 | .596 | .005010 |
| .877 .281 | | 0015 | .880 | .485 | .050060 | .892 | .653 | .050070 | .900 | .690 | .010050 | .906 | .325 | .005010 | .912 | .656 | .105120 |
| .877 .313 | | 25040 | .880 | .495 | .005010 | .892 | .726 | .005010 | .900 | .711 | .025040 | .906 | .394 | .010020 | .912 | .683 | .015030 |
| .877 .329 .877 .377 | | 2030 2020 | .880 | .505 | .015025 | .893 | .621 | .040075 | .900 | .800 | .005010 | .906 | .396 | .010020 | .912 | . 805 .493 | .005010 |
| .877 .389 | | 4187 | .880 .880 | .518 .530 | .040060 .030040 | .894 .894 | .195 .251 | .020040 .010020 | .900 .900 | .810 .830 | .010020 .015025 | .906 .906 | .405 .474 | .010020 | .913 .913 | .507 | .015030 .020030 |
| .877 .407 | | 0190 | .880 | .541 | .025035 | .894 | .501 | .060080 | .900 | .202 | .030050 | .906 | .512 | .006012 | .913 | .510 | .020030 |
| .877 .442 | | 0080 | .880 | .621 | .020060 | .894 | .624 | .005010 | .901 | .256 | .010016 | .906 | .512 | .010020 | .913 | .665 | .080100 |
| .877 .494 | | 2083 | .880 | .626 | .062078 | .894 | .762 | .005010 | .901 | .292 | .040060 | .906 | .565 | .080100 | .913 | .847 | .005010 |
| .877 .498 | | 0075 | .880 | .659 | .070080 | .895 | .375 | .070090 | .901 | .361 | .010020 | .906 | .592 | .025040 | .914 | .521 | .005010 |
| .877 .507 | | 080 0 | .880 | .681 | .005012 | .895 | .390 | .032062 | .901 | .506 | .005020 | .906 | .603 | .010020 | .914 | .596 | .025040 |
| .877 .593 | | 0100 | .880 | .690 | .060070 | .895 | .574 | .032042 | .901 | .626 | .005020 | .906 | .609 | .005010 | .914 | .650 | .015030 |
| .877 .643 | | 5042 | .880 | .711 | .025040 | .895 | .631 | .005010 | .901 | .694 | .075093 | .906 | .638 | .093125 | .915 | .350 | .040060 |
| .877 .693 | | 0050 | .881 | .201 | .005010 | .895 | .733 | .050070 | .902 | .316 | .010030 | .906 | .657 | .025035 | .915 | .446 | .015025 |
| .877 .694 | | 0090 | .881 | .203 | .005010 | .895 | .795 | .010020 | .902 | .329 | .005010 | .906 | .669 | .015030 | .915 | .509 | .050070 |
| .877 .755 | | 2062 | .881 | .548 | .030050 | .895 | .801 | .020030 | .902 | .377 | .005010 | .906 | .728 | .030050 | .915 | .510 | .005010 |
| .877 .836 | | 010 | .881 | .661 | .005010 | .896 | .340 | .050070 | .902 | .504 | .006012 | .906 | .730 | .030050 | .915 | .616 | .015030 |
| .878 .125 | | 0040 | .881 | .681 | .010015 | .896 | .772 | .020042 | .902 | .505 | .005020 | .906 | .750 | .010020 | .915 | .623 | .030060 |
| .878 .187 | | <u>90040</u> 5040 | .881 | .732 | .020030 | .897 | .292 | .005010 | .902 | .535 | .005010 | .906 | .759 | .010020 | .915 | .628 | .080095 |
| .878 .219 .878 .229 | | 5040 0060 | .882 .882 | .300 .323 | .005010 .005010 | .897 | . 407 | .005010 | .902 | .564 | .005010 | .906 907 | .769 .228 | .010020 | . 915 .916 | .744 .150 | .005010 .020032 |
| .878 .264 | | 60080 80083 | .882 | .325 | .005010 | .897 .897 | .408 .409 | .010020 .025080 | .902 .902 | .642 .658 | .005010 .005010 | .907 .907 | .228 | .070090 | .916 | .317 | .100120 |
| .878 .285 | | 0003 | .882 | .500 | .150180 | .897 | .704 | .025080 | . 902 .902 | . 658 .679 | .030050 | .907 | .330 | .050060 | .916 | .507 | .020040 |
| .878 .376 | | 25040 | .882 | .540 | .090110 | .897 | .748 | .025040 | .902 | .790 | .030050 | .907 | .380 | .125135 | .916 | .532 | .040060 |
| .878 .387 | | 8062 | .882 | .664 | .005010 | .897 | .810 | .010020 | .902 | .792 | .005010 | .907 | .411 | .025040 | .916 | .540 | .020040 |
| .878 .402 | | 0075 | .883 | .315 | .010020 | .898 | .250 | .040060 | .903 | .252 | .080100 | .907 | .469 | .100120 | .916 | .570 | .050090 |
| .878 .406 | | 5040 | .883 | .500 | .050075 | .898 | .318 | .050075 | .903 | .258 | .060080 | .907 | .514 | .005010 | .916 | .571 | .090110 |
| .878 .437 | | 20040 | .883 | .509 | .030050 | .898 | .343 | .005010 | .903 | .315 | .030048 | .907 | .624 | .020035 | .916 | .734 | .020040 |
| .878 .446 | .05 | 0075 | .883 | .560 | .050070 | .898 | .510 | .075104 | .903 | .330 | .015030 | .907 | .645 | .020040 | .916 | .735 | .020040 |
| .878 .473 | | 5156 | .883 | .622 | .050075 | .898 | .665 | .025040 | .903 | .401 | .005010 | .907 | .669 | .060080 | .916 | .795 | .010020 |
| .878 .478 | | 0020 | .883 | .777 | .010020 | .898 | .748 | .005010 | .903 | .416 | .100125 | .907 | .672 | .042060 | .916 | .804 | .016032 |
| .878 .501 | | 0040 | .884 | .510 | .015030 | .898 | .812 | .005010 | .903 | .500 | .025036 | .907 | .728 | .005015 | .917 | .501 | .070090 |
| .878 .516 | | 0125 | .885 | .150 | .020040 | .898 | .829 | .015030 | .903 | .531 | .160180 | .907 | .740 | .010050 | .917 | .506 | .010020 |
| .878 .518 | | 0125 | .885 | .212 | .010020 | .899 | .121 | .040060 | .903 | .664 | .025040 | .907 | .757 | .010020 | .917 | .531 | .062078 |
| .878 .523 | | 0125 | .885 | .325 | .005010 | .899 | .197 | .030050 | .903 | .710 | .010020 | .908 | .332 | .135156 | .917 | .579 | .050060 |
| .878 .531 | | 20040 | .885 | .396 | .005010 | .899 | .479 | .020040 | .903 | .735 | .005015 | .908 | .342 | .050075 | .917 | .596 | .005015 |
| .878 .562 | | 25040 | .885 | .443 456 | .005008 | .899 | .501 | .010020 | .903 | .760 | .015030 | .908 | .379 | .025040 | .917 | .623 | .040060 |
| .878 .570 .878 .585 | |)5012) 5010 | .885 .885 | .456 .565 | . 005020 .015032 | . 899 | . 535 | .005010 | .903 | .766 | .040060 | .908 .908 | .502 .555 | .030050 .080105 | .918 .918 | .497 .596 | .010020 .005010 |
| .878 .585 | , .00 | | | | | .899 | .562 | .025040 | .904 | .206 | .040060 ness vou wa | | | | | .590 | .005010 |

| | | Choose Any | | | Choose Any | | | Choose Any | 110 | 100 | Choose Any | IAIIGE | . 1 01 | Choose Any | 11112 | OIZE | Choose Any |
|----------------------|---------------------|----------------------------|----------------------|----------------------|----------------------------|---------------------|----------------------|---------------------------|---------------------|---------------------|---------------------------|---------------------|----------------------|----------------------------|---------------------|---------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| .918 | .614 | .005010 | .925 | .516 | .025040 | .933 | .688 | .005010 | .937 | .410 | .015030 | .939 | .457 | .008016 | .942 | .693 | .005010 |
| .918 | .762 | .025035 | .925 | .526 | .015030 | .933 | .726 | .005010 | .937 | .431 | .050075 | .939 | .496 | .005010 | .942 | .724 | .100125 |
| .919 .919 | .257 .366 | .070090 .005010 | .925 .925 | .575 .576 | .070090 .050075 | .933 .934 | .775 .094 | .010020 .005010 | .937 .937 | .437 .440 | .156187 .020040 | .939 | .560 | .080104 | .942 .942 | .744 .794 | .005010 .005010 |
| .919 | .396 | .005010 | .925 | .577 | .050075 | .934 | .190 | .010020 | .937 | .444 | .020040 | .939 .939 | .563 .610 | . 005010 .040060 | .943 | .406 | .005010 |
| .919 | .493 | .100125 | .925 | .661 | .025040 | .934 | .414 | .025040 | .937 | .460 | .025040 | .939 | .628 | .015030 | .943 | .418 | .120140 |
| .919 | .565 | .005020 | .925 | .672 | .040060 | .934 | .508 | .020040 | .937 | .480 | .015030 | .939 | .630 | .020040 | .943 | .426 | .020040 |
| .919 .919 | .697 .765 | .010020 . 005010 | . 925 .925 | .719 .725 | . 005010 .010020 | .934 | .513 .563 | .005010 | .937 | .487 | .005010 | .939 | .633 | .015030 | .943 .943 | .442 .473 | .010030 .075090 |
| .919 | .812 | .020030 | .925 | .756 | .010020 | .934 .934 | .743 | .048078 .020040 | .937 .937 | .500 .510 | .015030 .020110 | .939 | .640 .656 | .015025 .030040 | .943 | .475 | .005010 |
| .920 | .157 | .005010 | .925 | .800 | .012025 | .934 | .753 | .005010 | .937 | .515 | .030050 | .939 | .660 | .050070 | .943 | .517 | .005010 |
| .920 | .163 | .032060 | .925 | .817 | .010020 | .934 | .754 | .005020 | .937 | .517 | .105125 | .939 | .678 | .040060 | .943 | .547 | .030050 |
| .920 | .200 | .005010 | .925 | .834 | .020030 | .934 | .757 | .030050 | .937 | .518 | .005010 | .939 | .700 | .005010 | .943 | .568 | .080100 |
| .920 .920 | .230 .253 | .025040 . 005075 | .926 .926 | .399 .438 | .080105 .045060 | .934 .935 | .770 .152 | .040060 .040060 | .937 .937 | .520 .578 | .020125 .080104 | .939 .939 | .783 .799 | .040060 | .943 .943 | .596 .597 | .030050 .005012 |
| .920 | .265 | .040060 | .926 | .670 | .010020 | .935 | .216 | .080090 | .937 | .580 | .030050 | .939 | .869 | .015025 | .944 | .150 | .040060 |
| .920 | .269 | .135187 | .926 | .689 | .015030 | .935 | .273 | .010020 | .937 | .594 | .050060 | .940 | .186 | .031048 | .944 | .238 | .005010 |
| .920 | .316 | .080100 | .926 | .724 | .015030 | .935 | .310 | .050083 | .937 | .624 | .075090 | .940 | .194 | .010020 | .944 | .281 | .025036 |
| .920 .920 | .318 .378 | .005010 .005010 | .927 . 927 | .171 .264 | .100125 . 005010 | .935 .935 | .318 .321 | .005010 .005010 | .937 | .625 | .005010 | .940 .940 | . 231 .253 | . 005010 .007015 | .944 .944 | .314 .317 | .080100 . 005020 |
| .920 | .456 | .010030 | .927 | .397 | .005010 | .935 | .439 | .020050 | .937 .937 | .629 .637 | .030050 .025042 | .940 | .315 | .010075 | .944 | .317 | .008012 |
| .920 | .470 | .105125 | .927 | .512 | .008016 | .935 | .455 | .100125 | .937 | .640 | .032060 | .940 | .400 | .160190 | .944 | .394 | .005010 |
| .920 | .504 | .005010 | .927 | .627 | .005010 | .935 | .481 | .030050 | .937 | .650 | .005010 | .940 | .407 | .090120 | .944 | .423 | .156187 |
| .920 | .525 | .005010 | .927 | .647 | .042060 | .935 | .489 | .090120 | .937 | .656 | .032060 | .940 | .441 | .040060 | .944 | .432 | .105125 |
| . 920 .920 | . 550 | .005010 .015030 | .927 . 927 | .689 .819 | .010020 .005010 | .935 .935 | .501 .523 | .080104 .080105 | .937 | .675 | .060075 | .940 .940 | .481 .490 | .050075 | .944 .944 | .442 .473 | .005020 |
| .920 | .608 | .005010 | .928 | .084 | .050062 | .935 | .535 | .080105 | .937 .937 | .687 .693 | .100125 .015020 | .940 | .502 | .075105 | .944 | .475 .475 | .005010 |
| .920 | .628 | .030050 | .928 | .087 | .050060 | .935 | .565 | .012020 | .937 | .703 | .010020 | .940 | .508 | .100125 | .944 | .479 | .020030 |
| .920 | .629 | .010020 | .928 | .153 | .060080 | .935 | .569 | .030050 | .937 | .754 | .048072 | .940 | .509 | .050070 | .944 | .502 | .010020 |
| .920 | .630 | .015060 | .928 | .383 | .005015 | .935 | .570 | .030060 | .937 | .772 | .060080 | .940 | .518 | .050070 | .944 | .595 | .020040 |
| .920 .920 | .687 .690 | .020040 .090105 | .928 . 928 | .552 .678 | .080100 . 005010 | .935 .935 | .581 .624 | .100125 .100125 | .937 .937 | .785 .793 | .005015 .025040 | .940 .940 | .520 .525 | .090105 .040060 | .944 .944 | .633 .694 | .005010 .040060 |
| .920 | .720 | .040060 | .929 | .260 | .020040 | .935 | .681 | .030050 | .937 | .802 | .025040 | .940 | .535 | .030040 | .944 | .766 | .020040 |
| .920 | .778 | .030050 | .929 | .470 | .072105 | .935 | .682 | .005010 | .937 | .813 | .005010 | .940 | .553 | .100125 | .944 | .795 | .015030 |
| .920 | .819 | .020030 | .929 | .570 | .005010 | .935 | .683 | .030060 | .937 | .875 | .025035 | .940 | .590 | .015030 | .945 | .221 | .050075 |
| .920 | .853 | .010020 | .929 | .575 | .005010 | .935 | .685 | .072120 | .938 | .140 | .048062 | .940 | .607 | .030060 | .945 | .240 | .005010 |
| .921 .921 | .314 .402 | .078090 .005010 | .929 . 929 | .600 .689 | .050075 . 005104 | .935 .935 | .687 .715 | .020040 .016032 | .938 .938 | .144 .150 | .105135 .050072 | .940 .940 | .610 .633 | .030060 . 005010 | .945 .945 | .249 .282 | .060125 .040060 |
| .921 | .445 | .005010 | .929 | .697 | .012020 | .935 | .719 | .010032 | .938 | .199 | .030072 | .940 | .640 | .005105 | .945 | .314 | .005010 |
| .921 | .490 | .025040 | .930 | .088 | .015030 | .935 | .733 | .025040 | .938 | .200 | .030060 | .940 | .641 | .025040 | .945 | .317 | .005070 |
| .921 | .531 | .025040 | .930 | .199 | .005083 | .935 | .735 | .005010 | .938 | .201 | .100120 | .940 | .646 | .060080 | .945 | .322 | .010020 |
| .921 | .587 | .020040 | .930 | .270 | .005010 | .935 | .783 | .005010 | .938 | .217 | .050072 | .940 | .656 | .040060 | .945 | .331 | .070090 |
| .921 .921 | .630 .641 | .010020 .010020 | .930 .930 | .286 .301 | .070090 .015030 | .935 .935 | .794 .796 | .060075 .020040 | .938 .938 | .246 .266 | .048062 .042060 | .940 .940 | .673 .674 | .005030 .005010 | .945 .945 | .345 .378 | .020040 .050070 |
| .921 | .680 | .025040 | .930 | .377 | .005020 | .935 | .839 | .020030 | .938 | .318 | .042062 | .940 | .686 | .010020 | .945 | .389 | .050075 |
| .921 | .682 | .030050 | .930 | .440 | .020040 | .935 | .871 | .005010 | .938 | .322 | .035060 | .940 | .700 | .015025 | .945 | .393 | .030050 |
| .921 | .788 | .020040 | .930 | .475 | .040060 | .936 | .266 | .060080 | .938 | .328 | .104134 | .940 | .701 | .015030 | .945 | .394 | .010020 |
| .921 .922 | .790 | .005010 | .930 | .501 | .025062 | .936 | .310 | .050080 | .938 | .343 | .048062 | .940 .940 | .704 | .083105 .030050 | .945 | .434 | .156187 |
| .922 | .316 .450 | .105125 .080100 | .930 | .520 .609 | .020040 .042072 | .936 .936 | .313 .375 | .020035 .040050 | .938 .938 | .376 .379 | .048062 .005010 | .940 | .710 .721 | .040060 | .945 .945 | .453 .454 | .156187 .156187 |
| .922 | .608 | .050075 | .930 | .630 | .010025 | .936 | .390 | .060090 | .938 | .383 | .105125 | .940 | .752 | .005010 | .945 | .472 | .005010 |
| .922 | .630 | .010020 | .930 | .635 | .080104 | .936 | .406 | .050070 | .938 | .388 | .090105 | .940 | .766 | .050075 | .945 | .474 | .010020 |
| .922 | .640 | .030050 | .930 | .645 | .005010 | .936 | .480 | .010020 | .938 | .439 | .042062 | .940 | .788 | .020030 | .945 | .477 | .005010 |
| .922 .922 | .670 .687 | .010020 .020030 | .930 | .700 | .005010 | .936 | .481 | .005060 | .938 | .444 | .040062 | .940 .941 | .830 .119 | .005012 .030060 | .945 | .484 | .050075 |
| .922 | .755 | .020030 | .930 .930 | .701 . 710 | .015030 .005010 | .936 .936 | . 502 .517 | .005010 .090110 | .938 .938 | .458 .507 | .005010 .005010 | .941 | .150 | .060070 | .945 .945 | .502 .512 | .005010 |
| .922 | .758 | .050070 | .930 | .750 | .025040 | .936 | .537 | .005010 | .938 | .521 | .005010 | .941 | .260 | .050070 | .945 | .514 | .180190 |
| .923 | .397 | .015025 | .930 | .760 | .005030 | .936 | .552 | .005010 | .938 | .532 | .105125 | .941 | .459 | .020030 | .945 | .519 | .040060 |
| .923 | .502 | .015030 | .930 | .812 | .010020 | .936 | .627 | .040060 | .938 | .550 | .005010 | .941 | .484 | .005010 | .945 | .554 | .010020 |
| .923 . 923 | .506 .661 | .050070 .005010 | .931 | .478 | .020030 | .936 | .641 | .100125 | .938 | .562 | .030050 | .941 | .500 .532 | .040060 | .945 .945 | .610 | .060080 |
| .923 | .668 | .030050 | .931 | .598 .632 | .035060 .105125 | .936 .936 | .645 .650 | .105135 .050070 | .938 .938 | .563 .595 | .015030 .005010 | .941 .941 | .555 | .030050 | .945 | .627 .669 | .032042 |
| .923 | .678 | .020030 | .931 | .660 | .020030 | .936 | .660 | .005008 | .938 | .596 | .005010 | .941 | .566 | .020040 | .945 | .671 | .005010 |
| .923 | .754 | .020040 | .931 | .691 | .040060 | .936 | .718 | .020040 | .938 | .636 | .030050 | .941 | .632 | .030060 | .945 | .686 | .060105 |
| .923 | .755 | .015050 | .931 | .729 | .050070 | .937 | .080 | .020035 | .938 | .637 | .080104 | .941 | .675 | .005010 | .945 | .708 | .060080 |
| .923 .924 | .820 .201 | . 005010 .100125 | .931 | .762 .811 | .020030 .040060 | .937 | .092 | .050070 | .938 | .690 721 | .040060 .020040 | .941 .941 | .717 .744 | .050070 .006012 | .945 .945 | .710 .714 | .030050 .060080 |
| .924 | .253 | .005010 | .932 | .243 | .050070 | .937 .937 | .110 .174 | .050070 .062080 | .938 .938 | .721 .752 | .020040 | .941 | .816 | .028040 | .945 | .719 | .070090 |
| .924 | .538 | .010015 | .932 | .330 | .025040 | .937 | .257 | .032048 | .938 | .760 | .005010 | .941 | .821 | .010020 | .945 | .737 | .005010 |
| .924 | .727 | .040060 | .932 | .335 | .050070 | .937 | .275 | .030050 | .938 | .761 | .015030 | .941 | .880 | .020030 | .945 | .831 | .015030 |
| .924 | .746 | .020040 | .932 | .465 | .090110 | .937 | .292 | .025040 | .938 | .766 | .020030 | .942 | .171 | .025040 | .945 | .845 | .005015 |
| .925 .925 | .158 | .100125 .010015 | .932 | .469 | .040062 | .937 | .315 | .080100 | .938 | .770 | .030050 | .942 .942 | .407 | .005010 .030120 | .946 | .386 | .040060 |
| .925 | .314 .322 | .070015 | .932 .932 | .563 .676 | .005012 .015030 | .937 .937 | .319 .324 | .025040 .030060 | .938 .938 | .784 .831 | .015030 .005010 | .942 | .455 .475 | .030120 | .946 .946 | .398 .473 | .010020 .005010 |
| .925 | .346 | .015025 | .932 | .749 | .050070 | .937 | .341 | .050075 | .939 | .040 | .010020 | .942 | .484 | .010020 | .946 | .513 | .105125 |
| .925 | .397 | .048072 | .932 | .775 | .005010 | .937 | .350 | .020030 | .939 | .126 | .020030 | .942 | .504 | .030050 | .946 | .602 | .025042 |
| .925 | .438 | .015030 | .933 | .197 | .010020 | .937 | .375 | .010020 | .939 | .189 | .105135 | .942 | .508 | .090120 | .946 | .678 | .005010 |
| .925 | .445 | .060083 | .933 | .415 | .010020 | .937 | .381 | .025040 | .939 | .195 | .105125 | .942 | .515 | .015035 | .946 | .686 | .062070 |
| .925 .925 | .450 .474 | .025040 .050070 | .933 | .508 .624 | .032060 .025040 | .937 .937 | .390 .399 | .005010 .156187 | .939 .939 | .218 .442 | .100125 .005030 | .942 .942 | . 530 .628 | .005010 .060080 | .946 .946 | .717 .786 | .060080 .050070 |
| .020 | . 1/1 | .000 .070 | | | | | | . 100 107 | | | | | | | | ., 00 | .000 .070 |

| 14 | | | Choose Any | | | Choose Any | | | Choose Any | 1 3 IVIL | .IAL | Choose Any | IO AIII | - 1 7 | Choose Any | | | Choose Any |
|--|------|------|------------|------|------|------------|------|------|------------|----------|------|------------|---------|-------|------------|------|------|------------|
| 947 | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| 147 156 | | | | 1 | | | | | | | | | | | | | | |
| 147 266 | | | | 1 | | | | | | | | | | | | | | |
| 147 756 | | | | | | | | | | | | | | | | | | .030050 |
| 147 787 | | | | | | | | | | | | | | | | | | .050070 |
| 1447 780 | | | | 1 | | | | | | | | | | | | | | |
| 147 | | | | | | | | | | | | | | | | | | |
| 144 145 | | | | 1 | | | | | | | | | | | | | | |
| 144 145 | | | | | | | | | | | | | | | | | | |
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| 944 502 005 -010 995 300 015 025 999 436 009 -010 999 436 009 -010 999 436 009 -010 999 448 503 005 -010 999 448 503 005 -010 999 448 505 009 -010 999 448 505 009 -010 999 448 505 009 -010 999 448 505 009 -010 999 448 505 009 -010 999 448 505 009 -010 999 458 505 009 -010 999 448 505 009 -010 999 459 505 009 -010 999 459 505 009 999 479 505 009 -010 999 459 505 009 999 479 505 | | | | 1 | | | | | | | | | | | | | | |
| 948 5.06 005 - 007 | | | | | | | | | | | | | | | | | | .040060 |
| 948 514 050 - 075 959 641 000 - 120 989 565 020 - 030 977 628 070 - 090 984 384 050 - 000 - 080 987 759 030 - 050 948 587 005 - 010 988 779 030 - 050 984 848 686 030 - 080 989 779 7780 010 - 040 984 485 005 - 010 988 779 030 - 050 989 484 885 005 - 010 988 877 050 030 - 050 989 484 885 005 - 010 988 877 050 030 - 050 989 484 885 005 - 010 988 877 050 030 - 050 989 484 885 005 - 010 988 877 050 030 - 050 989 484 885 005 - 010 988 877 050 030 - 050 989 484 885 005 - 010 988 877 050 030 - 050 989 484 885 005 - 010 988 877 050 030 - 050 989 484 885 005 - 010 988 877 050 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 989 780 030 - 050 980 980 030 030 030 030 030 030 030 030 030 0 | | | | 1 | | | | | | | | | | | | | | |
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| 948 789 005 - 010 960 155 005 - 072 998 656 006 0.080 978 6370 0.05 - 040 984 469 006 - 010 989 178 005 - 010 999 646 006 - 060 978 530 005 - 040 984 478 005 - 040 006 980 259 006 - 070 999 484 9189 005 - 010 999 679 006 006 9978 530 005 - 020 984 481 005 - 040 006 980 259 006 - 070 999 484 9189 005 - 010 990 680 259 006 - 070 006 984 9189 005 - 010 990 890 979 010 - 040 978 530 005 - 070 990 980 282 006 - 070 990 984 9189 005 - 010 990 984 9189 005 - 010 990 984 985 005 0070 990 985 005 990 990 990 990 990 990 990 990 99 | | | | | | | .969 | | | .977 | .778 | .070090 | | | | | | |
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| 949 189 080 - 005 - 006 080 350 020 - 002 980 780 006 - 006 980 878 680 010 - 020 984 481 040 - 006 980 282 080 - 000 984 91 980 080 - 000 980 080 080 - 000 980 980 980 980 980 980 980 980 980 | | | | 1 | | | | | | | | | | | | | | |
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| 990 189 005-030 960 650 032-050 970 550 006-0070 977 779 779 770 030-050 984 641 080-105 989 878 020-040 990 189 047-070 980 778 003-050 980 485 080 988 830 055-030 990 128 015-030 980 204 020-035 980 778 003-060 970 677 005-010 980 324 015-030 984 669 020-030 990 125 004-060 980 234 015-030 980 779 080 770 030-060 970 772 070 070 070 070 070 070 070 070 0 | | | | 1 | | | | | | | | | | | | 1 | | |
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| 950 250 015 030 960 751 050 075 970 754 040 060 980 495 015 025 984 716 025 042 990 355 080 100 950 385 105 125 980 758 005 010 970 769 005 010 980 407 100 125 984 749 040 060 990 437 010 020 990 355 080 100 200 950 387 005 010 980 387 005 010 980 437 010 020 990 437 010 020 990 380 385 005 010 980 437 010 020 990 437 010 020 990 380 385 005 010 020 990 437 010 020 990 438 050 070 990 438 050 070 990 438 050 070 990 438 050 070 990 439 042 006 015 1990 430 090 100 991 438 050 070 991 371 376 060 090 980 481 005 010 984 789 070 090 990 443 006 015 990 500 005 010 020 961 621 005 010 971 439 020 040 980 514 005 010 984 789 070 090 990 456 030 0595 050 010 020 961 621 005 010 971 439 020 040 980 521 025 040 984 789 070 090 990 456 030 0595 050 050 000 005 010 020 961 621 005 010 971 439 020 040 980 521 025 040 984 880 015 030 990 456 030 050 950 551 100 020 961 621 005 010 971 439 020 040 980 521 025 040 984 880 015 030 990 456 030 050 950 551 000 050 050 961 844 010 050 971 430 030 050 980 640 007 015 984 887 005 030 950 050 050 050 050 950 551 000 050 951 000 050 050 951 000 050 050 950 551 000 050 951 000 050 050 951 000 050 050 951 000 050 950 050 050 050 951 000 050 050 951 000 050 050 951 000 050 050 950 050 050 050 050 951 000 050 050 050 050 050 050 050 050 0 | | | | | | | | | | | | | | | | 1 | | |
| 950 387 .005010 960 .74 .005010 .97 .802 .030048 .980 .445 .005010 .984 .794 .040005 .990 .428 .005010 .981 .798 .070009 .990 .428 .006015 .950 .404 .090105 .961 .438 .050070 .971 .408 .065075 .980 .481 .005010 .984 .798 .070090 .990 .424 .006016 .980 .512 .001 .984 .799 .042002 .990 .451 .000002 .990 .451 .000003 .990 .481 .005010 .990 .484 .005010 .990 .484 .006000 .990 .484 .000000 .990 .484 .000000 .990 .469 .000000 .990 .469 .000000 .990 .469 .000000 .990 .469 .000000 .990 .400 .000 <t< td=""><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>.080100</td></t<> | | | | 1 | | | | | | | | | | | | | | .080100 |
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| 950 512 100 - 125 961 676 0.20 - 0.30 9.71 4.44 0.20 - 0.30 9.80 6.00 0.30 - 1.05 9.84 817 0.05 - 0.01 0.90 4.69 0.80 - 1.00 9.95 5.67 0.30 - 0.50 9.61 8.44 0.01 - 0.20 9.71 6.05 0.05 - 0.01 9.80 6.47 0.05 - 0.01 9.85 2.76 0.60 - 0.80 9.90 5.12 0.05 - 0.01 9.95 6.64 0.03 - 1.25 0.64 0.60 9.85 2.76 0.60 - 0.80 9.90 5.12 0.05 - 0.01 9.95 0.05 - 0.01 | | | | 1 | | | | | | | | | | | | | | .060080 |
| 950 531 0.06 0.080 9.61 7.30 0.06 0.010 0.971 5.55 0.30 0.05 0.010 0.980 6.44 0.07 0.05 0.010 0.985 0.215 0.040 0.060 0.990 5.12 0.05 0.040 0.05 | | | | | | | | | | | | | | | | | | |
| .950 .640 .030125 .961 .878 .005010 .971 .631 .080104 .980 .664 .060 .083 .985 .276 .060080 .990 .516 .030050 .950 .696 .030040 .962 .045 .015025 .971 .720 .104125 .980 .719 .040060 .985 .316 .055 .010 .990 .560 .030060 .950 .950 .877 .020035 .962 .055 .005010 .971 .761 .005020 .980 .757 .080104 .985 .331 .070099 .990 .562 .080156 .950 .877 .020035 .962 .766 .005010 .971 .865 .030060 .980 .841 .030050 .985 .395 .005 .010 .990 .565 .105125 .951 .156 .015030 .962 .769 .035062 .971 .865 .030050 .981 .467 .020 .030 .985 .443 .005010 .990 .625 .020040 .951 .376 .010020 .963 .271 .005010 .972 .335 .040060 .981 .467 .020 .030 .985 .443 .005010 .990 .625 .020040 .951 .376 .010020 .963 .283 .030050 .972 .365 .010020 .981 .512 .005010 .985 .451 .070090 .990 .626 .050075 .991 .951 .388 .010020 .963 .500 .010 .972 .570 .100130 .981 .565 .005010 .985 .451 .070090 .990 .626 .050075 .991 .591 .500 .010 .020 .963 .500 .010 .020 .972 .657 .015105 .981 .565 .005010 .985 .451 .070090 .990 .633 .005 .010 .971 .500 .010 .020 .963 .500 .010 .020 .972 .570 .100130 .981 .565 .005010 .985 .451 .070090 .990 .631 .005010 .951 .586 .015025 .963 .500 .005 .010 .972 .746 .050070 .981 .577 .075104 .985 .490 .120156 .990 .633 .005 .010 .913 .911 .586 .015025 .983 .500 .020032 .990 .633 .005 .010 .921 .591 .586 .015025 .963 .886 .015025 .963 .886 .015025 .963 .886 .015 .025 .963 .886 .015 .025 .973 .586 .005 .075 .981 .586 .015 .026 .985 .503 .008 .015 .990 .735 .030 .050 .952 .166 .000 .000 .996 .885 .005 .010 .973 .510 .005 .070 .981 .570 .005 .010 .985 .506 .000 .020 .032 .990 .735 .030 .050 .992 .256 .020 .030 .985 .548 .010 .010 .990 .788 .020 .105 .992 .166 .005 .010 .985 .548 .010 .020 .990 .788 .020 .105 .992 .105 .992 .105 .005 .900 .900 .900 .900 .900 .900 .9 | | .531 | .060080 | 1 | | .005010 | | | | | | | | | | | | .025040 |
| 950 6.96 0.30 - 0.40 9.62 0.45 0.15 - 0.25 9.71 7.20 1.04 - 1.25 9.80 7.19 0.40 - 0.60 9.85 3.16 0.05 - 0.10 9.90 5.60 0.30 - 0.60 9.50 1.77 5 0.20 - 0.35 9.62 0.55 0.05 - 0.10 9.71 8.76 0.00 - 0.00 9.80 8.41 0.30 - 0.50 9.85 3.31 0.70 - 0.90 9.90 5.62 0.05 - 0.10 9.91 1.837 0.40 - 0.60 9.80 8.41 0.30 - 0.50 9.85 3.95 0.05 - 0.10 9.90 5.95 1.05 - 1.25 9.51 1.56 0.15 - 0.30 9.62 7.69 0.05 - 0.10 9.71 8.87 0.40 - 0.60 9.80 8.41 0.30 - 0.50 9.85 3.95 0.05 - 0.10 9.90 5.95 1.05 - 1.25 9.51 1.36 0.15 - 0.30 9.62 7.69 0.05 - 0.01 9.72 3.35 0.40 - 0.60 9.81 3.96 0.10 - 0.20 9.85 4.43 0.05 - 0.10 9.90 6.05 0.75 0.90 9.91 3.77 0.20 - 0.30 9.63 2.83 0.30 - 0.50 9.72 3.65 0.10 0.20 9.81 5.12 0.05 - 0.10 9.85 4.43 0.05 - 0.10 9.90 6.26 0.50 - 0.75 0.90 9.91 3.77 0.20 - 0.30 9.63 2.83 0.30 - 0.50 9.72 3.65 0.10 0.20 9.81 5.12 0.05 - 0.10 9.85 4.45 0.05 - 0.35 9.99 6.26 0.50 - 0.75 0.90 9.91 3.37 0.20 - 0.30 9.63 5.00 0.10 - 0.20 9.83 5.00 0.10 - 0.20 9.83 5.00 0.10 - 0.20 9.83 5.00 0.10 - 0.20 9.82 5.00 0.10 - 0.20 9.83 5.00 0.10 - 0.20 9.82 5.00 0.10 0.20 9.82 5.00 0.10 0.20 9.83 5.00 0.10 0.20 9.92 6.65 0.15 0.10 9.81 5.55 0.05 0.00 9.85 4.43 0.05 0.05 0.99 6.26 0.50 0.05 0.07 9.95 1 3.88 0.10 - 0.20 9.63 5.50 0.05 0.00 9.72 8.65 0.10 0.20 9.81 5.12 0.05 0.010 9.85 4.45 0.05 0.00 9.90 6.26 0.50 0.05 0.00 9.95 1 3.80 0.00 0.00 9.93 5.00 0.00 0.00 9.72 7.76 0.50 0.00 9.81 5.77 0.75 1.04 9.85 4.75 0.10 0.15 9.99 6.31 0.05 0.10 9.91 0.95 1.50 0.00 0.00 0.00 9.90 6.20 0.00 0.90 6.20 0.00 0.90 6.90 6.90 6.90 6.90 6.90 6.9 | | | | 1 | | | | | | | | | | | | | | .005010 |
| 950 .775 .020 .035 .962 .055 .005 .010 .971 .761 .005 .020 .980 .757 .080 .104 .985 .331 .070 .090 .990 .562 .080 .156 .955 .807 .010 .020 .962 .766 .005 .010 .971 .837 .040 .060 .980 .841 .030 .050 .985 .395 .005 .010 .990 .605 .075 .090 .951 .136 .015 .030 .050 .981 .396 .010 .020 .985 .499 .120 .140 .990 .605 .075 .090 .951 .377 .020 .030 .963 .271 .005 .010 .972 .335 .040 .060 .981 .366 .010 .020 .985 .443 .005 .010 .990 .625 .022 .040 .991 .370 .020 .030 .963 .371 .025 .062 .972 .365 .010 .020 .981 .512 .005 .010 .985 .451 .070 .090 .990 .625 .020 .040 .991 .388 .010 .020 .983 .500 .010 .020 .972 .570 .100 .130 .981 .552 .015 .030 .985 .451 .070 .090 .990 .631 .005 .010 .951 .388 .010 .020 .983 .500 .010 .020 .972 .657 .010 .130 .981 .555 .005 .010 .985 .451 .070 .090 .990 .631 .005 .010 .951 .586 .015 .025 .963 .659 .080 .100 .972 .766 .050 .070 .981 .577 .075 .104 .985 .490 .120 .155 .990 .693 .005 .010 .991 .586 .015 .025 .963 .659 .080 .100 .972 .764 .050 .070 .981 .577 .075 .104 .985 .500 .020 .032 .990 .703 .020 .040 .951 .586 .015 .025 .963 .858 .005 .010 .963 .758 .020 .030 .973 .110 .050 .072 .981 .730 .030 .050 .985 .500 .020 .032 .990 .735 .030 .030 .951 .951 .661 .005 .010 .963 .885 .010 .020 .973 .567 .005 .010 .981 .752 .020 .040 .985 .503 .008 .015 .990 .758 .020 .105 .952 .125 .025 .040 .964 .500 .015 .030 .974 .226 .050 .075 .981 .845 .005 .015 .985 .550 .020 .030 .050 .990 .759 .080 .100 .952 .125 .025 .040 .964 .502 .090 .120 .973 .595 .005 .070 .982 .286 .030 .060 .985 .556 .040 .060 .990 .760 .010 .952 .376 .005 .010 .965 .514 .090 .120 .974 .669 .015 .025 .982 .501 .005 .010 .985 .556 .040 .060 .990 .760 .010 .952 .376 .005 .010 .965 .514 .090 .120 .974 .669 .015 .025 .982 .501 .005 .010 .985 .566 .000 .005 .990 .810 .005 .010 .995 .510 .990 .820 .005 .010 .985 .500 .005 .010 .985 .560 .005 .010 .996 .580 .020 .020 .991 .770 .020 .030 .995 .500 .005 .010 .965 .514 .090 .120 .975 .500 .075 .981 .500 .005 .010 .985 .566 .005 .000 .990 .760 .005 .010 .995 .500 .005 .010 .965 .514 .090 .1 | | | | 1 | | | | | | | | | | | | | | |
| 951 .156 .015030 | .950 | .775 | .020035 | .962 | .055 | .005010 | .971 | .761 | .005020 | .980 | .757 | .080104 | .985 | .331 | .070090 | .990 | .562 | .080156 |
| 951 376 010 - 020 963 271 005 - 010 972 335 040 - 060 981 467 020 - 030 985 443 005 - 010 990 625 020 - 040 951 377 020 - 030 963 983 283 030 - 050 972 365 010 - 020 981 512 005 - 010 985 450 025 - 035 990 626 050 - 075 951 388 0.040 - 060 963 451 030 - 050 972 570 100 - 130 981 525 015 - 030 985 451 070 - 090 990 631 005 - 010 951 388 0.040 - 020 963 500 010 - 020 972 657 015 - 105 981 555 005 - 010 985 475 010 - 015 990 645 005 - 010 951 550 010 - 020 963 504 005 - 010 972 746 0.50 - 070 981 577 0.75 - 104 985 480 120 - 156 990 649 005 - 010 951 586 015 - 025 963 659 080 - 100 972 746 0.50 - 070 981 586 005 - 015 985 500 020 - 032 990 703 020 - 040 951 661 005 - 010 983 758 020 - 030 973 110 050 - 072 981 730 030 - 050 985 500 080 - 015 990 735 030 - 050 951 741 020 - 030 963 880 030 - 050 973 557 005 - 010 981 752 020 - 040 985 500 080 - 010 990 758 020 - 100 952 125 025 - 040 963 885 010 - 020 973 555 005 - 075 981 845 005 - 016 985 512 030 - 050 990 759 080 - 100 952 166 0.60 - 080 964 550 015 - 020 974 569 015 - 025 982 345 060 - 080 985 535 040 - 060 990 760 010 - 042 952 180 048 - 070 965 264 020 - 040 974 669 015 - 025 982 501 005 - 010 985 560 000 - 000 990 760 010 - 030 952 502 502 050 - 070 965 502 050 - 075 982 502 015 - 030 985 560 040 - 060 990 760 010 - 030 952 570 005 - 010 985 502 050 - 070 985 502 050 - 070 985 502 050 - 070 985 502 050 - 070 985 502 050 - 070 985 500 005 - 010 985 560 040 - 060 990 760 010 - 030 952 502 050 - 070 965 560 020 - 040 974 766 102 - 135 982 502 015 - 030 985 585 040 - 060 990 780 005 - 010 995 502 050 - 070 965 561 000 - 035 974 768 030 - 050 982 502 015 - 030 985 585 000 - 030 990 880 005 - 010 995 502 570 005 - 010 985 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 005 - 010 995 560 00 | | | | | | | | | | | | | | | | 1 | | |
| .951 .377 .020030 .963 .283 .030050 .972 .365 .010020 .981 .512 .005010 .985 .450 .025035 .990 .626 .050075 .951 .380 .040060 .963 .451 .030050 .972 .570 .100130 .981 .525 .015030 .985 .451 .070090 .990 .631 .005010 .951 .500 .010020 .963 .504 .005010 .972 .746 .050075 .981 .577 .075104 .985 .490 .120156 .990 .693 .005010 .972 .746 .050075 .981 .586 .005015 .985 .500 .020032 .990 .703 .020040 .985 .500 .020032 .990 .703 .020040 .985 .503 .008015 .990 .755 .030050 .981 .566 .005016 .981 | | | | | | | | | | | | | | | | 1 | | .075090 |
| 951 388 0.10 - 0.20 963 5.00 0.10 - 0.20 9.72 6.57 0.15 - 1.05 981 5.55 0.05 - 0.10 985 4.75 0.10 - 0.15 9.90 6.45 0.05 - 0.10 9.51 5.00 0.10 - 0.20 9.63 5.04 0.05 - 0.10 9.72 7.46 0.50 - 0.70 9.81 5.77 0.75 - 1.04 9.85 4.90 1.20 - 1.56 9.90 6.93 0.05 - 0.10 9.51 5.86 0.15 - 0.25 9.83 6.59 0.80 - 1.00 9.72 7.46 0.50 - 0.75 9.81 5.86 0.05 - 0.15 9.85 5.00 0.20 - 0.32 9.90 7.03 0.020 - 0.00 9.51 5.66 0.05 - 0.15 9.85 5.00 0.20 - 0.32 9.90 7.03 0.20 - 0.00 9.51 6.61 0.05 - 0.10 9.63 7.58 0.20 - 0.30 9.73 1.10 0.50 - 0.72 9.81 7.30 0.30 - 0.50 9.85 5.03 0.08 - 0.15 9.90 7.35 0.30 - 0.50 9.51 7.41 0.20 - 0.30 9.63 8.80 0.30 - 0.50 9.73 5.50 0.05 - 0.10 9.81 7.52 0.20 - 0.40 9.85 5.03 0.08 - 0.15 9.90 7.75 0.30 - 0.50 9.52 1.25 0.25 - 0.40 9.63 8.85 0.10 - 0.20 9.73 5.59 0.05 - 0.75 9.81 8.45 0.05 - 0.15 9.85 5.00 0.00 0.20 - 0.20 9.90 7.59 0.80 - 1.00 9.52 1.66 0.60 - 0.80 9.64 5.00 0.15 - 0.30 9.74 2.60 0.50 - 0.75 9.81 8.45 0.05 - 0.16 9.85 5.35 0.40 - 0.60 9.90 7.60 0.10 - 0.20 9.52 1.98 0.48 - 0.70 9.64 6.52 0.90 - 1.20 9.74 6.69 0.05 - 0.75 9.82 3.45 0.60 - 0.80 9.85 5.48 0.10 - 0.15 9.90 7.70 0.20 - 0.30 9.52 2.13 0.48 - 0.70 9.65 5.60 0.60 - 0.75 9.74 6.69 0.05 - 0.70 9.82 3.45 0.60 - 0.80 9.85 5.48 0.10 - 0.15 9.90 7.70 0.20 - 0.30 9.52 2.13 0.48 - 0.70 9.65 5.50 0.60 0.075 9.74 6.69 0.05 - 0.70 9.82 5.04 0.05 - 0.10 9.85 5.56 0.40 - 0.60 9.90 7.78 0.005 - 0.10 9.52 2.13 0.48 - 0.70 9.65 5.50 0.60 0.075 9.74 6.69 0.05 - 0.70 9.82 5.04 0.05 - 0.10 9.85 5.56 0.40 - 0.60 9.90 7.78 0.005 - 0.10 9.52 5.50 0.05 - 0.10 9.65 5.60 0.60 - 0.75 9.74 6.69 0.05 - 0.10 9.82 5.00 0.05 - 0.10 9.85 5.60 0.40 - 0.60 9.90 8.10 0.010 0.30 9.52 5.50 0.50 0.00 9.85 5.50 0.40 - 0.60 9.90 8.10 0.010 0.30 9.52 5.50 0.50 0.00 9.85 5.50 0.40 - 0.60 9.90 8.10 0.010 0.30 9.52 5.50 0.50 0.00 9.85 5.50 0.40 - 0.60 9.90 8.10 0.010 0.30 9.52 5.50 0.50 0.00 9.85 5.50 0.00 0.00 0.00 9.90 8.10 0.010 0.30 9.50 0.00 9.50 0.00 9.85 5.50 0.00 0.00 0.00 0.00 0.00 0.00 0 | .951 | .377 | .020030 | .963 | .283 | .030050 | .972 | .365 | .010020 | .981 | .512 | .005010 | .985 | .450 | .025035 | .990 | .626 | .050075 |
| 951 500 0.10 - 0.20 963 504 0.05 - 0.10 9.72 7.46 0.50 - 0.70 9.81 5.77 0.75 - 1.04 9.85 4.90 1.20 - 1.56 9.90 6.93 0.05 - 0.10 951 586 0.15 - 0.25 9.63 6.59 0.80 - 1.00 9.72 7.64 0.50 - 0.75 9.81 5.86 0.05 - 0.15 9.85 5.00 0.20 - 0.32 9.90 7.03 0.20 - 0.40 951 5.61 0.05 - 0.10 9.63 7.58 0.20 - 0.30 9.73 1.10 0.50 - 0.72 9.81 7.30 0.30 - 0.50 9.85 5.03 0.08 - 0.15 9.90 7.35 0.30 - 0.50 952 1.25 0.025 - 0.40 9.63 8.80 0.30 - 0.50 9.73 5.67 0.05 - 0.10 9.81 7.52 0.20 - 0.40 9.85 5.12 0.30 - 0.50 9.90 7.75 0.30 - 0.50 952 1.66 0.60 - 0.80 9.64 5.50 0.15 - 0.30 9.74 2.26 0.50 - 0.75 9.82 2.86 0.30 - 0.60 9.85 5.48 0.10 - 0.15 9.90 7.70 0.20 - 0.30 952 1.198 0.48 - 0.70 9.64 6.52 0.90 - 1.20 9.74 2.60 0.50 - 0.70 9.82 3.45 0.60 - 0.80 9.85 5.56 0.40 - 0.60 9.90 7.70 0.20 - 0.30 952 2.13 0.48 - 0.70 9.65 5.66 0.60 - 0.75 9.74 6.69 0.15 - 0.25 9.82 5.01 0.05 - 0.10 9.85 5.56 0.40 - 0.60 9.90 7.80 0.05 - 0.10 952 3.76 0.05 - 0.10 9.65 5.54 0.90 - 1.20 9.74 7.76 1.20 - 1.35 9.82 5.03 0.05 - 0.10 9.85 5.87 0.20 - 0.32 9.90 8.10 0.05 - 0.10 952 5.70 0.80 - 1.00 9.65 5.14 0.90 - 1.20 9.74 7.75 0.50 - 0.70 9.82 5.03 0.05 - 0.10 9.85 5.87 0.20 - 0.32 9.90 8.10 0.05 - 0.10 952 5.70 0.80 - 1.00 9.65 5.14 0.90 - 1.20 9.74 7.76 1.20 - 1.35 9.82 5.03 0.05 - 0.10 9.85 5.87 0.20 - 0.32 9.90 8.10 0.05 - 0.10 952 5.70 0.80 - 1.00 9.65 5.14 0.90 - 1.20 9.74 7.76 1.20 - 1.35 9.82 5.03 0.05 - 0.10 9.85 5.87 0.20 - 0.32 9.90 8.10 0.05 - 0.10 952 5.70 0.80 - 1.00 9.65 5.14 0.90 - 1.20 9.74 7.76 1.20 - 1.35 9.82 5.03 0.05 - 0.10 9.85 5.87 0.02 - 0.32 9.90 8.10 0.05 - 0.10 952 5.70 0.80 | | | | 1 | | | | | | | | | | | | | | .005010 |
| .951 .586 .015025 .963 .659 .080100 .972 .764 .050075 .981 .586 .005015 .985 .500 .020032 .990 .703 .020040 .951 .661 .005010 .963 .758 .020030 .973 .110 .050072 .981 .730 .030050 .985 .503 .008015 .990 .735 .030050 .951 .741 .020040 .963 .885 .010020 .973 .567 .005010 .981 .752 .020040 .985 .506 .100120 .990 .758 .020105 .952 .125 .025040 .963 .885 .010020 .973 .595 .005075 .981 .845 .005015 .985 .512 .030050 .990 .759 .080100 .952 .198 .048070 .964 .652 .090120 .974 .260 .050 | | | | 1 | | | | | | | | | | | | 1 | | |
| .951 .741 .020030 .963 .800 .030050 .973 .567 .005010 .981 .752 .020040 .985 .506 .100120 .990 .758 .020105 .952 .125 .025040 .963 .885 .010020 .973 .595 .005075 .981 .845 .005015 .985 .512 .030050 .990 .759 .080100 .952 .166 .060080 .964 .500 .015030 .974 .226 .050075 .982 .286 .030060 .985 .535 .040060 .990 .760 .010042 .952 .198 .048070 .964 .652 .090120 .974 .669 .015025 .982 .501 .005010 .985 .548 .010015 .990 .770 .020030 .952 .213 .048070 .965 .264 .020040 .974 .669 .015025 .982 .501 .005010 .985 .556 .040060 .990 .770 .020030 .952 .376 .005010 .965 .506 .060075 .974 .669 .015030 .982 .502 .015030 .985 .566 .040060 .990 .780 .005010 .952 .376 .005010 .965 .506 .060075 .974 .699 .025040 .982 .502 .015030 .985 .565 .042005 .990 .810 .010030 .952 .502 .050070 .965 .500 .032060 .974 .716 .120135 .982 .503 .005010 .985 .587 .020032 .990 .813 .005010 .952 .502 .050070 .965 .580 .032060 .974 .755 .050070 .982 .504 .100125 .985 .635 .060080 .990 .820 .016032 .952 .570 .080100 .965 .610 .020035 .974 .768 .030050 .982 .562 .060080 .985 .669 .005010 .990 .842 .010020 .952 .627 .005010 .965 .620 .025040 .975 .440 .005010 .982 .562 .060080 .985 .685 .100125 .990 .858 .025 .040 .952 .040 .952 .627 .005010 .965 .620 .025040 .975 .440 .005010 .982 .620 .005010 .985 .700 .005015 .990 .858 .025040 .953 .693 .105125 .965 .709 .005010 .975 .533 .015030 .982 .752 .030050 .985 .772 .040055 .991 .303 .005010 .953 .742 .090105 .966 .391 .040060 .975 .532 .025040 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 .965 .700 .005015 .990 .975 .532 .025 .040 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 .965 .700 .905 .910 .915 .900 .905 .910 .905 .910 .905 .910 .905 .910 .905 .9 | .951 | .586 | .015025 | 1 | | .080100 | | | | | | | | .500 | .020032 | .990 | .703 | .020040 |
| .952 .125 .025040 .963 .885 .010020 .973 .595 .005075 .981 .845 .005015 .985 .512 .030050 .990 .759 .080100 .952 .166 .060080 .964 .500 .015030 .974 .226 .050075 .982 .286 .030060 .985 .535 .040060 .990 .760 .010042 .952 .198 .048070 .964 .652 .090120 .974 .260 .050070 .982 .345 .060080 .985 .548 .010015 .990 .770 .020030 .952 .213 .048070 .965 .264 .020040 .974 .669 .015025 .982 .501 .005010 .985 .556 .040060 .990 .810 .010030 .952 .376 .005010 .965 .506 .060075 .974 .699 .025040 .982 .502 .015030 .985 .566 .062105 .990 .810 .010030 .952 .470 .005010 .965 .514 .090120 .974 .716 .120135 .982 .503 .005010 .985 .587 .020032 .990 .813 .005010 .952 .570 .080100 .965 .580 .032060 .974 .755 .050070 .982 .503 .005010 .985 .587 .020032 .990 .813 .005010 .952 .570 .080100 .965 .610 .020035 .974 .768 .030050 .982 .562 .060080 .985 .669 .005010 .990 .842 .010020 .952 .570 .080100 .965 .620 .025040 .975 .440 .005010 .982 .562 .060080 .985 .685 .100125 .990 .858 .025 .040 .925 .040 .952 .627 .005010 .965 .620 .025040 .975 .440 .005010 .982 .620 .005010 .985 .700 .005010 .990 .858 .025 .040 .025 .940 .953 .687 .005010 .965 .620 .025 .040 .975 .440 .005010 .982 .620 .005010 .985 .700 .005010 .990 .858 .025 .040 .020 .953 .687 .005010 .965 .620 .025 .040 .975 .531 .010 .005 .010 .982 .704 .010020 .985 .700 .005015 .990 .858 .025 .040 .020 .953 .700 .005010 .965 .620 .025 .040 .975 .531 .010 .020 .982 .752 .030 .055 .010 .985 .760 .042062 .991 .071 .010 .020 .953 .710 .105135 .965 .709 .005010 .975 .532 .025 .040 .982 .875 .020 .040 .985 .789 .005025 .991 .303 .005010 .953 .742 .090105 .966 .391 .040060 .975 .532 .025 .040 .982 .875 .020 .040 .985 .789 .005025 .991 .303 .005010 .905 .010 .905 .789 .005010 .905 .789 .005 .010 .905 .9 | | | | | | | | | | | | | | | | | | .030050 |
| .952 .166 .060080 .964 .500 .015030 .974 .226 .050075 .982 .286 .030060 .985 .535 .040060 .990 .760 .010042 .952 .198 .048070 .964 .652 .090120 .974 .260 .050070 .982 .345 .060080 .985 .548 .010015 .990 .770 .020030 .952 .213 .048070 .965 .264 .020040 .974 .669 .015025 .982 .501 .005010 .985 .556 .040060 .990 .780 .005010 .952 .376 .005010 .965 .506 .060075 .974 .699 .025040 .982 .502 .015030 .985 .565 .062105 .990 .810 .010030 .952 .470 .005010 .965 .514 .090120 .974 .716 .120135 .982 .503 .005010 .985 .587 .020032 .990 .813 .005010 .952 .502 .050070 .965 .580 .032060 .974 .755 .050070 .982 .504 .005010 .985 .665 .060080 .990 .820 .016032 .952 .570 .080100 .965 .610 .020035 .974 .768 .030050 .982 .562 .060080 .985 .668 .005010 .990 .820 .016032 .952 .627 .005010 .965 .620 .025040 .975 .440 .005010 .982 .620 .005010 .985 .685 .100125 .990 .842 .010025 .952 .687 .005010 .965 .624 .005010 .975 .440 .005010 .982 .620 .005010 .985 .685 .100125 .990 .842 .010025 .953 .693 .105125 .965 .709 .005010 .975 .533 .015030 .982 .704 .010020 .985 .700 .005015 .990 .910 .015025 .953 .710 .105135 .965 .783 .020036 .975 .531 .010020 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 .953 .742 .090105 .966 .391 .040060 .975 .532 .025040 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 | | | | 1 | | | | | | | | | | | | | | .020105 |
| .952 .213 .048070 .965 .264 .020040 .974 .669 .015025 .982 .501 .005010 .985 .556 .040060 .990 .780 .005010 .952 .376 .005010 .965 .506 .060075 .974 .699 .025040 .982 .502 .015030 .985 .565 .062105 .990 .810 .010030 .952 .470 .005010 .965 .514 .090120 .974 .716 .120135 .982 .503 .005010 .985 .587 .020032 .990 .813 .005010 .952 .502 .050070 .965 .580 .032060 .974 .755 .050070 .982 .504 .100125 .985 .635 .060080 .990 .820 .016032 .952 .570 .080100 .965 .610 .020035 .974 .768 .030050 .982 .562 .060080 .985 .669 .005010 .990 .842 .010020 .952 .627 .005010 .965 .620 .025040 .975 .440 .005010 .982 .620 .005010 .985 .685 .100125 .990 .842 .010020 .952 .687 .005010 .965 .644 .005010 .975 .440 .005010 .982 .620 .005010 .985 .685 .100125 .990 .910 .015025 .953 .693 .105125 .965 .709 .005010 .975 .503 .015030 .982 .752 .030050 .985 .721 .040105 .990 .910 .015020 .953 .710 .105135 .965 .783 .020036 .975 .531 .010020 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 .953 .742 .090105 .966 .391 .040060 .975 .532 .025040 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 | .952 | .166 | .060080 | .964 | .500 | .015030 | | | | | | | .985 | .535 | .040060 | .990 | .760 | .010042 |
| .952 .376 .005010 .965 .506 .060075 .974 .699 .025040 .982 .502 .015030 .985 .565 .062105 .990 .810 .010030 .952 .470 .005010 .965 .514 .090120 .974 .716 .120135 .982 .503 .005010 .985 .587 .020032 .990 .813 .005010 .952 .502 .050070 .965 .580 .032060 .974 .755 .050070 .982 .504 .100125 .985 .635 .060080 .990 .820 .016032 .952 .570 .080100 .965 .610 .020035 .974 .768 .030050 .982 .562 .060080 .985 .669 .005010 .990 .842 .010020 .952 .627 .005010 .965 .620 .025040 .975 .449 .005 | | | | 1 | | | | | | | | | | | | 1 | | .020030 |
| .952 .470 .005010 .965 .514 .090120 .974 .716 .120135 .982 .503 .005010 .985 .587 .020032 .990 .813 .005010 .952 .502 .050070 .965 .580 .032060 .974 .755 .050070 .982 .504 .100125 .985 .635 .060080 .990 .820 .016032 .952 .570 .080100 .965 .610 .020035 .974 .768 .030050 .982 .562 .060080 .985 .669 .005010 .990 .842 .010020 .952 .627 .005010 .965 .620 .025040 .975 .440 .005010 .982 .620 .005010 .985 .685 .100125 .990 .858 .025040 .953 .687 .005010 .965 .620 .025040 .975 .440 .005 | | | | | | | | | | | | | | | | | | |
| .952 .570 .080100 .965 .610 .020035 .974 .768 .030050 .982 .562 .060080 .985 .669 .005010 .990 .842 .010020 .952 .627 .005010 .965 .620 .025040 .975 .440 .005010 .982 .620 .005010 .985 .685 .100125 .990 .858 .025040 .952 .085 .953 .693 .105125 .965 .709 .005010 .975 .503 .015030 .982 .704 .010020 .985 .700 .005015 .990 .910 .015025 .953 .710 .105135 .965 .783 .020036 .975 .531 .010020 .982 .801 .005010 .985 .760 .042062 .991 .267 .060080 .953 .742 .090105 .966 .391 .040060 .975 .532 .025040 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 | .952 | .470 | .005010 | .965 | .514 | .090120 | .974 | .716 | .120135 | | | | .985 | .587 | .020032 | .990 | .813 | .005010 |
| .952 .627 .005010 .965 .620 .025040 .975 .440 .005010 .982 .620 .005010 .985 .685 .100125 .990 .858 .025040 .952 .687 .005010 .965 .644 .005010 .975 .495 .005010 .982 .704 .010020 .985 .700 .005015 .990 .910 .015025 .953 .693 .105125 .965 .709 .005010 .975 .503 .015030 .982 .752 .030050 .985 .721 .040105 .991 .071 .010020 .953 .710 .105135 .965 .783 .020036 .975 .531 .010020 .982 .801 .005010 .985 .760 .042062 .991 .267 .060080 .953 .742 .090105 .966 .391 .040060 .975 .532 .025 | | | | | | | | | | | | | | | | 1 | | |
| .952 .687 .005010 .965 .644 .005010 .975 .495 .005010 .982 .704 .010020 .985 .700 .005015 .990 .910 .015025 .953 .693 .105125 .965 .709 .005010 .975 .503 .015030 .982 .752 .030050 .985 .721 .040105 .991 .071 .010020 .953 .710 .105135 .965 .783 .020036 .975 .531 .010020 .982 .801 .005010 .985 .760 .042062 .991 .267 .060080 .953 .742 .090105 .966 .391 .040060 .975 .532 .025040 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 | | | | | | | | | | | | | | | | 1 | | |
| .953 .693 .105125 .965 .709 .005010 .975 .503 .015030 .982 .752 .030050 .985 .721 .040105 .991 .071 .010020 .953 .710 .105135 .965 .783 .020036 .975 .531 .010020 .982 .801 .005010 .985 .760 .042062 .991 .267 .060080 .953 .742 .090105 .966 .391 .040060 .975 .532 .025040 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 | | | | | | | | | | | | | | .700 | | | | |
| .953 .742 .090105 .966 .391 .040060 .975 .532 .025040 .982 .875 .020040 .985 .789 .005025 .991 .303 .005010 | | | | 1 | | | | | | .982 | .752 | .030050 | | | | 1 | | |
| | | | | 1 | | | | | | | | | | | | | | |
| | | | | | | | | | | .983 | .090 | .020040 | | | | 1 | | .005010 |

| | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any |
|----------------------|--------------|----------------------------|----------------------|----------------------|----------------------------|----------------------|----------------------|----------------------------|-----------------------|---------------------|----------------------------|-----------------------|---------------------|----------------------------|-----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| .991 | .317 | .090125 | .995 | .763 | .005010 | .998 | .573 | .050070 | 1.000 | .143 | .030050 | 1.000 | .410 | .005010 | 1.000 | .656 | .005010 |
| .991 | .405 | .005010 | .995 | .766 | .005010 | .998 | .577 | .005010 | 1.000 | .147 | .005010 | 1.000 | .414 | .100125 | 1.000 | .669 | .005032 |
| .991 | .406 | .090125 | .995 | .873 | .040060 | .998 | .578 | .010020 | 1.000 | .157 | .070090 | 1.000 | .415 | .025040 | 1.000 | .670 | .105125 |
| .991 | .412 | .005010 | .995 | .938 | .010020 | .998 | .629 | .005010 | 1.000 | .170 | .030050 | 1.000 | .418 | .050070 | 1.000 | .671 | .060090 |
| .991 | .515 | .005010 | .996 | .120 | .042062 | .998 | .630 | .010020 | 1.000 | .172 | .090120 | 1.000 | .434 | .104125 | 1.000 | .673 | .080100 |
| .991 | .605 | .005010 | .996 | .170 | .005010 | .998 | .637 | .040060 | 1.000 | .178 | .005010 | 1.000 | .437 | .050125 | 1.000 | .674 | .100125 |
| .991 .991 | .627 .678 | .105135 .030050 | .996 .996 | .255 .283 | . 005010 .090125 | .998 | .662 .672 | .050070 .005012 | 1.000 1.000 | .187 .192 | .050125 .050075 | 1.000 1.000 | .438 .440 | .020040 . 005010 | 1.000 1.000 | .675 .676 | .005030 .020030 |
| .991 | .751 | .030030 | .996 | .318 | .005010 | .998 .998 | .678 | .005012 | 1.000 | .195 | .010110 | 1.000 | .441 | .100120 | 1.000 | .680 | .005125 |
| .991 | .779 | .040060 | .996 | .323 | .005010 | .998 | .694 | .020040 | 1.000 | .196 | .025035 | 1.000 | .443 | .135170 | 1.000 | .686 | .030060 |
| .991 | .796 | .020030 | .996 | .396 | .100125 | .998 | .748 | .035060 | 1.000 | .199 | .008080 | 1.000 | .444 | .005010 | 1.000 | .688 | .008016 |
| .991 | .877 | .005010 | .996 | .441 | .020030 | .998 | .793 | .005010 | 1.000 | .200 | .134160 | 1.000 | .445 | .060080 | 1.000 | .690 | .025048 |
| .991 | .880 | .015060 | .996 | .463 | .060080 | .998 | .855 | .005010 | 1.000 | .205 | .050075 | 1.000 | .447 | .010020 | 1.000 | .691 | .005010 |
| .991 | .887 | .005010 | .996 | .511 | .040060 | .998 | .877 | .015030 | 1.000 | .209 | .105125 | 1.000 | .451 | .005010 | 1.000 | .700 | .005060 |
| .992 | .260 | .005010 | .996 | .578 | .075090 | .998 | .913 | .005010 | 1.000 | .215 | .050075 | 1.000 | .452 | .010020 | 1.000 | .709 | .015030 |
| .992 | .263 | .005010 | .996 | .630 | .010015 | .999 | .036 | .005010 | 1.000 | .217 | .025125 | 1.000 | .457 | .100125 | 1.000 | .716 | .005010 |
| .992 .992 | .270 .316 | .005015 .110130 | .996 | .666 | .040060 | .999 | .096 | .010020 | 1.000 1.000 | .218 .219 | .015048 . 005125 | 1.000 | .465 .468 | .030050 .100125 | 1.000 | .724 .733 | .040060 |
| .992 | .330 | .110130 | .996 .996 | .692 .740 | .010030 .050070 | .999 .999 | . 122 .201 | . 005010 .050070 | 1.000 | .221 | .005050 | 1.000 | .471 | .050070 | 1.000 1.000 | .733 . 742 | .025040 .005010 |
| .992 | .387 | .020040 | .996 | .758 | .005010 | .999 | .206 | .005010 | 1.000 | .225 | .050070 | 1.000 | .475 | .020040 | 1.000 | .750 | .005010 |
| .992 | .523 | .025040 | .996 | .785 | .050075 | .999 | .243 | .030050 | 1.000 | .228 | .005010 | 1.000 | .476 | .100125 | 1.000 | .751 | .100125 |
| .992 | .582 | .030050 | .996 | .788 | .005010 | .999 | .252 | .030045 | 1.000 | .237 | .060080 | 1.000 | .480 | .005125 | 1.000 | .752 | .040105 |
| .992 | .669 | .005010 | .996 | .798 | .040050 | .999 | .253 | .005010 | 1.000 | .239 | .015030 | 1.000 | .485 | .040135 | 1.000 | .753 | .050070 |
| .992 | .687 | .105135 | .996 | .808 | .040060 | .999 | .267 | .105125 | 1.000 | .250 | .008070 | 1.000 | .499 | .005010 | 1.000 | .754 | .020075 |
| .992 | .754 | .040060 | .996 | .812 | .060080 | .999 | .284 | .005010 | 1.000 | .252 | .005080 | 1.000 | .500 | .005062 | 1.000 | .755 | .006125 |
| .992 | .835 | .010015 | .996 | .813 | .015030 | .999 | .344 | .080104 | 1.000 | .253 | .030120 | 1.000 | .501 | .030105 | 1.000 | .756 | .030050 |
| .993 | .249 | .040050 | .996 | .823 | .005060 | .999 | .348 | .080104 | 1.000 | .255 | .060070 | 1.000 | .502 | .005125 | 1.000 | .759 | .005040 |
| .993 .993 | .295 .297 | .062120 .062120 | .996 .996 | .859 .864 | .040060 .040060 | .999 | .356 | .005010 | 1.000 | .256 .258 | .020040 .030050 | 1.000 | .502 .504 | .126187 .010110 | 1.000 1.000 | .760 .761 | .060080 .035050 |
| .993 . 993 | .297 | .062120 | .996 .996 | .864 . 877 | .040060 | .999 .999 | .372 .375 | .030060 .010060 | 1.000 1.000 | .268 | .030050 | 1.000 | .504 | .010110 | 1.000 | .761 | .105125 |
| .993 | .371 | .070090 | .996 | .880 | .020030 | .999 .999 | .375 | .005010 | 1.000 | .264 | .042062 | 1.000 | .506 | .010020 | 1.000 | .765 | .030050 |
| .993 | .523 | .040060 | .996 | .881 | .025040 | .999 | .382 | .030050 | 1.000 | .265 | .010020 | 1.000 | .507 | .020187 | 1.000 | .766 | .100125 |
| .993 | .605 | .020040 | .997 | .152 | .050075 | .999 | .392 | .030050 | 1.000 | .266 | .050075 | 1.000 | .508 | .005015 | 1.000 | .767 | .050075 |
| .993 | .638 | .040060 | .997 | .171 | .040062 | .999 | .401 | .040060 | 1.000 | .268 | .030050 | 1.000 | .510 | .060083 | 1.000 | .768 | .010020 |
| .993 | .640 | .062090 | .997 | .250 | .005010 | .999 | .444 | .030050 | 1.000 | .270 | .005010 | 1.000 | .511 | .032060 | 1.000 | .770 | .005060 |
| .993 | .655 | .070090 | .997 | .312 | .005010 | .999 | .453 | .060070 | 1.000 | .272 | .030050 | 1.000 | .513 | .140160 | 1.000 | .771 | .015030 |
| .994 | .243 | .025042 | .997 | .315 | .060080 | .999 | .505 | .005010 | 1.000 | .273 | .160190 | 1.000 | .515 | .005125 | 1.000 | .776 | .070090 |
| .994 | .287 | .090110 | .997 | .327 | .005010 | .999 | .518 | .040060 | 1.000 | .278 | .050075 | 1.000 | .515 | .126187 | 1.000 | .785 | .100125 |
| .994 .994 | .431 .441 | .010020 .090110 | .997 .997 | .466 .503 | .080100 | .999 .999 | .527 .563 | .090105 | 1.000 1.000 | .280 .281 | .040060 . 005100 | 1.000 1.000 | .517 .518 | . 005010 .015125 | 1.000 1.000 | .787 .791 | .060070 |
| .994 | .484 | .005010 | .997 | .503 | .030050 .050070 | .999 | .503 | .015030 .010020 | 1.000 | .282 | .006070 | 1.000 | .520 | .100125 | 1.000 | .791 | .005020 .010015 |
| .994 | .500 | .090100 | .997 | .533 | .005010 | .999 | .626 | .020134 | 1.000 | .283 | .040060 | 1.000 | .531 | .120140 | 1.000 | .797 | .025125 |
| .994 | .508 | .090105 | .997 | .537 | .040062 | .999 | .629 | .050070 | 1.000 | .292 | .005010 | 1.000 | .534 | .050070 | 1.000 | .800 | .012025 |
| .994 | .513 | .130150 | .997 | .549 | .020040 | .999 | .633 | .005010 | 1.000 | .293 | .080104 | 1.000 | .535 | .010060 | 1.000 | .801 | .025040 |
| .994 | .540 | .005010 | .997 | .563 | .125187 | .999 | .657 | .080100 | 1.000 | .301 | .005010 | 1.000 | .549 | .100125 | 1.000 | .805 | .005010 |
| .994 | .565 | .040060 | .997 | .622 | .005010 | .999 | .674 | .100134 | 1.000 | .310 | .062090 | 1.000 | .550 | .030110 | 1.000 | .815 | .005010 |
| .994 | .605 | .005010 | .997 | .689 | .050070 | .999 | .675 | .100134 | 1.000 | .311 | .150180 | 1.000 | .556 | .025040 | 1.000 | .828 | .015025 |
| .994 | .625 | .050075 | .997 | .718 | .005015 | .999 | .680 | .005010 | 1.000 | .315 | .031042 | 1.000 | .562 | .050075 | 1.000 | .837 | .040060 |
| .994 | .721 | .005010 | .997 | .748 | .030050 | .999 | .693 | .005010 | 1.000 | .316 | .005020 | 1.000 | .563 | .005020 | 1.000 | .845 | .030050 |
| .994 | .813 | .005010 | .997 | .756 | .016025 | .999 | .700 | .020030 | 1.000 | .317 | .005012 | 1.000 | .564 .567 | .030050 | 1.000 | .850 | .005010 |
| .995 .995 | .157 | . 005010 .032042 | . 997 .997 | .758 .769 | . 005010 .025040 | .999 .999 | .715 .754 | .010020 .050070 | 1.000 1.000 | .318 .320 | .050105 | 1.000 1.000 | .568 | .010020 | 1.000 1.000 | .851 .855 | .070080 . 005010 |
| .995 | .160 | .032042 | .998 | .111 | .025040 | .999 . 999 | .754 . 763 | .050070 | 1.000 | .323 | .050070 | 1.000 | .572 | .005010 | 1.000 | . 875 | .016025 |
| .995 | .196 | .005010 | .998 | .125 | .040060 | .999 | .787 | .025040 | 1.000 | .326 | .090120 | 1.000 | .578 | .100125 | 1.000 | .876 | .005010 |
| .995 | .282 | .025050 | .998 | .131 | .015025 | .999 | .790 | .005010 | 1.000 | .328 | .010060 | 1.000 | .579 | .020040 | 1.000 | .879 | .030060 |
| .995 | .297 | .100125 | .998 | .136 | .015030 | .999 | .822 | .050070 | 1.000 | .330 | .105125 | 1.000 | .590 | .020125 | 1.000 | .880 | .010020 |
| .995 | .374 | .050070 | .998 | .138 | .005015 | .999 | .832 | .025040 | 1.000 | .332 | .005010 | 1.000 | .594 | .156187 | 1.000 | .900 | .005010 |
| .995 | .378 | .005030 | .998 | .156 | .050075 | .999 | .840 | .005010 | 1.000 | .338 | .100125 | 1.000 | .600 | .005010 | 1.000 | .911 | .020035 |
| .995 | .392 | .050070 | .998 | .190 | .005010 | .999 | .878 | .005010 | 1.000 | .340 | .032048 | 1.000 | .605 | .010020 | 1.000 | .936 | .005010 |
| .995 | .410 | .005010 | .998 | .202 | .050075 | | | | 1.000 | .343 | .050070 | 1.000 | .610 | .005010 | 1.000 | .957 | .015025 |
| .995 | .447 | .005010 | .998 | .230 | .008016 | _ | 0 | 00 | 1.000 | .354 | .100125 .010020 | 1.000 | .611 | .030060 | 1.000 | .958 | .005010 .005010 |
| .995 .995 | .453 .500 | .008016 .070090 | .998 .998 | .252 .270 | .005020 .060083 | 7 | | 00 | 1.000 1.000 | .357 .363 | .010020 .005010 | 1.000 1.000 | .623 .624 | .030050 .005125 | 1.001 1.001 | .164 .203 | .005010 |
| .995 | .515 | .070090 | .998 | .339 | .005010 | I , | U | UU | 1.000 | .372 | .010020 | 1.000 | . 624 | .126187 | 1.001 1.001 | .203 | .025040 |
| .995 | .534 | .083105 | .998 | .347 | .100125 | | | | 1.000 | .375 | .060187 | 1.000 | .625 | .015030 | 1.001 | .247 | .090105 |
| .995 | .535 | .062120 | .998 | .348 | .075090 | 1.000 | .028 | .010015 | 1.000 | .377 | .005010 | 1.000 | .626 | .050075 | 1.001 | .250 | .062120 |
| .995 | .538 | .015030 | .998 | .378 | .080105 | 1.000 | .064 | .010020 | 1.000 | .378 | .005050 | 1.000 | .627 | .105125 | 1.001 | .251 | .005010 |
| .995 | .559 | .125187 | .998 | .395 | .010030 | 1.000 | .066 | .005010 | 1.000 | .379 | .042134 | 1.000 | .628 | .005030 | 1.001 | .253 | .010020 |
| .995 | .564 | .040060 | .998 | .435 | .020030 | 1.000 | .073 | .020035 | 1.000 | .384 | .060090 | 1.000 | .629 | .005010 | 1.001 | .260 | .080100 |
| .995 | .566 | .030060 | .998 | .501 | .040060 | 1.000 | .077 | .015030 | 1.000 | .386 | .050075 | 1.000 | .630 | .030060 | 1.001 | .262 | .005010 |
| .995 | .573 | .050070 | .998 | .503 | .030125 | 1.000 | .086 | .005010 | 1.000 | .387 | .007016 | 1.000 | .631 | .134156 | 1.001 | .264 | .090120 |
| .995 | .630 | .050070 | .998 | .504 | .030060 | 1.000 | .093 | .010020 | 1.000 | .388 | .005010 | 1.000 | .632 | .090110 | 1.001 | .268 | .005010 |
| .995 | .657 | .025048 | .998 | .506 | .005125 | 1.000 | .094 | .030060 | 1.000 | .389 | .048075 | 1.000 | .634 | .025060 | 1.001 | .269 | .050070 |
| .995 | .665 | .005012 | .998 | .508 | .090110 | 1.000 | .100 | .050070 | 1.000 | .392 | .075125 | 1.000 | .636 | .060075 | 1.001 | .285 | .105135 |
| .995 .995 | .666 .694 | .015030 | .998 | .509 515 | .005010 .080100 | 1.000 | .116 .117 | .050062 | 1.000 | .395 | .010020 | 1.000 | .638 .640 | .100125 | 1.001 | .322 .344 | .080100 |
| .995 .995 | .694 .717 | .020062 | .998 .998 | .515 .516 | .005010 | 1.000 | .117 | .040060 | 1.000 | .403 | .042100 | 1.000 | .640 .641 | .020080 | 1.001 1.001 | .344 | .015030 |
| .995 | .717 | .030060 | .998 | .534 | .030050 | 1.000 | .129 | .005010 | 1.000 | .406 | .020030 | 1.000 | .641 | .126156 | 1.001 | .380 | .025040 |
| .995 | .740 | .025040 | .998 | .562 | .015020 | 1.000 | .131 | .015030 | 1.000 | .407 | .156187 | 1.000 | .646 | .040080 | 1.001 | .385 | .005010 |
| .995 | .750 | .005010 | .998 | .563 | .075100 | 1.000 | .142 | .010062 | 1.000 | .409 | .120134 | 1.000 | .655 | .030050 | 1.001 | .389 | .030050 |
| | | | | | | | | u can choos | | | | | | | | | |

| | | Choose Any | | | Choose Any | | | Choose Any | 1 3 IVIE | IAL | Choose Any | 3 ARE | FLA | Choose Any | UNIDL | | Choose Any |
|--------------------------------|----------------------|----------------------------|-----------------------|----------------------|----------------------------|-------------------------|----------------------|-------------------------------|-------------------------|----------------------|----------------------------|-----------------------|---------------------|----------------------------|-----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| 1.001 | .409 | .005010 | 1.005 | .257 | .100125 | 1.020 | .510 | .135160 | 1.027 | .417 | .075090 | 1.036 | .718 | .090105 | 1.050 | .504 | .005008 |
| 1.001 | .416 | .070090 | 1.005 | .262 | .010020 | 1.020 | .552 | .134156 | 1.027 | .418 | .070090 | 1.036 | .793 | .075090 | 1.050 | .564 | .005020 |
| 1.001 | .418 | .050070 | 1.005 | .263 | .100125 | 1.020 | .641 | .005010 | 1.027 | .439 | .005010 | 1.037 | .440 | .015030 | 1.050 | .570 | .015030 |
| 1.001 1.001 | .439 .494 | .170190 .005010 | 1.005 1.005 | .480 .510 | .060075 .025040 | 1.020 1.020 | .667 .700 | .010020 .005008 | 1.027 1.027 | .542 .635 | .070090 .020070 | 1.037 1.038 | .925 .440 | .030048 .025042 | 1.050 1.050 | .626 .629 | .005050 .005010 |
| 1.001 | .500 | .010020 | 1.005 | .536 | .100125 | 1.020 | .775 | .050070 | 1.027 | .637 | .010030 | 1.038 | .506 | .050075 | 1.050 | .635 | .005010 |
| 1.001 | .503 | .005100 | 1.005 | .650 | .080100 | 1.020 | .787 | .030048 | 1.027 | .669 | .075100 | 1.038 | .709 | .030050 | 1.050 | .712 | .032060 |
| 1.001 | .504 | .005030 | 1.005 | .801 | .010020 | 1.020 | .805 | .060075 | 1.027 | .793 | .060083 | 1.038 | .974 | .010020 | 1.050 | .722 | .032042 |
| 1.001 | .505 | .015025 | 1.005 | .900 | .005010 | 1.020 | .861 | .025048 | 1.027 | .826 | .020040 | 1.038 | .989 | .015025 | 1.050 | .760 | .030050 |
| 1.001 1.001 | . 508 .531 | . 170105 | 1.005 1.006 | .950 .516 | .005010 .080105 | 1.020 1.020 | .960 .962 | .015030 .005020 | 1.027 1.027 | .830 .872 | .060080 .050060 | 1.039 1.039 | .626 .890 | .030060 .010020 | 1.050 | .765 .798 | .010020 |
| 1.001 | .564 | .170190 | 1.006 | .584 | .040060 | 1.020 | .257 | .050075 | 1.027 | .151 | .090105 | 1.039 | .138 | .010020 | 1.050 | .804 | .005010 |
| 1.001 | .595 | .050070 | 1.006 | .881 | .015030 | 1.021 | .316 | .040060 | 1.028 | .623 | .060080 | 1.040 | .544 | .090120 | 1.050 | .820 | .030050 |
| 1.001 | .611 | .040062 | 1.007 | .203 | .050075 | 1.021 | .575 | .005010 | 1.028 | .629 | .032048 | 1.040 | .560 | .030050 | 1.050 | .826 | .005010 |
| 1.001 | .626 .628 | .010020 | 1.007 | .414 | .015025 | 1.021 | .668 | .015020 | 1.028 | .812 | .020040 | 1.040 | .627 .809 | .020040 | 1.050 | .828 | .005010 |
| 1.001 | .688 | .006016 | 1.007 1.007 | .448 .528 | .015025 .080105 | 1.021 1.021 | .750 .766 | .025040 .015030 | 1.029 1.029 | .318 .520 | . 005010 .120135 | 1.040 | .831 | .012025 | 1.050 1.050 | .876 .877 | . 005010 .050070 |
| 1.001 | .690 | .050070 | 1.007 | .569 | .135160 | 1.021 | .878 | .020030 | 1.029 | .740 | .030050 | 1.040 | .875 | .025040 | 1.050 | .878 | .010090 |
| 1.001 | .711 | .080090 | 1.007 | .641 | .015030 | 1.021 | .930 | .015030 | 1.029 | .765 | .050070 | 1.040 | .926 | .020030 | 1.050 | .896 | .005010 |
| 1.001 | .756 | .025050 | 1.007 | .647 | .100125 | 1.022 | .318 | .005010 | 1.030 | .171 | .050070 | 1.041 | .788 | .015030 | 1.050 | .900 | .030050 |
| 1.001 | .818 | .080105 | 1.007 | .725 | .062075 | 1.022 | .394 | .005010 | 1.030 | .189 | .075090 | 1.041 | .909 | .005010 | 1.050 | .970 | .005010 |
| 1.001 1.002 | .906 .140 | .005010 .042060 | 1.007 1.007 | .752 .764 | .036050 . 005010 | 1.022 1.022 | .468 .477 | .030050 .010020 | 1.030 1.030 | .194 .273 | .030050 .060075 | 1.042 1.042 | .544 .773 | .090120 .015030 | 1.050 1.051 | .984 .264 | . 005010 .090110 |
| 1.002 | .172 | .010025 | 1.008 | .661 | .060080 | 1.022 | .552 | .005010 | 1.030 | .336 | .156187 | 1.043 | .473 | .105135 | 1.051 | .315 | .008015 |
| 1.002 | .197 | .005010 | 1.008 | .689 | .050060 | 1.022 | .590 | .015030 | 1.030 | .377 | .020030 | 1.043 | .676 | .070090 | 1.051 | .500 | .010020 |
| 1.002 | .277 | .010020 | 1.008 | .778 | .015030 | 1.022 | .626 | .030050 | 1.030 | .383 | .015030 | 1.044 | .191 | .032060 | 1.051 | .502 | .015030 |
| 1.002 1.002 | .312 .319 | .135160 .060080 | 1.008 1.009 | .845 .195 | .050070 .025042 | 1.022 1.022 | .786 .826 | .100125 .030050 | 1.030 | .384 | .010015 | 1.044 1.044 | .193 .378 | .007015 .020040 | 1.051 1.051 | .503 .504 | .015025 .005010 |
| 1.002 | .319 | .000080 | 1.009 | .195 | .030050 | 1.022 | .960 | .030050 | 1.030 1.030 | .417 .505 | .030050 .050070 | 1.044 | .378 .750 | .100125 | 1.051 | . 504 .752 | .110130 |
| 1.002 | .384 | .090125 | 1.010 | .506 | .005010 | 1.023 | .047 | .020030 | 1.030 | .510 | .062080 | 1.044 | .828 | .025042 | 1.051 | .881 | .060080 |
| 1.002 | .442 | .050070 | 1.010 | .510 | .015030 | 1.023 | .127 | .005010 | 1.030 | .533 | .110130 | 1.044 | .987 | .010020 | 1.051 | .964 | .005010 |
| 1.002 | .454 | .025042 | 1.010 | .664 | .025040 | 1.023 | .302 | .030040 | 1.030 | .542 | .015030 | 1.045 | .210 | .030042 | 1.052 | .595 | .005010 |
| 1.002 1.002 | .470 .504 | . 005075 .100125 | 1.010 1.011 | .757 .501 | .015025 .015030 | 1.023 1.023 | .395 .398 | . 005010 .005015 | 1.030 1.030 | .649 .690 | .005010 .090125 | 1.045 1.045 | .230 .252 | .008016 .005010 | 1.052 1.052 | .715 .760 | . 005010 .105125 |
| 1.002 | .531 | .035090 | 1.012 | .315 | .030040 | 1.023 | .474 | .005010 | 1.030 | .719 | .100125 | 1.045 | .288 | .030042 | 1.052 | .881 | .050075 |
| 1.002 | .532 | .005010 | 1.012 | .551 | .030040 | 1.023 | .552 | .060080 | 1.030 | .749 | .040060 | 1.045 | .300 | .005010 | 1.053 | .530 | .075090 |
| 1.002 | .534 | .025040 | 1.012 | .849 | .015030 | 1.023 | .553 | .005010 | 1.030 | .815 | .020030 | 1.045 | .407 | .030050 | 1.053 | .627 | .070090 |
| 1.002 1.002 | .564 .579 | .062083 .015030 | 1.012 1.013 | .896 .755 | .010020 .005010 | 1.023 1.023 | .669 .709 | .060080 .010020 | 1.030 | .894 | .050075 | 1.045 1.045 | .465 .619 | . 005010 .010020 | 1.053 1.053 | .662 .752 | .025050 .110130 |
| 1.002 | .652 | .015030 | 1.013 | .7 55 .806 | .040060 | 1.023 | .709 | .050070 | 1.030 1.030 | .952 .967 | .005015 .020030 | 1.045 | .704 | .030050 | 1.053 | .752 .893 | .005020 |
| 1.002 | .658 | .100125 | 1.013 | .848 | .042060 | 1.023 | .839 | .005010 | 1.031 | .377 | .015030 | 1.045 | .750 | .005032 | 1.054 | .649 | .005010 |
| 1.002 | .685 | .060083 | 1.014 | .503 | .060080 | 1.023 | .893 | .015030 | 1.031 | .385 | .005010 | 1.045 | .880 | .025040 | 1.054 | .725 | .015030 |
| 1.002 | .703 | .050070 | 1.014 | .692 | .040060 | 1.023 | .909 | .005010 | 1.031 | .408 | .105135 | 1.045 | .894 | .050060 | 1.054 | .749 | .005010 |
| 1.002 1.002 | .718 .719 | .020040 .062083 | 1.014 1.014 | .848 .860 | .005010 .005010 | 1.024 1.024 | .394 .395 | .010020 . 005010 | 1.031 1.031 | .485 .520 | .020040 .005010 | 1.046 1.046 | .345 .517 | .070090 .035050 | 1.054 1.054 | .840 .879 | .008012 .015025 |
| 1.002 | .767 | .020040 | 1.014 | .874 | .015030 | 1.024 | .398 | .005010 | 1.031 | .864 | .080100 | 1.046 | .908 | .005010 | 1.055 | .153 | .050070 |
| 1.002 | .820 | .020040 | 1.014 | .884 | .025040 | 1.024 | .473 | .005010 | 1.031 | .910 | .010020 | 1.046 | .943 | .020035 | 1.055 | .312 | .020040 |
| 1.002 | .842 | .030050 | 1.015 | .534 | .050075 | 1.024 | .476 | .005010 | 1.031 | .958 | .010020 | 1.047 | .287 | .005010 | 1.055 | .350 | .030050 |
| 1.002 1.003 | .897 .211 | .025040 .010020 | 1.015 1.015 | .652 .671 | .060080 .010020 | 1.024 1.024 | .629 .801 | . 005010 .030050 | 1.032 1.032 | .175 .259 | .100125 .062090 | 1.047 1.047 | .480 .499 | . 005010 .006015 | 1.055 1.055 | .384 .461 | .020035 . 005010 |
| 1.003 | .377 | .005015 | 1.015 | .755 | .005010 | 1.024 | .315 | .005010 | 1.032 | .378 | .010020 | 1.047 | .522 | .005010 | 1.055 | .472 | .010025 |
| 1.003 | .410 | .005020 | 1.015 | .790 | .005010 | 1.025 | .318 | .005010 | 1.032 | .529 | .100125 | 1.047 | .627 | .070090 | 1.055 | .501 | .020040 |
| 1.003 | .441 | .030050 | 1.015 | .818 | .100125 | 1.025 | .330 | .020040 | 1.032 | .633 | .080100 | 1.047 | .840 | .010020 | 1.055 | .758 | .010020 |
| 1.003 1.003 | .445 .455 | .010020 .062080 | 1.015 | .842 | .050070 | 1.025 | .375 | .030040 | 1.032 | .656 | .100125 | 1.048 1.048 | .163 .282 | . 005010 .090105 | 1.055 | .786 | .015030 . 005010 |
| 1.003 | .455 | .005015 | 1.016 1.016 | .302 .505 | .100125 .050070 | 1.025 1.025 | .394 .395 | .010020 .005010 | 1.032 1.032 | <u>.788</u> .849 | .020030 .070090 | 1.048 | .378 | .100125 | 1.055 1.055 | .791 .856 | .005010 |
| 1.003 | .508 | .005010 | 1.016 | .750 | .005010 | 1.025 | .410 | .036060 | 1.032 | .925 | .015030 | 1.048 | .431 | .042062 | 1.055 | .880 | .040060 |
| 1.003 | .628 | .045060 | 1.016 | .920 | .005010 | 1.025 | .433 | .050070 | 1.032 | .955 | .020040 | 1.048 | .504 | .006012 | 1.055 | .884 | .035050 |
| 1.003 | .641 | .005012 | 1.016 | .929 | .005010 | 1.025 | .440 | .090110 | 1.033 | .483 | .080100 | 1.048 | .629 | .008015 | 1.055 | .942 | .020035 |
| 1.003 | .723 .780 | .025040 | 1.017 1.017 | .301 .627 | .050075 .005008 | 1.025 1.025 | <u>.475</u> .477 | .005010 .005010 | 1.033 1.033 | .757 .811 | .005010 .050075 | 1.048 1.048 | .657 .688 | .010020 .005010 | 1.056 1.056 | . 205 .634 | .005010 .050075 |
| 1.003 | .807 | .030048 | 1.017 | .754 | .005015 | 1.025 | .505 | .005010 | 1.033 | .836 | .015030 | 1.048 | .882 | .005015 | 1.056 | .659 | .005010 |
| 1.003 | .810 | .005010 | 1.017 | .825 | .005060 | 1.025 | .550 | .005012 | 1.033 | .883 | .015030 | 1.048 | .883 | .015030 | 1.056 | .676 | .040060 |
| 1.004 | .148 | .080105 | 1.017 | .878 | .048062 | 1.025 | .606 | .048062 | 1.033 | .925 | .032050 | 1.049 | .377 | .010020 | 1.056 | .719 | .032060 |
| 1.004 1.004 | . 185 .320 | .005010 .020040 | 1.018 1.018 | .203 .688 | .008015 .050070 | 1.025 1.025 | .632 .704 | .010020 .032042 | 1.034 1.034 | .130 .350 | .005015 .020040 | 1.049 1.049 | .463 .562 | .060090 | 1.056 1.056 | .726 .841 | .005010 .005040 |
| 1.004 | .423 | .005010 | 1.018 | .696 | .050070 | 1.025 | .704 | .032042 | 1.034 | .381 | .020040 | 1.049 | .648 | .040060 | 1.056 | .875 | .010020 |
| 1.004 | .458 | .050070 | 1.018 | .747 | .048062 | 1.025 | .775 | .010020 | 1.034 | .500 | .070090 | 1.049 | .890 | .030050 | 1.057 | .350 | .005010 |
| 1.004 | .531 | .005010 | 1.018 | .807 | .010020 | 1.025 | .776 | .020040 | 1.034 | .654 | .005010 | 1.049 | .950 | .005010 | 1.057 | .838 | .005010 |
| 1.004 1.004 | . 549 .567 | .100125 | 1.018 | .824 | .020040 | 1.025 | .787 | .030050 | 1.034 | .731 | .015030 | 1.050 1.050 | .156 .178 | .025042 | 1.058 | .251 | 040 - 050 |
| 1.004 | .628 | .100125 | 1.018 1.018 | .826 .832 | .005010 .020040 | 1.025 1.025 | .893 .926 | .020040 .020040 | 1.034 1.034 | .827 .830 | . 005010 .005012 | 1.050 | .250 | .025040 | 1.058 1.058 | .428 .501 | .040050 .010020 |
| 1.004 | .675 | .100125 | 1.019 | .166 | .015030 | 1.026 | .239 | .005010 | 1.034 | .660 | .070090 | 1.050 | .314 | .005020 | 1.058 | .520 | .040060 |
| 1.004 | .705 | .040060 | 1.019 | .415 | .020030 | 1.026 | .480 | .030050 | 1.035 | .832 | .030050 | 1.050 | .320 | .170190 | 1.058 | .532 | .060075 |
| 1.004 | .750 | .090105 | 1.019 | .613 | .015030 | 1.026 | .630 | .060080 | 1.035 | .858 | .040060 | 1.050 | .375 | .062120 | 1.058 | .583 | .090110 |
| | | .090125 | 1.019 | .665 | .030050 | 1.026 | .781 | .040060 | 1.035 | .874 | .060080 .010020 | 1.050 1.050 | .376 .416 | . 005010 .020030 | 1.058 1.058 | .601 .626 | .005010 .005030 |
| 1.004 | .760 780 | 010 - 020 | 1 010 | 757 | 005 - 010 | | | | | | | | | | | | 030 |
| 1.004 1.004 1.004 | .780 .780 | .010020 .005010 | 1.019 1.019 | .757 .766 | . 005010 .010030 | 1.026 1.027 | .917 .203 | .005010 .005010 | 1.035 1.035 | .948 .954 | | 1.050 | .438 | .015030 | 1.058 | .640 | .050070 |
| 1.004 | .780 | | | | | 1.026 1.027 1.027 | . 203 .294 | .005010 .005010 .070090 | 1.035 1.035 1.036 | .948 .954 .533 | .020030 .050083 | | | | | | |

| | | Chasas Any | 1 | | Chassa Amir | | | Chassa Amy | NC | | Chance Any | | | | | SIZES | |
|-----------------------|---------------------|----------------------------|-----------------------|----------------------|----------------------------|-----------------------|----------------------|----------------------------|-----------------------|----------------------|--------------------------|-----------------------|---------------------|----------------------------|-----------------------|----------------------|----------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 1.058 | .735 | .050083 | 1.062 | .218 | .020035 | 1.064 | .712 | .030050 | 1.076 | .536 | .060080 | 1.090 | .534 | .030060 | 1.098 | .761 | .005010 |
| 1.058 | .757 | .030050 | 1.062 | .252 | .030040 | 1.064 | .751 | .010020 | 1.076 | .643 | .075090 | 1.090 | .595 | .090120 | 1.098 | .846 | .110130 |
| 1.058 | .762 | .075100 | 1.062 | .259 | .045060 | 1.064 | .790 | .005010 | 1.076 | .690 | .080104 | 1.090 | .932 | .060080 | 1.098 | .929 | .005010 |
| 1.058 | .872 | .050070 | 1.062 | .262 | .007025 | 1.064 | .822 | .040062 | 1.076 | .915 | .015025 | 1.091 | .625 | .032062 | 1.098 | .939 | .005010 |
| 1.058 | .897 | .060080 | 1.062 | .318 | .008016 | 1.064 | .865 | .010020 | 1.077 | .380 | .060080 | 1.091 | .991 | .015030 | 1.099 | .253 | .005010 |
| 1.059 | .153 | .015030 | 1.062 | .378 | .015125 | 1.064 | .945 | .030040 | 1.077 | .758 | .050075 | 1.092 | .070 | .005010 | 1.099 | .318 | .005010 |
| 1.059 | .188 | .040060 | 1.062 | .436 | .005010 | 1.064 | .951 | .015030 | 1.077 | .767 | .025040 | 1.092 | .239 | .005020 | 1.099 | .377 | .005010 |
| 1.059 1.059 | .347 .450 | .060070 .090120 | 1.062 1.062 | .440 .454 | .080104 | 1.065 1.065 | .165 .395 | .025040 .062083 | 1.077 1.077 | .830 .870 | .005010 .050070 | 1.092 1.092 | .433 .695 | .040105 .025040 | 1.099 1.099 | .378 .436 | .010015 .020040 |
| 1.059 | .514 | .015030 | 1.062 | .472 | .005010 | 1.065 | .434 | .002003 | 1.077 | .907 | .020050 | 1.092 | .750 | .015025 | 1.099 | .440 | .005010 |
| 1.059 | .582 | .030050 | 1.062 | .480 | .015030 | 1.065 | .510 | .015036 | 1.078 | .232 | .025040 | 1.092 | .753 | .048070 | 1.099 | .500 | .005010 |
| 1.059 | .596 | .050070 | 1.062 | .484 | .032060 | 1.065 | .626 | .156187 | 1.078 | .278 | .010020 | 1.092 | .791 | .010020 | 1.099 | .508 | .005010 |
| 1.059 | .634 | .005010 | 1.062 | .515 | .005010 | 1.065 | .634 | .075090 | 1.078 | .392 | .060083 | 1.092 | .811 | .005010 | 1.099 | .558 | .010020 |
| 1.059 | .750 | .050070 | 1.062 | .531 | .100125 | 1.065 | .697 | .030040 | 1.078 | .456 | .005010 | 1.092 | .812 | .015030 | 1.099 | .633 | .020030 |
| 1.059 | .768 | .020040 | 1.062 | .537 | .005105 | 1.065 | .767 | .005010 | 1.078 | .574 | .020040 | 1.093 | .239 | .012020 | 1.099 | .650 | .110130 |
| 1.059 1.059 | .890 .965 | .040060 .015025 | 1.062 1.062 | .564 .580 | .062090 .005010 | 1.065 | .814 | .042060 | 1.078 | .580 | .040060 | 1.093 1.093 | .405 .421 | .030060 .050070 | 1.099 1.099 | .788 .816 | .010050 |
| 1.060 | .150 | .060080 | 1.062 | .625 | .020030 | 1.065 1.065 | .875 .892 | .010025 .030050 | 1.078 1.078 | .593 .635 | .050075 .020040 | 1.093 | .500 | .050075 | 1.099 | .840 | .015025 .015025 |
| 1.060 | .172 | .010020 | 1.062 | .626 | .048062 | 1.065 | .923 | .032042 | 1.078 | .644 | .005010 | 1.093 | .641 | .015030 | 1.099 | .902 | .010030 |
| 1.060 | .210 | .010020 | 1.062 | .635 | .100156 | 1.065 | .967 | .005010 | 1.078 | .687 | .030040 | 1.093 | .681 | .010030 | 1.100 | .162 | .030042 |
| 1.060 | .258 | .025035 | 1.062 | .638 | .050070 | 1.066 | .535 | .050075 | 1.078 | .749 | .020040 | 1.093 | .830 | .030050 | 1.100 | .312 | .010020 |
| 1.060 | .283 | .156187 | 1.062 | .642 | .060080 | 1.066 | .634 | .075100 | 1.078 | .781 | .031042 | 1.093 | .871 | .025040 | 1.100 | .316 | .005010 |
| 1.060 | .284 | .040062 | 1.062 | .656 | .075090 | 1.066 | .664 | .005010 | 1.078 | .830 | .030050 | 1.093 | .876 | .025050 | 1.100 | .346 | .050070 |
| 1.060 | .318 | .005010 | 1.062 | .657 | .075090 | 1.066 | .725 | .020030 | 1.078 | .840 | .010020 | 1.093 | .878 | .050075 | 1.100 | .354 | .070090 |
| 1.060 | .341 | .105135 | 1.062 1.062 | <u>.687</u> .718 | .100187 | 1.066 1.066 | .728 .766 | .105135 .030060 | 1.079 | .114 | .005010 .030050 | 1.093 1.093 | .883 .957 | .035050 .005010 | 1.100 1.100 | .377 .378 | .010020 |
| 1.060 | .378 | .105135 | 1.062 | .716 | .050070 | 1.066 | .873 | .030060 | 1.079 1.079 | .509 .567 | .030050 | 1.093 | .313 | .005010 | 1.100 1.100 | .376 .380 | .015030 |
| 1.060 | .396 | .025048 | 1.062 | .727 | .060080 | 1.066 | .874 | .030050 | 1.079 | .587 | .025040 | 1.094 | .395 | .040060 | 1.100 | .416 | .015030 |
| 1.060 | .429 | .005010 | 1.062 | .750 | .100125 | 1.066 | .967 | .005010 | 1.079 | .760 | .025040 | 1.094 | .559 | .020030 | 1.100 | .426 | .157187 |
| 1.060 | .451 | .105125 | 1.062 | .755 | .005015 | 1.067 | .213 | .030050 | 1.079 | .955 | .005010 | 1.094 | .668 | .080100 | 1.100 | .439 | .005010 |
| 1.060 | .469 | .105125 | 1.062 | .764 | .100125 | 1.067 | .354 | .060080 | 1.080 | .088 | .005010 | 1.094 | .782 | .025040 | 1.100 | .440 | .005020 |
| 1.060 | .479 | .005010 | 1.062 | .770 | .030050 | 1.067 | .515 | .080100 | 1.080 | .328 | .015030 | 1.094 | .900 | .005010 | 1.100 | .454 | .100125 |
| 1.060 | .510 | .020035 | 1.062 | .802 | .100125 | 1.067 | .535 | .050075 | 1.080 | .571 | .070090 | 1.095 | .375 | .025080 | 1.100 | .478 | .005010 |
| 1.060 1.060 | .512 .513 | .156188 .105135 | 1.062 1.062 | .812 .817 | .005012 .010020 | 1.067 1.068 | .664 .205 | .010020 .030050 | 1.080 1.080 | .623 .738 | .020040 .060080 | 1.095 1.095 | .405 .591 | .025048 | 1.100 1.100 | .500 .502 | .005010 .005010 |
| 1.060 | .563 | .015030 | 1.062 | .833 | .025040 | 1.068 | .254 | .010020 | 1.080 | .760 | .020040 | 1.095 | .625 | .010020 | 1.100 | .503 | .005010 |
| 1.060 | .573 | .060080 | 1.062 | .839 | .025042 | 1.068 | .341 | .100125 | 1.080 | .770 | .050075 | 1.095 | .655 | .042062 | 1.100 | .504 | .005020 |
| 1.060 | .580 | .062120 | 1.062 | .860 | .010020 | 1.068 | .636 | .090105 | 1.080 | .773 | .030060 | 1.095 | .700 | .060090 | 1.100 | .505 | .005010 |
| 1.060 | .629 | .015050 | 1.062 | .876 | .010080 | 1.068 | .750 | .040050 | 1.080 | .780 | .005010 | 1.095 | .755 | .040050 | 1.100 | .506 | .005010 |
| 1.060 | .658 | .005040 | 1.062 | .877 | .020040 | 1.068 | .813 | .030050 | 1.080 | .856 | .020035 | 1.095 | .790 | .060080 | 1.100 | .515 | .100125 |
| 1.060 | .659 | .035060 | 1.062 | .930 | .005010 | 1.069 | .153 | .005010 | 1.080 | .906 | .005010 | 1.095 | .808 | .015030 | 1.100 | .560 | .005010 |
| 1.060 1.060 | .672 .688 | .060083 .010020 | 1.062 1.062 | .962 .963 | .010030 .010020 | 1.069 1.069 | .390 .600 | . 005010 .170190 | 1.080 | .935 .793 | .005010 .030050 | 1.095 1.095 | .809 .813 | .025040 .105135 | 1.100 1.100 | .562 .566 | .040060 . 005010 |
| 1.060 | .702 | .005010 | 1.062 | 1.010 | .005010 | 1.069 | .936 | .025040 | 1.081 1.081 | .793 | .005010 | 1.095 | .818 | .050075 | 1.100 | .607 | .075100 |
| 1.060 | .726 | .060080 | 1.062 | 1.025 | .005010 | 1.070 | .255 | .105125 | 1.083 | .253 | .050075 | 1.095 | .906 | .005010 | 1.100 | .629 | .010020 |
| 1.060 | .741 | .025040 | 1.063 | .142 | .090105 | 1.070 | .266 | .020030 | 1.083 | .475 | .010020 | 1.096 | .375 | .030060 | 1.100 | .630 | .005015 |
| 1.060 | .752 | .005010 | 1.063 | .190 | .005010 | 1.070 | .906 | .005010 | 1.083 | 1.016 | .020030 | 1.096 | .398 | .050083 | 1.100 | .632 | .010075 |
| 1.060 | .760 | .020030 | 1.063 | .204 | .075090 | 1.070 | .961 | .020035 | 1.084 | .631 | .080100 | 1.096 | .441 | .060075 | 1.100 | .635 | .005010 |
| 1.060 | .772 | .060080 | 1.063 | .315 | .005010 | 1.071 | .259 | .040062 | 1.084 | .645 | .025040 | 1.096 | .500 | .070090 | 1.100 | .641 | .135156 |
| 1.060 | .794 .880 | .080105 | 1.063 1.063 | . 317 .321 | .005010 .090120 | 1.071 1.071 | .266 .884 | .010030 .015030 | 1.084 1.084 | .848 | .005010 | 1.096 1.096 | .577 .675 | .015030 | 1.100 1.100 | .643 .675 | .050070 .070090 |
| 1.060 | .881 | .025040 | 1.063 | .329 | .080120 | 1.071 1.072 | .004 . 256 | .015030 | 1.084 | .926 .927 | .010020 | 1.096 | .690 | .030050 | 1.100 | .700 | .040060 |
| 1.060 | .882 | .010020 | 1.063 | .343 | .100125 | 1.072 | .381 | .005010 | 1.085 | .245 | .030050 | 1.096 | .754 | .005010 | 1.100 | .716 | .005020 |
| 1.060 | .883 | .010020 | 1.063 | .394 | .005010 | 1.072 | .712 | .005010 | 1.085 | .283 | .050075 | 1.096 | .803 | .010020 | 1.100 | .718 | .105135 |
| 1.060 | .888 | .010020 | 1.063 | .437 | .005030 | 1.072 | .750 | .075100 | 1.085 | .476 | .005010 | 1.096 | .872 | .005020 | 1.100 | .751 | .005010 |
| 1.060 | .896 | .010020 | 1.063 | .442 | .005010 | 1.072 | 1.001 | .005010 | 1.085 | .650 | .015030 | 1.096 | .922 | .025040 | 1.100 | .765 | .030050 |
| 1.060 | .905 | .040060 | 1.063 | .503 | .005010 | 1.073 | .347 | .060080 | 1.085 | .722 | .005010 | 1.096 | .935 | .050070 | 1.100 | .775 791 | .032042 |
| 1.061 1.061 | .128 .316 | .010020 . 005010 | 1.063 1.063 | .506 .540 | .062083 .135156 | 1.073 1.073 | .474 .510 | .005010 | 1.085 | .749 | .050070 | 1.096 1.097 | .937 .598 | .032060 .170190 | 1.100 1.100 | .781 .782 | .040060 .020040 |
| 1.061 | .386 | .080100 | 1.063 | .540 .545 | .005010 | 1.073 | .510 | .015030 .070090 | 1.085 1.086 | 1.022 .643 | .005010 .005010 | 1.097 | .627 | .070090 | 1.100 1.100 | .76∠ . 794 | .020040 |
| 1.061 | .442 | .005020 | 1.063 | .563 | .015030 | 1.073 | .656 | .040060 | 1.086 | .915 | .020035 | 1.097 | .638 | .030050 | 1.100 | .827 | .125135 |
| 1.061 | .500 | .050070 | 1.063 | .578 | .060075 | 1.073 | .672 | .005010 | 1.086 | .948 | .032050 | 1.097 | .782 | .005010 | 1.100 | .858 | .010020 |
| 1.061 | .505 | .010025 | 1.063 | .579 | .060080 | 1.073 | .890 | .050070 | 1.087 | .281 | .030050 | 1.097 | .830 | .025040 | 1.100 | .863 | .030042 |
| 1.061 | .510 | .070090 | 1.063 | .638 | .050070 | 1.074 | .680 | .135156 | 1.087 | .562 | .036060 | 1.097 | .873 | .005010 | 1.100 | .875 | .005010 |
| 1.061 | .533 | .035050 | 1.063 | .640 | .080100 | 1.074 | .720 | .020040 | 1.087 | .597 | .005010 | 1.097 | .883 | .005010 | 1.100 | .877 | .025040 |
| 1.061 | .562 | .005125 .005010 | 1.063 | .645 | .025040 | 1.074 | .971 | .015025 | 1.087 | .740 | .040060 | 1.097 | .900 | .030050 | 1.100 | .882 | .030040 |
| 1.061 1.061 | .574 .657 | .170190 | 1.063 1.063 | .657 .674 | .040062 . 005010 | 1.075 1.075 | .350 .525 | .005010 .100120 | 1.087 1.088 | .848 .194 | .005010 .062083 | 1.097 1.097 | .901 .949 | .040060 .050060 | 1.100 1.100 | .889 .905 | .015030 .040060 |
| 1.061 | .783 | .025040 | 1.063 | .687 | .040060 | 1.075 | .525 .689 | .075100 | 1.088 | .194 . 214 | .002083 | 1.097 | 1.003 | .010030 | 1.100 | .905 | .040060 |
| 1.061 | .922 | .025040 | 1.063 | .749 | .005010 | 1.075 | .694 | .050060 | 1.088 | .306 | .030050 | 1.098 | .220 | .005010 | 1.100 | .952 | .010020 |
| 1.061 | .943 | .050062 | 1.063 | .780 | .050070 | 1.075 | .804 | .005010 | 1.088 | .541 | .005010 | 1.098 | .375 | .070090 | 1.100 | .961 | .005010 |
| 1.061 | 1.004 | .010020 | 1.063 | .781 | .060080 | 1.075 | .810 | .005010 | 1.089 | .460 | .020030 | 1.098 | .377 | .010020 | 1.100 | .965 | .030050 |
| 1.062 | .061 | .015020 | 1.063 | .798 | .030050 | 1.075 | .814 | .005010 | 1.089 | .875 | .042060 | 1.098 | .396 | .120140 | 1.100 | .987 | .005035 |
| 1.062 | .073 | .020040 | 1.063 | .883 | .005010 | 1.076 | .348 | .050075 | 1.090 | .314 | .025036 | 1.098 | .420 | .005010 | 1.100 | .992 | .030050 |
| 1.062 | .120 | .010020 | 1.063 | .889 | .005010 | 1.076 | .367 | .075090 | 1.090 | .329 | .100125 | 1.098 | .504 | .010020 | 1.100 | .994 | .030050 |
| 1.062 | .128 .137 | .048062 .080100 | 1.064 1.064 | .470 .512 | .010020 .005010 | 1.076 1.076 | .398 .499 | . 005010 .015030 | 1.090 1.090 | .355 .433 | .015030 .030060 | 1.098 1.098 | .600 .660 | . 005010 .105125 | 1.100 1.100 | 1.000 1.007 | . 005010 .010020 |
| 1.062 | .188 | .020040 | 1.064 | .563 | .005020 | 1.076 | .508 | .013030 | 1.090 | .500 | .100125 | 1.098 | .671 | .005010 | 1.100 | 1.010 | .010020 |
| 1.062 | .200 | .042062 | 1.064 | .594 | .005020 | 1.076 | .515 | .015025 | 1.090 | .502 | .040060 | 1.098 | .752 | .120140 | 1.101 | .075 | .005010 |
| 1.062 | .211 | .050083 | 1.064 | .687 | .048062 | 1.076 | .535 | .060080 | 1.090 | .505 | .025040 | | .754 | .120156 | 1.101 | .255 | .110130 |
| | | | ****** | 1/5010 | | | | u can choos | | | | | | · | | | |

| 1901 385 695 695 696 796 | | | | | | | | | BOKER | 1 3 IVIE | IAL | | O AITE | - 1 | | OWIDE | LDL | |
|--|--|--|---|--|--|---|--|--|---|---|--|---|---|--|---|---|--|--|
| 1919 278 686 679 7010 801 600 7010 811 700 705 | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| 1910 319 2025 2025 2016 318 320 300 318 710 710 305 300 310 310 320 300 310 310 310 320 300 31 | 1 101 | 275 | | 1 108 | 801 | | 1 115 | 700 | | 1 120 | 620 | | 1 100 | 770 | | 1 125 | 378 | |
| 1919 | | | | 1 | | | | | | | | | | | | | | |
| 1901 328 398 | | | | 1 | | | | | | | | | | | | | | .005012 |
| 1906 | 1.101 | .356 | .015030 | 1.109 | .318 | .010020 | 1.115 | .807 | .005010 | 1.120 | .640 | .016025 | | | | 1.125 | .390 | .005070 |
| 1910 505 | | | | 1.109 | .488 | .005010 | 1.115 | .818 | .100125 | 1.120 | .644 | .100125 | | | .030050 | 1.125 | .391 | .100125 |
| 1010 739 0.05 0.06 110 0.05 0.05 0.05 110 0.05 0.05 110 0.05 0.05 110 0.05 0.05 110 0.05 0.05 110 0.05 0.05 110 0.05 0.05 110 0.05 0.05 110 0.05 0.05 0.05 110 0.05 0.05 0.05 110 0.05 | | | | 1 | | | | | | | | | | | | | | .042075 |
| 1010 788 60.00 1100 830 60.00 60.00 1100 848 60.00 120 120 848 60.00 120 | | | | | | | | | | | | | | | | | | |
| 100 | | | | 1 | | | | | | | | | | | | | | |
| 1902 6.070 6.085 - 0.00 1109 97 | | | | 1 | | | | | | | | | | | | | | |
| 1.102 237 .005 .010 1110 .094 .005 .010 1116 .786 .005 .010 1120 .780 .015 .002 .0124 .218 .218 .218 .218 .218 .218 .218 .218 | | | | | | | | | | | | | | | | | | |
| 1.00 | | | | 1 | | | | | | | | | | | | | | .100125 |
| 1002 340 505 506 1010 238 1018 301 1016 369 505 501 1019 709 1010 1214 317 500 500 122 486 1015 122 | 1.102 | .239 | .005010 | 1.110 | .097 | .045060 | 1.116 | .786 | | | | | 1.124 | .251 | .010020 | 1.125 | .439 | .070090 |
| 1102 334 005 - 006 | | | | 1.110 | | .030042 | 1.116 | .809 | .030060 | 1.120 | .779 | .025042 | | | | 1.125 | .450 | .025062 |
| 1.102 394 005 - 020 110 328 055 - 070 116 379 055 - 070 116 379 055 - 070 116 379 055 - 070 1170 116 379 055 - 070 1170 365 - 055 - 070 118 369 055 - | | | | | | | | | | | | | | | | | | .090125 |
| 1.102 395 015 - 205 016 - 205 016 026 026 02 | | | | l | | | | | | | | | | | | _ | | |
| 1.102 396 005 - 001 | | | | 1 | | | | | | | | | | | | | | |
| 1.102 A73 0.05 - 0.07 0.110 0.82 0.05 - 0.07 0.116 1.102 0.05 - 1.05 0.117 1.95 0.05 - 1.25 1.120 0.05 - 1.05 0.05 - 1.05 | | | | l | | | | | | | | | | | | | | |
| 1.102 | | | | 1 | | | | | | | | | | | | | | |
| 1.002 4.776 0.005 - 0.00 | 1.102 | .473 | .005010 | | | | | | | | | | | .509 | | | | .005125 |
| 1.002 1.003 1.004 1.005 1.00 | | | | 1.110 | | .100120 | 1.117 | .340 | .005015 | | | | | | | 1.125 | | .126187 |
| 1402 591 190 190 190 190 290 203 595 191 360 365 | | | | l | | | | | | | | | | | | | | .040050 |
| 100 150 100 110 805 0.05 0.05 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.07 1.07 0.05 0.05 0.07 1.07 0.05 0.05 0.07 1.07 0.05 0.05 0.05 0.07 1.07 0.05 | | | | 1 | | | | | | | | | | | | | | |
| 1.102 599 599 599 590 5110 534 588 595 591 591 592 592 593 595 591 592 593 5 | | | | | | | | | | | | | | | | | | |
| 1.102 598 0.05 0.05 0.110 885 0.05 0.111 7.50 0.05 1.22 1.21 5.11 0.05 0.07 1.124 6.82 8.08 0.00 1.125 566 0.08 0.10 1.125 566 0.08 0.10 1.125 566 0.08 0.10 1.125 566 0.08 0.10 1.125 566 0.08 0.10 1.125 566 0.08 0.10 1.125 566 0.08 0.10 1.125 566 0.08 0.10 1.125 571 0.05 0.08 0.10 1.12 0.08 0.125 0.12 | | | | 1 | | | | | | | | | | | | | | |
| 1.102 682 005 - 020 | | | | 1 | | | | | | | | | | | | | | |
| 1.102 686 0.40 0.60 | | | | 1 | | | | | | | | | | | | | | .005010 |
| 1002 687 040 - 080 1110 880 042 - 082 1117 780 020 - 040 1121 689 694 - 686 1124 683 050 - 050 1125 571 100 - 1225 1102 689 080 - 070 1110 083 083 - 105 1117 889 010 - 020 1121 644 100 - 125 1124 687 040 - 080 1125 573 100 - 1225 1102 689 080 - 070 1110 110 080 - 080 - 080 1110 111 080 080 - 070 1117 080 080 - 070 1126 573 080 - 080 1121 126 080 080 - 070 1125 590 100 - 1225 1121 1124 1124 1124 1124 1124 1125 1125 1125 100 - 1225 1124 1125 11 | | | | l | | | | | | | | | | | | | | .060080 |
| 1.102 .766 .005010 .110 .006 .012 .117 .889 .010020 .1121 .684 .100125 .124 .683 .005010 .125 .590 .000125 .124 .110 .006 .110 .111 .006 .010 .117 .899 .040026 .1121 .689 .005010 .1124 .794 .005001 .1125 .690 .000006 .1121 .111 .111 .101 .005006 .1121 .111 .101 .005006 .1121 .111 .101 .005006 .1121 .111 .101 .005006 .1121 .111 .101 .1125 .005001 .1124 .793 .101101 .1125 .626 .005001 .1124 .101 .101 .1125 .005001 .1125 .005001 .1124 .703 .101 .101 .1125 .005001 .1125 .005001 .1124 .703 .101 .101 .1125 .005001 .1124 .005005 .101 .101 .1125 .005001 .1124 .005005 .101 .101 .1125 .005001 .1124 .005005 .101 .101 .1125 .005001 .1124 .005005001 .1125 .005 - | | | | 1.110 | .880 | .042062 | 1.117 | .760 | .020040 | 1.121 | .609 | .134156 | | | | 1.125 | .571 | .100125 |
| 1.102 776 0.09000 1.110 1.000 0.00000 1.117 390 390007 1.121 589 0.05000 1.124 779 0.05000 1.128 589 0.00001 1.124 779 0.05000 1.128 589 0.00001 1.124 779 0.05000 1.124 589 0.00001 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 1.124 779 0.05000 0.05 | | | | 1 | | | | | | | | | | | | | | .100125 |
| 1.102 771 0.40 - 0.60 1.110 1.111 0.90 0.65 - 0.70 1.117 0.90 0.65 - 0.70 1.121 0.99 0.65 - 0.70 1.121 0.99 0.65 - 0.70 1.121 0.99 0.65 - 0.70 1.121 0.70 0.65 - 0.70 1.124 753 1.10 - 1.00 1.125 0.60 0.00 - 0.00 1.100 0.90 0.90 1.111 0.90 0.90 0.90 1.121 770 0.90 - 0.00 1.124 753 1.10 - 1.00 1.125 0.60 0.00 - 0.00 1.100 0.90 0.90 1.111 0.90 0.90 0.90 1.121 0.90 0.90 0.90 1.124 779 0.90 - 0.00 1.125 0.80 0.00 - 0.00 1.100 0.90 0.90 1.111 0.90 0.90 0.90 0.90 1.121 0.90 0.90 0.90 1.124 0.90 0. | | | | 1 | | | | | | | | | | | | | | |
| 1.102 384 0.05 - 0.01 1.11 556 0.05 - 0.01 1.12 7.05 0.05 - 0.01 1.124 7.05 1.10 - 1.30 1.125 6.25 0.05 - 0.01 1.102 384 0.05 - 0.01 1.111 7.15 0.02 - 0.03 1.118 3.18 0.05 - 0.01 1.111 7.15 0.02 - 0.03 1.118 3.18 0.05 - 0.01 1.111 7.15 0.05 - 0.01 1.118 5.06 0.05 - 0.05 1.121 7.70 0.05 - 0.07 1.124 7.75 0.02 - 0.03 1.125 6.25 6.00 - 0.02 1.103 3.16 0.05 - 0.01 1.111 7.15 0.05 - 0.01 1.118 5.06 0.05 - 0.05 - 0.05 1.124 7.70 0.05 - 0.01 1.124 5.00 0.02 - 0.03 1.125 5.03 0.05 - 0.02 1.103 3.05 0.05 - 0.01 1.111 7.75 0.05 - 0.01 1.118 7.54 0.01 - 0.02 1.121 8.75 0.05 - 0.01 1.124 8.70 0.02 - 0.03 1.125 5.03 0.05 - 0.01 1.124 8.75 0.05 - 0.01 1.125 0.0 | | | | l | | | | | | | | | | | | | | |
| 1.102 849 0.070 0.000 1.111 556 0.40 0.000 1.117 1.010 0.030 0.050 1.121 770 0.050 0.000 1.124 789 0.015 0.015 0.000 0.15 0.000 1.011 1.111 575 1.000 0.000 0.101 1.112 770 0.050 0.000 1.124 789 0.050 0.015 0.000 0.010 1.112 1.111 751 0.000 0.000 1.118 679 0.025 0.040 1.121 878 0.050 0.010 1.124 870 0.020 0.010 1.125 632 0.090 0.000 1.000 | | | | | | | | | | | | | | | | | | |
| 1.102 .884 .005010 .111 .711 .712 .002030 .118 .138 .009100 .112 .770 .005070 .1124 .794 .002030 .115 .680 .009102 .1103 .385 .005002 .111 .771 .005010 .118 .754 .010020 .112 .878 .005010 .1124 .784 .002030 .115 .683 .009002 .1103 .396 .005001 .111 .754 .000000 .118 .754 .010020 .112 .195 .005010 .1124 .879 .005001 .1125 .683 .000001 .113 .111 | | | | l | | | | | | | | | | | | | | |
| 1.103 346 005 - 010 1.111 751 0.20 - 0.30 1.118 679 0.55 - 040 1.121 878 0.05 - 0.00 1.124 879 0.05 - 0.00 1.125 633 0.020 - 0.40 1.131 3.55 0.05 - 0.020 1.111 7.75 1.00 - 1.25 1.118 679 0.05 - 0.00 1.121 825 0.05 - 0.00 1.124 870 0.020 - 0.030 1.125 638 0.01 - 0.205 1.131 1.132 | | | | l | | | | | | | | | | | | | | .090125 |
| 1.103 395 0.05 - 0.020 1.111 775 1.00 - 1.25 1.118 754 0.05 - 0.00 1.122 495 0.05 - 0.00 1.124 879 0.05 - 0.00 1.125 6.40 1.56 1.56 1.125 1. | 1.102 | .948 | .005010 | 1.111 | .711 | | 1.118 | | | | | | 1.124 | .794 | .020030 | 1.125 | .630 | .020040 |
| 1103 398 080 100 1112 246 060 090 1.118 788 005 005 010 1.122 383 030 050 1124 387 005 006 1.125 646 165 182 1103 398 005 005 001 1124 312 060 009 1.118 802 005 010 1.122 383 030 050 1.124 395 005 006 1.125 646 050 0.025 1.113 312 060 0.000 1.118 802 0.05 0.010 1.122 414 010 0.00 1.124 905 005 0.00 1.125 656 0.05 0.075 1.121 1.103 1.123 1.103 1.124 1.124 1.124 1.125 | | | | | | | | | | | | | | | | | | .090105 |
| 1103 397 010 020 1112 228 070 090 1118 802 005 010 1122 431 070 020 1124 891 030 080 080 1125 645 050 070 1120 123 080 070 080 080 1123 080 080 080 080 080 1125 645 080 080 080 1125 080 | | | | | | | | | | | | | | | | | | |
| 1103 398 005 - 020 1112 312 0.60 - 0.90 1.118 823 110 - 130 1.122 441 010 - 0.00 1.124 914 0.60 - 0.80 1.125 656 0.635 - 1.725 1.103 5.52 0.00 - 0.00 1.112 413 0.00 - 0.00 1.118 9.00 0.05 - 0.00 1.122 448 0.07 - 0.06 1.124 914 0.60 - 0.80 1.125 656 0.365 - 1.725 1.103 5.54 0.05 - 0.00 1.112 413 0.00 - 0.00 1.118 1.00 0.00 - 0.00 1.122 468 0.15 - 0.00 1.124 916 0.05 - 0.00 1.125 669 0.00 - 0.00 1.103 5.53 0.05 - 0.05 1.112 4.118 0.00 0.00 - 0.00 1.122 5.05 0.00 - 1.05 1.124 916 0.00 - 0.00 1.125 669 0.00 - 0.00 1.103 6.92 0.05 - 0.05 1.112 5.00 0.00 - 0.00 1.119 4.03 0.05 - 0.05 1.122 5.51 1.25 - 1.50 0.00 - 0.00 1.125 5.687 0.00 - 1.00 1.103 6.92 0.05 - 0.05 1.112 5.00 0.00 - 0.00 1.119 4.03 0.05 - 0.10 1.122 5.51 1.25 - 5.00 0.05 - 0.05 1.119 3.00 0.00 - 0.05 1.122 5.51 1.25 - 5.00 0.00 - 0.05 1.119 4.00 0.00 - 0.00 1.122 5.51 1.25 - 5.00 0.00 - 0.05 1.122 5.00 0.05 - 0.05 1.122 5.00 0.05 - 0.05 0.05 1.122 5.00 0.05 - 0.05 0.05 1.122 5.00 0.05 - 0.05 0.05 1.122 5.00 0.05 - 0.05 0.05 1.122 5.00 0.05 - 0.05 0.05 1.122 5.00 0.05 - 0.05 0.05 1.125 0.00 0.05 - 0.05 0.05 1.125 0.05 - 0.05 0.05 0.05 1.125 0.05 - 0.05 0.05 0.05 1.125 0.05 - 0.05 | | | | 1 | | | | | | | | | | | | | | |
| 1.103 .473 .005010 .1112 .313 .080100 .118 .940 .005010 .1122 .442 .007016 .1124 .914 .080080 .1125 .668 .010026 .1131 .1131 .1131 .1131 .070090 .1181 .1001 .055080 .1122 .510 .030128 .1124 .916 .005010 .1125 .689 .010026 .1133 .584 .005010 .1124 .478 .050075 .1119 .323 .050075 .1122 .510 .090105 .1124 .916 .040080 .1125 .689 .010026 .1133 .080016 .1132 .080 .075 .1132 .080 .075 .1132 .080 .075 .1132 .080 .075 .1132 .080 .075 .1132 .080 .075 .1132 .080 .080 .1132 .080 .080 .080 .1133 .080 .080 .1133 .080 .080 .1133 .080 .080 .1133 .080 .080 .080 .1133 .080 .080 .080 .1133 .080 .080 .080 .1133 .080 .080 .080 .1133 .080 .080 .080 .080 .1133 .080 .080 .080 .1133 .080 .080 .080 .080 .080 .080 .080 .080 .080 .080 .1133 .080 .080 .080 .1133 .080 . | | | | l | | | | | | | | | | | | | | |
| 1103 502 010 020 0 1112 413 070 090 1118 1000 040 060 1122 505 300 125 124 961 040 060 1012 508 689 010 020 1103 832 075 055 055 1112 478 055 075 1119 323 050 075 1122 510 090 105 1124 967 005 010 1125 688 090 080 011 1103 682 075 080 | | | | 1 | | | | | | | | | | | | | | |
| 1.103 632 0.75 - 0.95 1.112 4.78 0.85 - 0.75 1.119 4.03 0.05 - 0.75 1.122 5.10 0.90 - 1.05 1.124 9.67 0.05 - 0.10 1.125 687 0.00 - 1.05 1.111 1.103 6.92 0.30 - 0.50 1.112 5.31 1.25 - 1.56 1.124 1.087 0.05 - 0.10 1.125 7.70 0.05 - 0.75 1.121 1.103 1.103 1.103 1.103 1.103 1.103 1.112 1.070 0.080 0.090 1.119 4.50 0.30 - 0.50 1.122 5.55 0.15 - 0.30 1.125 1.31 0.10 - 0.25 1.125 7.11 0.70 - 0.080 1.110 0.70 0.080 0.090 1.119 6.02 0.30 - 0.50 1.122 6.27 0.20 - 0.40 1.125 1.31 0.10 - 0.25 1.125 7.15 0.25 - 0.44 1.104 0.97 0.060 - 0.09 1.112 0.76 0.060 - 0.09 1.119 6.88 0.060 - 0.00 1.122 7.50 0.05 - 0.05 1.125 1.56 0.05 - 0.04 1.125 7.13 0.75 - 0.05 1.125 1.130 1.125 7.13 0.75 - 0.05 1.125 1.130 1.125 7.13 0.75 - 0.05 1.125 1.130 1.125 7.13 0.75 - 0.05 1.125 1.130 1.125 7.13 0.75 - 0.05 1.125 1.130 1.125 7.13 0.75 - 0.05 1.125 1.130 1.125 7.13 0.75 - 0.05 1.125 1.130 1.125 7.13 0.75 - 0.05 1.125 1.130 1.125 7.13 0.75 - 0.05 1.125 1.130 1.125 7.13 0.75 - 0.05 1.125 1.135 1.125 7.14 0.05 - 0.05 1.125 1.135 1.125 7.14 0.05 - 0.05 1.125 1.135 1.125 7.14 0.05 - 0.05 1.125 1.135 1.125 7.14 0.05 - 0.05 1.125 1.135 1.125 7.14 0.05 - 0.05 1.125 1.135 1.125 7.14 0.05 - 0.05 1.125 1.135 1.125 1.135 1.125 7.14 0.05 - 1.135 1.125 1.135 1 | | | | | | | | | | | | | | | | | | .010020 |
| 1103 682 030 - 050 0.112 5.50 0.60 - 0.90 1.119 4.03 0.05 - 0.10 1.125 5.91 1.25 1.125 1.125 0.050 0.075 1.125 7.02 0.50 - 0.075 1.125 | 1.103 | .554 | .005010 | 1.112 | .421 | .025040 | 1.118 | 1.001 | .050060 | 1.122 | | | 1.124 | .961 | .040060 | 1.125 | .685 | .008016 |
| 1.103 | | | | l | | | | | | | | | | | | | | .090105 |
| 1.103 | | | | | | | | | | | | | | | | | | .050075 |
| 1.103 | | | | | | | | | | | | | | | | | | |
| 1104 0.97 0.60 - 0.90 1.112 7.76 0.20 - 0.40 1.119 6.88 0.60 - 0.80 1.122 7.50 0.05 - 0.15 1.125 1.166 0.25 - 0.40 1.125 7.19 0.40 - 0.60 1.104 3.96 0.60 - 0.70 1.112 8.90 0.30 - 0.50 1.119 8.80 0.80 - 1.00 1.122 7.55 0.50 - 0.70 1.125 1.62 0.15 - 0.30 1.125 7.45 1.00 - 1.025 1.104 4.96 0.05 - 0.010 1.112 8.93 0.90 - 1.20 1.119 8.80 0.80 - 1.00 1.122 7.58 0.10 - 0.20 1.125 1.69 0.42 - 0.62 1.125 7.45 1.00 - 1.025 1.104 0.33 1.104 0.33 1.104 0.33 1.104 0.33 1.104 0.33 1.104 0.33 1.105 1.119 0.80 0.80 - 1.00 1.122 8.87 0.50 - 0.05 1.125 1.72 1.25 - 1.35 1.125 7.49 1.05 - 1.35 1.104 0.33 1.104 0.33 1.104 0.35 1.104 0.35 0.104 1.122 8.89 0.05 - 0.05 1.125 1.77 0.25 - 0.40 1.125 7.50 0.15 - 0.42 1.104 0.45 0.05 - 0.010 1.122 8.89 0.05 - 0.05 | | | | 1 | | | | | | | | | | | | | | |
| 1.104 .396 .060070 .1.112 .899 .030050 .1.119 .678 .030040 .1.122 .755 .050070 .1.125 .162 .015030 .1.125 .741 .020044 .020044 .1.124 .758 .010020 .1.125 .169 .042062 .1.125 .745 .020044 .005 .1.144 .0552 .110130 .1.112 .1017 .020040 .1.119 .885 .040060 .1.122 .877 .050070 .1.125 .172 .125135 .1.125 .749 .100125 .104 .752 .050075 .1.131 .330 .156190 .1.119 .191 .0.130 .1.122 .890 .005010 .1.125 .177 .025040 .1.125 .750 .015042 .015 .042 .1.124 .0.130 .1.131 .757 .015025 .1.119 .0.131 .0.05010 .1.122 .891 .0.05010 .1.125 .202 .0.90120 .1.125 .753 .0.150.03 .1.125 .173 .0.130 .1.125 .754 .0.05010 .1.125 .754 .0.05010 .1.125 .754 .0.05010 .1.125 .754 .0.05010 .1.125 .754 .0.05010 .1.125 .754 .0.05010 .1.125 .754 .0.05010 .1.125 .0.05 | | | | 1 | | | | | | | | | | | | | | |
| 1.104 4.96 .005010 1.112 .893 .090120 1.119 .880 .080100 1.122 .877 .050070 1.125 .169 .042062 1.125 .745 .100125 .104 .552 .110130 .1113 .1112 .1017 .020040 .1119 .885 .040060 .122 .877 .050070 .125 .177 .025040 .1125 .750 .015042 .104 .752 .050075 .113 .500 .060090 .1119 .921 .025042 .1122 .890 .005010 .1125 .177 .025040 .1125 .750 .015042 .104 .945 .010020 .1113 .757 .015025 .1119 .119 .911 .005010 .1122 .891 .005010 .1125 .202 .090120 .1125 .753 .015025 .1125 .175 .016 .025 .1125 .175 .016 .025 .1125 .175 .016 .025 .016 .025 .1125 .025 .016 .025 .025 .016 .025 | | | | | | | | | | | | | | | | | | .020040 |
| 1.104 6.33 .110130 .1113 .330 .156190 .1119 .918 .075090 .1122 .889 .020035 .125 .177 .025040 .1.125 .750 .015042 .1.104 .752 .050075 .113 .500 .060090 .119 .921 .025042 .1.122 .890 .005010 .1.25 .129 .090125 .1.125 .751 .010020 .1.105 .126 .005010 .1113 .757 .015025 .1119 .1041 .005010 .1.122 .891 .005010 .1.25 .202 .090120 .1.25 .753 .015030 .1.105 .360 .100134 .1113 .879 .020040 .1.20 .158 .005012 .1.122 .1.002 .015025 .1.25 .206 .015025 .1.25 .755 .005010 .1.105 .592 .030050 .1.113 .888 .010020 .1.20 .160 .030042 .1.22 .1.024 .0.15025 .1.25 .255 .005060 .1.25 .050 .006 .016 .1.25 .768 .048062 .1.105 .756 .030050 .1.113 .940 .010020 .1.120 .255 .006075 .1.123 .314 .050075 .1.25 .267 .100125 .1.125 .768 .048062 .1.105 .756 .030050 .1.113 .941 .020030 .1.120 .359 .090101 .1.123 .399 .010020 .1.125 .283 .065010 .1.125 .283 .065010 .1.125 .796 .050066 .1.105 .916 .005010 .1.144 .209 .005010 .1.120 .359 .090101 .1.123 .399 .010020 .1.125 .289 .060083 .1.125 .796 .050066 .1.105 .916 .005010 .1.114 .209 .005010 .1.120 .391 .005075 .1.123 .501 .005010 .1.125 .289 .060083 .1.125 .796 .050066 .1.105 .916 .005010 .1.114 .312 .090125 .1.120 .391 .005075 .1.123 .501 .005010 .1.125 .289 .060083 .1.125 .796 .050066 .1.105 .916 .005010 .1.114 .312 .090125 .1.120 .391 .005075 .1.123 .501 .005010 .1.125 .289 .060083 .1.125 .815 .005010 .1.125 .1314 .005 - | | | .005010 | 1.112 | .893 | .090120 | 1.119 | | .080100 | | | | | .169 | .042062 | 1.125 | .745 | .100125 |
| 1.104 7.52 0.50 - 0.75 1.113 5.00 0.60 - 0.90 1.119 9.21 0.025 - 0.42 1.122 8.90 0.05 - 0.10 1.125 1.189 0.09 - 1.125 7.51 0.10 - 0.20 1.105 1.105 1.106 0.05 - 0.10 1.113 7.60 0.60 - 0.90 1.120 1.122 0.15 0.05 - 0.10 1.122 8.91 0.05 - 0.01 1.125 2.02 0.90 - 1.20 1.125 7.53 0.015 - 0.03 1.105 1.125 0.05 - 0.10 1.125 0.05 - 0.01 1.125 0.05 - 0.05 0.05 - 0.01 1.125 0.05 - 0.05 0.0 | | | | | | | | | | | | | | | | | | .105135 |
| 1.104 .945 .010 .020 .1113 .757 .015 .025 .1119 .1.041 .005 .010 .1.122 .891 .005 .010 .1.125 .202 .090 .120 .1.125 .753 .015 .030 .1.105 .126 .005 .010 .1.113 .760 .060 .090 .1.120 .1.132 .015 .025 .012 .012 .093 .015 .030 .1.125 .203 .040 .1.125 .754 .005 .016 .016 .016 | | | | | | | | | | | | | | | | | | .015042 |
| 1.105 .126 .005010 .1113 .760 .060090 .1120 .132 .015025 .1122 .893 .015030 .1125 .203 .040125 .1125 .754 .005016 .1105 .360 .100134 .1113 .879 .020040 .1120 .158 .005012 .1122 .1002 .015025 .1125 .206 .015025 .1125 .755 .005016 .105 .703 .080090 .1113 .898 .010020 .1120 .160 .030042 .1122 .1024 .015025 .1125 .255 .005060 .125 .760 .050096 .1105 .749 .030050 .1113 .940 .010020 .1120 .255 .100125 .1123 .314 .050075 .1125 .267 .100125 .1125 .788 .048066 .1125 .788 .048066 .1125 .788 .048066 .1125 .789 .030050 .1113 .943 .025040 .1120 .313 .062075 .1123 .344 .050075 .1125 .268 .005010 .1125 .796 .050076 .105 .10 | | | | | | | | | | | | | | | | | | |
| 1.105 .360 .100134 1.113 .879 .020040 1.120 .158 .005012 1.122 1.002 .015025 1.125 .206 .015025 .125 .755 .005010 .1105 .592 .030050 .1113 .888 .010020 .1120 .160 .030042 .1122 .1024 .015025 .1125 .255 .005060 .1125 .768 .050099 .113 .910 .042060 .1120 .220 .104134 .1123 .208 .008016 .1125 .260 .048125 .1125 .768 .048062 .015025 .125 .260 .048125 .1125 .768 .048062 .016 .105 .749 .030050 .1113 .940 .010020 .1120 .255 .100125 .1123 .314 .050075 .1125 .267 .100125 .1125 .781 .050076 .105 .756 .030050 .1113 .940 .010020 .1120 .255 .100125 .1123 .344 .005010 .1125 .268 .005010 .1125 .795 .010050 .105 .105 .105 .1125 .268 .005010 .1125 .795 .010050 .105 .105 .105 .1125 .268 .005010 .1125 .268 .005010 .1125 .795 .010050 .1125 .105 .105 .1125 .105 .105 .1125 | | | | 1 | | | | | | | | | | | | | | |
| 1.105 .592 .030050 1.113 .888 .010020 1.120 .160 .030042 1.122 1.024 .015025 1.125 .255 .005060 1.125 .760 .050090 1.105 .779 .030050 .1113 .940 .010020 1.120 .220 .104134 .123 .208 .008016 1.125 .260 .048125 1.125 .768 .048066 .105 .779 .030050 .1113 .940 .010020 .1120 .255 .100125 .123 .314 .050075 .1.25 .267 .100125 .1125 .781 .050050 .1115 .756 .030050 .1113 .943 .025040 .1120 .313 .062075 .123 .344 .055010 .1125 .268 .005010 .1125 .796 .050066 .105 .105 .796 .050066 .1125 .796 .050066 .105 .1125 .796 .050066 .105 .105 .796 .050066 .105 | | | | | | | | | | | | | | | | | | |
| 1.105 .703 .080090 .1113 .910 .042060 .1.120 .220 .104134 .1.123 .208 .008016 .1.125 .260 .048125 .1.125 .768 .048062 .1.105 .779 .030050 .1.113 .940 .010020 .1.120 .255 .100125 .1.123 .314 .050075 .1.125 .267 .100125 .1.125 .781 .050076 .1.125 .268 .005010 .1.125 .795 .010050 .076 .1.105 .881 .070090 .1.113 .011 .020030 .1.120 .359 .090110 .1.123 .344 .005010 .1.125 .268 .005010 .1.125 .796 .010050 .010 .1.105 .886 .020030 .1.114 .209 .005010 .1.120 .380 .025040 .1.123 .409 .156187 .1.125 .283 .062083 .1.125 .802 .134156 .1.105 .916 .005010 .1.114 .312 .090125 .1.120 .390 .020125 .1.123 .417 .020030 .1.125 .296 .020040 .1.125 .812 .080100 .1.106 .317 .015030 .1.114 .436 .150180 .1.120 .391 .005075 .1.123 .501 .005010 .1.125 .298 .060090 .1.125 .815 .005016 .1.106 .656 .060090 .1.114 .551 .170180 .1.120 .420 .040060 .1.123 .503 .010110 .1.125 .314 .008015 .1.125 .823 .005016 .1.106 .782 .020040 .1.14 .749 .005010 .1.120 .450 .040060 .1.23 .503 .010110 .1.125 .314 .008015 .1.125 .845 .005016 .1.106 .790 .040060 .1.114 .749 .005010 .1.120 .450 .472 .100125 .1.123 .516 .125156 .1.125 .318 .005010 .1.125 .845 .005016 .1.106 .790 .040060 .1.115 .204 .005010 .1.120 .472 .100125 .1.123 .524 .005010 .1.125 .318 .005020 .1.125 .873 .005010 .1.125 .873 .005010 .1.125 .384 .005020 .1.125 .384 .005020 .1.125 .384 .005020 .1.125 .384 .005020 .1.125 .384 . | | | | 1 | | | | | | | | | | | | | | .050090 |
| 1.105 .749 .030050 .1.113 .940 .010020 .1.120 .2.55 .1001.25 .1.123 .3.14 .0.500.75 .1.125 .2.67 .1.001.25 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.81 .0.500.76 .1.125 .7.95 .0.100.50 .1.125 .2.68 .0.500.10 .1.125 .7.95 .0.500.50 .1.125 .0.500.50 .1.125 .0.500.50 .1.125 .0.500.50 .1.125 .0.500.50 .1.125 .0.500.50 .1.125 .0.500.50 .1.125 .0.500.50 .1.125 .0.500.50 .1.125 .0.500.50 .1.125 .0.50 .0.50 .0.50 .0.50 .0.50 .1.125 .0.50 .0. | | | | | | | | | | | | | | | | | | .048062 |
| 1.105 .881 .070090 1.113 1.011 .020030 1.120 .359 .090110 1.123 .399 .010020 1.125 .283 .062083 1.125 .796 .050062 1.105 .886 .020030 1.114 .209 .005010 1.120 .380 .025040 1.123 .409 .156187 1.125 .289 .060083 1.125 .802 .134156 1.105 .916 .005010 1.114 .312 .090125 1.120 .390 .020025 .123 .417 .020030 1.125 .296 .020040 1.125 .812 .080100 1.106 .357 .015030 1.114 .436 .150180 1.120 .391 .005075 1.123 .501 .005010 1.125 .298 .060090 1.1125 .815 .005010 1.106 .782 .020040 .114 .665 .010020 .120 . | 1 105 | .749 | | | | | | .255 | .100125 | 1.123 | .314 | .050075 | | | | | | .050070 |
| 1.105 .886 .020030 1.114 .209 .005010 1.120 .380 .025040 1.123 .409 .156187 1.125 .289 .060083 1.125 .802 .134156 1.105 .916 .005010 1.114 .312 .090125 1.120 .390 .020125 1.123 .417 .020030 1.125 .296 .020040 1.125 .812 .080100 1.106 .317 .015030 1.114 .436 .150180 1.120 .391 .005075 1.123 .501 .005010 1.125 .298 .060090 1.125 .815 .005010 1.106 .656 .060090 1.114 .551 .170180 1.120 .420 .040060 1.123 .303 .010110 1.125 .314 .008015 1.125 .845 .005010 1.106 .790 .040060 1.114 .749 .005010 1.120 | | | 020 050 | 1.113 | .943 | | | | | | | | | | | | | .010050 |
| 1.105 .916 .005010 1.114 .312 .090125 1.120 .390 .020125 1.123 .417 .020030 1.125 .296 .020040 1.125 .812 .080010 1.106 .317 .015030 1.114 .436 .150180 1.120 .391 .005075 1.123 .501 .005010 1.125 .298 .060090 1.125 .815 .005010 1.106 .656 .060090 1.114 .551 .170180 1.120 .420 .040060 1.123 .503 .010110 1.125 .298 .060090 1.125 .815 .005010 1.106 .656 .060040 .0114 .551 .170020 .1120 .439 .050075 1.123 .516 .125156 .125 .314 .008010 1.125 .845 .005050 1.107 .912 .030050 1.115 .204 .005010 1.120 . | 1.105 | | | | | | 1 120 | .359 | .090110 | 1.123 | | | | | .062083 | 1.125 | .796 | |
| 1.106 .317 .015030 1.114 .436 .150180 1.120 .391 .005075 1.123 .501 .005010 1.125 .298 .060090 1.125 .815 .005010 1.106 .656 .060090 1.114 .551 .170180 1.120 .420 .040060 1.123 .503 .010110 1.125 .314 .008015 1.125 .823 .005010 1.106 .782 .020040 1.114 .665 .010020 1.120 .439 .050075 1.123 .516 .125156 1.125 .317 .083120 1.125 .845 .005050 1.106 .790 .040060 1.114 .749 .005010 1.120 .450 .100125 1.123 .524 .005010 1.125 .318 .005010 1.125 .848 .062083 1.107 .912 .030050 1.115 .204 .005010 .120 . | 1.105 1.105 | .881 | .070090 | 1.113 | | | | | | 1 100 | | | 1105 | 7300 | 060 000 | 1 105 | | |
| 1.106 .656 .060090 1.114 .551 .170180 1.120 .420 .040060 1.123 .503 .010110 1.125 .314 .008015 1.125 .823 .005010 1.106 .782 .020040 1.114 .665 .010020 1.120 .439 .050075 1.123 .516 .125156 1.125 .317 .083120 1.125 .845 .005050 1.106 .790 .040060 1.114 .749 .005010 1.120 .450 .100125 1.123 .524 .005010 1.125 .848 .062083 1.107 .912 .030050 1.115 .204 .005010 1.120 .472 .100125 1.123 .528 .080100 1.125 .321 .005020 1.125 .872 .100125 1.107 .983 .010020 1.115 .256 .015030 1.120 .496 .040060 1.123 | 1.105 1.105 1.105 | .881 .886 | .070090 .020030 | 1.113 1.114 | .209 | .005010 | 1.120 | .380 | .025040 | | | | | | | | .802 | |
| 1.106 .782 .020040 1.114 .665 .010020 1.120 .439 .050075 1.123 .516 .125156 1.125 .317 .083120 1.125 .845 .005050 1.106 .790 .040060 1.114 .749 .005010 1.120 .450 .100125 1.123 .524 .005010 1.125 .318 .005010 1.125 .848 .062083 1.107 .912 .030050 1.115 .204 .005010 1.120 .472 .100125 1.123 .528 .080100 1.125 .321 .005020 1.125 .872 .100125 1.107 .983 .010020 1.115 .256 .015030 1.120 .496 .040060 1.123 .534 .156187 1.125 .327 .062090 1.125 .878 .005010 1.108 .407 .050 .075090 1.120 .500 .060080 1 | 1.105 1.105 1.105 1.105 | .881 .886 .916 | .070090 .020030 .005010 | 1.113 1.114 1.114 | .209 .312 | .005010 .090125 | 1.120 1.120 | .380 .390 | .025040 .020125 | 1.123 | .417 | .020030 | 1.125 | .296 | .020040 | 1.125 | .802 .812 | .080100 |
| 1.106 .790 .040060 1.114 .749 .005010 1.120 .450 .100125 1.123 .524 .005010 1.125 .848 .062083 1.107 .912 .030050 1.115 .204 .005010 1.120 .472 .100125 1.123 .528 .080100 1.125 .321 .005020 1.125 .872 .100125 1.107 .983 .010020 1.115 .256 .015030 1.120 .496 .040060 1.123 .534 .156187 1.125 .327 .062090 1.125 .875 .032060 1.108 .407 .050070 1.115 .500 .075090 1.120 .500 .060080 1.123 .636 .005010 1.125 .378 .002030 1.125 .878 .005010 1.108 .525 .005015 1.115 .642 .005010 1.120 .507 .008016 1.123 | 1.105 1.105 1.105 1.105 1.106 | .881 .886 .916 .317 | .070090 .020030 .005010 .015030 | 1.113 1.114 1.114 1.114 | . 209 .312 .436 | .005010 .090125 .150180 | 1.120 1.120 1.120 | .380 .390 .391 | .025040 .020125 .005075 | 1.123 1.123 | .417 .501 | .020030 .005010 | 1.125 1.125 | .296 .298 | .020040 .060090 | 1.125 1.125 | .802 .812 .815 | |
| 1.107 .983 .010020 1.115 .256 .015030 1.120 .496 .040060 1.123 .534 .156187 1.125 .327 .062090 1.125 .875 .032060 1.108 .407 .050070 1.115 .500 .075090 1.120 .500 .060080 1.123 .636 .005010 1.125 .338 .020030 1.125 .878 .005010 1.108 .525 .005015 1.115 .642 .005010 1.120 .507 .008016 1.123 .691 .125156 1.125 .344 .062083 1.125 .880 .010020 1.108 .636 .050070 1.115 .644 .015030 1.120 .512 .005015 1.123 .696 .040060 1.125 .362 .105134 1.125 .900 .040060 1.108 .774 .060075 1.115 .643 .005010 1.120 .573 .005050 1.123 .750 .005010 1.125 .375 | 1.105 1.105 1.105 1.105 1.106 1.106 | .881 .886 .916 .317 .656 | .070090 .020030 .005010 .015030 .060090 | 1.113 1.114 1.114 1.114 1.114 | . 209 .312 .436 .551 | .005010 .090125 .150180 .170180 | 1.120 1.120 1.120 1.120 | .380 .390 .391 .420 | .025040 .020125 .005075 .040060 | 1.123 1.123 1.123 | .417 .501 .503 | .020030 .005010 .010110 | 1.125 1.125 1.125 | .296 .298 .314 | .020040 .060090 .008015 | 1.125 1.125 1.125 | .802 .812 .815 .823 | .080100 . 005010 |
| 1.108 .407 .050070 1.115 .500 .075090 1.120 .500 .060080 1.123 .636 .005010 1.125 .338 .020030 1.125 .878 .005010 1.108 .525 .005015 1.115 .642 .005010 1.120 .507 .008016 1.123 .691 .125156 1.125 .344 .062083 1.125 .880 .010020 1.108 .636 .050070 1.115 .644 .015030 1.120 .512 .005015 1.123 .696 .040060 1.125 .362 .105134 1.125 .900 .040060 1.108 .714 .060075 1.115 .645 .005010 1.120 .522 .100125 1.123 .703 .040060 1.125 .373 .042062 1.125 .908 .070090 1.108 .778 .030050 1.115 .663 .005010 1.120 | 1.105 1.105 1.105 1.105 1.106 1.106 1.106 | .881 .886 . 916 .317 .656 .782 | .070090 .020030 . 005010 .015030 .060090 .020040 | 1.113 1.114 1.114 1.114 1.114 1.114 | .209 .312 .436 .551 | .005010 .090125 .150180 .170180 .010020 .005010 | 1.120 1.120 1.120 1.120 1.120 | .380 .390 .391 .420 | .025040 .020125 .005075 .040060 .050075 | 1.123 1.123 1.123 1.123 | .417 . 501 .503 | .020030 .005010 .010110 .125156 | 1.125 1.125 1.125 1.125 1.125 | .296 .298 .314 .317 .318 | .020040 .060090 .008015 .083120 .005010 | 1.125 1.125 1.125 1.125 | .802 .812 .815 .823 | .080100 .005010 .005010 |
| 1.108 .525 .005015 1.115 .642 .005010 1.120 .507 .008016 1.123 .691 .125156 1.125 .344 .062083 1.125 .880 .010020 1.108 .636 .050070 1.115 .644 .015030 1.120 .512 .005015 1.123 .696 .040060 1.125 .362 .105134 1.125 .900 .040060 1.108 .714 .060075 1.115 .645 .005010 1.120 .522 .100125 1.123 .703 .040060 1.125 .373 .042062 1.125 .908 .070090 1.108 .778 .030050 1.115 .663 .005010 1.120 .573 .005050 1.123 .750 .005010 1.125 .375 .125156 1.125 .920 .050075 | 1.105 1.105 1.105 1.105 1.106 1.106 1.106 1.106 1.107 | .881 .886 . 916 .317 .656 .782 .790 .912 | .070090 .020030 . 005010 .015030 .060090 .020040 .040060 | 1.113 1.114 1.114 1.114 1.114 1.114 1.115 | .209 .312 .436 .551 .665 .749 | .005010 .090125 .150180 .170180 .010020 .005010 | 1.120 1.120 1.120 1.120 1.120 1.120 1.120 | .380 .390 .391 .420 .439 .450 .472 | .025040 .020125 .005075 .040060 .050075 .100125 | 1.123 1.123 1.123 1.123 1.123 1.123 | .417 .501 .503 .516 .524 .528 | .020030 .005010 .010110 .125156 .005010 .080100 | 1.125 1.125 1.125 1.125 1.125 1.125 | .296 .298 .314 .317 .318 .321 | .020040 .060090 .008015 .083120 .005010 | 1.125 1.125 1.125 1.125 1.125 1.125 | .802 .812 . 815 . 823 . 845 .848 .872 | .080100 .005010 .005010 .005050 .062083 .100125 |
| 1.108 .636 .050070 1.115 .644 .015030 1.120 .512 .005015 1.123 .696 .040060 1.125 .362 .105134 1.125 .900 .040060 1.108 .714 .060075 1.115 .645 .005010 1.120 .522 .100125 1.123 .703 .040060 1.125 .373 .042062 1.125 .908 .070090 1.108 .778 .030050 1.115 .663 .005010 1.120 .573 .005050 1.123 .750 .005010 1.125 .375 .125156 1.125 .920 .050075 | 1.105 1.105 1.105 1.105 1.106 1.106 1.106 1.106 1.107 1.107 | .881 .886 .916 .317 .656 .782 .790 .912 .983 | .070090 .020030 . 005010 .015030 .060090 .020040 .040060 .030050 | 1.113 1.114 1.114 1.114 1.114 1.114 1.114 1.115 1.115 | .209 .312 .436 .551 .665 .749 .204 | .005010 .090125 .150180 .170180 .010020 .005010 .015030 | 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 | .380 .390 .391 .420 .439 .450 .472 .496 | .025040 .020125 .005075 .040060 .050075 .100125 .100125 | 1.123 1.123 1.123 1.123 1.123 1.123 1.123 | .417 . 501 .503 .516 . 524 .528 .534 | .020030 .005010 .010110 .125156 .005010 .080100 .156187 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .296 .298 .314 .317 .318 .321 .327 | .020040 .060090 .008015 .083120 .005010 .005020 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .802 .812 . 815 . 823 . 845 .848 .872 .875 | .080100 .005010 .005010 .005050 .062083 .100125 .032060 |
| 1.108 .714 .060075 1.115 .645 .005010 1.120 .522 .100125 1.123 .703 .040060 1.125 .373 .042062 1.125 .908 .070090 1.108 .778 .030050 1.115 .663 .005010 1.120 .573 .005050 1.123 .750 .005010 1.125 .375 .125156 1.125 .920 .050075 | 1.105 1.105 1.105 1.105 1.106 1.106 1.106 1.106 1.107 1.107 1.108 | .881 .886 .916 .317 .656 .782 .790 .912 .983 .407 | .070090 .020030 .005010 .015030 .060090 .020040 .040060 .030050 .010020 .050070 | 1.113 1.114 1.114 1.114 1.114 1.114 1.115 1.115 | .209 .312 .436 .551 .665 .749 .204 .256 | .005010 .090125 .150180 .170180 .010020 .005010 .015030 .075090 | 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 | .380 .390 .391 .420 .439 .450 .472 .496 .500 | .025040 .020125 .005075 .040060 .050075 .100125 .100125 .040060 .060080 | 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 | .417 .501 .503 .516 .524 .528 .534 .636 | .020030 .005010 .010110 .125156 .005010 .080100 .156187 .005010 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .296 .298 .314 .317 .318 .321 .327 .338 | .020040 .060090 .008015 .083120 .005010 .005020 .062090 .020030 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .802 .812 .815 .823 .845 .848 .872 .875 .878 | .080100 .005010 .005010 .005050 .062083 .100125 .032060 .005010 |
| 1.108 .778 .030050 1.115 .663 .005010 1.120 .573 .005050 1.123 .750 .005010 1.125 .375 .125156 1.125 .920 .050075 | 1.105 1.105 1.105 1.105 1.106 1.106 1.106 1.106 1.107 1.107 1.108 | .881 .886 .916 .317 .656 .782 .790 .912 .983 .407 | .070090 .020030 . 005010 .015030 .060090 .020040 .040060 .030050 .010020 .050070 | 1.113 1.114 1.114 1.114 1.114 1.114 1.115 1.115 1.115 | .209 .312 .436 .551 .665 .749 .204 .256 .500 | .005010 .090125 .150180 .170180 .010020 .005010 .005010 .015030 .075090 | 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 | .380 .390 .391 .420 .439 .450 .472 .496 .500 | .025040 .020125 .005075 .040060 .050075 .100125 .100125 .040060 .060080 | 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 | .417 .501 .503 .516 .524 .528 .534 .636 | .020030 .005010 .010110 .125156 .005010 .080100 .156187 .005010 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .296 .298 .314 .317 .318 .321 .327 .338 | .020040 .060090 .008015 .083120 .005010 .005020 .062090 .020030 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .802 .812 .815 .823 .845 .848 .872 .875 .878 | .080100 .005010 .005010 .005050 .062083 .100125 .032060 .005010 |
| | 1.105 1.105 1.105 1.105 1.106 1.106 1.106 1.106 1.107 1.107 1.108 1.108 | .881 .886 .916 .317 .656 .782 .790 .912 .983 .407 .525 .636 | .070090 .020030 . 005010 .015030 .060090 .020040 .040060 .030050 .010020 .050070 | 1.113 1.114 1.114 1.114 1.114 1.114 1.115 1.115 1.115 1.115 | .209 .312 .436 .551 .665 .749 .204 .256 .500 .642 .644 | .005010 .090125 .150180 .170180 .010020 .005010 .005010 .015030 .075090 .005030 | 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 | .380 .390 .391 .420 .439 .450 .472 .496 .500 .507 | .025040 .020125 .005075 .040060 .050075 .100125 .100125 .040060 .060080 .008016 | 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 | .417 .501 .503 .516 .524 .528 .534 .636 .691 | .020030 .005010 .010110 .125156 .005010 .156187 .005010 .125156 .040060 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .296 .298 .314 .317 .318 .321 .327 .338 .344 .362 | .020040 .060090 .008015 .083120 .005010 .005020 .062090 .020030 .062083 .105134 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .802 .815 .823 .845 .848 .872 .875 .878 .880 | .080100 .005010 .005010 .005050 .062083 .100125 .032060 .005010 .010020 .040060 |
| | 1.105 1.105 1.105 1.105 1.106 1.106 1.106 1.107 1.107 1.108 1.108 1.108 | .881 .886 .916 .317 .656 .782 .790 .912 .983 .407 .525 .636 .714 | .070090 .020030 .005010 .015030 .060090 .020040 .040060 .030050 .010020 .050070 .055015 | 1.113 1.114 1.114 1.114 1.114 1.115 1.115 1.115 1.115 1.115 | .209 .312 .436 .551 .665 .749 .204 .256 .500 .642 .644 | .005010 .090125 .150180 .170180 .010020 .005010 .005010 .015030 .075090 .015030 .005010 | 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 1.120 | .380 .390 .391 .420 .439 .450 .472 .496 .500 .507 .512 .522 | .025040 .020125 .005075 .040060 .050075 .100125 .040060 .060080 .008016 .005015 .100125 | 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 1.123 | .417 .501 .503 .516 .524 .528 .534 .636 .691 .696 .703 | .020030 .005010 .010110 .125156 .005010 .080100 .156187 .005010 .125156 .040060 .040060 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .296 .298 .314 .317 .318 .321 .327 .338 .344 .362 .373 | .020040 .060090 .008015 .083120 .005010 .005020 .062090 .020030 .062083 .105134 .042062 | 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 1.125 | .802 .812 .815 .823 .845 .848 .872 .875 .878 .880 .900 .908 | .080100 .005010 .005010 .005050 .062083 .100125 .032060 .005010 |

| | | Ohaana Amu | | | Obsess Asses | | | Ohaana Amu | 140 | 100 | | IANGL | - 1 01 | Characters | THE. | SIZL | Oharan |
|-----------------------|----------------------|----------------------------|----------------|---------------------|----------------------------|-----------------------|----------------------|---------------------------|----------------|---------------------|--------------------------|-----------------------|----------------------|--------------------------|-----------------------|---------------------|----------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 1.125 | .938 | .015030 | 1.133 | .191 | .030050 | 1110 | 050 | From To | 1.155 | 775 | From To | 1 100 | 440 | From To | 1.176 | .371 | .040060 |
| 1.125 | .939 | .050070 | 1.133 | .199 | .050060 | 1.143 1.145 | .952 .210 | .050070 .005010 | 1.155 1.155 | .775 .967 | .030050 .025042 | 1.169 | .410 .419 | .070090 .090125 | 1.176 | .439 | .005010 |
| 1.125 | .940 | .005010 | 1.133 | .946 | .030050 | 1.145 | .856 | .005010 | 1.156 | .125 | .005010 | 1.169 1.169 | .691 | .090125 | 1.176 | .443 | .005020 |
| 1.125 | .950 | .040060 | 1.133 | .971 | .005010 | 1.145 | .896 | .030060 | 1.156 | .188 | .100125 | 1.169 | .698 | .030050 | 1.176 | .500 | .070090 |
| 1.125 | .958 | .020040 | 1.134 | .545 | .015030 | 1.146 | 1.010 | .005020 | 1.156 | .379 | .040060 | 1.169 | .878 | .080000 | 1.176 | .506 | .005010 |
| 1.125 | .959 | .005010 | 1.134 | .555 | .010020 | 1.146 | 1.035 | .010020 | 1.156 | .532 | .025040 | 1.169 | .880 | .040060 | 1.176 | .589 | .020030 |
| 1.125 | .967 | .005010 | 1.134 | .791 | .050070 | 1.147 | .316 | .050070 | 1.156 | .562 | .010020 | 1.169 | .883 | .005010 | 1.176 | .625 | .040105 |
| 1.125 | 1.005 | .010025 | 1.134 | .904 | .040060 | 1.147 | .775 | .070090 | 1.156 | .565 | .100130 | 1.169 | .995 | .005010 | 1.176 | .682 | .005010 |
| 1.126 | .170 | .050075 | 1.135 | .201 | .050060 | 1.148 | .221 | .070090 | 1.156 | .582 | .050075 | 1.169 | 1.119 | .010020 | 1.176 | .756 | .030050 |
| 1.126 | .270 | .025040 | 1.135 | .375 | .010020 | 1.148 | .251 | .105135 | 1.156 | .765 | .105135 | 1.170 | .224 | .005010 | 1.177 | .271 | .005015 |
| 1.126 | .406 | .100130 | 1.135 | .483 | .005050 | 1.148 | .630 | .020030 | 1.156 | .794 | .040062 | 1.170 | .256 | .020030 | 1.177 | .445 | .005030 |
| 1.126 | .452 | .005010 | 1.135 | .507 | .090120 | 1.148 | .809 | .005010 | 1.156 | .812 | .005012 | 1.170 | .440 | .090105 | 1.177 | .759 | .050070 |
| 1.126 | .546 | .060080 | 1.135 | .770 | .020040 | 1.148 | .941 | .020030 | 1.156 | .893 | .005020 | 1.170 | .524 | .005010 | 1.177 | .782 | .005010 |
| 1.126 | .563 | .015030 | 1.135 | .775 | .040060 | 1.149 | .187 | .030050 | 1.156 | .906 | .025040 | 1.170 | .611 | .020040 | 1.177 | .790 | .030050 |
| 1.126 | .639 | .005010 | 1.135 | .812 | .100125 | 1.149 | .313 | .090110 | 1.156 | .911 | .020040 | 1.170 | .675 | .032050 | 1.177 | .823 | .093125 |
| 1.126 | .677 | .015025 | 1.136 | .946 | .030050 | 1.149 | .383 | .010015 | 1.156 | .966 | .005010 | 1.170 | .710 | .005010 | 1.177 | .865 | .062090 |
| 1.126 | .728 | .030050 | 1.136 | .961 | .060075 | 1.149 | .632 | .060080 | 1.156 | .968 | .010030 | 1.170 | .758 | .050070 | 1.177 | .875 | .025040 |
| 1.126 | .755 .781 | .040060 | 1.137 | .253 | .125135 | 1.149 | .943 | .030050 | 1.157 | .378 | .050070 | 1.170 | .793 .815 | .030050 | 1.177 | .878 | .105135 |
| 1.126 1.126 | .761 . 851 | .010020 . 005125 | 1.137 | .693 | . 005010 .040060 | 1.150 | .125 .186 | .062083 .062083 | 1.157 | .570 | .020040 | 1.170 1.170 | .860 | .005010 .020040 | 1.177 | .883 .893 | .105120 |
| 1.126 | .880 | .005010 | 1.137 | .814 .907 | .030050 | 1.150 1.150 | .187 | .030050 | 1.157 | <u>.748</u> .785 | .015030 .020030 | 1.170 | .870 | .010020 | 1.177 1.177 | .093 .911 | .005010 .050070 |
| 1.126 | .938 | .015025 | 1.137 | .953 | .030050 | 1.150 | .203 | .062083 | 1.157 1.158 | .408 | .020030 | 1.170 | .880 | .030050 | 1.177 | .954 | .060070 |
| 1.120 | .063 | .020035 | 1.137 | .126 | .030030 | 1.150 | .250 | .062083 | 1.158 | .408 .476 | .005010 | 1.170 | .919 | .025040 | 1.177 | .989 | .070090 |
| 1.127 | .159 | .025042 | 1.138 | .568 | .070090 | 1.150 | .252 | .005010 | 1.158 | .971 | .050060 | 1.170 | .920 | .005010 | 1.177 | .990 | .025040 |
| 1.127 | .237 | .025042 | 1.138 | .570 | .025040 | 1.150 | .313 | .062083 | 1.158 | 1.052 | .015030 | 1.170 | .936 | .010025 | 1.177 | .992 | .005010 |
| 1.127 | .253 | .075090 | 1.138 | .692 | .156190 | 1.150 | .375 | .020083 | 1.159 | .298 | .025040 | 1.170 | .985 | .040062 | 1.177 | 1.000 | .005010 |
| 1.127 | .267 | .048062 | 1.138 | .738 | .025050 | 1.150 | .376 | .010020 | 1.159 | .393 | .015030 | 1.170 | 1.000 | .020032 | 1.178 | .380 | .090125 |
| 1.127 | .410 | .100125 | 1.138 | .781 | .062083 | 1.150 | .377 | .015030 | 1.159 | .687 | .020040 | 1.170 | 1.002 | .005020 | 1.178 | .395 | .100125 |
| 1.127 | .438 | .005010 | 1.138 | .872 | .090110 | 1.150 | .382 | .020030 | 1.159 | .901 | .005010 | 1.171 | .259 | .010015 | 1.178 | .442 | .060080 |
| 1.127 | .507 | .005010 | 1.138 | .912 | .060075 | 1.150 | .503 | .005020 | 1.159 | 1.008 | .015025 | 1.171 | .659 | .025040 | 1.178 | .631 | .005020 |
| 1.127 | .521 | .025042 | 1.138 | .979 | .030050 | 1.150 | .505 | .005010 | 1.160 | .130 | .025035 | 1.171 | .778 | .040060 | 1.178 | .636 | .005010 |
| 1.127 | .531 | .060083 | 1.139 | .320 | .005010 | 1.150 | .553 | .005010 | 1.160 | .269 | .035050 | 1.171 | .853 | .050070 | 1.178 | .663 | .090110 |
| 1.127 | .626 | .005080 | 1.140 | .134 | .060075 | 1.150 | .628 | .005010 | 1.160 | .655 | .100125 | 1.171 | .965 | .070090 | 1.178 | .709 | .005010 |
| 1.127 | .643 | .015025 | 1.140 | .195 | .060075 | 1.150 | .630 | .005062 | 1.160 | .710 | .030050 | 1.171 | 1.005 | .060080 | 1.178 | .753 | .015030 |
| 1.127 | .695 | .012018 | 1.140 | .210 | .060075 | 1.150 | .750 | .040090 | 1.160 | .750 | .042062 | 1.171 | 1.050 | .005010 | 1.178 | 1.041 | .020040 |
| 1.127 1.127 | .773 .885 | .075090 .080100 | 1.140 1.140 | .260 .320 | .060075 | 1.150 1.150 | . 763 .803 | .005010 | 1.160 | .752 | .030048 | 1.171 1.172 | 1.105 .190 | .005010 .040060 | 1.179 1.179 | .381 .473 | .170190 .010020 |
| 1.127 | .931 | .050100 | 1.140 | .383 | .060075 .060075 | 1.150 | .814 | .040060 .048125 | 1.160 1.160 | .759 .800 | .030050 .050062 | 1.172 | .473 | .120135 | 1.179 | .502 | .005010 |
| 1.127 | .937 | .050070 | 1.140 | .570 | .010125 | 1.150 | .830 | .048123 | 1.160 | .829 | .060080 | 1.172 | .523 | .005010 | 1.179 | .569 | .030060 |
| 1.127 | .997 | .005010 | 1.140 | .627 | .020040 | 1.150 | .951 | .025042 | 1.160 | .889 | .025040 | 1.172 | .600 | .050187 | 1.179 | .632 | .010020 |
| 1.127 | 1.018 | .005020 | 1.140 | .629 | .020040 | 1.150 | .986 | .005020 | 1.160 | .942 | .050075 | 1.172 | .628 | .040060 | 1.179 | .641 | .050070 |
| 1.128 | .314 | .075090 | 1.140 | .657 | .005020 | 1.150 | .988 | .010020 | 1.160 | .955 | .030060 | 1.172 | .632 | .030040 | 1.179 | .648 | .015030 |
| 1.128 | .347 | .156187 | 1.140 | .722 | .005010 | 1.150 | .993 | .005012 | 1.160 | .989 | .032050 | 1.172 | .694 | .050075 | 1.179 | .687 | .030060 |
| 1.128 | .358 | .156187 | 1.140 | .723 | .005010 | 1.150 | 1.045 | .005010 | 1.161 | .408 | .005030 | 1.172 | .800 | .010020 | 1.179 | .721 | .060080 |
| 1.128 | .366 | .048062 | 1.140 | .742 | .005010 | 1.150 | 1.050 | .030040 | 1.161 | .753 | .060080 | 1.172 | .816 | .050075 | 1.179 | .829 | .030060 |
| 1.128 | .747 | .005010 | 1.140 | .753 | .010020 | 1.151 | .127 | .020040 | 1.161 | .770 | .010020 | 1.172 | .897 | .030050 | 1.179 | .874 | .005010 |
| 1.128 | .749 | .025040 | 1.140 | .780 | .005010 | 1.151 | .157 | .035050 | 1.161 | .794 | .080100 | 1.172 | .958 | .050062 | 1.179 | .875 | .005010 |
| 1.128 1.128 | . 751 .877 | . 005010 .010020 | 1.140 | .809 | .005010 | 1.151 | .249 | .015030 | 1.161 | .922 | .040060 | 1.172 | 1.000 | .050075 .015025 | 1.179 | .911 | .040062 |
| - | | | 1.140 | .812 | .031042 | 1.151 | .633 | .010020 | 1.162 | .600 | .075100 | 1.173 | .063 | | 1.179 | .914 | .035050 |
| 1.128 1.129 | .889 .500 | .050070 | 1.140 | .936 .950 | .005010 | 1.151 | .700 | .005010 | 1.162 | .906 | .060080 | 1.173 1.173 | .412 .413 | .130150 .156190 | 1.179 1.179 | .931 | .040060 |
| 1.129 | .500 | .080105 | 1.140 1.140 | .950 .970 | .005015 .025050 | 1.151 | . 729 | .005010 | 1.162 | .955 | .040060 .010020 | 1.173 1.173 | .413 | .005010 | 1.179 1.179 | .936 .996 | .040060 |
| 1.129 | .620 | .100125 | 1.140 | .970 | .015030 | 1.151 1.151 | .755 .900 | .062120 .010020 | 1.163 1.163 | .408 .480 | .040060 | 1.173 | .722 | .005010 | 1.179 | 1.015 | .040060 |
| 1.129 | .705 | .105135 | 1.140 | 1.010 | .005010 | 1.151 | 1.046 | .005010 | 1.163 | .800 | .030042 | 1.173 | .804 | .030050 | 1.179 | 1.041 | .020040 |
| 1.129 | .804 | .060080 | 1.140 | 1.020 | .005010 | 1.152 | .305 | .020030 | 1.163 | .846 | .040060 | 1.173 | .851 | .025040 | 1.180 | .140 | .016032 |
| 1.130 | .163 | .005010 | 1.141 | .394 | .005010 | 1.152 | .380 | .005010 | 1.163 | 1.010 | .010020 | 1.173 | .891 | .020030 | 1.180 | .156 | .060080 |
| 1.130 | .171 | .050070 | 1.141 | .395 | .005015 | 1.152 | .563 | .040060 | 1.164 | .351 | .005010 | 1.173 | .998 | .020030 | 1.180 | .238 | .005010 |
| 1.130 | .200 | .060070 | 1.141 | .717 | .015025 | 1.152 | .673 | .120135 | 1.164 | .787 | .083120 | 1.174 | .207 | .100125 | 1.180 | .239 | .105125 |
| 1.130 | .302 | .020040 | 1.141 | .818 | .105125 | 1.153 | .062 | .025042 | 1.164 | .801 | .060080 | 1.174 | .261 | .125156 | 1.180 | .251 | .156187 |
| 1.130 | .376 | .005010 | 1.142 | .132 | .010020 | 1.153 | .626 | .010032 | 1.164 | .802 | .040060 | 1.174 | .419 | .090105 | 1.180 | .315 | .025040 |
| 1.130 | .410 | .060080 | 1.142 | .472 | .005010 | 1.153 | .731 | .100125 | 1.164 | .946 | .031048 | 1.174 | .876 | .030050 | 1.180 | .317 | .090110 |
| 1.130 | .500 | .040060 | 1.142 | .532 | .080100 | 1.153 | .843 | .015030 | 1.165 | .735 | .010020 | 1.174 | .891 | .060080 | 1.180 | .319 | .005010 |
| 1.130 | .506 | .100125 | 1.142 | .552 | .005010 | 1.154 | .159 | .030060 | 1.165 | .781 | .070090 | 1.174 | .921 | .020040 | 1.180 | .331 | .140160 |
| 1.130 | .589 | .030050 | 1.142 | .638 | .030040 | 1.154 | .375 | .100125 | 1.165 | 1.010 | .005015 | 1.175 | .054 | .020040 | 1.180 | .354 | .010020 |
| 1.130 | .751 | .080105 | 1.142 | .751 | .005020 | 1.154 | .387 | .005008 | 1.165 | 1.065 | .005010 | 1.175 | .063 | .020032 | 1.180 | .357 | .150170 |
| 1.130 | . 759 | .005010 | 1.142 | .753 | .090110 | 1.154 | .499 | .050075 | 1.165 | 1.122 | .005010 | 1.175 | .260 | .090125 | 1.180 | .383 | .048075 |
| 1.130 1.130 | .791 .800 | .050070 | 1.142 | .826 | .080104 | 1.154 | .584 | .030060 | 1.166 | .689 | .010020 | 1.175 | .438 .514 | .015030 | 1.180 | .398 | .005020 |
| 1.130 | .800 .821 | .005010 .005010 | 1.142 1.143 | .945 .187 | .040080 .060075 | 1.154 | . 710 | .005010 | 1.166 | .957 | .025035 .020030 | 1.175 1.175 | .514 .625 | .020035 .010020 | 1.180 1.180 | .409 .438 | . 005010 .050070 |
| 1.130 | .855 | .062083 | 1.143 | .206 | .040060 | 1.154 1.154 | .787 .803 | .090100 .030050 | 1.168 1.168 | .194 .229 | .020030 | 1.175 | .715 | .010020 | 1.180 | .438 .472 | .005010 |
| 1.130 | 1.001 | .030050 | 1.143 | .250 | .060075 | 1.154 | .856 | .025040 | 1.168 | .697 | .025040 | 1.175 | .716 | .005010 | 1.180 | .474 | .005010 |
| 1.131 | .251 | .050070 | 1.143 | .313 | .060075 | 1.154 | .875 | .010020 | 1.168 | .704 | .135156 | 1.175 | .750 | .005010 | 1.180 | .475 | .005010 |
| 1.131 | .515 | .040060 | 1.143 | .314 | .062080 | 1.154 | .877 | .005010 | 1.168 | .750 | .005010 | 1.175 | .814 | .020040 | 1.180 | .476 | .025040 |
| 1.131 | .664 | .005010 | 1.143 | .375 | .060075 | 1.154 | 1.033 | .005010 | 1.168 | .843 | .005010 | 1.175 | .868 | .005010 | 1.180 | .485 | .010020 |
| 1.131 | .751 | .015025 | 1.143 | .376 | .020035 | 1.155 | .250 | .040060 | 1.168 | .922 | .005010 | 1.175 | .905 | .030050 | 1.180 | .499 | .015025 |
| 1.131 | .855 | .060080 | 1.143 | .504 | .005020 | 1.155 | .266 | .050075 | 1.168 | .985 | .005020 | 1.175 | .925 | .020030 | 1.180 | .521 | .070090 |
| 1.131 | .956 | .025042 | 1.143 | .651 | .140160 | 1.155 | .437 | .050075 | 1.168 | .996 | .005015 | 1.175 | .985 | .080100 | 1.180 | .540 | .015025 |
| 1.131 | 1.034 | .025042 | 1.143 | .739 | .005010 | 1.155 | .501 | .075090 | 1.168 | 1.000 | .005010 | 1.175 | .999 | .015020 | 1.180 | .563 | .010020 |
| 1.132 | .170 | .060075 | 1.143 | .812 | .100120 | 1.155 | .510 | .030040 | 1.169 | .126 | .010025 | 1.175 | 1.031 | .005010 | 1.180 | .635 | .040060 |
| | | .025050 | 1.143 | .848 | .015040 | 1.155 | .766 | .020030 | 1.169 | .390 | .060083 | 1.176 | .127 | .025040 | 1.180 | .671 | .150170 |
| 1.132 | .955 | .020 .000 | | | | | | | | | | | | | | | |

| | | | | | | | | | | | WASHER | | | | | | |
|--|---|---|---|---|---|---|--|---|---|--|--|---|---|---|---|--|---|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 1.180 | .694 | .080104 | 1.185 | .252 | .040060 | 1.188 | .195 | .040062 | 1.195 | .641 | .040060 | 1.200 | .935 | .005010 | 1.218 | .474 | .005010 |
| 1.180 | .714 | .120135 | 1.185 | .313 | .100125 | 1.188 | .193 | .050070 | 1.195 | .692 | .040000 | 1.200 | .952 | .030040 | 1.218 | .565 | .042062 |
| 1.180 | .747 | .030050 | 1.185 | .315 | .050075 | 1.188 | .254 | .050070 | 1.195 | .730 | .030050 | 1.200 | .990 | .005020 | 1.218 | .758 | .025035 |
| 1.180 | .773 | .015030 | 1.185 | .328 | .100125 | 1.188 | .310 | .050070 | 1.195 | .795 | .050070 | 1.200 | 1.000 | .005060 | 1.218 | .855 | .060075 |
| 1.180 | .787 | .010020 | 1.185 | .365 | .075125 | 1.188 | .312 | .005010 | 1.195 | .865 | .015030 | 1.200 | 1.013 | .015030 | 1.218 | .856 | .060075 |
| 1.180 | .788 | .090105 | 1.185 | .375 | .100125 | 1.188 | .326 | .062083 | 1.195 | .872 | .005010 | 1.200 | 1.048 | .005010 | 1.218 | .889 | .050062 |
| 1.180 1.180 | .789 .793 | .010050 .105125 | 1.185 1.185 | .435 .437 | .100125 .060080 | 1.188 | .439 .508 | .060080 | 1.195 | .912 | .010020 | 1.200 1.201 | 1.050 .257 | .025040 . 005010 | 1.218 1.218 | 1.038 1.076 | .060080 .025040 |
| 1.180 | .890 | .010020 | 1.185 | .568 | .005010 | 1.188 1.188 | .515 | .020040 .040060 | 1.195 1.195 | .915 .964 | . 005010 .032048 | 1.201 | .314 | .030050 | 1.219 | .268 | .060080 |
| 1.180 | .895 | .005010 | 1.185 | .609 | .030040 | 1.188 | .530 | .048075 | 1.195 | .980 | .005015 | 1.201 | .395 | .005030 | 1.219 | .270 | .005025 |
| 1.180 | .903 | .005010 | 1.185 | .645 | .010040 | 1.188 | .563 | .005075 | 1.195 | .983 | .010020 | 1.201 | .562 | .020030 | 1.219 | .315 | .035050 |
| 1.180 | .947 | .010020 | 1.185 | .700 | .005015 | 1.188 | .621 | .080100 | 1.195 | 1.026 | .010030 | 1.201 | .721 | .050070 | 1.219 | .473 | .005010 |
| 1.180 | .981 | .005010 | 1.185 | .709 | .100125 | 1.188 | .623 | .040060 | 1.195 | 1.116 | .010020 | 1.201 | .755 | .005010 | 1.219 | .515 | .050075 |
| 1.180 1.180 | .995 1.015 | . 005040 .040060 | 1.185 | .753 | .005010 | 1.188 | .626 | .105125 | 1.195 | 1.120 | .015030 | 1.201 | .760 | .050070 | 1.219 | .534 | .050075 |
| 1.180 | 1.029 | .005010 | 1.185 1.185 | .755 . 768 | .030050 .005010 | 1.188 1.188 | .656 .688 | .025040 .040060 | 1.196 1.196 | .264 .378 | .025042 .00 5010 | 1.201 | .763 .774 | .050075 | 1.219 1.219 | . 552 .595 | .005010 .025042 |
| 1.181 | .239 | .005010 | 1.185 | .783 | .050125 | 1.188 | .759 | .156187 | 1.196 | .859 | .040060 | 1.201 | .800 | .015030 | 1.219 | .801 | .005010 |
| 1.181 | .252 | .005010 | 1.185 | .875 | .050083 | 1.188 | .763 | .005010 | 1.196 | 1.013 | .005010 | 1.201 | 1.003 | .010020 | 1.219 | .890 | .020040 |
| 1.181 | .265 | .030050 | 1.185 | .880 | .012025 | 1.188 | .765 | .070090 | 1.196 | 1.020 | .020030 | 1.201 | 1.050 | .050062 | 1.219 | .940 | .040060 |
| 1.181 | .326 | .005010 | 1.185 | .908 | .005020 | 1.188 | .799 | .050070 | 1.197 | .362 | .005010 | 1.202 | .439 | .040060 | 1.219 | 1.000 | .020075 |
| 1.181 | .379 | .005010 | 1.185 | .940 | .030062 | 1.188 | .880 | .005125 | 1.197 | .376 | .005010 | 1.202 | .793 | .015030 | 1.220 | .125 | .015030 |
| 1.181 1.181 | .394 .395 | .015030 . 005060 | 1.185 1.185 | .973 .990 | .005010 | 1.188 | .880 .920 | .126160 | 1.197 | .500 | .030050 | 1.202 1.202 | .937 .996 | .025040 .025040 | 1.220 1.220 | .194 .283 | .075100 |
| 1.181 | .472 | .010020 | 1.185 | 1.024 | .080104 .040060 | 1.188 1.188 | .920 . 940 | .010020 .005010 | 1.197 1.197 | .637 .880 | .005010 .005010 | 1.202 | 1.065 | .010020 | 1.220 | .283 .375 | .015030 |
| 1.181 | .473 | .005010 | 1.185 | 1.048 | .005010 | 1.188 | 1.000 | .062089 | 1.197 | 1.120 | .020035 | 1.203 | .353 | .060080 | 1.220 | .394 | .005020 |
| 1.181 | .474 | .005010 | 1.185 | 1.067 | .015030 | 1.188 | 1.001 | .005010 | 1.198 | .398 | .105125 | 1.203 | .439 | .050075 | 1.220 | .455 | .012020 |
| 1.181 | .477 | .005010 | 1.186 | .189 | .105125 | 1.188 | 1.038 | .025040 | 1.198 | .441 | .010020 | 1.203 | .502 | .100125 | 1.220 | .476 | .005010 |
| 1.181 | .482 | .030060 | 1.186 | .378 | .156190 | 1.189 | .140 | .015030 | 1.198 | .500 | .005010 | 1.203 | .627 | .005010 | 1.220 | .504 | .005125 |
| 1.181 1.181 | .518 .531 | .135156 .010020 | 1.186 1.186 | .437 .506 | .010100 .060090 | 1.189 1.189 | .309 .346 | .025040 .030050 | 1.198 1.198 | . 522 .552 | . 005010 .025040 | 1.203 1.203 | .793 .822 | .015030 .015025 | 1.220 1.220 | .507 .602 | .110134 .090120 |
| 1.181 | .552 | .105125 | 1.186 | .559 | .090125 | 1.189 | .380 | .110130 | 1.198 | .632 | .030050 | 1.203 | 1.004 | .030050 | 1.220 | .640 | .100125 |
| 1.181 | .560 | .100125 | 1.186 | .740 | .040060 | 1.189 | .627 | .160190 | 1.198 | .640 | .070090 | 1.204 | .757 | .005015 | 1.220 | .672 | .025042 |
| 1.181 | .577 | .070090 | 1.186 | .781 | .005010 | 1.189 | .751 | .040060 | 1.198 | .875 | .025042 | 1.204 | 1.030 | .005010 | 1.220 | .680 | .030050 |
| 1.181 | .607 | .005015 | 1.186 | .783 | .050062 | 1.189 | .798 | .005010 | 1.198 | .890 | .025040 | 1.205 | .870 | .005090 | 1.220 | .699 | .030050 |
| 1.181 | .627 | .020040 | 1.186 | .826 | .010020 | 1.189 | .828 | .005010 | 1.198 | 1.053 | .010030 | 1.205 | .922 | .015030 | 1.220 | .799 | .010020 |
| 1.181 1.181 | .628 .640 | .025083 .090125 | 1.186 1.186 | 1.015 1.016 | .025040 .030050 | 1.189 1.189 | .999 1.032 | .010020 .005010 | 1.199 1.199 | .187 .379 | .020040 .020040 | 1.206 1.206 | .920 1.072 | .025040 . 005010 | 1.220 1.220 | .831 .844 | .060083 .050070 |
| 1.181 | .649 | .160190 | 1.186 | 1.063 | .015030 | 1.190 | .128 | .030050 | 1.199 | .503 | .005010 | 1.207 | .258 | .050070 | 1.220 | .875 | .062090 |
| 1.181 | .669 | .070090 | 1.187 | .142 | .005030 | 1.190 | .250 | .100125 | 1.199 | .510 | .005010 | 1.207 | .381 | .160190 | 1.220 | .960 | .050083 |
| 1.181 | .787 | .135160 | 1.187 | .156 | .050062 | 1.190 | .265 | .062090 | 1.199 | .550 | .005010 | 1.207 | .974 | .050070 | 1.220 | 1.004 | .010020 |
| 1.181 | .801 | .005010 | 1.187 | .212 | .040062 | 1.190 | .317 | .100125 | 1.199 | .562 | .015030 | 1.208 | .259 | .005010 | 1.220 | 1.083 | .005010 |
| 1.181 | .802 | .025040 .025040 | 1.187 | .283 | .080104 .010025 | 1.190 | .392 | .090110 | 1.199 | .735 | .050070 | 1.208 | .390 | .010050 | 1.220 | 1.090 | .042062 |
| 1.181 1.181 | .829 .877 | .040060 | 1.187 1.187 | .313 .374 | .010025 | 1.190 1.190 | .410 .500 | .010020 .032050 | 1.199 1.199 | .737 .830 | .020040 .040060 | 1.209 1.210 | .893 .312 | .020030 .015030 | 1.220 1.221 | 1.116 .131 | .040050 .015030 |
| 1.181 | .885 | .040050 | 1.187 | .378 | .005010 | 1.190 | .531 | .050070 | 1.199 | 1.012 | .015030 | 1.210 | .383 | .050075 | 1.221 | .194 | .020040 |
| 1.181 | .943 | .030080 | | .390 | .134187 | 1.190 | .543 | .060080 | 1.199 | 1.050 | .040060 | 1.210 | .674 | .050062 | 1.221 | .257 | .040060 |
| 1.181 | | | 1.187 | .000 | | | | 000 005 | | | | 1.210 | .878 | .005020 | 1 | | 000 040 |
| 1.181 | .945 | .010025 | 1.187 | .404 | .020040 | 1.190 | .564 | .020035 | 1.199 | 1.053 | .005010 | | | | 1.221 | .867 | .020040 |
| | .950 | .005010 | 1.187 1.187 | .404 .477 | .100125 | 1.190 | .626 | .025070 | 1.200 | .138 | .050070 | 1.210 | .958 | .100125 | 1.221 1.221 | .867 .899 | .025040 |
| 1.181 | .950 .965 | .005010 .012040 | 1.187 1.187 1.187 | .404 .477 .512 | .100125 .060080 | 1.190 1.190 | .626 .738 | .025070 .050070 | 1.200 1.200 | .138 .168 | .050070 .030050 | 1.210 1.210 | .958 1.038 | .100125 .050075 | 1.221 1.221 1.221 | .867 .899 .916 | .025040 . 005010 |
| 1.181 1.181 | .950 .965 1.000 | .005010 .012040 .010020 | 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 | .100125 .060080 .065080 | 1.190 1.190 1.190 | .626 .738 .752 | .025070 .050070 .042060 | 1.200 1.200 1.200 | .138 .168 .186 | .050070 .030050 .020040 | 1.210 1.210 1.211 | .958 1.038 .201 | .100125 .050075 .010020 | 1.221 1.221 1.221 1.221 | .867 .899 .916 .986 | .025040 . 005010 .020040 |
| 1.181 | .950 .965 | .005010 .012040 | 1.187 1.187 1.187 | .404 .477 .512 | .100125 .060080 | 1.190 1.190 | .626 .738 | .025070 .050070 | 1.200 1.200 | .138 .168 | .050070 .030050 | 1.210 1.210 | .958 1.038 | .100125 .050075 | 1.221 1.221 1.221 | .867 .899 .916 | .025040 . 005010 |
| 1.181 1.181 1.181 | .950 .965 1.000 1.020 | .005010 .012040 .010020 .005010 | 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 | .100125 .060080 .065080 .010020 | 1.190 1.190 1.190 1.190 | .626 .738 .752 .753 | .025070 .050070 .042060 .015040 | 1.200 1.200 1.200 1.200 | .138 .168 .186 | .050070 .030050 .020040 .040060 | 1.210 1.210 1.211 1.211 | .958 1.038 .201 .403 | .100125 .050075 .010020 .075090 | 1.221 1.221 1.221 1.221 1.221 | .867 .899 .916 .986 | .025040 . 005010 .020040 .010020 |
| 1.181 1.181 1.181 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 | .005010 .012040 .010020 .005010 .005020 .010020 .005010 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 | .626 .738 .752 .753 .787 .817 .881 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 | .050070 .030050 .020040 .040060 .005010 .080100 | 1.210 1.210 1.211 1.211 1.211 1.211 1.211 | .958 1.038 .201 .403 .751 1.005 1.035 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 | 1.221 1.221 1.221 1.221 1.221 1.221 1.222 1.222 | .867 .899 . 916 .986 1.094 1.098 .194 .836 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 |
| 1.181 1.181 1.181 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 | .005010 .012040 .010020 .005010 .005020 .010020 .005010 .005020 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 | .626 .738 .752 .753 .787 .817 .881 .890 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 | .050070 .030050 .020040 .040060 .005010 .080100 .005020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.211 1.212 | .958 1.038 .201 .403 .751 1.005 1.035 .994 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 | 1.221 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 |
| 1.181 1.181 1.181 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 | .005010 .012040 .010020 .005010 .005020 .010020 .005010 .005020 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 | .626 .738 .752 .753 .787 .817 .881 .890 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 | .050070 .030050 .020040 .040060 .005010 .080100 .005020 .010020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.211 1.212 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 | 1.221 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 | .005010 .012040 .010020 .005010 .005020 .010020 .005010 .005020 .050060 .030050 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 | .626 .738 .752 .753 .787 .817 .881 .890 .918 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 | .050070 .030050 .020040 .040060 .005010 .005020 .010020 .005010 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 .020040 .020040 | 1.221 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110130 .100125 |
| 1.181 1.181 1.181 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 | .005010 .012040 .010020 .005010 .005020 .010020 .005010 .005020 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 | .626 .738 .752 .753 .787 .817 .881 .890 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 | .050070 .030050 .020040 .040060 .005010 .080100 .005020 .010020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.211 1.212 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 | 1.221 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 | .005010 .012040 .010020 .005010 .005020 .005010 .005020 .050060 .030050 .100125 .048062 .090120 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 .005010 .020040 .170190 .005010 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 | .050070 .030050 .020040 .040060 .005010 .005020 .010020 .005010 .005010 .005020 .005010 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.042 .894 1.074 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 .020040 .020040 .070090 .005020 .015025 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110125 .008015 .008015 .002040 .020040 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 .750 | .005010 .012040 .010020 .005010 .005020 .005010 .005020 .050060 .030050 .100125 .048062 .090120 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 .686 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .060075 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 .005010 .020040 .170190 .005010 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005010 .005020 .100125 .005125 .090125 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 1.214 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.042 .894 1.074 | .100125 .050075 .010020 .075090 .050075 . 005010 .010020 .030050 .020040 .020040 .070090 .005020 .015025 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110125 .008015 .025040 .020040 .005040 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 .561 .635 .714 .750 .752 .753 | .005010 .012040 .010020 .005010 .005020 .005010 .005020 .050060 .030050 .100125 .048062 .090120 .100125 .005010 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 .686 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 .005010 .020040 .170190 .070090 .050075 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005010 .005020 .100125 .090125 .090125 .005020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 | .100125 .050075 .010020 .075090 .050075 . 005010 .010020 .030050 .020040 .070090 .005020 .005020 .030050 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 | .025040 .005010 .020040 .035050 .020040 .030050 .005010 .110130 .100125 .008015 .025040 .020040 .030040 .030040 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 .561 .635 .714 .750 .752 .753 | .005010 .012040 .010020 .005010 .005020 .005010 .005020 .050060 .030050 .100125 .048062 .090120 .100125 .005010 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .559 .625 .632 .636 .640 .656 .674 .686 .687 .753 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 .050060 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.191 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 | .025070 .050070 .042060 .015040 .080104 .088062 .025040 .050060 .010020 .005010 .020040 .170190 .070090 .050075 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005020 .100125 .005125 .090125 .005020 .005020 .005020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 1.214 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.016 1.042 .894 1.074 .860 .879 .410 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 .020040 .070090 .005020 .015025 .030050 .015025 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110130 .100125 .008015 .025040 .020040 .030060 .030060 .005010 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 .561 .635 .714 .750 .752 .753 | .005010 .012040 .010020 .005010 .005020 .010020 .005010 .005020 .050060 .030050 .100125 .048062 .090120 .005010 .005010 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .559 .632 .636 .640 .656 .674 .686 .687 .753 .755 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 .050060 .020040 .100125 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.191 1.192 1.192 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 .005010 .020040 .170190 .070090 .050075 .030050 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 | .050070 .030050 .020040 .040060 .080100 .005020 .005020 .005125 .005125 .005020 .005020 .005020 .005020 .005020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.214 1.214 1.215 1.215 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 .020040 .020040 .070090 .015025 .030050 .015025 .010022 .015025 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 1.085 .754 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110130 .100125 .008015 .025040 .020040 .030060 .005010 .070090 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 .750 .752 .753 .801 | .005010 .012040 .010020 .005010 .005020 .005010 .005020 .050060 .030050 .100125 .048062 .090120 .100125 .005010 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .559 .625 .632 .636 .640 .656 .674 .686 .687 .753 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 .050060 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.191 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 | .025070 .050070 .042060 .015040 .080104 .088062 .025040 .050060 .010020 .005010 .020040 .170190 .070090 .050075 | 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005020 .100125 .005125 .090125 .005020 .005020 .005020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 1.214 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.016 1.042 .894 1.074 .860 .879 .410 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 .020040 .070090 .005020 .015025 .030050 .015025 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110130 .100125 .008015 .025040 .020040 .030060 .030060 .005010 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 .750 .752 .753 .801 .867 .960 | .005010 .012040 .010020 .005010 .005020 .005010 .005020 .050060 .030050 .100125 .048062 .090120 .100125 .005010 .010020 .010020 .010020 .005010 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .625 .632 .636 .640 .656 .674 .686 .687 .753 .755 .757 .765 .812 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 .050060 .020040 .020040 .020040 .020043 .025083 .062083 .062083 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.192 1.192 1.192 1.192 1.192 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 .778 1.004 1.014 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 .005010 .020040 .170190 .070090 .050075 .030050 .040060 .015025 .020040 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 .501 .502 .503 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 1.215 1.215 1.216 1.216 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 .020040 .070090 .005020 .015025 .010025 .010020 .015025 .010020 .015025 .010020 .015025 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.224 1.225 1.225 | .867 .899 .916 .986 1.094 1.094 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 1.085 .754 1.090 | .025040 .005010 .020040 .010020 .035050 .036050 .005010 .110130 .100125 .008014 .020040 .020040 .030060 .005010 .010020 .040060 .010020 .040060 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 .750 .752 .753 .801 .867 .960 | .005010 .012040 .010020 .005010 .005020 .005020 .050060 .030050 .100125 .048062 .090120 .100125 .005010 .010020 .010020 .005010 .005010 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .625 .632 .636 .640 .656 .674 .686 .687 .753 .755 .757 .765 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .050083 .050060 .020040 .100125 .025083 .062083 .062083 .062083 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.192 1.192 1.192 1.193 1.193 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .560 .934 .739 .739 .778 1.004 1.014 .159 .282 | .025070 .050070 .042060 .015040 .080104 .050060 .010020 .005010 .020040 .170190 .070090 .050075 .030050 .040060 .015025 .020040 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 .501 .502 .503 .504 | .050070 .030050 .020040 .040060 .080100 .005020 .005010 .005020 .005125 .005125 .090125 .090125 .005020 .005020 .005020 .005020 .005020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 1.215 1.215 1.216 1.216 1.216 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 .020040 .070040 .070090 .015025 .030050 .015025 .010020 .055010 .062090 .060090 .060090 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.224 1.224 1.225 1.225 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 .252 .385 .793 .998 1.020 1.085 .754 1.090 | .025040 .005010 .020040 .010020 .035050 .005010 .110130 .100125 .008040 .020040 .005040 .005040 .005040 .007090 .040060 .010020 .040060 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 .752 .753 .801 .867 .960 .993 .405 | .005010 .012040 .010020 .005010 .005020 .005020 .050060 .030050 .100125 .048062 .090120 .010020 .010020 .010020 .005010 .005010 .006015 | 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 .686 .687 .753 .755 .757 .765 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .060075 .050083 .050060 .020040 .100125 .025083 .062083 .032120 .005010 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.192 1.192 1.192 1.193 1.193 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .934 .739 .778 1.004 1.014 .159 .282 | .025070 .050070 .042060 .015040 .080104 .050060 .010020 .005010 .020040 .170190 .050075 .030050 .040060 .015025 .020040 .005010 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 .501 .502 .503 .504 .520 .562 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005020 .005125 .005125 .090125 .005020 .005020 .005020 .005020 .005020 .005020 .005020 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.214 1.215 1.215 1.216 1.216 1.216 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 .701 | .100125 .050075 .010020 .075090 .050075 .005010 .010020 .030050 .020040 .070090 .005020 .015025 .010020 .015025 .010020 .005010 .062090 .060083 .070090 .005010 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.224 1.224 1.225 1.225 1.225 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 1.085 .754 1.090 | .025040 .005010 .020040 .010020 .035050 .005010 .110130 .100125 .008010 .020040 .030040 .055040 .055040 .056040 .070090 .040060 .010020 .040060 .010020 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 1.183 | .950 .965 1.000 1.020 .317 .398 .506 .550 .561 .635 .714 .750 .752 .753 .801 .867 .960 .993 .405 .771 .807 | .005010 .012040 .010020 .005010 .005020 .005020 .005020 .050060 .030050 .100125 .048062 .090120 .010020 .010020 .010020 .005010 .005010 .005010 | 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 .686 .687 .753 .755 .757 .765 .812 .823 .825 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 .050060 .020040 .100125 .025083 .062083 .062083 .062083 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.192 1.192 1.192 1.192 1.193 1.193 1.193 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 .778 1.004 1.014 1.159 .282 .445 | .025070 .050070 .042060 .015040 .080104 .088062 .025040 .050060 .010020 .005010 .020040 .170190 .050075 .030050 .040060 .015025 .020040 .055010 .050050 .040060 .055010 .050040 .055010 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 .501 .502 .503 .504 .526 .600 .626 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005020 .005125 .005125 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 | 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.215 1.215 1.216 1.216 1.217 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 .701 .757 | .100125 .050075 .010020 .075090 .005010 .010020 .030050 .020040 .020040 .070090 .015025 .010025 .010020 .005010 .062090 .062090 .065010 .005010 .005010 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.224 1.224 1.225 1.225 1.225 1.225 1.225 | .867 .899 .916 .986 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 1.085 .754 1.090 .564 .640 .826 .947 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110125 .008015 .025040 .030040 .030040 .030040 .040040 .010020 .010020 .040060 .010020 .015030 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 1.183 | .950 .965 1.000 1.020 .317 .395 .398 .506 .561 .635 .714 .750 .752 .753 .801 .867 .960 .993 .405 .771 .807 | .005010 .012040 .010020 .005010 .005020 .005010 .005020 .030050 .100125 .048062 .090120 .100125 .005010 .010020 .010020 .005010 .010020 .006080 .006080 .006080 .007090 | 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 .686 .687 .755 .757 .765 .812 .823 .823 .825 .874 .880 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .090120 .060075 .050060 .020040 .100125 .025083 .032120 .005010 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.192 1.192 1.192 1.193 1.193 1.193 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 .778 1.004 1.014 .159 .282 .445 .640 | .025070 .050070 .042060 .015040 .080104 .025040 .050060 .010020 .005010 .020040 .170090 .050075 .030075 .030050 .040060 .015025 .020040 .055010 .050060 .015025 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 .501 .502 .503 .504 .520 .600 .626 | .050070 .030050 .020040 .040060 .005010 .005020 .010020 .005020 | 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 1.215 1.215 1.216 1.216 1.216 1.217 1.217 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 .701 .757 | .100125 .050075 .010020 .075090 .005010 .010020 .030050 .020040 .020040 .070090 .005025 .030050 .015025 .010020 .052010 .062090 .060083 .070090 .005010 .005010 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.224 1.225 1.225 1.225 1.225 1.226 | .867 .899 .916 .986 1.094 .194 .836 1.015 .252 .385 .755 .793 .998 1.020 1.085 .754 1.090 .564 .640 .826 .947 .525 .381 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .055010 .110125 .008015 .025040 .020040 .030050 .005010 .005030 .030060 .005010 .070090 .040060 .010020 .005010 .040060 .010020 .015030 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 1.183 | .950 .965 1.000 1.020 .317 .398 .506 .550 .561 .635 .714 .750 .752 .753 .801 .867 .960 .993 .405 .771 .807 | .005010 .012040 .010020 .005010 .005020 .005020 .005020 .050060 .030050 .100125 .048062 .090120 .010020 .010020 .010020 .005010 .005010 .005010 | 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 .686 .687 .753 .755 .757 .765 .812 .823 .825 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 .050060 .020040 .100125 .025083 .062083 .062083 .062083 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.192 1.192 1.192 1.192 1.193 1.193 1.193 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 .778 1.004 1.014 1.159 .282 .445 | .025070 .050070 .042060 .015040 .080104 .088062 .025040 .050060 .010020 .005010 .020040 .170190 .050075 .030050 .040060 .015025 .020040 .055010 .050050 .040060 .055010 .050040 .055010 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 .501 .502 .503 .504 .526 .600 .626 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005020 .005125 .005125 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 | 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.215 1.215 1.216 1.216 1.217 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 .701 .757 | .100125 .050075 .010020 .075090 .005010 .010020 .030050 .020040 .020040 .070090 .015025 .010025 .010020 .005010 .062090 .062090 .065010 .005010 .005010 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.224 1.224 1.225 1.225 1.225 1.225 1.225 | .867 .899 .916 .986 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 1.085 .754 1.090 .564 .640 .826 .947 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110125 .008015 .025040 .030040 .030040 .030040 .040040 .070090 .040060 .010020 .040060 .010020 .015030 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 1.183 1.183 1.184 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 .750 .752 .753 .801 .867 .960 .993 .405 .771 .807 .903 | .005010 .012040 .010020 .005010 .005020 .005060 .030050 .030050 .048062 .090125 .005010 .010020 .010020 .010020 .005010 .010020 .005010 .010020 .006083 .006015 .070090 | 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 .686 .687 .753 .755 .757 .765 .812 .823 .825 .874 .880 | .100125 .060080 .065080 .010020 .025040 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 .050060 .020040 .100125 .025083 .032120 .065010 .010020 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.192 1.192 1.192 1.193 1.193 1.193 1.193 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 .778 1.004 1.014 .159 .282 .445 .640 1.003 .760 | .025070 .050070 .042060 .015040 .080104 .050060 .010020 .005010 .020040 .070090 .050075 .030050 .040060 .015025 .020040 .055010 .050040 .055010 .050060 .060078 .040060 .015025 .020040 .050060 .060078 .040060 .010020 .050070 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 .501 .502 .503 .504 .520 .606 .642 .650 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .050020 .050020 .050020 .050020 .051020 .052020 .053020 .054020 .055020 | 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 1.215 1.216 1.216 1.216 1.217 1.217 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 .701 .757 | .100125 .050075 .010020 .075090 .005010 .010020 .030050 .020040 .020040 .070090 .005025 .010025 .015025 .010020 .005010 .062090 .060083 .070090 .005010 .005011 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.225 1.225 1.225 1.225 1.226 1.227 1.227 | .867 .899 .916 .986 1.094 .194 .836 1.015 .252 .385 .755 .793 .998 1.020 1.085 .754 1.090 .564 .640 .826 .947 .525 .381 | .025040 .005010 .020040 .010020 .035050 .036050 .005010 .110125 .008040 .020040 .020040 .020040 .005010 .010020 .006010 .010020 .010020 .010020 .010020 .010020 .015030 .005010 .040060 .010020 .015030 .005010 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 1.183 1.183 1.184 1.184 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 .750 .752 .753 .801 .867 .960 .993 1.007 .585 .635 .730 | .005010 .012040 .010020 .005010 .005020 .005020 .050060 .030050 .100125 .048062 .090120 .010020 .010020 .010020 .010020 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .006080 .006083 .010020 .062083 .010020 | 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 .686 .687 .755 .757 .765 .812 .823 .825 .874 .880 .881 .882 .944 | .100125 .060080 .065080 .010020 .080100 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050060 .020040 .100125 .025083 .032120 .060025 .050060 .020040 .100025 .055010 .010020 .010020 .010020 .005010 .005010 .005010 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.192 1.192 1.192 1.193 1.193 1.193 1.193 1.194 1.194 1.194 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .934 .739 .778 1.004 1.014 1.014 1.015 .460 .932 1.003 .760 .932 1.002 1.002 | .025070 .050070 .042060 .015040 .080104 .050060 .010020 .005010 .020040 .070090 .050050 .040060 .015025 .020040 .055010 .050060 .010020 .050050 .040060 .010020 .050070 .030050 .040060 .010020 .050070 .030050 .040060 .010020 .050070 .030050 .050070 .030050 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 .501 .502 .503 .504 .520 .626 .642 .650 .751 .755 .760 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005020 .100125 .005125 .090125 .090020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .050020 | 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.214 1.214 1.215 1.215 1.216 1.216 1.217 1.217 1.217 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 .701 .757 .902 .995 1.001 1.013 | .100125 .050075 .010020 .075090 .005010 .010020 .030050 .020040 .020040 .070090 .015025 .010020 .055010 .062090 .060090 .060090 .060090 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.225 1.225 1.225 1.225 1.225 1.227 1.227 1.227 1.228 | .867 .899 .916 .986 1.094 .1098 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 .564 .640 .826 .947 .525 .381 .775 .812 .661 | .025040 .005010 .020040 .010020 .035050 .005010 .110130 .100125 .008040 .020040 .030040 .020040 .030050 .025040 .020040 .030060 .005010 .040060 .010020 .015030 .005010 .040060 .010020 .015030 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 1.183 1.183 1.184 1.184 1.184 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 .752 .753 .801 .867 .960 .993 1.000 .127 .585 .635 .730 | .005010 .012040 .010020 .005010 .005020 .055020 .050060 .030050 .100125 .048062 .090120 .100125 .005010 .010020 .010020 .010020 .010020 .055010 .010020 .060080 .006080 .006083 .010020 .060083 .010020 .062083 .010020 .062083 .010020 .062083 .010020 | 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .636 .640 .656 .674 .686 .687 .753 .755 .757 .765 .812 .823 .825 .874 .880 .881 .882 .944 .954 | .100125 .060080 .065080 .010020 .025040 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050063 .050060 .020040 .100125 .025083 .032120 .055010 .010020 .010020 .010020 .010025 .005010 .005011 .005012 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.192 1.192 1.192 1.193 1.193 1.193 1.193 1.194 1.194 1.194 | .626 .738 .752 .753 .787 .817 .881 .890 .918 .1.125 .460 .560 .934 .739 .778 1.004 1.014 .159 .282 .445 .640 1.003 .760 .932 1.002 1.012 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 .055010 .070090 .050070 .050060 .010020 .050070 .060070 .070090 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .377 .378 .383 .440 .500 .501 .502 .503 .504 .520 .626 .642 .650 .751 .755 .760 | .050070 .030050 .020040 .040060 .005010 .005010 .005010 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .005020 .055 - | 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.214 1.215 1.215 1.216 1.216 1.217 1.217 1.217 1.217 1.217 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .876 .377 1.029 1.073 .701 .757 .902 .998 1.001 1.013 | .100125 .050075 .010020 .075090 .005010 .010020 .030050 .020040 .020040 .070090 .005025 .015025 .015025 .010020 .062090 .062090 .063010 .062090 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.225 1.225 1.225 1.225 1.227 1.227 1.227 1.228 1.228 | .867 .899 .916 .986 1.094 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 1.085 .754 1.090 .564 .640 .826 .947 .525 .381 .777 .812 .661 .926 1.012 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110125 .008015 .025040 .020040 .005030 .030060 .005010 .070090 .040060 .010020 .055010 .040060 .010020 .055010 .040060 .010020 .055010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 1.183 1.183 1.184 1.184 1.184 1.184 1.184 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .714 .750 .752 .753 .801 .867 .960 .993 .405 .771 .807 .933 1.000 .127 .585 .635 .738 .730 .753 .807 | .005010 .012040 .010020 .005010 .005020 .055020 .050060 .030050 .100125 .048062 .090120 .100125 .005010 .010020 .050010 .010020 .050010 .010020 .060080 .060080 .010020 .060080 .010020 .060080 .060083 .010020 .062083 .010020 .062083 .010020 .062083 .015010 .005010 | 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .687 .755 .757 .765 .812 .823 .825 .874 .880 .881 .882 .944 .954 | .100125 .060080 .065080 .010020 .025040 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 .050060 .020040 .100125 .025083 .032120 .005010 .010020 .010020 .010020 .010020 .005010 .005010 .005010 .005010 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.192 1.192 1.192 1.192 1.193 1.193 1.193 1.194 1.194 1.194 1.194 1.194 1.194 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 .778 1.004 1.014 .159 .282 .445 .640 1.003 .760 .932 1.002 1.012 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 .055010 .070090 .050075 .030055 .040060 .015025 .020040 .050060 .015025 .020040 .050060 .010020 .050070 .030050 .050070 .030050 .050070 .030050 .050070 .050070 .050070 .050070 .050070 .050070 .050070 .050070 .050070 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .378 .383 .440 .500 .501 .502 .503 .504 .520 .600 .626 .642 .650 .751 .755 .760 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005010 .005020 .005125 .090125 .090125 .005020 .015030 .025042 .030050 .010020 .020040 .120135 .080090 | 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 1.215 1.216 1.216 1.216 1.217 1.217 1.217 1.217 1.217 1.217 1.218 1.218 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 .701 .757 .902 .998 1.001 1.013 .277 .315 | .100125 .050075 .010020 .075090 .005010 .010020 .030050 .020040 .020040 .075025 .030050 .015025 .030050 .016025 .010020 .055010 .062090 .060083 .070090 .005010 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.225 1.225 1.225 1.225 1.226 1.227 1.227 1.227 1.228 1.228 1.228 1.228 | .867 .899 .916 .984 1.098 .194 .836 1.015 .252 .385 .755 .793 .998 1.020 1.085 .754 1.090 .564 .640 .826 .947 .525 .381 .777 .812 .661 .926 1.012 .416 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110125 .008015 .025040 .020040 .030050 .040060 .010020 .040060 .010020 .015030 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 |
| 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 1.183 1.183 1.184 1.184 1.184 1.184 1.184 1.184 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .635 .714 .750 .752 .753 .801 .867 .960 .993 .405 .771 .807 .993 .127 .585 .635 .730 .753 .807 .995 | .005010 .012040 .010020 .005010 .005020 .005060 .030055 .048062 .090125 .048062 .090125 .005010 .010020 .010020 .010020 .010020 .010020 .010020 .010020 .010020 .010020 .006015 .070090 .040060 .060083 .010020 .062083 .010020 .062083 .025040 .005010 .005010 .005010 | 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .656 .674 .686 .687 .753 .755 .757 .765 .812 .823 .825 .874 .880 .881 .882 .944 .954 1.017 | .100125 .060080 .065080 .010020 .025040 .080100 .030050 .066020 .115135 .040060 .090120 .060075 .050083 .050060 .020040 .100125 .025083 .032120 .062083 .032120 .010020 .010020 .010020 .010025 .005010 .010025 .005010 .005010 .005010 .005010 .005010 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.192 1.192 1.192 1.192 1.193 1.193 1.193 1.194 1.194 1.194 1.194 1.194 1.194 1.194 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .738 1.004 1.014 .159 .282 .445 .640 1.003 .760 .932 1.002 1.012 1.014 1.072 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 .005010 .070090 .050075 .030055 .040060 .015025 .020040 .050070 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .378 .383 .440 .500 .501 .502 .503 .504 .520 .562 .600 .751 .755 .760 .761 .786 .796 | .050070 .030050 .020040 .040060 .005010 .005020 .010025 .005020 .015030 .025042 .030050 .010020 .020040 .020040 .080090 .080090 .080090 | 1.210 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 1.215 1.216 1.216 1.216 1.217 1.217 1.217 1.217 1.217 1.217 1.217 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 .701 .757 .902 .995 .998 1.001 1.013 .277 .315 .355 | .100125 .050075 .010020 .075090 .005010 .010020 .030050 .020040 .020040 .075090 .005025 .030050 .015025 .010020 .005010 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.225 1.225 1.225 1.225 1.225 1.225 1.226 1.227 1.227 1.227 1.228 1.228 1.229 1.229 | .867 .899 .916 .986 1.094 1.098 .194 .836 1.015 .252 .385 .628 .755 .793 .998 1.020 1.085 .754 1.090 .564 .640 .826 .947 .525 .381 .777 .812 .661 .926 1.012 .416 .591 | .025040 .005010 .020040 .030050 .035050 .005010 .110125 .008015 .025040 .020040 .020040 .020040 .030050 .040060 .010020 .040060 .010020 .055010 .040060 .010020 .055010 .040060 .010020 .055010 .040060 .010020 .055010 .055010 .055010 .080010 .080010 .005010 .005010 .005010 |
| 1.181 1.181 1.181 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.182 1.183 1.183 1.183 1.183 1.184 1.184 1.184 1.184 1.184 | .950 .965 1.000 1.020 .317 .395 .398 .506 .550 .561 .714 .750 .752 .753 .801 .867 .960 .993 .405 .771 .807 .933 1.000 .127 .585 .635 .738 .730 .753 .807 | .005010 .012040 .010020 .005010 .005020 .055020 .050060 .030050 .100125 .048062 .090120 .100125 .005010 .010020 .050010 .010020 .050010 .010020 .060080 .060080 .010020 .060080 .010020 .060080 .060083 .010020 .062083 .010020 .062083 .010020 .062083 .015010 .005010 | 1.187 | .404 .477 .512 .516 .519 .550 .594 .625 .632 .636 .640 .687 .755 .757 .765 .812 .823 .825 .874 .880 .881 .882 .944 .954 | .100125 .060080 .065080 .010020 .025040 .030050 .006020 .115135 .040060 .048062 .090120 .060075 .050083 .050060 .020040 .100125 .025083 .032120 .005010 .010020 .010020 .010020 .010020 .005010 .005010 .005010 .005010 | 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.190 1.191 1.191 1.191 1.191 1.192 1.192 1.192 1.192 1.193 1.193 1.193 1.194 1.194 1.194 1.194 1.194 1.194 | .626 .738 .752 .753 .787 .817 .881 .890 .918 1.125 .460 .560 .882 .900 .934 .739 .778 1.004 1.014 .159 .282 .445 .640 1.003 .760 .932 1.002 1.012 | .025070 .050070 .042060 .015040 .080104 .048062 .025040 .050060 .010020 .055010 .070090 .050075 .030055 .040060 .015025 .020040 .050060 .015025 .020040 .050060 .010020 .050070 .030050 .050070 .030050 .050070 .030050 .050070 .050070 .050070 .050070 .050070 .050070 .050070 .050070 .050070 | 1.200 | .138 .168 .186 .213 .220 .250 .314 .327 .350 .376 .378 .383 .440 .500 .501 .502 .503 .504 .520 .600 .626 .642 .650 .751 .755 .760 | .050070 .030050 .020040 .040060 .080100 .005020 .010020 .005010 .005020 .005125 .090125 .090125 .005020 .015030 .025042 .030050 .010020 .020040 .120135 .080090 | 1.210 1.211 1.211 1.211 1.211 1.212 1.212 1.212 1.212 1.213 1.213 1.214 1.214 1.215 1.216 1.216 1.216 1.217 1.217 1.217 1.217 1.217 1.217 1.218 1.218 | .958 1.038 .201 .403 .751 1.005 1.035 .994 1.015 1.016 1.042 .894 1.074 .860 .879 .410 .474 .875 .377 1.029 1.073 .701 .757 .902 .998 1.001 1.013 .277 .315 | .100125 .050075 .010020 .075090 .005010 .010020 .030050 .020040 .020040 .075025 .030050 .015025 .030050 .016025 .010020 .055010 .062090 .060083 .070090 .005010 | 1.221 1.221 1.221 1.221 1.221 1.222 1.222 1.222 1.223 1.223 1.223 1.223 1.223 1.223 1.223 1.225 1.225 1.225 1.225 1.226 1.227 1.227 1.227 1.228 1.228 1.228 1.228 | .867 .899 .916 .984 1.098 .194 .836 1.015 .252 .385 .755 .793 .998 1.020 1.085 .754 1.090 .564 .640 .826 .947 .525 .381 .777 .812 .661 .926 1.012 .416 | .025040 .005010 .020040 .010020 .035050 .020040 .030050 .005010 .110125 .008015 .025040 .020040 .030050 .040060 .005010 .040060 .010020 .040060 .010020 .015030 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 .005010 |

| 0.0 | 10 | Choose Any | 0.5 | 10 | Choose Any | 0.0 | 1.0 | Choose Any | 0.5 | 100 | Choose Any | | | Choose Any | | SIZES | Choose Any |
|--------------------|----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|---------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|----------------------|----------------------------|-----------------------|---------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* From To |
| 1.229 | .785 | .032050 | 1.240 | .814 | .005010 | 1.245 | 1.123 | .005010 | 1.248 | .749 | .050070 | 1.250 | .164 | .005010 | 1.250 | .640 | .030080 |
| 1.229 1.229 | .861 .917 | .070090 .025042 | 1.240 1.240 | .875 .937 | .030125 .090105 | 1.245 1.245 | 1.126 1.130 | .005010 .005010 | 1.248 1.248 | . 750 .752 | .005010 .008015 | 1.250 1.250 | .165 .170 | .060083 | 1.250 1.250 | .641 .646 | .100125 .005015 |
| 1.229 | .919 | .005010 | 1.240 | .938 | .020040 | 1.245 | 1.143 | .005015 | 1.248 | .760 | .025040 | 1.250 | .182 | .005010 | 1.250 | .647 | .003013 |
| 1.229 | .920 | .010020 | 1.240 | .960 | .025040 | 1.246 | .252 | .080104 | 1.248 | .780 | .080104 | 1.250 | .187 | .040083 | 1.250 | .650 | .005010 |
| 1.230 | .145 | .050070 | 1.240 | 1.015 | .025070 | 1.246 | .254 | .015030 | 1.248 | .810 | .005010 | 1.250 | .192 | .040062 | 1.250 | .656 | .070187 |
| 1.230 | .176 | .040060 | 1.240 | 1.036 | .030050 | 1.246 | .261 | .075090 | 1.248 | .811 | .040100 | 1.250 | .193 | .030060 | 1.250 | .658 | .005010 |
| 1.230 | .201 | .125156 | 1.240 | 1.062 | .010020 | 1.246 | .384 | .050083 | 1.248 | .813 | .040062 | 1.250 | .195 | .090135 | 1.250 | .660 | .020040 |
| 1.230 1.230 | .378 .381 | .060080 .042062 | 1.240 1.240 | 1.070 1.075 | . 005010 .030050 | 1.246 1.246 | .566 .701 | . 005010 .110130 | 1.248 1.248 | .877 .878 | .005010 .005025 | 1.250 1.250 | .203 .208 | .016125 . 005010 | 1.250 1.250 | .662 .665 | .105125 .030040 |
| 1.230 | .501 | .050070 | 1.240 | 1.120 | .025042 | 1.246 | .741 | .015030 | 1.248 | .909 | .010015 | 1.250 | .213 | .010020 | 1.250 | .669 | .005010 |
| 1.230 | .612 | .050070 | 1.241 | .279 | .005030 | 1.246 | .750 | .010015 | 1.248 | .932 | .005010 | 1.250 | .217 | .015030 | 1.250 | .675 | .015030 |
| 1.230 | .761 | .005010 | 1.241 | .641 | .050075 | 1.246 | .753 | .050070 | 1.248 | .950 | .030050 | 1.250 | .227 | .005015 | 1.250 | .680 | .105125 |
| 1.230 | .766 | .050134 | 1.241 | .750 | .030050 | 1.246 | .754 | .060090 | 1.248 | .984 | .010020 | 1.250 | .250 | .020030 | 1.250 | .683 | .010020 |
| 1.230 | .890 .911 | .030050 | 1.241 | .761 .782 | .105125 | 1.246 | .761 | .070090 | 1.248 | 1.000 | .062083 | 1.250 1.250 | .252 | .012090 | 1.250 1.250 | .688 .689 | .090125 |
| 1.230 | .921 | .025040 | 1.241 | .782 .788 | .110130 .010020 | 1.246 1.246 | .768 .769 | .015030 .040060 | 1.248 1.248 | 1.004 1.020 | .062083 .005010 | 1.250 | .255 | .005012 | 1.250 1.250 | .690 | .010040 |
| 1.230 | .925 | .010030 | 1.241 | .937 | .030050 | 1.246 | .781 | .020040 | 1.248 | 1.060 | .005015 | 1.250 | .259 | .005010 | 1.250 | .701 | .015105 |
| 1.230 | .981 | .020030 | 1.241 | .945 | .020040 | 1.246 | .783 | .020040 | 1.248 | 1.145 | .040060 | 1.250 | .260 | .040060 | 1.250 | .707 | .020040 |
| 1.230 | .985 | .010020 | 1.241 | .994 | .020030 | 1.246 | .839 | .060080 | 1.249 | .140 | .005050 | 1.250 | .262 | .050075 | 1.250 | .710 | .050070 |
| 1.230 | 1.053 | .020040 | 1.241 | 1.063 | .020035 | 1.246 | .880 | .005010 | 1.249 | .203 | .005105 | 1.250 | .264 | .010020 | 1.250 | .711 | .005010 |
| 1.230 1.231 | 1.080 .915 | . 005010 .010020 | 1.241 | 1.110 | .050070 | 1.246 | .909 | .050075 | 1.249 | .250 | .030050 | 1.250 1.250 | .266 .273 | .120134 . 005010 | 1.250 1.250 | .715 .723 | . 005010 .050080 |
| 1.231 1.231 | .915 1.048 | .010020 .005010 | 1.242 1.242 | .436 .452 | .020030 .020030 | 1.246 1.246 | .937 1.035 | . 005010 .075090 | 1.249 1.249 | .318 .319 | .170190 .036060 | 1.250 | .273 | .062083 | 1.250 | .750 | .050080 |
| 1.232 | .185 | .015030 | 1.242 | .535 | .020030 | 1.246 | 1.035 | .020040 | 1.249 | .320 | .105125 | 1.250 | .283 | .060083 | 1.250 | .754 | .032042 |
| 1.232 | .500 | .005010 | 1.242 | .641 | .062090 | 1.246 | 1.060 | .020040 | 1.249 | .327 | .015030 | 1.250 | .286 | .050075 | 1.250 | .755 | .070090 |
| 1.232 | .661 | .040060 | 1.242 | .879 | .042062 | 1.247 | .064 | .015030 | 1.249 | .328 | .090125 | 1.250 | .295 | .025042 | 1.250 | .758 | .070125 |
| 1.233 | 1.027 | .040060 | 1.242 | .944 | .040060 | 1.247 | .125 | .040060 | 1.249 | .380 | .105125 | 1.250 | .311 | .050062 | 1.250 | .762 | .005070 |
| 1.233 1.233 | 1.065 1.131 | .005010 .020030 | 1.243 1.243 | .220 .405 | .035060 .030050 | 1.247 1.247 | .254 | .060080 | 1.249 | .391 .401 | .042060 .100125 | 1.250 1.250 | .312 .314 | . 005010 .105125 | 1.250 1.250 | .763 .764 | . 005010 .040060 |
| 1.234 | .087 | .015030 | 1.243 | .405 | .125156 | 1.247 | .263 .354 | .050075 .100125 | 1.249 1.249 | .427 | .020040 | 1.250 | .320 | .005010 | 1.250 | .765 | .104134 |
| 1.234 | .392 | .134156 | 1.243 | .613 | .005010 | 1.247 | .378 | .005010 | 1.249 | .444 | .036060 | 1.250 | .327 | .020030 | 1.250 | .770 | .040060 |
| 1.234 | .505 | .070090 | 1.243 | .614 | .005010 | 1.247 | .392 | .005010 | 1.249 | .450 | .005010 | 1.250 | .329 | .070090 | 1.250 | .771 | .030050 |
| 1.234 | .849 | .020040 | 1.243 | .699 | .005010 | 1.247 | .450 | .020030 | 1.249 | .495 | .005010 | 1.250 | .343 | .080100 | 1.250 | .781 | .050070 |
| 1.234 | .906 | .105120 | 1.243 | .855 | .070090 | 1.247 | .503 | .030050 | 1.249 | .510 | .070090 | 1.250 | .354 | .005010 | 1.250 | .783 | .050075 |
| 1.234 1.234 | .950 1.015 | .090110 .008016 | 1.243 1.243 | .965 1.025 | .090105 .030040 | 1.247 1.247 | .572 .684 | .030048 .110120 | 1.249 | .516 | .030050 | 1.250 1.250 | .356 .359 | .015030 .060090 | 1.250 1.250 | .784 .785 | .050070 .040060 |
| 1.234 | 1.025 | .030050 | 1.243 | 1.025 | .030040 | 1.247 | .699 | .005010 | 1.249 1.249 | .532 .605 | .156187 .005010 | 1.250 | .365 | .020062 | 1.250 | .789 | .105135 |
| 1.234 | 1.080 | .020030 | 1.243 | 1.100 | .042060 | 1.247 | .754 | .050070 | 1.249 | .623 | .040060 | 1.250 | .375 | .090105 | 1.250 | .791 | .010020 |
| 1.235 | .500 | .010020 | 1.244 | .150 | .015030 | 1.247 | .816 | .005050 | 1.249 | .635 | .005010 | 1.250 | .377 | .005010 | 1.250 | .795 | .007015 |
| 1.235 | .626 | .005020 | 1.244 | .768 | .060125 | 1.247 | .850 | .070090 | 1.249 | .650 | .020030 | 1.250 | .378 | .005030 | 1.250 | .796 | .110125 |
| 1.235 | .628 | .040060 | 1.244 | .770 | .020083 | 1.247 | .874 | .015030 | 1.249 | .651 | .020040 | 1.250 | .379 | .012040 | 1.250 | .798 | .015030 |
| 1.235 1.235 | .732 .766 | . 005010 .010020 | 1.244 1.244 | .782 .793 | .070090 . 005010 | 1.247 1.247 | .937 .978 | .016025 .050070 | 1.249 1.249 | .660 .663 | .020040 .060080 | 1.250 1.250 | .382 .383 | .100134 .030050 | 1.250 1.250 | .803 .808 | .080100 .010020 |
| 1.235 | .802 | .005010 | 1.244 | .801 | .025040 | 1.247 | .992 | .062083 | 1.249 | .689 | .050075 | 1.250 | .390 | .005080 | 1.250 | .812 | .010104 |
| 1.235 | .882 | .005020 | 1.244 | .878 | .105135 | 1.247 | 1.011 | .020030 | 1.249 | .690 | .080100 | 1.250 | .406 | .100187 | 1.250 | .828 | .020030 |
| 1.235 | .945 | .010020 | 1.244 | .967 | .080100 | 1.247 | 1.034 | .035050 | 1.249 | .721 | .030050 | 1.250 | .407 | .005050 | 1.250 | .829 | .090120 |
| 1.235 | .962 | .010020 | 1.244 | 1.000 | .025040 | 1.248 | .145 | .050075 | 1.249 | .723 | .010020 | 1.250 | .413 | .100120 | 1.250 | .839 | .120135 |
| 1.236 1.236 | .131 .413 | .005010 .005010 | 1.244 1.244 | 1.018 1.178 | .070090 . 005010 | 1.248 | .147 | .030040 | 1.249 | .756 | .036060 | 1.250 1.250 | .436 .437 | .100125 .010020 | 1.250 1.250 | .843 .845 | . 005030 .050080 |
| 1.236 | .500 | .005010 | 1.245 | .205 | .005075 | 1.248 1.248 | .178 .202 | .100125 .050070 | 1.249 1.249 | . 758 .797 | .005010 .030050 | 1.250 | .440 | .040125 | 1.250 | .855 | .040060 |
| 1.236 | .501 | .090110 | 1.245 | .315 | .156187 | 1.248 | .255 | .005010 | 1.249 | .800 | .030050 | 1.250 | .441 | .005012 | 1.250 | .875 | .120135 |
| 1.236 | .635 | .005010 | 1.245 | .340 | .005010 | 1.248 | .262 | .005010 | 1.249 | .812 | .050070 | 1.250 | .442 | .040060 | 1.250 | .876 | .030050 |
| 1.236 | .967 | .020040 | 1.245 | .501 | .100125 | 1.248 | .263 | .050075 | 1.249 | .850 | .015030 | 1.250 | .443 | .105135 | 1.250 | .878 | .040060 |
| 1.236 | 1.122 | .005010 | 1.245 | .527 | .005010 | 1.248 | .325 | .030050 | 1.249 | .905 | .015030 | 1.250 | .445 | .100134 | 1.250 | .879 | .050070 |
| 1.237 1.238 | .867 .326 | .030050 .040060 | 1.245 1.245 | .528 .550 | .050070 .015035 | 1.248 1.248 | .333 .344 | .050070 .042060 | 1.249 1.249 | . 920 .925 | . 005010 .105125 | 1.250 1.250 | .455 .480 | .040060 | 1.250 1.250 | .880 .882 | . 005030 .090125 |
| 1.238 | .640 | .070090 | 1.245 | .560 | .005010 | 1.248 | .354 | .100125 | 1.249 1.249 | .925 | .005010 | 1.250 | .500 | .005062 | 1.250 | .887 | .005010 |
| 1.238 | .890 | .070090 | 1.245 | .565 | .050083 | 1.248 | .375 | .005010 | 1.249 | .961 | .007015 | 1.250 | .501 | .070090 | 1.250 | .888 | .012025 |
| 1.239 | .718 | .005010 | 1.245 | .595 | .080100 | 1.248 | .377 | .020040 | 1.249 | 1.001 | .030050 | 1.250 | .503 | .005020 | 1.250 | .889 | .060090 |
| 1.239 | .779 | .020030 | 1.245 | .631 | .015025 | 1.248 | .378 | .042062 | 1.249 | 1.027 | .030050 | 1.250 | .504 | .006015 | 1.250 | .890 | .005090 |
| 1.239 | .879 | .062083 | 1.245 | .636 | .050070 | 1.248 | .453 | .005010 | 1.249 | 1.037 | .025040 | 1.250 | .505 507 | .005020 | 1.250 | .893 | .015030 |
| 1.239 1.239 | .885 .950 | .020030 .010020 | 1.245 1.245 | .741 .754 | .015025 .050075 | 1.248 1.248 | .455 .471 | .090120 .005010 | 1.249 1.249 | 1.100 1.110 | .075090 .010020 | 1.250 1.250 | .507 .508 | . 005010 .015062 | 1.250 1.250 | .895 .902 | .025070 . 005010 |
| 1.239 | .962 | .020060 | 1.245 | .756 | .010020 | 1.248 | .500 | .135187 | 1.249 | 1.110 1.134 | .010020 | 1.250 | .510 | .090120 | 1.250 | .902 | .040060 |
| 1.239 | 1.043 | .015030 | 1.245 | .758 | .040060 | 1.248 | .505 | .005020 | | 1.156 | .015030 | 1.250 | .520 | .020060 | 1.250 | .937 | .100125 |
| 1.240 | .065 | .030040 | 1.245 | .760 | .060080 | 1.248 | .508 | .105125 | | | | 1.250 | .534 | .036090 | 1.250 | .939 | .100125 |
| 1.240 | .127 | .090105 | 1.245 | .768 | .015025 | 1.248 | .510 | .005010 | | | | 1.250 | .540 | .005125 | 1.250 | .953 | .015083 |
| 1.240 | .172 | .010020 | 1.245 | .773 | .005010 | 1.248 | .517 | .005125 | | | | 1.250 | .562 | .050125 | 1.250 | .962 | .015020 |
| 1.240 1.240 | .323 | .062083 | 1.245 1.245 | .788 .836 | .025040 .030050 | 1.248 1.248 | .532 .535 | .005010 .005010 | | | | 1.250 1.250 | . 563 .564 | . 005030 .104134 | 1.250 1.250 | .986 .990 | .090105 .030040 |
| 1.240 | .380 | .030048 | 1.245 | .880 | .030030 | 1.248 | .550 | .050070 | 4 | | | 1.250 | .571 | .040060 | 1.250 | .995 | .060080 |
| 1.240 | .451 | .015030 | 1.245 | .887 | .050070 | 1.248 | .559 | .156187 | | | 50 | 1.250 | .572 | .040050 | 1.250 | 1.000 | .093125 |
| 1.240 | .484 | .070090 | 1.245 | .921 | .030050 | 1.248 | .627 | .010020 | | | | 1.250 | .580 | .135156 | 1.250 | 1.007 | .042062 |
| 1.240 | .560 | .075105 | 1.245 | .945 | .005020 | 1.248 | .651 | .090105 | | | | 1.250 | .586 | .015030 | 1.250 | 1.010 | .010020 |
| 1.240 | .635 | .030040 | 1.245 | .947 | .080104 | 1.248 | .656 | .005010 | 1.250 | .082 | .025040 | 1.250 | .595 | .015135 | 1.250 | 1.011 | .005010 |
| 1.240 1.240 | .697 .710 | .030072 .040060 | 1.245 1.245 | .948 .990 | .070090 .100125 | 1.248 1.248 | .689 .695 | .050070 .005010 | 1.250 1.250 | .125 .127 | .050075 .031048 | 1.250 1.250 | .625 .630 | .020125 .050100 | 1.250 1.250 | 1.012 1.017 | .050070 .060083 |
| 1.240 | .749 | .010020 | 1.245 | 1.010 | .020105 | 1.248 | .723 | .005010 | 1.250 | .140 | .020125 | 1.250 | .636 | .005010 | 1.250 | 1.020 | .100120 |
| 1.240 | .812 | .025040 | 1.245 | 1.107 | .010020 | 1.248 | .742 | .100125 | 1.250 | .148 | .008016 | 1.250 | .637 | .005010 | 1.250 | 1.033 | .005010 |
| | | | NACH DC | | | | | | | | | | | | _ | | |

| Choose Any Incheres Choose Any Incheres | O.D. 1.291 1.291 1.292 1.292 1.293 1.293 1.294 1.294 1.295 1.295 1.295 | 1.D. .966 1.180 1.000 1.121 1.132 .378 1.200 1.058 1.135 | Choose Any Thickness* From To .020040 .005010 .005010 .010020 .060080 .005010 .005010 |
|---|--|---|--|
| 1.250 1.036 .080105 1.252 .630 .105125 1.258 .478 .005010 1.265 1.000 .060075 1.280 .893 .005010 1.250 1.051 .010020 1.252 .633 .050075 1.258 .538 .010020 1.265 1.206 .005010 1.280 .915 .007012 1.250 1.058 .072093 1.252 .640 .008016 1.258 .632 .015030 1.266 .668 .070090 1.280 .100 .060090 1.250 1.061 .025040 1.252 .753 .005010 1.258 .677 .030050 1.266 .680 .050070 1.280 1.017 .025040 1.250 1.115 .010020 1.252 .755 .005010 1.258 .686 .005010 1.266 .661 .055010 1.280 1.020 1.251 .1252 .765 .005010 1 | 1.291 1.292 1.292 1.293 1.293 1.293 1.294 1.294 1.295 1.295 | 1.180 1.000 1.121 1.132 .378 1.200 1.058 1.135 | .005010 .005010 .010020 .060080 .005010 |
| 1.250 1.051 .010020 1.252 .633 .050075 1.258 .538 .010020 1.265 1.206 .005010 1.280 .915 .007012 1.250 1.058 .072093 1.252 .640 .008016 1.258 .632 .015030 1.266 .668 .070090 1.280 .100 .060090 1.250 1.061 .025040 1.252 .753 .005010 1.258 .677 .030050 1.266 .680 .050070 1.280 1.017 .025040 1.250 1.115 .010020 1.252 .753 .005010 1.258 .686 .005010 1.266 .680 .050070 1.280 1.017 .025040 1.250 1.115 .010020 1.252 .755 .005010 1.258 .686 .005010 1.266 .761 .005010 1.280 1.020 1.250 1.125 .040 .055010 1 | 1.292 1.292 1.293 1.293 1.294 1.294 1.295 1.295 | 1.000 1.121 1.132 .378 1.200 1.058 1.135 | .005010 .010020 .060080 .005010 |
| 1.250 1.058 .072093 1.252 .640 .008016 1.258 .632 .015030 1.266 .668 .070090 1.280 1.000 .060090 1.250 1.061 .025040 1.252 .753 .005010 1.258 .677 .030050 1.266 .680 .050070 1.280 1.017 .025040 1.250 1.115 .010020 1.252 .755 .005010 1.258 .686 .005010 1.266 .761 .005010 1.280 1.020 .070090 1.250 1.123 .025040 1.252 .765 .005010 1.258 .722 .030050 1.266 .779 .050075 1.280 1.010020 1.250 1.140 .015025 1.252 .779 .005015 1.258 .984 .010015 1.266 .791 .005010 1.280 1.041 .040050 1.250 1.145 .020040 1.252 | 1.292 1.293 1.293 1.294 1.294 1.295 1.295 1.295 | 1.121 1.132 .378 1.200 1.058 1.135 | .010020 .060080 .005010 |
| 1.250 1.061 .025040 1.252 .753 .005010 1.258 .677 .030050 1.266 .680 .050070 1.280 1.017 .025040 1.250 1.115 .010020 1.252 .755 .005010 1.258 .686 .005010 1.266 .761 .005010 1.280 1.020 .070090 1.250 1.123 .025040 1.252 .765 .005010 1.258 .722 .030050 1.266 .779 .050075 1.280 1.017 .025040 1.250 1.140 .015025 1.252 .779 .005015 1.258 .984 .010015 1.266 .791 .005010 1.280 1.041 .040050 1.250 1.145 .020040 1.252 .789 .050075 1.258 1.004 .015030 1.266 .791 .005010 1.280 1.041 .040050 1.250 1.145 .020040 | 1.292 1.293 1.293 1.294 1.294 1.295 1.295 1.295 | .378 1.200 1.058 1.135 | .060080 .005010 |
| 1.250 1.123 .025040 1.252 .765 .005010 1.258 .722 .030050 1.266 .779 .050075 1.280 1.031 .010020 1.250 1.140 .015025 1.252 .779 .005015 1.258 .984 .010015 1.266 .791 .005010 1.280 1.041 .040050 1.250 1.145 .020040 1.252 .789 .050075 1.258 1.004 .015030 1.266 1.047 .060080 1.280 1.045 .040060 1.250 1.167 .010025 1.252 .790 .050075 1.258 1.129 .010015 1.267 .624 .016032 1.280 1.066 .010060 | 1.293 1.294 1.294 1.295 1.295 1.295 | 1.200 1.058 1.135 | |
| 1.250 1.140 .015025 1.252 .779 .005015 1.258 .984 .010015 1.266 .791 .005010 1.280 1.041 .040050 1.250 1.145 .020040 1.252 .789 .050075 1.258 1.004 .015030 1.266 1.047 .060080 1.280 1.045 .040060 1.250 1.167 .010025 1.252 .790 .050075 1.258 1.129 .010015 1.267 .624 .016032 1.280 1.066 .010060 | 1.294 1.294 1.295 1.295 1.295 | 1.058 1.135 | .005010 |
| 1.250 1.145 .020040 1.252 .789 .050075 1.258 1.004 .015030 1.266 1.047 .060080 1.280 1.045 .040060 1.250 1.167 .010025 1.252 .790 .050075 1.258 1.129 .010015 1.267 .624 .016032 1.280 1.066 .010060 | 1.294 1.295 1.295 1.295 | 1.135 | .100120 |
| 1.250 1.167 .010025 1.252 .790 .050075 1.258 1.129 .010015 1.267 .624 .016032 1.280 1.066 .010060 | 1.295 1.295 1.295 | | .010020 |
| 1.250 1.180 .005015 1.252 .797 .010020 1.259 .232 .020040 1.267 .798 .075100 1.280 1.070 .050070 | 1.295 | .377 | .010020 |
| | | .511 | .135156 |
| 1.250 1.181 .005015 1.252 .882 .008016 1.259 .239 .005010 1.267 1.049 .075090 1.280 1.074 .030050 1.250 1.187 .005010 1.252 .932 .100125 1.259 .316 .015030 1.267 1.120 .020040 1.280 1.139 .020040 | | .588 .881 | .040060 .010020 |
| 1.251 .131 .050070 1.252 .961 .007040 1.259 .395 .010020 1.268 .711 .080100 1.280 1.140 .020040 | 1.295 | .901 | .060080 |
| 1.251 .132 .070090 1.252 .998 .008016 1.259 .425 .156187 1.268 .918 .080104 1.281 .248 .060090 | 1.295 | 1.015 | .050075 |
| 1.251 | 1.295 1.295 | 1.141 1.170 | .005010 .005010 |
| 1.251 | 1.295 | 1.228 | .010020 |
| 1.251 .312 .090105 | 1.297 | .247 | .050083 |
| 1.251 .330 .156190 1.252 1.030 .020040 1.259 .679 .070090 1.269 .980 .025040 1.281 .550 .156187 | 1.297 | .736 | .005010 |
| 1.251 .332 .105125 1.252 1.037 .050070 1.259 .748 .005010 1.269 1.004 .005010 1.281 .608 .020030 1.251 .335 .020040 1.252 1.040 .005010 1.259 .882 .010020 1.270 .166 .050075 1.281 .891 .080100 | 1.297 1.297 | .825 .845 | .010020 .050070 |
| 1.251 .378 .005010 1.252 1.092 .010020 1.259 .082 .010020 1.270 .166 .030075 1.281 .081 .000060 1.281 .892 .040060 | 1.297 | .852 | .010020 |
| 1.251 .384 .170190 1.252 1.107 .005010 1.259 .991 .005010 1.270 .527 .156187 1.281 1.012 .015030 | 1.297 | .945 | .062090 |
| 1.251 .401 .015030 1.252 1.122 .005010 1.259 1.020 .025040 1.270 .700 .040060 1.282 .103 .005010 | 1.297 | 1.058 1.150 | .090105 |
| 1.251 .410 .015031 1.252 1.125 .010030 1.259 1.024 .015020 1.270 .793 .100125 1.282 .248 .060075 1.251 .417 .135160 1.252 1.127 .005010 1.259 1.114 .005010 1.270 .976 .040060 1.282 .310 .075090 | 1.297 1.297 | 1.150 | .020040 .020050 |
| 1.251 .440 .040060 1.253 .390 .100120 1.259 1.181 .030050 1.271 .886 .005010 1.282 .408 .005010 | 1.298 | .220 | .060080 |
| 1.251 .471 .045060 1.253 .410 .060080 1.260 .237 .005010 1.271 .940 .006012 1.282 .409 .005010 | 1.298 | .275 | .050075 |
| 1.251 .480 .030050 1.253 .573 .030050 1.260 .301 .100125 1.271 1.005 .025040 1.282 .580 .010020 1.251 .482 .160190 1.253 .633 .060080 1.260 .319 .005010 1.271 1.080 .020035 1.282 .942 .010020 | 1.298 1.298 | <u>.395</u> .441 | .010020 |
| 1.251 .500 .005010 1.253 .656 .015030 1.260 .398 .005020 1.272 .525 .050070 1.282 1.020 .005010 | 1.298 | .479 | .105125 |
| 1.251 .531 .156187 1.253 .766 .156187 1.260 .440 .005010 1.272 .643 .090120 1.282 1.043 .030050 | 1.298 | .496 | .030050 |
| 1.251 .551 .015030 1.253 .768 .030050 1.260 .449 .010020 1.272 .800 .040060 1.282 1.066 .040060 | 1.298 | .504 | .090110 |
| 1.251 .559 .105125 1.253 .780 .156187 1.260 .474 .005010 1.273 .780 .080105 1.282 1.162 .010020 1.251 .561 .060120 1.253 .782 .008020 1.260 .475 .005010 1.273 .907 .030050 1.282 1.164 .010020 | 1.298 1.298 | .630 .640 | .005010 |
| 1.251 .574 .010020 1.253 .886 .050070 1.260 .477 .005010 1.273 .920 .020030 1.283 .104 .005010 | 1.298 | .880 | .070090 |
| 1.251 .579 .100125 1.253 .914 .020030 1.260 .501 .005030 1.274 .711 .030050 1.283 .375 .020035 | 1.298 | .906 | .015025 |
| 1.251 .640 .005010 1.253 1.000 .025040 1.260 .503 .100125 1.274 .938 .015025 1.283 .409 .010020 1.251 .658 .040062 1.253 1.025 .030050 1.260 .505 .005020 1.274 .969 .080105 1.283 .650 .080090 | 1.299 1.299 | .140 .245 | .020040 .005010 |
| 1.251 .669 .050070 1.253 1.110 .010020 1.260 .553 .010020 1.274 1.125 .005010 1.283 .671 .015025 | 1.299 | .253 | .030040 |
| 1.251 .692 .090110 1.253 1.123 .005010 1.260 .630 .005010 1.275 .255 .015030 1.283 .890 .015030 | 1.299 | .385 | .005010 |
| 1.251 .695 .025040 1.254 .516 .048075 1.260 .632 .005010 1.275 .297 .025042 1.283 1.126 .040060 | 1.299 | .395 | .005020 |
| 1.251 .725 .020040 1.254 .542 .010020 1.260 .682 .060080 1.275 .313 .060090 1.283 1.167 .005010 1.251 .752 .020030 1.254 .630 .050070 1.260 .683 .060080 1.275 .409 .050070 1.284 .192 .050070 | 1.299 1.299 | .396 .471 | .005010 .030050 |
| 1.251 .755 .015030 1.254 .748 .040060 1.260 .750 .062120 1.275 .410 .025042 1.284 .324 .080104 | 1.299 | .473 | .005010 |
| 1.251 .759 .105135 | 1.299 | .553 | .005015 |
| 1.251 .814 .075100 1.254 .766 .134156 1.260 .984 .025040 1.275 .500 .075090 1.284 1.019 .010020 1.251 .834 .005010 1.254 .840 .050075 1.260 1.002 .080100 1.275 .672 .025042 1.284 1.089 .015030 | 1.299 1.299 | .626 .812 | .010020 .025040 |
| 1.251 .874 .050075 1.254 1.069 .020040 1.260 1.050 .015025 1.275 .797 .025042 1.284 1.208 .005010 | 1.299 | .922 | .040060 |
| 1.251 .879 .005010 1.254 1.083 .030050 1.260 1.055 .010015 1.275 .980 .020040 1.285 .409 .120135 | 1.299 | .958 | .050070 |
| 1.251 .907 .040062 1.254 | 1.299 | .960 | .005010 |
| 1.251 .928 .025040 1.255 .501 .060080 1.260 1.130 .010020 1.275 1.045 .025042 1.286 .251 .060090 1.251 .942 .090105 1.255 .656 .010120 1.261 .126 .010012 1.275 1.060 .005008 1.286 .509 .156187 | 1.299 1.299 | 1.019 1.030 | .025042 .016025 |
| 1.251 .984 .010020 1.255 .664 .090105 1.261 .195 .005010 1.275 1.092 .005010 1.286 .809 .005010 | 1.299 | 1.068 | .005010 |
| 1.251 .999 .005010 | 1.300 | .147 | .080104 |
| 1.251 1.003 .005010 1.255 .843 .135187 1.261 .316 .090125 1.276 .821 .050070 1.286 .918 .010020 1.251 1.005 .090105 1.255 .845 .005010 1.261 .414 .005010 1.277 .657 .083105 1.287 .178 .050083 | 1.300 1.300 | .298 .312 | .020030 .005010 |
| 1.251 1.050 .005010 1.255 .872 .030050 1.261 .505 .070090 1.277 .964 .020030 1.287 .251 .060090 | 1.300 | .316 | .105125 |
| 1.251 1.081 .070090 1.255 .960 .040060 1.261 .509 .105125 1.277 1.059 .050070 1.287 .254 .050062 | 1.300 | .318 | .005010 |
| 1.251 1.082 .020040 1.255 1.031 .020030 1.261 .632 .005010 1.278 .250 .005015 1.287 .264 .010020 1.251 1.099 .010020 1.255 1.079 .020030 1.261 1.004 .070090 1.278 .500 .100125 1.287 1.142 .005010 | 1.300 | .368 | .025040 |
| 1.251 1.099 .010020 1.255 1.079 .020030 1.261 1.004 .070090 1.278 .500 .100125 1.287 1.142 .005010 1.251 1.110 .020030 1.256 .139 .050083 1.261 1.016 .005010 1.278 .529 .100125 1.288 .614 .050070 | 1.300 1.300 | .377 .378 | .005020 .005020 |
| 1.252 .268 .030050 1.256 .329 .075100 1.261 1.063 .030042 1.278 .571 .005010 1.288 .761 .030050 | 1.300 | .382 | .010020 |
| 1.252 .280 .105135 | 1.300 | .383 | .020030 |
| 1.252 .316 .025070 1.256 .519 .100125 1.262 .295 .020040 1.278 .821 .030050 1.288 1.023 .015030 1.252 .317 .135156 1.256 .613 .015030 1.262 .535 .005010 1.278 .924 .005010 1.288 1.111 .020035 | 1.300 1.300 | .394 .397 | . 005020 .010020 |
| 1.252 .319 .050070 1.256 .941 .125156 1.262 .951 .030050 1.279 .438 .005010 1.288 1.113 .075090 | 1.300 | .437 | .005010 |
| 1.252 .329 .048062 1.256 | 1.300 | .438 | .010020 |
| 1.252 .343 .156190 1.257 .605 .005010 1.263 1.075 .090105 1.280 .155 .005015 1.288 1.150 .015030 | 1.300 | .440 | .005020 |
| 1.252 .376 .005020 1.257 .673 .020030 1.263 1.085 .010020 1.280 .170 .100125 1.289 1.113 .075090 1.252 .396 .040060 1.257 .787 .120135 1.263 1.089 .025035 1.280 .221 .070090 1.290 .128 .020030 | 1.300 1.300 | .511 .518 | .010020 .010020 |
| 1.252 .407 .090110 | 1.300 | .558 | .010020 |
| 1.252 .408 .025042 1.257 .941 .125156 1.265 .354 .120134 1.280 .438 .030040 1.290 .264 .005010 | 1.300 | .628 | .020035 |
| 1.252 | 1.300 1.300 | . 629 | .005030 .050075 |
| 1.252 .437 .060075 1.257 1.014 .005010 1.265 .504 .005010 1.280 .530 .015025 1.290 .627 .020030 1.252 .442 .125156 1.257 1.100 .005015 1.265 .533 .100125 1.280 .628 .040060 1.290 .760 .030060 | 1.300 | .635 | .050075 |
| 1.252 .506 .005010 1.257 1.166 .025040 1.265 .866 .080100 1.280 .668 .062120 1.290 .1000 .050070 | 1.300 | .650 | .080105 |
| 1.252 .585 .030050 1.258 .380 .005010 1.265 .875 .040060 1.280 .677 .030050 1.290 1.146 .050060 | 1.300 | .677 | .030050 |
| 1.252 .625 .005010 1.258 .473 .005010 1.265 .930 .010020 1.280 .760 .040060 1.290 1.204 .005010 | 1.300 | .681 | .005010 |

| | | Choose Any | | | Choose Any | | | Choose Any | 110 | 100 | Choose Any | I A I G | | Choose Any | | SIZES | Choose Any |
|-----------------------|-----------------------|----------------------------|-----------------------|----------------------|----------------------------|-----------------------|-----------------------|---------------------------|-----------------------|---------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|
| O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* To | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* From To | O.D. | I.D. | Thickness* From To |
| 1.300 | .755 | .010030 | 1.310 | .205 | .040060 | 1.312 | 1.000 | .010020 | 1.320 | 1.000 | .090125 | 1.335 | .906 | .020030 | 1.344 | .376 | .100120 |
| 1.300 | .812 | .015030 | 1.310 | .231 | .080100 | 1.312 | 1.001 | .080105 | 1.320 | 1.130 | .040050 | 1.335 | 1.106 | .062080 | 1.344 | .752 | .100125 |
| 1.300 1.300 | .900 .905 | .060080 .030050 | 1.310 1.310 | .379 .385 | . 005010 .170190 | 1.312 1.312 | 1.008 1.027 | .050125 .005010 | 1.321 1.321 | .780 .804 | .050070 .005010 | 1.335 1.335 | 1.131 1.134 | .050075 . 005010 | 1.344 1.344 | .812 1.000 | .040062 .015030 |
| 1.300 | .960 | .062083 | 1.310 | .407 | .090120 | 1.312 | 1.027 | .080105 | 1.321 | .758 | .080104 | 1.335 | 1.004 | .005010 | 1.344 | 1.000 | .050075 |
| 1.300 | .962 | .010020 | 1.310 | .416 | .110130 | 1.312 | 1.190 | .015025 | 1.322 | 1.175 | .040060 | 1.336 | 1.006 | .030050 | 1.344 | 1.050 | .005010 |
| 1.300 | .963 | .020060 | 1.310 | .505 | .010020 | 1.313 | .268 | .035050 | 1.323 | .212 | .005010 | 1.336 | 1.038 | .080100 | 1.344 | 1.068 | .015030 |
| 1.300 | .980 | .100125 | 1.310 | .510 | .012020 | 1.313 | .375 | .100125 | 1.323 | .244 | .020040 | 1.336 | 1.131 | .040062 | 1.345 | .408 | .005010 |
| 1.300 | .988 | .005015 | 1.310 | .516 .529 | .040060 | 1.313 | .456 | .005010 | 1.323 | .351 | .005015 | 1.337 | .319 | .005010 | 1.345 | .818 | .050070 |
| 1.300 | .996 1.006 | .050070 | 1.310 | .619 | .040060 | 1.313 1.313 | . 563 | .005030 .090100 | 1.323 1.323 | <u>.394</u> .551 | .015030 .050070 | 1.337 1.337 | . 396 .440 | .005010 .042062 | 1.345 1.345 | .836 .907 | .005010 .060090 |
| 1.300 | 1.012 | .005015 | 1.310 | .711 | .015030 | 1.313 | .657 | .050075 | 1.323 | .640 | .060075 | 1.337 | .475 | .005010 | 1.345 | .967 | .100125 |
| 1.300 | 1.020 | .035050 | 1.310 | .751 | .100120 | 1.313 | .660 | .090125 | 1.323 | .666 | .100125 | 1.337 | .500 | .100125 | 1.345 | 1.001 | .010020 |
| 1.300 | 1.060 | .006016 | 1.310 | .753 | .105125 | 1.313 | .687 | .105125 | 1.323 | 1.001 | .015030 | 1.337 | .502 | .005020 | 1.345 | 1.039 | .025040 |
| 1.300 | 1.062 | .070090 | 1.310 | .768 | .040060 | 1.313 | .751 | .025040 | 1.323 | 1.063 | .050070 | 1.337 | .747 | .025040 | 1.345 | 1.040 | .015030 |
| 1.300 1.300 | 1.136 1.182 | .030040 . 005010 | 1.310 1.310 | .770 .812 | .005010 .030042 | 1.313 1.313 | .759 .874 | .080100 .020040 | 1.324 1.324 | .320 .529 | .010020 .105135 | 1.337 1.337 | .748 .856 | .010020 .010020 | 1.345 1.345 | 1.173 1.174 | .015030 .015025 |
| 1.301 | .377 | .015030 | 1.310 | .878 | .015030 | 1.313 | .951 | .070090 | 1.324 | .687 | .005030 | 1.337 | .884 | .005010 | 1.346 | .201 | .060080 |
| 1.301 | .504 | .005020 | 1.310 | .944 | .005010 | 1.313 | 1.015 | .060083 | 1.324 | .808 | .105125 | 1.337 | .945 | .060080 | 1.346 | .443 | .005025 |
| 1.301 | .698 | .005010 | 1.310 | 1.006 | .005010 | 1.313 | 1.063 | .040060 | 1.324 | 1.001 | .020040 | 1.337 | .984 | .005040 | 1.347 | .441 | .005010 |
| 1.301 | .756 | .018025 | 1.310 | 1.049 | .005010 | 1.313 | 1.118 | .015035 | 1.325 | .125 | .010020 | 1.337 | 1.001 | .070090 | 1.347 | .500 | .005010 |
| 1.301 1.301 | .820 .901 | .040060 .080110 | 1.310 1.311 | 1.130 .189 | .005015 .040060 | 1.313 1.313 | 1.148 1.164 | .020030 .025040 | 1.325 1.325 | .139 .141 | .040060 .010020 | 1.337 1.338 | 1.094 .320 | .005010 .005010 | 1.347 1.347 | .502 1.075 | . 005010 .015030 |
| 1.301 | .945 | .080110 | 1.311 | .202 | .020040 | 1.313 | .268 | .025040 | 1.325 | .141 | .010020 | 1.338 | .394 | .010020 | 1.347 | 1.140 | .015030 |
| 1.301 | .962 | .105125 | 1.311 | .261 | .020040 | 1.314 | .341 | .060080 | 1.325 | .171 | .005015 | 1.338 | .396 | .010020 | 1.348 | .441 | .005010 |
| 1.301 | 1.068 | .030050 | 1.311 | .335 | .080100 | 1.314 | .392 | .040060 | 1.325 | .172 | .010020 | 1.338 | .473 | .005010 | 1.348 | .500 | .005015 |
| 1.302 | .441 | .100125 | 1.311 | .380 | .030050 | 1.314 | .439 | .050075 | 1.325 | .204 | .010020 | 1.338 | .475 | .010020 | 1.348 | .504 | .006012 |
| 1.302 1.302 | .477 .628 | .050070 .100125 | 1.311 | .389 .500 | .025040 .025040 | 1.314 | .441 | .105135 | 1.325 | .218 | .010020 | 1.338 1.338 | .477 .505 | .005010 .005020 | 1.348 1.348 | .566 .677 | .080100 .030050 |
| 1.302 | .628 .774 | .060090 | 1.311 1.311 | .500 | .025040 | 1.314 1.314 | .522 .593 | .015030 .015030 | 1.325 1.325 | .251 .270 | .010020 .010020 | 1.338 | .552 | .005020 | 1.348 1.348 | .677 | .030050 .005010 |
| 1.302 | .787 | .100125 | 1.311 | .593 | .075090 | 1.314 | .626 | .100125 | 1.325 | .281 | .040060 | 1.338 | .582 | .005010 | 1.348 | .717 | .075090 |
| 1.302 | 1.007 | .012020 | 1.311 | .635 | .005010 | 1.314 | .673 | .015025 | 1.325 | .295 | .080104 | 1.338 | .751 | .100134 | 1.348 | .818 | .005015 |
| 1.302 | 1.200 | .005010 | 1.311 | .655 | .090110 | 1.314 | .827 | .010020 | 1.325 | .301 | .012025 | 1.338 | .867 | .020030 | 1.348 | 1.095 | .010025 |
| 1.303 1.303 | .194 .504 | .005010 .005010 | 1.311 | .676 | .005010 | 1.314 | .969 | .040060 | 1.325 | .350 | .010020 | 1.338 1.338 | .937 .983 | .025040 .010020 | 1.348 | 1.145 | .010025 |
| 1.303 | .734 | .020030 | 1.311 1.311 | .688 . 858 | .156187 .005010 | 1.314 1.314 | 1.062 1.090 | .006016 .042062 | 1.325 1.325 | <u>.381</u> .410 | .010020 .010015 | 1.338 | 1.121 | .020030 | 1.349 1.349 | .471 .501 | .040060 .005010 |
| 1.303 | .899 | .040060 | 1.311 | .875 | .020040 | 1.315 | .177 | .005010 | 1.325 | .440 | .010134 | 1.339 | .272 | .015030 | 1.349 | .503 | .005020 |
| 1.304 | .470 | .075125 | 1.311 | .884 | .050135 | 1.315 | .253 | .080104 | 1.325 | .500 | .010015 | 1.339 | .316 | .005010 | 1.349 | .504 | .005010 |
| 1.304 | .504 | .090120 | 1.311 | .890 | .030050 | 1.315 | .522 | .010020 | 1.325 | .600 | .010015 | 1.339 | .474 | .005010 | 1.349 | .593 | .060080 |
| 1.304 | .080 | .005016 | 1.311 | .947 | .020040 | 1.315 | .560 | .005010 | 1.325 | .640 | .010015 | 1.339 | .640 . 762 | .100125 | 1.349 1.349 | .749 .984 | .050070 |
| 1.305 1.305 | .514 | .005008 .100120 | 1.311 1.311 | .995 1.001 | .030050 .005010 | 1.315 1.315 | .626 .923 | .100125 .020030 | 1.325 1.325 | .700 .750 | .010015 .010015 | 1.339 1.339 | .828 | . 005010 .105125 | 1.350 | .089 | .050070 .005010 |
| 1.305 | .705 | .062120 | 1.311 | 1.005 | .030048 | 1.315 | 1.177 | .005010 | 1.325 | .810 | .010013 | 1.339 | .983 | .005010 | 1.350 | .090 | .025040 |
| 1.305 | .734 | .020030 | 1.311 | 1.009 | .030040 | 1.316 | .655 | .005010 | 1.325 | .900 | .050075 | 1.339 | 1.181 | .005010 | 1.350 | .252 | .015125 |
| 1.305 | .803 | .040060 | 1.311 | 1.190 | .005010 | 1.316 | .745 | .080100 | 1.325 | .920 | .010015 | 1.339 | 1.202 | .005010 | 1.350 | .314 | .005020 |
| 1.305 | .825 | .040060 | 1.312 | .197 | .025040 | 1.316 | .881 | .020040 | 1.325 | 1.055 | .080104 | 1.339 | 1.205 .250 | .005010 .062120 | 1.350 | .441 | .010020 |
| 1.305 1.305 | .826 .942 | .100125 .020040 | 1.312 1.312 | .234 .251 | .050075 .050070 | 1.316 1.316 | .885 .940 | .025050 .010015 | 1.325 1.326 | 1.179 .314 | .080100 .025040 | 1.340 1.340 | .260 | .002120 | 1.350 1.350 | .457 .500 | .005010 .005020 |
| 1.305 | 1.006 | .015030 | 1.312 | .314 | .075090 | 1.316 | .978 | .042060 | 1.326 | .570 | .015070 | 1.340 | .261 | .005010 | 1.350 | .503 | .005025 |
| 1.305 | 1.011 | .005010 | 1.312 | .320 | .030050 | 1.317 | .502 | .030050 | 1.326 | .751 | .010020 | 1.340 | .284 | .015030 | 1.350 | .504 | .006020 |
| 1.306 | .758 | .040060 | 1.312 | .374 | .020040 | 1.317 | .744 | .005010 | 1.326 | 1.022 | .005010 | 1.340 | .288 | .040060 | 1.350 | .505 | .006015 |
| 1.306 | .970 | .015025 | 1.312 | .377 | .020030 | 1.317 | 1.051 | .010020 | 1.327 | .680 | .030050 | 1.340 | .289 | .005010 | 1.350 | .508 | .005010 |
| 1.306 1.306 | .996 1.007 | .007015 .050090 | 1.312 1.312 | .392 .505 | .030060 .010015 | 1.317 1.317 | 1.115 1.198 | .080100 .020035 | 1.328 1.328 | .126 .415 | .016025 .156187 | 1.340 1.340 | .630 .632 | .020040 .010020 | 1.350 1.350 | .562 .564 | . 005010 .010020 |
| 1.306 | 1.070 | .015030 | 1.312 | .507 | .042062 | 1.317 | 1.250 | .020032 | 1.328 | 1.020 | .025040 | 1.340 | .677 | .042072 | 1.350 | .626 | .005020 |
| 1.306 | 1.167 | .005010 | 1.312 | .553 | .005010 | 1.318 | .180 | .005010 | 1.329 | .175 | .050083 | 1.340 | .751 | .045060 | 1.350 | .634 | .020040 |
| 1.306 | 1.184 | .005010 | 1.312 | .563 | .005010 | 1.318 | .746 | .050075 | 1.329 | .791 | .105125 | 1.340 | .766 | .042062 | 1.350 | .669 | .090110 |
| 1.307 | .502 | .010020 | 1.312 | .564 | .020040 | 1.318 | 1.005 | .040125 | 1.329 | .900 | .050075 | 1.340 | 1.004 | .042060 | 1.350 | . 675 | .005010 |
| 1.307 1.307 | .655 1.068 | . 005010 .075090 | 1.312 1.312 | .565 .566 | .090110 .005010 | 1.319 1.319 | .387 .715 | .090125 .005010 | 1.329 1.329 | .990 1.001 | .105134 .080100 | 1.340 1.340 | 1.034 1.104 | . 005010 .070080 | 1.350 1.350 | .700 .750 | .030060 .005030 |
| 1.308 | .125 | .040062 | 1.312 | .594 | .075090 | 1.319 | .716 | .005010 | 1.329 | 1.174 | .060070 | 1.340 | 1.118 | .050083 | 1.350 | .751 | .005010 |
| 1.308 | .220 | .050070 | 1.312 | .625 | .100125 | 1.319 | .851 | .040060 | 1.329 | 1.180 | .005010 | 1.340 | 1.143 | .005020 | 1.350 | .760 | .005040 |
| 1.308 | .251 | .005010 | 1.312 | .634 | .040062 | 1.319 | 1.070 | .015030 | 1.329 | 1.190 | .030050 | 1.341 | .479 | .005010 | 1.350 | .777 | .025040 |
| 1.308 | .619 | .005010 | 1.312 | .655 | .015030 | 1.319 | 1.075 | .050070 | 1.330 | .328 | .005010 | 1.341 | .537 | .105135 | 1.350 | .779 | .040060 |
| 1.308 | .751 .762 | .050075 | 1.312 1.312 | .687 .703 | .025035 .100125 | 1.319 | 1.104 1.130 | .030040 .005010 | 1.330 1.330 | .391 .744 | .156190 .030060 | 1.341 | .871 .893 | .010020 .040060 | 1.350 1.350 | .819 .905 | .050070 .050070 |
| 1.309 | .762 | .105125 | 1.312 | .703 | .050070 | 1.319 1.320 | .183 | .005010 | 1.330 | .744 .851 | .030060 | 1.341 | .380 | .120156 | 1.350 | .910 | .050070 |
| 1.309 | .377 | .005015 | 1.312 | .748 | .050062 | 1.320 | .210 | .005010 | 1.330 | .910 | .025040 | 1.342 | .457 | .100125 | 1.350 | .977 | .036048 |
| 1.309 | .392 | .030048 | 1.312 | .755 | .105125 | 1.320 | .318 | .105125 | 1.330 | 1.100 | .030050 | 1.342 | .876 | .125156 | 1.350 | .978 | .010020 |
| 1.309 | .607 | .025040 | 1.312 | .765 | .090120 | 1.320 | .476 | .010020 | 1.331 | .635 | .070090 | 1.342 | .922 | .040060 | 1.350 | 1.000 | .050070 |
| 1.309 | .635 | .010020 | 1.312 | .766 | .050075 | 1.320 | .495 | .062135 | 1.331 | .776 | .050070 | 1.342 | 1.015 | .005010 | 1.350 | 1.054 | .012020 |
| 1.309 1.309 | .791 .813 | .005010 .020035 | 1.312 1.312 | .781 .782 | .020125 .060083 | 1.320 1.320 | .715 .753 | .005010 .005010 | 1.331 1.332 | 1.128 .770 | .010020 .125156 | 1.343 1.343 | .630 .871 | .025040 .050075 | 1.350 1.350 | 1.108 1.139 | .050070 .005010 |
| 1.309 | .816 | .020035 | 1.312 | .762 .843 | .005010 | 1.320 | .7 53 .758 | .080104 | 1.332 | .770 | .040060 | 1.343 | .907 | .042062 | 1.350 | 1.209 | .010020 |
| 1.309 | .878 | .060083 | 1.312 | .878 | .060080 | 1.320 | .761 | .015060 | 1.333 | .950 | .005010 | 1.343 | 1.100 | .080105 | 1.351 | .561 | .010030 |
| 1.309 | .883 | .050080 | 1.312 | .890 | .090125 | 1.320 | .765 | .005010 | 1.334 | .325 | .005010 | 1.343 | 1.126 | .030050 | 1.351 | .750 | .020030 |
| 1.309 | 1.000 | .020040 | 1.312 | .892 | .020040 | 1.320 | .849 | .005010 | 1.334 | .886 | .105125 | 1.343 | 1.150 | .072090 | 1.351 | 1.026 | .060080 |
| 1.309 | 1.031 | .100120 | 1.312 | .906 | .062080 | 1.320 | .867 .880 | .005010 | 1.334 | .906 | .060075 | 1.343 | 1.261 | .020040 | 1.351 | 1.049 1.091 | .010020 |
| | 1100 | | | | | | | | | | | | | | | | |
| 1.309 | 1.128 .190 | .030050 .050070 | 1.312 1.312 | .938 .941 | .005010 .030040 | 1.320 1.320 | .931 | .005010 .020035 | 1.335 1.335 | .380 .632 | .020035 .035060 | 1.344 1.344 | .258 .260 | .100135 .060090 | 1.351 1.351 | 1.164 | .025040 .015030 |

| | | | | | | | | BOKEF | 1 3 IVIL | IAL | WASHER | 3 Ani | - 1 - | | OIVIDL | LDL | |
|-----------------------|-----------------------|----------------------------|-----------------------|----------------------|----------------------------|-----------------------|---------------------|----------------------------|-----------------------|-----------------------|---------------------------|-----------------------|-----------------------|----------------------------|-----------------------|---------------------|----------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 1.351 | 1.209 | .010020 | 1.364 | .912 | .080100 | 1 270 | 144 | From To | 1 272 | 200 | From To | 1075 | 010 | From To | 1.375 | 1.146 | .025040 |
| 1.351 | 1.212 | .010020 | 1.364 | 1.002 | .000100 | 1.370 1.370 | .144 .192 | .030050 .030050 | 1.373 1.373 | .380 .409 | .120135 .005010 | 1.375 1.375 | .210 .250 | .100125 .080104 | 1.375 | 1.159 | .025040 |
| 1.351 | 1.253 | .005010 | 1.364 | 1.011 | .030050 | 1.370 | .234 | .100125 | 1.373 | .410 | .100125 | 1.375 | .252 | .040060 | 1.375 | 1.189 | .030050 |
| 1.352 | .776 | .050075 | 1.364 | 1.042 | .080100 | 1.370 | .282 | .080100 | 1.373 | .462 | .020040 | 1.375 | .255 | .040060 | 1.375 | 1.195 | .005025 |
| 1.353 | .988 | .075090 | 1.364 | 1.182 | .005010 | 1.370 | .300 | .075125 | 1.373 | .463 | .015030 | 1.375 | .260 | .015030 | 1.375 | 1.200 | .020032 |
| 1.353 | 1.070 | .050070 | 1.364 | 1.184 | .005010 | 1.370 | .316 | .005010 | 1.373 | .500 | .105135 | 1.375 | .281 | .100125 | 1.375 | 1.201 | .025040 |
| 1.354 | .315 | .020040 | 1.364 | 1.191 | .010020 | 1.370 | .333 | .010020 | 1.373 | .563 | .070090 | 1.375 | .310 | .062080 | 1.375 | 1.251 | .010020 |
| 1.354 | .538 | .005010 | 1.364 | 1.193 | .050070 | 1.370 | .505 | .100125 | 1.373 | .568 | .170190 | 1.375 | .312 | .050083 | 1.375 | 1.253 | .005030 |
| 1.355 1.355 | .263 .501 | .090120 .110130 | 1.364 1.364 | 1.194 1.237 | .030060 .010025 | 1.370 1.370 | .538 .568 | .008016 . 005010 | 1.373 | .570 | .006015 | 1.375 | .316 | .050100 .100125 | 1.375 1.376 | 1.265 .258 | .005010 .005010 |
| 1.355 | .687 | .015025 | 1.364 | 1.252 | .005010 | 1.370 | .685 | .075125 | 1.373 1.373 | <u>.575</u> .625 | .050075 .020190 | 1.375 1.375 | <u>.318</u> .321 | .060080 | 1.376 | .267 | .134187 |
| 1.355 | .746 | .015030 | 1.364 | 1.281 | .005010 | 1.370 | .696 | .015030 | 1.373 | .627 | .010020 | 1.375 | .328 | .025070 | 1.376 | .383 | .005015 |
| 1.355 | .795 | .090105 | 1.364 | 1.282 | .005012 | 1.370 | .698 | .050075 | 1.373 | .639 | .040050 | 1.375 | .343 | .100125 | 1.376 | .406 | .050075 |
| 1.355 | .899 | .050070 | 1.365 | .354 | .060080 | 1.370 | .751 | .080100 | 1.373 | .641 | .125156 | 1.375 | .355 | .070100 | 1.376 | .503 | .090125 |
| 1.355 | 1.010 | .090110 | 1.365 | .435 | .050083 | 1.370 | .793 | .020030 | 1.373 | .749 | .005010 | 1.375 | .373 | .100125 | 1.376 | .513 | .005010 |
| 1.355 | 1.064 | .015030 | 1.365 | .562 | .030050 | 1.370 | .794 | .005010 | 1.373 | .750 | .005010 | 1.375 | .375 | .062120 | 1.376 | .530 | .156187 |
| 1.355 | 1.073 | .005010 | 1.365 | .584 | .030060 | 1.370 | .886 | .070090 | 1.373 | .765 | .010020 | 1.375 | .382 | .050075 | 1.376 | .534 | .010020 |
| 1.356 | .444 1.000 | .025042 .015030 | 1.365 | .585 | .025042 | 1.370 | .890 | .100125 | 1.373 | .785 | .005010 | 1.375 | .395 | .062080 | 1.376 | .620 | .005010 |
| 1.356 1.356 | 1.000 | .015030 | 1.365 1.365 | .595 .808 | .030050 .040060 | 1.370 1.370 | .900 .940 | .005007 .080100 | 1.373 1.373 | .890 .906 | .030050 .005020 | 1.375 | .420 .422 | .048062 .060070 | 1.376 1.376 | .650 .657 | .100125 . 005010 |
| 1.357 | .190 | .020040 | 1.365 | .940 | .030050 | 1.370 | .948 | .062080 | 1.373 | .912 | .040090 | 1.375 1.375 | .439 | .170190 | 1.376 | .760 | .060140 |
| 1.357 | .350 | .005010 | 1.365 | 1.131 | .005010 | 1.370 | .950 | .005015 | 1.373 | .996 | .005010 | 1.375 | .440 | .075090 | 1.376 | .761 | .090105 |
| 1.357 | .500 | .100125 | 1.365 | 1.150 | .050075 | 1.370 | .960 | .032050 | 1.373 | 1.000 | .008060 | 1.375 | .444 | .050070 | 1.376 | .765 | .090105 |
| 1.357 | .666 | .080100 | 1.365 | 1.160 | .020030 | 1.370 | 1.000 | .042062 | 1.373 | 1.095 | .042062 | 1.375 | .452 | .156187 | 1.376 | .780 | .110130 |
| 1.357 | .845 | .032060 | 1.365 | 1.187 | .025040 | 1.370 | 1.056 | .005015 | 1.373 | 1.126 | .020040 | 1.375 | .500 | .100125 | 1.376 | .815 | .060080 |
| 1.357 | .890 | .020040 | 1.365 | 1.192 | .005020 | 1.370 | 1.065 | .005015 | 1.373 | 1.207 | .025040 | 1.375 | .502 | .005060 | 1.376 | .847 | .005010 |
| 1.357 | .968 | .005010 | 1.365 | 1.194 | .020040 | 1.370 | 1.126 | .005010 | 1.373 | 1.209 | .030060 | 1.375 | .505 | .030050 | 1.376 | .903 | .025040 |
| 1.357 1.358 | 1.030 .125 | .015040 .030050 | 1.365 1.366 | 1.262 .191 | .020030 | 1.370 | 1.127 | .040060 | 1.373 | 1.218 | .040060 | 1.375 1.375 | .515 .526 | .060080 .070090 | 1.376 1.376 | .906 .984 | .030060 .030050 |
| 1.358 | .125 | .120135 | 1.366 | .191 | .105125 .025050 | 1.370 1.370 | 1.130 1.163 | .010020 .040060 | 1.373 1.373 | 1.236 1.255 | .010020 .005020 | 1.375 | .526 . 530 | .070090 | 1.376 | .984 1.003 | .030050 |
| 1.358 | .601 | .040060 | 1.366 | .760 | .020030 | 1.370 | 1.199 | .005010 | 1.374 | .155 | .005010 | 1.375 | .556 | .005010 | 1.376 | 1.016 | .050070 |
| 1.358 | .803 | .005010 | 1.366 | .761 | .005010 | 1.370 | 1.255 | .010015 | 1.374 | .190 | .060080 | 1.375 | .560 | .005010 | 1.376 | 1.022 | .005010 |
| 1.358 | 1.026 | .050075 | 1.366 | .763 | .005010 | 1.371 | .148 | .005010 | 1.374 | .245 | .050070 | 1.375 | .564 | .010020 | 1.376 | 1.135 | .080105 |
| 1.358 | 1.037 | .008015 | 1.366 | .883 | .080100 | 1.371 | .234 | .090125 | 1.374 | .251 | .160180 | 1.375 | .590 | .156187 | 1.376 | 1.157 | .010020 |
| 1.358 | 1.130 | .005010 | 1.366 | .892 | .005020 | 1.371 | .281 | .005010 | 1.374 | .253 | .083104 | 1.375 | .619 | .020040 | 1.376 | 1.225 | .025040 |
| 1.359 | .689 | .005010 | 1.366 | .997 | .025040 | 1.371 | .525 | .020030 | 1.374 | .318 | .050060 | 1.375 | .630 | .005007 | 1.376 | 1.247 | .005010 |
| 1.359 1.359 | .860 .888 . | .130150 . 005010 | 1.366 | 1.028 | .070090 | 1.371 | .627 | .050075 | 1.374 | .341 | .090110 | 1.375 1.375 | .634 .641 | .005010 | 1.377 | .269 | .040060 |
| 1.359 | 1.025 | .100125 | 1.366 1.366 | 1.030 1.070 | .050075 .030105 | 1.371 1.371 | .641 .651 | .105125 .030050 | 1.374 1.374 | .378 .389 | .050070 .060070 | 1.375 | .644 | .157187 . 005010 | 1.377 1.377 | .318 .336 | .100125 .075090 |
| 1.359 | 1.028 | .100 .125 | 1.366 | 1.133 | .050070 | 1.371 | .698 | .040062 | 1.374 | .518 | .134187 | 1.375 | .656 | .040062 | 1.377 | .346 | .100125 |
| 1.359 | 1.126 | .060080 | 1.366 | 1.140 | .020030 | 1.371 | .759 | .100125 | 1.374 | .562 | .015025 | 1.375 | .700 | .120135 | 1.377 | .376 | .105125 |
| 1.360 | .204 | .050075 | 1.366 | 1.144 | .005010 | 1.371 | .760 | .005010 | 1.374 | .563 | .005010 | 1.375 | .709 | .050070 | 1.377 | .377 | .080105 |
| 1.360 | .338 | .005010 | 1.366 | 1.153 | .010020 | 1.371 | .820 | .008040 | 1.374 | .568 | .005010 | 1.375 | .719 | .010020 | 1.377 | .383 | .005010 |
| 1.360 | .344 | .050070 | 1.367 | .758 | .070090 | 1.371 | .886 | .005025 | 1.374 | .575 | .090110 | 1.375 | .750 | .020050 | 1.377 | .384 | .030050 |
| 1.360 | .629 | .010020 | 1.367 | .760 | .110130 | 1.371 | 1.000 | .120135 | 1.374 | .577 | .020042 | 1.375 | .753 | .100125 | 1.377 | .505 | .005020 |
| 1.360 | .639 | .015030 | 1.367 | .763 | .110130 | 1.371 | 1.073 | .005010 | 1.374 | .641 | .050070 | 1.375 | .754 | .060080 | 1.377 | .515 | .050075 .060080 |
| 1.360 1.360 | .656 .878 | .100125 .050070 | 1.367 1.367 | .884 .885 | .080104 .040060 | 1.371 1.371 | 1.123 1.138 | .020040 .070090 | 1.374 1.374 | .700 .701 | .156187 .005010 | 1.375 1.375 | .757 .758 | .090110 .048062 | 1.377 1.377 | .517 .531 | .100125 |
| 1.360 | .928 | .080105 | 1.367 | .911 | .010020 | 1.371 | 1.178 | .070090 | 1.374 | .710 | .005010 | 1.375 | .770 | .005010 | 1.377 | .754 | .060080 |
| 1.360 | .986 | .060080 | 1.367 | 1.010 | .040060 | 1.371 | 1.200 | .010020 | 1.374 | .717 | .005010 | 1.375 | .782 | .156187 | 1.377 | .756 | .050075 |
| 1.360 | 1.003 | .005010 | 1.367 | 1.030 | .060080 | 1.371 | 1.212 | .005015 | 1.374 | .750 | .100125 | 1.375 | .803 | .090100 | 1.377 | .860 | .005010 |
| 1.360 | 1.026 | .050075 | 1.367 | 1.067 | .040060 | 1.372 | .141 | .070090 | 1.374 | .756 | .020030 | 1.375 | .812 | .005120 | 1.377 | .895 | .032048 |
| 1.360 | 1.146 | .030060 | 1.367 | 1.112 | .025040 | 1.372 | .191 | .070090 | 1.374 | .762 | .070090 | 1.375 | .824 | .005020 | 1.377 | .983 | .060080 |
| 1.361 | .219 | .060080 | 1.367 | 1.153 | .020030 | 1.372 | .378 | .030050 | 1.374 | .770 | .040060 | 1.375 | .827 | .105135 | 1.377 | .985 | .005010 |
| 1.361 | .875 | .075125 | 1.367 | 1.180 | .005015 | 1.372 | .564 | .080125 | 1.374 | .800 | .010020 | 1.375 | .829 | .048075 | 1.377 | .997 | .030050 |
| 1.361 1.361 | .884 .890 | .075100 .050075 | 1.368 1.368 | .498 .510 | . 005010 .075090 | 1.372 1.372 | .637 .690 | .020032 .010030 | 1.374 | .807 | .090100 .040060 | 1.375 1.375 | .860 .875 | .006100 .100125 | 1.377 1.377 | 1.001 1.018 | .025090 .030050 |
| 1.361 | 1.032 | .005010 | 1.368 | .510 | .030050 | 1.372 | .730 | .105187 | 1.374 1.374 | .825 .829 | .040060 | 1.375 | .876 | .032048 | 1.377 | 1.029 | .030050 |
| 1.362 | .230 | .005010 | 1.368 | .635 | .005010 | 1.372 | .750 | .020032 | 1.374 | .880 | .010020 | 1.375 | .877 | .005020 | 1.377 | 1.100 | .005010 |
| 1.362 | .439 | .015030 | 1.368 | .792 | .040060 | 1.372 | .812 | .020032 | 1.374 | .881 | .110135 | 1.375 | .878 | .090120 | 1.377 | 1.241 | .005010 |
| 1.362 | .641 | .062090 | 1.368 | .874 | .050070 | 1.372 | .891 | .070090 | 1.374 | .884 | .025040 | 1.375 | .883 | .010020 | 1.378 | .206 | .050075 |
| 1.362 | .656 | .100125 | 1.368 | .918 | .100125 | 1.372 | .908 | .050075 | 1.374 | .901 | .030050 | 1.375 | .936 | .020032 | 1.378 | .208 | .005010 |
| 1.362 | .750 | .010060 | 1.368 | .980 | .050070 | 1.372 | .940 | .030050 | 1.374 | .905 | .010020 | 1.375 | .940 | .060090 | 1.378 | .240 | .105125 |
| 1.362 | .762 | .100125 | 1.368 | 1.044 | .030050 | 1.372 | .949 | .090125 | 1.374 | .912 | .010025 | 1.375 | .953 | .005010 | 1.378 | .313 | .020032 |
| 1.362 1.362 | 1.002 1.203 | .005025 | 1.368 | 1.069 | .070090 | 1.372 | .973 | .005015 | 1.374 | .942 | .050070 | 1.375 1.375 | .962 .977 | .035060 | 1.378 | .315 | .010020 |
| 1.362 | 1.262 | .015030 | 1.368 1.368 | 1.072 1.112 | .030080 .025040 | 1.372 1.372 | .983 1.003 | .025040 .040060 | 1.374 1.374 | .999 1.011 | .025040 .090120 | 1.375 | 1.000 | .062063 | 1.378 1.378 | .316 .324 | .005010 .005010 |
| 1.363 | .941 | .060080 | 1.368 | 1.112 | .050075 | 1.372 | 1.003 | .105120 | 1.374 | 1.049 | .005010 | 1.375 | 1.005 | .120156 | 1.378 | .402 | .156187 |
| 1.363 | 1.004 | .015030 | 1.368 | 1.174 | .040062 | 1.372 | 1.065 | .012025 | 1.374 | 1.059 | .030050 | 1.375 | 1.006 | .100125 | 1.378 | .500 | .010020 |
| 1.363 | 1.190 | .030050 | 1.369 | .312 | .025040 | 1.372 | 1.135 | .050070 | 1.374 | 1.078 | .010020 | 1.375 | 1.008 | .060080 | 1.378 | .657 | .060080 |
| 1.363 | 1.249 | .015025 | 1.369 | .329 | .010020 | 1.372 | 1.145 | .050105 | 1.374 | 1.125 | .050075 | 1.375 | 1.015 | .005010 | 1.378 | .660 | .105135 |
| 1.364 | .414 | .070090 | 1.369 | .505 | .065080 | 1.372 | 1.153 | .030050 | 1.374 | 1.128 | .010020 | 1.375 | 1.022 | .016032 | 1.378 | .736 | .100125 |
| 1.364 | .505 | .025040 | 1.369 | .761 | .010020 | | 1.189 | .030050 | 1.374 | 1.145 | .005010 | 1.375 | 1.045 | .025040 | 1.378 | .780 | .025050 |
| 1.364 | .539 | .070090 | 1.369 | .803 | .040060 | 1.372 | | .005010 | 1.374 | 1.209 | .040060 | 1.375 | 1.065 | .035050 | 1.378 | .783 | .040060 |
| 1.364 1.364 | .664 .665 | .005010 .070090 | 1.369 | . 832 .885 | .005010 .005015 | 1.372 | 1.210 | .010020 | 1.374 | 1.265 | .030050 | 1.375 | 1.078 1.110 | .040060 .005010 | 1.378 1.378 | .787 .858 | .100120 |
| 1.364 | .665 .701 | .040060 | 1.369 | .893 | .125156 | 1.372 1.373 | 1.213 .218 | .020035 .040062 | 1.375 1.375 | .100 .125 | .025045 .070090 | 1.375 1.375 | 1.110 | .005010 | 1.378 | .858 .861 | .032050 |
| 1.364 | .780 | .135156 | 1.369 | 1.001 | .015030 | 1.373 | .234 | .105125 | 1.375 | .125 | .015030 | 1.375 | 1.130 | .015030 | 1.378 | .865 | .100125 |
| 1.364 | .788 | .070090 | 1.369 | 1.145 | .090105 | 1.373 | .250 | .016032 | 1.375 | .144 | .040060 | 1.375 | 1.131 | .005010 | 1.378 | .876 | .090125 |
| 1.364 | .911 | .070090 | 1.369 | 1.188 | .010015 | 1.373 | .255 | .040060 | 1.375 | .207 | .040062 | 1.375 | 1.136 | .050070 | 1.378 | .878 | .060120 |
| | | | | | | | | u can choos | | | | | | | | | |

| | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any | INE | SIZE | Choose Any |
|-----------------------|-----------------------|----------------------------|-----------------------|----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|----------------------|----------------------------|-----------------------|----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| 1.378 | .984 | .010020 | 1.395 | .132 | .025035 | 1.407 | .390 | .005030 | 1.417 | .912 | .135187 | 1.430 | .640 | .100125 | 1.437 | .795 | .020040 |
| 1.378 | 1.060 | .005010 | 1.395 | .420 | .105125 | 1.407 | .624 | .005010 | 1.417 | .983 | .060080 | 1.430 | .698 | .005010 | 1.437 | .850 | .075090 |
| 1.378 | 1.061 | .012020 | 1.395 | .550 | .050083 | 1.407 | .634 | .060090 | 1.417 | .997 | .050070 | 1.430 | .716 | .010020 | 1.437 | .873 | .156190 |
| 1.378 1.378 | 1.075 1.186 | .030050 .060080 | 1.395 | 1.157 | .040060 | 1.407 | .705 | .005010 | 1.417 | 1.006 | .030040 | 1.430 1.430 | .749 .755 | .010020 | 1.437 | .879 | .070090 |
| 1.378 | 1.201 | .005010 | 1.396 1.396 | .563 .611 | .060080 .105125 | 1.407 1.407 | 1.112 1.125 | .015030 .005010 | 1.417 1.417 | 1.031 1.070 | .050060 .020040 | 1.430 | .827 | .015030 | 1.437 1.437 | .886 .895 | .050075 .040060 |
| 1.379 | .203 | .020040 | 1.396 | 1.190 | .015025 | 1.407 | 1.188 | .020030 | 1.418 | .204 | .040060 | 1.430 | 1.065 | .005010 | 1.437 | .950 | .050070 |
| 1.379 | .453 | .010040 | 1.396 | 1.220 | .010020 | 1.408 | .902 | .032050 | 1.418 | .322 | .010020 | 1.430 | 1.128 | .050075 | 1.437 | 1.000 | .030040 |
| 1.379 | .510 | .070080 | 1.397 | .381 | .115130 | 1.408 | 1.004 | .005010 | 1.418 | .375 | .070090 | 1.430 | 1.129 | .050070 | 1.437 | 1.001 | .156187 |
| 1.379 | . 564 .599 | .005010 | 1.397 | .419 | .060125 .005010 | 1.408 | 1.256 | .040060 | 1.418 | .473 | .005010 | 1.430 | 1.148 | .075090 | 1.437 | 1.008 | .075104 |
| 1.379 1.379 | .812 | .015030 . 005010 | 1.397 1.397 | .545 .705 | .060090 | 1.408 1.408 | 1.285 1.332 | .030050 . 005010 | 1.418 1.418 | .474 .477 | .010020 . 005010 | 1.430 1.431 | 1.186 .716 | .005010 .005010 | 1.437 1.437 | 1.031 1.093 | .050070 .035048 |
| 1.379 | .835 | .005010 | 1.397 | .710 | .050075 | 1.409 | .502 | .005010 | 1.418 | .478 | .100120 | 1.431 | 1.129 | .010020 | 1.437 | 1.103 | .080100 |
| 1.379 | 1.069 | .090120 | 1.397 | .815 | .005020 | 1.409 | .503 | .005010 | 1.418 | .807 | .080104 | 1.431 | 1.253 | .060080 | 1.437 | 1.123 | .005030 |
| 1.379 | 1.075 | .015025 | 1.397 | .981 | .015030 | 1.409 | .766 | .015070 | 1.418 | .983 | .120135 | 1.432 | .936 | .090105 | 1.437 | 1.132 | .030050 |
| 1.379 | 1.089 | .030050 | 1.397 | 1.068 | .005030 | 1.409 | 1.187 | .005010 | 1.418 | 1.181 | .100125 | 1.432 | .995 | .100125 | 1.437 | 1.172 | .005010 |
| 1.380 1.380 | .254 .282 | .040060 .062190 | 1.398 1.398 | .505 .717 | .005015 .005010 | 1.409 1.410 | 1.333 .265 | . 005010 .060080 | 1.418 1.419 | 1.188 .435 | .070090 .160180 | 1.432 1.432 | 1.045 1.094 | .030050 .050060 | 1.437 1.437 | 1.185 1.201 | .015070 .060080 |
| 1.380 | .300 | .005008 | 1.398 | .872 | .025040 | 1.410 | .500 | .015030 | 1.419 | .677 | .080100 | 1.432 | 1.160 | .050062 | 1.437 | 1.250 | .005010 |
| 1.380 | .346 | .120134 | 1.398 | .906 | .030050 | 1.410 | .660 | .015030 | 1.419 | .797 | .005010 | 1.433 | .316 | .005010 | 1.437 | 1.281 | .025040 |
| 1.380 | .398 | .005010 | 1.398 | 1.160 | .010020 | 1.410 | .690 | .105135 | 1.419 | .800 | .005010 | 1.433 | .510 | .008030 | 1.438 | .258 | .105125 |
| 1.380 | .405 | .100125 | 1.398 | 1.161 | .030050 | 1.410 | .855 | .030050 | 1.419 | 1.003 | .005010 | 1.433 | . 563 | .005010 | 1.438 | .281 | .120135 |
| 1.380 1.380 | .596 .752 | .100125 | 1.399 1.399 | .377 .654 | . 005020 .010020 | 1.410 1.410 | .897 1.030 | .060090 .020040 | 1.419 1.420 | 1.070 .285 | .090125 .110135 | 1.433 1.433 | .760 1.050 | .040060 .040060 | 1.438 1.438 | .345 .377 | .040060 .010030 |
| 1.380 | .880 | .020030 | 1.399 | .719 | .010020 | 1.410 | 1.110 | .030050 | 1.420 | .380 | .030050 | 1.433 | 1.095 | .020030 | 1.438 | .562 | .005010 |
| 1.380 | .901 | .005010 | 1.399 | .890 | .025040 | 1.410 | 1.143 | .010020 | 1.420 | .507 | .012020 | 1.433 | 1.350 | .010020 | 1.438 | .669 | .020030 |
| 1.380 | .902 | .080100 | 1.399 | .906 | .050070 | 1.410 | 1.147 | .080100 | 1.420 | .611 | .075090 | 1.434 | .361 | .005010 | 1.438 | .682 | .060080 |
| 1.380 | 1.004 | .005010 | 1.399 | 1.160 | .030050 | 1.410 | 1.187 | .005010 | 1.420 | .690 | .050070 | 1.434 | .751 | .100125 | 1.438 | .751 | .100125 |
| 1.380 1.380 | 1.009 1.021 | .105125 .050075 | 1.399 1.400 | 1.203 .140 | . 005010 .020040 | 1.410 1.410 | 1.189 1.202 | .005008 . 005010 | 1.420 1.420 | .752 1.137 | .080100 .050070 | 1.434 1.434 | .873 .936 | .120135 .090120 | 1.438 1.438 | .765 .811 | . 005010 .125156 |
| 1.380 | 1.180 | .005010 | 1.400 | .269 | .050070 | 1.411 | .836 | .005010 | 1.420 | 1.199 | .080100 | 1.434 | 1.125 | .015030 | 1.438 | .881 | .080100 |
| 1.380 | 1.186 | .080100 | 1.400 | .379 | .080100 | 1.411 | 1.265 | .010025 | 1.420 | 1.270 | .010020 | 1.434 | 1.315 | .010020 | 1.438 | .938 | .040060 |
| 1.380 | 1.253 | .005010 | 1.400 | .500 | .040060 | 1.412 | .201 | .040060 | 1.420 | 1.271 | .032050 | 1.435 | .207 | .100125 | 1.438 | .998 | .005010 |
| 1.381 | .561 | .080100 | 1.400 | .503 | .005015 | 1.412 | .836 | .105120 | 1.420 | 1.280 | .030050 | 1.435 | .270 | .005010 | 1.438 | 1.039 | .030050 |
| 1.381 | .689 1.200 | .050070 | 1.400 1.400 | .505 .549 | .080100 .020040 | 1.412 1.412 | 1.070 1.193 | .040060 .030050 | 1.421 1.421 | <u>.495</u> .518 | .080100 .090120 | 1.435 1.435 | .316 .377 | .015030 .005010 | 1.438 1.438 | 1.065 1.100 | .036050 .050070 |
| 1.382 | .542 | .010030 | 1.400 | .564 | .010020 | 1.412 | 1.246 | .005010 | 1.421 | 1.190 | .010020 | 1.435 | .379 | .020040 | 1.438 | 1.171 | .025040 |
| 1.382 | .543 | .040070 | 1.400 | .627 | .015030 | 1.413 | .634 | .100125 | 1.422 | .408 | .005020 | 1.435 | .500 | .005010 | 1.438 | 1.190 | .015030 |
| 1.382 | .633 | .020030 | 1.400 | .696 | .020032 | 1.413 | .995 | .005010 | 1.422 | .697 | .065080 | 1.435 | .563 | .010020 | 1.439 | .115 | .020040 |
| 1.382 | 1.093 | .005010 | 1.400 | .754 | .015030 | 1.413 | 1.118 | .005010 | 1.422 | .880 | .060090 | 1.435 | .750 | .020030 | 1.439 | .466 | .005010 |
| 1.382 1.382 | 1.137 1.138 | .060080 . 005010 | 1.400 1.400 | .755 .756 | . 005010 .050070 | 1.414 1.414 | .434 .563 | .170190 .160190 | 1.422 1.422 | .945 1.058 | .090105 .042060 | 1.435 1.435 | .875 1.082 | . 005010 .070090 | 1.439 1.439 | .515 .636 | .125135 .015030 |
| 1.382 | 1.192 | .020040 | 1.400 | .879 | .005010 | 1.414 | .595 | .090110 | 1.423 | .157 | .080104 | 1.435 | 1.107 | .020040 | 1.439 | .757 | .040060 |
| 1.383 | .629 | .090125 | 1.400 | .885 | .005020 | 1.414 | .794 | .005010 | 1.423 | .864 | .020040 | 1.435 | 1.192 | .040060 | 1.439 | .811 | .040060 |
| 1.383 | 1.000 | .030050 | 1.400 | .887 | .010020 | 1.415 | .319 | .005010 | 1.423 | .880 | .010020 | 1.435 | 1.315 | .010020 | 1.439 | .812 | .005020 |
| 1.384 | .314 | .090110 | 1.400 | 1.000 | .010105 | 1.415 | .320 | .005020 | 1.423 | 1.000 | .031042 | 1.436 | .125 | .008016 | 1.439 | 1.125 | .070085 |
| 1.384 1.384 | .543 .758 | .020030 . 005010 | 1.400 1.400 | 1.017 1.076 | .090105 .025042 | 1.415 1.415 | .382 .396 | .040062 . 005020 | 1.423 1.424 | 1.289 .440 | .010030 .060070 | 1.436 1.436 | .195 .377 | .025050 .010040 | 1.440 1.440 | .235 .250 | .020035 .060070 |
| 1.384 | 1.171 | .012025 | 1.400 | 1.158 | .005010 | 1.415 | .398 | .005020 | 1.424 | .505 | .005010 | 1.436 | .383 | .010040 | 1.440 | .332 | .005010 |
| 1.384 | 1.318 | .005010 | 1.400 | 1.200 | .080090 | 1.415 | .477 | .005010 | 1.425 | .316 | .015030 | 1.436 | .504 | .050075 | 1.440 | .375 | .090120 |
| 1.385 | .578 | .031042 | 1.400 | 1.258 | .020030 | 1.415 | .567 | .010025 | 1.425 | .377 | .005020 | 1.436 | .563 | .015030 | 1.440 | .392 | .005010 |
| 1.385 | .920 | .015020 | 1.400 | 1.260 | .030042 | 1.415 | .896 | .060070 | 1.425 | .438 | .010020 | 1.436 | .643 | .005010 | 1.440 | .395 | .005010 |
| 1.385 1.385 | 1.010 1.015 | .030060 .075090 | 1.401 1.401 | .195 .986 | . 005010 .045060 | 1.415 1.415 | 1.000 1.044 | . 005010 .015030 | 1.425 1.425 | .502 .504 | .005020 .005020 | 1.436 1.436 | .886 .940 | .008012 .005010 | 1.440 1.440 | .438 .504 | .040060 .005020 |
| 1.385 | 1.269 | .005010 | 1.401 | 1.102 | .010020 | 1.415 | 1.100 | .010020 | 1.425 | .505 | .010020 | 1.436 | 1.001 | .050075 | 1.440 | .610 | .005020 |
| 1.385 | 1.339 | .005010 | 1.401 | 1.169 | .010020 | 1.415 | 1.122 | .030042 | 1.425 | .515 | .005010 | 1.436 | 1.134 | .030050 | 1.440 | .762 | .005010 |
| 1.386 | .474 | .080105 | 1.401 | 1.186 | .015025 | 1.415 | 1.126 | .005010 | 1.425 | .889 | .005010 | 1.436 | 1.154 | .015025 | 1.440 | .891 | .015025 |
| 1.386 | .655 | .170190 | 1.401 | 1.258 | .005030 | 1.416 | .169 | .030050 | 1.425 | 1.155 | .005010 | 1.436 | 1.195 | .032050 | 1.440 | 1.015 | .020040 |
| 1.386 1.386 | 1.084 1.124 | .060080 . 005010 | 1.401 1.402 | 1.295 .295 | . 005010 .030050 | 1.416 1.416 | .324 .473 | .135156 .005010 | 1.425 1.425 | 1.161 1.188 | .040050 .010020 | 1.436 1.436 | 1.198 1.250 | . 005010 .040060 | 1.440 1.440 | 1.070 1.120 | .020030 .050075 |
| 1.386 | 1.187 | .030045 | 1.402 | .504 | .005010 | 1.416 | .474 | .020030 | 1.425 | 1.251 | .060075 | 1.436 | 1.320 | .005010 | 1.440 | 1.137 | .005010 |
| 1.387 | 1.212 | .020040 | 1.402 | .505 | .008015 | 1.416 | .502 | .005030 | | 1.110 | .005010 | 1.437 | .186 | .010020 | 1.441 | .720 | .050083 |
| 1.388 | .825 | .020040 | 1.402 | .509 | .105135 | 1.416 | .505 | .005020 | 1.426 | 1.188 | .025040 | 1.437 | .206 | .025125 | 1.441 | 1.140 | .050075 |
| 1.388 | 1.016 | .090110 | 1.402 | .518 | .005008 | 1.416 | .590 | .160190 | 1.426 | 1.261 | .005020 | 1.437 | .297 | .070090 | 1.441 | 1.142 | .050075 |
| 1.389 | .474 1.052 | .080105 | 1.402 1.402 | .760 1.224 | .005015 .050070 | 1.416 1.416 | . 629 .635 | .005010 .050070 | 1.426 1.427 | 1.291 .250 | .005015 .050075 | 1.437 1.437 | . 376 .378 | .005025 .015035 | 1.441 1.442 | 1.258 .411 | .005010 .062080 |
| 1.389 | 1.073 | .005010 | 1.402 | .250 | .042075 | 1.416 | .709 | .040060 | 1.427 | .250 1.141 | .060070 | 1.437 | .383 | .005060 | 1.442 | .541 | .002000 |
| 1.390 | .368 | .060083 | 1.403 | .430 | .100125 | 1.416 | 1.030 | .100120 | 1.427 | 1.218 | .020040 | 1.437 | .397 | .020040 | 1.442 | .881 | .080105 |
| 1.390 | .430 | .080134 | 1.403 | .672 | .110130 | 1.416 | 1.111 | .005030 | 1.427 | 1.253 | .075093 | 1.437 | .420 | .080104 | 1.442 | 1.002 | .006012 |
| 1.390 | .552 | .010020 | 1.403 | 1.022 | .010020 | 1.416 | 1.141 | .040060 | 1.427 | 1.257 | .025040 | 1.437 | .493 | .156187 | 1.442 | 1.130 | .030040 |
| 1.390 1.390 | .780 1.094 | .005010 .005008 | 1.404 | .508 | .090120 .010020 | 1.416 | 1.226 | .025040 .010020 | 1.428 | 1.014 | .060080 | 1.437 1.437 | .500 .504 | .032048 .062080 | 1.443 1.443 | .626 | .015030 |
| 1.390 | 1.187 | .015030 | 1.405 1.405 | .610 .630 | .010020 | 1.416 1.417 | 1.338 .413 | .060080 | 1.428 1.428 | 1.066 1.249 | .015032 .005010 | 1.437 | .552 | .002000 | 1.443 | .880 .948 | .070090 .040060 |
| 1.391 | .888 | .010035 | 1.405 | 1.008 | .015030 | 1.417 | .474 | .010020 | 1.429 | .418 | .005010 | 1.437 | .639 | .015025 | 1.443 | 1.179 | .040050 |
| 1.391 | .983 | .040060 | 1.405 | 1.265 | .005010 | 1.417 | .511 | .105125 | 1.429 | .783 | .010020 | 1.437 | .680 | .100125 | 1.444 | .136 | .005010 |
| 1.393 | .611 | .060080 | 1.406 | .139 | .030048 | 1.417 | .519 | .080104 | 1.429 | 1.100 | .020030 | 1.437 | .761 | .105125 | 1.444 | 1.006 | .030050 |
| 1.393 1.393 | .719 1.281 | .080104 . 005010 | 1.406 1.406 | .390 1.091 | . 005010 .025040 | 1.417 1.417 | .548 .580 | .050070 | 1.429 1.429 | 1.126 1.194 | .020040 .040060 | 1.437 1.437 | .764 .765 | .020030 .050075 | 1.444 1.445 | 1.055 .132 | .005010 .040062 |
| 1.394 | .654 | .005010 | 1.406 | 1.249 | .025040 | 1.417 | .632 | .075090 . 005010 | 1.429 | .376 | .015030 | 1.437 | .766 | .015025 | 1.445 | .312 | .010020 |
| 1.394 | .724 | .070090 | 1.407 | .290 | .025040 | 1.417 | .825 | .050070 | 1.430 | .519 | .005010 | 1.437 | .792 | .100125 | 1.445 | .322 | .060090 |
| | | | | | precision me | | | | | | | | | | | | |

| | | Choose Any | | | Choose Any | | | Choose Any | 1 3 IVIE | IAL | Choose Any | 3 Ani | E FLA | Choose Any | UIVIDL | E DE | Choose Any |
|-----------------------|-----------------------|-------------------------------|-------------------------|----------------------|-------------------------------|-------------------------|----------------------|-------------------------------|-------------------------|-------------------------|-------------------------------|-------------------------|-----------------------|-------------------------------|-------------------------|----------------------|-------------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| 1.445 | .350 | .032060 | 1.458 | .984 | .005010 | 1.472 | 1.001 | .070090 | 1.486 | 1.330 | .005015 | 1.494 | 1.265 | .005010 | 1.497 | .810 | .005010 |
| 1.445 | .690 | .090120 | 1.458 | 1.124 | .042062 | 1.472 | 1.230 | .090125 | 1.487 | .949 | .080104 | 1.494 | 1.270 | .010015 | 1.497 | .891 | .005010 |
| 1.445 1.445 | .934 1.044 | .050060 .045060 | 1.459 1.459 | .630 .841 | . 005010 .040050 | 1.473 1.473 | .130 .609 | .042062 .010030 | 1.487 1.487 | 1.128 1.233 | . 005010 .015030 | 1.494 1.494 | 1.305 1.338 | . 005010 .010020 | 1.497 1.497 | .906 1.060 | .100120 |
| 1.446 | .179 | .005010 | 1.459 | .951 | .030050 | 1.474 | .318 | .010020 | 1.487 | 1.368 | .020030 | 1.494 | 1.342 | .010020 | 1.497 | 1.119 | .040060 |
| 1.446 | .240 | .090120 | 1.459 | 1.189 | .015030 | 1.474 | 1.010 | .040060 | 1.488 | .390 | .020030 | 1.494 | 1.414 | .015025 | 1.497 | 1.126 | .135156 |
| 1.446 | .253 | .105135 | 1.460 | .180 | .035050 | 1.474 | 1.180 | .005010 | 1.488 | .550 | .100125 | 1.494 | 1.425 | .025040 | 1.497 | 1.137 | .005010 |
| 1.446 1.446 | .254 .315 | .100125 .100125 | 1.460 1.460 | .500 .569 | .025040 .050070 | 1.474 1.474 | 1.357 1.358 | . 005010 .015025 | 1.488 1.488 | .804 .880 | .050070 | 1.495 1.495 | .263 .294 | .005010 .020032 | 1.497 1.497 | 1.150 1.154 | .090110 .025040 |
| 1.446 | .318 | .105125 | 1.460 | .667 | .050070 | 1.475 | .500 | .110130 | 1.488 | 1.043 | .005010 .005010 | 1.495 | .295 | .100125 | 1.497 | 1.242 | .030050 |
| 1.446 | 1.062 | .005015 | 1.460 | .761 | .010020 | 1.475 | .504 | .006015 | 1.488 | 1.217 | .010020 | 1.495 | .354 | .105135 | 1.497 | 1.252 | .005012 |
| 1.447 | .406 | .100125 | 1.460 | .950 | .040060 | 1.475 | .526 | .080100 | 1.488 | 1.313 | .030042 | 1.495 | .375 | .030050 | 1.497 | 1.267 | .040062 |
| 1.447 1.447 | .596 .837 | . 005010 .100125 | 1.460 1.460 | 1.189 1.394 | .035050 .020025 | 1.475 1.475 | .626 .751 | .005020 .005010 | 1.488 1.488 | 1.330 1.350 | .030042 .005010 | 1.495 1.495 | .459 .510 | .156187 .070090 | 1.497 1.497 | 1.283 1.352 | .005010 .010020 |
| 1.447 | 1.064 | .080100 | 1.461 | .180 | .070080 | 1.475 | .828 | .062090 | 1.489 | .383 | .070090 | 1.495 | .545 | .010020 | 1.498 | .128 | .015030 |
| 1.447 | 1.136 | .105125 | 1.461 | .875 | .030050 | 1.475 | 1.169 | .040060 | 1.489 | 1.004 | .050070 | 1.495 | .629 | .040050 | 1.498 | .142 | .040060 |
| 1.447 1.448 | 1.203 .125 | .032060 .030050 | 1.461 1.461 | 1.172 1.362 | .050070 .020030 | 1.475 | 1.360 | .010020 | 1.489 | 1.165 | .015030 | 1.495 | 1.010 | .015030 | 1.498 1.498 | .176 .252 | .010015 .100125 |
| 1.448 | .390 | .040050 | 1.461 | .502 | .080100 | 1.476 1.476 | .255 .500 | .005010 .005030 | 1.489 1.490 | 1.260 .170 | .050075 .025042 | 1.495 1.495 | 1.028 1.058 | .060080 . 005010 | 1.498 | .252 | .042062 |
| 1.448 | .441 | .010020 | 1.462 | .563 | .048062 | 1.476 | 1.359 | .010020 | 1.490 | .171 | .030050 | 1.495 | 1.086 | .005010 | 1.498 | .266 | .100125 |
| 1.448 | .575 | .050070 | 1.462 | 1.070 | .080100 | 1.477 | .617 | .010020 | 1.490 | .243 | .080100 | 1.495 | 1.120 | .005010 | 1.498 | .313 | .040060 |
| 1.448 1.448 | .630 1.031 | . 005010 .075090 | 1.462 | 1.247 | .008075 | 1.477 | 1.201 | .010040 | 1.490 | .511 | .105125 | 1.495 1.495 | 1.182 1.185 | .060080 .020030 | 1.498 1.498 | .360 .379 | .005010 .005010 |
| 1.448 | 1.051 | .030050 | 1.463 1.463 | .480 .813 | .090110 .090110 | 1.478 1.478 | 1.099 1.310 | .080100 .025042 | 1.490 1.490 | .688 .760 | .080100 .020030 | 1.495 | 1.201 | .020030 | 1.498 | .380 | .120135 |
| 1.448 | 1.053 | .040060 | 1.463 | 1.211 | .015025 | 1.479 | .600 | .020030 | 1.490 | .764 | .030050 | 1.495 | 1.255 | .010020 | 1.498 | .390 | .105130 |
| 1.448 | 1.126 | .090105 | 1.463 | 1.224 | .015030 | 1.479 | 1.133 | .015030 | 1.490 | .820 | .040060 | 1.495 | 1.257 | .060080 | 1.498 | .400 | .170190 |
| 1.448 1.449 | 1.190 .522 | .080100 .105125 | 1.464 1.464 | .741 1.189 | .042062 .015025 | 1.479 1.480 | 1.361 .221 | . 005020 .062080 | 1.490 1.490 | .875 1.004 | .100125 .005010 | 1.495 1.495 | 1.260 1.275 | .005010 .005010 | 1.498 1.498 | .406 .412 | .050125 .005010 |
| 1.449 | .629 | .010020 | 1.465 | .377 | .030060 | 1.480 | .511 | .105125 | 1.490 | 1.004 | .080100 | 1.495 | 1.339 | .005010 | 1.498 | .500 | .005015 |
| 1.449 | .990 | .010020 | 1.465 | .378 | .010050 | 1.480 | .632 | .100125 | 1.490 | 1.130 | .010025 | 1.495 | 1.354 | .005010 | 1.498 | .502 | .005010 |
| 1.449 | 1.028 | .045060 | 1.465 | .812 | .105134 | 1.480 | .640 | .156188 | 1.490 | 1.140 | .025050 | 1.495 | 1.400 | .020040 | 1.498 | .521 | .015025 |
| 1.449 1.449 | 1.057 1.198 | .040060 . 005010 | 1.465 1.465 | 1.095 1.190 | .050075 .025040 | 1.480 1.480 | .702 .707 | .015060 .090105 | 1.490 1.490 | 1.190 1.193 | . 005010 .010020 | 1.496 1.496 | .250 .256 | .030050 .005010 | 1.498 1.498 | . 607 .625 | .005010 .040060 |
| 1.449 | 1.322 | .010020 | 1.465 | 1.262 | .060080 | 1.480 | .784 | .075090 | 1.490 | 1.242 | .090125 | 1.496 | .296 | .010020 | 1.498 | .687 | .030125 |
| 1.450 | .157 | .020035 | 1.465 | 1.306 | .035050 | 1.480 | .824 | .105135 | 1.490 | 1.272 | .060080 | 1.496 | .438 | .040060 | 1.498 | .690 | .100125 |
| 1.450 | .201 | .025040 | 1.465 | 1.325 | .015030 | 1.480 | .984 | .070090 | 1.490 | 1.360 | .015025 | 1.496 | .473 | .005030 | 1.498 | .754 | .020030 |
| 1.450 1.450 | .208 .262 | .050075 .020030 | 1.466 1.466 | .379 1.072 | .030050 .030050 | 1.480 1.480 | 1.049 1.120 | .120156 .010020 | 1.491 1.491 | .063 .875 | . 005010 .100125 | 1.496 1.496 | .474 .512 | . 005010 .170190 | 1.498 1.498 | .757 .771 | .040060 .031048 |
| 1.450 | .282 | .040060 | 1.466 | 1.155 | .020040 | 1.480 | 1.154 | .030060 | 1.491 | .994 | .105120 | 1.496 | .620 | .015050 | 1.498 | .819 | .005010 |
| 1.450 | .441 | .005010 | 1.466 | 1.268 | .030050 | 1.480 | 1.232 | .005010 | 1.491 | 1.001 | .005010 | 1.496 | .625 | .050080 | 1.498 | .844 | .100125 |
| 1.450 1.450 | .531 .626 | .080100 .010020 | 1.467 1.467 | .841 .939 | .015030 .075090 | 1.480 | 1.269 .269 | .080105 | 1.491 | 1.063 | .080100 | 1.496 1.496 | . 630 .720 | . 005075 .010020 | 1.498 1.498 | .867 .902 | .005010 .025040 |
| 1.450 | .630 | .005010 | 1.467 | 1.038 | .030050 | 1.481 1.481 | .622 | .042062 .010020 | 1.491 1.491 | 1.210 1.312 | .010020 .005010 | 1.496 | .762 | .005010 | 1.498 | .979 | .050070 |
| 1.450 | .650 | .050062 | 1.467 | 1.126 | .075100 | 1.481 | .936 | .005010 | 1.492 | .394 | .005010 | 1.496 | .767 | .010020 | 1.498 | .997 | .030050 |
| 1.450 | .760 | .030060 | 1.468 | .310 | .010020 | 1.481 | 1.108 | .025042 | 1.492 | .803 | .016025 | 1.496 | .783 | .100125 | 1.498 | 1.000 | .060080 |
| 1.450 1.450 | .952 1.019 | .040060 .105135 | 1.468 1.468 | .384 .391 | .080105 .050070 | 1.482 1.482 | .250 .632 | .015030 .135156 | 1.492 1.492 | .886 1.011 | .020032 .020040 | 1.496 1.496 | .946 .994 | . 005010 .010020 | 1.498 1.498 | 1.014 1.015 | .100125 .005015 |
| 1.450 | 1.031 | .083120 | 1.468 | .440 | .010020 | 1.482 | .774 | .120135 | 1.492 | 1.062 | .100125 | 1.496 | 1.003 | .040060 | 1.498 | 1.021 | .005010 |
| 1.450 | 1.085 | .050075 | 1.468 | .640 | .050075 | 1.482 | .882 | .020040 | 1.492 | 1.118 | .005010 | 1.496 | 1.007 | .005010 | 1.498 | 1.032 | .020040 |
| 1.450 | 1.140 | .005010 | 1.468 | .820 | .005010 | 1.482 | .884 | .020040 | 1.492 | 1.130 | .015030 | 1.496 | 1.014 | .060080 | 1.498 | 1.033 | .005010 |
| 1.451 1.451 | .503 1.016 | . 005010 .050070 | 1.468 1.468 | .988 1.235 | . 005010 .010020 | 1.482 1.483 | 1.222 .755 | .050070 .105125 | 1.493 1.493 | .433 .748 | .105125 .015030 | 1.496 1.496 | 1.017 1.060 | .050075 .005010 | 1.498 1.498 | 1.040 1.065 | .105135 .005012 |
| 1.451 | 1.140 | .005015 | 1.468 | 1.310 | .020032 | 1.484 | .132 | .015030 | 1.493 | .758 | .032060 | 1.496 | 1.066 | .005010 | 1.498 | 1.066 | .030050 |
| 1.451 | 1.196 | .010020 | 1.469 | .665 | .100120 | 1.484 | .252 | .156187 | 1.493 | .776 | .020030 | 1.496 | 1.114 | .010020 | 1.498 | 1.071 | .015030 |
| 1.451 | 1.271 | .036060 | 1.469 | .750 | .080090 | 1.484 | .882 | .040060 | 1.493 | .810 | .005010 | 1.496 | 1.162 | .005010 | 1.498 | 1.072 | .110130 |
| 1.452 1.452 | .266 .441 | .020040 | 1.469 1.470 | .808 .171 | .005010 .005010 | 1.484 1.484 | .889 1.070 | .050070 . 005010 | 1.493 1.493 | 1.008 1.062 | .050070 .030050 | 1.496 1.496 | 1.189 1.221 | . 005010 .040060 | 1.498 1.498 | 1.098 1.125 | .030060 .090120 |
| 1.453 | .104 | .005010 | 1.470 | .610 | .100125 | 1.484 | 1.130 | .020030 | 1.493 | 1.136 | .010025 | 1.496 | 1.255 | .040060 | 1.498 | 1.130 | .100120 |
| 1.453 | .760 | .030050 | 1.470 | .752 | .005010 | 1.484 | 1.382 | .020030 | 1.493 | 1.191 | .030050 | 1.496 | 1.260 | .005075 | 1.498 | 1.169 | .025040 |
| 1.454 1.454 | .568 .756 | .080100 | 1.470 1.470 | .782 .833 | .100125 .100156 | 1.485 | .472 .520 | .080104 .060080 | 1.493 | 1.229 | .005010 | 1.496 1.497 | 1.311 .145 | .010020 | 1.498 1.498 | 1.178 1.268 | .010020 .040060 |
| 1.454 | 1.014 | .020030 | 1.470 | 1.062 | .048075 | 1.485 1.485 | .550 | .100125 | 1.493 1.493 | 1.242 1.273 | . 005010 .060070 | 1.497 | .145 | .020040 | 1.498 | 1.305 | .030050 |
| 1.454 | 1.102 | .005010 | 1.470 | 1.094 | .015030 | 1.485 | .650 | .100125 | 1.493 | 1.299 | .005010 | 1.497 | .375 | .050083 | 1.498 | 1.321 | .030048 |
| 1.454 | 1.282 | .050070 | | 1.111 | .040050 | 1.485 | .674 | .050070 | 1.493 | 1.314 | .005010 | 1.497 | .377 | .105125 | 1.498 | 1.378 | .005010 |
| 1.455 1.455 | .475 .637 | .125135 | 1.470 1.470 | 1.150 1.226 | .025042 | 1.485 1.485 | <u>.794</u> .846 | .005010 .005020 | 1.494 1.494 | .271 .330 | .015030 .005020 | 1.497 1.497 | .379 .386 | .042062 | 1.498 1.499 | 1.396 .098 | .015025 .050075 |
| 1.455 | .638 | .040030 | 1.470 | 1.375 | .040060 | 1.485 | .901 | .134156 | 1.494 1.494 | .330 .4 74 | .005020 | 1.497 | .421 | .156187 | 1.499 | .127 | .080075 |
| 1.455 | .754 | .005010 | 1.471 | .688 | .062080 | 1.485 | .919 | .030040 | 1.494 | .477 | .005010 | 1.497 | .477 | .005010 | 1.499 | .167 | .005010 |
| 1.455 | 1.065 | .040060 | 1.471 | .758 | .090120 | 1.485 | .970 | .032042 | 1.494 | .637 | .005010 | 1.497 | .515 | .100125 | 1.499 | .187 | .020040 |
| 1.455 1.456 | 1.101 .315 | .040050 | 1.471 1.471 | .759 .810 | .100125 .050070 | 1.485 1.485 | 1.108 1.223 | .050070 .015030 | 1.494 1.494 | .650 760 | .007020 .060080 | 1.497 1.497 | .559 .612 | .100125 | 1.499 1.499 | .197 .213 | .125156 .005010 |
| 1.456 | .826 | .105135 | 1.471 | .821 | .050070 | 1.485 | 1.250 | .015030 | 1.494 | .760 .857 | .080080 | 1.497 | .620 | .010060 | 1.499 | .268 | .070090 |
| 1.456 | 1.066 | .030050 | 1.471 | .877 | .100125 | 1.485 | 1.357 | .015025 | 1.494 | .937 | .030050 | 1.497 | .632 | .010020 | 1.499 | .281 | .100125 |
| 1.457 | .505 | .005020 | 1.471 | .938 | .105125 | 1.486 | .650 | .100125 | 1.494 | 1.024 | .030050 | 1.497 | .655 | .075100 | 1.499 | .303 | .040060 |
| 1.457 1.457 | .675 1.022 | .050070 .005010 | 1.471 1.472 | 1.331 .438 | .005040 .015030 | 1.486 | .803 | .005010 | 1.494 | 1.057 | .080104 | 1.497 1.497 | .723 .753 | .060083 | 1.499 | .314 .374 | .010020 |
| 1.437 | 1.200 | .015025 | 1.472 | .438 | .015030 | 1.486 1.486 | .830 .893 | .040062 .005010 | 1.494 1.494 | 1.060 1.075 | .064078 .050060 | 1.497 | .755 .755 | .025040 | 1.499 | .385 | .135156 |
| | | | | | | | | | | | | | | | | | |
| 1.457 1.457 | 1.295 | .020030 | 1.472 | .762 | .010020 | 1.486 | .906 | .005010 | 1.494 | 1.092 | .040060 | 1.497 | .757 | .010030 | 1.499 | .399 | .005010 |
| 1.457 | | .020030 .100120 .030050 | 1.472 1.472 1.472 | .762 .765 .829 | .010020 .080100 .010020 | 1.486 1.486 1.486 | 1.090 1.229 | .005010 .050075 .070090 | 1.494 1.494 1.494 | 1.092 1.175 1.201 | .040060 .015025 .035050 | 1.497 1.497 1.497 | .757 .763 .772 | .010030 .005015 .030048 | 1.499 1.499 1.499 | .399 .420 .474 | .005010 .005010 .005010 |

| | | | | | | | | | - 110 | 100 | LING CF | IAIIGI | - 1 01 | | INE | SIZE | |
|-----------------------|---------------------|--------------------------|-----------------------|--------------|--------------------------|-----------------------|-----------------------|----------------------------|----------------|----------------------|--------------------------|-----------------------|--------------------|---------------------------|----------------|----------------|--------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| _ | | From To | | | From To | - | | From To | | | From To | | | From To | | | From To |
| 1.499 | .485 | .050075 | 1.500 | .345 | .050070 | 1.500 | .806 | .080104 | 1.500 | 1.298 | .010025 | 1.508 | .315 | .105125 | 1.530 | 1.031 | .075090 |
| 1.499 | .503 | .005020 | 1.500 | .346 | .105135 | 1.500 | .810 | .025040 | 1.500 | 1.300 | .050075 | 1.508 | .910 | .080105 | 1.530 | 1.202 | .010030 |
| 1.499 | .504 | .005020 | 1.500 | .349 | .005010 | 1.500 | .812 | .050100 | 1.500 | 1.301 | .050070 | 1.509 | .301 | .090120 | 1.531 | .333 | .005010 |
| 1.499 | .533 | .005010 | 1.500 | .364 | .005010 | 1.500 | .813 | .050100 | 1.500 | 1.332 | .025040 | 1.509 | .781 | .090105 | 1.531 | .390 | .100125 |
| 1.499 | .561 | .005010 | 1.500 | .372 | .040060 | 1.500 | .817 | .005125 | 1.500 | 1.376 | .015060 | 1.510 | .510 | .060080 | 1.531 | .516 | .060080 |
| 1.499 | .562 | .015025 | 1.500 | .375 | .060187 | 1.500 | .817 | .126135 | 1.500 | 1.389 | .030050 | 1.510 | .900 | .030050 | 1.531 | .625 | .005010 |
| 1.499 | .563 | .010020 | 1.500 | .376 | .015025 | 1.500 | .820 | .020040 | 1.501 | .125 | .075090 | 1.510 | 1.236 | .005010 | 1.531 | .689 | .060080 |
| 1.499 | .574 | .050060 | 1.500 | .377 | .005010 | 1.500 | .830 | .015135 | 1.501 | .190 | .005010 | 1.510 | 1.258 | .005010 | 1.531 | .776 | .025040 |
| 1.499 | .599 .626 | .030050 | 1.500 | .379 .384 | .030050 | 1.500 | .841 | .040050 | 1.501 | .200 | .100125 | 1.511 | .213 | .090100 | 1.531 | .808 | .030050 .020032 |
| 1.499 1.499 | .676 | .005010 .030060 | 1.500 1.500 | .385 | .010025 .005010 | 1.500 1.500 | .853 .871 | .080104 | 1.501 | .280 .336 | .060090 .105125 | 1.511 | .823 | .170190 | 1.531 | 1.000 | .025042 |
| 1.499 | .710 | .030050 | 1.500 | .391 | .050070 | 1.500 | .873 | .170190 | 1.501 1.501 | .372 | .050070 | 1.511 | 1.015 1.112 | .005010 | 1.531 | 1.223 | .010020 |
| 1.499 | .750 | .070090 | 1.500 | .392 | .010020 | 1.500 | .874 | .020040 | 1.501 | .382 | .005012 | 1.511 1.511 | 1.112 | .050075 | 1.532 | .098 | .030050 |
| 1.499 | .759 | .060080 | 1.500 | .395 | .050083 | 1.500 | .876 | .100125 | 1.501 | .385 | .090125 | 1.511 | 1.351 | .040060 .005010 | 1.532 | .765 | .005010 |
| 1.499 | .760 | .060080 | 1.500 | .397 | .030050 | 1.500 | .877 | .100125 | 1.501 | .437 | .005010 | 1.514 | 1.126 | .062080 | 1.532 | 1.047 | .015025 |
| 1.499 | .763 | .040060 | 1.500 | .398 | .005015 | 1.500 | .880 | .010020 | 1.501 | .508 | .030050 | 1.515 | .583 | .120134 | 1.532 | 1.306 | .070090 |
| 1.499 | .765 | .005125 | 1.500 | .406 | .005125 | 1.500 | .882 | .110134 | 1.501 | .514 | .005010 | 1.515 | .765 | .050070 | 1.533 | 1.003 | .040060 |
| 1.499 | .768 | .010020 | 1.500 | .406 | .126187 | 1.500 | .883 | .040125 | 1.501 | .626 | .010020 | 1.515 | .892 | .045060 | 1.533 | 1.379 | .050060 |
| 1.499 | .813 | .090105 | 1.500 | .413 | .075090 | 1.500 | .886 | .156187 | 1.501 | .715 | .005010 | 1.515 | 1.360 | .040060 | 1.534 | .325 | .080104 |
| 1.499 | .876 | .005010 | 1.500 | .437 | .040125 | 1.500 | .892 | .105120 | 1.501 | .755 | .010020 | 1.515 | 1.375 | .020040 | 1.534 | .505 | .005020 |
| 1.499 | .880 | .040060 | 1.500 | .440 | .005080 | 1.500 | .893 | .062090 | 1.501 | .773 | .100125 | 1.515 | 1.378 | .010020 | 1.534 | 1.026 | .105125 |
| 1.499 | .881 | .040060 | 1.500 | .441 | .010020 | 1.500 | .908 | .026048 | 1.501 | .817 | .100125 | 1.516 | .293 | .050075 | 1.534 | 1.046 | .015030 |
| 1.499 | .995 | .005010 | 1.500 | .442 | .005010 | 1.500 | .910 | .140160 | 1.501 | .820 | .040060 | 1.516 | .915 | .050070 | 1.534 | 1.097 | .020040 |
| 1.499 | 1.003 | .005012 | 1.500 | .443 | .020032 | 1.500 | .934 | .040060 | 1.501 | .840 | .010020 | 1.516 | 1.194 | .005010 | 1.534 | 1.397 | .020035 |
| 1.499 | 1.011 | .110130 | 1.500 | .450 | .100125 | 1.500 | .935 | .030040 | 1.501 | .876 | .040060 | 1.516 | 1.199 | .005010 | 1.535 | .322 | .050075 |
| 1.499 | 1.046 | .050075 | 1.500 | .451 | .005010 | 1.500 | .937 | .050075 | 1.501 | .909 | .050070 | 1.518 | 1.405 | .005010 | 1.535 | .330 | .156187 |
| 1.499 | 1.047 | .040060 | 1.500 | .454 | .100125 | 1.500 | .938 | .093109 | 1.501 | 1.008 | .080100 | 1.519 | .623 | .005010 | 1.535 | .635 | .025040 |
| 1.499 | 1.052 | .050070 | 1.500 | .479 | .156187 | 1.500 | .942 | .105134 | 1.501 | 1.009 | .005010 | 1.520 | .195 | .035050 | 1.535 | .788 | .050070 |
| 1.499 | 1.059 | .070090 | 1.500 | .497 | .105125 | 1.500 | .970 | .080100 | 1.501 | 1.010 | .005010 | 1.520 | .328 | .015020 | 1.535 | .867 | .105125 |
| 1.499 | 1.098 | .030050 | 1.500 | .500 | .005060 | 1.500 | .993 | .025040 | 1.501 | 1.121 | .020030 | 1.520 | .890 | .050070 .005010 | 1.535 | .904 | .100125 |
| 1.499 | 1.117 | .040060 | 1.500 | .505 | .005050 | 1.500 | .996 | .050070 | 1.501 | 1.132 | .025050 | 1.520 | 1.015 | | 1.535 | 1.064 | .080104 |
| 1.499 | 1.123 | .080100 | 1.500 | .506 | .005125 | 1.500 | 1.001 | .005015 | 1.501 | 1.133 | .060080 | 1.520 | 1.264 | .020050 | 1.535 | 1.138 | .005020 |
| 1.499 1.499 | 1.135 1.142 | .040060 .005012 | 1.500 | .512 | .060156 | 1.500 | 1.002 | .040090 | 1.501 | 1.188 | .050070 | 1.520 1.521 | 1.420 .326 | .005010 .030050 | 1.535 | 1.140 | .030040 |
| 1.499 | 1.202 | .005012 | 1.500 1.500 | .513 .515 | .100125 .100125 | 1.500 1.500 | 1.003 1.003 | . 005125 .126156 | 1.501 | 1.251 | .020030 | 1.521 | .320 | .040060 | 1.535 1.535 | 1.344 1.378 | .012025 .020035 |
| 1.499 | 1.250 | .050075 | 1.500 | .519 | .080104 | 1.500 | 1.003 | .015050 | 1.501 1.502 | 1.290 .185 | .105135 | 1.521 | .889 | .050070 | 1.536 | .188 | .090120 |
| 1.499 | 1.256 | .030040 | 1.500 | .530 | .015125 | 1.500 | 1.005 | .050075 | 1.502 | .220 | .060080 | 1.521 | 1.024 | .040060 | 1.536 | .501 | .010020 |
| 1.400 | 1.200 | .000 .040 | 1.500 | .536 | .006134 | 1.500 | 1.003 | .040140 | 1.502 | .345 | .080000 | 1.523 | .346 | .050070 | 1.536 | .576 | .015030 |
| | | | 1.500 | .537 | .030048 | 1.500 | 1.010 | .005020 | 1.502 | .349 | .030048 | 1.523 | .503 | .005010 | 1.536 | .651 | .015030 |
| | | | 1.500 | .550 | .090125 | 1.500 | 1.011 | .010020 | 1.502 | .375 | .060125 | 1.523 | .507 | .005020 | 1.536 | .694 | .015020 |
| _ | | | 1.500 | .560 | .005015 | 1.500 | 1.015 | .040125 | 1.502 | .411 | .005010 | 1.523 | .584 | .050070 | 1.536 | .710 | .005010 |
| 4 | | 00 | 1.500 | .562 | .050190 | 1.500 | 1.018 | .100125 | 1.502 | .441 | .030050 | 1.524 | .329 | .110130 | 1.536 | .712 | .030050 |
| | | | 1.500 | .563 | .015030 | 1.500 | 1.019 | .005012 | 1.502 | .444 | .120135 | 1.524 | .432 | .100125 | 1.536 | .811 | .005010 |
| | V | | 1.500 | .564 | .100120 | 1.500 | 1.020 | .005125 | 1.502 | .562 | .134187 | 1.524 | .435 | .040060 | 1.536 | 1.009 | .050070 |
| | | | 1.500 | .571 | .025040 | 1.500 | 1.032 | .048134 | 1.502 | .563 | .005010 | 1.524 | .560 | .040060 | 1.536 | 1.024 | .135156 |
| 1.500 | .084 | .020035 | 1.500 | .577 | .010015 | 1.500 | 1.036 | .008105 | 1.502 | .656 | .156188 | 1.524 | 1.274 | .042060 | 1.537 | .407 | .075125 |
| 1.500 | .126 | .040060 | 1.500 | .579 | .110130 | 1.500 | 1.041 | .005010 | 1.502 | .752 | .105125 | 1.525 | .250 | .050070 | 1.537 | .501 | .010020 |
| 1.500 | .130 | .020032 | 1.500 | .605 | .050070 | 1.500 | 1.043 | .005010 | 1.502 | .877 | .080100 | 1.525 | .265 | .005010 | 1.537 | 1.288 | .042062 |
| 1.500 | .135 | .090104 | 1.500 | .625 | .030050 | 1.500 | 1.050 | .156187 | 1.502 | .885 | .005010 | 1.525 | .268 | .005010 | 1.537 | 1.296 | .005010 |
| 1.500 | .150 | .040062 | 1.500 | .626 | .100125 .005010 | 1.500 | 1.062 | .050075 | 1.502 | .891 | .025040 | 1.525 | .657 | .005010 | 1.539 | .562 | .010020 |
| 1.500 | .156 | .030125 | 1.500 | .634 | | 1.500 | 1.063 | .020040 | 1.502 | .960 | .060080 | 1.525 | .685 | .040060 | 1.539 | 1.206 | .015030 |
| 1.500 1.500 | .157 .161 | .030050 .100125 | 1.500 1.500 | .636 .638 | .060180 .020040 | 1.500 1.500 | 1.065 1.092 | .010060 .005030 | 1.502 | 1.015 | .020030 .100125 | 1.525 1.525 | 1.310 1.316 | .025040 .070090 | 1.539 1.539 | 1.220 1.359 | .015030 .030050 |
| 1.500 | .163 | .010040 | 1.500 | .640 | .110130 | 1.500 | 1.092 | .005062 | 1.502 1.502 | 1.067 1.110 | .025040 | 1.525 | 1.335 | .040060 | 1.540 | .512 | .105125 |
| 1.500 | .185 | .050083 | 1.500 | .655 | .005020 | 1.500 | 1.115 | .005002 | 1.502 | 1.110 | .120135 | 1.526 | 1.280 | .040060 | 1.540 | .563 | .005010 |
| 1.500 | .188 | .005010 | 1.500 | .656 | .075130 | 1.500 | 1.122 | .032048 | 1.502 | 1.125 | .005010 | 1.526 | 1.310 | .025042 | 1.540 | .910 | .015030 |
| 1.500 | .194 | .025042 | 1.500 | .660 | .040060 | 1.500 | 1.127 | .005010 | 1.502 | 1.150 | .090125 | 1.526 | 1.345 | .005010 | 1.540 | 1.102 | .025040 |
| 1.500 | .195 | .048075 | 1.500 | .665 | .005010 | 1.500 | 1.129 | .060083 | 1.502 | 1.380 | .005010 | 1.527 | 1.418 | .020030 | 1.540 | 1.200 | .020030 |
| 1.500 | .200 | .010030 | 1.500 | .687 | .030050 | 1.500 | 1.156 | .015030 | 1.503 | .509 | .005010 | 1.528 | .187 | .025040 | 1.540 | 1.290 | .050070 |
| 1.500 | .209 | .105125 | 1.500 | .688 | .050070 | 1.500 | 1.157 | .025042 | 1.503 | .701 | .050070 | 1.528 | .195 | .050100 | 1.541 | .318 | .020030 |
| 1.500 | .219 | .050070 | 1.500 | .694 | .005010 | 1.500 | 1.171 | .070090 | 1.503 | .845 | .025040 | 1.528 | .250 | .010030 | 1.541 | 1.008 | .025070 |
| 1.500 | .245 | .032060 | 1.500 | .700 | .070090 | 1.500 | 1.175 | .030050 | 1.503 | 1.008 | .005010 | 1.528 | .728 | .005010 | 1.541 | 1.250 | .050070 |
| 1.500 | .250 | .010020 | 1.500 | .701 | .050070 | 1.500 | 1.186 | .105135 | 1.503 | 1.016 | .015030 | 1.528 | 1.009 | .050070 | 1.542 | .833 | .020030 |
| 1.500 | .259 | .060083 | 1.500 | .703 | .005010 | 1.500 | 1.187 | .015125 | 1.503 | 1.020 | .050075 | 1.528 | 1.276 | .010020 | 1.542 | .998 | .005010 |
| 1.500 | .265 | .100125 | 1.500 | .713 | .005010 | 1.500 | 1.190 | .005010 | 1.504 | .687 | .010020 | 1.528 | 1.285 | .020040 | 1.542 | 1.193 | .005010 |
| 1.500 | .266 | .015025 | 1.500 | .715 | .005020 | 1.500 | 1.191 | .105125 | 1.504 | .784 | .042062 | 1.529 | .466 | .005010 | 1.543 | .431 | .075105 |
| 1.500 | .267 | .005010 | 1.500 | .725 | .070090 | 1.500 | 1.199 | .005040 | 1.504 | .789 | .005010 | 1.529 | .791 | .030050 | 1.543 | 1.200 | .020030 |
| 1.500 | .269 | .030048 | 1.500 | .749 | .010025 | 1.500 | 1.202 | .031048 | 1.504 | .811 | .100125 | 1.529 | .984 | .080105 | 1.543 | 1.255 | .050075 |
| 1.500 1.500 | .275 | .080090 | 1.500 | .753 754 | .010125 | 1.500 | 1.204 | .035048 | 1.504 | 1.036 | .120135 | 1.529 | 1.052 | .080100 | 1.543 | 1.257 | .025040 |
| 1.500 | .281 | .156187 | 1.500 1.500 | .754 .761 | .040060 .100125 | 1.500 1.500 | 1.212 1.215 | .015030 | 1.504 | 1.230 | .062090 | 1.529 1.529 | 1.117 1.259 | .100110 | 1.543 1.544 | 1.261 | .030050 .030050 |
| 1.500 | .282 | .008015 | 1.500 | .765 | .020080 | 1.500 | 1.215 | .005010 .005010 | 1.504 1.504 | 1.287 1.378 | .040060 .010020 | 1.529 | 1.360 | .020040 | 1.544 | 1.169 1.182 | .030050 |
| 1.500 | .303 | .005010 | 1.500 | .768 | .020030 | 1.500 | 1.251 | .025040 | 1.504 | .408 | .010020 | 1.529 | 1.416 | .020040 | 1.544 1.544 | 1.102 1.191 | .025040 |
| 1.500 | .311 | .104134 | 1.500 | .781 | .020030 | 1.500 | 1.264 | .020030 | 1.505 | .408 .440 | .156187 | 1.529 | 1.453 | .020030 | 1.544 | 1.481 | .010020 |
| 1.500 | .313 | .062080 | 1.500 | .782 | .050075 | 1.500 | 1.265 | .005010 | 1.505 | .845 | .025035 | 1.530 | .251 | .015030 | 1.545 | .264 | .030050 |
| 1.500 | .315 | .002000 | 1.500 | .783 | .156187 | 1.500 | 1.266 | .010020 | 1.505 | 1.003 | .015030 | 1.530 | .282 | .060080 | 1.545 | .437 | .020040 |
| 1.500 | .325 | .048075 | 1.500 | .785 | .030040 | 1.500 | 1.274 | .010020 | 1.505 | 1.109 | .040060 | 1.530 | .312 | .030050 | 1.545 | 1.156 | .020030 |
| 1.500 | .327 | .005010 | 1.500 | .786 | .005010 | 1.500 | 1.275 | .008018 | 1.505 | 1.310 | .015025 | 1.530 | .536 | .005010 | 1.545 | 1.191 | .005010 |
| 1.500 | .330 | .120135 | 1.500 | .792 | .005040 | 1.500 | 1.277 | .090125 | 1.506 | 1.249 | .050075 | 1.530 | .548 | .005010 | 1.545 | 1.457 | .025035 |
| 1.500 | .340 | .005010 | 1.500 | .804 | .005012 | 1.500 | 1.282 | .008016 | 1.507 | 1.324 | .005010 | 1.530 | .832 | .020030 | 1.546 | 1.182 | .025040 |
| | | | *\^(:+ - DO | | | | | | | | | | | | | | |

| | | Obsess Amu | | | Oh A | | | Character | 1 5 IVIE | ·IAL | WASHER | O AIII | - 1 7 | | OWIDE | E DE | |
|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|---------------------------|----------------|----------------------|----------------------------|-----------------------|----------------------|--------------------------|-----------------------|----------------------|----------------------------|-----------------------|-----------------------|---------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 1.546 | 1.184 | .025040 | 1.559 | 1.315 | .006040 | 1 500 | 1047 | From To | 1 570 | 1.050 | From To | 4.570 | F70 | From To | 1.600 | .310 | .030050 |
| 1.547 | 1.007 | .040064 | 1.559 | 1.439 | .005020 | 1.562 1.562 | 1.347 1.348 | .040060 .062075 | 1.570 1.571 | 1.250 .379 | .005010 .080100 | 1.579 | .570 | .005010 | 1.600 | .377 | .005015 |
| 1.548 | .441 | .010020 | 1.560 | .242 | .015030 | 1.562 | 1.354 | .002013 | 1.571 | .870 | .100120 | 1.579 1.579 | 1.232 1.378 | .010020 .030040 | 1.600 | .378 | .005015 |
| 1.548 | .951 | .090110 | 1.560 | .381 | .125156 | 1.562 | 1.374 | .025040 | 1.571 | 1.018 | .100125 | 1.580 | .795 | .020040 | 1.600 | .415 | .075100 |
| 1.548 | 1.005 | .010020 | 1.560 | .391 | .080105 | 1.562 | 1.375 | .020040 | 1.571 | 1.038 | .005015 | 1.580 | 1.081 | .010020 | 1.600 | .441 | .100125 |
| 1.548 | 1.038 | .031048 | 1.560 | .392 | .080105 | 1.562 | 1.376 | .005010 | 1.571 | 1.146 | .070090 | 1.580 | 1.310 | .005010 | 1.600 | .478 | .090120 |
| 1.549 | .361 | .050070 | 1.560 | .455 | .100125 | 1.563 | .439 | .005010 | 1.572 | .476 | .005010 | 1.580 | 1.472 | .005010 | 1.600 | .502 | .005010 |
| 1.549 | .503 | .015030 | 1.560 | .508 | .100125 | 1.563 | .638 | .005010 | 1.572 | .569 | .050060 | 1.581 | .119 | .005010 | 1.600 | .503 | .006012 |
| 1.549 | .505 | .005020 | 1.560 | .563 | .015030 | 1.563 | .690 | .032060 | 1.572 | .625 | .050070 | 1.582 | .405 | .040060 | 1.600 | .625 | .020040 |
| 1.549 | .754 | .040062 | 1.560 | .619 | .005010 | 1.563 | .762 | .005010 | 1.572 | .754 | .005010 | 1.582 | .450 | .010020 | 1.600 | .627 | .005020 |
| 1.549 | 1.003 | .050070 | 1.560 | .772 | .005010 | 1.563 | .878 | .025040 | 1.572 | .761 | .020040 | 1.582 | .530 | .040060 | 1.600 | .630 | .010020 |
| 1.549 | 1.005 | .040060 | 1.560 | .839 | .050070 | 1.563 | .892 | .075100 | 1.572 | 1.254 | .030050 | 1.582 | .634 | .010020 | 1.600 | .715 | .105120 |
| 1.549 | 1.007 | .005010 | 1.560 | .845 | .025048 | 1.563 | .999 | .105125 | 1.572 | 1.255 | .025040 | 1.582 | 1.250 | .083105 | 1.600 | .751 | .005010 |
| 1.549 | 1.226 | .030050 | 1.560 | 1.063 | .135156 | 1.563 | 1.005 | .110130 | 1.572 | 1.258 | .007016 | 1.582 | 1.301 | .005010 | 1.600 | .754 | .010020 |
| 1.550 | .245 | .042075 | 1.560 | 1.100 | .005010 | 1.563 | 1.062 | .005010 | 1.572 | 1.452 | .005010 | 1.583 | 1.089 | .020040 | 1.600 | .800 | .005010 |
| 1.550 | .368 | .020035 | 1.560 | 1.140 | .005010 | 1.563 | 1.131 | .050070 | 1.573 | .504 | .090135 | 1.584 | .834 | .005010 | 1.600 | .874 | .040060 |
| 1.550 | .438 | .005030 | 1.560 | 1.207 | .010020 | 1.563 | 1.347 | .040062 | 1.573 | .641 | .060083 | 1.584 | 1.009 | .040060 | 1.600 | .878 | .025040 |
| 1.550 1.550 | .440 .500 | . 005010 .050070 | 1.560 1.560 | 1.315 | .015025 | 1.563 1.564 | 1.402 .375 | .020040 | 1.573 | .648 | .010020 | 1.585 1.585 | .140 .375 | .042060 | 1.600 1.600 | .885 | .030040 .080100 |
| 1.550 | .502 | .005010 | 1.560 | 1.319 1.320 | .005010 | | | .048075 .025040 | 1.573 | .731 | .040062 | 1.585 | 1.000 | .032050 | 1.600 | .925 | |
| 1.550 | .704 | .005010 | 1.560 | 1.331 | .015025 .050070 | 1.564 1.564 | .501 .511 | .020040 | 1.573 1.573 | .812 1.013 | .015030 .005010 | 1.585 | 1.007 | .010030 | 1.600 | 1.000 1.070 | .005010 .025125 |
| 1.550 | .750 | .020040 | 1.560 | 1.353 | .005010 | 1.564 | .767 | .010020 | 1.573 | 1.102 | .060080 | 1.585 | 1.120 | .005015 | 1.600 | 1.125 | .015025 |
| 1.550 | .752 | .105125 | 1.560 | 1.376 | .025040 | 1.564 | 1.135 | .050075 | 1.573 | 1.221 | .030050 | 1.585 | 1.209 | .025040 | 1.600 | 1.128 | .010020 |
| 1.550 | 1.221 | .005010 | 1.561 | .161 | .020030 | 1.564 | 1.189 | .005010 | 1.573 | 1.224 | .135156 | 1.585 | 1.256 | .025040 | 1.600 | 1.175 | .090125 |
| 1.550 | 1.235 | .050075 | 1.561 | .251 | .040060 | 1.564 | 1.309 | .005010 | 1.573 | 1.264 | .005010 | 1.585 | 1.260 | .015030 | 1.600 | 1.205 | .010020 |
| 1.550 | 1.255 | .015025 | 1.561 | .259 | .083125 | 1.564 | 1.393 | .015030 | 1.573 | 1.374 | .005010 | 1.585 | 1.359 | .050062 | 1.600 | 1.260 | .030050 |
| 1.550 | 1.415 | .005010 | 1.561 | .629 | .075105 | 1.564 | 1.434 | .005010 | 1.574 | .344 | .105125 | 1.586 | .141 | .060090 | 1.600 | 1.271 | .110130 |
| 1.550 | 1.416 | .015020 | 1.561 | .766 | .100125 | 1.565 | .122 | .020040 | 1.574 | .434 | .150170 | 1.586 | 1.265 | .020030 | 1.600 | 1.300 | .050060 |
| 1.550 | 1.439 | .005010 | 1.561 | .768 | .025040 | 1.565 | .562 | .030048 | 1.574 | .474 | .005010 | 1.586 | 1.290 | .005010 | 1.600 | 1.310 | .050060 |
| 1.551 | .289 | .050070 | 1.561 | .883 | .005010 | 1.565 | 1.192 | .050075 | 1.574 | .475 | .010020 | 1.587 | .469 | .010020 | 1.600 | 1.357 | .005015 |
| 1.551 1.551 | .438 .440 | .010020 .010020 | 1.561 | .952 | .030050 | 1.565 | 1.228 | .030050 | 1.574 | .502 | .010020 | 1.588 | .700 1.006 | .050070 | 1.600 | 1.375 | .010020 |
| 1.551 | 1.026 | .060080 | 1.561 1.561 | 1.039 1.040 | .030050 .010015 | 1.565 | 1.270 1.369 | .030042 | 1.574 | .631 .984 | .010020 | 1.588 1.588 | 1.118 | . 005010 .105120 | 1.600 1.601 | 1.439 .631 | .005010 .005010 |
| 1.551 | 1.140 | .010020 | 1.561 | 1.158 | .040060 | 1.565 1.566 | .257 | .050075 .070090 | 1.574 1.574 | 1.071 | .035045 | 1.588 | 1.248 | .020035 | 1.601 | 1.436 | .005010 |
| 1.551 | 1.189 | .105125 | 1.561 | 1.231 | .040060 | 1.566 | .502 | .105125 | 1.574 | 1.103 | .015030 | 1.589 | .505 | .025040 | 1.601 | 1.460 | .005010 |
| 1.551 | 1.278 | .060080 | 1.561 | 1.261 | .040060 | 1.566 | .980 | .005010 | 1.574 | 1.130 | .012020 | 1.590 | .490 | .090125 | 1.602 | .630 | .100125 |
| 1.552 | 1.460 | .005010 | 1.561 | 1.390 | .005010 | 1.566 | 1.330 | .050070 | 1.574 | 1.188 | .005010 | 1.590 | .594 | .100125 | 1.602 | .973 | .100125 |
| 1.553 | .854 | .075105 | 1.561 | 1.433 | .005012 | 1.566 | 1.347 | .035050 | 1.574 | 1.221 | .010020 | 1.590 | 1.299 | .020035 | 1.602 | 1.432 | .005010 |
| 1.553 | .859 | .080100 | 1.561 | 1.439 | .005010 | 1.566 | 1.416 | .040060 | 1.574 | 1.337 | .020030 | 1.590 | 1.345 | .010060 | 1.602 | 1.492 | .005010 |
| 1.553 | 1.158 | .125156 | 1.562 | .201 | .020030 | 1.567 | .729 | .030048 | 1.574 | 1.373 | .062090 | 1.590 | 1.362 | .060080 | 1.603 | .341 | .100125 |
| 1.554 | .765 | .080104 | 1.562 | .317 | .008016 | 1.567 | .935 | .050075 | 1.574 | 1.416 | .005010 | 1.592 | .407 | .048062 | 1.603 | .800 | .075090 |
| 1.554 | .883 | .010015 | 1.562 | .351 | .075105 | 1.567 | .978 | .007015 | 1.575 | .355 | .100125 | 1.592 | 1.171 | .040060 | 1.603 | 1.012 | .025040 |
| 1.554 | 1.000 | .060080 | 1.562 | .378 | .048075 | 1.567 | 1.004 | .105125 | 1.575 | .393 | .120135 | 1.592 | 1.222 | .010020 | 1.603 | 1.500 | .020030 .115130 |
| 1.554 1.554 | 1.193 1.460 | .060080 .005010 | 1.562 1.562 | .406 .408 | .105125 .015030 | 1.567 1.567 | 1.232 1.248 | .030050 .062090 | 1.575 1.575 | .473 .477 | .005010 .005010 | 1.593 1.593 | .515 .900 | .010020 .060080 | 1.604 1.604 | .674 1.007 | .005010 |
| 1.555 | .166 | .080104 | 1.562 | .562 | .032050 | 1.567 | 1.260 | .005010 | 1.575 | .502 | .020030 | 1.593 | 1.034 | .010020 | 1.605 | .378 | .030050 |
| 1.555 | .650 | .007012 | 1.562 | .563 | .156187 | 1.567 | 1.311 | .015030 | 1.575 | .503 | .005010 | 1.593 | 1.171 | .100125 | 1.605 | .390 | .005010 |
| 1.555 | 1.060 | .032060 | 1.562 | .564 | .005020 | 1.567 | 1.346 | .015030 | 1.575 | .504 | .100125 | 1.593 | 1.172 | .050075 | 1.605 | 1.009 | .105125 |
| 1.555 | 1.100 | .090120 | 1.562 | .746 | .075105 | 1.567 | 1.380 | .040062 | 1.575 | .564 | .010020 | 1.593 | 1.194 | .062080 | 1.605 | 1.134 | .010030 |
| 1.555 | 1.112 | .080105 | 1.562 | .750 | .010100 | 1.568 | .060 | .040050 | 1.575 | .591 | .050060 | 1.593 | 1.322 | .060080 | 1.605 | 1.348 | .030050 |
| 1.555 | 1.133 | .090105 | 1.562 | .762 | .005010 | 1.568 | .675 | .005010 | 1.575 | .630 | .005010 | 1.594 | .657 | .030060 | 1.606 | .465 | .105125 |
| 1.555 | 1.196 | .015030 | 1.562 | .765 | .090120 | 1.568 | .692 | .060080 | 1.575 | .643 | .070090 | 1.594 | .814 | .015025 | 1.606 | .516 | .105125 |
| 1.555 | 1.250 | .060080 | 1.562 | .781 | .083105 | 1.568 | 1.110 | .050070 | 1.575 | .709 | .015030 | 1.594 | 1.278 | .080100 | 1.606 | 1.000 | .105125 |
| 1.556 1.556 | .164 .511 | .050062 .080105 | 1.562 | .782 | .080104 | 1.568 | 1.347 .361 | . 005010 .040060 | 1.575 | .789 | .025040 | 1.594 1.594 | 1.303 1.416 | .010020 .005015 | 1.607 1.607 | .562 | .125156 |
| 1.556 | 1.192 | .050070 | 1.562 1.562 | .812 .864 | .062080 .120140 | 1.569 1.569 | .504 | .070090 | 1.575 1.575 | .794 .879 | .005010 .005010 | 1.594 | 1.451 | .030050 | 1.607 | .630 1.022 | .092125 |
| 1.556 | 1.260 | .015030 | 1.562 | .874 | .020040 | 1.569 | .589 | .005030 | 1.575 | .953 | .090100 | 1.594 | 1.504 | .015030 | 1.607 | 1.271 | .025040 |
| 1.556 | 1.262 | .020040 | 1.562 | .875 | .015030 | 1.569 | .756 | .105125 | 1.575 | .985 | .010156 | 1.596 | .880 | .010020 | 1.607 | 1.332 | .010020 |
| 1.556 | 1.405 | .010020 | 1.562 | .904 | .040050 | 1.569 | .807 | .090105 | 1.575 | 1.025 | .030050 | 1.597 | .200 | .050070 | 1.608 | .811 | .030050 |
| 1.556 | 1.437 | .032050 | 1.562 | .906 | .040050 | 1.569 | .884 | .105125 | 1.575 | 1.178 | .156187 | 1.597 | .755 | .010020 | 1.608 | 1.130 | .100125 |
| 1.557 | .396 | .005015 | 1.562 | .925 | .030060 | 1.569 | 1.030 | .025040 | 1.575 | 1.200 | .040050 | 1.597 | .881 | .090125 | 1.608 | 1.444 | .015030 |
| 1.557 | .407 | .060080 | 1.562 | .932 | .050075 | 1.569 | 1.140 | .070090 | 1.575 | 1.220 | .005015 | 1.598 | .199 | .080090 | 1.609 | .810 | .025040 |
| 1.557 | .770 | .110130 | 1.562 | .937 | .100125 | 1.569 | 1.187 | .040060 | 1.575 | 1.338 | .005010 | 1.598 | .320 | .080090 | 1.609 | .845 | .012020 |
| 1.557 | 1.002 | .075090 | 1.562 | .938 | .015025 | 1.569 | 1.285 | .010020 | 1.575 | 1.389 | .070090 | 1.598 | .505 | .005010 | 1.609 | 1.015 | .016025 |
| 1.557 | 1.038 | .040060 | 1.562 | .939 | .030050 | 1.569 | 1.320 | .015030 | 1.575 | 1.474 | .005010 | 1.598 1.598 | .516 .625 | .050070 | 1.609 | 1.260 | .050075 |
| 1.557 | 1.355 | .025040 | 1.562 1.562 | .996 1.001 | .062090 .120134 | 1.569 1.570 | 1.331 .168 | .040060 .008012 | 1.576 1.576 | .414 .477 | .160190 .010020 | 1.598 | .630 | .030050 | 1.609 1.609 | 1.275 1.400 | .100125 .020032 |
| 1.557 | 1.358 | .005010 | 1.562 | 1.001 | .120134 | 1.570 | .256 | .080012 | 1.576 | .630 | .010020 | 1.598 | .720 | .010020 | 1.609 | 1.468 | .048062 |
| 1.558 | .256 | .075100 | 1.562 | 1.002 | .040060 | 1.570 | .346 | .010020 | 1.576 | .670 | .015030 | 1.598 | 1.000 | .080125 | 1.610 | 1.110 | .015030 |
| 1.558 | .375 | .075090 | 1.562 | 1.032 | .083105 | 1.570 | .526 | .080100 | 1.576 | 1.092 | .050070 | 1.598 | 1.269 | .050070 | 1.610 | 1.148 | .090105 |
| 1.558 | .378 | .060080 | 1.562 | 1.063 | .015025 | 1.570 | .720 | .005010 | 1.576 | 1.245 | .025040 | 1.599 | .378 | .005020 | 1.610 | 1.259 | .005010 |
| 1.558 | .410 | .090105 | 1.562 | 1.128 | .030048 | 1.570 | .813 | .030050 | 1.577 | .632 | .040060 | 1.599 | .489 | .090110 | 1.610 | 1.275 | .100125 |
| 1.558 | .749 | .020040 | 1.562 | 1.155 | .015032 | 1.570 | .870 | .005010 | 1.577 | .771 | .030060 | 1.599 | .503 | .005010 | 1.610 | 1.404 | .070090 |
| 1.558 | .770 | .105125 | 1.562 | | .005010 | 1.570 | .906 | .100125 | 1.577 | .994 | .015030 | 1.599 | .504 | .010020 | 1.610 | 1.422 | .020035 |
| 1.558 | 1.004 | .025040 | 1.562 | 1.188 | .020040 | 1.570 | 1.003 | .035060 | 1.577 | 1.072 | .090110 | 1.599 | .505 | .005010 | 1.611 | 1.135 | .005010 |
| 1.558 1.559 | 1.433 .776 | .005010 .005010 | 1.562 | 1.203 1.313 | .025048 .005010 | 1.570 | 1.031 | .080105 | 1.577 | 1.341 | .070090 | 1.599 1.599 | .626 .630 | .015025 . 005010 | 1.611 1.612 | 1.410 1.135 | .010020 .005020 |
| 1.559 | .77 6 .875 | .110130 | 1.562 1.562 | 1.320 | .060080 | 1.570 1.570 | 1.032 1.190 | .100125 .032042 | 1.578 1.578 | .771 1.063 | .025040 .030050 | 1.599 1.599 | 1.437 | .010020 | 1.612 | 1.316 | .030050 |
| 1.559 | 1.071 | .005010 | 1.562 | 1.323 | .105125 | 1.570 | 1.191 | .125156 | 1.578 | 1.292 | .020030 | 1.600 | .170 | .050062 | 1 | 1.499 | .005010 |
| 1.559 | 1.288 | .010020 | 1.562 | 1.346 | .030050 | 1.570 | 1.220 | .050070 | 1.578 | 1.298 | .010015 | 1.600 | .281 | .050075 | 1 | 1.510 | .005010 |
| | | | MACHE DO | | | | | | | | | | | | | | |

| O.D. I.D. Thickness Th | To 1.655 0020 1.655 0040 1.655 0070 1.655 0010 1.656 080 1.656 060 1.656 030 1.656 040 1.656 050 1.656 050 1.656 010 1.656 010 1.656 | 1.125 1.179 1.440 1.541 1.101 1.223 1.344 1.390 | Thickness* From To |
|--|--|--|---|
| 1.613 1.124 .090100 1.622 1.261 .050070 1.625 .633 .060090 1.628 .129 .050070 1.647 .621 .025025 1.613 1.312 .015030 1.622 1.312 .060070 1.625 .634 .100125 1.628 .323 .080105 1.647 1.053 .010010 1.614 .145 .070090 1.622 1.357 .015030 1.625 .640 .005010 1.628 .420 .156187 1.647 1.310 .050050 1.614 .329 .005010 1.622 1.364 .020040 1.625 .656 .010020 1.628 .508 .090120 1.647 1.426 .005005 1.614 .694 .020030 1.623 .255 .080104 1.625 .657 .035050 1.628 .810 .040060 1.648 .408 .062062 1.614 .884 .040060 | 040 1.655 020 1.655 070 1.655 080 1.656 080 1.656 020 1.656 020 1.656 030 1.656 050 1.656 | 1.125 1.179 1.440 1.541 1.101 1.223 1.344 1.390 | .020030 .005020 .030050 .005010 .120156 .090105 .050070 |
| 1.613 1.312 .015030 1.622 1.312 .060070 1.625 .634 .100125 1.628 .323 .080105 1.647 1.053 .010010 1.614 .145 .070090 1.622 1.357 .015030 1.625 .640 .005010 1.628 .420 .156187 1.647 1.310 .050050 1.614 .329 .005010 1.622 1.364 .020040 1.625 .656 .010020 1.628 .508 .090120 1.647 1.426 .005005 1.614 .694 .020030 1.623 .255 .080104 1.625 .657 .035050 1.628 .810 .040060 1.648 .408 .062062 1.614 .884 .040060 1.623 .511 .090105 1.625 .688 .100120 1.628 1.137 .005010 1.648 .543 .040060 1.614 1.818 .025040 | 020 1.655 070 1.655 010 1.655 080 1.656 060 1.656 020 1.656 030 1.656 050 1.656 050 1.656 | 1.179 1.440 1.541 1.101 1.223 1.344 1.390 | .005020 .030050 .005010 .120156 .090105 .050070 .030050 |
| 1.614 .145 .070090 1.622 1.357 .015030 1.625 .640 .005010 1.628 .420 .156187 1.647 1.310 .050050 1.614 .329 .005010 1.622 1.364 .020040 1.625 .656 .010020 1.628 .508 .090120 1.647 1.426 .005005 1.614 .694 .020030 1.623 .255 .080104 1.625 .657 .035050 1.628 .810 .040060 1.648 .408 .062062 1.614 .884 .040060 1.623 .511 .090105 1.625 .688 .100120 1.628 1.137 .005010 1.648 .543 .040060 1.614 1.189 .025040 1.623 .597 .080104 1.625 .754 .050075 1.628 1.358 .030050 1.648 1.008 .010001 | 070 1.655 .010 1.655 080 1.656 060 1.656 020 1.656 030 1.656 .010 1.656 .010 1.657 | 1.440 1.541 1.101 1.223 1.344 1.390 | .030050 .005010 .120156 .090105 .050070 .030050 |
| 1.614 .329 .005010 1.622 1.364 .020040 1.625 .656 .010020 1.628 .508 .090120 1.647 1.426 .005005 1.614 .694 .020030 1.623 .255 .080104 1.625 .657 .035050 1.628 .810 .040060 1.648 .408 .062062 1.614 .884 .040060 1.623 .511 .090105 1.625 .688 .100120 1.628 1.137 .005010 1.648 .543 .040060 1.614 1.189 .025040 1.623 .597 .080104 1.625 .754 .050075 1.628 1.358 .030050 1.648 1.008 .010001 | .010 1.655 .080 1.656 .060 1.656 .020 1.656 .030 1.656 .010 1.656 .050 1.656 .010 1.656 | 1.541 1.101 1.223 1.344 1.390 | .005010 .120156 .090105 .050070 .030050 |
| 1.614 .694 .020030 1.623 .255 .080104 1.625 .657 .035050 1.628 .810 .040060 1.648 .408 .062062 1.614 .884 .040060 1.623 .511 .090105 1.625 .688 .100120 1.628 1.137 .005010 1.648 .543 .040060 1.614 1.189 .025040 1.623 .597 .080104 1.625 .754 .050075 1.628 1.358 .030050 1.648 1.008 .010010 | 080 1.656 060 1.656 020 1.656 030 1.656 .010 1.656 050 1.656 | 1.101 1.223 1.344 1.390 | .120156 .090105 .050070 .030050 |
| 1.614 .884 .040060 1.623 .511 .090105 1.625 .688 .100120 1.628 1.137 .005010 1.648 .543 .040120 1.614 1.189 .025040 1.623 .597 .080104 1.625 .754 .050075 1.628 1.358 .030050 1.648 1.008 .010010 | 060 1.656 020 1.656 030 1.656 .010 1.656 050 1.656 | 1.223 1.344 1.390 | .090105 .050070 .030050 |
| 1.614 1.189 .025040 1.623 .597 .080104 1.625 .754 .050075 1.628 1.358 .030050 1.648 1.008 .010 - | 020 1.656 030 1.656 .010 1.656 050 1.656 | 1.344 1.390 | .050070 .030050 |
| | 030 1.656 010 1.656 050 1.656 010 1.657 | 1.390 | .030050 |
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| 1.614 1.280 .020040 1.623 .775 .005010 1.625 .760 .100125 1.629 .240 .015030 1.648 1.403 .005 - | 010 1.657 | | .040060 |
| 1.614 1.281 .010020 1.623 .782 .062080 1.625 .765 .090120 1.629 .284 .015030 1.648 1.515 .040 - | | | .005010 |
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| 1.615 .500 .050070 1.623 1.032 .050070 1.625 .781 .100135 1.629 1.125 .015025 1.649 .562 .010010 1.615 .629 .090100 1.623 1.063 .050080 1.625 .791 .030050 1.629 1.319 .005010 1.649 .621 .030050 | | | . 005010 .090110 |
| 1.615 | | 1.212 | .025040 |
| 1.615 1.000 .050075 1.623 1.188 .060090 1.625 .816 .090120 1.630 .231 .050070 1.649 1.366 .060 - | | | .010015 |
| 1.615 1.407 .020040 1.623 1.208 .025040 1.625 .865 .100125 1.630 .243 .110135 1.649 1.449 .050 - | | .754 | .025040 |
| 1.615 1.417 .040060 1.623 1.257 .110125 1.625 .875 .090125 1.630 .320 .100125 1.649 1.499 .050 - | 070 1.659 | 1.518 | .050062 |
| 1.615 1.450 .005010 1.623 1.375 .005015 1.625 .882 .060070 1.630 .422 .140160 1.649 1.501 .010 - | 020 1.660 | | .050070 |
| 1.616 .752 .075100 1.623 1.410 .005015 1.625 .932 .005012 1.630 .890 .025042 1.650 .051 .015 - | | | .070090 |
| 1.616 1.382 .005010 1.623 1.456 .025040 1.625 .999 .005032 1.630 1.007 .083120 1.650 .132 .010 - | | | .010020 |
| 1.616 1.390 .100120 1.623 1.481 .025040 1.625 1.000 .040060 1.630 1.061 .042062 1.650 .377 .030 - 1617 1.617 .498 .080120 1.624 .311 .105125 1.625 1.004 .040060 1.630 1.153 .025040 1.650 .424 .100060 | | | .090120 .090105 |
| 1.617 .498 .080120 1.624 .311 .105125 1.625 1.004 .040060 1.630 1.153 .025040 1.650 .424 .100 - 1.617 .500 .010020 1.624 .440 .040060 1.625 1.009 .040060 1.630 1.200 .125156 1.650 .500 .005 | | | .110130 |
| 1.617 .626 .048062 1.624 .621 .050070 1.625 1.010 .005010 1.630 1.274 .005010 1.650 .503 .005 - | | 1.141 | .080100 |
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| 1.617 1.060 .050070 1.624 .875 .040060 1.625 1.062 .120134 1.630 1.489 .030040 1.650 .626 .020 | | 1.381 | .005010 |
| 1.617 1.258 .025042 1.624 .906 .100125 1.625 1.125 .005125 1.630 1.503 .015030 1.650 .634 .020 | | | .040060 |
| 1.617 1.390 .030050 | | | .040125 |
| 1.618 .256 .100125 1.624 1.005 .040060 1.625 1.127 .005010 1.631 1.378 .005010 1.650 .689 .156 1.618 .651 .040060 1.624 1.015 .050100 1.625 1.130 .090125 1.631 1.438 .020035 1.650 .750 .156 | | | .005010 |
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| 1.618 .963 .110130 | | | .070090 |
| 1.618 1.010 .105125 1.624 1.100 .050070 1.625 1.255 .100125 1.633 .501 .015030 1.650 1.252 .105 | 1.665 | 1.471 | .010016 |
| 1.618 1.035 .060090 1.624 1.129 .062080 1.625 1.256 .030050 1.634 1.202 .030050 1.650 1.253 .020 | 030 1.665 | 1.581 | .005010 |
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| 1.618 1.180 .060080 1.624 1.141 .005010 1.625 1.287 .005010 1.635 .998 .050075 1.650 1.321 .100 - | | | .005010 |
| 1.618 1.382 .020030 | | | .042060 |
| 1.619 .838 .040060 1.624 | | | .005010 .005010 |
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| 1.620 .297 .080105 | | | .100135 |
| 1.620 .408 .005010 1.624 1.268 .050070 1.625 1.375 .050070 1.638 .554 .010020 1.651 .818 .040 | | | .020040 |
| 1.620 .530 .005010 1.624 1.329 .005020 1.625 1.382 .090105 1.638 1.020 .030050 1.651 1.251 .005 - | 010 1.670 | 1.255 | .025042 |
| 1.620 .585 .090120 1.624 1.357 .010025 1.625 1.396 .080100 1.638 1.262 .030050 1.651 1.300 .015 | 25 1.670 | 1.314 | .005010 |
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| 1.620 .647 .005010 1 6.624 1 4.406 . 090110 1 6.625 1 4.437 . 060080 1 6.639 1 3.10 . 080100 1 6.652 . 786 . 070 - . 1.620 .713 .005010 1 6.624 1 4.442 . 010020 1 6.626 . 251 . 050070 1 6.639 1.376 .005010 1 6.653 . 474 . 020 - . | | | .020040 |
| 1.620 .713 .005010 1.624 1.442 .010020 1.626 .251 .050070 1.639 1.376 .005010 1.653 .474 .020010 1.620 .759 .040060 1.625 .125 .020040 1.626 .504 .010020 1.640 .645 .005010 1.653 .475 .005005 | | .922 1.152 | . 005010 .030050 |
| 1.620 .884 .005010 1.625 .137 .040060 1.626 .509 .105135 1.640 .1373 .010035 1.653 .492 .090 | | | .075105 |
| 1.620 .909 .005010 | | | .105125 |
| 1.620 .920 .010020 1.625 .199 .050075 1.626 .562 .005010 1.640 1.442 .050070 1.653 .631 .005 - | | | .005010 |
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| 1.620 .963 .120134 1.625 .344 .060080 1.626 .780 .010020 1.642 .682 .105135 1.653 1.273 .050 | | | .005010 |
| 1.620 1.120 .110135 1.625 .362 .005010 1.626 1.007 .025040 1.642 1.039 .005010 1.653 1.274 .050 | | | .005010 |
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| 1.620 1.144 .050070 1.625 .395 .105125 1.626 1.187 .005040 1.643 .678 .080104 1.653 1.416 .070 1.620 1.190 .060090 1.625 .406 .050070 1.626 1.321 .050075 1.643 .755 .050080 1.653 1.481 .040 | | | .042075 . 005010 |
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| 1.620 1.311 .005010 1.625 .430 .100125 1.626 1.402 .005010 1.644 .914 .030050 1.654 .475 .010 | | | .030050 |
| 1.620 1.383 .005010 1.625 .465 .015030 1.627 .173 .010020 1.644 .990 .040060 1.654 .632 .010 | | | .005010 |
| 1.620 1.470 .020030 1.625 .475 .105135 1.627 .314 .015030 1.644 1.039 .015030 1.654 .639 .090 | | | .020030 |
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| 1.621 .758 .050075 1.625 .500 .025080 1.627 .385 .090125 1.644 1.328 .075090 1.654 .820 .005 - | | | .105125 |
| 1.621 1.265 .005010 1.625 .504 .005010 1.627 .555 .156187 1.644 1.388 .090110 1.654 1.050 .080 | | | .025040 |
| 1.621 1.275 .020040 1.625 .508 .005042 1.627 .627 .062080 1.644 1.405 .040060 1.654 1.265 .050 1.621 1.317 .025042 1.625 .514 .005010 1.627 .693 .105135 1.644 1.458 .020040 1.654 1.272 .010 | | | .080100 |
| 1.621 1.317 .025042 1.625 .514 .005010 1.627 .693 .105135 1.644 1.458 .020040 1.654 1.272 .010 1.621 1.480 .025035 1.625 .531 .100125 1.627 .816 .025042 1.645 .625 .015050 1.654 1.419 .020 | | | .156188 .040060 |
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| 1.622 .645 .100125 1.625 .542 .090120 1.627 1.125 .080104 1.645 1.328 .060080 1.655 .473 .005 - | | | .015030 |
| 1.622 .767 .120156 | | | .005010 |
| 1.622 | | | .040060 |
| 1.622 .992 .025040 1.625 .565 .010125 1.627 1.250 .005010 1.646 1.427 .015030 1.655 .651 .080 - | | | .010035 |
| 1.622 1.161 .040050 1.625 .566 .100125 1.627 1.302 .010020 1.646 1.435 .070090 1.655 .771 .020 - | | | .010105 |
| 1.622 1.188 .050100 1.625 .571 .015030 1.627 1.320 .025040 1.646 1.460 .015025 1.655 .905 .050 | | .712 | .040060 |

| Color Colo | | | Choose Any | 1 | | Choose Any | | | Choose Any | 1 5 IVIE | IAL | Choose Any | O AIII | - 1 -/ | Choose Any | | E DE | |
|--|-------|-------|------------|-------|-------|------------|-------|-------|------------|----------|-------|------------|--------|--------|------------|-------|-------|--------------------------|
| 1860 776 260 768 260 760 761 761 762 760 760 761 761 762 760 | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 1480 379 042 060 160 375 062 375 062 170 170 170 375 075 | 1680 | 768 | | 1 691 | 1 563 | | 1714 | 1.400 | | 1 732 | 1 257 | | 1 7/15 | 995 | | 1748 | 1 136 | .075090 |
| 1860 | | | | l | | | | | | | | | | | | | | |
| 1.500 1.50 | | | | l | | | | | | | | | | | | | | .015030 |
| 1866 1869 1969 1864 1864 1864 1864 1865 1869 | | | | | | | | | | | | | | | | | | .070090 |
| | 1.680 | | .040060 | l | | | | | | | | | | | | | | .005010 |
| 1.680 1.192 0.00 0.00 1.694 1.500 0.05 0.715 1.715 1.515 0.05 0.00 | 1.680 | .927 | .040060 | 1.694 | 1.260 | | | .950 | | | | | | | | 1.748 | 1.316 | .070090 |
| 1860 1965 080 - 120 1965 200 140 - 100 1715 1581 086 - 090 1715 1581 087 - 090 1715 1581 087 - 090 1715 | 1.680 | .965 | .040060 | 1.694 | 1.499 | .025040 | 1.715 | 1.033 | .060080 | 1.733 | 1.257 | .030050 | 1.745 | 1.511 | .005010 | 1.748 | 1.320 | .040060 |
| 1886 1870 00-060 1896 349 00-060 1716 485 00-070 1734 283 100-125 1746 433 006-080 1746 1846 | 1.680 | 1.102 | .030050 | 1.694 | 1.500 | .005015 | 1.715 | 1.513 | .015030 | 1.733 | 1.357 | .040050 | 1.745 | 1.560 | .010020 | 1.748 | 1.374 | .100125 |
| 1880 1430 0.00 0.00 1867 1.00 0.00 1.00 1.70 1.70 0.00 0.00 1.70 1.70 0.00 0.00 1.70 1.70 0.00 0.00 1.70 1.70 0.00 0.00 1.70 1.70 0.00 0.00 1.70 1.70 0.00 0.00 1.70 1.70 0.00 0.00 1.70 1.70 0.00 0.00 1.70 1.70 0.00 0.00 1.70 0.00 0.00 1.70 0.00 | 1.680 | 1.195 | .090120 | 1.695 | .203 | .040060 | 1.715 | 1.551 | .005010 | 1.733 | 1.506 | .050075 | 1.745 | 1.561 | .015025 | 1.748 | 1.380 | .020040 |
| 1.880 1.430 .086000 1.696 1.000 1.000 1.250 1.716 1.392 .000 1.724 1.392 .000000 1.726 .000 .000 .000 1.716 1.716 1.71 | | | | | | | | | | 1.734 | .253 | .105125 | 1.746 | .373 | .060080 | | | .015030 |
| 1888 1896 005-000 1896 1002 006-008 1719 1312 005-000 1734 1399 006-000 1746 1786 1789 100-002-1 1891 1005-01 1891 1300 005-000 1719 1806 015-000 1719 1806 1807 006-000 1719 1806 015-000 1724 1858 1015-000 1726 1786 006-000 1719 1806 1807 1789 1807 1789 1807 1789 1807 1789 1807 1789 1807 1789 1807 1789 1807 1789 1807 1789 1807 1789 1807 1789 1807 1789 1807 180 | | | | l | | | | | | | | | | | | | | .062083 |
| 1888 1894 008-000 1896 1200 020-040 1717 1896 030-050 1724 1451 008-000 1726 1746 1900 100-120 1749 2770 078-00 1725 1749 2770 078-00 1746 1900 100-120 1749 2770 078-00 1746 1900 100-120 1749 2770 078-00 1746 1900 1900 1749 2770 078-00 1746 1900 1749 1740 078-00 1746 1900 1749 1740 078-00 1746 1900 1749 1740 078-00 1746 1900 1749 1740 078-00 1746 1740 174 | | | | l | | | | | | | | | | | | | | |
| 1888 1894 690 - 690 1896 1397 696 1397 696 - 690 1717 1896 615 - 690 1724 1536 615 - 630 1724 1724 1690 690 - 690 1729 1720 | | | | l | | | | | | | | | | | | | | |
| 1881 1390 0490 0490 1496 1452 0891 1452 | | | | l | | | | | | | | | | | | | | |
| 1881 1392 040 - 060 1697 453 100 - 125 1718 300 050 - 070 1728 386 060 - 105 1714 1046 075 - 090 1749 375 065 - 0.0 1881 1040 085 - 070 1057 1308 105 - 125 1718 585 100 - 125 1735 1265 105 - 030 1746 1183 040 - 000 1749 375 065 - 0.0 1748 138 040 - 000 1749 375 065 - 0.0 1748 138 040 - 000 1748 138 040 - 000 1749 375 065 - 0.0 1748 138 040 - 000 1748 138 | | | | | | | | | | | | | | | | | | |
| 1.681 1.400 0.00 - 1.00 1.697 861 0.00 - 1.125 1.718 6.00 0.15 - 0.00 1.725 1.728 1.05 0.00 - 1.00 0.00 1.749 1.735 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.00 - 1.00 1.725 1.728 1.725 1.728 1 | | | | l | | | | | | | | | | | | | | |
| 1682 1616 000 - 000 1697 1328 005 - 105 178 506 100 - 126 1785 1285 1389 005 - 000 1746 1748 1748 1749 286 005 - 100 1748 | | | | | | | | | | | | | | | | | | |
| 1688 1619 101-0-200 1697 1328 1005-100 1718 1309 1718 1309 1718 | | | | l | | | | | | | | | | | | | | |
| 1683 381 010 - 020 1697 1398 010 - 020 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 080 1781 1870 060 - 1870 1780 1780 1780 1781 1870 060 - 1870 1780 | | | | | | | | | | | | | | | | | | .015025 |
| 1688 108 000 - 000 1698 431 015 - 030 1718 1718 1710 - 1718 | | | | | | | | | | | | | | | | | | .156187 |
| 1688 1289 006 007 008 008 008 009 1719 1878 1889 008 | | | | l | | | | | | | | | | | | | | .050070 |
| 1688 1298 0.090 - 1.00 1698 502 0.15 - 0.00 1.719 4.81 0.090 - 1.00 1.736 4.75 0.050 - 0.00 1.746 1.230 0.050 - 0.00 1.749 783 0.050 - 0.00 1.746 1.230 0.050 - 0.00 1.740 0.050 | | | | l | | | | | | | | | | | | 1 | | .040060 |
| 1684 1389 205 - 040 698 628 601 - 020 1719 1683 030 - 050 1736 1236 050 - 080 1746 1449 505 - 075 1749 734 507 - 070 1684 1442 205 - 040 1698 775 300 - 000 1719 1275 070 - 090 1737 730 015 - 300 1746 1749 226 205 - 040 1749 394 305 - 070 1749 1749 1745 1747 174 | 1.683 | 1.298 | .090105 | | | | | | .090110 | | | | 1.746 | 1.320 | .005010 | 1.749 | .783 | .005010 |
| 1684 1.542 0.05010 1688 753 0.00000 1719 1.275 0.00000 1.737 1.500 0.05010 1.747 2.82 0.05000 1.749 3.92 0.05000 1.884 1.562 0.04000 1.894 3.90010 1.719 1.400 0.02030 1.737 1.500 0.05010 1.747 3.14 0.00025 1.749 1.000 0.025 1.740 1.000 0.025 1.740 1.000 0.025 1.740 1.000 0.025 1.740 1.000 0.025 1.740 1.000 0.025 1.740 1.000 0.025 1.740 1.000 0.025 1.740 1.000 0.025 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.000 1.740 1.740 1.740 1.000 1.740 1.740 1.740 1.000 1.740 1. | 1.684 | | .005010 | 1.698 | | .010020 | 1.719 | 1.063 | .030050 | 1.736 | 1.253 | .060080 | 1.746 | | | | | .070090 |
| 1684 1525 040 - 505 1689 780 080 - 100 1749 1378 505 - 070 1739 1370 020 - 020 1737 1500 040 - 500 1747 286 050 - 070 1749 100 025 - 026 1685 345 002 - 024 1689 825 015 - 030 1719 1555 025 - 040 1738 1771 015 - 025 1747 334 010 - 125 1740 1000 025 - 026 1685 345 030 - 030 1689 349 050 - 030 1759 125 030 - 030 1738 382 030 - 100 1747 333 030 - 100 1749 1010 050 - 030 1685 745 030 - 030 1700 125 1710 125 1710 125 1710 125 1710 1730 1730 1730 1730 1738 1829 030 - 030 1747 1749 1005 125 - 11 1685 1865 032 - 030 1700 125 1710 125 1710 125 1710 125 1710 125 1710 125 1710 125 1710 1730 | | | | | | | 1.719 | | .100125 | 1.737 | .350 | .015030 | | | | | | .005010 |
| 1685 340 085 1689 1449 095 096 097 0 | | | | l | | | | | | | | | | | | | | .005015 |
| 1868 340 0.05 - 0.042 1.699 | | | | l | | | | | | | | | | | | | | .020040 |
| 1685 425 095 083 1699 949 050 060 1719 1592 207 040 070 1738 382 090 105 1747 515 005 005 1749 105 015 | | | | ı | | | | | | | | | | | | | | .025040 |
| 1685 495 002 - 006 170 | | | | | | | | | | | | | | | | | | .050070 |
| 1885 782 020 - 040 1700 125 100 - 125 1720 257 070 - 020 1737 258 1249 005 - 001 1747 531 1015 - 030 1.05 - 1.0 1.0 1 | | | | | | | | | | | | | | | | | | |
| 1885 1065 032 080 1700 204 100 126 1720 257 265 052 036 31738 1257 005 020 037 038 103 105 11855 1190 010 020 1700 208 1070 208 030 040 1700 1700 208 030 040 1700 1700 208 030 040 1700 1700 1855 1369 082 030 1700 1000 060 083 1720 1700 1 | | | | l | | | | | | | | | | | | | | |
| 1885 1970 040 050 1700 206 100 120 1720 265 052 063 1738 1260 070 030 1474 5.65 050 0.075 1749 1038 010 0.0 1885 1269 062 060 1700 390 030 040 1720 655 025 0.040 1739 1144 030 050 1747 626 032 0.060 1749 1142 100 1.1 1885 1360 020 030 040 040 070 030 040 0 | | | | l | | | | | | | | | | | | | | |
| 1885 1390 002 - 003 003 - 004 1700 390 303 - 004 1700 1700 390 303 - 004 1700 1700 390 303 - 004 1700 1700 1900 303 - 004 1700 1700 1900 303 - 004 1700 1700 1900 303 - 004 1700 1700 1900 303 - 005 1700 1700 1900 303 - 005 1700 17 | | | | l | | | | | | | | | | | | | | .010020 |
| 1886 1360 020 030 1700 1000 060 083 1720 1708 005 040 1739 1302 020 040 1747 815 010 020 1749 1140 030 030 1886 1317 020 040 1700 1192 100 125 1720 1200 080 081 1740 382 050 070 1747 815 100 020 1749 1140 030 030 1886 317 020 040 1700 1225 050 075 1720 1420 080 075 080 075 07 | 1.685 | 1.190 | | | | | | | | | | | 1.747 | .620 | | | | .090105 |
| 1886 1867 032 - 050 1700 1700 190 020 - 080 1720 1000 060 - 083 1739 1446 040 - 060 1747 815 010 - 020 1749 1140 030 - 030 1868 345 050 - 070 1700 123 050 - 075 1720 1400 015 - 030 1740 501 025 - 040 1747 885 100 - 125 1749 1187 016 - 040 1868 1360 - 005 - 010 1700 1230 005 - 010 1721 1360 050 - 075 1740 503 070 - 090 1747 090 100 - 020 1749 1251 030 - 010 1868 1370 015 - 030 1700 1380 040 - 060 1721 1360 050 - 075 1740 878 100 - 125 1747 198 070 - 090 1749 1255 030 - 010 1868 1383 016 - 025 1700 1389 040 - 060 1721 1361 020 - 030 1740 1360 025 - 040 1747 1360 070 - 090 1747 1869 1383 016 - 025 1740 1760 1760 1470 1260 070 1749 1255 040 - 040 1866 1383 016 - 025 1700 1389 005 - 010 1721 1361 020 - 030 1740 1261 1360 025 - 040 1747 1263 030 - 040 1749 1255 040 - 040 1867 1255 1347 1360 020 - 040 1749 1255 040 - 040 1867 | 1.685 | 1.269 | .062080 | 1.700 | .990 | .030040 | 1.720 | .655 | .025040 | 1.739 | 1.114 | .030050 | 1.747 | .626 | .032060 | 1.749 | 1.124 | .100125 |
| 1886 317 020 - 040 1700 1192 100 - 125 1720 1420 108 015 1740 326 050 - 070 1747 885 100 - 125 1749 1155 080 - 11 1886 350 005 - 010 1700 1220 005 - 012 1720 1440 101 - 020 1740 503 070 - 090 1747 1478 98 075 - 105 1749 1479 106 - 10 1886 1370 005 - 010 1700 1340 005 - 010 1721 1360 005 - 010 1740 740 765 032 - 060 1747 996 120 - 140 1749 1250 125 - 125 136 138 138 161 - 025 1700 1385 040 - 060 1721 1408 005 - 010 1740 1749 1255 040 - 040 1886 1830 065 - 010 1700 1410 085 - 010 1721 1516 080 - 010 1740 1749 1255 040 - 040 1886 1830 065 - 010 1700 1514 005 - 010 1722 1515 080 - 010 1740 1236 105 - 125 1747 1830 005 - 010 1749 1235 005 - 010 1873 1366 1873 18 | 1.685 | 1.360 | .020030 | 1.700 | 1.000 | .060083 | 1.720 | .718 | .005010 | 1.739 | 1.302 | .020040 | 1.747 | .701 | .125134 | 1.749 | 1.125 | .010020 |
| 1886 345 050 070 1700 1223 050 075 1720 1440 015 030 1740 501 075 025 040 1747 882 075 1749 1187 016 015 1886 1707 005 0170 1280 005 010 1721 1360 050 075 1740 785 032 080 1747 908 010 0.02 1749 1251 030 030 1886 1370 015 030 030 070 1388 040 080 0721 1741 1898 080 070 070 070 1749 1255 040 040 080 070 1749 1255 040 040 080 070 | 1.685 | 1.567 | .032050 | 1.700 | 1.190 | .020080 | 1.720 | 1.000 | .060083 | 1.739 | 1.446 | .040060 | 1.747 | .815 | .010020 | 1.749 | 1.140 | .030050 |
| 1.686 3.50 0.05010 1.700 1.250 0.05012 1.720 1.464 0.05010 1.740 5.03 0.70090 1.747 908 0.10020 1.749 1.251 3.00010 1.881 1.270 0.15030 1.700 1.385 0.05010 1.721 1.361 0.05010 1.740 8.78 1.00125 1.747 3.18 0.70090 1.749 1.255 0.4001 1.881 1.383 0.05010 1.721 1.514 0.02030 1.740 1.199 0.25040 1.747 1.030 0.20040 1.749 1.255 0.05010 1.887 3.05010 1.722 1.77 0.05010 1.740 1.265 0.05010 1.747 1.265 0.05010 1.749 1.255 0.05010 1.740 1.265 0.05010 1.747 1.265 0.05010 1.749 1.255 0.05010 1.749 1.255 0.05010 1.283 1.65 - 1.05 1.25 1.25 1.24 1.25 0.05010 1.749 1.255 0.05010 1.749 1.255 0.05010 1.749 1.255 0.05010 1.749 1.255 0.05010 1.749 1.255 0.05025 1.225 1.255 0.05025 1.225 1.255 0.05025 1.225 1.255 | | | | l | | | | | | 1.740 | | | | | | | | .080100 |
| 1866 1070 005 - 012 1700 1340 005 - 010 1721 1306 005 - 010 1740 1765 032 - 060 1747 198 070 - 000 1749 1255 040 - 060 1721 1408 005 - 010 1740 1 | | | | | | | | | | | | | | | | | | .016025 |
| 1866 1270 0.15 - 0.09 1.700 1.385 0.40 - 0.60 1.721 1.514 0.20 - 0.30 1.740 1.391 0.25 - 0.40 1.747 1.095 0.05 - 0.05 1.686 1.580 0.05 - 0.07 1.700 1.581 0.05 - 0.07 1.722 1.514 0.20 - 0.30 1.740 1.190 0.25 - 0.40 1.747 1.005 0.05 - 0.05 1.687 3.05 - 0.05 1.700 1.581 0.05 - 0.05 1.722 7.52 0.45 - 0.60 1.740 1.286 0.05 - 1.25 1.747 1.283 0.05 - 0.00 1.749 1.286 1.05 - 1.25 1.747 1.283 0.05 - 0.05 1.749 1.286 1.05 - 1.25 1.747 1.285 0.05 - 0.05 1.749 1.280 1.687 1.687 4.06 0.05 - 1.05 1.700 1.515 0.12 - 0.00 1.722 1.515 0.60 - 0.00 1.740 1.286 0.06 - 0.02 1.747 1.285 0.05 - 0.05 1.749 1.489 0.05 - 0.05 1.687 4.06 0.05 - 1.05 1.700 1.542 0.01 - 0.00 1.723 3.55 0.60 - 0.08 1.740 1.313 0.05 - 0.05 1.747 1.340 0.05 - 0.05 1.749 1.516 0.05 - 0.05 1.749 1.749 1.740 1. | | | | l | | | | | | | | | | | | | | |
| 1.686 1.580 0.05 0.07 0.189 0.05 0.07 0.181 0.05 0.07 0.181 0.05 0.07 0.181 0.05 0.07 0.181 0.05 0.07 0.181 0.05 0.07 0.181 0.05 0.07 0.181 0.05 0.07 0.181 0.05 0.07 0.181 0.05 0.07 0.081 0. | | | | l | | | | | | | | | | | | | | |
| 1686 1.560 0.05 - 0.01 | | | | ı | | | | | | | | | | | | | | |
| 1887 255 080 -104 1700 1504 030 -050 1722 752 045 -060 1740 1260 010 -050 1747 1253 005 -005 1749 1490 005 -050 1687 377 030 -050 1701 1515 012 -020 1722 1515 060 -080 1740 1281 066 -012 1747 1255 005 -025 1749 1499 005 -0.06 1747 1747 1255 005 -025 1749 1499 005 -0.06 1747 1747 1255 005 -025 1749 1499 005 -0.06 1747 1747 1747 1747 1749 1510 010 -0.06 1747 1747 1747 1747 1749 17 | | | | | | | | | | | | | | | | | | .156180 |
| 1687 375 0.30 0.50 1.700 1.515 0.12 0.20 1.722 1.515 0.60 0.80 1.740 1.261 0.06 0.12 1.747 1.255 0.05 0.05 0.75 1.749 1.499 0.05 0.05 1.687 4.484 0.60 0.80 1.701 1.266 0.15 0.30 1.723 3.54 0.60 0.80 1.740 1.530 0.05 0.010 1.747 1.340 0.05 0.010 1.749 1.510 0.10 0.00 1.687 0.584 0.05 0.00 0.720 1.745 1.345 0.05 0.010 1.747 1.346 0.05 0.010 1.749 1.510 0.10 0.05 0.010 1.747 1.340 0.05 0.010 1.749 1.510 0.10 0.05 0.010 1.749 1.510 0.05 0.010 1.740 1.740 1.740 1.740 1.740 1.740 1.510 0.05 0.070 1.740 1.741 0.05 0.010 1.740 | | | | ı | | | | | | | | | | | | | | .005010 |
| 1.687 .484 .060080 .1701 1.266 .015030 .1723 .354 .060080 .1740 1.530 .005010 1.747 1.340 .005010 1.749 1.568 .025036 .1687 .563 .030050 .1701 1.355 .030050 1.723 .368 .110130 .1741 1.209 .030050 1.747 1.394 .042062 .026030 .1687 .756 .030050 .1701 1.455 .040060 .1723 .1415 .020040 .1741 .1239 .030050 1.747 1.394 .042062 .1467 .1687 .1839 .005010 .1702 .100 .010 .010 .1723 .1313 .070090 .1742 .188 .050075 .1747 .1.395 .005010 .1745 .1849 .005010 .1848 | 1.687 | .375 | .030050 | 1.700 | 1.515 | | | | | | | | 1.747 | 1.255 | .005025 | 1.749 | 1.499 | .005010 |
| 1.687 .562 .005020 1.701 1.385 .030050 1.723 .686 .110130 1.741 1.010 .025040 1.747 1.376 .020030 1.687 .634 .030050 1.701 1.450 .040060 1.723 1.415 .020090 1.741 1.239 .030050 1.747 1.394 .042062 1.745 1.084 .065075 1.747 1.395 .005010 1.702 .208 .040060 1.723 1.513 .070090 1.742 1.980 .050075 1.747 1.395 .005010 1.687 .226 .030050 1.702 .208 .040060 1.724 1.955 .060080 1.747 1.449 .005010 1.687 1.226 .030040 1.702 1.120 .050070 1.725 1.350 .040062 1.742 1.555 .050070 1.747 1.449 .005010 1.750 1.550 .040061 1.688 .635 .015030 1.703 1.320 .050075 1.726 1.134 .055070 1.743 .505 .015020 1.748 .266 .042060 1.750 1.750 .195 .040061 1.688 .686 .010125 1.703 1.386 .005010 1.726 1.385 .030050 1.743 .511 .005010 1.748 .266 .042060 1.750 1.940 .075116 .088 .089 .098 | 1.687 | .406 | .105135 | 1.700 | 1.542 | .010020 | 1.723 | .265 | .050083 | 1.740 | 1.313 | .062093 | 1.747 | 1.309 | .050075 | 1.749 | 1.510 | .010020 |
| 1.687 .634 .030 .050 | | | | 1.701 | 1.266 | .015030 | 1.723 | .354 | .060080 | 1.740 | 1.530 | .005010 | 1.747 | | | 1.749 | 1.568 | .025040 |
| 1.687 7.56 0.30 - 0.50 1.702 2.08 0.40 - 0.60 1.723 1.513 0.70 - 0.90 1.742 1.98 0.50 - 0.75 1.747 1.395 0.05 - 0.10 1.724 1.702 1.000 1.702 1.000 0.10 - 0.20 1.724 1.195 0.60 - 0.80 1.742 1.429 1.020 0.20 - 0.60 1.747 1.449 0.05 - 0.10 1.724 1.702 1.000 0.10 - 0.20 1.724 1.195 0.60 - 0.80 1.742 1.459 0.10 - 0.20 1.747 1.445 0.05 - 0.10 1.724 0.05 - 0.10 1.724 1.703 1.300 0.04 - 0.05 1.724 1.703 1.300 0.04 - 0.05 - 0.10 1.724 1.725 1.410 0.05 - 0.10 1.724 1.725 1.410 0.05 - 0.10 1.724 1.725 1.410 0.05 - 0.10 1.724 1.725 | | | | l | | | | | | | | | | | | _ | | |
| 1.687 1.226 0.300 - 0.50 1.702 1.000 0.101 - 0.20 1.724 1.195 0.601 - 0.80 1.742 1.459 0.101 - 0.20 1.747 1.451 0.151 - 0.25 1.687 1.312 0.300 - 0.40 1.702 1.120 0.501 - 0.70 1.725 1.350 0.401 - 0.62 1.742 1.555 0.500 - 0.70 1.747 1.451 0.015 - 0.30 1.750 1.750 0.401 - 0.015 1.688 1.520 0.601 - 0.70 1.703 1.140 0.051 - 0.10 1.725 1.410 0.051 - 0.10 1.743 5.05 0.151 - 0.02 1.748 1.16 0.151 - 0.30 1.750 1.155 0.401 - 0.015 1.688 0.686 0.101 - 1.25 1.703 1.320 0.501 - 0.75 1.726 1.385 0.501 - 0.70 1.743 5.51 0.101 - 0.02 1.748 2.66 0.421 - 0.60 1.750 1.94 0.751 - 1.16 1.688 1.090 0.701 - 0.90 1.704 1.14 0.051 - 0.10 1.726 1.385 0.020 - 0.305 1.743 5.522 1.001 - 1.25 1.748 2.267 0.301 - 0.042 1.750 1.750 0.901 - 1.16 1.688 1.097 0.301 - 0.50 1.704 1.149 0.051 - 0.10 1.727 1.623 0.201 - 0.305 1.743 1.220 0.201 - 0.30 1.748 2.267 0.301 - 0.042 1.750 0.901 - 1.16 1.688 1.097 0.301 - 0.50 1.704 1.149 0.101 - 0.25 1.728 8.78 1.001 - 1.25 1.743 1.220 0.201 - 0.30 1.748 2.267 0.301 - 0.042 1.750 2.201 0.801 - 1.16 1.688 1.492 0.301 - 0.55 1.705 1.705 1.726 1.728 8.78 1.001 - 1.25 1.743 1.220 0.201 - 0.30 1.748 2.267 0.301 - 0.042 1.750 2.201 0.801 - 1.16 1.688 1.492 0.301 - 0.55 1.705 1.705 1.728 1.728 8.78 1.001 - 1.25 1.743 1.225 1.001 - 1.25 1.748 2.267 0.301 - 0.04 1.750 1.750 2.250 0.550 - 0.0 1.688 1.492 0.301 - 0.55 1.750 1.750 1.728 8.78 1.001 - 1.25 1.743 1.225 1.250 0.051 - 0.0 1.75 | | | | | | | | | | | | | | | | 4 | 7 | |
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| 1.690 .410 .105125 1.708 1.311 .030050 1.731 .748 .015030 1.744 1.505 .030060 1.748 .765 .050070 1.750 .343 .100125 1.690 .711 .050070 1.708 1.312 .050075 1.731 .828 .090105 1.744 1.567 .005010 1.748 .767 .100125 1.750 .365 .105125 1.690 .890 .080104 1.709 .391 .005015 1.731 .884 .070090 1.745 .125 .032060 1.748 .770 .010020 1.750 .375 .10012 1.690 1.187 .020040 1.709 .761 .156187 1.731 .1315 .005010 1.745 .162 .015030 1.748 .781 .050075 1.750 .392 .10012 1.690 1.303 .030040 1.710 .760 .100125 1.731 | | | | | | | | | | | | | | | | | | |
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| 1.690 .890 .080104 1.709 .391 .005015 1.731 .854 .070090 1.745 .125 .032060 1.748 .770 .010020 1.750 .375 .10012 1.690 1.163 .040050 1.709 .761 .156187 1.731 .881 .040060 1.745 .162 .015030 1.748 .781 .050075 1.750 .392 .10012 1.690 1.873 .020040 1.710 .760 .100125 1.731 1.135 .005010 1.745 .195 .005012 1.748 .785 .100125 1.750 .395 .10012 1.690 1.303 .030050 1.710 1.345 .005010 1.731 1.195 .025040 1.745 .315 .060080 1.748 .875 .020040 1.750 .398 .09011 1.690 1.378 .030060 1.711 1.143 .156187 1.731 1.255 .040050 1.745 .503 .100125 1.748 .878 | | | | | | | | | | | | | | | | | | |
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| 1.00 | | | Ohanan Amu | | | Obsess Asses | | | Oh A | 140 | 100 | | IAIIGE | - 1 01 | | INE | SIZES | |
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| 1.752 | 1.750 | 127 | | 1.750 | 1 170 | | 1.750 | 1.510 | | 1 770 | E01 | | 4.700 | 1.007 | | 1 010 | 1.060 | |
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| 1.750 582 1.05 1.75 1.05 | 1.750 | | .040060 | 1.750 | 1.300 | .040060 | | | | | | | | | | 1.812 | 1.480 | .050075 |
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| 1759 586 010 100 101 1750 1319 008 010 0 | 1.750 | .562 | .126187 | 1.750 | 1.318 | .005008 | 1.755 | .281 | .080100 | 1.776 | 1.262 | .060080 | 1.800 | | | 1.812 | 1.510 | .005010 |
| 1756 623 020 075 075 1750 1329 030 030 045 055 035 0 | 1.750 | .564 | .010020 | 1.750 | 1.319 | .005010 | 1.755 | .322 | .050070 | 1.776 | 1.452 | .030050 | 1.800 | 1.430 | .040060 | 1.812 | 1.522 | .020040 |
| 1750 682 100 100 1760 1351 600 100 176 1353 600 100 1777 126 600 1777 110 115 100 15 200 200 100 1360 1361 200 1813 20 | 1.750 | .590 | .090110 | 1.750 | 1.324 | .035050 | 1.755 | .906 | .040062 | 1.776 | 1.576 | .015025 | 1.800 | 1.451 | .015030 | 1.812 | 1.523 | .030050 |
| 1.750 626 0.00 - 100 1.750 1.383 0.00 - 0.00 1.757 6.252 0.00 - 1.00 1.757 1.750 6.262 0.00 - 1.00 1.750 1.383 0.00 - 0.00 1.757 1.057 0.005 - 0.00 1.750 1.383 0.05 - 0.00 1.757 1.057 0.055 - 0.00 1.750 1.383 0.05 - 0.00 1.758 1.582 0.05 - 0.00 1.759 1.057 0.055 - 0.00 1.750 1.383 0.05 - 0.00 1.758 1.582 0.05 - 0.00 1.759 1.057 0.055 - 0.00 1.750 1.058 0.055 - 0.00 1.750 1.058 0.00 1.750 1.058 0.00 1.750 1.058 0.00 1.750 1.058 0.00 1.750 1.058 0.00 1.750 1.058 0.00 1.750 1.058 0.00 1.750 1.058 0.00 1.750 1.058 0.00 1.750 1.058 0.00 1.058 0.00 1.058 0.00 0.00 1.058 0.00 0.00 1.058 0.00 | 1.750 | .623 | .020075 | 1.750 | 1.329 | .030050 | 1.755 | 1.285 | .060080 | 1.777 | .998 | .010020 | 1.800 | 1.500 | .005020 | 1.812 | 1.524 | .015030 |
| 1.756 627 0.05 0.00 | 1.750 | .624 | .100125 | 1.750 | 1.351 | .060080 | 1.755 | 1.536 | .050070 | 1.777 | 1.110 | .015030 | 1.800 | 1.548 | .005010 | 1.812 | 1.563 | .015030 |
| 1.750 | 1.750 | .625 | .010160 | 1.750 | 1.353 | .040060 | 1.757 | .252 | .080104 | 1.778 | .199 | .020040 | 1.800 | 1.562 | .005010 | 1.813 | .251 | .083104 |
| 1.750 1.629 0.05 - 0.09 | 1.750 | .626 | .010020 | 1.750 | 1.375 | .005020 | 1.757 | .629 | .100125 | 1.779 | .999 | .050070 | 1.800 | 1.569 | .025040 | 1.813 | .751 | .025040 |
| 1,750 6.29 0.05 0.09 0.75 1.285 1.00 1.125 1.75 1.285 1.75 0.05 0.07 0.75 0.07 0.0 | | | | l | | .005010 | | | .005010 | 1.779 | 1.057 | .005010 | | | | | | .025040 |
| 1750 630 690 | | | | l | | | | | .005010 | 1.780 | | .020032 | | | | l | | .005010 |
| 1750 6.85 120 - 1958 1750 1394 090 - 120 1750 077 077 077 077 077 077 077 077 077 | | | | l | | | | | | 1.780 | .509 | .020040 | | | | l | | .156187 |
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| 1.750 6.841 1.58190 1.750 1.400 0.05050 1.760 1.262 0.05070 1.780 1.250 0.15020 1.802 1.257 0.05010 1.813 1.585 0.10020 1.750 6.865 0.10020 1.750 1.410 0.08051 7.750 1.803 0.15030 1.780 1.891 0.20030 0.803 1.382 0.40060 1.814 1.000 0.05051 1.750 0.866 0.00030 1.750 1.435 0.05040 1.752 1.880 0.00080 1.781 1.871 1.871 0.00040 1.803 1.382 0.40060 1.815 3.23 0.05051 1.750 0.866 0.05070 1.750 1.435 0.05070 1.750 1.836 0.05080 1.751 1.570 0.05070 1.00020 1.815 3.23 0.05070 1.750 1.836 1.20134 1.752 1.388 0.00080 1.781 1.575 0.0500 1.803 1.352 0.0000 1.815 3.23 0.051750 1.836 0.05070 1.750 1.836 1.20134 1.752 1.386 0.05080 1.781 1.575 0.0500 1.803 3.75 0.0000 1.815 3.23 0.051750 1.836 0.0500 1.752 0.0000 1.752 1.750 | | | | ı | | | | | | 1.780 | | .030048 | | | | l | | .010020 |
| 1750 685 100 - 128 1750 1410 010 - 202 1751 448 015 - 303 1788 1612 030 - 505 1803 908 020 - 302 1814 1000 100 - 128 1750 686 010 - 608 1750 443 005 - 604 1782 395 014- 608 1759 1803 090 - 302 1803 1803 908 020 - 302 1814 1000 100 - 128 1750 686 057 010 1750 1433 005 - 604 1782 395 014- 608 1759 1803 005 - 604 1750 1803 1804 1702 010 - 202 1815 323 005 - 604 1750 1804 1750 1804 1750 1803 005 - 604 1750 1804 1750 1804 1750 1803 005 - 604 1750 1804 1804 1804 1804 1804 1804 1804 180 | | | | l | | | | | .007016 | 1.780 | .953 | .120135 | | | | 1 | | .040060 |
| 1750 656 010 - 0.60 1750 141 003 - 0.15 1762 408 015 - 0.90 1789 80 005 - 0.10 1803 1803 1802 040 - 0.00 1814 1300 025 - 0.05 - 0.1750 680 050 - 0.05 1750 1750 1436 020 - 0.00 1781 230 080 - 0.00 1781 230 080 - 0.00 1770 1805 080 - 0.00 1805 1750 1805 1805 1805 1805 1805 1805 1805 18 | | | | ı | | | | | | | | | | | | 1 | | .010020 |
| 1750 687 687 687 686 686 696 675 676 678 438 205 504 478 388 606 686 | | | | ı | | | | | | | | | | | | l | | |
| 1750 688 096 097 1750 1750 1750 1750 1750 1750 1750 175 | | | | | | | | | | | | | | | | | | .025050 |
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| 1750 703 010 0.020 1750 1.570 1.572 0.05 0.040 1764 1.581 1.05 1.194 1.05 1.194 1.05 1.194 1.05 1.194 1.05 1.194 1.05 1.194 1.05 | | | | l | | | | | | | | | | | | l | | |
| 1750 733 015 025 1750 1527 020 -040 1764 950 110 -130 1784 1130 020 -040 1805 1375 030 -060 1815 1523 015 -033 1750 750 100 -156 1750 1531 030 -080 1784 1288 060 -090 1784 1616 060 -080 1805 1385 1385 031 -030 1818 631 020 -020 1750 1550 100 -155 1750 1550 100 -015 1750 1550 000 -090 1805 1584 015 -030 1818 1065 015 -030 1750 755 060 -090 1750 1566 005 -010 1765 297 042 -060 1785 881 050 -070 1805 1591 070 -090 1818 1404 020 -030 1750 755 060 -090 1750 1566 005 -010 1765 594 100 -125 1785 1694 022 -048 1805 1591 005 -010 1818 1404 020 -030 1750 780 1561 1877 1750 1566 005 -010 1765 594 100 -125 1785 1084 022 -048 1805 1591 005 -010 1818 1404 020 -030 1750 1561 005 -010 1750 1566 005 -010 1765 594 100 -125 1785 1084 022 -048 1806 226 040 -050 1818 1498 040 -050 1875 1875 1875 1875 1875 1875 1875 1875 | | | | | | | | | | | | | | | | | | |
| 1750 750 100 - 156 1750 1532 055 - 945 1784 1475 800 - 104 1784 1830 070 - 0.20 1805 1805 1805 1605 005 - 0.00 1818 1605 005 - 0.00 1750 1532 055 - 945 1785 1805 1806 100 - 1785 1805 1806 1806 1806 1806 1806 1806 1806 1806 | | | | ı | | | | | | | | | | | | 1 | | |
| 1750 750 100 -166 1750 1552 025 -045 1766 14775 080 -104 1784 1616 060 -080 1805 1584 015 -030 1818 1065 015 -030 1770 755 060 -090 1759 1565 010 -016 1765 297 042 -080 1785 881 050 -070 1805 1591 070 -090 170 1818 1406 025 -044 1770 755 0560 090 1759 1565 005 -010 1765 504 100 -125 1785 1284 105 -125 1806 206 040 -050 1818 1406 025 -034 1770 780 1566 1877 1750 1566 005 -010 1765 504 100 -125 1785 1284 105 -125 1806 206 040 -050 1818 1406 020 -030 1775 180 1806 1806 1806 1806 1806 1806 1806 | | | | ı | | | | | | | | | | | | l | | |
| 1750 756 0.90 - 110 1.750 1.550 0.00 - 0.00 1.750 1.750 0.00 0.00 - 0.00 1.750 1.750 0.00 0.00 - 0.00 1.750 1.750 0.00 0.00 - 0.00 1.750 1.750 0.00 - 0.00 1.750 1.750 0.00 0.00 - 0.00 1.750 1.750 0.00 0.00 - 0.00 1.750 1.750 0.00 0.00 - 0.00 1.750 1.750 0.00 0.00 - 0.00 1.750 0.0 | | | | l | | | | | | | | | | | | 1 | | |
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| 1750 768 005 - 010 1750 1.666 0.05 - 010 1.765 5.04 100 - 1.25 1.786 1.286 1.05 - 1.25 1.806 2.06 0.06 0.06 1.818 1.486 0.05 - 0.05 1.806 1.805 0.05 - 0.06 1.818 1.826 0.05 - 0.05 1.806 1.825 0.05 0.05 0.05 0.05 1.806 1.825 0.05 | | | | l | | | | | | | | | | | | | | |
| 1750 1750 1751 | | | | l | | | | | | | | | | | | l | | |
| 1750 812 0.42 - 1.56 1.761 3.25 0.05 - 0.01 1.765 9.03 0.01 - 0.25 1.788 1.24 0.01 - 0.05 1.806 1.344 0.05 - 0.05 0.01 - 0.02 1.765 1.05 1. | | | | ı | | | | | | | | | | | | 1 | | |
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| 1.750 8.32 0.50 0.70 0.75 1.626 0.25 0.40 0.75 1.826 1.750 0.30 0.50 0.75 0.876 0.30 0.50 0.75 0.876 0.30 0.50 0.75 0.75 0.876 0.30 0.50 0.75 0.75 0.876 0.30 0.50 0.75 0.75 0.876 0.30 0.50 0.75 0.75 0.876 0.30 0.50 0.75 0.75 0.876 0.80 0.15 0.50 0.75 0.876 0.80 0.15 0.80 0.15 0.80 0.15 0.15 0.05 0.07 0.15 0.15 0.05 0.07 0.15 0.05 0. | | | | ı | | | | | | | | | | | | | | |
| 1.750 8.76 0.90 - 105 1.751 6.28 0.00 - 125 1.765 1.861 0.50 - 0.70 1.789 1.780 0.878 0.06 - 0.06 1.751 6.29 0.30 - 0.50 1.785 1.382 0.62 - 0.83 1.790 6.20 0.15 - 1.25 1.807 1.438 0.40 - 0.60 1.821 1.006 0.50 - 0.75 1.780 0.90 0.00 - 1.025 1.751 1.720 1.56 - 1.87 1.766 1.382 0.60 - 0.80 1.790 0.820 0.15 - 1.25 1.807 1.518 0.30 - 0.60 1.822 1.586 0.30 - 0.05 1.750 0.907 1.10 - 1.30 1.751 1.90 1.55 1.786 1.382 0.05 - 0.01 1.790 1.530 0.10 - 0.20 1.808 1.534 0.10 - 0.20 1.823 1.438 0.00 - 0.07 1.750 0.907 0.10 - 1.25 1.751 1.011 0.05 - 0.10 1.768 1.382 0.05 - 0.00 1.791 1.605 0.30 - 0.50 1.809 0.96 0.40 - 0.60 1.823 1.35 0.10 - 1.00 1.750 0.93 0.00 - 1.25 1.751 1.312 0.50 - 0.75 1.768 1.382 0.05 - 0.01 1.791 1.605 0.05 - 0.00 1.809 0.96 0.40 - 0.60 1.823 1.35 0.10 - 1.00 0.15 0 | | | | ı | | | | | | | | | | | | l | | |
| 1.750 878 0.006 0.016 1.751 6.29 0.30 0.50 1.756 1.382 0.62 0.03 0.05 0.07 1.750 0.05 0.07 1.751 0.05 0.05 0.07 1.751 0.05 | | | | ı | | | | | | | | | | | | l | | |
| 1.750 9.06 1.00 1.25 1.751 7.20 1.56 1.87 1.766 1.382 0.60 0.80 1.790 1.790 1.063 0.05 1.010 1.808 0.690 0.30 0.500 1.823 1.366 0.30 0.501 1.750 1.750 9.920 0.30 0.104 1.751 1.002 1.05 1.768 1.322 0.05 0.05 1.791 1.605 0.00 0.000 1.808 1.534 1.00 0.00 0.000 1.823 1.066 0.020 0.041 1.755 0.000 0.05 1.768 1.322 0.05 0.05 0.000 1.791 1.605 0.00 0.000 0.000 1.809 0.000 0.000 0.000 1.823 1.066 0.020 0.041 1.755 0.000 0.000 1.751 1.011 1.005 0.075 1.768 1.382 0.05 0.005 0.010 1.791 1.605 0.030 0.050 1.809 0.000 0.040 0.000 1.823 1.065 0.020 0.000 0.000 1.750 0.000 0.000 1.750 0.000 0.000 0.000 0.000 1.750 0.000 0.000 0.000 0.000 0.000 0.000 0.000 1.750 0.000 0.0 | | | | ı | | | | | | | | | | | | | | |
| 1.750 9.97 1.10 1.30 1.751 8.90 1.05 1.35 1.768 1.768 1.793 0.05 0.00 1.790 1.063 0.05 0.00 1.808 6.90 0.30 0.50 1.823 1.434 0.50 0.070 1.750 9.920 0.30 0.104 1.751 1.002 1.505 1.05 1.25 1.768 1.232 0.05 0.00 1.790 1.590 1.590 0.10 0.005 1.809 1.534 0.10 0.005 1.823 1.135 1.001 0.105 1.750 9.43 0.06 0.080 1.751 1.033 0.50 0.075 1.768 1.382 0.05 0.00 1.792 1.605 0.10 0.005 1.809 1.809 0.00 0.004 0.000 1.823 1.135 0.10 1.105 1.750 9.005 0.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.809 1.005 0.005 1.005 0.005 0.005 1.005 0.005 0.005 1.005 0.005 0.005 1.005 0.005 0.005 1.005 0.005 0.005 1.005 0.00 | | | | | | | | | | | | | | | | | | |
| 1.750 9.20 0.30 - 1.04 1.751 1.002 1.05 - 1.25 1.768 1.322 0.05 - 0.10 1.790 1.590 1.605 0.30 - 0.50 1.809 1.804 0.04 - 0.60 1.823 1.056 0.20 - 0.04 1.750 1.750 1.033 0.50 - 0.75 1.768 1.382 0.05 - 0.10 1.792 1.605 0.01 - 0.20 1.809 4.63 0.25 - 0.40 1.823 1.255 0.20 - 0.03 1.750 0.950 0.95 1.751 1.93 0.950 - 0.75 1.768 1.382 0.05 - 0.10 1.792 1.605 0.10 - 0.20 1.809 4.63 0.25 - 0.40 1.823 1.255 0.20 - 0.03 1.750 0.95 0.10 - 0.20 1.751 1.98 0.70 - 0.90 1.769 4.61 0.90 - 1.20 1.793 9.99 0.10 - 0.20 1.809 1.437 0.05 - 0.05 1.827 1.823 1.250 0.25 - 0.04 1.750 1.750 1.030 0.50 - 0.75 1.769 4.61 0.90 - 1.20 1.750 1.750 1.030 0.05 - 0.07 1.751 1.265 0.50 - 0.70 1.769 4.83 0.40 - 0.60 1.793 1.793 0.99 0.10 - 0.20 1.810 1.407 0.05 - 0.05 1.827 1.827 1.320 0.05 - 0.05 1.750 1.050 0.05 - 0.70 1.751 1.265 0.50 - 0.70 1.769 1.299 0.50 - 0.70 1.794 1.868 0.10 - 0.20 1.810 1.80 0.15 - 0.30 1.827 1.841 0.15 - 0.025 1.827 1.827 1.320 0.25 - 0.40 1.750 1.050 0.05 - 0.15 1.827 1.827 1.320 0.25 - 0.40 1.750 1.050 0.05 - 0.15 1.827 1.827 1.320 0.25 - 0.40 1.750 1.050 0.05 - 0.10 1.820 1.827 1.827 1.320 0.25 - 0.40 1.750 1.050 0.05 - 0.10 1.820 1.827 1.821 0.150 0.05 - 0.10 1.820 1.821 1.821 0.150 0.05 - 0.10 1.821 1.821 0.150 0.05 - 0.10 1.821 1.821 0.150 0.05 - 0.10 1.821 1.821 0.150 0.05 - 0.10 1.821 1.821 0.150 0.05 - 0.10 1.821 1.821 0.150 0.05 - 0.10 1.821 1.821 0.150 0.05 - 0.10 1.821 0.150 0.05 - 0.10 1.821 0.150 0.05 - 0.10 1.821 0.150 0.05 - 0.10 1.821 0.150 0.05 - 0.10 1.821 0.150 0.05 - 0.10 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0.150 0 | | | | l | | | | | | | | | | | | 1 | | |
| 1.750 .937 .100125 .1751 .1011 .005010 .1768 .1.809 .030050 .1.791 .1.605 .030050 .1.809 .040 .040 .040 .040 .020 .1.823 .1.25 .020030 .1.750 .0.83 .0.8050.80 .1.751 .1.182 .0.5050.75 .1.768 .1.822 .0.050.10 .1.792 .1.793 .0.83 .0.050.10 .1.809 .1.63 .0.931.13 .1.251 .1.250 .0.2050.81 .1.751 .1.184 .0.700.90 .1.769 .4.64 .0.801.04 .1.793 .8.38 .0.050.05 .1.809 .1.809 .1.803 .0.931.13 .1.251 .0.2050.55 .0.81 .1.751 .1.188 .0.700.90 .1.769 . | | | | | | | | | | | | | | | | | | |
| 1.750 9.43 0.80 0.80 1.751 1.032 0.50 0.75 1.768 1.382 0.80 0.10 1.792 1.605 0.10 0.020 1.809 1.603 0.025 0.103 1.823 1.205 0.036 0.03 | | | | l | | | | | | | | | | | | | | |
| 1.750 1.750 1.751 1.751 1.751 1.752 0.50 0.750 0.769 | | | | | | | | | | | | | | | | | | .020030 |
| 1.750 1.750 1.751 1.75 | | | | | | | | | | | | | | | | | | .035050 |
| 1.750 1.000 0.10 - 0.200 1.751 1.260 0.50 - 0.70 1.769 1.769 1.269 0.50 - 0.700 1.769 1.269 0.50 - 0.700 1.769 1.269 0.50 - 0.700 1.769 1.269 0.50 - 0.700 1.769 1.260 0.50 - 0.700 1.760 1.260 0.50 - 0.700 1.260 | | | | l | | | | | | | | | | | | | | .060080 |
| 1.750 | | | | l | | | | | | | | | | | | 1 | | .005010 |
| 1.750 1.005 .015187 1.751 1.290 .025040 1.769 1.301 .040060 1.794 1.588 .010020 1.810 .180 .015030 1.827 1.481 .015026 1.750 1.009 .050070 1.751 1.405 .050075 1.769 1.391 .025040 1.795 1.001 .005010 1.824 .050010 1.828 1.420 .050010 1.750 1.016 .050070 1.751 1.515 .005010 1.770 .881 .030040 1.795 1.625 .025040 1.810 .050010 1.820 .020035 .010020 1.751 1.569 .020035 1.770 .827 .030048 1.796 1.688 .015030 1.810 .060040060 1.830 .935040 1.770 .0825040 1.779 1.687 .020030 1.810 1.066 .040060 1.830 .050076 1.750 1.020 .031032 .1810 | | | | | | | | | | | | | | | | 1 | | .062090 |
| 1.750 1.009 .0.50070 | | | | l | | | | | | | | | | | | 1 | | .015025 |
| 1.750 | | | | | | | | | | | | | | | | | | .050060 |
| 1.750 | | | | | | | | | | | | | | | | | | .005010 |
| 1.750 1.019 .005020 1.751 1.569 .020035 1.770 .827 .030048 1.796 1.688 .015030 1.810 1.066 .040060 1.830 1.059 .105125 1.750 1.025 .010020 1.752 .262 .100120 1.770 1.181 .010020 1.791 .181 .040050 1.810 .130 .100125 1.830 .080070 1.750 1.025 .010020 1.752 .262 .100120 1.770 1.811 .010020 1.798 .096 .030050 1.810 .1530 .050070 1.750 1.031 .135156 1.752 .375 .030050 1.770 1.250 .005010 1.798 .096 .030050 1.811 .313 .050060 1.830 1.620 .042060 1.750 1.043 .050070 1.752 .485 .156190 1.770 1.629 .015025 .1798 1.025 </td <td></td> <td></td> <td></td> <td>l</td> <td></td> <td>.010020</td> | | | | l | | | | | | | | | | | | | | .010020 |
| 1.750 1.020 .005125 1.751 1.583 .025040 1.770 1.065 .050070 1.797 1.687 .020030 1.810 1.130 .100125 1.830 .083 .080000 1.750 1.025 .010020 1.752 .262 .100120 1.770 1.811 .010020 1.798 .096 .030050 1.810 .1518 .040062 1.830 .1530 .050070 1.750 1.031 .135156 1.752 .375 .030050 1.770 1.265 .005010 1.798 .091 .050075 1.811 .313 .050060 1.830 1.627 .042060 1.750 1.043 .050070 1.752 .485 .156190 1.770 1.565 .050070 1.798 .005010 1.811 .501 .030050 1.832 .764 .015026 .178 .122 .105125 1.811 .101 .013 .000050 .1832 .156 </td <td></td> <td></td> <td></td> <td>l</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1.066</td> <td></td> <td>1</td> <td></td> <td>.105125</td> | | | | l | | | | | | | | | | 1.066 | | 1 | | .105125 |
| 1.750 1.025 .010020 1.752 .262 .100120 1.770 1.181 .010020 1.798 .096 .030050 1.810 1.518 .040062 1.830 1.530 .050070 1.750 1.031 .135156 1.752 .375 .030050 1.770 1.250 .040060 1.798 .629 .005010 1.811 .275 .005010 1.830 1.627 .042060 1.750 1.033 .062083 1.752 .381 .040060 1.770 1.265 .005010 1.798 .931 .050075 1.811 .313 .050060 1.831 1.200 .020030 1.750 1.043 .050070 1.752 .485 .156190 1.770 1.629 .015025 1.798 1.076 .005010 1.811 .101 .030050 1.832 .156 .030050 1.750 1.060 .030060 1.752 .663 .101130 1.771 <td></td> <td></td> <td></td> <td>l</td> <td></td> <td>.080100</td> | | | | l | | | | | | | | | | | | | | .080100 |
| 1.750 1.031 .135 - 156 | 1.750 | 1.025 | .010020 | | | | | | | | | | | | | | | .050070 |
| 1.750 1.043 .050070 1.752 .485 .156190 1.770 1.565 .050070 1.798 1.076 .005010 1.811 .501 .030050 1.832 .156 .030044 1.750 1.049 .005010 1.752 .531 .005010 1.770 1.629 .015025 1.798 1.122 .105125 1.811 1.013 .100125 1.832 .764 .015030 1.750 1.060 .030060 1.752 .563 .110130 1.771 .257 .050070 1.798 1.255 .100125 1.811 1.144 .020030 1.833 1.382 .050060 1.750 1.062 .050075 1.752 .640 .010020 1.771 1.332 .090105 1.799 .096 .030050 1.811 1.314 .100125 1.833 1.589 .015030 1.750 1.120 .005010 1.752 .040 .015030 1.771 </td <td></td> <td></td> <td></td> <td>1.752</td> <td>.375</td> <td>.030050</td> <td>1.770</td> <td>1.250</td> <td>.040060</td> <td>1.798</td> <td>.629</td> <td>.005010</td> <td>1.811</td> <td></td> <td>.005010</td> <td>1.830</td> <td>1.627</td> <td>.042060</td> | | | | 1.752 | .375 | .030050 | 1.770 | 1.250 | .040060 | 1.798 | .629 | .005010 | 1.811 | | .005010 | 1.830 | 1.627 | .042060 |
| 1.750 1.049 .005010 1.752 .531 .005010 1.770 1.629 .015025 1.798 1.122 .105125 1.811 1.013 .100125 1.832 .764 .015030 1.750 1.060 .030060 1.752 .563 .110130 1.771 .257 .050070 1.798 1.255 .100125 1.811 1.144 .020030 1.833 1.382 .050062 1.750 1.062 .050075 1.752 .640 .010020 1.771 1.332 .090105 1.799 .096 .030050 1.811 1.314 .100125 1.833 1.589 .015030 1.750 1.120 .005010 1.752 .800 .025040 1.771 1.378 .010020 1.799 .180 .030050 1.811 1.379 .005010 1.834 .184 .184 .005010 1.811 1.271 .1233 .1252 .005030 .005010 .17 | | | | | | | 1.770 | 1.265 | .005010 | 1.798 | .931 | | | | | | | .020030 |
| 1.750 1.060 .030060 1.752 .563 .110130 1.771 .257 .050070 1.798 1.255 .100125 1.811 1.144 .020030 1.833 1.382 .050060 1.750 1.062 .050075 1.752 .640 .010020 1.771 1.332 .090105 1.799 .096 .030050 1.811 1.314 .100125 1.833 1.589 .015030 1.750 1.120 .005010 1.752 .800 .025040 1.771 1.378 .010020 1.799 .180 .030050 1.811 1.379 .005010 1.834 .764 .020033 1.750 1.122 .110130 1.752 .910 .015030 1.771 1.397 .005010 1.799 .377 .005010 1.811 1.521 .025040 1.834 .1382 .005010 1.750 1.124 .100125 1.752 1.000 .030060 1.772< | | | | | .485 | | 1.770 | 1.565 | .050070 | 1.798 | 1.076 | .005010 | | | | | | .030048 |
| 1.750 1.060 .030060 1.752 .563 .110130 1.771 .257 .050070 1.798 1.255 .100125 1.811 1.144 .020030 1.833 1.382 .050062 1.750 1.062 .050075 1.752 .640 .010020 1.771 1.332 .090105 1.799 .096 .030050 1.811 1.314 .100125 1.833 1.589 .015030 1.750 1.120 .005010 1.752 .800 .025040 1.771 1.378 .010020 1.799 .180 .030050 1.811 1.374 .100125 1.834 .764 .02003 1.750 1.122 .110130 1.752 .910 .015030 1.771 1.397 .005010 1.811 1.521 .025040 1.834 .764 .02003 1.750 1.124 .100125 1.752 .100 .030060 1.772 .1360 .005010 1.799 <td>1.750</td> <td></td> <td></td> <td>1.752</td> <td>.531</td> <td></td> <td>1.770</td> <td>1.629</td> <td>.015025</td> <td>1.798</td> <td>1.122</td> <td>.105125</td> <td>1.811</td> <td>1.013</td> <td>.100125</td> <td>1.832</td> <td>.764</td> <td>.015030</td> | 1.750 | | | 1.752 | .531 | | 1.770 | 1.629 | .015025 | 1.798 | 1.122 | .105125 | 1.811 | 1.013 | .100125 | 1.832 | .764 | .015030 |
| 1.750 1.120 .005010 1.752 .800 .025040 1.771 1.378 .010020 1.799 .180 .030050 1.811 1.379 .005010 1.834 .764 .020033 1.750 1.122 .110130 1.752 .910 .015030 1.771 1.397 .005010 1.799 .377 .005010 1.811 1.521 .025040 1.834 1.382 .005010 1.750 1.124 .100125 1.752 1.000 .030060 1.772 .501 .015025 1.799 .753 .042060 1.811 1.540 .090120 1.834 1.384 .005010 1.750 1.126 .010083 1.752 1.062 .100125 1.772 1.360 .005010 1.799 .795 .036050 1.812 .213 .010125 1.834 1.574 .015030 1.750 1.130 .1552 1.064 .110130 1.772 1.361 | 1.750 | | | 1.752 | .563 | .110130 | 1.771 | .257 | .050070 | | 1.255 | .100125 | 1.811 | 1.144 | | 1.833 | 1.382 | .050062 |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | | | | 1.752 | .640 | .010020 | 1.771 | 1.332 | | | | | 1.811 | | | 1.833 | 1.589 | .015030 |
| 1.750 1.124 .100125 1.752 1.00 .030060 1.772 .501 .015025 1.799 .753 .042060 1.811 1.540 .090120 1.834 1.384 .005010 1.750 1.126 .010083 1.752 1.062 .100125 1.772 1.360 .005010 1.799 .795 .036050 1.812 .213 .010125 1.834 1.574 .015030 1.750 1.130 .105125 1.752 1.064 .110130 1.772 1.361 .005010 1.799 .945 .100125 1.812 .328 .156187 1.835 .430 .005010 1.750 1.135 .005010 1.752 1.450 .080100 1.772 1.470 .015025 1.799 1.020 .040060 1.812 .456 .060080 1.835 1.382 .030060 1.750 1.139 .015060 1.752 1.453 .083120 1.773< | 1.750 | 1.120 | .005010 | 1.752 | .800 | | | | | | | | 1.811 | 1.379 | .005010 | 1.834 | .764 | .020032 |
| 1.750 1.126 .010083 1.752 1.062 .100125 1.772 1.360 .005010 1.799 .795 .036050 1.812 .213 .010125 1.834 1.574 .015030 1.750 1.130 .105125 1.752 1.064 .110130 1.772 1.361 .005010 1.799 .945 .100125 1.812 .328 .156187 1.835 .430 .005010 1.750 1.135 .005010 1.752 1.450 .080100 1.772 1.470 .015025 1.799 .020 .040060 1.812 .456 .060080 1.835 .430 .005010 1.750 1.139 .015060 1.752 1.453 .083120 1.773 .202 .050070 1.799 1.029 .120135 1.812 .456 .060080 1.835 1.501 .005010 1.750 1.139 .015060 1.752 1.453 .083120 1.773 </td <td>1.750</td> <td></td> <td></td> <td>1.752</td> <td>.910</td> <td>.015030</td> <td>1.771</td> <td>1.397</td> <td>.005010</td> <td>1.799</td> <td>.377</td> <td></td> <td>1.811</td> <td>1.521</td> <td>.025040</td> <td>1.834</td> <td></td> <td>.005010</td> | 1.750 | | | 1.752 | .910 | .015030 | 1.771 | 1.397 | .005010 | 1.799 | .377 | | 1.811 | 1.521 | .025040 | 1.834 | | .005010 |
| 1.750 1.130 .105125 1.752 1.064 .110130 1.772 1.361 .005010 1.799 .945 .100125 1.812 .328 .156187 1.835 .430 .005010 1.750 1.135 .005010 1.752 1.450 .080100 1.772 1.470 .015025 1.799 1.020 .040060 1.812 .456 .060080 1.835 1.382 .030060 1.750 1.139 .015060 1.752 1.453 .083120 1.773 .202 .050070 1.799 1.029 .120135 1.812 .751 .156187 1.835 1.501 .005010 | | | | | | | 1.772 | .501 | .015025 | | | | | | | | | .005010 |
| 1.750 1.135 .005010 1.752 1.450 .080100 1.772 1.470 .015025 1.799 1.020 .040060 1.812 .456 .060080 1.835 1.382 .030060 1.750 1.139 .015060 1.752 1.453 .083120 1.773 .202 .050070 1.799 1.029 .120135 1.812 .751 .156187 1.835 1.501 .005010 | 1.750 | 1.126 | | 1.752 | 1.062 | .100125 | 1.772 | 1.360 | | 1.799 | .795 | .036050 | 1.812 | .213 | | | 1.574 | .015030 |
| 1.750 1.139 .015060 1.752 1.453 .083120 1.773 .202 .050070 1.799 1.029 .120135 1.812 .751 .156187 1.835 1.501 .005010 | | | | | | | 1.772 | 1.361 | .005010 | 1.799 | .945 | .100125 | 1.812 | .328 | | 1.835 | | .005010 |
| | | | | l | | | | | .015025 | 1.799 | 1.020 | .040060 | | | | 1 | | .030060 |
| 1.750 1.150 .090120 1.752 1.507 .050070 1.773 .471 .130150 1.799 1.380 .050075 1.812 .792 .035048 1.835 1.620 .010020 | | | | | | | | | | | | | | | | | | .005010 |
| | 1.750 | 1.150 | .090120 | 1.752 | 1.507 | .050070 | 1.773 | .471 | .130150 | 1.799 | 1.380 | .050075 | 1.812 | .792 | .035048 | 1.835 | 1.620 | .010020 |

| | | 01 4 | | | 01 4 | | | BOKEF | R'S ME | IAL | WASHER | IS ANI | C FLF | | OIVIDL | LUL | |
|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|---------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|--------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 1.836 | 1.646 | .005010 | 1.851 | 1.505 | .025040 | 1.873 | .625 | .100125 | 1.875 | 1.156 | .032125 | 1.881 | 1.204 | .015030 | 1.900 | 1.501 | .090105 |
| 1.837 | 1.343 | .005010 | 1.851 | 1.590 | .005012 | 1.873 | .750 | .100125 | 1.875 | 1.171 | .100125 | 1.881 | 1.281 | .040060 | 1.900 | 1.530 | .010020 |
| 1.837 | 1.345 | .005015 | 1.851 | 1.630 | .005025 | 1.873 | .844 | .105135 | 1.875 | 1.188 | .015070 | 1.881 | 1.424 | .005010 | 1.900 | 1.600 | .030050 |
| 1.838 | .126 | .030050 | 1.852 | .290 | .020030 | 1.873 | .882 | .015030 | 1.875 | 1.244 | .040062 | 1.882 | .887 | .060100 | 1.900 | 1.628 | .030050 |
| 1.838 | .419 | .005010 | 1.852 | .560 | .070090 | 1.873 | 1.140 | .100125 | 1.875 | 1.250 | .020040 | 1.883 | 1.035 | .060080 | 1.900 | 1.650 | .025060 |
| 1.838 | 1.371 | .040060 | 1.852 | 1.165 | .035045 | 1.873 | 1.260 | .065080 | 1.875 | 1.254 | .005010 | 1.883 | 1.585 | .040060 | 1.900 | 1.651 | .080100 |
| 1.838 1.839 | 1.571 1.251 | .030050 .025030 | 1.852 1.854 | 1.590 1.658 | .008015 .020030 | 1.873 1.873 | 1.349 1.381 | .030050 .090125 | 1.875 | 1.258 1.260 | .030050 | 1.884 1.884 | 1.010 1.494 | .015040 | 1.900 1.901 | 1.660 .626 | .005010 .025040 |
| 1.839 | 1.382 | .005010 | 1.857 | .586 | .020030 | 1.873 | 1.386 | .100134 | 1.875 1.875 | 1.310 | .060090 .040062 | 1.884 | 1.577 | .050075 .040050 | 1.901 | .726 | .105125 |
| 1.840 | .249 | .060075 | 1.857 | .710 | .090125 | 1.873 | 1.437 | .100125 | 1.875 | 1.355 | .070090 | 1.884 | 1.585 | .030060 | 1.901 | .760 | .120140 |
| 1.840 | .509 | .050070 | 1.857 | 1.435 | .005012 | 1.873 | 1.444 | .062075 | 1.875 | 1.370 | .060083 | 1.885 | .327 | .025035 | 1.901 | .781 | .105125 |
| 1.840 | .679 | .050070 | 1.858 | 1.360 | .025040 | 1.873 | 1.508 | .005020 | 1.875 | 1.375 | .006030 | 1.885 | .376 | .060080 | 1.901 | 1.501 | .010020 |
| 1.840 | 1.005 | .005010 | 1.859 | .389 | .050075 | 1.873 | 1.533 | .005010 | 1.875 | 1.379 | .005075 | 1.885 | .956 | .062090 | 1.902 | .631 | .005010 |
| 1.840 1.840 | 1.008 1.336 | .090105 .050075 | 1.859 | .818 | .005010 | 1.873 | 1.639 | .005010 | 1.875 | 1.384 | .042062 | 1.885 | 1.060 | .042062 | 1.902 1.902 | 1.101 1.139 | .040062 |
| 1.840 | 1.343 | .010020 | 1.859 1.859 | 1.435 1.642 | .005010 .060080 | 1.873 1.873 | 1.671 1.734 | .005015 .010020 | 1.875 1.875 | 1.386 1.453 | .030050 .040060 | 1.885 1.885 | 1.136 1.157 | .060080 .062090 | 1.902 | 1.256 | .090125 |
| 1.840 | 1.424 | .050075 | 1.860 | .201 | .050075 | 1.874 | .219 | .100134 | 1.875 | 1.502 | .105125 | 1.885 | 1.380 | .062090 | 1.902 | 1.570 | .005010 |
| 1.840 | 1.425 | .065080 | 1.860 | 1.268 | .025050 | 1.874 | .252 | .005010 | 1.875 | 1.503 | .005032 | 1.886 | .985 | .100125 | 1.903 | .485 | .025040 |
| 1.840 | 1.479 | .040060 | 1.860 | 1.345 | .030040 | 1.874 | .266 | .070090 | 1.875 | 1.505 | .040083 | 1.886 | 1.188 | .005010 | 1.903 | .719 | .010125 |
| 1.840 | 1.519 | .040060 | 1.860 | 1.445 | .050075 | 1.874 | .281 | .020050 | 1.875 | 1.550 | .020050 | 1.886 | 1.382 | .060080 | 1.903 | 1.031 | .050070 |
| 1.841 1.841 | .377 .402 | .110130 .040060 | 1.861 1.862 | 1.446 1.510 | .005010 | 1.874 | .282 | .015060 | 1.875 | 1.568 | .060090 .010020 | 1.886 | 1.397 | .005010 | 1.903 1.904 | 1.404 1.510 | .015025 .025040 |
| 1.841 | .402 1.189 | .040060 | 1.862 1.863 | 1.510 .650 | .012025 .005010 | 1.874 1.874 | .375 .376 | .100125 .070125 | 1.875 1.875 | 1.585 1.640 | .010020 .050070 | 1.886 1.886 | 1.398 1.446 | . 005010 .050075 | 1.904 1.905 | 1.510 1.160 | .025040 |
| 1.841 | 1.404 | .005010 | 1.863 | 1.361 | .110130 | 1.874 | .409 | .100120 | 1.875 | 1.681 | .050070 | 1.887 | 1.186 | .010020 | 1.905 | 1.510 | .005010 |
| 1.841 | 1.407 | .005010 | 1.863 | 1.375 | .090110 | 1.874 | .440 | .170190 | 1.875 | 1.688 | .005015 | 1.888 | .755 | .005010 | 1.905 | 1.590 | .010030 |
| 1.841 | 1.569 | .005010 | 1.863 | 1.501 | .105125 | 1.874 | .625 | .015030 | 1.875 | 1.707 | .025040 | 1.888 | .788 | .050070 | 1.905 | 1.627 | .025040 |
| 1.842 | .378 | .100125 | 1.865 | .354 | .070090 | 1.874 | .628 | .040060 | 1.876 | .533 | .105125 | 1.889 | .760 | .015030 | 1.905 | 1.640 | .080100 |
| 1.842 | .640 | .025040 | 1.865 | .888 | .050062 | 1.874 | .631 | .105125 | 1.876 | .659 | .080100 | 1.890 | .380 | .105135 | 1.906 | .194 | .070090 |
| 1.842 1.842 | .828 1.098 | . 005010 .080100 | 1.865 1.865 | 1.023 1.123 | .100125 .100125 | 1.874 1.874 | .713 .822 | .005012 .050062 | 1.876 1.876 | .669 .754 | .100125 .062083 | 1.890 1.890 | .512 1.023 | . 005010 .010025 | 1.906 1.906 | .316 .381 | .060080 .090120 |
| 1.842 | 1.251 | .090125 | 1.865 | 1.134 | .075100 | 1.874 | .875 | .110130 | 1.876 | .765 | .125156 | 1.890 | 1.220 | .040090 | 1.906 | .409 | .050070 |
| 1.842 | 1.531 | .040060 | 1.865 | 1.390 | .040060 | 1.874 | .879 | .005020 | 1.876 | 1.007 | .015032 | 1.890 | 1.378 | .030050 | 1.906 | 1.314 | .080105 |
| 1.842 | 1.643 | .025040 | 1.865 | 1.502 | .025040 | 1.874 | .883 | .005010 | 1.876 | 1.129 | .015030 | 1.890 | 1.384 | .005010 | 1.906 | 1.557 | .015030 |
| 1.843 | .316 | .015030 | 1.867 | .334 | .040060 | 1.874 | .907 | .080105 | 1.876 | 1.156 | .105135 | 1.890 | 1.389 | .010020 | 1.906 | 1.590 | .015025 |
| 1.843 1.843 | .816 .880 | .025035 | 1.867 | 1.387 | .040060 | 1.874 | .951 | .050070 | 1.876 | 1.257 | .105135 | 1.890 1.890 | 1.496 1.562 | .020040 .005010 | 1.907 | .365 | .060080 |
| 1.843 | 1.188 | .005010 .020050 | 1.867 1.868 | 1.438 1.063 | .100125 .040060 | 1.874 1.874 | 1.045 1.180 | .025040 .030050 | 1.876 1.876 | 1.260 1.380 | . 005040 .010020 | 1.890 | 1.614 | .040060 | 1.907 1.907 | 1.157 1.485 | .120134 .070090 |
| 1.843 | 1.381 | .005010 | 1.869 | .380 | .040060 | 1.874 | 1.202 | .015025 | 1.876 | 1.381 | .010020 | 1.891 | 1.000 | .008015 | 1.908 | .877 | .010020 |
| 1.843 | 1.455 | .038060 | 1.869 | .405 | .020040 | 1.874 | 1.257 | .070090 | 1.876 | 1.382 | .020040 | 1.891 | 1.719 | .010020 | 1.909 | .802 | .080100 |
| 1.843 | 1.456 | .030050 | 1.869 | .501 | .110135 | 1.874 | 1.282 | .010070 | 1.876 | 1.438 | .100125 | 1.892 | .989 | .005010 | 1.909 | 1.250 | .020040 |
| 1.844 | .816 | .005010 | 1.869 | 1.136 | .005010 | 1.874 | 1.331 | .005010 | 1.876 | 1.508 | .020060 | 1.892 | 1.367 | .100125 | 1.909 | 1.275 | .005010 |
| 1.844 | 1.098 | .050075 | 1.869 | 1.277 | .050105 | 1.874 | 1.450 | .150170 | 1.876 | 1.592 | .090105 | 1.892 | 1.719 | .005010 | 1.909 | 1.348 | .005010 |
| 1.844 1.844 | 1.100 1.624 | .030050 .005010 | 1.869 1.869 | 1.283 1.438 | .090105 .050062 | 1.874 1.874 | 1.479 1.515 | .020030 .010020 | 1.876 1.876 | 1.645 1.752 | .020040 .020030 | 1.893 1.893 | .508 .535 | .104125 .100125 | 1.910 1.910 | 1.159 1.437 | .040060 .100125 |
| 1.845 | .140 | .040060 | 1.869 | 1.567 | .025040 | 1.874 | 1.595 | .030045 | 1.876 | 1.764 | .010020 | 1.894 | .868 | .020030 | 1.910 | 1.438 | .105125 |
| 1.845 | .391 | .050070 | 1.870 | .080 | .020040 | 1.874 | 1.625 | .015030 | 1.877 | .320 | .100125 | 1.894 | 1.180 | .005010 | 1.911 | 1.631 | .005010 |
| 1.845 | .661 | .105125 | 1.870 | .500 | .100125 | 1.874 | 1.627 | .025040 | 1.877 | .525 | .015030 | 1.894 | 1.535 | .050070 | 1.912 | 1.758 | .030050 |
| 1.845 | 1.250 | .040060 | 1.870 | .505 | .100125 | 1.874 | 1.752 | .010020 | 1.877 | 1.008 | .015030 | 1.895 | .378 | .100125 | 1.913 | 1.096 | .005010 |
| 1.845 | 1.312 | .048075 | 1.870 | .642 | .005010 | 1.875 | .159 | .010020 | 1.877 | 1.376 | .005010 | 1.895 | 1.159 | . 005010 .105135 | 1.913 | 1.755 | .005010 |
| 1.845 1.845 | 1.568 1.569 | .025035 .005010 | 1.870 1.870 | .661 .696 | .105125 .060080 | 1.875 1.875 | .204 .250 | .100125 .050105 | 1.877 1.877 | 1.505 1.525 | .070090 .015030 | 1.896 1.896 | .508 . 752 | .005010 | 1.913 1.915 | 1.779 .255 | .005010 .020030 |
| 1.846 | .792 | .080120 | 1.870 | .698 | .050075 | 1.875 | .317 | .015030 | 1.877 | 1.527 | .050070 | 1.896 | .761 | .005010 | 1.915 | 1.259 | .100125 |
| 1.846 | 1.312 | .020030 | 1.870 | .795 | .040060 | 1.875 | .320 | .105125 | 1.877 | 1.563 | .025040 | 1.897 | .309 | .005010 | 1.915 | 1.586 | .007015 |
| 1.846 | 1.401 | .050070 | 1.870 | .880 | .042062 | 1.875 | .375 | .040060 | 1.877 | 1.637 | .030040 | 1.897 | 1.414 | .005010 | 1.916 | .966 | .050070 |
| 1.846 | 1.441 | .125156 | 1.870 | .901 | .005010 | 1.875 | .408 | .060080 | 1.878 | .621 | .005020 | 1.898 | .511 | .120135 | 1.917 | 1.258 | .125156 |
| 1.847 | .375 | .005010 | 1.870 | .909 | .015030 | 1.875 | .409 | .090120 | 1.878 | .655 | .090120 | 1.898 | .629 | .010020 | 1.918 | 1.385 | .015025 .062083 |
| 1.847 1.848 | 1.442 . 258 | .120135 . 005010 | 1.870 1.870 | .911 1.032 | . 005010 .105125 | 1.875 1.875 | .437 .510 | .005010 .090125 | 1.878 1.878 | .690 .754 | . 005010 .125156 | 1.898 1.898 | .636 .754 | .120135 . 005010 | 1.918 1.918 | 1.410 1.632 | .062083 |
| 1.848 | .332 | .050070 | 1.870 | 1.273 | .010020 | 1.875 | .620 | .062075 | 1.878 | .812 | .105125 | 1.898 | .910 | .050075 | 1.919 | 1.390 | .060080 |
| 1.848 | .485 | .020040 | 1.870 | 1.392 | .010015 | 1.875 | .626 | .015030 | 1.878 | 1.053 | .005010 | 1.899 | .194 | .005010 | 1.919 | 1.501 | .010020 |
| 1.849 | .375 | .090105 | 1.870 | 1.418 | .005010 | 1.875 | .629 | .040060 | 1.878 | 1.500 | .060080 | 1.899 | .340 | .156190 | 1.919 | 1.595 | .060080 |
| 1.849 | 1.081 | .060070 | 1.870 | 1.419 | .010020 | 1.875 | .632 | .104135 | 1.878 | 1.505 | .010020 | 1.899 | .380 | .030050 | 1.919 | 1.754 | .015030 |
| 1.849 | 1.333 | .083100 | | 1.504 | .025040 | 1.875 | .718 | .062075 | 1.879 | .523 | .005010 | 1.899 | .437 | .156190 | 1.920 | .859 | .080104 |
| 1.849 1.850 | 1.731 .252 | .010020 .030050 | 1.870 1.871 | 1.513 1.009 | .060090 .005010 | 1.875 | .757 .781 | . 005010 .075090 | 1.879 1.879 | 1.029 1.130 | .120135 .005010 | 1.899 1.899 | .629 .630 | .015030 . 005010 | 1.920 1.920 | 1.000 1.263 | .070090 .062083 |
| 1.850 | .366 | .050070 | 1.871 | 1.260 | .156187 | 1.875 1.875 | .875 | .015030 | 1.879 | 1.140 | .005010 | 1.899 | 1.015 | .040060 | 1.920 | 1.410 | .060090 |
| 1.850 | .510 | .005010 | 1.871 | 1.377 | .050070 | 1.875 | .876 | .010020 | 1.879 | 1.255 | .070090 | 1.900 | .378 | .030075 | 1.920 | 1.411 | .090105 |
| 1.850 | .561 | .170190 | 1.871 | 1.417 | .060080 | 1.875 | .890 | .110130 | 1.879 | 1.431 | .060070 | 1.900 | .626 | .005020 | 1.920 | 1.471 | .080100 |
| 1.850 | .625 | .030040 | 1.871 | 1.770 | .015030 | 1.875 | .891 | .040060 | 1.879 | 1.463 | .015030 | 1.900 | .630 | .005010 | 1.920 | 1.635 | .030040 |
| 1.850 | .626 | .010020 | 1.872 | .626 | .050075 | 1.875 | .906 | .105125 | 1.879 | 1.501 | .015030 | 1.900 | .855 | .005010 | 1.920 | 1.826 | .010020 |
| 1.850 | .967 1.071 | .100120 .060080 | 1.872 | .632 756 | .156187 | 1.875 | .936 | .105135 | 1.879 | 1.563 | .025040 | 1.900 | .870 881 | .060080 | 1.921 | .438 | .090110 |
| 1.850 1.850 | 1.071 1.107 | .060080 | 1.872 1.872 | .756 .891 | .005010 .005010 | 1.875 1.875 | 1.031 1.061 | .025040 .050070 | 1.879 1.879 | 1.605 1.687 | .025040 .010020 | 1.900 1.900 | .881 1.002 | .090125 .075105 | 1.921 1.921 | .566 1.500 | .015030 .010020 |
| 1.850 | 1.122 | .005020 | 1.872 | .909 | .010025 | 1.875 | 1.072 | .070090 | 1.880 | .585 | .156187 | 1.900 | 1.002 | .040060 | 1.921 | 1.671 | .062083 |
| 1.850 | 1.199 | .040050 | 1.872 | 1.260 | .075135 | 1.875 | 1.093 | .025040 | 1.880 | 1.131 | .025040 | 1.900 | 1.095 | .040060 | 1.922 | .317 | .015030 |
| 1.850 | 1.310 | .005007 | 1.872 | 1.318 | .040060 | 1.875 | 1.113 | .080104 | 1.880 | 1.193 | .015030 | 1.900 | 1.256 | .080104 | 1.922 | .565 | .150170 |
| 1.850 | 1.391 | .010020 | 1.872 | 1.509 | .005010 | 1.875 | 1.135 | .050070 | 1.880 | 1.392 | .070080 | 1.900 | 1.320 | .040060 | 1.922 | .972 | .080104 |
| 1.850 | 1.438 | .100120 | 1.873 | .177 | .050070 | 1.875 | 1.140 | .010042 | 1.880 | 1.465 | .005010 | 1.900 | 1.321 | .040060 | 1.922 | 1.079 | .080104 |
| 1.850 1.850 | 1.570 | .020050 | 1.873 | .252 | .005015 | | 1.142 | .007016 | 1.880 | 1.759 | .005010 | 1.900 | 1.375 | .050075 | 1.922 | 1.176 | .080104 |
| 1 2011 | 1.685 | .015025 | 1.873 | .386 | .090125 | 1.875 | 1.152 | .005010 | 1.881 | .786 | .010025 | 1.900 | 1.500 | .006060 | 1.922 | 1.341 | .080104 |

| | | Choose Any | | | Choose Any | | | Choose Any | 140 | 7100 | Choose Any | IAITGI | - 1 01 | Choose Any | 11115 | SIZE | Choose Any |
|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|---------------------|--------------------|-----------------------|---------------------|----------------------------|--------------------|---------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| 1.922 | 1.410 | .080104 | 1.937 | 1.260 | .040062 | 1.960 | 1.065 | .070090 | 1.977 | 1.775 | .005010 | 1.995 | 1.000 | .030050 | 1.999 | 1.000 | .030040 |
| 1.923 | .390 | .015030 | 1.937 | 1.283 | .005010 | 1.960 | 1.500 | .020040 | 1.977 | 1.798 | .010020 | 1.995 | 1.128 | .120135 | 1.999 | 1.015 | .005010 |
| 1.923 | .881 | .105135 | 1.937 | 1.284 | .015030 | 1.960 | 1.584 | .010020 | 1.978 | 1.550 | .015030 | 1.995 | 1.500 | .048062 | 1.999 | 1.033 | .160190 |
| 1.923 | 1.181 | .025040 | 1.937 | 1.399 | .030050 | 1.960 | 1.619 | .020040 | 1.978 | 1.694 | .020030 | 1.995 | 1.636 | .015030 | 1.999 | 1.034 | .005010 |
| 1.923 | 1.262 | .080104 | 1.937 | 1.436 1.498 | .030050 | 1.960 | 1.642 | .005010 | 1.979 | 1.660 | .005010 | 1.995 1.995 | 1.663 | .020040 | 1.999 | 1.143 | .005010 |
| 1.923 | 1.714 | .010020 | 1.937 1.937 | 1.498 1.527 | .025040 . 005010 | 1.961 1.961 | 1.188 1.300 | .010020 .020030 | 1.979 1.980 | 1.775 .267 | .020030 .125135 | 1.995 | .381 | .005010 | 1.999 1.999 | 1.289 1.308 | .025040 .005020 |
| 1.924 | .315 | .015030 | 1.937 | 1.528 | .050075 | 1.961 | 1.312 | .050083 | 1.980 | 1.060 | .010020 | 1.996 | .647 | .005010 | 1.999 | 1.504 | .025042 |
| 1.924 | .691 | .050070 | 1.937 | 1.657 | .010020 | 1.961 | 1.584 | .090125 | 1.980 | 1.478 | .050070 | 1.996 | .768 | .005010 | 1.999 | 1.560 | .005010 |
| 1.924 | .860 | .062083 | 1.937 | 1.665 | .050070 | 1.962 | 1.735 | .008020 | 1.980 | 1.500 | .050070 | 1.996 | .821 | .005010 | 1.999 | 1.685 | .020030 |
| 1.924 | .973 | .062083 | 1.937 | 1.733 | .040060 | 1.963 | .281 | .005010 | 1.980 | 1.507 | .005010 | 1.996 | 1.045 | .005010 | 1.999 | 1.692 | .030040 |
| 1.924 | 1.068 | .025040 | 1.937 | 1.809 | .005010 | 1.963 | .481 | .005010 | 1.980 | 1.546 | .005010 | 1.996 | 1.120 | .135156 | | | |
| 1.924 1.924 | 1.080 1.177 | .062083 .062083 | 1.938 1.938 | .319 1.395 | .015030 .005010 | 1.963 1.964 | 1.565 .281 | .025040 .015030 | 1.980 1.981 | 1.778 .831 | .005010 .156187 | 1.996 1.996 | 1.404 1.504 | . 005010 .010020 | | | |
| 1.924 | 1.180 | .062083 | 1.938 | 1.468 | .030050 | 1.964 | 1.576 | .015025 | 1.981 | 1.519 | .040060 | 1.996 | 1.666 | .005010 | | | |
| 1.924 | 1.263 | .062083 | 1.938 | 1.502 | .025040 | 1.964 | 1.579 | .005040 | 1.981 | 1.736 | .005010 | 1.996 | 1.751 | .050070 | | | |
| 1.924 | 1.341 | .062083 | 1.938 | 1.758 | .005010 | 1.964 | 1.756 | .020030 | 1.982 | 1.609 | .083104 | 1.996 | 1.850 | .010020 | | | 00 |
| 1.924 | 1.410 | .062083 | 1.938 | 1.809 | .005010 | 1.964 | 1.790 | .012020 | 1.983 | .515 | .030050 | 1.997 | .407 | .050070 | | .\ J' | w |
| 1.925 | .328 | .030040 | 1.939 | .126 | .030050 | 1.965 | .281 | .005010 | 1.983 | 1.628 | .020040 | 1.997 | .500 | .105125 | | | |
| 1.925 1.925 | .564 .573 | .010020 | 1.939 1.939 | 1.062 | .060070 .110130 | 1.965 1.965 | .815 1.427 | .030050 | 1.984 1.984 | .229 .395 | .005010 .005125 | 1.997 | .561 .700 | .005010 | 2.000 | .160 | .005015 |
| 1.925 | .754 | .060080 | 1.939 | 1.664 | .020030 | 1.965 | 1.427 | .030030 | 1.984 | .395 | .126190 | 1.997 | .720 | .020035 | 2.000 | .165 | .050070 |
| 1.925 | 1.317 | .020040 | 1.940 | .880 | .065080 | 1.965 | 1.498 | .048062 | 1.984 | 1.544 | .005015 | 1.997 | .766 | .010020 | 2.000 | .180 | .005010 |
| 1.925 | 1.391 | .025040 | 1.940 | 1.155 | .080100 | 1.965 | 1.503 | .005010 | 1.985 | 1.398 | .010030 | 1.997 | .913 | .005010 | 2.000 | .194 | .036050 |
| 1.925 | 1.510 | .010020 | 1.940 | 1.261 | .030070 | 1.965 | 1.513 | .005010 | 1.985 | 1.590 | .010020 | 1.997 | 1.021 | .030050 | 2.000 | .205 | .060125 |
| 1.925 | 1.554 | .050075 | 1.940 | 1.402 | .015030 | 1.965 | 1.586 | .020030 | 1.985 | 1.695 | .040060 | 1.997 | 1.061 | .050075 | 2.000 | .210 | .105135 |
| 1.925 1.926 | 1.715 1.554 | .062083 .020040 | 1.940 1.940 | 1.410 1.769 | .040060 .005010 | 1.965 1.966 | 1.860 1.006 | .007030 . 005010 | 1.986 | .540 | .005010 | 1.997 1.997 | 1.071 1.254 | .005010 .005010 | 2.000 | .250 .255 | .025125 .030060 |
| 1.926 | 1.684 | .020040 | 1.940 | 1.627 | .065080 | 1.966 | .394 | .080100 | 1.987 1.987 | .671 .888 | .100120 .050070 | 1.997 | 1.414 | .005010 | 2.000 | .261 | .060080 |
| 1.926 | 1.691 | .030042 | 1.941 | 1.629 | .075090 | 1.967 | .502 | .010020 | 1.988 | .880 | .050070 | 1.997 | 1.503 | .080105 | 2.000 | .266 | .040060 |
| 1.928 | .533 | .008020 | 1.942 | 1.157 | .080100 | 1.967 | 1.113 | .025040 | 1.988 | .899 | .005010 | 1.997 | 1.584 | .005010 | 2.000 | .270 | .080100 |
| 1.928 | 1.265 | .025040 | 1.942 | 1.746 | .015030 | 1.967 | 1.519 | .005010 | 1.988 | 1.497 | .005010 | 1.997 | 1.849 | .005010 | 2.000 | .282 | .060080 |
| 1.928 | 1.585 | .005010 | 1.942 | 1.787 | .005010 | 1.967 | 1.596 | .030050 | 1.988 | 1.575 | .050075 | 1.998 | .328 | .005010 | 2.000 | .291 | .050075 |
| 1.928 1.929 | 1.664 1.550 | .070090 .015025 | 1.943 1.944 | .764 .800 | .105125 .156187 | 1.967 | 1.687 .283 | .010020 | 1.988 | 1.586 .750 | .020042 .020030 | 1.998 1.998 | .426 .441 | . 005010 .120135 | 2.000 2.000 | .298 .316 | .005010 .005010 |
| 1.930 | .375 | .032048 | 1.944 | 1.628 | .025040 | 1.968 1.968 | .386 | .050070 .110135 | 1.989 1.989 | .786 | .105135 | 1.998 | .500 | .020050 | 2.000 | .328 | .070090 |
| 1.930 | .451 | .015025 | 1.945 | .426 | .050070 | 1.968 | .505 | .005010 | 1.989 | .875 | .100125 | 1.998 | .531 | .120135 | 2.000 | .344 | .060075 |
| 1.930 | 1.181 | .050070 | 1.946 | 1.780 | .005010 | 1.968 | .630 | .105125 | 1.989 | 1.753 | .030050 | 1.998 | .562 | .040060 | 2.000 | .380 | .160190 |
| 1.930 | 1.532 | .010020 | 1.947 | 1.661 | .005010 | 1.968 | .827 | .105125 | 1.990 | .281 | .125135 | 1.998 | .690 | .050075 | 2.000 | .398 | .010020 |
| 1.930 | 1.600 | .025042 | 1.948 | 1.083 | .070090 | 1.968 | .866 | .170190 | 1.990 | .317 | .005010 | 1.998 | .755 | .135156 | 2.000 | .399 | .020040 |
| 1.930 | 1.650 1.824 | .005010 | 1.948 | 1.578 1.749 | .005010 | 1.968 | .984 | .005010 | 1.990 | .318 | .007012 | 1.998 1.998 | .881 .882 | .015030 .020030 | 2.000 | .405 | .100135 .090105 |
| 1.930 1.930 | 1.880 | . 005030 .010020 | 1.948 1.948 | 1.820 | .010020 .005020 | 1.968 1.968 | 1.008 1.028 | .030050 . 005010 | 1.990 1.990 | .526 .651 | . 005010 | 1.998 | 1.021 | .070090 | 2.000 | .415 .437 | .050105 |
| 1.931 | .181 | .015025 | 1.949 | .459 | .020030 | 1.968 | 1.150 | .005010 | 1.990 | .688 | .050070 | 1.998 | 1.029 | .005010 | 2.000 | .438 | .156190 |
| 1.931 | .566 | .156190 | 1.949 | .820 | .005010 | 1.968 | 1.183 | .005010 | 1.990 | .754 | .005010 | 1.998 | 1.093 | .025040 | 2.000 | .451 | .090125 |
| 1.931 | 1.595 | .005020 | 1.949 | 1.062 | .030050 | 1.968 | 1.253 | .030050 | 1.990 | .893 | .005010 | 1.998 | 1.124 | .030070 | 2.000 | .484 | .170190 |
| 1.932 | 1.126 | .130150 | 1.949 | 1.119 | .080100 | 1.968 | 1.394 | .005010 | 1.990 | 1.376 | .040060 | 1.998 | 1.126 | .005010 | 2.000 | .504 | .010060 |
| 1.932 | 1.626 | .040060 | 1.949 | 1.526 | .005010 | 1.968 | 1.401 | .060070 | 1.990 | 1.379 | .093125 | 1.998 | 1.136 | .110135 | 2.000 | .507 | .100125 |
| 1.932 1.932 | 1.695 1.779 | .025040 . 005010 | 1.949 1.949 | 1.620 1.664 | .030040 .035050 | 1.968 | 1.578 | .015125 .015030 | 1.990 | 1.519 | .060080 .015030 | 1.998 1.998 | 1.248 1.409 | .125156 .025040 | 2.000 2.000 | .509 .516 | .156187 .090120 |
| 1.933 | .750 | .130150 | 1.950 | .190 | .015040 | 1.968 1.968 | 1.625 1.731 | .005010 | 1.990 1.991 | 1.779 .317 | .105130 | 1.998 | 1.417 | .030050 | 2.000 | .522 | .005010 |
| 1.933 | 1.504 | .015030 | 1.950 | .320 | .005010 | 1.969 | .502 | .005010 | 1.991 | .653 | .090120 | 1.998 | 1.501 | .050060 | 2.000 | .530 | .060080 |
| 1.933 | 1.556 | .050060 | 1.950 | .505 | .125156 | 1.969 | .881 | .015030 | 1.991 | .687 | .030050 | 1.998 | 1.506 | .020030 | 2.000 | .570 | .005010 |
| 1.933 | 1.565 | .030050 | 1.950 | 1.408 | .005010 | 1.969 | 1.380 | .070090 | 1.991 | .998 | .015050 | 1.998 | 1.635 | .010020 | 2.000 | .591 | .025040 |
| 1.934 | 1.002 | .030050 | 1.950 | 1.600 | .005050 | 1.969 | 1.440 | .010020 | 1.991 | 1.325 | .020040 | 1.998 | 1.664 | .030050 | 2.000 | .594 | .170190 |
| 1.934 1.935 | 1.562 .473 | .050062 .060085 | 1.950 | 1.820 | .025035 | 1.969 | 1.468 | .010020 | 1.992 | .419 | .005010 | 1.998 1.998 | 1.734 1.748 | .050070 .080100 | 2.000 | .619 .620 | .015030 .040060 |
| 1.935 | .500 | .060083 | 1.951 1.951 | .504 1.000 | .110130 .105135 | 1.969 1.969 | 1.469 1.470 | .030070 .105125 | 1.992 1.992 | .560 .999 | .010020 .020030 | 1.998 | 1.748 | .050070 | 2.000 | .625 | .100125 |
| 1.935 | 1.032 | .156187 | 1.951 | 1.201 | .030050 | 1.969 | 1.628 | .015030 | 1.992 | 1.313 | .040060 | 1.998 | 1.789 | .005010 | 2.000 | .626 | .015030 |
| 1.935 | 1.190 | .005010 | 1.951 | 1.781 | .005010 | 1.969 | 1.657 | .050070 | 1.993 | .406 | .030040 | 1.999 | .193 | .005010 | 2.000 | .627 | .040060 |
| 1.935 | 1.309 | .105125 | 1.952 | .812 | .040060 | 1.970 | .413 | .105125 | 1.993 | .410 | .010015 | 1.999 | .238 | .005015 | 2.000 | .628 | .020040 |
| 1.935 | 1.500 | .090100 | 1.952 | 1.592 | .030050 | 1.970 | .556 | .030050 | 1.993 | .474 | .030050 | 1.999 | .280 | .120135 | 2.000 | .632 | .010020 |
| 1.935 | 1.555 1.656 | .060083 .010020 | 1.953 | 1.375 1.421 | .040060 | 1.970 | .938 | .090110 | 1.993 | .499 | .090110 .005010 | 1.999 | .310 .313 | . 005010 .050070 | 2.000 2.000 | .636 .644 | . 005010 .090105 |
| 1.935 1.935 | 1.661 | .010020 | 1.953 1.954 | .377 | . 005010 .050075 | 1.970 1.971 | 1.630 1.268 | .005010 .093125 | 1.993 1.993 | .520 1.017 | .005010 | 1.999 1.999 | .388 | .105135 | 2.000 | .657 | .100125 |
| 1.935 | 1.687 | .090105 | 1.954 | .421 | .050070 | 1.971 | 1.541 | .005030 | 1.993 | 1.664 | .005010 | 1.999 | .406 | .160190 | 2.000 | .670 | .090125 |
| 1.936 | .688 | .025040 | 1.954 | 1.108 | .125156 | 1.972 | .379 | .015030 | 1.993 | 1.933 | .005010 | 1.999 | .407 | .100125 | 2.000 | .685 | .080105 |
| 1.936 | .780 | .060080 | 1.954 | 1.627 | .005010 | 1.972 | .505 | .015030 | 1.994 | .412 | .005010 | 1.999 | .452 | .100125 | 2.000 | .692 | .090120 |
| 1.936 | .818 | .005060 | 1.955 | .421 | .050070 | 1.972 | .875 | .105125 | 1.994 | .885 | .110135 | 1.999 | .484 | .070090 | 2.000 | .752 | .010020 |
| 1.936 | 1.186 | .050075 | 1.955 | 1.004 | .140160 | 1.972 | 1.130 | .015030 | 1.994 | 1.629 | .010020 | 1.999 | .515 | .156187 | 2.000 | .753 | .005010 |
| 1.936 1.936 | 1.564 1.579 | .060080 .015042 | 1.955 1.955 | 1.513 | .020042 .080104 | 1.972 1.974 | 1.250 .408 | .093125 .015030 | 1.994 | 1.662 | .010020 | 1.999 1.999 | .562 .687 | .100125 .156187 | 2.000 2.000 | .758 .761 | . 005010 .090110 |
| 1.936 | 1.656 | .050070 | 1.955 | 1.519 1.780 | .005010 | 1.974 1.974 | .408 1.170 | .015030 | 1.994 1.994 | 1.789 1.885 | .005010 .020040 | 1.999 | .691 | .120140 | 2.000 2.000 | .779 | .005010 |
| 1.936 | 1.719 | .005010 | 1.956 | .995 | .050090 | 1.974 | 1.284 | .005010 | 1.994 | 1.933 | .005010 | 1.999 | .749 | .025040 | 2.000 | .780 | .015030 |
| 1.936 | 1.740 | .005010 | 1.956 | 1.520 | .005010 | 1.974 | 1.503 | .005010 | 1.995 | .395 | .005010 | 1.999 | .750 | .156187 | 2.000 | .781 | .005060 |
| 1.937 | .651 | .105125 | 1.956 | 1.564 | .010015 | 1.975 | .755 | .025040 | 1.995 | .404 | .005010 | 1.999 | .753 | .020030 | 2.000 | .786 | .005010 |
| 1.937 | 1.015 | .075090 | 1.957 | 1.415 | .030050 | 1.975 | 1.879 | .010020 | 1.995 | .453 | .060080 | 1.999 | .797 | .020040 | 2.000 | .797 | .020040 |
| 1.937 | 1.021 | .156187 | 1.960 | .754 | .120134 | 1.976 | .759 | .030050 | 1.995 | .634 | .005010 | 1.999 | .813 | .135156 | 2.000 | .812 | .080105 |
| 1.937 | 1.079 | .005010 | 1.960 | .870 1.011 | .150170 | 1.976 | 1.289 1.673 | .040060 | 1.995 | .750 | .105125 | 1.999 1.999 | .937 .977 | .075090 .015030 | 2.000 | .876 .880 | .105125 .010020 |
| 1.937 | 1.157 | .020040 | 1.960 | 1 () () | .105120 | 1.976 | | .030050 | 1.995 | .886 | .090120 | 999 | | | | | |

| | | 01 4 | | | 0 4 | | | BOKEF | R'S ME | IAL | | IS ANI | - 1 | AT AND T | OIVIDL | LUL | |
|--------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|---------------------|----------------------------|--------------------|----------------------|----------------------------|-----------------------|----------------------|--------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 2.000 | .906 | .015060 | 2.001 | .755 | .005010 | 2.031 | .936 | .005010 | 2.056 | .528 | .048062 | 2.097 | 1.013 | .110125 | 2.125 | .562 | .100125 |
| 2.000 | .977 | .025040 | 2.001 | .813 | .005010 | 2.031 | 1.755 | .005030 | 2.057 | .390 | .040060 | 2.098 | .253 | .025040 | 2.125 | .565 | .010020 |
| 2.000 | .979 | .020040 | 2.001 | .814 | .060080 | 2.032 | .489 | .005010 | 2.058 | .482 | .048062 | 2.098 | .760 | .015030 | 2.125 | .626 | .015030 |
| 2.000 | 1.000 | .055070 | 2.001 | .942 | .105135 | 2.032 | .880 | .005010 | 2.058 | .630 | .105135 | 2.098 | 1.635 | .010020 | 2.125 | .655 | .075100 |
| 2.000 2.000 | 1.005 1.006 | .005010 .083105 | 2.001 | 1.020 1.105 | .015030 .080104 | 2.033 | .877 1.525 | .025040 | 2.058 | 1.010 | .010020 | 2.099 | 1.638 | .005010 | 2.125 2.125 | .695 . 705 | .090105 .005010 |
| 2.000 | 1.014 | .035060 | 2.001 | 1.155 | .105125 | 2.033 | 1.562 | .010030 .020030 | 2.058 2.058 | 1.196 1.515 | .050070 .020040 | 2.100 2.100 | .753 .794 | .025040 .010020 | 2.125 | .761 | .060090 |
| 2.000 | 1.015 | .050075 | 2.001 | 1.282 | .105125 | 2.033 | 1.745 | .010020 | 2.059 | .402 | .030060 | 2.100 | 1.406 | .050070 | 2.125 | .813 | .110135 |
| 2.000 | 1.020 | .015030 | 2.001 | 1.312 | .050070 | 2.033 | 1.845 | .040060 | 2.059 | 1.671 | .030060 | 2.100 | 1.640 | .005015 | 2.125 | .895 | .005010 |
| 2.000 | 1.030 | .010125 | 2.001 | 1.397 | .015025 | 2.034 | 1.574 | .020040 | 2.059 | 1.750 | .050075 | 2.100 | 1.656 | .105125 | 2.125 | .907 | .020030 |
| 2.000 | 1.031 | .050070 | 2.001 | 1.505 | .005010 | 2.035 | .423 | .030050 | 2.059 | 1.759 | .005010 | 2.100 | 1.900 | .050075 | 2.125 | 1.015 | .105125 |
| 2.000 | 1.062 1.064 | .100125 | 2.001 2.001 | 1.583 1.602 | .025040 .030050 | 2.035 2.035 | .788 1.002 | .105125 .090110 | 2.060 2.060 | .221 .254 | .050075 .005125 | 2.100 2.101 | 1.933 .564 | . 005010 .010020 | 2.125 2.125 | 1.075 1.100 | .010020 .030050 |
| 2.000 | 1.075 | .015030 | 2.002 | .101 | .005010 | 2.035 | 1.690 | .040060 | 2.060 | .254 | .126130 | 2.101 | 1.731 | .025040 | 2.125 | 1.123 | .060080 |
| 2.000 | 1.090 | .005010 | 2.002 | .380 | .090134 | 2.035 | 1.750 | .050075 | 2.060 | .312 | .005010 | 2.102 | .792 | .030040 | 2.125 | 1.251 | .050075 |
| 2.000 | 1.108 | .040060 | 2.002 | .437 | .050075 | 2.035 | 1.834 | .025042 | 2.060 | .390 | .005010 | 2.103 | 1.781 | .010020 | 2.125 | 1.260 | .075090 |
| 2.000 | 1.125 1.131 | .015062 .030062 | 2.002 | .533 | .156187 | 2.035 | 1.933 | .020030 | 2.060 | .443 | .005010 | 2.104 2.106 | 1.680 1.808 | .040060 .015030 | 2.125 | 1.308 | .025050 |
| 2.000 | 1.158 | .030062 | 2.002 | .665 1.276 | .105120 .050070 | 2.036 2.037 | 1.557 1.588 | .040062 . 005010 | 2.060 2.060 | .530 .800 | .050075 .025036 | 2.106 | 1.814 | .050075 | 2.125 2.125 | 1.339 1.376 | .080105 .015030 |
| 2.000 | 1.165 | .020040 | 2.002 | 1.381 | .020030 | 2.037 | 1.676 | .050070 | 2.060 | .890 | .080104 | 2.108 | 1.801 | .075090 | 2.125 | 1.408 | .030050 |
| 2.000 | 1.166 | .005010 | 2.002 | 1.390 | .010020 | 2.038 | .989 | .080100 | 2.060 | 1.141 | .040060 | 2.109 | 1.726 | .025040 | 2.125 | 1.439 | .015030 |
| 2.000 | 1.190 | .080187 | 2.002 | 1.501 | .050075 | 2.038 | 1.875 | .015030 | 2.060 | 1.438 | .030050 | 2.109 | 1.829 | .080100 | 2.125 | 1.500 | .015104 |
| 2.000 | 1.199 | .005010 | 2.002 | 1.530 | .025035 | 2.039 | .281 | .030050 | 2.060 | 1.450 | .025042 | 2.111 | 1.436 | .010020 | 2.125 | 1.507 | .005060 |
| 2.000 | 1.201 1.208 | .080100 .050075 | 2.002 | 1.560 1.630 | .105135 .050070 | 2.039 2.040 | 1.527 .990 | .105135 .015030 | 2.060 2.060 | 1.511 1.520 | .005010 .040060 | 2.112 2.112 | 1.260 1.509 | .080105 .020040 | 2.125 2.125 | 1.526 1.562 | .040060 .050070 |
| 2.000 | 1.217 | .005010 | | 1.733 | .080105 | 2.040 | 1.383 | .005010 | 2.060 | 1.629 | .015030 | 2.112 | 1.831 | .050070 | 2.125 | 1.625 | .015030 |
| 2.000 | 1.220 | .035060 | 2.002 | 1.758 | .005010 | 2.040 | 1.410 | .005007 | 2.060 | 1.672 | .020040 | 2.113 | .256 | .006016 | 2.125 | 1.641 | .010040 |
| 2.000 | 1.248 | .156187 | 2.002 | 1.812 | .070090 | 2.040 | 1.620 | .070105 | 2.060 | 1.805 | .005010 | 2.113 | .876 | .015030 | 2.125 | 1.642 | .040060 |
| 2.000 | 1.250 | .008040 | 2.002 | 1.828 | . 005010 .025040 | 2.040 | 1.625 | .005010 | 2.061 | 1.291 | .060080 | 2.113 2.113 | 1.497 1.735 | .070090 .040060 | 2.125 | 1.671 | .010020 .010020 |
| 2.000 | 1.253 1.262 | .010156 .083104 | 2.003 | .161 .752 | .025040 | 2.041 2.042 | 1.500 .331 | .040060 .040060 | 2.061 2.062 | 1.734 .372 | .020035 .005010 | 2.113 | 1.890 | .020040 | 2.125 | 1.750 1.757 | .025050 |
| 2.000 | 1.263 | .050075 | 2.003 | 1.077 | .050070 | 2.042 | 1.312 | .050070 | 2.062 | .515 | .100125 | 2.113 | 1.916 | .005010 | 2.125 | 1.781 | .025040 |
| 2.000 | 1.264 | .090120 | 2.003 | 1.126 | .070090 | 2.042 | 1.630 | .040060 | 2.062 | .625 | .005032 | 2.114 | 1.190 | .025040 | 2.125 | 1.852 | .015030 |
| 2.000 | 1.280 | .040090 | 2.003 | 1.481 | .005015 | 2.042 | 1.795 | .050075 | 2.062 | .630 | .050070 | 2.114 | 1.900 | .015030 | 2.125 | 1.891 | .005010 |
| 2.000 | 1.281 | .040060 | 2.003 | 1.557 | .020040 | 2.042 | 1.940 | .020030 | 2.062 | .766 | .040060 | 2.115 | .986 | .080100 | 2.125 | 1.978 | .005020 |
| 2.000 | 1.285 1.290 | .025040 .157187 | 2.003 | 1.694 1.781 | .020030 .010020 | 2.043 2.043 | 1.825 1.940 | .015030 .010020 | 2.062 2.062 | 1.371 1.381 | .070090 .015030 | 2.115 2.116 | 1.762 1.330 | .020030 .030050 | 2.126 2.126 | .439 .755 | .010030 .050105 |
| 2.000 | 1.291 | .005010 | 2.004 | .756 | .040060 | 2.044 | 1.025 | .050070 | 2.063 | .392 | .050070 | 2.117 | 1.152 | .005010 | 2.126 | 1.950 | .040060 |
| 2.000 | 1.311 | .005010 | 2.004 | .843 | .100125 | 2.044 | 1.826 | .010020 | 2.063 | .751 | .030050 | 2.117 | 1.764 | .005010 | 2.127 | .385 | .005010 |
| 2.000 | 1.321 | .080100 | 2.004 | 1.131 | .010020 | 2.045 | .344 | .040060 | 2.063 | 1.062 | .005010 | 2.118 | 1.382 | .070090 | 2.127 | .406 | .100120 |
| 2.000 | 1.330 | .080104 . 005010 | 2.005 | .204 | .080104 | 2.045 | .724 | .005050 | 2.063 | 1.312 | .005010 | 2.118 | 1.508 | .105125 | 2.127 | .754 | .040060 |
| 2.000 2.000 | 1.332 1.350 | .010020 | 2.005 | 1.260 1.515 | .025040 .010020 | 2.045 2.045 | 1.344 1.703 | .040060 .005010 | 2.063 2.065 | 1.628 1.722 | . 005010 .015030 | 2.118 2.118 | 1.537 1.610 | . 005010 .070080 | 2.127 2.127 | .999 1.021 | .010020 .080105 |
| 2.000 | 1.375 | .050090 | 2.006 | 1.280 | .105135 | 2.045 | 1.730 | .010020 | 2.065 | 1.857 | .075090 | 2.118 | 1.641 | .060080 | 2.127 | 1.260 | .005010 |
| 2.000 | 1.376 | .015030 | 2.006 | 1.775 | .005010 | 2.045 | 1.881 | .005010 | 2.066 | 1.718 | .030050 | 2.118 | 1.887 | .025040 | 2.127 | 1.625 | .005010 |
| 2.000 | 1.380 | .135156 | 2.007 | .826 | .005010 | 2.046 | 1.536 | .060080 | 2.070 | 1.180 | .080104 | 2.119 | 1.061 | .075090 | 2.127 | 1.673 | .040060 |
| 2.000 | 1.386 | .030060 | 2.007 | 1.533 | .040060 | 2.046 | 1.611 | .070090 | 2.070 | 1.530 | .020030 | 2.119 | 1.503 | .005010 | 2.128 | 1.122 | .050075 |
| 2.000 | 1.389 1.402 | .015080 .105125 | 2.008 2.008 | .765 1.319 | .105125 . 005010 | 2.046 2.047 | 1.730 .551 | .020030 .060080 | 2.071 2.072 | 1.749 1.277 | .010020 .015030 | 2.119 2.119 | 1.512 1.587 | . 005010 .050070 | 2.128 2.128 | 1.374 1.505 | .060080 .050070 |
| 2.000 | 1.450 | .005010 | 2.008 | 1.392 | .005012 | 2.047 | .747 | .015030 | 2.075 | 1.969 | .030050 | | .628 | .050075 | 2.128 | 1.626 | .005010 |
| 2.000 | 1.499 | .005010 | 2.008 | 1.676 | .070090 | 2.047 | .807 | .070090 | 2.076 | 1.629 | .050070 | 2.120 | .810 | .015030 | 2.128 | 1.668 | .005010 |
| 2.000 | 1.500 | .005125 | 2.009 | .239 | .040060 | 2.047 | .828 | .025040 | 2.077 | 1.155 | .080104 | 2.120 | .875 | .040062 | 2.129 | .251 | .050070 |
| 2.000 | 1.502 | .010020 | 2.009 | 1.783 | .070090 | 2.047 | .965 | .025040 | 2.077 | 1.380 | .080104 | 2.120 | .927 | .156187 | 2.129 | .533 | .105135 |
| 2.000 | 1.511 1.513 | .090125 .015030 | 2.009 | 1.804 1.699 | .030050 .050070 | 2.047 2.047 | .985 1.102 | .070080 .060080 | 2.077 2.077 | 1.639 1.719 | .030050 .030050 | 2.120 2.120 | 1.014 1.187 | .015030 .015025 | 2.129 2.129 | .735 1.282 | .020040 .050070 |
| 2.000 | 1.515 | .030060 | 2.013 | 1.003 | .015030 | 2.047 | 1.274 | .005010 | 2.078 | 1.691 | .050060 | 2.120 | 1.305 | .030050 | 2.129 | 1.500 | .010020 |
| 2.000 | 1.536 | .005010 | 2.013 | 1.502 | .020040 | 2.047 | 1.417 | .060080 | 2.079 | 1.750 | .060080 | 2.120 | 1.506 | .050070 | 2.129 | 1.524 | .100125 |
| 2.000 | 1.589 | .005010 | 2.013 | 1.658 | .005010 | 2.047 | 1.692 | .060080 | 2.080 | .834 | .070090 | 2.120 | 1.615 | .050075 | 2.130 | .293 | .050070 |
| 2.000 | 1.625 | .050060 | 2.015 | 1.383 | .030040 | 2.047 | 1.773 | .015030 | 2.080 | 1.600 | .005040 | 2.120 | 1.785 | .050075 | 2.130 | .532 | .134156 |
| 2.000 | 1.626 1.635 | .105125 .005015 | 2.016 2.018 | 1.687 1.510 | .005010 .030050 | 2.047 2.048 | 1.811 .296 | .025040 .005010 | 2.080 2.081 | 1.719 .820 | .030040 .042060 | 2.120 | 1.811 1.819 | .080105 .025040 | 2.130 | .549 .860 | .100125 |
| 2.000 | 1.649 | .005020 | 2.019 | .502 | .030050 | 2.048 | .626 | .005010 | 2.081 | 1.060 | .010020 | 2.121 | 1.903 | .010020 | 2.130 | 1.030 | .015030 |
| 2.000 | 1.654 | .005105 | 2.019 | .508 | .050070 | 2.048 | 1.260 | .070090 | 2.082 | 1.883 | .005010 | 2.122 | 1.507 | .020030 | 2.130 | 1.057 | .005010 |
| 2.000 | 1.670 | .025040 | 2.019 | 1.623 | .015030 | 2.048 | 1.378 | .030050 | 2.082 | 1.942 | .020030 | 2.122 | 1.877 | .005010 | 2.130 | 1.762 | .005010 |
| 2.000 2.000 | 1.695 1.749 | .005010 .010060 | 2.020 | .280 | .100125 | 2.048 | 1.393 | .070090 | 2.083 | 1.440 | .005010 | 2.122 | 1.878 .890 | .020040 | 2.130 | 1.869 | .025040 |
| 2.000 | 1.749 | .080100 | 2.020 2.020 | 1.551 1.682 | .080100 .015030 | 2.048 2.049 | 1.748 1.854 | .020040 .005010 | 2.085 2.085 | 1.429 1.801 | .040060 .025040 | 2.123 | .890 .906 | .090105 | 2.130 2.131 | 1.871 1.658 | .010020 .015030 |
| 2.000 | 1.780 | .015040 | 2.021 | 1.014 | .005010 | 2.050 | .140 | .060080 | 2.086 | .787 | .020035 | 2.123 | 1.008 | .050070 | 2.131 | 1.878 | .080105 |
| 2.000 | 1.810 | .005020 | 2.022 | 1.184 | .010020 | 2.050 | .506 | .005010 | 2.089 | 1.508 | .050070 | 2.123 | 1.645 | .105125 | 2.131 | 2.031 | .030050 |
| 2.000 | 1.843 | .010025 | 2.024 | .810 | .030050 | 2.050 | .626 | .010020 | 2.090 | .815 | .070090 | 2.123 | 1.659 | .105125 | 2.132 | .250 | .090110 |
| 2.001 | .198 | .010020 | 2.029 | 1.222 | .005010 | 2.050 | .627 | .010020 | 2.090 | .941 | .110135 | 2.123 | 1.811 | .005010 | 2.132 | 1.190 | .060080 |
| 2.001 | .250 .315 | .100125 .105120 | 2.029 2.029 | 1.626 1.755 | .050070 . 005010 | 2.050 2.050 | .630 1.425 | .005020 .030050 | 2.093 2.093 | .223 1.001 | .100125 .060080 | 2.124 2.124 | .312 1.127 | .080100 .015030 | 2.134 2.134 | 1.729 1.752 | .060080 .005012 |
| 2.001 | .345 | .125135 | 2.029 | .936 | .050070 | 2.050 | 1.660 | .030030 | 2.093 | .473 | .080080 | 2.124 | 1.250 | .010020 | 2.134 | 1.898 | .020040 |
| 2.001 | .375 | .105125 | 2.030 | 1.060 | .050070 | 2.050 | 1.708 | .040060 | 2.095 | .688 | .105135 | 2.124 | 1.580 | .040060 | 2.135 | 1.120 | .100120 |
| 2.001 | .447 | .005010 | 2.030 | 1.184 | .050070 | 2.052 | .626 | .025040 | 2.095 | .875 | .105135 | 2.124 | 1.815 | .070090 | 2.136 | 1.578 | .060080 |
| 2.001 | .499 | .170190 | 2.030 | 1.310 | .050070 | 2.054 | 1.274 | .010020 | 2.095 | 1.890 | .005010 | 2.125 | .346 | .050075 | 2.137 | 1.969 | .005010 |
| 2.001 | .501 .592 | .015030 .120135 | 2.030 2.030 | 1.434 1.500 | .050070 . 005010 | 2.054 2.054 | 1.384 1.632 | .025040 .015030 | 2.095 2.096 | 1.946 .202 | .005010 .015020 | 2.125 2.125 | .380 .500 | .100125 .080100 | 2.138 2.138 | 1.897 1.968 | .005010 .025040 |
| | .750 | .005010 | 2.030 | | .016030 | 2.054 | | .005010 | 2.096 | 1.186 | .015020 | | .507 | .005010 | 2.139 | 1.417 | .080104 |
| 2.001 | | | | | | | | 1010 | 000 | 100 | .0.0 | | | | | | |



| | | Choose Any | | | Choose Any | | | Choose Any | | | Choose Any | IANG | | Choose Any | 11112 | SIZL | Chanca Any |
|-------|-------|--------------------------|-------|---------------|------------|----------------|----------------|--------------------|-----------------------|----------------|--------------------|-------|-------|--------------------|----------------|---------------|--------------------------|
| O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Choose Any Thickness* |
| 2.139 | 1.454 | .005010 | 2.165 | 1.701 | .030050 | 2.203 | 1.884 | .030050 | 2.245 | 1.343 | .025042 | 2.250 | .641 | .125156 | 2.253 | .642 | .120135 |
| 2.139 | 1.818 | .005010 | 2.165 | 1.800 | .005010 | 2.205 | 1.122 | .050050 | 2.245 | 1.375 | .025042 | 2.250 | .643 | .135156 | 2.253 | .780 | .005010 |
| 2.139 | 1.821 | .025040 | 2.166 | 1.216 | .050070 | 2.205 | 1.127 | .040060 | 2.245 | 1.380 | .030050 | 2.250 | .662 | .140160 | 2.253 | 1.011 | .030050 |
| 2.140 | 1.730 | .025040 | 2.166 | 1.594 | .060090 | 2.205 | 1.912 | .070090 | 2.245 | 1.395 | .010020 | 2.250 | .688 | .104125 | 2.253 | 1.063 | .120156 |
| 2.140 | 2.012 | .040060 | 2.167 | 1.408 | .070090 | 2.206 | 1.791 | .005010 | | | .080125 | 2.250 | .750 | .075104 | 2.253 | 1.145 | .120130 |
| 2.142 | 1.545 | .030050 | 2.167 | 1.718 | .005010 | 2.206 | 1.980 | .050100 | 2.245 2.245 | 1.417 1.738 | | 2.250 | .771 | .060080 | 2.253 | 1.751 | .105135 |
| 2.142 | 1.941 | .005010 | 2.167 | 1.772 | .070090 | 2.210 | 1.015 | | | | .110130 | 2.250 | .781 | .100134 | 2.253 | 1.752 | .050070 |
| 2.142 | 2.003 | .005010 | 2.167 | .720 | .020030 | 2.210 | | .050060 | 2.245 | 2.007 | .010015 | 2.250 | .790 | .040060 | 2.253 | 1.973 | .050070 |
| 2.142 | 1.621 | .005010 | 2.109 | 1.520 | .015030 | 2.210 | 1.215 1.625 | .090125 | 2.246 | .378 | .080100 | 2.250 | .795 | .050070 | 2.253 | 2.011 | .020032 |
| 2.143 | 1.730 | .020040 | 2.170 | 1.556 | .005010 | 2.210 | .127 | .040125 | 2.246 | .627 | .025040 | 2.250 | .874 | .060080 | 2.254 | 1.511 | .020032 |
| 2.143 | 1.791 | .010020 | 2.170 | 1.900 | .010020 | 2.211 | 1.933 | .040060 | 2.246 | .631 | .156179 | 2.250 | .877 | .070090 | 2.254 | 1.555 | .110130 |
| 2.143 | 1.890 | .005010 | 2.171 | 1.969 | .005010 | 2.215 | .880 | .050075 | 2.246 2.246 | 1.048 1.058 | .050070 | 2.250 | .880 | .005010 | 2.255 | 1.032 | .090120 |
| 2.145 | .845 | .005010 | 2.171 | 1.760 | .020030 | 2.215 2.215 | .916 | .005010 | 2.246 | 1.064 | .050070 .025040 | 2.250 | 1.004 | .080100 | 2.255 | 1.242 | .030040 |
| 2.145 | 1.730 | .005010 | 2.172 | 1.393 | .005010 | 2.215 | .933 | .040060 | 2.246 | 1.813 | .050075 | 2.250 | 1.014 | .005010 | 2.255 | 1.625 | .040062 |
| 2.145 | 1.967 | .005010 | 2.173 | 1.709 | .005010 | | | | | .538 | | 2.250 | 1.022 | .090104 | 2.255 | 1.645 | .005010 |
| 2.146 | 1.645 | .070090 | 2.176 | .942 | .050070 | 2.215 2.215 | 1.153 1.434 | .060090 .075100 | 2.247 2.247 | .762 | .010020 | 2.250 | 1.040 | .010090 | 2.256 | 1.281 | .090125 |
| 2.146 | 1.654 | .075090 | 2.176 | 2.068 | .010020 | 2.215 | 1.976 | .010020 | 2.247 | .905 | .005010 .010020 | 2.250 | 1.060 | .015030 | 2.257 | 1.938 | .005010 |
| 2.146 | 1.743 | .005020 | 2.170 | 2.000 | .040060 | 2.215 | 1.977 | .010020 | 2.247 | 1.200 | .010020 | 2.250 | 1.067 | .005010 | 2.260 | .880 | .030040 |
| 2.147 | 1.671 | .030050 | 2.177 | .362 | .050070 | 2.215 | 1.575 | .010020 | | | | 2.250 | 1.180 | .105135 | 2.260 | 1.320 | .010030 |
| 2.147 | .626 | .030030 | 2.170 | .302 1.208 | .005010 | 2.218 | .127 | | 2.248 | .250 | .105120 | 2.250 | 1.257 | .025042 | 2.260 | 1.890 | |
| 2.148 | .690 | .105135 | | | | | | .042060 | 2.248 | .620 | .015030 | 2.250 | 1.263 | | | | .015030 |
| 2.148 | .878 | .105135 | 2.179 | 1.500 | .030050 | 2.218 | .328 1.686 | .010020 | 2.248 | .656 | .156187 | 2.250 | 1.265 | .060080 .050135 | 2.266 2.267 | .354 1.932 | .060080 .025040 |
| 2.148 | 1.003 | .010020 | 2.180 | 1.133 | .070090 | 2.219 | | .010020 | 2.248 | .883 | .005010 | 2.250 | 1.274 | .080104 | 2.267 | .316 | .025040 |
| 2.148 | 1.764 | .030040 | 2.180 | 1.200 | .005075 | 2.220 2.220 | .190 .886 | .005010 | 2.248 | 1.033 | .105120 | 2.250 | 1.274 | .100134 | 2.268 | .916 | .015030 |
| | | | 2.180 | 1.662 | .080100 | _ | | .005010 | 2.248 | 1.127 | .050075 | | | | | | .050070 |
| 2.148 | 1.778 | .050070 | 2.181 | .499 | .015030 | 2.220 | 1.290 | .150164 | 2.248 | 1.190 | .005010 | 2.250 | 1.279 | .005010 | 2.269 | 1.260 | |
| 2.148 | 1.988 | .060075 | 2.181 | 1.507 | .025040 | 2.220 | 1.906 | .050070 | 2.248 | 1.249 | .015030 | 2.250 | 1.286 | .010020 | 2.270 | 1.813 | .020030 |
| 2.150 | .813 | .100125 | 2.182 | 1.511 | .050070 | 2.221 | 1.312 | .100125 | 2.248 | 1.250 | .090105 | 2.250 | 1.311 | .040060 | 2.270 | 1.885 | .030050 |
| 2.150 | 1.250 | .100125 | 2.182 | 2.067 | .010020 | 2.222 | .826 | .030050 | 2.248 | 1.315 | .005010 | 2.250 | 1.335 | .025050 | 2.270 | 1.890 | .036060 |
| 2.150 | 1.379 | .020040 | 2.182 | 2.092 | .025035 | 2.225 | .812 | .020040 | 2.248 | 1.507 | .030050 | 2.250 | 1.375 | .010020 | 2.270 | 1.980 | .015030 |
| 2.150 | 1.778 | .015050 | 2.183 | 1.384 | .100125 | 2.225 | 1.804 | .050070 | 2.248 | 1.508 | .005010 | 2.250 | 1.380 | .015030 | 2.271 | .258 | .060080 |
| 2.151 | .629 | .005010 | 2.187 | .251 | .050070 | 2.226 | 1.616 | .080100 | 2.248 | 1.655 | .005090 | 2.250 | 1.387 | .105134 | 2.271 | 1.979 | .005010 |
| 2.151 | .687 | .100125 | 2.187 | .565 | .005010 | 2.227 | 1.451 | .050070 | 2.248 | 1.749 | .015035 | 2.250 | 1.425 | .030050 | 2.271 | 1.980 | .005010 |
| 2.151 | .874 | .100125 | 2.187 | .822 | .060080 | 2.227 | 1.800 | .020070 | 2.248 | 1.753 | .005010 | 2.250 | 1.438 | .030050 | 2.272 | .443 | .080100 |
| 2.151 | 1.379 | .025040 | 2.188 | .320 | .050070 | 2.227 | 1.855 | .105135 | 2.248 | 1.767 | .080100 | 2.250 | 1.442 | .050075 | 2.273 | .590 | .100125 |
| 2.152 | .630 | .005010 | 2.188 | .446 | .050070 | 2.228 | 1.685 | .105125 | 2.248 | 1.875 | .030050 | 2.250 | 1.500 | .060156 | 2.273 | .665 | .100125 |
| 2.153 | .724 | .100134 | 2.188 | .781 | .100134 | 2.228 | 1.857 | .060090 | 2.248 | 1.889 | .025040 | 2.250 | 1.510 | .005010 | 2.273 | 1.910 | .010020 |
| 2.153 | .875 | .100125 | 2.188 | 1.126 | .050075 | 2.230 | 1.800 | .030120 | 2.248 | 1.912 | .050070 | 2.250 | 1.530 | .042060 | 2.273 | 1.968 | .005020 |
| 2.153 | 1.725 | .050070 | 2.189 | 1.690 | .025040 | 2.230 | 1.937 | .072090 | 2.248 | 1.990 | .005010 | 2.250 | 1.563 | .050104 | 2.275 | .881 | .025040 |
| 2.154 | .132 | .016030 | 2.190 | 1.125 | .025040 | 2.231 | 1.763 | .050060 | 2.248 | 2.000 | .010020 | 2.250 | 1.598 | .030050 | 2.277 | 1.184 | .060080 |
| 2.154 | 1.780 | .040060 | 2.190 | 1.517 | .015030 | 2.232 | 1.761 | .050070 | 2.248 | 2.002 | .080100 | 2.250 | 1.615 | .015030 | 2.277 | 1.785 | .005010 |
| 2.154 | 1.957 | .010020 | 2.190 | 1.627 | .005010 | 2.232 | 1.764 | .010030 | 2.249 | .316 | .050070 | 2.250 | 1.620 | .040060 | 2.278 | 1.674 | .105135 |
| 2.155 | 1.325 | .005010 | 2.191 | 1.254 | .015030 | 2.233 | 1.845 | .010020 | 2.249 | .438 | .156187 | 2.250 | 1.628 | .110130 | 2.278 | 1.868 | .050070 |
| 2.155 | 1.957 | .015030 | 2.191 | 1.892 | .060080 | 2.234 | 1.250 | .015025 | 2.249 | .439 | .104120 | 2.250 | 1.631 | .005020 | 2.278 | 1.919 | .040060 |
| 2.156 | .345 | .030060 | 2.191 | 2.005 | .015030 | 2.235 | 1.034 | .005010 | 2.249 | .540 | .015030 | 2.250 | 1.668 | .020075 | 2.278 | 1.990 | .050070 |
| 2.156 | .877 | .110130 | 2.192 | 1.636 | .040062 | 2.235 | 1.499 | .050070 | 2.249 | .542 | .150170 | 2.250 | 1.687 | .025040 | 2.279 | .313 | .030050 |
| 2.156 | 2.006 | .015030 | 2.192 | 1.754 | .030040 | 2.235 | 1.640 | .005010 | 2.249 | .752 | .005010 | 2.250 | 1.751 | .005020 | 2.279 | 1.746 | .020030 |
| 2.157 | .344 | .050075 | 2.193 | .972 | .025042 | 2.235 | 1.950 | .040060 | 2.249 | .756 | .005010 | 2.250 | 1.768 | .050075 | 2.280 | 1.070 | .040060 |
| 2.157 | .350 | .005010 | 2.193 | 1.934 | .030040 | 2.236 | 1.442 | .005010 | 2.249 | .800 | .080100 | 2.250 | 1.781 | .050070 | 2.280 | 1.150 | .025040 |
| 2.157 | .629 | .120135 | 2.193 | 2.006 | .010020 | 2.236 | 1.562 | .070090 | 2.249 | 1.217 | .005010 | 2.250 | 1.801 | .100134 | 2.280 | 2.032 | .050070 |
| 2.157 | 1.253 | .005010 | 2.196 | 1.698 | .010020 | 2.238 | 1.427 | .025040 | 2.249 | 1.640 | .005020 | 2.250 | 1.844 | .040075 | 2.282 | 1.771 | .050070 |
| 2.157 | 1.344 | .050075 | 2.196 | 1.702 | .005010 | 2.239 | .875 | .100125 | 2.249 | 1.711 | .040060 | 2.250 | 1.875 | .050075 | 2.283 | .334 | .060080 |
| 2.157 | 1.427 | .040050 | 2.196 | 1.982 | .005010 | 2.239 | 1.020 | .156188 | | | | 2.250 | 1.912 | .070090 | 2.284 | 2.043 | .040060 |
| 2.157 | 2.006 | .010020 | 2.197 | 1.650 | .040060 | 2.239 | 1.260 | .050060 | | | | 2.250 | 1.969 | .010015 | 2.284 | 2.070 | .030040 |
| 2.158 | 1.060 | .075090 | 2.198 | 1.047 | .040060 | 2.239 | 1.773 | .050070 | | | | 2.250 | 2.025 | .020040 | 2.285 | .768 | .075090 |
| 2.158 | 1.063 | .080120 | 2.198 | 1.126 | .040060 | 2.240 | .782 | .156188 | | | | 2.251 | .266 | .005010 | 2.285 | 2.070 | .005010 |
| 2.158 | 1.469 | .005010 | 2.198 | 2.047 | .005010 | 2.240 | 1.115 | .020030 | | | | 2.251 | .378 | .025040 | 2.287 | .770 | .080104 |
| 2.158 | 1.564 | .080120 | 2.199 | .250 | .005010 | 2.240 | 1.200 | .016032 | | | | 2.251 | .540 | .134156 | 2.290 | 1.125 | .105134 |
| 2.158 | 1.727 | .030050 | 2.199 | .629 | .015030 | 2.240 | 1.384 | .080105 | | | 50 | 2.251 | .579 | .090105 | 2.290 | 2.160 | .020040 |
| 2.159 | .386 | .010020 | 2.199 | .706 | .050070 | 2.240 | 1.440 | .105135 | | ' کا | | 2.251 | .812 | .005010 | 2.291 | 1.630 | .030050 |
| 2.159 | 1.690 | .025040 | 2.199 | .840 | .005010 | 2.240 | 1.631 | .015030 | | | | 2.251 | .905 | .030050 | 2.295 | 1.857 | .030050 |
| 2.160 | 1.127 | .020030 | 2.200 | .360 | .050070 | 2.240 | 1.762 | .040060 | 2.250 | .125 | .050070 | 2.251 | 1.083 | .120140 | 2.295 | 1.858 | .020030 |
| 2.160 | 1.400 | .040125 | 2.200 | .880 | .060070 | 2.240 | | .005040 | 2.250 | .136 | .015025 | 2.251 | 1.377 | .040060 | 2.295 | 2.052 | .025040 |
| 2.162 | .668 | .020030 | 2.200 | 1.010 | .005060 | 2.240 | | .005010 | 2.250 | .164 | .010020 | 2.251 | 1.501 | .030050 | 2.296 | .187 | .025040 |
| 2.162 | .756 | .025040 | 2.200 | 1.378 | .105125 | 2.241 | .880 | .030050 | 2.250 | .216 | .060080 | 2.251 | 1.519 | .025040 | 2.296 | .501 | .015025 |
| 2.162 | .857 | .020030 | 2.200 | 1.519 | .030050 | 2.241 | 1.578 | .100125 | 2.250 | .325 | .075104 | 2.251 | 1.538 | .005010 | 2.296 | 2.068 | .025040 |
| 2.162 | 1.512 | .080105 | 2.200 | 1.599 | .048075 | 2.241 | 1.700 | .015030 | 2.250 | .370 | .050070 | 2.251 | 1.563 | .030040 | 2.297 | 1.960 | .005010 |
| 2.162 | 1.724 | .134160 | 2.200 | 1.700 | .048075 | 2.242 | 1.565 | .005010 | 2.250 | .378 | .050075 | 2.251 | 2.025 | .105135 | 2.298 | .402 | .105125 |
| 2.162 | 1.760 | .032050 | 2.200 | 1.800 | .105120 | | 1.726 | .080105 | 2.250 | .394 | .030050 | 2.252 | .377 | .025040 | 2.298 | 1.325 | .005010 |
| 2.163 | .252 | .030050 | 2.200 | 1.884 | .030050 | 2.242 | 1.761 | .050070 | 2.250 | .400 | .100125 | 2.252 | .758 | .040060 | 2.300 | .196 | .005010 |
| 2.163 | .678 | .005010 | 2.200 | 1.920 | .020030 | 2.242 | 1.844 | .080105 | 2.250 | .439 | .100125 | 2.252 | .781 | .090120 | 2.300 | .628 | .005010 |
| 2.163 | 1.929 | .060080 | 2.201 | .505 | .005020 | 2.243 | .762 | .030050 | 2.250 | .478 | .030050 | 2.252 | 1.000 | .040060 | 2.300 | .631 | .005010 |
| 2.163 | 2.028 | .005010 | 2.201 | .755 | .005010 | 2.243 | 1.009 | .060080 | 2.250 | .500 | .105120 | 2.252 | 1.032 | .005010 | 2.300 | 1.314 | .105135 |
| 2.164 | 1.801 | .025040 | 2.201 | 1.520 | .040060 | 2.243 | 1.551 | .010020 | 2.250 | .507 | .030050 | 2.252 | 1.253 | .050070 | 2.300 | 1.654 | .050070 |
| 2.164 | 1.898 | .070090 | 2.201 | 2.010 | .010020 | 2.244 | 1.857 | .015030 | 2.250 | .517 | .005110 | 2.252 | 1.511 | .050075 | 2.301 | .625 | .005010 |
| 2.164 | 1.908 | .050070 | 2.201 | 2.039 | .005010 | 2.245 | .330 | .005010 | 2.250 | .519 | .170190 | 2.252 | 1.656 | .005010 | 2.301 | 1.480 | .050075 |
| 2.165 | .254 | .005010 | 2.202 | .752 | .015030 | 2.245 | .633 | .005010 | 2.250 | .562 | .135156 | 2.252 | 1.887 | .005010 | 2.302 | 1.620 | .050070 |
| 2.165 | .323 | .030050 | 2.202 | 1.887 | .005010 | 2.245 | .886 | .105125 | 2.250 | .620 | .030050 | 2.252 | 1.979 | .080105 | 2.303 | | .005010 |
| 2.165 | .670 | .105135 | 2.203 | .255 | .100125 | 2.245 | 1.192 | .005010 | 2.250 | .626 | .015030 | 2.253 | .188 | .025040 | 2.304 | 1.905 | .100120 |
| 2.165 | 1.506 | .050070 | 2.203 | 1.026 | .010020 | 2.245 | 1.259 | .090105 | 2.250 | .629 | .040060 | 2.253 | .252 | .025040 | 2.305 | 1.498 | .008016 |
| | | .080100 | 2.203 | 1.582 | .050075 | 2.245 | | .025040 | 2.250 | .639 | .015030 | 2.253 | .517 | .105125 | 2.305 | 1.681 | .050075 |
| 2.165 | 1.660 | | | | | | | | | | | | | | | | |

| | | Choose Any | | | Choose Any | | | Choose Any | 10 1111 | IAL | Choose Any | O AII | | Choose Any | | | Choose Any |
|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|----------------------|----------------------------|-----------------------|----------------------|----------------------------|-----------------------|-----------------------|----------------------------|-----------------------|-----------------------|----------------------------|
| O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* | O.D. | I.D. | Thickness* |
| 2.306 | 1.899 | .048062 | 2.354 | 2.100 | .010020 | 2.374 | 1.811 | .005050 | 2.398 | 2.170 | .005010 | 2.436 | 1.750 | .090105 | 2.489 | 1.748 | .050070 |
| 2.307 | 1.199 | .030050 | 2.355 | 2.217 | .010020 | 2.374 | 1.990 | .100120 | 2.399 | 1.393 | .080105 | 2.436 | 1.877 | .005010 | 2.489 | 1.776 | .015020 |
| 2.307 | 1.893 | .110130 | 2.356 | .815 | .080105 | 2.375 | .139 | .040062 | 2.399 | 1.560 | .025040 | 2.437 | 1.257 | .050070 | 2.489 | 2.002 | .005010 |
| 2.308 | 2.208 | .005015 .030050 | 2.358 | 1.095 1.542 | .025040 .030050 | 2.375 2.375 | .165 .280 | .030050 .025040 | 2.399 | 1.681 | .025040 | 2.437 | 1.313 | .040060 .025042 | 2.490 2.490 | 1.436 1.853 | .005010 .005010 |
| 2.310 | 1.136 | .080105 | 2.358 | 1.932 | .135156 | 2.375 | .375 | .104134 | 2.399 2.399 | 1.713 1.720 | .00 5010 .035050 | 2.437 2.437 | 1.425 1.498 | .010020 | 2.490 | 1.980 | .090110 |
| 2.310 | 1.636 | .005010 | 2.358 | 2.130 | .010020 | 2.375 | .390 | .160190 | 2.399 | 2.133 | .050075 | 2.437 | 1.875 | .020035 | 2.490 | 1.996 | .105125 |
| 2.310 | 1.693 | .005010 | 2.360 | .438 | .070090 | 2.375 | .503 | .015025 | 2.400 | .504 | .005010 | 2.437 | 2.000 | .050075 | 2.490 | 2.060 | .005010 |
| 2.310 | 1.873 | .070090 | 2.360 | .728 | .050070 | 2.375 | .506 | .080100 | 2.400 | .505 | .010020 | 2.437 | 2.187 | .025040 | 2.491 | 1.011 | .120156 |
| 2.310 | 1.997 | .010025 | 2.360 | 1.003 | .050070 | 2.375 | .640 | .040060 | 2.400 | .753 | .010020 | 2.437 | 2.250 | .020040 | 2.491 | 1.508 | .080125 |
| 2.311 | .312 .532 | .030050 .050070 | 2.360 2.360 | 1.133 1.262 | .160190 . 005010 | 2.375 2.375 | .687 .717 | .050075 .100135 | 2.400 2.400 | 1.320 1.734 | .015030 .080105 | 2.438 2.438 | .350 | .005010 | 2.492 2.493 | 1.069 .752 | .005010 .048062 |
| 2.311 | .633 | .030070 | 2.360 | 1.375 | .015060 | 2.375 | .945 | .006020 | 2.400 | 1.838 | .060103 | 2.438 | .390 .691 | .042060 .105135 | 2.493 | 1.255 | .080100 |
| 2.311 | 1.067 | .005010 | 2.360 | 1.578 | .005040 | 2.375 | 1.067 | .120140 | 2.400 | 1.933 | .005010 | 2.438 | .940 | .100125 | 2.493 | 1.400 | .025035 |
| 2.311 | 1.688 | .025040 | 2.360 | 1.958 | .010020 | 2.375 | 1.269 | .100125 | 2.400 | 1.999 | .045060 | 2.438 | 2.160 | .015025 | 2.493 | 1.562 | .080105 |
| 2.311 | 1.934 | .050070 | 2.360 | 2.165 | .005010 | 2.375 | 1.371 | .100120 | 2.400 | 2.001 | .005010 | 2.438 | 2.214 | .040060 | 2.493 | 1.785 | .125156 |
| 2.312 2.312 | .563 1.003 | .050070 . 005010 | 2.361 | 1.009 | .025070 | 2.375 | 1.490 | .025050 | 2.400 | 2.047 | .050070 | 2.439 | 1.966 | .040060 | 2.493 | 2.000 | .040060 |
| 2.312 | 1.640 | .015030 | 2.361 | 1.181 1.774 | .080120 .010020 | 2.375 2.375 | 1.500 1.639 | .010020 .100125 | 2.400 2.400 | 2.062 2.200 | .020040 .015050 | 2.439 2.439 | 1.977 2.164 | . 005015 .015030 | 2.493 2.494 | 2.062 .616 | .040060 .030050 |
| 2.312 | 1.651 | .105134 | 2.361 | 2.026 | .040060 | 2.375 | 1.645 | .005010 | 2.400 | 2.205 | .005010 | 2.440 | .837 | .105135 | 2.494 | 1.257 | .005010 |
| 2.312 | 1.802 | .005010 | 2.362 | .240 | .020030 | 2.375 | 1.688 | .030040 | 2.400 | 2.220 | .050070 | 2.440 | 1.274 | .050070 | 2.495 | .616 | .010020 |
| 2.312 | 1.881 | .010020 | 2.362 | 1.002 | .005010 | 2.375 | 1.766 | .050075 | 2.401 | .761 | .010030 | 2.440 | 1.978 | .020030 | 2.495 | .620 | .015060 |
| 2.313 | 1.828 | .015030 | 2.362 | 1.541 | .020050 | 2.375 | 1.785 | .015030 | 2.401 | 1.209 | .015030 | 2.440 | 1.982 | .015030 | 2.495 | 1.150 | .005010 |
| 2.313 | 1.992 | .005010 | 2.362 | 1.875 2.007 | . 005010 .088100 | 2.375 | 1.906 | .042060 | 2.401 | 1.889 | .015010 | 2.440 | 2.175 | .005010 | 2.495 | 1.319 | .105135 |
| 2.313 2.314 | 2.185 .745 | .005010 .070090 | 2.362 | 2.007 1.010 | .005015 | 2.375 2.375 | 1.925 1.938 | .050070 .156187 | 2.401 2.402 | 2.067 .760 | .025040 .015030 | 2.440 2.440 | 2.262 2.290 | .040050 .005010 | 2.495 2.495 | 1.400 1.651 | .005010 .030050 |
| 2.314 | 1.758 | .025040 | 2.363 | 1.122 | .100120 | | 2.019 | .020040 | 2.402 | .857 | .050070 | 2.440 | 2.330 | .010020 | 2.495 | 2.046 | .005010 |
| 2.314 | 1.991 | .005010 | 2.363 | 1.526 | .120135 | 2.375 | 2.105 | .005010 | 2.402 | 1.970 | .070090 | 2.441 | 1.527 | .050070 | 2.495 | 2.060 | .050075 |
| 2.315 | 2.032 | .040060 | 2.363 | 1.870 | .060080 | 2.375 | 2.125 | .040060 | 2.402 | 2.000 | .060075 | | 1.500 | .005010 | 2.495 | 2.120 | .090110 |
| 2.316 | .173 | .040060 | 2.364 | .630 | .105125 | 2.376 | .631 | .120140 | 2.402 | 2.295 | .005030 | 2.447 | 2.040 | .015030 | 2.496 | 1.122 | .005010 |
| 2.316 | .623 1.757 | .020040 .032050 | 2.365 2.365 | .674 1.136 | .125156 .005010 | 2.376 | .755 | .030060 | 2.403 | 2.196 | .005010 | 2.447 2.447 | 2.059 2.129 | . 005010 .040060 | 2.496 2.496 | 1.123 2.361 | .010050 .005010 |
| 2.317 | 1.941 | .025040 | 2.366 | 1.508 | .030050 | 2.376 2.376 | 1.443 1.828 | .040060 .030050 | 2.405 2.405 | . 135 .993 | . 005010 .080104 | 2.447 | 1.749 | .005010 | 2.490 | .813 | .045060 |
| 2.317 | 1.969 | .070080 | 2.366 | 1.570 | .030050 | 2.376 | 1.875 | .040060 | 2.405 | 2.125 | .010025 | 2.448 | 1.989 | .070090 | 2.497 | 1.314 | .040060 |
| 2.318 | .771 | .005010 | 2.366 | 1.827 | .030050 | 2.377 | .261 | .090120 | 2.405 | 2.217 | .040060 | 2.448 | 2.089 | .005010 | 2.497 | 1.318 | .080105 |
| 2.318 | 1.760 | .005010 | 2.367 | 1.520 | .100125 | 2.377 | .502 | .005010 | 2.407 | .658 | .100120 | 2.449 | 1.970 | .015035 | 2.497 | 1.506 | .020040 |
| 2.318 | 1.942 | .020040 | 2.368 | 2.069 | .005010 | 2.377 | 1.512 | .050075 | 2.408 | 1.875 | .020040 | 2.450 | 1.192 | .040060 | 2.497 | 1.518 | .030050 |
| 2.320 | 1.681 2.053 | .005010 .005010 | 2.369 | .245 .816 | .010020 .015030 | 2.378 2.378 | .689 1.255 | .040060 . 005010 | 2.410 2.414 | 1.908 1.935 | .007035 .025040 | 2.450 2.450 | 2.133 2.135 | .015032 .005030 | 2.497 2.498 | 2.029 .125 | .005010 .030050 |
| 2.322 | .192 | .015030 | 2.369 | 1.701 | .005010 | 2.378 | 1.785 | .025035 | 2.414 | 1.519 | .040060 | | 2.140 | .012020 | 2.498 | .188 | .025040 |
| 2.322 | 1.770 | .030040 | 2.369 | 1.875 | .050070 | 2.378 | 1.800 | .090125 | 2.416 | 1.911 | .030040 | 2.450 | 2.305 | .040050 | 2.498 | .283 | .025040 |
| 2.322 | 2.000 | .015030 | 2.370 | .135 | .005010 | 2.378 | 1.997 | .090115 | 2.417 | 1.465 | .050070 | 2.451 | .629 | .010020 | 2.498 | .300 | .040060 |
| 2.323 | .311 | .015030 | 2.370 | .246 | .005010 | 2.378 | 2.000 | .040060 | 2.418 | 1.873 | .020040 | 2.451 | .814 | .005010 | 2.498 | .379 | .005008 |
| 2.323 | 1.948 2.165 | .070090 | 2.370 | .510 .884 | .005010 | 2.379 | .876 | .060080 | 2.420 | 1.873 | .020030 | 2.452 2.453 | 1.630 1.565 | .060080 .060075 | 2.498 2.498 | .385 .752 | .020040 .005010 |
| 2.323 | 1.253 | .050070 .025040 | 2.370 | 1.254 | .050060 .110130 | 2.379 2.379 | 1.505 1.630 | .040060 | 2.420 2.420 | 2.100 | .020030 .020035 | 2.453 | 1.791 | .075095 | 2.498 | .755 | .005010 |
| 2.325 | 1.851 | .050070 | 2.370 | 1.588 | .090105 | 2.379 | 2.011 | .030040 | 2.421 | 2.125 | .020040 | 2.453 | 1.820 | .060080 | 2.498 | 1.062 | .090105 |
| 2.325 | 2.008 | .015060 | 2.370 | 1.681 | .005010 | 2.380 | .551 | .080105 | 2.422 | 1.522 | .110130 | 2.453 | 1.828 | .134156 | 2.498 | 1.126 | .090120 |
| 2.325 | 2.062 | .005010 | 2.370 | 2.001 | .080105 | 2.380 | .670 | .050075 | 2.422 | 2.040 | .100125 | 2.453 | 2.050 | .120135 | 2.498 | 1.261 | .060080 |
| 2.328 | .500 | .120135 | 2.371 | 1.515 | .050070 | 2.380 | .870 | .060090 | | 2.215 | .005010 | 2.454 | 1.020 | .015030 | 2.498 | 1.359 | .015030 |
| 2.328 2.328 | 1.199 2.006 | .030050 . 005010 | 2.371 | 1.865 .418 | .015030 .015030 | 2.380 2.380 | 1.000 1.250 | .040060 .030040 | 2.423 2.423 | 1.422 1.623 | .005008 .030050 | 2.454 2.460 | 1.827 1.726 | .105125 .050060 | 2.498 2.498 | 1.449 1.532 | .070090 .110135 |
| 2.330 | 1.200 | .005010 | 2.372 | .866 | .025060 | 2.380 | 1.632 | .010020 | 2.425 | 1.520 | .040060 | 2.462 | 1.727 | .050070 | 2.498 | 1.568 | .020050 |
| 2.331 | 1.627 | .090110 | 2.372 | 1.000 | .025040 | 2.380 | 1.649 | .030050 | 2.425 | 1.552 | .020030 | 2.462 | 1.940 | .020040 | 2.498 | 1.625 | .010020 |
| 2.334 | 2.164 | .025040 | 2.372 | 1.015 | .100125 | 2.380 | 1.997 | .015030 | 2.425 | 1.899 | .010020 | 2.468 | .381 | .105135 | 2.498 | 1.687 | .005010 |
| 2.335 | 1.968 | .050070 | 2.372 | 1.512 | .050075 | 2.380 | 2.020 | .090105 | 2.427 | 1.187 | .010020 | 2.469 | 1.270 | .010020 | 2.498 | 1.881 | .020030 |
| 2.335 2.338 | 1.995 1.636 | .020030 .020040 | 2.372 | 1.654 1.990 | .040060 .015030 | 2.381 2.381 | .328 | .050070 | | 1.191 | .050070 .050070 | | 2.123 2.264 | .010020 . 005010 | 2.498 | 1.910 2.002 | .060070 .005015 |
| 2.338 | .430 | .060080 | 2.372 | .193 | .060080 | 2.381 | 1.437 1.552 | .025040 .020040 | 2.428 2.428 | 1.510 2.001 | .050070 | 2.469 | .502 | .040060 | 2.498 | | .050070 |
| 2.340 | 1.752 | .005025 | 2.373 | .210 | .030050 | 2.382 | 2.014 | .105125 | 2.428 | 2.020 | .042060 | 2.470 | 2.362 | .005010 | 2.498 | 2.119 | .060080 |
| 2.342 | 1.770 | .075090 | 2.373 | .630 | .015030 | 2.383 | .881 | .060080 | 2.430 | 1.651 | .010020 | 2.472 | .814 | .125135 | 2.499 | .325 | .060080 |
| 2.342 | 2.001 | .050070 | 2.373 | .642 | .080100 | 2.385 | .254 | .080100 | 2.430 | 1.938 | .010020 | 2.473 | 2.000 | .010020 | 2.499 | 1.061 | .050070 |
| 2.343 | 1.773 | .005010 | 2.373 | . 755 | .005010 | 2.387 | 1.366 | .050075 | | 2.000 | .020040 | | 1.351 | .070080 | 2.499 | 1.270 | .005010 |
| 2.345 2.346 | .718 2.074 | .090105 .030050 | 2.373 | .876 1.125 | .050070 .025040 | 2.388 2.388 | 1.701 2.048 | .050070 .040060 | 2.430 2.430 | 2.118 2.121 | .015025 .005010 | 2.475 2.477 | 1.770 1.968 | .0 05010 .030080 | 2.499 2.499 | 1.313 1.379 | .105135 .060070 |
| 2.347 | 1.437 | .050070 | 2.373 | 1.281 | .030045 | 2.390 | 1.120 | .015030 | 2.431 | | .005010 | 2.478 | 1.230 | .075105 | 2.499 | 1.387 | .060080 |
| 2.347 | 2.110 | .005010 | 2.373 | 1.300 | .040060 | 2.390 | 1.188 | .050070 | 2.431 | | .020030 | 2.478 | 1.598 | .005010 | 2.499 | 1.498 | .025040 |
| 2.348 | .747 | .050070 | 2.373 | 1.500 | .050070 | 2.390 | 1.328 | .010050 | 2.432 | 1.005 | .015025 | 2.478 | 1.889 | .020040 | 2.499 | 1.749 | .005020 |
| 2.348 | .783 | .075090 | 2.373 | 1.739 | .015025 | 2.390 | 1.850 | .020040 | | 1.267 | .025040 | 2.479 | 2.100 | .015030 | 2.499 | 1.757 | .040060 |
| 2.348 | 1.380 2.000 | .060080 | 2.373 | 1.912 | .005010 | 2.391 | 2.070 | .005010 | | 2.000 | .040050 | 2.480 2.480 | .750 2.255 | .060075 | 2.499 2.499 | 1.889 1.952 | .010020 |
| 2.348 | 2.000 | .042062 | 2.373 | 1.937 2.166 | .030050 .040060 | 2.391 2.393 | 2.078 1.100 | .040060 .010050 | 2.432 2.432 | 2.000 | .005015 .020030 | 2.481 | 1.673 | . 005010 .105135 | 2.499 | | . 005010 .015020 |
| 2.349 | .502 | .100120 | 2.373 | .346 | .105125 | 2.395 | .813 | .040060 | 2.432 | | .020030 | 2.481 | | .005010 | 2.733 | 2.001 | .010020 |
| 2.349 | 1.494 | .025040 | 2.374 | .560 | .040060 | 2.395 | 1.435 | .050070 | | 1.483 | .030050 | 2.482 | | .025040 | | | |
| 2.349 | 2.005 | .060090 | 2.374 | .625 | .050075 | 2.395 | 1.443 | .050070 | 2.434 | 1.501 | .050075 | | 2.150 | .050070 | | | |
| 2.350 | 1.267 | .050070 | 2.374 | .900 | .020040 | 2.395 | 2.000 | .020030 | 2.434 | 1.531 | .030050 | 2.484 | 1.640 | .005010 | | | |
| 2.350 | 1.815 | .005010 | 2.374 | 1.066 | .005010 | 2.396 | 1.085 | .010020 | 2.435 | 1.255 | .125156 | 2.485 | 1.055 | .135156 .134187 | | F | 00 |
| 2.351 | .270 1.659 | .080100 .010020 | 2.374 | 1.170 1.374 | .030187 .050070 | 2.396 2.396 | | .010060 .030050 | 2.435 2.435 | 1.900 2.255 | .050075 .010015 | 2.487 2.487 | 1.015 1.425 | .030050 | | J | UU |
| 2.352 | 1.660 | .005010 | 2.374 | 1.535 | .040060 | 2.397 | | .030050 | 2.435 | 2.263 | .010013 | 2.487 | 1.635 | .005010 | | | |
| | | | *\^(:+ - D(| | | , | v_ | | 100 | 00 | .0.0 | | | | | | |

| Column C | | | | | | | | | | | | | Andi | - 1 01 | RANYOF | | SIZES | |
|--|-------|-------|---------|-------|-------|---------|-------|-------|--------------------------|-------|-------|---------|-------|--------|-----------|-------|-------|--------------------------|
| 2500 144 | O.D. | I.D. | | O.D. | I.D. | | O.D. | I.D. | Choose Any Thickness* | O.D. | I.D. | | O.D. | I.D. | | O.D. | I.D. | Choose Any Thickness* |
| 2.500 144 | 2.500 | .100 | | 2 500 | 1954 | | 2 550 | 1630 | | 2 615 | 560 | | 2 627 | 1561 | | 2 755 | 1,260 | .035045 |
| 2.500 148 | | | | | | | | | | | | | | | | | | .025035 |
| 2500 281 101 201 202 202 201 202 201 202 | | | | | | | | | | | | | | | | | | .010040 |
| 2.500 2.600 1.000 1.000 2.500 2.00 | 2.500 | .188 | .090105 | 2.500 | 2.001 | .005010 | 2.560 | 1.136 | .050070 | 2.615 | 2.354 | .020030 | 2.627 | | | 2.756 | 1.085 | .010020 |
| 2.500 3.60 5.00 5.00 2.50 2.50 2.50 2.50 3.00 2.50 2.50 3.00 2.50 2.50 3.00 2.50 2.50 3.00 2.50 2.50 3.00 2.50 2.50 3.00 2.50 2.50 3.00 2.50 2.50 3.00 | | | | | | | | | | | | | 2.627 | | | | | .040050 |
| | | | | | | | | | | | | | | | | | | .040050 |
| 2500 377 | | | | | | | | | | | | | | | | | | .020040 .025040 |
| | | | | | | | | | | | | | | | | | | .020040 |
| 2500 385 125 166 2500 271 090 095 09 | | | | | | | | | | | | | | | | | | .010050 |
| 2.500 4.00 1.00 5.00 | 2.500 | .385 | .125156 | 2.500 | 2.271 | .020035 | 2.562 | .407 | .030050 | | | | | | | 2.781 | 2.531 | .006010 |
| 2500 445 605 - 105 2501 447 605 - 070 2505 2503 2600 2600 2706 | | | | | | | | | | | | | 2.630 | 1.419 | .030050 | | | .030040 |
| 2500 2501 | | | | | | | | | | | | | | | | | | .006010 |
| 2500 500 120 135 507 139 065 070 258 2683 020 070 070 258 2585 0285 020 070 | | | | | | | | | | | | | | | | | | .060078 .010030 |
| 2500 5801 68-128 68-167 68-16 | | | | | | | | | | | | | | | | | | .005010 |
| 1.500 1.624 1.600 1.60 | | | | | | | | | | | | | | | | | | .020030 |
| | 2.500 | | .036060 | 2.501 | 1.250 | .060090 | 2.564 | 1.706 | .080105 | 2.623 | .514 | .005010 | 2.635 | 1.634 | .005010 | | | .010020 |
| 2500 6800 6900 6900 2501 1625 680-100 2556 2146 605-200 2624 124 300-300 2624 124 300-300 2625 2620 | | | | | | | | | | | | | | | | | | .015025 |
| 2.500 6.85 | | | | | | | | | | | | | | | | | | .006010 |
| 2500 641 120 - 138 2501 2137 020 - 040 2567 2407 030 - 050 2624 756 040 - 050 2567 040 030 - 050 2624 757 040 - 050 2624 2567 040 - 050 2567 040 030 - 050 2624 1573 040 - 050 2567 040 04 | | | | | | | | | | | | | 2.030 | 1.030 | .005010 | | | .050062 |
| 2500 656 156 187 2502 341 005 - 010 2571 407 030 - 050 2624 778 040 060 050 050 182 182 040 020 025 040 050 | | | | | | | | | | | | | | | | | | .020035 |
| | | | | | | | | | | | | | | | | | | .020040 |
| | | | | | | | | | | | | .080100 | | | | | | .010020 |
| 2.500 7.56 1.00 1.05 2.502 1.50 0.80 0.100 2.578 1.025 0.20 0.205 0.205 0.205 0.205 0.005 0.001 0.005 0. | | | | | | | | | | | | | _ | _! | A 11-4- 1 | | | .030040 |
| 2.500 3.70 3.70 3.90 2.50 1994 125 155 2.578 2.578 2.578 3.578 2.578 3.578 2.578 3.578 | | | | | | | | | | | | | | | | | | .010015 |
| 2.500 8.22 1.20 1.35 | | | | | | | | | | | | | | | | | | .020040 .020040 |
| 2.500 871 015 - 030 2.602 2.273 0.05 - 010 2.800 1.381 1.20 - 1.35 2.625 2.81 0.80 - 1.04 2.640 1.280 0.05 - 0.00 2.440 2.840 2.81 | | | | | | | | | | | | | (5 | , JE | | | | .050060 |
| 2500 912 090-110 2503 550 010 - 020 2580 2198 015 - 025 0265 0365 010 - 020 02645 2175 030 - 040 02645 2580 0255 2580 0365 | | | | | | | | | | | | | 2.640 | 1.630 | .005010 | | | .010020 |
| 2.500 9.34 0.070 0.900 2.503 5.78 0.020 0.030 2.502 1.750 0.010 0.020 2.625 3.766 0.070 0.090 2.503 3.780 0.0070 0.0 | | | | | | | 2.580 | 2.137 | .020040 | 2.625 | .347 | .100125 | | | | | | .010015 |
| 2.500 951 0.40 0.600 2.503 1.578 0.20 0.303 0.282 1.750 0.10 0.202 2.625 3.831 1.00 1.125 2.655 1.137 0.05 0.060 0.05 2.250 2.050 0.005 0.050 0.005 0.00 | | | | | | | | | | | | | | | | | | .010015 |
| 2.500 1.000 0.005 0.000 0.500 2.504 875 1.00 1.00 1.000 2.503 1.000 | | | | | | | | | | | | | | | | | | .005040 |
| | | | | | | | | | | | | | | | | | | .020040 |
| 2.500 1.014 1.10 1.30 2.504 1.501 0.50 0.70 2.586 2.913 0.20 0.40 0.80 2.595 5.90 0.40 0.800 0.889 1.795 0.905 0.501 | | | | | | | | | | | | | | | | | | .010020 |
| 2500 1034 036 - 050 2505 195 060 - 080 2589 2100 040 - 080 2262 617 090 - 120 2666 1715 040 - 080 2871 1316 020 2500 130 005 - 010 2505 239 050 - 070 2625 030 - 070 2625 1414 040 - 080 2871 1316 020 2500 130 010 - 080 2505 1413 120 - 135 2590 2253 050 - 070 2625 1000 060 - 070 2677 2460 030 - 030 2875 1750 040 2500 1310 040 - 080 2505 1413 120 - 135 2590 2253 050 - 070 2625 1020 050 - 010 2677 2480 020 - 030 2875 755 040 020 2500 1310 040 - 080 2507 2310 015 - 025 2594 2376 015 - 030 2625 1075 005 - 010 2677 2440 020 - 030 2875 755 040 020 | 2.500 | 1.014 | | | | | | | | | | | 2.665 | | | | 1.765 | .005010 |
| 1.500 1038 005 - 010 2.505 9.29 0.50 0.70 2.590 345 105 - 125 2.665 874 0.50 0.70 2.675 1.440 0.40 0.60 2.871 1.316 0.20 2.500 1.130 0.10 0.600 2.505 1.416 1.00 1.134 2.591 2.373 0.20 0.30 3.65 0.70 0.265 1.020 0.05 0.010 2.677 2.382 0.30 0.80 2.875 7.55 0.40 2.500 1.150 0.93 1.152 2.505 1.999 0.05 0.010 2.591 2.373 0.20 0.03 2.625 1.075 0.05 0.010 2.677 2.482 0.80 0.80 2.875 7.55 0.40 0.500 1.198 0.10 0.600 2.507 2.310 0.15 0.25 2.598 1.580 0.20 0.800 2.625 1.131 0.80 1.00 2.687 6.35 9.99 1.05 2.275 2.275 0.30 0.500 1.266 0.05 | | | | | | | | | | 2.625 | .503 | .015030 | | | | | | .030050 |
| 1.500 1.662 120 - 1.56 2.505 1.413 120 - 1.35 2.590 2.253 3.50 - 0.70 2.625 1.000 0.690 - 0.70 2.677 2.382 0.00 - 0.80 2.675 7.55 0.005 2.500 1.150 0.005 - 1.150 | | | | | | | | | | | | | | | | | | .048062 |
| 1,130 | | | | | | | | | | | | | | | | | | .020030 |
| 2500 1150 093 - 125 2505 1889 005 - 010 2591 2376 015 - 030 2625 1315 008 - 100 2687 1635 090 - 105 2675 2287 2285 020 - 2250 1192 040 - 060 2507 2310 015 - 025 2594 2368 020 - 030 2.625 1315 080 - 100 2.687 1635 090 - 105 2.675 2.275 030 - 2500 1262 010 - 020 2.511 781 040 - 060 2.598 1625 020 - 030 2.625 1516 100 - 125 2.700 780 040 - 060 2.803 2.623 050 - 010 2.625 1516 100 - 125 2.700 2.800 050 - 010 2.803 2.000 0.000 2.500 1272 015 - 025 2.515 145 015 - 030 2.599 1378 010 - 020 2.625 1315 000 - 020 0270 2.800 0.00 | | | | | | | | | | | | | | | | | | .040060 |
| 2500 1.185 1.10 1.125 2.507 5.62 0.50 1.255 2.595 1.580 0.20 0.380 2.625 1.115 0.80 1.100 2.687 1.635 0.90 1.055 2.875 2.255 0.20 2.500 1.262 0.10 0.020 2.511 7.81 0.40 0.60 2.598 1.625 0.80 1.00 2.625 1.516 1.00 1.125 2.700 7.80 0.40 0.060 2.880 2.263 0.50 0.20 0.265 1.516 0.00 1.225 2.700 7.80 0.40 0.06 0.280 2.800 2.265 0.500 0.250 1.275 0.30 0.00 0.255 1.516 0.00 0.255 1.516 0.00 0.255 1.516 0.00 0.255 1.516 0.00 0.255 1.516 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.255 0.00 0.00 0.00 0.255 0.00 0.00 0.00 0.255 0.00 0.00 0.00 0.255 0.00 0. | | | | | | | | | | | | | | | | | | .005010 |
| 2.500 1.282 0.10 0.202 2.511 7.81 0.40 0.60 0.598 1.895 1.895 1.896 0.80 0.005 2.625 1.516 1.00 1.020 2.625 1.516 1.00 1.020 2.540 0.05 0.010 2.883 2.000 0.008 2.500 1.272 0.15 0.252 2.515 1.45 0.15 0.300 2.599 1.378 0.10 0.20 2.625 1.640 0.10 0.660 2.713 2.380 0.20 0.305 2.890 2.390 0.05 0.2500 1.279 0.00 1.255 2.218 0.80 1.00 0.90 2.695 1.818 0.00 0.008 0.2655 1.614 0.10 0.660 2.726 2.016 0.255 0.200 0.025 0.2550 1.311 0.40 0.660 0.2516 1.581 0.70 0.90 0.260 0.503 0.05 0.005 0.2605 0.255 0.40 0.2752 0.10 0.35 0.505 0.900 0.200 0.2550 | 2.500 | 1.185 | .110125 | 2.507 | .562 | .050125 | | | .020030 | | | | 2.687 | 1.635 | .090105 | 2.875 | 2.255 | .020040 |
| 2.500 1.268 0.50 .070 2.511 1.980 0.30 .060 2.599 2.392 0.05 .010 2.625 1.531 1.04 1.04 1.70 2.540 0.05 0.010 2.883 2.000 0.062 2.500 1.279 1.00 1.25 2.515 2.18 0.80 1.00 2.599 1.387 0.00 0.060 2.625 1.701 0.025 0.040 2.720 1.125 0.020 0.040 2.885 2.420 0.020 0.2500 1.311 0.40 0.660 2.516 1.881 0.70 0.90 0.6260 0.503 0.05 0.020 2.625 1.761 0.05 0.06 0.05 | | | | | | | | | | | | | | | | | | .030050 |
| 2.500 1.272 0.115 - 0.25 2.515 1.45 0.15 - 0.30 2.599 1.378 0.10 - 0.20 2.625 1.640 0.10 - 0.60 2.713 2.380 0.20 - 0.35 2.890 2.390 0.05 - 2.500 1.275 0.10 - 0.20 2.516 1.581 0.70 - 0.90 2.690 5.33 0.05 - 0.20 2.625 1.761 0.05 - 0.00 0.275 2.001 0.035 - 0.50 0.2900 7.80 0.80 - 0.20 0.2500 1.314 0.00 - 0.00 0.2516 1.683 0.03 - 0.50 2.600 6.29 0.10 - 0.20 2.625 1.781 0.15 - 0.30 2.730 2.007 0.20 - 0.35 2.900 2.010 0.80 - 2.500 1.346 0.05 - 0.00 2.520 3.54 0.60 - 0.80 2.600 0.752 0.15 - 0.30 2.625 1.781 0.15 - 0.30 2.730 2.007 0.20 - 0.30 2.900 2.000 0.10 - 2.500 1.375 0.30 - 0.40 2.520 3.54 0.60 - 0.80 2.600 7.53 0.08 - 0.15 0.260 2.525 1.926 0.50 - 0.75 2.735 1.985 0.30 - 0.40 2.911 1.656 0.40 - 2.500 1.394 0.40 - 0.80 2.520 1.921 0.02 - 0.30 2.600 1.456 0.05 - 0.20 2.625 2.367 0.40 - 0.60 2.735 2.000 0.50 - 0.60 2.915 2.643 0.20 - 2.500 1.501 0.50 - 1.25 2.520 1.21 0.15 - 0.30 2.600 1.456 0.20 - 0.30 2.626 4.40 0.05 - 0.10 2.735 2.000 0.20 - 0.30 2.919 1.257 0.50 - 2.500 1.511 0.50 - 0.05 0.50 - 0.00 2.520 2.255 0.05 - 0.10 2.600 1.782 0.20 - 0.30 2.626 8.95 1.05 - 1.135 2.742 1.728 0.30 - 0.40 2.915 1.965 0.40 - 2.500 1.523 0.50 - 0.10 2.520 2.530 0.05 - 0.10 2.600 2.750 0.18 - 0.30 2.626 1.532 0.05 - 0.05 0.00 0.20 2.915 1.911 0.40 - 2.500 1.529 0.70 - 0.90 2.523 2.040 0.35 - 0.62 2.600 2.180 0.18 - 0.30 0.18 - 0.30 2.626 1.532 0.05 - 0.05 0.00 0.20 2.932 2.596 0.10 - 0.20 2.250 1.501 0.05 - 0.00 2.520 2.530 0.05 - 0.00 0.260 2.780 0.18 - 0.00 0.18 - 0.00 0.2626 1.532 0.05 - 0.00 0.2745 0.040 0.295 0.295 0.1501 0.00 - 0.00 0.2530 0.00 0.00 0.2530 0.00 0.2600 0.18 - 0.00 0.18 - 0.00 0.18 - 0.00 0.18 - 0.00 0.18 | | | | | | | | | | | | | | | | | | .050060 |
| 2.500 1.279 1.00 - 1.125 2.515 2.218 0.80 - 1.00 2.599 1.387 0.60802 2.625 1.701 0.25040 2.725 2.010 0.35050 0.290 0.780 0.802 0.202 0.503 0.1311 0.40 - 0.60 0.518 1.918 0.40 - 0.60 0.600 0.600 0.503 0.05 - 0.002 0.625 1.781 0.15030 0.2730 0.207 0.20035 0.2900 0.200 0.600 0.503 0.503 0.505 0.600 0.6 | | | | | | | | | | | | - | | | | | | .008016 .005010 |
| 2.500 1.295 0.10 - 0.200 2.516 1.581 0.70 - 0.900 2.600 5.03 0.05 - 0.200 2.625 1.781 0.15 - 0.30 2.736 2.010 0.35 - 0.50 2.900 2.000 0.600 2.500 1.346 0.05 - 0.10 2.516 1.881 0.40 - 0.60 2.600 0.752 0.15 - 0.300 2.625 1.781 0.15 - 0.300 2.734 2.323 0.20 - 0.30 2.900 2.400 0.10 - 2.500 1.346 0.05 - 0.10 2.510 1.818 0.40 - 0.60 2.500 0.752 0.15 - 0.300 2.625 1.986 0.50 - 0.75 2.734 2.323 0.20 - 0.300 2.900 2.400 0.10 - 2.500 1.392 0.40 - 0.60 2.520 3.54 0.60 - 0.80 2.600 0.755 0.10 - 0.20 2.625 1.988 1.05 - 1.25 2.735 1.985 0.30 - 0.40 2.911 1.656 0.40 - 0.60 2.520 1.921 0.20 - 0.30 2.600 8.12 0.05 - 0.20 2.625 2.062 0.05 - 0.10 2.735 2.000 0.50 - 0.60 0.50 - 0.60 2.515 2.643 0.20 - 2.500 1.511 0.55 - 0.500 2.520 2.121 0.15 - 0.30 2.600 1.812 0.05 - 0.20 2.625 2.367 0.40 - 0.60 2.736 2.253 0.10 - 0.20 2.915 2.643 0.20 - 2.500 1.511 0.55 - 0.60 2.520 2.194 0.50 - 0.70 2.600 1.785 0.05 - 0.20 2.625 5.005 0.10 2.736 2.200 0.20 - 0.300 2.916 1.955 0.40 - 2.500 1.511 0.55 - 0.60 2.520 2.194 0.50 - 0.70 2.600 1.785 0.20 - 0.300 2.626 8.95 0.10 + 1.34 2.740 2.250 0.10 - 0.20 2.290 2.300 0.50 - 0.50 2.250 1.520 0.50 0. | | | | | | | | | | | | | | | | | | .020030 |
| 2.500 1.314 | | | | | | | | | | | | | | | | | | .080105 |
| 2.500 1.375 0.30 - 0.40 2.520 3.58 0.60 - 0.80 2.600 7.53 0.08 - 0.15 2.625 1.998 1.05 - 1.25 2.735 1.985 0.30 - 0.40 2.911 1.656 0.40 - 2.500 1.394 0.40 - 0.60 2.520 1.921 0.220 - 0.30 2.600 1.320 0.05 - 0.00 2.625 2.002 0.05 - 0.00 2.735 2.000 0.50 - 0.00 2.915 2.643 0.20 - 0.20 2.500 1.500 1.05 - 1.25 2.520 2.121 0.15 - 0.30 2.600 1.456 0.20 - 0.30 2.626 3.40 0.05 - 0.00 2.740 2.250 0.00 - 0.20 2.920 0.20 - 0.20 2.250 0.05 - 0.00 2.520 2.194 0.50 - 0.00 0.600 0.80 - 0.00 0.600 0.05 - 0.00 0.250 0.101 0.200 0.290 0.05 - 0.00 0.2500 0.05 - 0.00 0.2500 0.05 - 0.00 0.600 0.05 - 0.00 0.600 0.05 - 0.00 0.600 0.000 0.600 0.000 0.600 0.000 0 | | | .040060 | | | | | | | | | | 2.730 | 2.007 | .020035 | | | .060080 |
| 2.500 1.392 0.40 - 0.60 2.520 3.68 0.05 - 0.10 2.600 7.55 0.10 - 0.20 2.625 2.002 0.05 - 0.10 2.735 2.000 0.50 - 0.60 2.915 2.643 0.20 - 0.20 2.500 1.500 1.500 1.500 1.500 1.500 1.500 0. | | | | | | | | | | | | | | | | | | .010040 |
| 2.500 1.394 0.40060 2.520 1.921 0.20030 2.600 8.12 0.05020 2.625 2.367 0.40060 2.736 2.253 0.10020 2.916 1.965 0.40 - 2.500 1.511 0.50060 2.520 2.121 0.15030 2.600 1.456 0.20030 2.626 4.40 0.05010 2.740 2.250 0.10020 2.920 2.030 0.50 - 2.500 1.517 0.05010 2.520 2.194 0.50070 2.600 1.782 0.20030 2.626 5.00 1.04 - 1.34 2.740 2.250 0.10020 2.920 2.030 0.50 - 2.500 1.523 0.50070 2.522 1.921 0.05010 2.600 2.120 0.60080 2.626 8.95 1.05 - 1.35 2.742 1.728 0.30040 2.925 1.690 0.40 - 2.500 1.529 0.70090 2.523 2.040 0.35062 2.600 2.180 0.18031 2.626 1.516 1.00125 2.743 2.520 0.30040 2.931 1.310 0.40 - 2.500 1.561 0.50075 2.528 2.328 0.20030 2.600 2.300 0.40060 2.626 1.562 0.15025 2.745 8.88 0.05010 2.932 2.596 0.10 - 2.200 2.500 1.606 0.25 - 0.42 2.530 1.251 0.60070 2.601 1.391 0.70090 2.626 1.567 0.05040 2.530 1.875 0.60080 2.602 2.402 0.30050 2.626 1.577 0.30050 2.747 1.400 0.25040 2.937 1.375 0.40 - 2.500 1.625 0.05060 2.530 2.192 0.05010 2.602 2.402 0.30050 2.626 1.577 0.30050 2.747 1.400 0.25040 2.937 1.500 0.40 - 2.500 1.755 0.05060 2.531 2.331 0.15025 2.603 1.932 0.05010 2.603 2.802 0.30050 2.626 1.807 0.25 - 0.40 2.937 1.500 0.40 - 2.500 1.755 0.05060 2.531 2.331 0.15 - 0.05 2.603 1.805 0.05070 2.626 1.836 0.60080 2.750 5.63 0.90 - 1.25 2.533 2.365 0.05010 2.603 2.800 0.50070 2.626 1.836 0.60080 2.750 5.63 0.90 - 1.25 2.940 1.325 0.40 2.950 2.299 0.40 2.500 1.775 0.04060 2.540 1.528 0.30050 0.605 1.810 0.50 | | | | | | | | | | | | | | | | | | .040060 |
| 2.500 | | | | | | | | | | | | | | | | | | .020030 |
| 2.500 1.511 0.50 - 0.60 | | | | | | | | | | | | | | | | | | .050060 |
| 2.500 1.517 0.005 - 0.010 2.520 2.255 0.005 - 0.010 2.600 2.120 0.60 - 0.80 2.626 8.95 1.05 - 1.35 2.742 1.728 0.30 - 0.40 2.925 1.690 0.40 - 2.500 1.523 0.50 - 0.70 0.90 2.522 1.921 0.005 - 0.010 2.600 2.180 0.18 - 0.30 2.626 1.516 1.00 - 1.25 2.743 2.520 0.30 - 0.40 2.931 1.310 0.40 - 2.500 1.561 0.50 - 0.75 2.528 2.328 0.20 - 0.30 2.600 2.180 0.18 - 0.30 2.626 1.532 0.06 - 0.15 2.745 2.345 0.020 - 0.30 2.932 2.590 0.10 - 2.500 1.606 0.25 - 0.42 2.530 1.251 0.60 - 0.70 2.601 1.391 0.70 - 0.90 2.626 1.577 0.30 - 0.50 2.745 2.345 0.20 - 0.30 2.934 2.520 0.20 - 2.500 1.624 0.40 - 0.60 2.530 1.875 0.60 - 0.80 2.602 1.378 0.10 - 0.020 2.626 1.583 0.60 - 0.90 2.749 1.376 0.40 - 0.50 2.937 1.375 0.40 - 2.500 1.625 0.05 - 0.60 2.530 2.192 0.05 - 0.10 2.602 2.402 0.30 - 0.50 2.626 1.853 0.60 - 0.90 2.749 1.376 0.40 - 0.50 2.937 1.500 0.40 - 0.60 2.530 2.192 0.05 - 0.10 2.603 1.250 0.20 - 0.40 2.626 1.825 0.60 - 0.90 2.749 1.376 0.40 - 0.50 2.937 1.500 0.40 - 0.60 2.531 2.331 0.15 - 0.25 2.603 1.250 0.20 - 0.031 2.626 1.825 0.60 - 0.90 2.749 1.376 0.40 - 0.50 2.937 1.500 0.40 - 0.60 2.531 2.331 0.15 - 0.25 2.603 1.250 0.20 - 0.031 2.626 1.825 0.60 - 0.90 2.749 1.376 0.40 - 0.50 2.937 1.500 0.40 - 0.60 2.531 2.331 0.15 - 0.25 2.603 2.805 0.50 - 0.70 2.626 1.825 0.60 - 0.90 2.749 1.376 0.40 - 0.50 2.937 1.500 0.40 - 0.60 2.531 2.331 0.40 - 0.60 2.603 2.805 0.50 - 0.70 2.626 1.825 0.60 - 0.90 2.749 1.376 0.40 - 0.50 2.937 1.500 0.40 - 0.60 2.531 2.331 0.40 - 0.60 2.603 2.603 2.805 0.50 - 0.70 2.626 1.825 0.60 - 0.90 2.749 1.376 0.40 - 0.50 2.949 1.511 0.40 - 0.50 2.530 0.505 0.505 0.505 0.505 0.505 0.505 0.505 0.505 0.5 | | | | | | | | | | | | | | | | | | .050060 |
| 2.500 1.523 0.50 - 0.70 2.522 1.921 0.05 - 0.10 2.600 2.176 0.18 - 0.31 2.626 1.516 1.00 - 1.25 2.743 2.520 0.30 - 0.40 2.931 1.310 0.40 - 0.500 | | | | | | | | | | | | | | | | | | .040060 |
| 2.500 | | | | | | | | | | | | | | | | | | .040060 |
| 2.500 | | | | | | | | | | | | | | | | | | .010020 |
| 2.500 1.624 0.40 - 0.60 0.530 1.875 0.60 - 0.80 0.605 - 0.10 0.605 0.605 - 0.10 0.605 0.605 - 0.10 0.605 0.605 - 0.10 0.605 0.605 - 0.10 0.605 0.605 - 0.10 0.605 0.605 - 0.10 0.605 0.605 - 0.10 0.605 0.605 - 0.10 0.605 0.605 - 0.10 0.605 0.605 - 0.10 | | | | | | | | | | | | | | | | | | .060070 .020030 |
| 2.500 1.625 .005060 2.530 2.192 .005010 2.602 2.402 .030050 2.626 1.745 .060090 2.937 1.500 .040050 2.530 2.316 .005010 2.603 1.250 .020040 2.626 1.807 .025040 2.500 1.755 .006090 2.531 2.331 .015025 2.603 1.932 .050070 2.626 1.825 .060090 2.500 1.755 .005010 2.533 2.365 .005010 2.603 2.180 .020031 2.626 1.836 .060080 2.945 1.994 .040 - 2.500 1.759 .090105 2.539 .301 .040060 2.605 1.685 .050070 2.626 1.834 .005010 2.949 1.511 .040 - 2.500 1.777 .015062 2.541 1.939 .025040 2.607 2.015 .010030 2.626 2.000 .015050 2.750 .563 .090125 2.955 1.719 .040 - 2.500 1.786 .040060 2.542 1.897 .005010 2.607 2.603 .050070 2.626 2.074 .060080 2.750 .563 .090125 2.955 1.719 .040 - 2.500 1.814 .010031 2.549 1.904 .005010 2.608 2.063 .025040 2.627 .394 .010020 2.750 .760 .020030 2.967 .786 .040030 2.550 1.814 .010031 2.549 1.904 .005010 2.608 2.200 .035050 2.627 .395 .005010 2.750 1.250 .020030 2.967 .786 .040020 2.550 1.899 .030050 2.610 2.626 .055010 2.627 1.266 .025040 2.750 1.300 .020030 2.967 .786 .040050 2.550 1.899 .030050 2.610 2.626 .055010 2.627 1.266 .025040 2.750 1.635 .020030 2.986 2.230 .060080 2.550 1.899 .030050 2.555 1.899 .030048 2.611 2.303 .030050 2.627 1.266 .025040 2.750 1.635 .020030 2.986 2.230 .060080 2.550 1.899 .030030 2.555 1.899 .030048 2.611 2.303 .030050 2.627 1.296 .060075 2.750 1.635 .020030 2.986 2.230 .060080 2.550 1.899 .030048 2.611 2.3 | | | | | | | | | | | | | | | | | | .020030 |
| 2.500 | | | | | | | | | | | | | | | | | | .040060 |
| 2.500 1.759 .090105 2.539 .301 .040060 2.605 1.685 .050070 2.626 1.871 .010020 .020 2.950 2.229 .040060 2.500 1.770 .040060 2.540 1.528 .030050 2.605 1.810 .050070 2.626 1.933 .060090 2.750 .505 .010020 2.950 2.260 .020020030 2.500 1.777 .015062 2.541 1.939 .025040 2.607 2.015 .010030 2.626 2.000 .015050 2.750 .563 .090125 2.955 1.719 .040060 2.500 1.787 .040060 2.542 1.897 .005010 2.603 .050070 2.626 2.074 .060080 2.750 .628 .010030 2.968 2.489 .040020 2.750 .628 .010020 2.500 .055010 2.610 .055040 2.627 .394 .010020 | | | | | | | | | | | | | | | | 2.937 | | .025040 |
| 2.500 1.759 .090105 2.539 .301 .040060 2.605 1.685 .050070 2.626 1.871 .010020 .020 2.950 2.229 .040060 2.500 1.770 .040060 2.540 1.528 .030050 2.605 1.810 .050070 2.626 1.933 .060090 2.750 .505 .010020 2.950 2.260 .020020030 2.500 1.777 .015062 2.541 1.939 .025040 2.607 2.015 .010030 2.626 2.000 .015050 2.750 .563 .090125 2.955 1.719 .040060 2.500 1.787 .040060 2.542 1.897 .005010 2.603 .050070 2.626 2.074 .060080 2.750 .628 .010030 2.968 2.489 .040020 2.750 .628 .010020 2.500 .055010 2.610 .055040 2.627 .394 .010020 | | | | | | | | | | | | | | 7 | | | | .048062 |
| 2.500 1.759 .090105 2.539 .301 .040060 2.605 1.685 .050070 2.626 1.871 .010020 .020 2.950 2.229 .040060 2.500 1.770 .040060 2.540 1.528 .030050 2.605 1.810 .050070 2.626 1.933 .060090 2.750 .505 .010020 2.950 2.260 .020020020020 2.500 1.777 .015062 2.541 1.939 .025040 2.607 2.015 .010030 2.626 2.000 .015050 2.750 .563 .090125 2.955 1.719 .040060 2.542 1.897 .005010 2.603 .050070 2.626 2.074 .060080 2.750 .628 .010030 2.958 2.469 .040060 2.542 1.897 .005010 2.608 2.063 .025040 2.627 .394 .010020 2.750 .628 0.00040 2.965 2.485 | | | | | | | | | | | | | | | JU | | | .040060 |
| 2.500 1.770 .040060 2.540 1.528 .030050 2.605 1.810 .050070 2.626 1.933 .060090 2.750 .505 .010020 2.950 2.260 .020020020 2.500 1.777 .015062 2.541 1.939 .025040 2.607 2.015 .010030 2.626 2.000 .015050 2.750 .563 .090125 2.955 1.719 .040080 2.500 1.787 .040060 2.542 1.897 .005010 2.603 .050070 2.626 2.074 .060080 2.750 .628 .010030 2.958 2.469 .040080 2.5750 .628 .010030 2.958 2.469 .040080 2.5750 .628 .010030 2.965 2.485 .020040 2.627 .394 .010020 2.750 .760 .020040 2.965 2.485 .020040 2.627 .395 .005010 2.750 .786 .040040< | | | | | | | | | | | | | | | | | | .040060 .040050 |
| 2.500 1.777 .015062 2.541 1.939 .025040 2.607 2.015 .010030 2.626 2.000 .015050 2.750 .563 .090125 2.955 1.719 .040040 2.500 1.787 .040060 2.542 1.897 .005010 2.603 .050070 2.626 2.074 .060080 2.750 .628 .010030 2.958 2.469 .040040 2.500 1.796 .075156 2.548 2.213 .005010 2.608 2.003 .025040 2.627 .394 .010020 2.750 .760 .020040 2.965 2.485 .020020 2.500 1.814 .010031 2.549 1.904 .005010 2.608 2.200 .035050 2.627 .395 .005010 2.750 .760 .020040 2.965 2.485 .020040 2.500 1.820 .005010 2.550 .410 .005010 2.610 .513 .090135 2.627 .500 .135187 2.750 1.250 | | | | | | | | | | | | | 2.750 | .505 | .010020 | | | .020040 |
| 2.500 1.787 .040060 2.542 1.897 .005010 2.607 2.063 .050070 2.626 2.074 .060080 2.750 .628 .010030 2.958 2.469 .040020 2.500 1.814 .010031 2.549 1.904 .005010 2.608 2.200 .035050 2.627 .394 .010020 2.750 .760 .020040 2.965 2.485 .020020 2.500 1.814 .010031 2.549 1.904 .005010 2.608 2.200 .035050 2.627 .395 .005010 2.750 .1200 .020030 2.967 .786 .040020 2.500 1.820 .005010 2.550 .410 .005010 2.610 .513 .090135 2.627 .500 .135187 2.750 1.250 .010020 2.977 2.330 .020030 2.627 .005010 2.627 .262 .005010 2.627 .260 .02 | | | | | | | | | | | | | | | | | | .040050 |
| 2.500 1.796 .075156 2.548 2.213 .005010 2.608 2.063 .025040 2.627 .394 .010020 2.750 .760 .020040 2.965 2.485 .020020030 2.500 1.814 .010031 2.549 1.904 .005010 2.608 2.200 .035050 2.627 .395 .005010 2.750 1.200 .020030 2.967 .786 .040040 2.500 1.820 .005010 2.550 .410 .005010 2.610 .513 .090135 2.627 .500 .135187 2.750 1.250 .010020 2.977 2.330 .020030 2.500 1.889 .030050 2.555 1.873 .005010 2.610 2.622 .005010 2.627 1.266 .025040 2.750 1.300 .020035 2.980 2.450 .010020 2.500 1.890 .020030 2.555 1.899 .030048 < | | | | | | | | | | | | | | | | | | .040060 |
| 2.500 1.820 .005010 2.550 .410 .005010 2.610 .513 .090135 2.627 .500 .135187 2.750 1.250 .010020 2.977 2.330 .020030 2.500 1.889 .030050 2.555 1.873 .005010 2.610 2.262 .005010 2.627 1.266 .025040 2.750 1.300 .020035 2.980 2.450 .010020 2.500 1.890 .020030 2.555 1.899 .030048 2.611 2.303 .030050 2.627 1.296 .060075 2.750 1.635 .020030 2.986 2.230 .060075 | | | | | 2.213 | .005010 | | | | | | | | | | | | .020040 |
| 2.500 1.889 .030050 2.555 1.873 .005010 2.610 2.262 .005010 2.627 1.266 .025040 2.750 1.300 .020035 2.980 2.450 .010025 2.500 1.890 .020030 2.555 1.899 .030048 2.611 2.303 .030050 2.627 1.296 .060075 2.750 1.635 .020030 2.986 2.230 .060075 | | | | | | | | | | | | | | | | | | .040060 |
| 2.500 1.890 .020030 2.555 1.899 .030048 2.611 2.303 .030050 2.627 1.296 .060075 2.750 1.635 .020030 2.986 2.230 .060 - | | | | | | | | | | | | | | | | | | .020040 |
| | | | | | | | | | | | | | | | | | | .010020 .060080 |
| | | | | | | | | | | | | | l | | | | | .010020 |
| | | | | | | | | | | | | | l | | | | | .050060 |

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|----------------|-------|-------------------------------------|----------------|----------------|-------------------------------------|----------------|----------------|-------------------------------------|----------------|----------------|-------------------------------------|----------------|----------------|-------------------------------------|----------|---------|-------------------------------------|
| | |) | 3.100 | 2.500 | .005010 | 3.387 | 1.816 | .020030 | 3.609 | 2.250 | .025040 | 4.000 | .504 | .040060 | 4.376 | 3.258 | .025040 |
| | | 00 | 3.100 | 2.501 | .030050 | 3.390 | .191 | .010015 | 3.609 | 2.500 | .025040 | 4.000 | .690 | .040060 | 4.380 | 3.375 | .006012 |
| -5 | | | 3.100 | 2.750 | .030050 | 3.393 | 1.841 | .020040 | 3.625 | 2.030 | .062080 | 4.000 | 1.010 | .050070 | 4.402 | 2.778 | .010020 |
|) | | | 3.120 | 2.747 | .040060 | 3.400 | .400 | .048062 | 3.625 | 3.196 | .020030 | 4.000 | 2.000 | .008015 | 4.420 | 3.890 | .020030 |
| | | | 3.120 | 2.750 | .010020 | 3.400 | .628 | .020030 | 3.640 | 2.072 | .020040 | 4.000 | 2.281 | .008015 | 4.432 | 3.810 | .020035 |
| 3.000 | .250 | .030050 | 3.121 | 1.641 | .048062 | 3.426 | 2.939 | .010030 | 3.647 | 2.346 | .015036 | 4.000 | 2.530 | .030050 | 4.434 | 3.153 | .010015 |
| 3.000 | .312 | .040060 | 3.123 | 2.151 | .015025 | 3.427 | 2.940 | .020035 | 3.661 | 2.992 | .010030 | 4.000 | 2.562 | .048062 | 4.435 | .756 | .050070 |
| 3.000 | .375 | .020040 | 3.123 | 2.153 | .010020 | 3.430 | 3.077 | .020040 | 3.663 | 2.427 | .040060 | 4.000 | 2.577 | .020040 | 4.490 | 4.223 | .030050 |
| 3.000 | .531 | .090105 | 3.125 | .906 | .080090 | 3.450 | 1.554 | .005010 | 3.700 | 2.899 | .040060 | 4.000 | 2.780 | .040060 | 4.500 | .504 | .040060 |
| 3.000 | .560 | .050070 | 3.125 | 1.900 | .048062 | 3.450 | 2.610 | .040050 | 3.733 | 3.332 | .020035 | 4.000 | 3.000 | .008025 | 4.500 | 2.500 | .048062 |
| 3.000 | .750 | .090105 | 3.125 | 1.902 | .040060 | 3.452 | 3.038 | .010015 | 3.735 | 3.300 | .010020 | 4.000 | 3.362 | .010020 | 4.550 | .243 | .040060 |
| 3.000 | .981 | .015030 | 3.125 | 2.000 | .020040 | 3.463 | 2.632 | .020030 | 3.750 | .656 | .090105 | 4.000 | 3.410 | .020030 | 4.570 | 3.870 | .020030 |
| 3.000 | 1.020 | .020035 | 3.130 | .315 | .105125 | 3.466 | 2.230 | .040060 | 3.750 | .875 | .020035 | 4.000 | 3.426 | .020030 | 4.623 | 4.328 | .010015 |
| 3.000 | 1.748 | .048062 | 3.138 | 1.566 | .020030 | 3.470 | .705 | .090105 | 3.750 | 3.015 | .005010 | 4.000 | 3.544 | .015025 | 4.688 | 3.560 | .005010 |
| 3.000 | 1.750 | .050070 | 3.138 | 1.578 | .020030 | 3.481 | 2.415 | .010020 | 3.750 | 3.250 | .035045 | 4.015 | 3.572 | .040060 | 4.688 | 3.879 | .005010 |
| 3.000 | 2.000 | .020040 | 3.149 | .722 | .090125 | 3.482 | 2.703 | .032042 | 3.761 | 1.870 | .030050 | 4.025 | 3.060 | .040060 | 4.700 | 3.865 | .010020 |
| | 2.125 | .030050 | 3.175 | 2.700 | .010020 | 3.484 | 2.880 | .035048 | 3.780 | 3.049 | .020040 | 4.026 | 3.309 | .050060 | 4.706 | 3.140 | .020030 |
| 3.000 | 2.255 | .010020 | 3.181 | 2.230 | .040050 | 3.491 | 2.000 | .010015 | 3.781 | 1.435 | .030050 | 4.055 | 1.299 | .050060 | 4.710 | 3.873 | .010020 |
| 3.000 | 2.500 | .048062 | 3.185 | 1.023 | .005010 | 3.494 | .636 | .090125 | 3.800 | 3.300 | .020035 | 4.065 | 3.275 | .020030 | 4.720 | 3.884 | .020035 |
| 3.000 | 2.527 | .040060 | 3.191 | 1.955 | .040060 | 3.497 | 2.670 | .060080 | 3.800 | 3.350 | .020040 | 4.095 | 3.858 | .010020 | 4.730 | 4.083 | .030050 |
| 3.009 | 1.650 | .048062 | 3.195 | 1.260 | .005010 | | _ | | 3.819 | 3.415 | .040060 | 4.096 | 3.267 | .010020 | 4.860 | .390 | .090125 |
| 3.015 | 2.665 | .008015 | 3.195 | 1.355 | .020035 | 7 | | 00 | 3.823 | 3.332 | .030040 | 4.120 | 2.549 | .020030 | 4.860 | 4.350 | .020036 |
| | 2.184 | .050070 | 3.200 | 2.500 | .010075 | L.). | | | 3.850 | 1.780 | .020040 | 4.120 | 3.150 | .035050 | 4.860 | 4.600 | .015030 |
| | 2.917 | .010020 | 3.220 | 3.024 | .020030 | | | | 3.870 | 1.370 | .020032 | 4.125 | 1.781 | .040050 | 4.875 | 3.018 | .020030 |
| 3.031 | 2.310 | .050060 | 3.244 | 1.425 | .005010 | 0.500 | 405 | 015 005 | 3.874 | 1.642 | .050062 | 4.125 | 3.750 | .020040 | 4.935 | 4.763 | .015025 |
| 3.031 | 2.435 | .050060 | 3.248 | 2.776 | .010015 | 3.500 | .135 | .015025 | 3.875 | 1.150 | .040060 | 4.127 | 3.214 | .048062 | 4.950 | 4.393 | .010020 |
| 3.032 | 2.913 | .030050 | 3.249 | 1.001 | .005010 | 3.500 | .504 | .040060 | 3.880 | 2.515 | .030050 | 4.130 | .660 | .020030 | 4.960 | 4.260 | .020030 |
| 3.037 | .820 | .020035 | 3.250 | .190 | .010020 | 3.500 | 2.030 | .040050 | 3.881 | 2.396 | .050060 | 4.150 | 3.576 | .020030 | 4.975 | 3.165 | .025040 |
| 3.047 | 1.795 | .040050 | 3.250 | .750 | .010015 | 3.500 | 2.250 | .020035 | 3.889 | 2.315 | .020030 | 4.195 | 2.136 | .010020 | 4.994 | 4.904 | .020040 |
| 3.060 | 2.180 | .040050 .025035 | 3.250 | 1.013 | .005010 | 3.500 | 2.500 3.060 | .010020 | 3.900 | 2.700 | .050060 | 4.200 | 3.505 | .020032 | | | |
| 3.062 3.063 | 2.798 | .048062 | 3.250 | 1.338 | .005010 | 3.500 3.500 | 3.125 | .010015 | 3.900 | 3.360 | .020040 | 4.218 4.224 | 1.618 1.520 | .020040 | | | 00 |
| 3.065 | 1.560 | .046062 | 3.250 | 2.375 2.510 | .030050 | 3.500 | 3.158 | .020030 | 3.908 | 2.352 2.224 | .020040 | 4.240 | 2.525 | .020032 | h | | 00 |
| 3.065 | 2.800 | .040050 | 3.250 3.250 | 2.510 | .020030 .010020 | 3.500 | 3.250 | .010020 | 3.925 3.937 | 2.008 | .020030 .015025 | 4.250 | .780 | .020032 | ١IJ. | ·U | UU |
| 3.066 | 2.550 | .040050 | 3.259 | 2.694 | .010020 | 3.503 | 2.702 | .040060 | | 2.362 | .020032 | 4.250 | .801 | .020030 | . | _ | |
| 3.067 | .901 | .040050 | 3.265 | 2.465 | .020030 | 3.511 | 3.207 | .040050 | 3.940 | 3.150 | .050060 | 4.250 | 3.550 | .050060 | 5.000 | .270 | .040060 |
| 3.070 | 1.775 | .010020 | 3.290 | 2.280 | .020035 | 3.515 | 3.050 | .050060 | 3.960 | 3.612 | .030050 | 4.250 | 3.570 | .020030 | 5.000 | 1.562 | .030050 |
| 3.070 | 1.930 | .020040 | 3.290 | 3.115 | .020035 | 3.537 | 2.186 | .020040 | 3.987 | 1.891 | .010015 | 4.250 | 3.660 | .015025 | 5.125 | 4.393 | .015025 |
| 3.077 | .941 | .040060 | 3.300 | 2.270 | .020035 | 3.537 | 2.280 | .030050 | 0.307 | 1.031 | .010015 | 4.254 | 3.018 | .040050 | 5.140 | 2.860 | .015025 |
| 3.080 | 2.190 | .040050 | 3.306 | 2.505 | .040050 | 3.543 | 3.150 | .015025 | | | | 4.270 | 3.935 | .020040 | 5.140 | 2.000 | .000012 |
| 3.085 | 2.458 | .060080 | 3.337 | .308 | .080090 | 3.550 | .628 | .020030 | | | | 4.300 | 3.200 | .020040 | | _ | |
| 3.090 | 1.650 | .048062 | 3.364 | 1.404 | .020030 | 3.557 | 2.782 | .010020 | Æ | | 00 | 4.308 | 2.746 | .020040 | | For out | |
| 3.093 | 2.628 | .020040 | 3.367 | 2.065 | .020030 | 3.570 | .259 | .030050 | | | • • • • | 4.358 | .485 | .048062 | | | up to 12" |
| 3.094 | 2.000 | .010020 | 3.370 | 2.625 | .048062 | 3.575 | 1.020 | .036050 | | ·U | 00 | 4.368 | 3.273 | .020035 | | | KER's at |
| 3.094 | 2.757 | .040050 | 3.375 | | .046002 | 3.586 | 3.275 | .020032 | | _ | | 4.375 | 4.083 | .030040 | 8) | 300) 92 | 7-4377. |
| 0.000 | 2.737 | | 3.373 | | .010020 | 3.300 | J.LIJ | .020 .002 | | | | 4.070 | 4.003 | .000040 | | | |

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1 mm = .03937" .001" = .0254 mm

| FRACTION DECIMALS MILLIM | NETERS FRACTION | DECIMALS MILLIMETERS | MM INCHES | MM INCHES |
|---|--|---|--|--|
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 0.515625 — 13.097 — .53125 — 13.494 .546875 — 13.891 — .5625 — 14.288 .578125 — 14.684 — .59375 — 15.081 .609375 — 15.478 — .6250 — 15.875 .640625 — 16.272 — .65625 — 16.669 .671875 — 17.066 — .6875 — 17.463 .703125 — 17.859 — .71875 — 18.256 .734375 — 18.653 — .7500 — 19.050 .765625 — 19.447 — .78125 — 19.844 .796875 — 20.241 — .8125 — 20.638 .828125 — 21.034 — .84375 — 21.431 .859375 — 21.828 — .8750 — 22.225 .890625 — 22.622 | .1 — .0039 .2 — .0079 .3 — .0118 .4 — .0157 .5 — .0197 .6 — .0236 .7 — .0276 .8 — .0315 .9 — .0354 1 — .0394 2 — .0787 3 — .1181 4 — .1575 5 — .1969 6 — .2362 7 — .2756 8 — .3150 9 — .3543 10 — .3937 11 — .4331 12 — .4724 13 — .5118 14 — .5512 15 — .5906 16 — .6299 17 — .6693 18 — .7087 19 — .7480 20 — .7874 21 — .8268 22 — .8661 23 — .9055 24 — .9449 25 — .9843 26 — 1.0236 27 — 1.0630 28 — 1.1024 29 — 1.1417 30 — 1.1811 31 — 1.2205 32 — 1.2598 33 — 1.2992 34 — 1.3386 | 46 — 1.8110 47 — 1.8504 48 — 1.8898 49 — 1.9291 50 — 1.9685 51 — 2.0079 52 — 2.0472 53 — 2.0866 54 — 2.1260 55 — 2.1654 56 — 2.2047 57 — 2.2441 58 — 2.2835 59 — 2.3228 60 — 2.3622 61 — 2.4016 62 — 2.4409 63 — 2.4803 64 — 2.5197 65 — 2.5591 66 — 2.5591 66 — 2.7559 71 — 2.7358 70 — 2.7559 71 — 2.7953 72 — 2.8346 73 — 2.8740 74 — 2.9134 75 — 2.9528 76 — 2.9921 77 — 3.0315 78 — 3.0709 79 — 3.1102 80 — 3.1496 81 — 3.1890 82 — 3.2283 83 — 3.2677 84 — 3.3071 85 — 3.3465 86 — 3.3858 87 — 3.4252 88 — 3.4646 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | .859375 — 21.828 — .8750 — 22.225 .890625 — 22.622 — .90625 — 23.019 .921875 — 23.416 — .9375 — 23.813 .953125 — 24.209 — .96875 — 24.606 | 29 — 1.1417 30 — 1.1811 31 — 1.2205 32 — 1.2598 33 — 1.2992 | 83 — 3.2677 84 — 3.3071 85 — 3.3465 86 — 3.3858 87 — 3.4252 |

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| | | Thickness | | | Order | Purchase | |
|------|------|-----------|----------|----------|-------|-----------|-------|
| O.D. | I.D. | From | Material | Quantity | Date | Order No. | Notes |
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