



General Service Gaskets and Specialty Gaskets

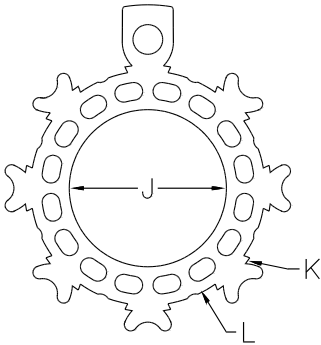
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Universal FPM (e.g. Viton®¹) Gasket

For use with non-metallic Metric piping (PVDF, polypropylene, etc.) IR Butt-Weld and Socket Fusion Type Flange Adapter.

Bolt holes in accordance with ANSI B16.5 class 150 pattern.

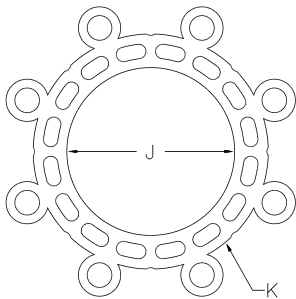


| Pipe Size inch | mm | Part# | I.D. inch J | O.D. inch K | L inch | Thickness inch | Bolt Hole # | Bolt Hole Diameter |
|-------------------|-----|------------|-------------------|-------------------|-----------|-------------------|-------------------|--------------------------|
| 1/2 | 20 | KC-GV0.101 | 0.638 | 1.730 | 1.339 | .100 | 4 | 5/8 |
| 3/4 | 25 | KC-GV0.102 | 0.835 | 2.130 | 1.614 | .100 | 4 | 5/8 |
| 1 | 32 | KC-GV0.103 | 1.189 | 2.480 | 1.969 | .100 | 4 | 5/8 |
| 1 1/4 | 40 | KC-GV0.104 | 1.386 | 2.870 | 2.402 | .100 | 4 | 5/8 |
| 1 1/2 | 50 | KC-GV0.105 | 1.732 | 3.230 | 2.874 | .100 | 4 | 5/8 |
| 2 | 63 | KC-GV0.106 | 2.244 | 4.020 | 3.543 | .100 | 4 | 3/4 |
| 2 1/2 | 75 | KC-GV0.107 | 2.670 | 4.760 | 4.173 | .100 | 4 | 3/4 |
| 3 | 90 | KC-GV0.108 | 3.205 | 5.240 | 4.921 | .100 | 4 | 3/4 |
| 4 | 110 | KC-GV0.110 | 3.913 | 6.220 | 5.906 | .100 | 8 | 3/4 |

Universal FPM (e.g. Viton®¹) Gasket

For use with non-metallic Metric piping (PVDF, polypropylene, etc.) IR Butt-Weld Type Flange Adapter.

Bolt holes in accordance with ANSI B16.5 class 150 pattern.



| Pipe Size inch | mm | Part# | I.D. inch J | O.D. inch K | Thickness inch | Bolt Circle Diameter | Bolt Hole # | Bolt Hole Diameter |
|-------------------|-----|------------|-------------------|-------------------|-------------------|----------------------------|-------------------|--------------------------|
| 6 | 160 | KC-GV0.212 | 5.913 | 8.350 | .100 | 9.50 | 8 | 0.875 |
| 8 | 200 | KC-GV0.213 | 7.386 | 10.550 | .100 | 11.75 | 8 | 0.875 |
| 9 | 225 | KC-GV0.214 | 8.307 | 10.550 | .100 | 11.75 | 8 | 0.875 |
| 10 | 250 | KC-GV0.215 | 9.234 | 13.250 | .100 | 14.25 | 12 | 1.000 |
| 12 | 315 | KC-GV0.216 | 12.750 | 16.125 | .100 | 17.00 | 12 | 1.000 |
| 14 | 355 | KC-GV0.217 | 14.000 | 17.750 | .100 | 18.75 | 12 | 1.125 |
| 16 | 400 | KC-GV0.218 | 16.000 | 20.250 | .100 | 21.25 | 16 | 1.125 |
| 18 | 450 | KC-GV0.219 | 18.000 | 20.675 | .100 | 22.75 | 16 | 1.250 |
| 20 | 500 | KC-GV0.220 | 20.000 | 23.875 | .100 | 25.00 | 20 | 1.250 |

¹Viton® is the registered trademark of DuPont Corp.

Our gaskets are covered under US Patent #5,362,115 and Others Pending.

SAMPLE SPECIFICATION

Gaskets shall be manufactured in the patented KC Multi-Ring® low torque design, KC Multi-Ring Products, Inc., sole source. To ensure proper laminar flow, geometrically align gasket and flange faces. Install using zinc-plated fasteners. Tighten fasteners in a star pattern, using progressive 4-pass tightening, to proper torque values.

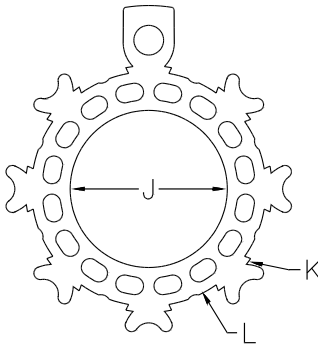
Contact KC Multi-Ring Products, Inc. for sizes and materials not listed.



Universal EPDM Gasket

For use with non-metallic Metric piping (PVDF, polypropylene, etc.) IR Butt-Weld and Socket Fusion Type Flange Adapter.

Bolt holes in accordance with ANSI B16.5 class 150 pattern.

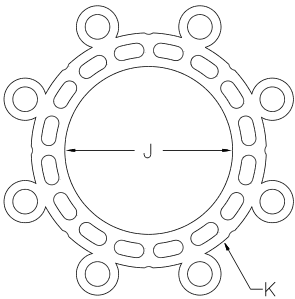


| Pipe Size inch | mm | Part# | I.D. inch J | O.D. inch K | L inch | Thickness inch | Bolt Hole # | Bolt Hole Diameter |
|-------------------|-----|------------|-------------------|-------------------|-----------|-------------------|----------------|-----------------------|
| 1/2 | 20 | KC-GE0.101 | 0.638 | 1.730 | 1.339 | .100 | 4 | 5/8 |
| 3/4 | 25 | KC-GE0.102 | 0.835 | 2.130 | 1.614 | .100 | 4 | 5/8 |
| 1 | 32 | KC-GE0.103 | 1.189 | 2.480 | 1.969 | .100 | 4 | 5/8 |
| 1 1/4 | 40 | KC-GE0.104 | 1.386 | 2.870 | 2.402 | .100 | 4 | 5/8 |
| 1 1/2 | 50 | KC-GE0.105 | 1.732 | 3.230 | 2.874 | .100 | 4 | 5/8 |
| 2 | 63 | KC-GE0.106 | 2.244 | 4.020 | 3.543 | .100 | 4 | 3/4 |
| 2 1/2 | 75 | KC-GE0.107 | 2.670 | 4.760 | 4.173 | .100 | 4 | 3/4 |
| 3 | 90 | KC-GE0.108 | 3.205 | 5.240 | 4.921 | .100 | 4 | 3/4 |
| 4 | 110 | KC-GE0.110 | 3.913 | 6.220 | 5.906 | .100 | 8 | 3/4 |

Universal EPDM Gasket

For use with non-metallic piping (PVDF, polypropylene, etc.) IR Butt-Weld Type Flange Adapter.

Bolt holes in accordance with ANSI B16.5 class 150 pattern.



| Pipe Size inch | mm | Part# | I.D. inch J | O.D. inch K | Thickness inch | Bolt Circle Diameter | Bolt Hole # | Bolt Hole Diameter |
|-------------------|-----|------------|-------------------|-------------------|-------------------|-------------------------|----------------|-----------------------|
| 6 | 160 | KC-GE0.212 | 5.913 | 8.350 | .100 | 9.50 | 8 | 0.875 |
| 8 | 200 | KC-GE0.213 | 7.386 | 10.550 | .100 | 11.75 | 8 | 0.875 |
| 9 | 225 | KC-GE0.214 | 8.307 | 10.550 | .100 | 11.75 | 8 | 0.875 |
| 10 | 250 | KC-GE0.215 | 9.234 | 13.250 | .100 | 14.25 | 12 | 1.000 |
| 12 | 315 | KC-GE0.216 | 12.750 | 16.125 | .100 | 17.00 | 12 | 1.000 |
| 14 | 355 | KC-GE0.217 | 14.000 | 17.750 | .100 | 18.75 | 12 | 1.125 |
| 16 | 400 | KC-GE0.218 | 16.000 | 20.250 | .100 | 21.25 | 16 | 1.125 |
| 18 | 450 | KC-GE0.219 | 18.000 | 20.675 | .100 | 22.75 | 16 | 1.250 |
| 20 | 500 | KC-GE0.220 | 20.000 | 23.875 | .100 | 25.00 | 20 | 1.250 |

Our gaskets are covered under US Patent #5,362,115 and Others Pending.

SAMPLE SPECIFICATION

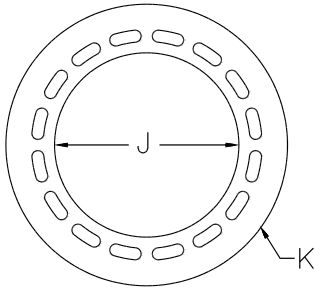
Gaskets shall be manufactured in the patented KC Multi-Ring® low torque design, KC Multi-Ring Products, Inc., sole source. To ensure proper laminar flow, geometrically align gasket and flange faces. Install using zinc-plated fasteners. Tighten fasteners in a star pattern, using progressive 4-pass tightening, to proper torque values.

Contact KC Multi-Ring Products, Inc. for sizes and materials not listed.



EPDM Socket Fusion Ring Gasket

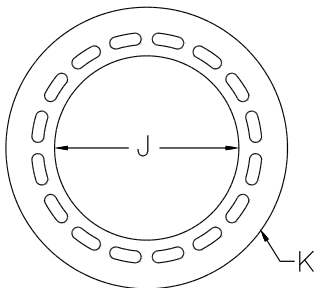
For use with non-metallic Metric piping (PVDF, polypropylene, etc.)
 IR Butt-Weld and Socket Fusion Type Flange Adapter.



| Pipe Size | mm | Part # | J inch | K inch | Thickness inch |
|-----------|-----|------------|-----------|-----------|-------------------|
| 1/2 | 20 | KC-SEO.101 | 0.638 | 1.339 | .125 |
| 3/4 | 25 | KC-SEO.102 | 0.835 | 1.614 | .125 |
| 1 | 32 | KC-SEO.103 | 1.189 | 1.969 | .125 |
| 1 1/4 | 40 | KC-SEO.104 | 1.386 | 2.402 | .125 |
| 1 1/2 | 50 | KC-SEO.105 | 1.732 | 2.874 | .125 |
| 2 | 63 | KC-SEO.106 | 2.244 | 3.543 | .125 |
| 2 1/2 | 75 | KC-SEO.107 | 2.670 | 4.173 | .125 |
| 3 | 90 | KC-SEO.108 | 3.205 | 4.921 | .125 |
| 4 | 110 | KC-SEO.110 | 3.913 | 5.906 | .125 |

FPM Socket Fusion Ring Gasket

For use with non-metallic Metric piping (PVDF, polypropylene, etc.)
 IR Butt-Weld and Socket Fusion Type Flange Adapter.



| Pipe Size | mm | Part # | J inch | K inch | Thickness inch |
|-----------|-----|------------|-----------|-----------|-------------------|
| 1/2 | 20 | KC-SVO.101 | 0.638 | 1.339 | .125 |
| 3/4 | 25 | KC-SVO.102 | 0.835 | 1.614 | .125 |
| 1 | 32 | KC-SVO.103 | 1.189 | 1.969 | .125 |
| 1 1/4 | 40 | KC-SVO.104 | 1.386 | 2.402 | .125 |
| 1 1/2 | 50 | KC-SVO.105 | 1.732 | 2.874 | .125 |
| 2 | 63 | KC-SVO.106 | 2.244 | 3.543 | .125 |
| 2 1/2 | 75 | KC-SVO.107 | 2.670 | 4.173 | .125 |
| 3 | 90 | KC-SVO.108 | 3.205 | 4.921 | .125 |
| 4 | 110 | KC-SVO.110 | 3.913 | 5.906 | .125 |

Our gaskets are covered under US Patent #5,362,115 and Others Pending.

SAMPLE SPECIFICATION

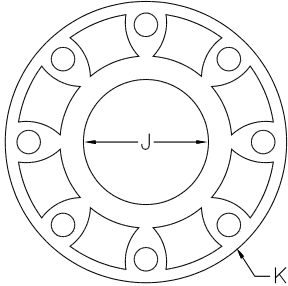
Gaskets shall be manufactured in the patented KC Multi-Ring® low torque design, KC Multi-Ring Products, Inc., sole source. To ensure proper laminar flow, geometrically align gasket and flange faces. Install using zinc-plated fasteners. Tighten fasteners in a star pattern, using progressive 4-pass tightening, to proper torque values.

Contact KC Multi-Ring Products, Inc. for sizes and materials not listed.



EPDM Fiberglass Reinforced Plastic Ducting Gasket

For use on fiberglass reinforced plastic (FRP) ducting NBSPS 15-69.



| Pipe Size | Part # | J inch | K inch | Thickness inch | Bolt Circle inch | Bolt Holes | |
|-----------|------------|-----------|-----------|-------------------|---------------------|------------|------|
| | | | | | | Number | Dia. |
| 2 | KC-DE0.206 | 2 | 6.375 | .125 | 5 | 4 | 1/2 |
| 3 | KC-DE0.208 | 3 | 7.375 | .125 | 6 | 4 | 1/2 |
| 4 | KC-DE0.210 | 4 | 8.375 | .125 | 7 | 4 | 1/2 |
| 6 | KC-DE0.212 | 6 | 10.375 | .125 | 9 | 8 | 1/2 |
| 8 | KC-DE0.213 | 8 | 12.375 | .125 | 11 | 8 | 1/2 |
| 10 | KC-DE0.215 | 10 | 14.375 | .125 | 13 | 12 | 1/2 |
| 12 | KC-DE0.216 | 12 | 16.375 | .125 | 15 | 12 | 1/2 |
| 14 | KC-DE0.217 | 14 | 18.375 | .125 | 17 | 12 | 1/2 |
| 16 | KC-DE0.218 | 16 | 20.375 | .125 | 19 | 16 | 1/2 |
| 18 | KC-DE0.219 | 18 | 22.375 | .125 | 21 | 16 | 1/2 |
| 20 | KC-DE0.220 | 20 | 24.375 | .125 | 23 | 20 | 1/2 |
| 24 | KC-DE0.222 | 24 | 28.375 | .125 | 27 | 20 | 1/2 |
| 30 | KC-DE0.225 | 30 | 34.375 | .125 | 33 | 28 | 1/2 |
| 36 | KC-DE0.228 | 36 | 40.375 | .125 | 39 | 32 | 1/2 |
| 42 | KC-DE0.231 | 42 | 46.375 | .125 | 45 | 36 | 1/2 |
| 48 | KC-DE0.234 | 48 | 54.375 | .125 | 52 | 44 | 5/8 |
| 54 | KC-DE0.237 | 54 | 60.375 | .125 | 58 | 44 | 5/8 |
| 60 | KC-DE0.240 | 60 | 66.375 | .125 | 64 | 52 | 5/8 |
| 66 | KC-DE0.243 | 66 | 72.375 | .125 | 70 | 56 | 5/8 |
| 72 | KC-DE0.243 | 72 | 78.375 | .125 | 76 | 60 | 5/8 |
| 78 | KC-DE0.249 | 78 | 84.375 | .125 | 82 | 68 | 5/8 |
| 84 | KC-DE0.252 | 84 | 90.375 | .125 | 88 | 72 | 5/8 |

Our gaskets are covered under US Patent #5,362,115 and Others Pending.

SAMPLE SPECIFICATION

Gaskets shall be manufactured from 1/8" commercial grade 40 durometer EPDM cut to FRP ducting NBSPS 15-69, in patented KC Multi-Ring® low torque design, KC Multi-Ring Products, Inc., sole source.

Contact KC Multi-Ring Products, Inc. for sizes and materials not listed.



GASKET SELECTION MATRIX FOR DISSIMILAR FLANGES

Select pipe size on left columns, then read left to right until you find both mating flanges and use the gasket that is farthest to the right:

Example 1: 4" Old ANSI flange mated to 110 mm DIN Standard — use Old ANSI gasket

Example 2: 2" Schedule-10 flange to 63 mm DIN Standard flange — use DIN Standard gasket

| I.P.S. | mm | | | | |
|--------|-----|----------|----------|----------|----------|
| 1/2 | 20 | OLD ANSI | DIN | SCH-10 | NEW ANSI |
| 3/4 | 25 | OLD ANSI | DIN | SCH-10 | NEW ANSI |
| 1 | 32 | OLD ANSI | DIN | SCH-10 | NEW ANSI |
| 1 1/4 | 40 | OLD ANSI | DIN | SCH-10 | NEW ANSI |
| 1 1/2 | 50 | OLD ANSI | SCH-10 | DIN | NEW ANSI |
| 2 | 63 | OLD ANSI | SCH-10 | DIN | NEW ANSI |
| 2 1/2 | 75 | OLD ANSI | SCH-10 | DIN | NEW ANSI |
| 3 | 90 | OLD ANSI | DIN | SCH-10 | NEW ANSI |
| 3 1/2 | | OLD ANSI | SCH-10 | NEW ANSI | |
| 4 | 110 | DIN | OLD ANSI | SCH-10 | NEW ANSI |
| 5 | | OLD ANSI | SCH-10 | NEW ANSI | |
| 6 | 160 | DIN | OLD ANSI | SCH-10 | NEW ANSI |
| 8 | 225 | OLD ANSI | DIN | SCH-10 | NEW ANSI |
| 10 | 250 | DIN | OLD ANSI | SCH-10 | NEW ANSI |
| 12 | | OLD ANSI | SCH-10 | NEW ANSI | NEW ANSI |
| 14 | | SCH-10 | OLD ANSI | or | NEW ANSI |
| 16 | | SCH-10 | OLD ANSI | or | NEW ANSI |
| 18 | | SCH-10 | OLD ANSI | or | NEW ANSI |
| 20 | | SCH-10 | OLD ANSI | or | NEW ANSI |
| 24 | | SCH-10 | OLD ANSI | or | NEW ANSI |

DIN = DIN Standard Dimensions



INSTALLATION PROCEDURE FOR AC BACKING FLANGE

Installation

1. Inspect box for damage from shipping. Notify carrier of any damage and make claims as required.
2. After removing the AC Backing Flange from the box, inspect the beveled surface between the AC Backing Flange inside diameter (ID) for any sharp protrusion which could come into contact with the flange adapter. Any sharp edge in this area is cause for rejection.
3. When installation is required, verify that each AC Backing Flange is the proper size, flange type, and coating for the given application.
4. If AC Backing Flange is rejected due to a surface deformation in the above noted area, set aside for return and specify reason for rejection.
5. Slip AC Backing Flange over flange adapter and rotate ring to confirm correct fit and size.

Note: Beveled surface on AC Backing Flange faces flange adapter; washers, bolts, and nuts go on flat surface of AC Backing Flange. As with any flange made to ANSI drilling, optimal distribution of clamping force is obtained through the use of heavy-duty washers.

6. Select one AC Backing Flange on each joint for determining the flange tightening sequence, and follow the "star" pattern for all tightening passes on that joint.
7. Install all AC Backing Flanges using a calibrated torque wrench or a KC Multi-Ring® SmartBox™. Whenever possible, apply the torque to the nut. All passes are to be made following the tightening sequence described above. For pass 1, torque each nut to 33% of the desired torque value. For pass 2, re-torque each nut to 66% of the desired torque value. For pass 3, re-torque each nut to 100% of the desired torque value. Wait two minutes and re-torque to 100% value. (Note that for speed and ease of installation, the KC Multi-Ring® SmartBox™ is calibrated to the recommended bolt torque for each pipe size using KC Multi-Ring® gaskets, allowing the use of an electric impact wrench for the first 3 passes - a calibrated torque wrench is always used for the final Quality Control pass.)

Note: Optimal results are obtained when used in conjunction with KC Multi-Ring® reduced surface area low-torque gaskets.