

Conduit Sealing Bushings

Type CSB Series

1 Segmental Design (Figure 1):

Segmental pressure discs and slit neoprene sealing ring produce a come-apart design which allows the sealing bushing to be installed without having to thread it along the cable or allows installation around cables already terminated. Maximum diameter of wire or cable may need to be reduced. (Include Catalog Number "SEG"). Also available with slit neoprene sealing ring and one piece pressure discs.

2 Double Sealing Ring:

A second neoprene sealing ring may be added for cable support applications. Add suffix "G2" to catalog number. Contact your local representative for price and availability.

3 Close/Short Nipples:

Short nipples which can be screwed into conduit hubs or couplings. Seal Fittings are then installed in the open ends of these nipples. To specify a fitting complete with nipple add "N" after Catalog Number. (Example: CSBG 200P-N).

4 Type GL Cabinet Adapter (Figure 2):

For use with sealing bushings when exposed wires enter cabinets. Hot dip galvanized malleable or ductile iron is standard; aluminum if specified. Adapter assembly includes special smooth bore nipple, gasket and locknut. Type GL Cabinet Adapters must be ordered separately. See table for catalog numbers.

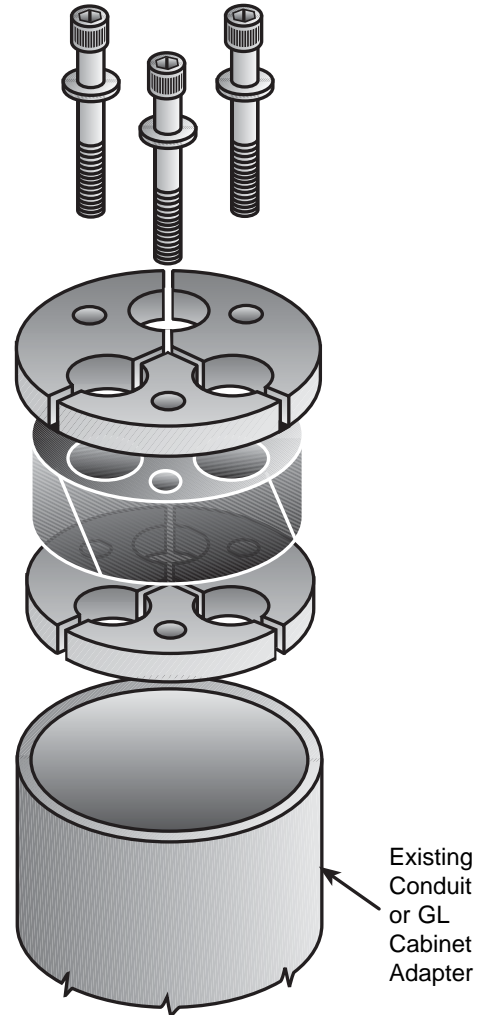
Thread length on special smooth bore nipples will accommodate 1/8" thick cabinet or structure on Type CSBG (specify if thicker than 1/8"), and up to 3/4" thickness on Types CSBE & CSBI.

These fittings are designed for use in schedule 40 Rigid Metal Conduit. For use with IMC or EMT, a short nipple of Rigid Metal Conduit should be used to accommodate the Conduit Sealing Bushing. Contact your local representative for application involving Schedule 40 or Schedule 80 PVC Conduit.

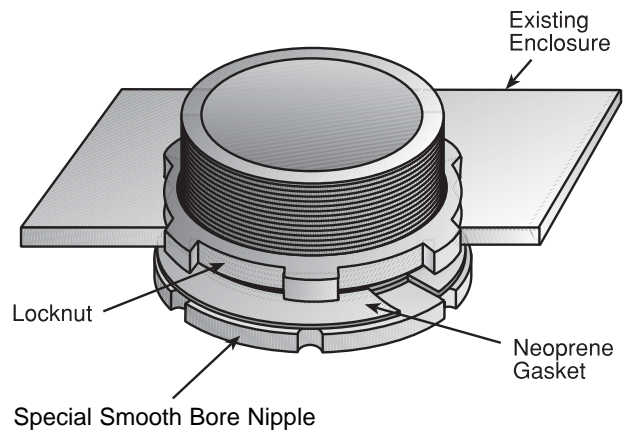
Blank fittings are intended as abandonment and future use devices only. DO NOT FIELD DRILL.

Dimensional Data:
See Page RA19

Type CSBE
Segmental Design
Figure 1



| Conduit Size | Catalog Number |
|--------------|----------------|
| 1½ | GL150 |
| 2 | GL200 |
| 2½ | GL250 |
| 3 | GL300 |
| 3½ | GL350 |
| 4 | GL400 |
| 5 | GL500 |
| 6 | GL600 |



Type GL
Cabinet Adapter
Figure 2

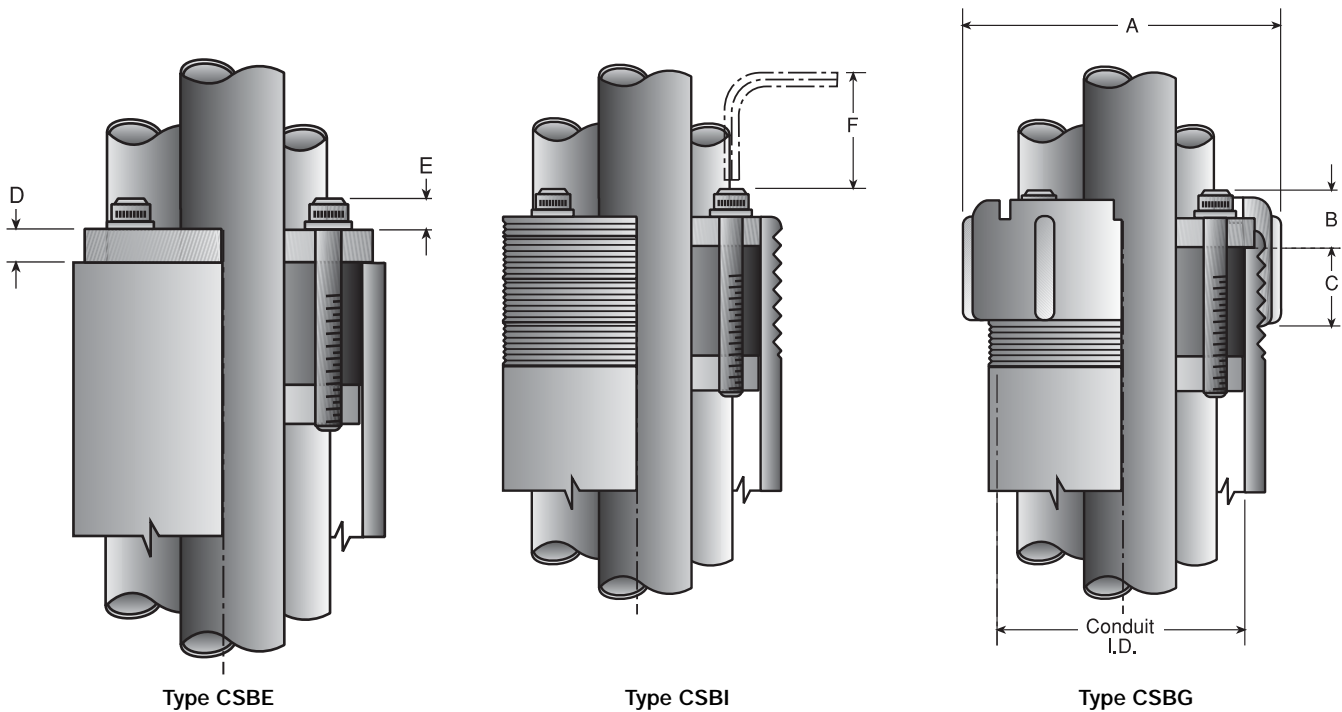
Conduit Sealing Bushings

For Use with Cable in Rigid Conduit*

Type CSB Series Dimensional Data:

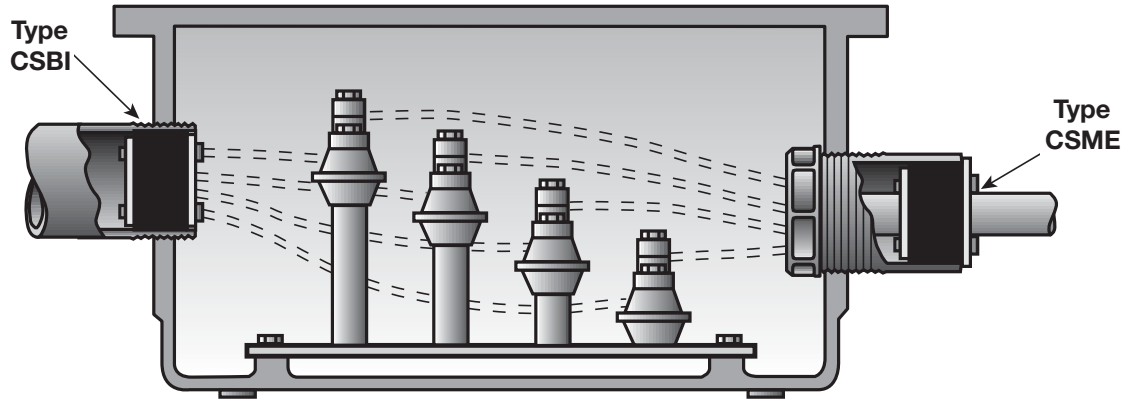
| Conduit* Size | Max. Diameter of Wire Permitted - Inches (non segmented) | | | | Conduit ID | Dimensions in Inches | | | | | F Min |
|------------------|---|------------|------------|------------|------------|---------------------------------|------|-----|------|------|----------|
| | 1 Hole | 2 Holes | 3 Holes | 4 Holes | | A Dia. | B | C | D | E | |
| 1½" | .78 | .49 | .53 | .44 | 1.610 | 2 ³ / ₈ | 5/8 | 7/8 | 5/16 | 5/16 | 1/4 |
| 2" | 1.02 | .77 | .71 | .61 | 2.067 | 2 ¹³ / ₁₄ | 5/8 | 7/8 | 5/16 | 5/16 | 1/4 |
| 2½" | 1.32 | .96 | .89 | .78 | 2.469 | 3 ³ / ₈ | 3/4 | 7/8 | 5/16 | 5/16 | 1/4 |
| 3" | 1.89 | 1.20 | 1.13 | .96 | 3.068 | 4 ¹ / ₈ | 3/4 | 7/8 | 5/16 | 5/16 | 1/4 |
| 3½" | 2.13 | 1.32 | 1.32 | 1.13 | 3.548 | 4 ⁹ / ₁₆ | 7/8 | 7/8 | 7/16 | 3/8 | 1½ |
| 4" | 2.57 | 1.63 | 1.51 | 1.26 | 4.026 | 5 ¹ / ₈ | 5/16 | 1 | 7/16 | 3/8 | 1½ |
| 5" | 3.45 | 2.00 | 1.88 | 1.63 | 5.047 | 6 ¹ / ₄ | 5/16 | 1 | 7/16 | 3/8 | 1½ |
| 6" | 4.32 | 2.51 | 2.38 | 2.13 | 6.065 | 7 ³ / ₈ | 5/16 | 1 | 7/16 | 3/8 | 1½ |

*Standard fittings may be used with corresponding sizes of schedule 40 pipe or tubes and cored holes which have the same internal diameter as conduit I.D. shown above.

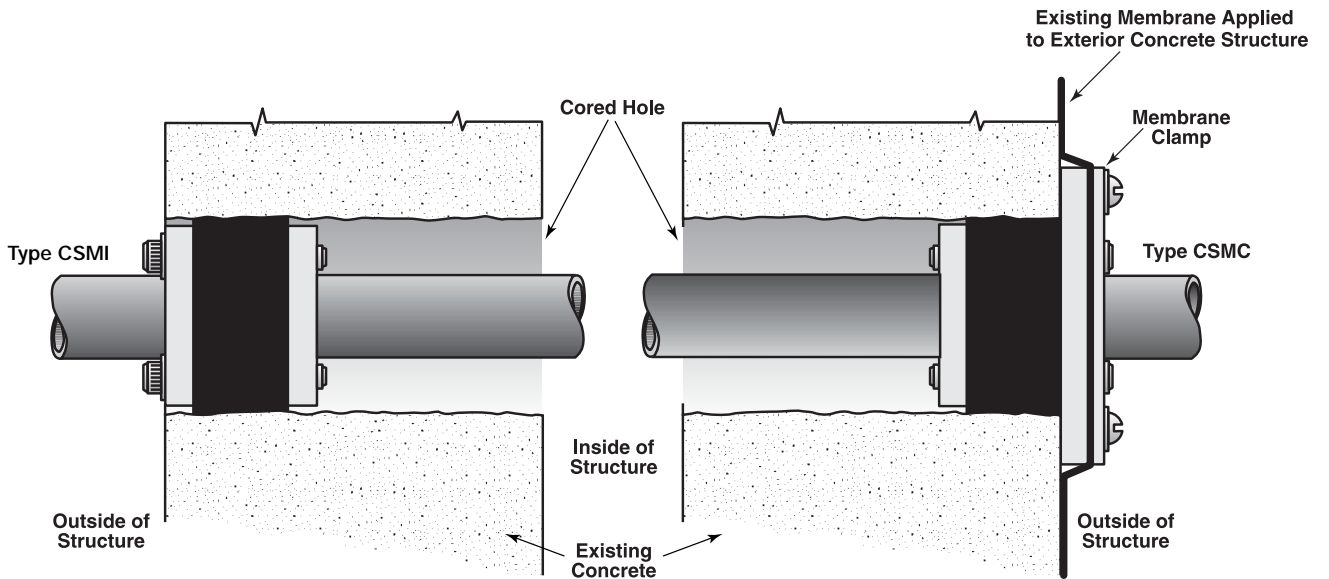


Conduit Sealing Bushings

Typical Applications:



Type CSBI & Type CSME
Used to seal conduits entering an enclosure to prevent condensation and water from entering.



Type CSMI & Type CSMC
Core Drilled Hole Application

Conduit Sealing Bushings

For Use with Pipe, Conduit or Tubing

Type CSM Series

Use:

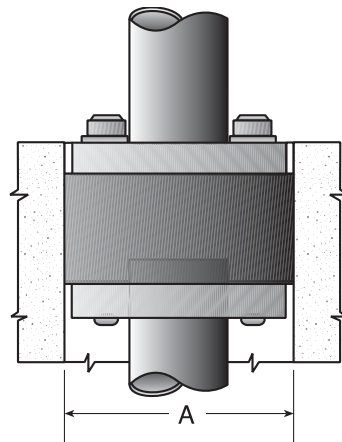
These Sealing Bushings are used to seal against fluid and gas pressure around mechanical pipes, casing, conduits or tubes. They have the same details of construction and are used for the same applications as the Type CSB Series described on Pages RA17 and RA18. In addition to sealing a pipe within a pipe, some types are specifically designed for use in core bit drilled holes or precast holes in concrete. Most of the options for the Type CSB are available in the Type CSM Series.

Dimensional Data:

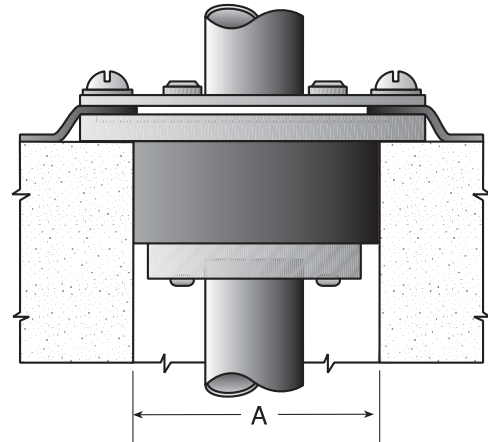
See Pages RA22, RA23

TO ORDER SPECIFY:

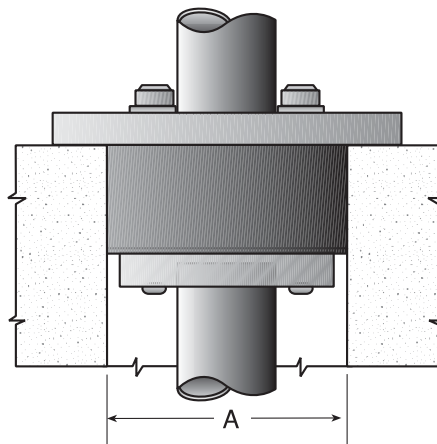
- 1 Catalog Number
- 2 Diameter of core bit drilled hole, precast hole or I.D. of pipe.
- 3 Number and O.D. of penetrating pipe, conduit or tube
- 4 Disc material finish: PVC Coated Steel Discs (standard); Uncoated Aluminum Discs.
- 5 Segmental design, if required (prices on application)
- 6 Two Neoprene Sealing Rings (if required) Prices on Applications. Suffix G2.



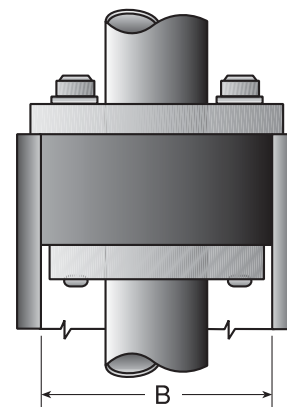
Type CSMI Internal



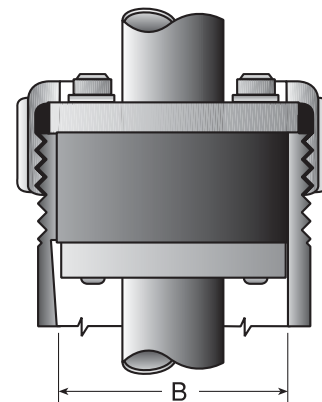
Type CSMC with steel membrane clamp for holding existing moisture membrane



Type CSML Large Top Plate



Type CSME External

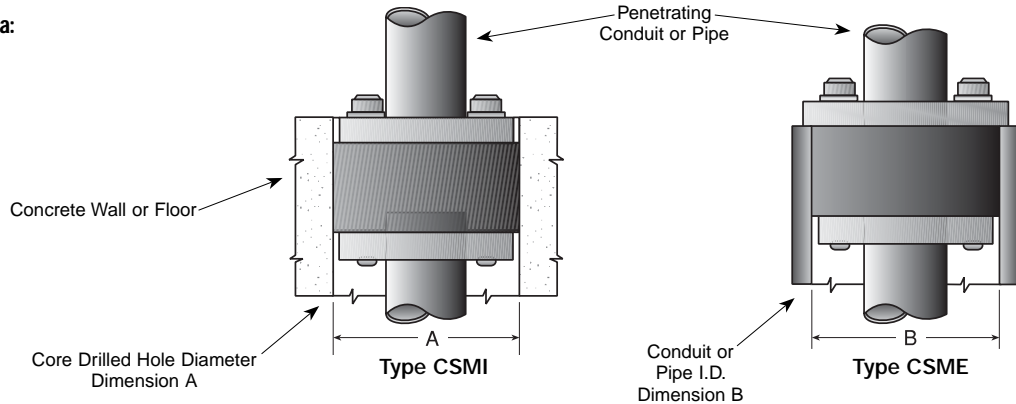


Type CSMG Gland-Locking Collar

Conduit Sealing Bushings

For Use with Pipe, Conduit or Tubing

Type CSM Dimensional Data:



| Use with Core Drilled Hole Dia. "A" | Conduit or Pipe I.D. "B" | Single Penetration Applications Dimension in Inches | | | | | | Multiple Penetration Max. O.D. for More Than One Pipe | | | Catalog Numbers | | | | |
|-------------------------------------|--------------------------|---|--------|-------------------------|--------|------------------------|-------|---|---------|---------|-----------------|------------|-----------|------------|-----------|
| | | Steel Pipe or Conduit Nom I.D. | O.D. | Cast Iron Pipe Nom I.D. | O.D. | Copper Tubing Nom I.D. | O.D. | 2 Holes | 3 Holes | 4 Holes | Type CSMI | Type CSML | Type CSMC | Type CSME | Type CSMG |
| 2 | 2.067 | 3/8 | .675 | | | 3/8 | .500 | .790 | .710 | .600 | CSMI-200P | CSML-200P | CSMC-200P | CSME-200P | CSMG-200P |
| 2 1/2 | 2.469 | 1/2 | .840 | | | 1/2 | .625 | | | | | | | | |
| | | 3/4 | 1.050 | | | 3/4 | .875 | | | | | | | | |
| 3 | 3.068 | 1 | 1.315 | | | 1 | 1.125 | .970 | .930 | .730 | CSMI-250P | CSML-250P | CSMC-250P | CSME-250P | CSMG-250P |
| | | 1 1/4 | 1.660 | | | 1 1/4 | 1.375 | | | | | | | | |
| | | 1 1/2 | 1.900 | | | 1 1/2 | 1.625 | 1.210 | 1.110 | .930 | CSMI-300P | CSML-300P | CSMC-300P | CSME-300P | CSMG-300P |
| | | | | | | 1 3/4 | 1.875 | | | | | | | | |
| 3 1/2 | 3.548 | | 2.000 | | | 2 | 2.125 | 1.375 | 1.315 | 1.125 | CSMI-350P | CSML-350P | CSMC-350P | CSME-350P | CSMG-350P |
| 4 | 4.026 | 2 | 2.375 | 2 | 2.500 | 2 1/4 | 2.375 | 1.625 | 1.460 | 1.315 | CSMI-400P | CSML-400P | CSMC-400P | CSME-400P | CSMG-400P |
| | | | | | | 2 1/2 | 2.625 | | | | | | | | |
| 5 | 5.047 | 2 1/2 | 2.875 | 2 | 2.750 | | | 2.000 | 1.875 | 1.625 | CSMI-500P | CSML-500P | CSMC-500P | CSME-500P | CSMG-500P |
| | | | 3.000 | | | | | | | | | | | | |
| | | | 3.500 | | | | | | | | | | | | |
| 6 | 6.065 | 3 1/2 | 4.000 | 3 | 3.660 | | | 2.500 | 2.125 | 2.000 | CSMI-600P | CSML-600P | CSMC-600P | CSME-600P | CSMG-600P |
| | | | 4.500 | 3 | 3.800 | | | | | | | | | | |
| | | | | 3 | 3.960 | | | | | | | | | | |
| 8 | 7.981 | 4 1/2 | 5.000 | 4 | 4.800 | | | | | | | | | | |
| | | | 5.250 | 4 | 5.000 | | | | | | | | | | |
| | | | 5.500 | | | | | 3.000 | 3.000 | 2.875 | CSMI-800P | CSML-800P | CSMC-800P | CSME-800P | • |
| | | 5 | 5.563 | | | | | | | | | | | | |
| | | | 6.000 | | | | | | | | | | | | |
| | | 6 | 6.625 | | | | | | | | | | | | |
| 10 | 10.020 | | 7.000 | 6 | 6.900 | | | Single Penetration Only | | | CSMI-1000P | CSML-1000P | • | CSME-1000P | • |
| | | | | 6 | 7.100 | | | | | | | | | | |
| 12 | 11.938 | | 8.000 | | | | | Single Penetration Only | | | CSMI-1200P | CSML-1200P | • | CSME-1200P | • |
| | | 8 | 8.625 | 8 | 9.050 | | | | | | | | | | |
| | | | | 8 | 9.300 | | | | | | | | | | |
| 14 | 13.126 | | 10.000 | 10 | 11.100 | | | Single Penetration Only | | | CSMI-1400P | CSML-1400P | • | CSME-1400P | • |
| | | 10 | 10.750 | 10 | 11.400 | | | | | | | | | | |
| 16 | 15.000 | | 12.000 | 12 | 13.200 | | | Single Penetration Only | | | CSMI-1600P | CSML-1600P | • | CSME-1600P | • |
| | | 12 | 12.750 | 12 | 13.500 | | | | | | | | | | |

The suffix P in the Catalog Number indicates PVC Coated Steel Pressure Discs. For Aluminum Pressure Discs, change P to A.

•Type CSMG and CSMC are not available in these sizes.

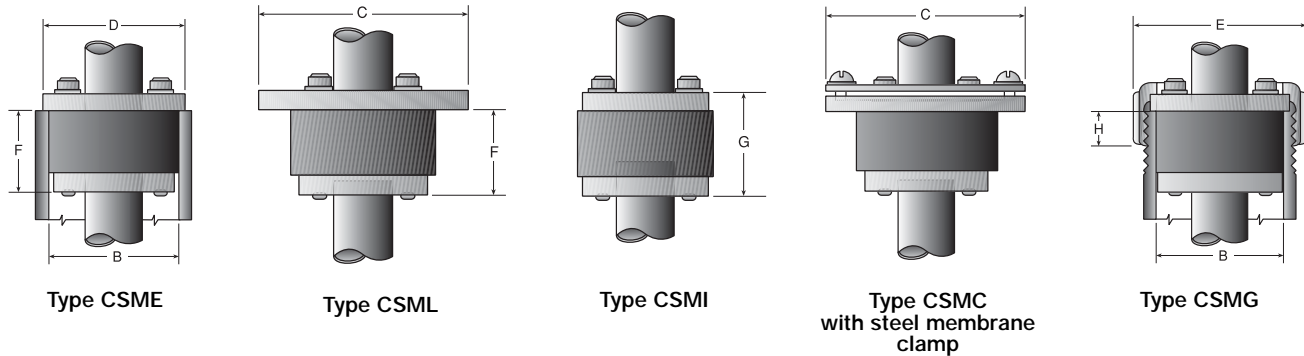
† Blank fittings are intended as abandonment and future use devices only. Do not field drill.

NOTE: For additional information on Type CSM Series See Pages RA21, RA 23

Conduit Sealing Bushings

For Use with Pipe, Conduit or Tubing

Type CSM Dimensional Data:



| Use with Core Conduit Drilled or Pipe Hole Dia. I.D. "A" "B" | Single Penetration Applications Dimension in Inches | | | | | | Catalog No. CSMI - CSML - CSMC - CSME - CSMG - | Multiple Penetration Max. O.D. for More Than One Pipe | | | C Dia. | D Dia. | E | F | G | H |
|---|--|--|----------------------------|-------------------------|---------------------------|-------------------------|---|---|------------|------------|-----------|-----------|--------|-------|-------|-----|
| | Steel Pipe or Conduit Nom I.D. | O.D. | Cast Iron Pipe Nom I.D. | O.D. | Copper Tubing Nom I.D. | O.D. | | 2 Holes | 3 Holes | 4 Holes | | | | | | |
| 2 2.067 | 3/8 1/2 | .675 .840 | | | 3/8 1/2 | .500 .625 | 200P | .790 | .710 | .600 | 3 | 2 1/8 | 2 3/16 | 1 1/8 | 1 1/8 | 5/8 |
| 2 1/2 2.469 | 1 | 1.315 | | | 1 | 1.125 | 250P | .970 | .930 | .730 | 3 1/2 | 2 1/8 | 3 3/8 | 1 1/8 | 1 1/8 | 7/8 |
| 3 3.068 | 1 1/4 1 1/2 | 1.660 1.900 | | | 1 1/4 1 1/2 1 3/4 | 1.375 1.625 1.875 | 300P | 1.210 | 1.110 | .930 | 4 | 3 3/16 | 4 1/8 | 1 1/8 | 1 1/8 | 7/8 |
| 3 1/2 3.548 | | 2.000 | | | 2 | 2.125 | 350P | 1.375 | 1.315 | 1.125 | 4 1/8 | 3 3/16 | 4 1/8 | 1 1/8 | 1 1/8 | 7/8 |
| 4 4.026 | 2 | 2.375 | 2 2 | 2.500 2.625 | 2 1/4 2 1/2 | 2.375 2.625 | 400P | 1.625 | 1.460 | 1.315 | 5 | 4 3/16 | 5 1/8 | 1 1/8 | 1 1/8 | 1 |
| 5 5.047 | 2 1/2 3 | 2.875 3.000 3.500 | 2 | 2.750 | | | 500P | 2.00 | 1.875 | 1.625 | 6 | 5 1/4 | 6 1/4 | 1 1/8 | 1 1/8 | 1 |
| 6 6.065 | 3 1/2 4 | 4.000 4.500 | 3 3 3 | 3.660 3.800 3.960 | | | 600P | 2.500 | 2.125 | 2.000 | 7 1/8 | 6 1/4 | 7 3/8 | 1 1/8 | 1 1/8 | 1 |
| 8 7.981 | 4 1/2 5 6 | 5.000 5.250 5.500 5.563 6.000 6.625 | 4 4 | 4.800 5.000 | | | 800P* | -- | -- | -- | 9 1/8 | -- | -- | 1 1/8 | 1 1/8 | -- |
| 10 10.020 | | 7.000 | 6 6 | 6.900 7.100 | | | 1000P* | -- | -- | -- | 11 1/8 | -- | -- | 1 1/8 | 1 1/8 | -- |
| 12 11.938 | 8 | 8.000 8.625 | 8 8 | 9.050 9.300 | | | 1200P* | -- | -- | -- | 13 1/8 | -- | -- | 1 1/8 | 2 1/8 | -- |
| 14 13.126 | 10 | 10.000 10.750 | 10 10 | 11.100 11.400 | | | 1400P* | -- | -- | -- | 15 1/8 | -- | -- | 1 1/8 | 2 1/8 | -- |
| 16 15.000 | 12 | 12.000 12.750 | 12 12 | 13.200 13.500 | | | 1600P* | -- | -- | -- | 17 1/8 | -- | -- | 1 1/8 | 2 1/8 | -- |

*Type CSMG and CSMC are not available in these sizes.
NOTE: For additional information on Type CSM Series See Pages RA21, RA22