

For New Installation



Thru Wall Floor Seals

For New Installation

NEC/CEC:
Rated for Ordinary Locations

Order of Assembly

Fig. 1

- A If wall or floor thickness is less than 14", cut length of oversize sleeve to suit. Use marker strip provided.
- B Secure assembly of body and oversize sleeve to concrete forms by using the nail holes provided, or by using positioning rods which pass thru the forms and the inside of the fitting.
- C If fitting is to be grounded, attach grounding wire using ground pad assembly which is furnished only when specified.

Note: The sealing assembly parts, which are used later in Step F, are contained in a separate package and should be stored until they are needed.

Fig. 2

- D After concrete has been poured and the forms have been taken down, remove the protective cover from the fitting. (This cover is installed temporarily to keep concrete out of tapped holes and out of fitting.)
- E Pass cable, conduit or tube thru the fitting.

- F Slip one of the pressure rings, the neoprene sealing grommet, the other pressure ring and the pressure clamp over the end of entering cable, conduit or tube as shown and insert these parts into the end of the body.
- G Insert hex head cap screws into screw holes, and tighten until neoprene sealing grommet is sufficiently squeezed between the two pressure rings to seal around the cable, conduit or tube and the inside of body.
- H DO NOT OVER TIGHTEN. At a later date if it is found that the sealing Assembly was not tightened sufficiently, it may be retightened to stop leakage or seepage.

Supplementary Instructions for Installing Sealing Ring

- Sealing ring is coated with rubber lubricant at factory to ease the passage of the oversize sleeve. If the oversize sleeve should be difficult to insert, apply additional rubber lubricant to the sealing ring and/or chamfer the end of the sleeve.

Note: Installation instructions are included with each fitting.

Typical Installation Instructions

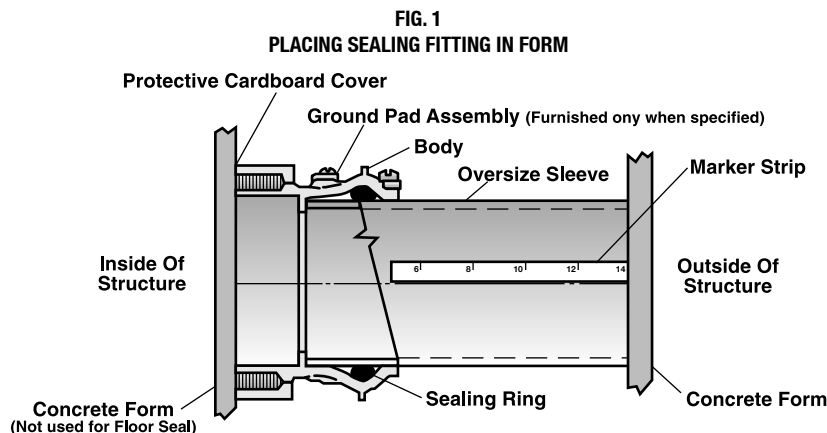
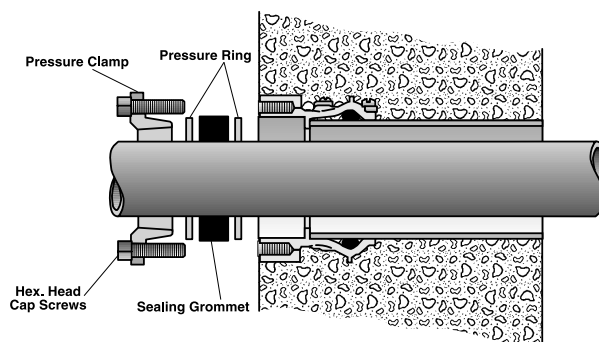


FIG. 2
INSTALLING CABLE CONDUIT OR PIPE AND SEALING ASSEMBLY



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General Information

Design

The Thruwall and Floor Seal performs two functions:

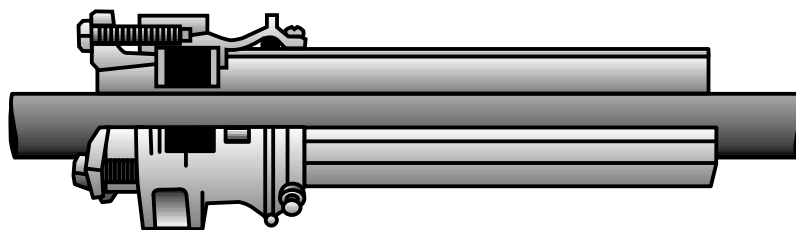
1) TO PROVIDE A WATERTIGHT BLOCKAGE BETWEEN POURED CONCRETE AND THE FITTING BODY. Watertight blockage is accomplished by special designed fins cast on the outside of the Body, which permit the concrete, when it cures, to shrink around these fins, preventing water from creeping along the outside of the body.

2) TO PROVIDE A PRESSURE SEAL BETWEEN THE FITTING BODY AND THE OUTSIDE DIAMETER OF ANY ROUND CASING PENETRATING A WALL, FLOOR OR CEILING. Pressure sealing is based on an engineering principle that solid rubber-like materials are incompressible. If properly selected material is confined and is compressed, the material will flow to fill all voids, providing a very effective, long lasting seal. The sealing grommet is a shock absorber between the fitting and the casing. It allows axial movement of the casing, removing stresses from the casing. The PVC coated steel rings provide cathodic protection as it insulates the sealing fitting from the casing.

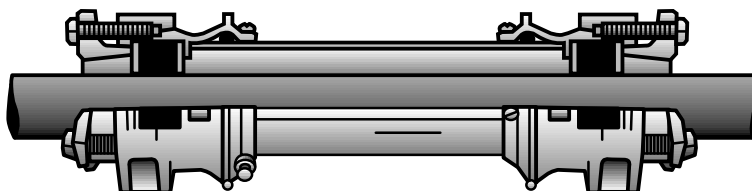
Applications

- Type FSK and WSK Thruwall Sealing Fittings are used where a single casing penetrates the fitting. The FSC and WSC Thruwall Sealing fittings are used where multiple casings penetrate through one fitting.

- The Type FSK and Type FSC fittings are used for most sealing applications. They consist of a body and sealing assembly located on the inside of the structure, and an oversize sleeve which extends from the fitting to the outside of the structure wall. After the foundation is poured, the concrete forms are removed and the round casing is inserted into the body, providing a pressure-tight seal between the round casing and the body of the fitting. The sealing assembly is always available on the inside of the structure for retightening, in the event that sufficient tightening was not utilized during the initial installation.
- The WSK and the WSC fittings are the same as the Type FSK and FSC fittings except that they have a body and sealing assembly on both sides of the oversize sleeve. This provides a pressure seal on both sides of the wall. The Type WSK and WSC fittings can be used on applications where a seal is required on each side of the wall. The body and sealing assembly on the outside of the wall can also be used as a throttle to limit the pressure on the sealing assembly on the inside of the structure. This practice is used where applications require future provisions for replacing the inside sealing assembly when there is a high pressure on the outside wall.
- Another purpose for the Type WSK and WSC fitting is to keep the round casing in the center of the fitting and not have it deflect in the oversize sleeve in the event of earth movement in the back fill.
- Sealing grommets have an expected life in excess of 20 years.



Type FSK



Type WSK

Thru Wall Floor Seals

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General Information

Material Specifications

- 1) BODIES AND PRESSURE CLAMPS are high strength malleable or ductile iron coated with a high organic zinc sacrificial conductive epoxy coating.

Exception: Bodies of FSK 60 are cast iron, malleable iron and cast iron are both inherently corrosion resistant.

- 2) PRESSURE RINGS are closely sized to fitting inside diameter and outside diameter of casing. They are thick steel plates that have a heavy durable PVC coating, utilizing the very effective fluid bed process. PVC coating provides an insulation between the sealing assembly, and the casing to provide cathodic protection by eliminating stray electrical currents from flowing between the fitting and the casting.

Exception: Multi-hole Type FSC and WSC sealing assemblies are furnished with low water-absorbing high-impact thick phenolic plates in electrical applications to eliminate eddy current effect when single conductor AC currents pass through magnetic metal.

- 3) BOLTS are - Hex head cap bolts zinc electroplated.
- 4) NEOPRENE SEALING GROMMETS are molded or drilled to accommodate casing outside diameters. The neoprene is specifically compounded for the following very desirable operating characteristics:
 - Low compression modulus (the ability of the neoprene sealing ring to flow with low-tightening force).
 - Very low compression set (maintain seal over extended period without having to retighten).
 - Anti-oxidant (resistant to ozone attack).
 - Anti-oxidant (resistance to weathering).
 - Low crystallization (suitable for use at low temperatures).
 - Fire retardant (will not support combustion).
- 5) OVERSIZE SLEEVES have a marker strip to facilitate field-cutting of sleeves to accommodate walls or floors of varying thicknesses and are furnished in the following material:
 - On FSK/WSK-10 through FSK/WSK-40 and FSCS/WSCS-20 through FSCS/WSCS-50 - High strength, high-impact, durable Schedule 40 PVC pipe.
 - On FSK/WSK-60 and FSCS/WSCS-70 - Steel pipe coated with a high organic zinc conductive Epoxy coating.
 - FSK/FSCS standard length sleeves will accommodate a wall or floor up to 14 inches thick.
 - WSK/WSCS standard length sleeves will accommodate a wall or floor up to 16 inches thick.

Special Options Available at Price Addition

- 1) Bodies and pressure clamps can be furnished hot dip galvanized, add suffix -HDG.
- 2) Oversize PVC or steel sleeves longer than standard sleeve length are also available, please note:
 - For FSK/WSK-10 to FSK/WSK-40, and FSCS/WSCS-20 to FSCS/WSCS-50, add suffix -MS for PVC or -SMS for steel and specify actual wall/floor thickness in inches (not desired sleeve length).
 - For FSK/WSK-60 and FSCS/WSCS-70, add suffix -SMS and specify actual wall/floor thickness in inches (not desired sleeve length). PVC sleeves are not available in this size.
 - Example: for an FSK20-250 with a PVC sleeve for a 20-inch thick wall, the catalog number is FSK-20-250-MS20.
- 3) Grounding pad for connecting grounding wire, add suffix -G.

Alternate Construction: (Suffix -SEG)

- 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 pulled/terminated. Example: FSCS-45-SEG.

WARNING Blank fittings are intended for use as abandonment plugs and for sealing openings reserved for future use. DO NOT FIELD DRILL. O-Z/Gedney™ will not be responsible for any device that has been modified in the field.

Thru Wall Floor Seals

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Order of Assembly

- 1 Bodies and oversize sleeve as a unit is mounted in concrete forms.
- 2 Pour concrete.
- 3 Remove forms, pass conduit thru fitting and install sealing assembly parts.

Applications

- Where conduit, pipe or tubing enters a building through the concrete foundation below grade or ground water level, or where it is necessary to seal around a conduit, pipe or tubing where it passes through a concrete floor or wall.
- These fittings are designed so that each body size will accept several different size sealing assemblies which are made to fit the standard sizes of conduit, steel or cast iron pipe, or copper tubing.
- If desired, this design permits the purchase of the fitting less the sealing assembly for mounting in the concrete forms before the concrete is poured.
- At a later date the sealing assembly can be ordered and the installation completed.

Features

- The installation of these fittings is simplified by the use of hex head screws on the sealing assembly.

- Ordinary wrenches are used for tightening, which is desirable especially where space is limited.
- The standard fittings up to the "FSK-40-450" are furnished with a PVC oversize sleeve and the "FSK-60-480" thru "FSK-60-663" sizes have a steel sleeve. (Steel sleeves can be furnished on the sizes up to "FSK-40-450". Consult with local representative prior to ordering.)
- All the standard sleeves will accommodate a wall or floor up to 14" thick and a marker strip, divided in inches, is provided on the sleeve to facilitate field cutting for wall less than 14".
- Oversize sleeves longer than standard length available at an additional charge.

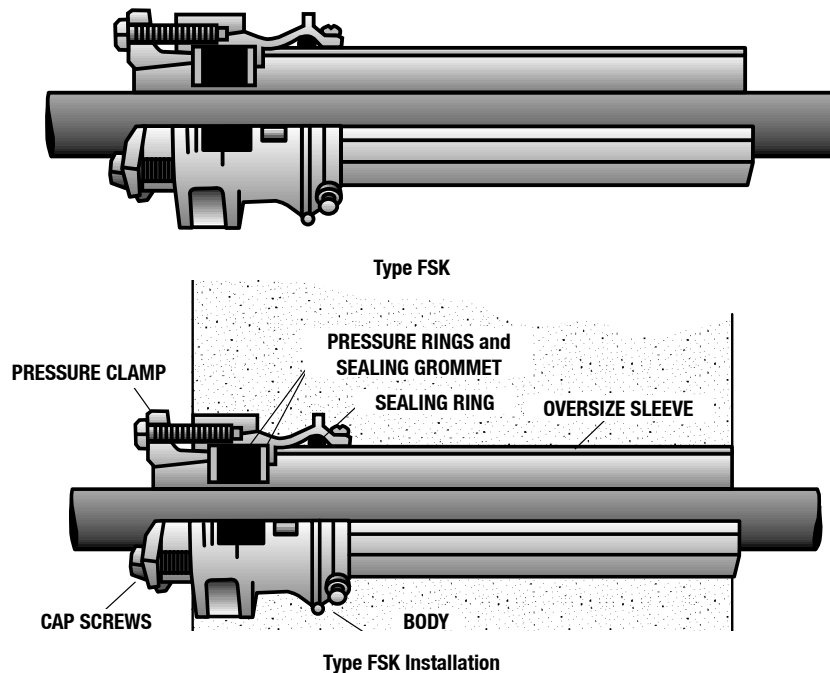
Standard Materials

- Castings - malleable or ductile iron
- FSK 60 Series bodies - cast iron
- Grommet - neoprene
- Pressure rings - steel

Standard Finishes

- Castings - alkyd enamel coating, hot dip galvanized available
- Pressure rings - PVC coated

WARNING: Blank Fittings are intended as abandonment plugs. DO NOT FIELD DRILL.



TO ORDER SPECIFY:

1. Catalog Number
2. Size and O.D. of conduit, pipe or tubing
3. Wall thickness if greater than 14", add suffix -MS for PVC and -SMS for steel material, and specify actual wall thickness (not desired sleeve length). PVC sleeve material not available on FSK-60.
4. Other special options if required, see options page

Thru Wall Floor Seals

For New Installation

NEC/CEC:
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Dimensions in Millimeters (Inches)									
Steel Pipe or Conduit		Cast Iron Pipe		Copper Tubing		Minimum Wall Thickness	Catalog Number		
Nom I.D.	O.D.	Nom I.D.	O.D.	Nom I.D.	O.D.		Fitting Complete with Sealing Assembly ①	Fitting Only ②	Sealing Assembly ④ Only ③
				9.65 (0.38)	12.70 (0.50)		FSK-10-68		FSK-68-25
9.65 (0.38)	17.27 (0.68)			12.70 (0.50)	16.00 (0.63)				
12.70 (0.50)	21.34 (0.84)			19.05 (0.75)	22.35 (0.88)	95.25 (3.75)	FSK-10-88	FSK-1020	FSK-88-25
19.05 (0.75)	26.67 (1.05)			25.40 (1.00)	28.70 (1.13)		FSK-10-113		FSK-113-25
25.4 (1.00)	33.53 (1.32)			31.75 (1.25)	35.05 (1.38)		FSK-10-138		FSK-138-25
31.75 (1.25)	42.16 (1.66)			38.10 (1.5)	41.40 (1.63)		FSK-20-166		FSK-166-35
38.10 (1.50)	48.26 (1.90)			44.45 (1.75)	47.75 (1.88)	106.43 (4.19)	FSK-20-193	FSK-2030	FSK-193-35
	50.80 (2.00)			50.80 (2.00)	54.10 (2.13)		FSK-20-213		FSK-213-35
50.80 (2.00)	60.45 (2.38)	50.80 (2.00)	63.50 (2.50)	57.15 (2.25)	60.45 (2.38)		FSK-20-250		FSK-250-35
		50.80 (2.00)	66.80 (2.63)	63.50 (2.50)	66.8 (2.63)		FSK-30-263		FSK-263-45
63.50 (2.50)	73.15 (2.88)	50.80 (2.00)	69.85 (2.75)			111.25 (4.38)	FSK-30-288	FSK-3040	FSK-288-45
	76.20 (3.00)						FSK-30-313		FSK-313-45
76.20 (3.00)	88.90 (3.50)						FSK-30-350		FSK-350-45
		76.20 (3.00)	92.96 (3.66)				FSK-40-366		FSK-366-55
		76.20 (3.00)	96.52 (3.80)			117.60 (4.63)	FSK-40-380	FSK-4050	FSK-380-55
88.90 (3.50)	101.60 (4.00)	76.20 (3.00)	100.58 (3.96)				FSK-40-410		FSK-410-55
101.60 (4.00)	114.30 (4.50)						FSK-40-450		FSK-450-55
		101.60 (4.00)	121.92 (4.80)				FSK-60-480		FSK-480-80
114.30 (4.50)	127.00 (5.00)	101.60 (4.00)	127.00 (5.00)				FSK-60-506		FSK-506-80
	133.35 (5.25)						FSK-60-530		FSK-530-80
	139.70 (5.50)								
127.00 (5.00)	141.22 (5.56)					127.00 (5.00)	FSK-60-563	FSK-6070	FSK-563-80
	152.40 (6.00)						FSK-60-610		
	165.10 (6.50)								
152.40 (6.00)	168.40 (6.63)						FSK-60-663		FSK-663-80

For Thruwall Seals for LARGE SIZE MECHANICAL PIPES up to 14" O.D., please see Type FSK and WSK - For Large Size Mechanical Pipes.

① Oversize sleeves can be ordered to accommodate wall thickness greater than 14". To order, add suffix -MS for PVC and -SMS for steel material, and specify actual wall thickness (not desired sleeve length). PVC sleeve material not available on FSK-60.

② "Fitting Only" consists of the following parts, malleable or ductile iron bodies, oversize sleeve and sealing rings. (Except FSK 60 Series.)

③ Furnished with a "Sealing Assembly" consisting of the following parts: pressure clamp, hex head cap screws, pressure rings and sealing grommet.

④ A set of pressure rings and sealing grommet only is available separately.

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Order of Assembly

- 1 Bodies and oversize sleeve as a unit is mounted in concrete forms.
- 2 Pour concrete.
- 3 Remove forms, pass conduit thru fitting and install sealing assembly parts.

Applications

- Where conduit, pipe or tubing enters a building through the concrete foundation below grade or ground water level, or where it is necessary to seal around a conduit, pipe or tubing where it passes through a concrete floor or wall.
- These fittings are designed so that each body size will accept several different size sealing assemblies which are made to fit the standard sizes of conduit, steel or cast iron pipe, or copper tubing.
- If desired, this design permits the purchase of the fitting less the sealing assembly for mounting in the concrete forms before the concrete is poured.
- At a later date the sealing assembly can be ordered and the installation completed.

Features

- The installation of these fittings is simplified by the use of hex head screws on the sealing assembly.

- Ordinary wrenches are used for tightening, which is desirable especially where space is limited.
- The standard fittings up to the "WSK-40-450" are furnished with a PVC oversize sleeve and the "WSK-60-480" through "WSK-60-663" sizes have a steel sleeve. (Steel sleeves can be furnished on the sizes up to WSK-40-450. Consult with local representative prior to ordering.)
- All the standard sleeves will accommodate a wall or floor up to 16" thick and a marker strip, divided in inches, is provided on the sleeve to facilitate field cutting for walls less than 16".
- Longer sleeves for use in walls or floors of greater thickness are available.

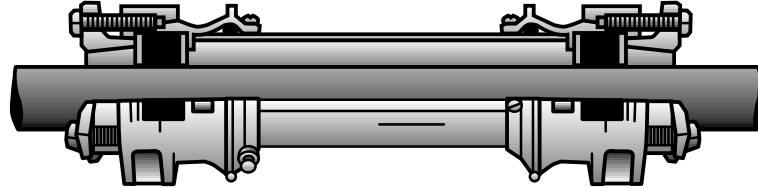
Standard Materials

- Castings - malleable or ductile iron
- WSK 60 Series bodies - cast iron
- Grommet - neoprene
- Pressure rings - steel

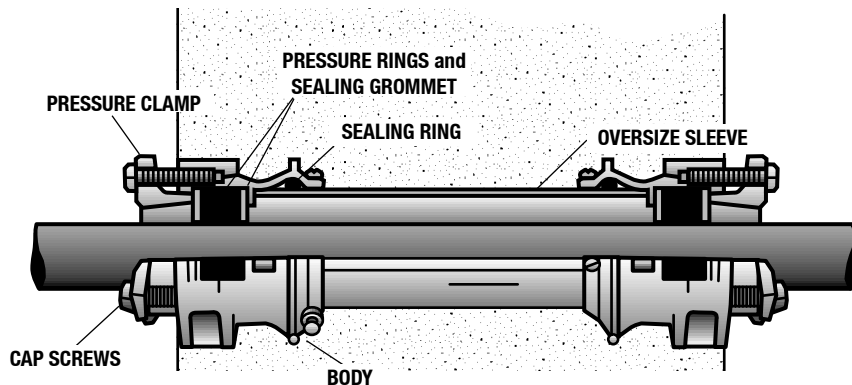
Standard Finishes

- Castings - alkyd enamel coating, hot dip galvanized available
- Pressure rings - PVC coated

WARNING: Blank Fittings are intended as abandonment plugs. DO NOT FIELD DRILL.



Type WSK



Type WSK Installation

TO ORDER SPECIFY:

1. Catalog Number
2. Size and O.D. of conduit, pipe or tubing
3. Wall thickness if greater than 16", add suffix -MS for PVC and -SMS for steel material, and specify actual wall thickness (not desired sleeve length). PVC sleeve material not available on WSK-60.
4. Other special options if required, see options page

Thru Wall Floor Seals

For New Installation

NEC/CEC:
Rated for Ordinary Locations

Steel Pipe or Conduit		Dimensions in Millimeters (Inches)						Catalog Number	
		Cast Iron Pipe		Copper Tubing		Minimum Wall Thickness	Fitting Complete with Sealing Assembly ①	Fitting Only ②	Sealing Assembly④ Only ③
Nom I.D.	O.D.	Nom I.D.	O.D.	Nom I.D.	O.D.				
				9.65 (0.38)	12.70 (0.50)		WSK-10-68		WSK-68-25
9.65 (0.38)	17.27 (0.68)			12.70 (0.50)	16.00 (0.63)				
12.70 (0.50)	21.34 (0.84)			19.05 (0.75)	22.35 (0.88)	190.50 (7.50)	WSK-10-88	WSK-1020	WSK-88-25
19.05 (0.75)	26.67 (1.05)			25.40 (1.00)	28.70 (1.13)		WSK-10-113		WSK-113-25
25.40 (1.00)	33.53 (1.32)			31.75 (1.25)	35.05 (1.38)		WSK-10-138		WSK-138-25
31.75 (1.25)	42.16 (1.66)			38.10 (1.50)	41.4 (1.63)		WSK-20-166		WSK-166-35
38.10 (1.50)	48.26 (1.90)			44.45 (1.75)	47.75 (1.88)	212.85 (8.38)	WSK-20-193	WSK-2030	WSK-193-35
	50.8 (2.00)			50.8 (2.00)	54.10 (2.13)		WSK-20-213		WSK-213-35
50.80 (2.00)	60.45 (2.38)	50.80 (2.00)	63.50 (2.50)	57.15 (2.25)	60.45 (2.38)		WSK-20-250		WSK-250-35
		50.8 (2.00)	66.8 (2.63)	63.50 (2.50)	66.80 (2.63)		WSK-30-263		WSK-263-45
63.5 (2.50)	73.15 (2.88)	50.8 (2.00)	69.85 (2.75)			222.25 (8.75)	WSK-30-288	WSK-3040	WSK-288-45
76.2 (3.00)							WSK-30-313		WSK-313-45
76.2 (3.00)	88.90 (3.50)						WSK-30-350		WSK-350-45
		76.20 (3.00)	92.96 (3.66)				WSK-40-366		WSK-366-55
		76.20 (3.00)	96.52 (3.80)			234.95 (9.25)	WSK-40-380	WSK-4050	WSK-380-55
88.90 (3.50)	101.60 (4.00)	76.20 (3.00)	100.58 (3.96)				WSK-40-410		WSK-410-55
101.60 (4.00)	114.30 (4.50)						WSK-40-450		WSK-450-55
		101.60 (4.00)	121.92 (4.80)				WSK-60-480		WSK-480-80
114.30 (4.50)	127.00 (5.00)	101.60 (4.00)	127.00 (5.00)				WSK-60-506		WSK-506-80
	133.35 (5.25)						WSK-60-530		WSK-530-80
	139.70 (5.50)								
127.00 (5.00)	141.22 (5.56)					254.00 (10.00)	WSK-60-563	WSK-6070	WSK-563-80
	152.40 (6.00)						WSK-60-610		
	165.10 (6.50)								
152.4 (6.00)	168.40 (6.63)						WSK-60-663		WSK-663-80

For Thruwall Seals for LARGE SIZE MECHANICAL PIPES up to 14" O.D., please see Type FSK and WSK - For Large Size Mechanical Pipes.

① Oversize sleeves can be ordered to accommodate wall thickness greater than 16". To order, add suffix -MS for PVC and -SMS for steel material, and specify actual wall thickness (not desired sleeve length). PVC sleeve material not available on WSK-60.

② "Fitting Only" consists of the following parts, malleable or ductile iron bodies, oversize sleeve and sealing rings. (Except FSK 60 Series.)

③ Furnished with a "Sealing Assembly" consisting of the following parts: pressure clamp, hex head cap screws, pressure rings and sealing grommet.

④ A set of pressure rings and sealing grommet only is available separately.

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Application

- Where direct burial cables located below grade or ground water level enter a building through the concrete foundation or for sealing around exposes cables passing through a concrete wall.
- If desired, this design permits the purchase of the fitting less sealing assembly, for mounting in the concrete forms before the concrete is poured.
- At a later date, the sealing assemblies to accommodate the specific size and number of wires can be ordered and the installation completed.

Features

- The installation of these fittings is simplified by the use of hex head screws on the sealing assembly.
- Ordinary wrenches are used for tightening, which is desirable especially where space is limited.
- Where it is desirable or convenient to have a sealing assembly on both sides of the wall Type "WSCS" should be specified.
- The standard fittings up to the "FSCS-5055" and "WSCS-5055" are furnished with PVC sleeve and the "FSCS-7080" and "WSCS-7080" sizes have a steel sleeve. (Steel sleeves can be furnished on the sizes up to "FSCS-5055" and "WSCS-5055" at an additional charge. Consult with local representative prior to ordering.)

- The standard sleeve will accommodate a wall or floor up to 14" thick on the Type "FSCS" fittings and up to 16" thick on the Type "WSCS" fittings and a marker strip, divided in inches is provided on the sleeve to facilitate field cutting for walls or floors less than 14" or 16" thick.
- Oversize sleeves longer than standard length available at an additional charge.

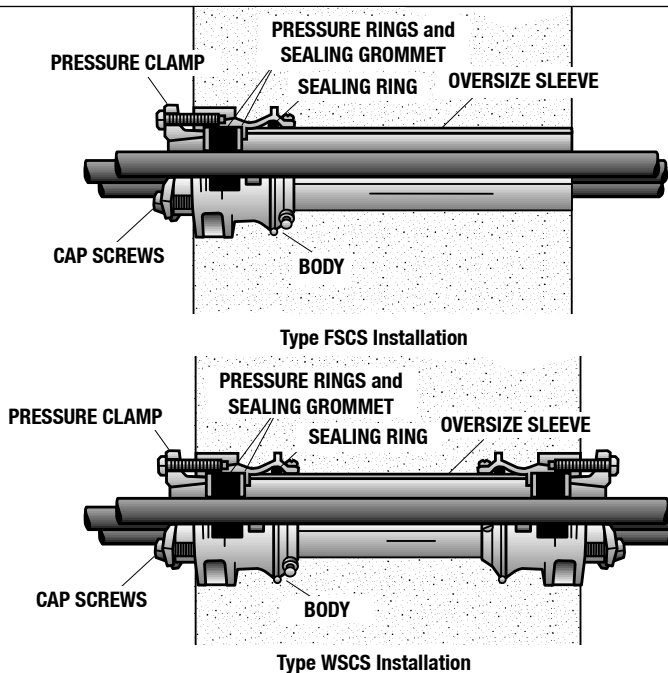
Standard Materials

- Castings - malleable or ductile iron
- FSCS 7080 Series bodies - cast iron
- Pressure rings - phenolic

Standard Finishes

- Castings - alkyd enamel coating, hot dip galvanized available

WARNING: Blank Fittings are intended as abandonment plugs. DO NOT FIELD DRILL.



TO ORDER SPECIFY:

1. Catalog Number
2. Number of Cables
3. Diameter over Insulation of Individual conductors
4. Wall thickness if greater than 14" on Type FSCS or 16" on Type WSCS, add suffix -MS for PVC and -SMS for steel material, and specify actual wall thickness (not desired sleeve length). PVC sleeve material not available on FSCS/WSCS-70.
5. Other special options if required, see options page

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Type FSCS

Max. Diameter ⑤ of Wire Permitted – Millimeters (Inches)						Catalog Number			
1 ④ Wires	2 Wires	3 Wires	4 Wires	Min. Wall Thick.	Max. Dia.	No. of Clamp Screws	Fitting Complete with Sealing Assembly ①	Fitting Only ②	Sealing Assembly Only ③
33.27 (1.31)	14.22 (0.56)	13.46 (0.53)	11.18 (0.44)	95.25 (3.75)	120.65 (4.75)	2	FSCS-2025	FSCS-20	FSCS-25
60.45 (2.38)	26.16 (1.03)	24.64 (0.97)	21.34 (0.84)	106.43 (4.19)	146.05 (5.75)	3	FSCS-3035	FSCS-30	FSCS-35
88.90 (3.50)	40.64 (1.60)	37.34 (1.47)	31.24 (1.23)	111.25 (4.38)	171.45 (6.75)	4	FSCS-4045	FSCS-40	FSCS-45
114.30 (4.50)	50.04 (1.97)	46.99 (1.85)	40.64 (1.60)	117.60 (4.63)	200.15 (7.88)	4	FSCS-5055	FSCS-50	FSCS-55
175.26 (6.90)	78.74 (3.10)	72.39 (2.85)	62.74 (2.47)	127.00 (5.00)	260.35 (10.25)	6	FSCS-7080	FSCS-70	FSCS-80

Type WSCS

Max. Diameter ⑤ of Wire Permitted – Inches						Catalog Number			
1 ④ Wires	2 Wires	3 Wires	4 Wires	Min. Wall Thick.	Max. Dia.	No. of Clamp Screws	Fitting Complete with Sealing Assembly ①	Fitting Only ②	Sealing Assembly Only ③
33.27 (1.31)	14.22 (0.56)	13.46 (0.53)	11.18 (0.44)	190.50 (7.50)	120.65 (4.75)	2	WSCS-2025	WSCS-20	WSCS-25
60.45 (2.38)	26.16 (1.03)	24.64 (0.97)	21.34 (0.84)	212.85 (8.38)	146.05 (5.75)	3	WSCS-3035	WSCS-30	WSCS-35
88.90 (3.50)	40.64 (1.60)	37.34 (1.47)	31.24 (1.23)	234.95 (9.25)	171.45 (6.75)	4	WSCS-4045	WSCS-40	WSCS-45
114.30 (4.50)	50.04 (1.97)	46.99 (1.85)	40.64 (1.6)	234.95 (9.25)	200.15 (7.88)	4	WSCS-5055	WSCS-50	WSCS-55
175.26 (6.90)	78.74 (3.10)	72.39 (2.85)	62.74 (2.47)	254.00 (10.00)	260.35 (10.25)	6	WSCS-7080	WSCS-70	WSCS-80

For sizes other than those shown above, consult factory.

① Oversize sleeves can be ordered to accommodate wall thickness greater than 14" (Type FSCS) and 16" (Type WSCS). To order, add suffix -MS for PVC and -SMS for steel material, and specify actual wall thickness (not desired sleeve length). PVC sleeve material not available on FSCS/WSCS-70.

② "Fitting Only" consists of the following parts, malleable or ductile iron body (2 on type "WSCS"). Sealing ring(s) and oversize sleeve.

③ Furnished with a "Sealing Assembly" consisting of the following parts: pressure clamp, hex head cap screws, pressure rings, and sealing grommet. Type "WSCS" is furnished with two sealing assemblies.

④ If a single alternating current conductor is used, a non-ferrous fitting must be specified. Refer to factory.

⑤ Fittings can be furnished for more than four wires or for wires of varying sizes.

Thru Wall Floor Seals

Controlled Environment Vault Cable Seal

For Cable Penetrations of Underground Vaults

NEC/CEC:
Rated for Ordinary Locations

Applications

- To seal cable penetration of controlled environment vaults.
- For use as a future use fitting.

Features:

- Cast iron durability.
- Integral water barrier.
- Seals tightened with standard 3/4" wrench.
- Easy, craft friendly installation.
- Hub with NPT thread.
- Withstands 50 ft. head of water pressure without leakage.
- Fitting seal always accessible for retightening.

Standard Materials

- Sealing grommet - low compression modulus neoprene
- Hex head bolts: zinc plated steel
- Pressure discs: steel

Standard Finishes

- Pressure discs - PVC coated

Options

- Pressure Discs - stainless steel PVC coated
- Bolts - galvanized or stainless steel
- Sealing grommet available for multiple cables of varying sizes

Cable Sealing Assembly Consists of

- Two pressure discs drilled to size
- One sealing grommet to fit cable O.D.

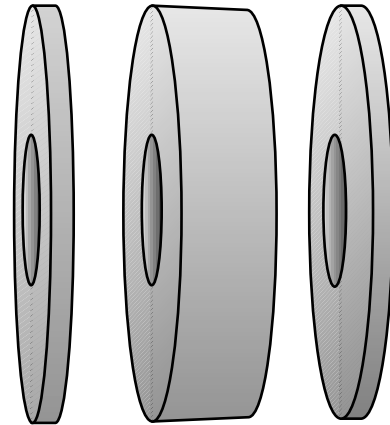
TO ORDER SPECIFY:

1. Catalog Number
2. Number of Cables
3. Maximum Diameter of Individual Cables
4. Optional Material, if required

Grommet Characteristics

- Neoprene sealing grommets are molded or drilled to accommodate cable outside diameters.
- The Neoprene is specifically compounded for the following very desirable operating characteristics:
 - Low compression modulus (the ability of the neoprene to flow with low-tightening force)
 - Very low compression set (maintain seal over extended period without having to retighten)
 - Anti-oxidant (resistance to weathering and ozone attack)
 - Low crystallization (suitable for use at low temperatures)
 - Fire retardant (will not support combustion)
- An expected life in excess of 20 years

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



Cable Sealing Assembly

Max. Diameter of Cable Permitted – Millimeters (Inches)					Catalog Number
1 Cable	2 Cables	3 Cables	4 Cables	Max. Dia.	
88.90 (3.50)	36.32 (1.43)	33.27 (1.31)	28.70 (1.13)	115.82 (4.56)	FSCS-45-CEV
114.30 (4.50)	49.02 (1.93)	44.45 (1.75)	38.10 (1.50)	139.70 (5.50)	FSCS-55-CEV

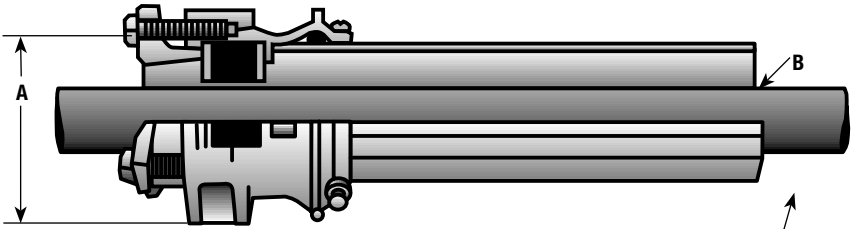
Thru Wall Floor Seals

For Sealing Around a Conduit Pipe or Tube Passing through a Wall or Floor

NEC/CEC:
Rated for Ordinary Locations

Steel Pipe or Conduit		Cast Iron Pipe		Copper Tubing		Wall Thickness Range		A Max. Dia.	B Oversize Sleeve Size Nom. I.D.	No. of Clamp Screws	Catalog Number		
Nom. I.D.	O.D.	Nom. I.D.	O.D.	Nom. I.D.	O.D.	Min.	Max.				Fitting Complete with Sealing Assembly	Fitting Only	Sealing Assembly Only
9.65 (0.38)	17.27 (0.68)			9.65 (0.38)	12.70 (0.50)						FSK-10-68		FSK-68-25
12.70 (0.50)	21.34 (0.84)			12.70 (0.50)	16.00 (0.63)								
19.05 (0.75)	26.67 (1.05)			19.05 (0.75)	22.35 (0.88)	95.25 (3.75)	355.60 (14.00)	120.65 (4.75)	50.80 (2.00)	2	FSK-10-88	FSK-1020	FSK-88-25
25.40 (1.00)	33.53 (1.32)			25.40 (1.00)	28.70 (1.13)						FSK-10-113		FSK-113-25
				31.75 (1.25)	35.05 (1.38)						FSK-10-138		FSK-138-25
31.75 (1.25)	42.16 (1.66)			38.10 (1.50)	41.40 (1.63)	106.43 (4.19)	355.60 (14.00)	146.05 (5.75)	76.20 (3.00)	3	FSK-20-166		FSK-166-35
38.10 (1.50)	48.26 (1.9)			44.45 (1.75)	47.75 (1.88)						FSK-20-193	FSK-2030	FSK-193-35
	50.80 (2.00)			50.80 (2.00)	54.10 (2.13)						FSK-20-213		FSK-213-35
50.80 (2.00)	60.45 (2.38)	50.80 (2.00)	63.50 (2.50)	57.15 (2.25)	60.45 (2.38)						FSK-20-250		FSK-250-35
		50.80 (2.00)	66.80 (2.63)	63.50 (2.50)	66.80 (2.63)	111.25 (4.38)	355.60 (14.00)	171.45 (6.75)	101.60 (4.00)	4	FSK-30-263		FSK-263-45
63.50 (2.50)	73.15 (2.88)	50.80 (2.00)	69.85 (2.75)								FSK-30-288	FSK-3040	FSK-288-45
	76.20 (3.00)										FSK-30-313		FSK-313-45
76.20 (3.00)	88.90 (3.50)										FSK-30-350		FSK-350-45
		76.20 (3.00)	92.96 (3.66)			117.60 (4.63)	355.60 (14.00)	200.15 (7.88)	127.00 (5.00)	4	FSK-40-366		FSK-366-55
		76.20 (3.00)	96.52 (3.80)								FSK-40-380	FSK-4030	FSK-380-55
88.90 (3.50)	101.60 (4.00)	76.20 (3.00)	100.58 (3.96)								FSK-40-410		FSK-410-55
101.60 (4.00)	114.30 (4.50)										FSK-40-450		FSK-450-55
		101.60 (4.00)	121.92 (4.80)			127.00 (5.00)	355.60 (14.00)	260.35 (10.25)	177.80 (7.00)	6	FSK-60-480		FSK-480-80
114.30 (4.50)	127.00 (5.00)	101.60 (4.00)	127.00 (5.00)								FSK-60-506		FSK-506-80
	133.35 (5.25)										FSK-60-530		FSK-530-80
	139.70 (5.50)											FSK-6070	
	141.22 (5.56)												
	152.40 (6.00)										FSK-60-610		FSK-610-80
	165.10 (6.50)												
	168.40 (6.63)												

- Order of Assembly:
1. Body and oversize sleeve as a unit is mounted to concrete forms
 2. Pour concrete
 3. Remove Forms, pass conduit through fitting and install sealing assembly parts



Type FSK

Existing Conduit

Thru Wall Floor Seals

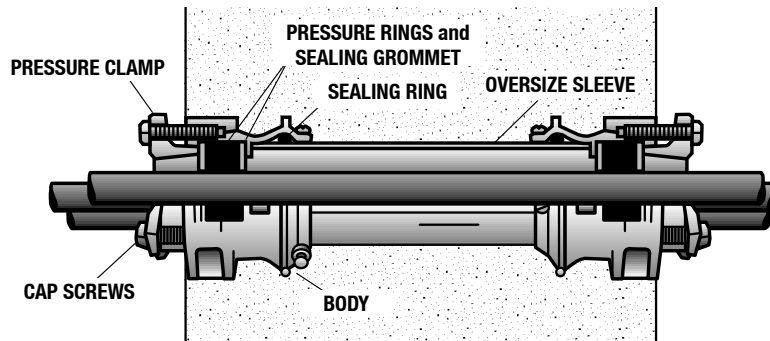
For Sealing Around Conduit Passing through a Wall or Floor

NEC/CEC:
Rated for Ordinary Locations

Steel Pipe or Conduit		Cast Iron Pipe		Copper Tubing		Wall Thickness Range		A Max. Dia.	B Oversize Sleeve Size Nom. I.D.	No. of Clamp Screws	Catalog Number		
Nom. I.D.	O.D.	Nom. I.D.	O.D.	Nom. I.D.	O.D.	Min.	Max.				Fitting Complete with Sealing Assembly	Fitting Only	Sealing Assembly Only
9.65 (0.38)	17.27 (0.68)			9.65 (0.38)	12.70 (0.50)						WSK-10-68		WSK-68-25
12.70 (0.50)	21.34 (0.84)			12.70 (0.50)	16.00 (0.63)	190.50 (7.50)	406.40 (16.00)	120.65 (4.75)	50.80 (2.00)	2	WSK-10-88	WSK-1020	WSK-88-25
19.05 (0.75)	26.67 (1.05)			19.05 (0.75)	22.35 (0.88)						WSK-10-113		WSK-113-25
25.40 (1.00)	33.53 (1.32)			25.40 (1.00)	28.70 (1.13)						WSK-10-138		WSK-138-25
31.75 (1.25)	42.16 (1.66)			31.75 (1.25)	35.05 (1.38)								
38.10 (1.50)	48.26 (1.90)			38.10 (1.50)	41.40 (1.63)						WSK-20-166		WSK-166-35
	50.80 (2.00)			44.45 (1.75)	47.75 (1.88)	212.85 (8.38)	406.40 (16.00)	146.05 (5.75)	76.20 (3.00)	3	WSK-20-193	WSK-2030	WSK-193-35
50.80 (2.00)	60.45 (2.38)	50.80 (2.00)	63.50 (2.50)	50.80 (2.00)	54.10 (2.13)						WSK-20-213		WSK-213-35
				57.15 (2.25)	60.45 (2.38)						WSK-20-250		WSK-250-35
		50.80 (2.00)	66.80 (2.63)	63.50 (2.50)	66.80 (2.63)						WSK-30-263		WSK-263-45
63.50 (2.50)	73.15 (2.88)	50.80 (2.00)	69.85 (2.75)			222.25 (8.75)	406.40 (16.00)	171.45 (6.75)	101.60 (4.00)	4	WSK-30-288	WSK-3040	WSK-288-45
	76.20 (3.00)										WSK-30-313		WSK-313-45
76.20 (3.00)	88.90 (3.50)										WSK-30-350		WSK-350-45
		76.20 (3.00)	92.96 (3.66)								WSK-40-366		WSK-366-55
		76.20 (3.00)	96.52 (3.80)			234.95 (9.25)	406.40 (16.00)	200.15 (7.88)	127.00 (5.00)	4	WSK-40-380	WSK-4050	WSK-380-55
88.90 (3.50)	101.60 (4.00)	76.20 (3.00)	100.58 (3.96)								WSK-40-410		WSK-410-55
101.60 (4.00)	114.30 (4.50)										WSK-40-450		WSK-450-55
		101.60 (4.00)	121.92 (4.80)								WSK-60-480		WSK-480-80
114.30 (4.50)	127.00 (5.00)	101.60 (4.00)	127.00 (5.00)								WSK-60-506		WSK-506-80
	133.35 (5.25)										WSK-60-530		WSK-530-80
	139.70 (5.50)					254.00 (10.00)	406.40 (16.00)	260.35 (10.25)	177.80 (7.00)	6		WSK-6070	
	141.22 (5.56)												
	152.40 (6.00)												
	165.10 (6.50)												
	168.40 (6.63)												

Order of Assembly:

1. Body and oversize sleeve as a unit is mounted to concrete forms
2. Pour concrete
3. Remove Forms, pass conduit through fitting and install sealing assembly parts



Type WSK