Environmental seal for conduit passing through concrete walls, floors or ceilings

Applications:

- Link-Seal® is the quick, economical way to seal around conduit in concrete walls, floors and casings
- Link-Seal is a modular mechanical seal used for any type of penetration

Features:

- Saves time and money – Link-Seal installs in up to 75% less time than competition products
- Positive hydrostatic sealing – properly installed, Link-Seal is rated at 20 PSIg (40 feet of head), which exceeds the performance requirements of most applications
- Environment seals – Link-Seal environmental seal is designed for long life and use as a permanent seal; seal elements are specially compounded to resist aging, ozone, sunlight, water and a wide range of chemicals
- Fire seals – for fire protection in floor and wall penetrations, Link-Seal is Factory Mutual approved
- Resistance to high and low temperatures – Link-Seal environmental seal is manufactured from special compounds that resist temperatures from -40°F to +250°F; Link-Seal fire seal is manufactured from a silicone material that resists temperatures from -67°F to +400°F
- Corrosion protection – where installation against galvanic corrosion (or electrolysis) is required, Link-Seal provides complete separation pipe and casing; metal-to-metal contact is eliminated
- Compensates for misalignment – Link-Seal allows for some angular and off center conduit conditions and still seals effectively
- Absorbs shock, sound and vibration – this inherent benefit of Link-Seal helps reduce conduit failure due to fatigue and threaded connections

Standard materials:

- Rubber seal elements – environmental seals: EPDM (black); fire seals: silicone (gray)
- Pressure plates – environmental seals: glass-reinforced nylon; fire seals: steel with zinc dichromate plate
- Fasteners – environmental seals: carbon steel, zinc dichromate plate; 316 stainless steel (optional with suffix S316); fire seals: carbon steel with zinc dichromate

Environmental conduit seal

Ordering information:

It's easy. Locate the conduit size and type you are installing in the columns on the left. Then locate the seal and sleeve part numbers under the installation method you've selected. No sleeve is needed for cored or cast hole installation.

Cored or cast hole method:

Note the appropriate hole diameter and select the seal part number. Example: for ¾" EMT conduit through a cored hole – core a 2" diameter hole and install the conduit using Link-Seal catalog number LSA200-C-04.

Sleeve methods:

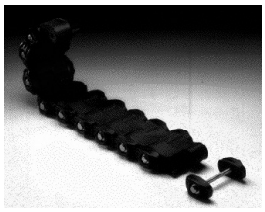
Select either the plastic or metal sleeve. Both types of sleeves are designed to be cast into concrete walls or floors. Sleeves are ordered separately. Remember to add the wall or floor thickness to the steel sleeve catalog number to ensure the sleeve is provided in the proper length. Plastic sleeves are a standard 16 long and can be modified in the field.

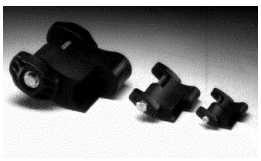
Standard materials:

The standard product for environmental conduit seals is made from EPDM supplied with steel bolts and nuts with a zinc dichromate finish. These seals are suitable for use in water, direct ground burial and atmospheric conditions. They provide electrical insulation where cathodic protection is required. EPDM rubber is resistant to most inorganic acids and alkalis, and some organic chemicals (acetone, alcohol, ketones).

Options:

To order the standard product with 316 stainless steel bolts and nuts, for corrosive environments, replace the 'C' in the seal catalog number with 'S316.' For example, a ½" seal for rigid steel conduit for a cored hole is an LSA200-C-04; ordered with stainless steel bolts and nuts, the catalog number becomes LSA200-S316-04.





Environmental seal for conduit passing through concrete walls, floors or ceilings

Ordering information – environmental conduit seal:

Conduit nominal size	Conduit type[A]	Conduit actual O.D. (in.)	Cast / cored hole dia. (in.)	Cat. # Seal for cast / cored hole	Cat. # Plastic sleeve	Cat. # Seal for plastic sleeve	Cat. # Steel sleeve	Cat. # Seal for steel sleeve
1/2"	EMT	0.706	2.000	**LSA275 C 04**	**LS CS 2 16**	**LSA200 C 04**	**WS2 15** ①	**LSA275 C 04**
1/2"	IMC	0.815	2.000	**LSA200 C 04**	**LS CS 2 16**	**LSA200 C 04**	**WS2 21** ①	**LSA200 C 04**
1/2"	RSC	0.840	2.000	**LSA200 C 04**	**LS CS 2 16**	**LSA200 C 04**	**WS2 21** ①	**LSA200 C 04**
3/4"	EMT	0.922	2.000	**LSA200 C 04**	**LS CS 3 16**	**LSA315 C 04**	**WS2 15** ①	**LSA200 C 04**
3/4"	IMC	1.029	2.500	**LSA275 C 06**	**LS CS 3 16**	**LSA315 C 04**	**WS2 15** ①	**LSA200 C 04**
3/4"	RSC	1.050	2.500	**LSA275 C 06**	**LS CS 3 16**	**LSA315 C 04**	**WS2.5 20** ①	**LSA275 C 06**
1"	EMT	1.163	3.000	**LSA315 C 04**	**LS CS 3 16**	**LSA300 C 04**	**WS2.5 20** ①	**LSA275 C 06**
1"	IMC	1.290	3.000	**LSA300 C 04**	**LS CS 3 16**	**LSA300 C 04**	**WS2.5 20** ①	**LSA275 C 06**
1"	RSC	1.315	3.000	**LSA300 C 04**	**LS CS 3 16**	**LSA300 C 04**	**WS2.5 20** ①	**LSA200 C 05**
1 1/4"	EMT	1.510	3.000	**LSA300 C 04**	**LS CS 3.5 16**	**LSA315 C 05**	**WS3.5 22** ①	**LSA315 C 05**
1 1/4"	IMC	1.638	3.000	**LSA275 C 07**	**LS CS 3.5 16**	**LSA300 C 05**	**WS3.5 22** ①	**LSA315 C 05**
1 1/4"	RSC	1.660	3.000	**LSA275 C 07**	**LS CS 3 16**	**LSA200 C 06**	**WS3.5 22** ①	**LSA315 C 05**
1 1/2"	EMT	1.740	3.500	**LSA315 C 05**	**LS CS 3.5 16**	**LSA300 C 05**	**WS3.5 32** ①	**LSA315 C 05**
1 1/2"	IMC	1.883	3.500	**LSA300 C 05**	**LS CS 3.5 16**	**LSA275 C 08**	**WS3.5 22** ①	**LSA300 C 05**
1 1/2"	RSC	1.900	3.500	**LSA300 C 05**	**LS CS 3.5 16**	**LSA275 C 08**	**WS3.5 22** ①	**LSA300 C 05**
2"	EMT	2.197	4.000	**LSA315 C 06**	**LS CS 4 16**	**LSA315 C 06**	**WS4 23** ①	**LSA315 C 06**
2"	IMC	2.360	4.000	**LSA300 C 06**	**LS CS 4 16**	**LSA300 C 06**	**WS4 23** ①	**LSA300 C 06**
2"	RSC	2.375	4.000	**LSA300 C 06**	**LS CS 4 16**	**LSA300 C 06**	**WS4 23** ①	**LSA300 C 06**
2 1/2"	EMT/RSC	2.875	4.000	**LSA200 C 09**	**LS CS 4 16**	**LSA200 C 09**	**WS4 23** ①	**LSA200 C 09**
2 1/2"	IMC	2.857	4.000	**LSA200 C 09**	**LS CS 4 16**	**LSA200 C 09**	**WS4 23** ①	**LSA200 C 09**
3"	EMT/RSC	3.500	5.000	**LSA300 C 08**	**LS CS 5 16**	**LSA300 C 08**	**WS5 25** ①	**LSA300 C 08**
3"	IMC	3.476	5.000	**LSA300 C 08**	**LS CS 5 16**	**LSA300 C 08**	**WS5 25** ①	**LSA300 C 08**
3 1/2"	EMT/RSC	4.000	6.000	**LSA325 C 05**	**LS CS 6 16**	**LSA325 C 05**	**WS6 28** ①	**LSA325 C 05**
3 1/2"	IMC	3.971	6.000	**LSA325 C 05**	**LS CS 6 16**	**LSA325 C 05**	**WS6 28** ①	**LSA325 C 05**
4"	EMT/RSC	4.500	6.000	**LSA300 C 10**	**LS CS 6 16**	**LSA300 C 10**	**WS6 28** ①	**LSA300 C 10**
4"	IMC	4.466	6.000	**LSA300 C 10**	**LS CS 6 16**	**LSA300 C 10**	**WS6 28** ①	**LSA300 C 10**
5"	RSC	5.563	8.000	**LSA425 C 06**	**LS CS 8 16**	**LSA425 C 06**	**WS8 32** ①	**LSA425 C 06**
6"	RSC	6.625	10.000	**LSA475 C 10**	**LS CS 10 16**	**LSA475 C 10**	**WS8 18** ①	**LSA300 C 15**

①Specify length of steel sleeve in inches. Example: S6-28-08 is 8" long. All plastic sleeves come in standard 16" lengths and can be field cut to desired length.

Note: The last two digits of the seal catalog number indicate the number of links (and the number of bolts) per seal.

[A]EMT – Electrical Metallic Tubing; IMC – Intermediate Metal Conduit; RSC – Rigid Steel Conduit. Also suitable for use with PVC pipe. RSC and PVC share common dimensions.

Environmental seal for conduit passing through concrete walls, floors or ceilings

Fire conduit seal

Ordering information:

Locate the conduit size and type you are installing in the columns on the left. Then locate the seal and sleeve catalog number under the installation method you've selected. No sleeve is needed for cored or cast hole installation.

Sleeve methods:

Select the appropriate metal sleeve for the size and type of conduit being installed. The sleeve should be ordered separately. Remember to add the wall or floor thickness to the steel sleeve catalog number to ensure the sleeve is provided in the proper length.

Cored or cast hole method:

Note the appropriate hole diameter and select the seal catalog number. Example: for ¾" EMT conduit through a cored hole – core a 2" diameter hole and install the conduit using Link-Seal catalog number LSA200-T-04.

Standard materials:

The standard product for fire conduit seals is made from gray silicone supplied with steel bolts and nuts with a zinc dichromate finish. These seals are Factory Mutual approved for use as a 1-hour fire stop and can handle temperature extremes of -67°F to +400°F.

Ordering information – fire conduit seal:

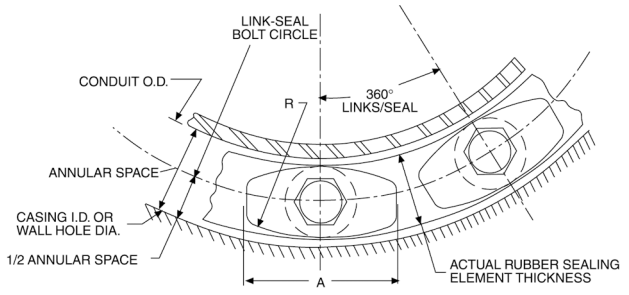
Conduit nominal size	Conduit type[B]	Conduit actual O.D. (in.)	Cast / cored hole dia. (in.)	Cat. # Seal for cast / cored hole	Cat. # Steel sleeve	Cat. # Seal for steel sleeve
½"	EMT	0.706	2.000	**LSA275 T 04**	**WS2 15** ①	**LSA275 T 04**
½"	IMC	0.815	2.000	**LSA200 T 04**	**WS2 21** ①	**LSA200 T 04**
½"	RSC	0.840	2.000	**LSA200 T 04**	**WS2 21** ①	**LSA200 T 04**
¾"	EMT	0.922	2.000	**LSA200 T 04**	**WS2 15** ①	**LSA200 T 04**
¾"	IMC	1.029	2.500	**LSA275 T 06**	**WS2 15** ①	**LSA200 T 04**
¾"	RSC	1.050	2.500	**LSA275 T 06**	**WS2.5 20** ①	**LSA275 T 06**
1"	EMT	1.163	3.000	**LSA315 T 04**	**WS2.5 20** ①	**LSA275 T 06**
1"	IMC	1.290	3.000	**LSA300 T 04**	**WS2.5 20** ①	**LSA275 T 06**
1"	RSC	1.315	3.000	**LSA300 T 04**	**WS2.5 20** ①	**LSA200 T 05**
1¼"	EMT	1.510	3.000	**LSA300 T 04**	**WS3.5 22** ①	**LSA315 T 05**
1¼"	IMC	1.638	3.000	**LSA275 T 07**	**WS3.5 22** ①	**LSA315 T 05**
1¼"	RSC	1.660	3.000	**LSA275 T 07**	**WS3.5 22** ①	**LSA300 T 05**
1½"	EMT	1.740	3.500	**LSA315 T 05**	**WS3.5 32** ①	**LSA300 T 05**
1½"	IMC	1.883	3.500	**LSA300 T 05**	**WS3.5 22** ①	**LSA300 T 05**
1½"	RSC	1.900	3.500	**LSA300 T 05**	**WS3.5 22** ①	**LSA275 T 08**
2"	EMT	2.197	4.000	**LSA315 T 06**	**WS4 23** ①	**LSA315 T 06**
2"	IMC	2.360	4.000	**LSA300 T 06**	**WS4 23** ①	**LSA300 T 06**
2"	RSC	2.375	4.000	**LSA300 T 06**	**WS4 23** ①	**LSA300 T 06**
2½"	EMT/RSC	2.875	4.000	**LSA200 T 09**	**WS4 23** ①	**LSA200 T 09**
2½"	IMC	2.857	4.000	**LSA200 T 09**	**WS4 23** ①	**LSA200 T 09**
3"	EMT/RSC	3.500	5.000	**LSA300 T 08**	**WS5 25** ①	**LSA300 T 08**
3"	IMC	3.476	5.000	**LSA300 T 08**	**WS5 25** ①	**LSA300 T 08**
3½"	EMT/RSC	4.000	6.000	**LSA325 T 05**	**WS6 28** ①	**LSA325 T 05**
3½"	IMC	3.971	6.000	**LSA325 T 05**	**WS6 28** ①	**LSA325 T 05**
4"	EMT/RSC	4.500	6.000	**LSA300 T 10**	**WS6 28** ①	**LSA300 T 10**
4"	IMC	4.466	6.000	**LSA300 T 10**	**WS6 28** ①	**LSA300 T 10**
5"	RSC	5.563	8.000	**LSA425 T 06**	**WS8 32** ①	**LSA425 T 06**
6"	RSC	6.625	10.000	**LSA475 T 10**	**WS8 18** ①	**LSA300 T 15**

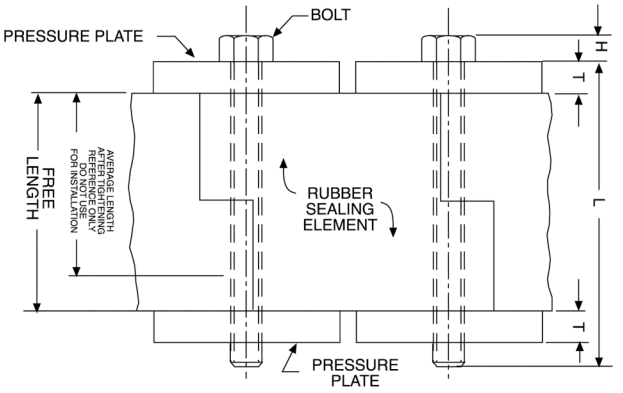
①Specify length of steel sleeve in inches. Example: WS6-28-08 is 8" long.

Note: The last two digits of the seal catalog number indicate the number of links (and the number of bolts) per seal.

[B]EMT – Electrical Metallic Tubing; IMC – Intermediate Metal Conduit; RSC – Rigid Steel Conduit.

Dimensions (in inches):





Technical information:

	Rubber sealing element			Pressure plate			Bolt			
Cat. #	Actual thickness (in.)	Free length (in.)	Average length after tightening (in.)	A (in.)	R (in.)	T (in.)	Hex across flats	H (in.)	Thread size (in.)	L
LSA200 C	0.478	1 3/4	1 3/8	1 1/16	2 1/4	5/16	M5 slotted hex	0.180	M5	2 1/2
LSA275 C	0.607	1 3/4	1 3/8	7/8	1 7/8	5/16	M5 slotted hex	0.180	M5	2 1/2
LSA300 C	0.687	2 1/2	2	1 1/2	2 1/2	7/16	1/2	7/32	5/16 - 5/18	3 1/2
LSA315 C	0.807	2 1/2	2	1 7/16	2 1/2	7/16	1/2	7/32	5/16 - 5/18	3 1/2
LSA325 C	0.875	3	2 3/8	3 1/8	2	1/2	1/2	7/32	5/16 - 5/18	4
LSA425 C	1.062	3 1/2	2 3/4	3 1/2	3	3/4	9/16	1/4	3/8 - 3/16	5
LSA475 C	1.562	3 1/2	2 3/4	3 1/2	3 1/2	1/2	9/16	1/4	3/8 - 3/16	4 1/2