

Type HFSLA

Part of the **SHIELD-FLEX®** family of EMI/RFI Shielding conduits, as well as **Zero-Halogen** product family.

Type HFSLA is identical to standard UL Listed liquidtight flexible steel conduit (See Type LA) but is augmented with a tinned copper shielding braid located over the inner steel core and under its protective Polyurethane jacket. The braid offers a minimum of 90% coverage.

Type HFSLA liquidtight flexible shielding conduit is designed for field installations where safety concerns exist regarding a material's reaction in a fire situation. The specially formulated thermoplastic polyurethane jacket has excellent flame retardancy and low smoke characteristics. Acidic gases such as hydrogen chloride, hydrogen fluoride and hydrogen bromide are virtually eliminated as products of combustion.

Construction:

Inner Core:

- Hot Dipped Galvanized Steel
- 3/8" – 1-1/4" Squarelock Profile with continuous bonding strip
- 1-1/2" – 2" Fully Interlocked Profile
- Shielded with a tinned copper braid

Liquidtight Jacket:

- Low Smoke Zero-Halogen Thermoplastic
- Resistant to Ozone, Hydrocarbons, Moderate **Chemicals and Oils**
- Flame Retardant / Self-Extinguishing
- Low Smoke
- Low Toxicity
- Sunlight Resistant (UV)

Application:

- Meets ASTM E162 for Flame Spread
- Meets the requirements of Bombardier SMP 800-C for Toxic Gas Generation.
- Meets the requirements of ASTM E662 for Smoke Generation.
- NFPA130 approved

This conduit is intended for installation in accordance with Article 350 of the NEC (ANSI/NFPA-70)



All Products Proudly Made in the USA

Product Information

CERTIFICATIONS & COMPLIANCE



Listed File # E29278. Conforms to Underwriters Laboratories Standard ANSI/UL-360 for Liquidtight Flexible Steel conduit.



WEEE and RoHS Compliant



BS EN IEC 61386 Classification Code 445240650414 **CE**

Declaration

ARRA: For ARRA Certification Letter, please [click here](#)



BABA Compliant

STANDARD COLORS

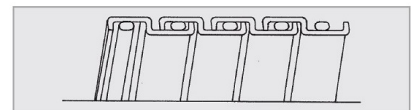
Black. **Other colors and jacketing materials available upon request**

WORKING TEMPERATURES:

-40°C to 105°C Air / 60°C Wet / 70°C Oil

-40°F to 221°F Air / 140°F Wet / 158°F Oil

- Suitable as an equipment grounding conductor per Article 250.118(6). Larger sizes require separate grounding conductor.
- Suitable for use in hazardous locations: Class I, Div. 2 and Classes II and III.
- PVC jacket is resistant to a wide variety of oils, acids, alkaline and ultraviolet light.
- Accepts Standard Metallic Liquidtight Fittings
- Designed for wiring applications requiring shielding effectiveness from Electromagnetic and Radio Frequency Interference (EMI/RFI)
- Listed and marked for Direct Burial and in Poured Concrete.



Squarelock with Filler Sizes
3/8" - 1-1/4"

HFSLA is a trademark of Electri-Flex Company, registered in the U.S. Patent and Trademark Office.

Combustion & Flammability Properties

COMBUSTION & FLAMMABILITY

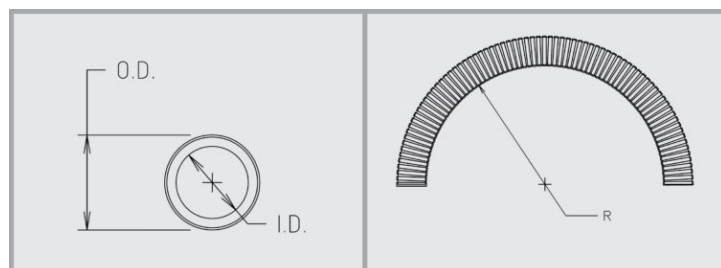
TEST

Vertical Burn (Material)	UL94 (V-0)
Vertical Burn (Conduit)	UL360
Oxygen Index %	D2863
Flame Spread Index	ASTM E162
Smoke Generation (Flaming)	ASTM E662 (NFPA 258)
Smoke Generation (Non-Flaming)	ASTM E662 (NFPA 258)
Toxic Gas Generation	BOMBARDIER SMP 800-C
Toxicity Index	NES 713

** Test data is based on controlled laboratory conditions and does not necessarily reflect performance in actual fire conditions. Additional product information available upon request.*

Markets:

Aerospace, DataComm, Defense, Healthcare, Ship Building, Telecommunications



Product Table

	US Trade Size	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	ISO (MM)	16	20	25	32	40	50	63
	CSA (MM)	12	16	21	27	35	41	53
	Type	HFSLA-10	HFSLA-11	HFSLA-12	HFSLA-13	HFSLA-14	HFSLA-15	HFSLA-16
Internal Diameter	Min (IN.)	0.484	0.622	0.820	1.041	1.380	1.575	2.020
	Max (IN.)	0.504	0.642	0.840	1.066	1.410	1.600	2.045
Outer Diameter	Min (IN.)	0.690	0.820	1.030	1.290	1.630	1.865	2.340
	Max (IN.)	0.710	0.840	1.050	1.315	1.660	1.900	2.375
Inside Bend Radius	Static (IN.)	2.0	3.25	4.25	6.5	8.0	9.0	11.0
Weight	Lbs. per 100 Ft	29	32	53	82	102	124	145
Standard Length	Carton (Ft.)	100	100	100	100	50	50	50
	Part # (black)	789012	789128	789228	789328	789428	789528	789628
	Reel (Ft.)	500	500	500	400	200	150	100
	Part # (black)	789032	789137	789247	789347	789447	789547	789647
	Reel (Ft.)	1000	1000					
	Part # (black)	789042	789148					

related products



Type HFEMS

Part of the SHIELD-FLEX® family of EMI/RFI Shielding conduits. Type HFEMS liquidtight flexible shielding conduit is designed for field installations where safety concerns exist regarding a material's reaction in a fire situation. Its jacketing is made of a protective Low Smoke Zero-Halogen Thermoplastic.

[see product detail »](#)



Type HFEMCS

Part of the SHIELD-FLEX® family of EMI/RFI Shielding conduits. Type HFEMCS is a hybrid of HFSLA and HFEMS. It utilizes the same bronze core and Low Smoke Zero-Halogen Thermoplastic jacket as HFEMS but gets further screening protection from a tinned copper braid as found in the HFSLA product.

[see product detail »](#)



Type SLA

Part of the SHIELD-FLEX® family of EMI/RFI Shielding conduits. Type SLA is identical to standard UL Listed liquidtight flexible steel conduit (See Type LA) but is augmented with a tinned copper shielding braid located over the inner steel core and under its protective PVC jacket.

[see product detail »](#)



Type ZHLA

Non-halogen, low smoke and low flame spread make Type ZHLA a proven choice for applications where limiting toxic materials of combustion are an important issue. Since ZHLA is also UL listed, it is ideal for field installation in confined, public areas such as subways, tunnels, etc.

[see product detail »](#)