

# Type HSLA

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

Type HSLA 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 HSLA 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
- 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



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

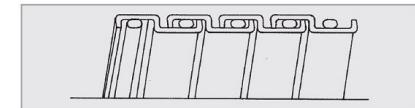
Black. **Other colors and jacketing materials available upon request**

### WORKING TEMPERATURES:

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

-4°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)



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

## Squarelock with Filler Sizes

3/8" - 1-1/4"

# Combustion & Flammability Properties

## COMBUSTION & FLAMMABILITY

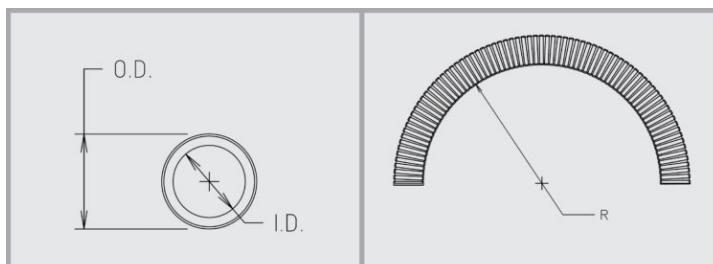
### TEST

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, Cell Towers, DataComm, Data Centers, Defense, Healthcare, Renewable Energy, Security, 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 (MM)	12.3	15.8	20.8	26.4	35.1	40.0	51.3
	Max (MM)	12.8	16.3	21.3	27.1	35.8	40.6	51.9
Outside Diameter	Min (MM)	17.5	20.8	26.2	32.8	41.4	47.4	59.4
	Max (MM)	18.0	21.3	26.7	33.4	42.2	48.3	60.3
Inside Bend Radius	Static (MM)	51	83	108	165	203	229	279
Weight	(Kgs) per 30 meters	13	15	24	37	46	56	66
Standard Length	Carton (Mtrs)	30	30	30	30	15	15	15
	Part # (black)	789012	789128	789228	789328	789428	789528	789628
	Reel (Mtrs)	150	150	150	120	60	45	30
	Part # (black)	789032	789137	789247	789347	789447	789547	789647
	Reel (Mtrs)	300	300					
	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 »](#)