

# Type HFEMS

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

Type HFEMS 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:

- Bronze
- 3/8" – 4" Fully Interlocked Profile

### Liquidtight Jacket:

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

## Application:

- Meets the requirements of Bombardier SMP 800-C for Toxic Gas Generation.
- Meets the requirements of ASTM E662 for Smoke Generation
- Accepts Standard Metallic Liquidtight Fittings
- Designed for wiring applications requiring shielding effectiveness from Electromagnetic and Radio Frequency Interference (EMI/RFI)

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

## Combustion & Flammability Properties

### COMBUSTION & FLAMMABILITY

Vertical Burn (Material)

### TEST

UL94

### VALUE

V-0 Rating; No Flaming Drips

Vertical Burn (Conduit)

UL360

Pass; No Flaming Drips

Oxygen Index %

D2863

28.5

Smoke Generation (Flaming)

ASTM E662 (NFPA 258)

Ds 41@1.5 Min/Ds 113@4.0 Min

Smoke Generation (Non-Flaming)

ASTM E662 (NFPA 258)

Ds 4@1.5 Min/Ds 19@4.0 Min

Toxic Gas Generation

BOMBARDIER SMP 800-C

Pass

Toxicity Index

NES 713

3.9

\* 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:



All Products Proudly Made in the USA

## Product Information

### CERTIFICATIONS & COMPLIANCE

 **WEEE and RoHS Compliant**

**CE** BS EN IEC 61386 Classification

Code 445240650414 **CE**

**Declaration**

**ARRA:** For ARRA Certification

Letter, please [click here](#)

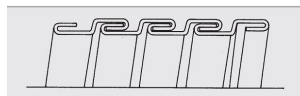
### STANDARD COLORS

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

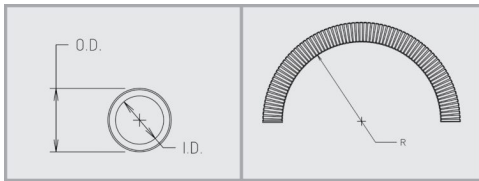
### WORKING TEMPERATURES:

-40°C to 80°C

-40°F to 176°F



### Interlock



## Product Table

US Trade Size	ISO (MM)	CSA (MM)	Type	Internal Diameter		Outside Diameter		Inside Bend Radius Static (MM)	Weight (Kgs) per 30 meters	Standard Length			
				Min (MM)	Max (MM)	Min (MM)	Max (MM)			Carton (Mtrs)	Part # (black)	Reel (Mtrs)	Part # (black)
3/8"	16	12	HFEMS-10	12.3	12.8	17.5	18.0	76	12	30	78201	150	78204
1/2"	20	16	HFEMS-11	15.8	16.3	20.8	21.3	76	16	30	78211	150	78214
3/4"	25	21	HFEMS-12	20.8	21.3	26.2	26.7	102	20	30	78221	150	78224
1"	32	27	HFEMS-13	26.4	27.1	32.8	33.4	102	39	30	78232	120	78234
1 1/4"	40	35	HFEMS-14	35.1	35.8	41.4	42.2	114	46	15	78242	60	78244
1 1/2"	50	41	HFEMS-15	40.0	40.6	47.4	48.3	178	64	15	78252	45	78254
2"	63	53	HFEMS-16	51.3	51.9	59.4	60.3	241	82	15	78262	30	78264
2 1/2"	70	63	HFEMS-17	63.0	63.6	72.1	73.0	305	105	8	78272		
3"	80	78	HFEMS-18	78.0	78.7	87.9	88.9	343	145	8	78282		
4"	100	103	HFEMS-19	101.6	102.6	113.3	114.3	432	176	8	78292		

### related products



### Type HFSLA

Part of the SHIELD-FLEX® family of EMI/RFI Shielding conduits. 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.

[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 Polyurethane jacket as HFEMS, but gets further screening protection from a tinned copper braid as found in the HFSLA product.

[see product detail »](#)



### Type EMS

Part of the SHIELD-FLEX® family of EMI/RFI Shielding conduits. Type EMS has an inner core that is made from a fully interlocked bronze strip and does not contain a braided shield.

[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 and CSA Certified for "Heavy-Duty" applications, it is ideal for field installation in confined, public areas such as subways, tunnels, etc.

[see product detail »](#)