

# 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:

- 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
- 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



All Products Proudly Made in the USA

## Product Information

### CERTIFICATIONS & COMPLIANCE



WEEE and RoHS Compliant



BS EN IEC 61386 Classification

Code 445240650414 **CE**

**Declaration**

**ARRA:** For ARRA Certification

Letter, please [click here](#)



BABA Compliant

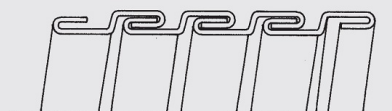
### STANDARD COLORS

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

### WORKING TEMPERATURES:

-20°C to 105°C

-4°F to 105°F



COMBUSTION & FLAMMABILITY

TEST

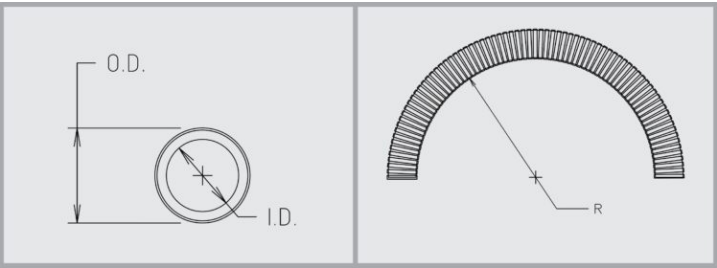
Interlock

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, Defense, Healthcare, Renewable Energy, Security, Ship Building, Telecommunications



Product Table

US Trade Size	ISO (MM)	CSA (MM)	Type	Internal Diameter		Outer Diameter		Inside Bend Radius	Weight  Lbs. per 100 Ft	Standard Length			
				Min (IN.)	Max (IN.)	Min (IN.)	Max (IN.)	Static (IN.)		Carton (Ft.)	Part # (black)	Reel (Ft.)	Part # (black)
3/8"	16	12	HFEMS-10	0.484	0.504	0.690	0.710	2.0	27	100	78201	1000	78204
1/2"	20	16	HFEMS-11	0.622	0.642	0.820	0.840	3.25	35	100	78211	1000	78214
3/4"	25	21	HFEMS-12	0.820	0.840	1.030	1.050	4.25	43	100	78221	500	78224
1"	32	27	HFEMS-13	1.041	1.066	1.290	1.315	6.5	85	100	78232	400	78234
1 1/4"	40	35	HFEMS-14	1.380	1.410	1.630	1.660	8.0	101	50	78242	200	78244
1 1/2"	50	41	HFEMS-15	1.575	1.600	1.865	1.900	9.0	140	50	78252	150	78254
2"	63	53	HFEMS-16	2.020	2.045	2.340	2.375	11.0	180	50	78262	100	78264
2 1/2"	70	63	HFEMS-17	2.480	2.505	2.840	2.875	14.5	232	25	78272		
3"	80	78	HFEMS-18	3.070	3.100	3.460	3.500	17.5	320	25	78282		
4"	100	103	HFEMS-19	4.000	4.040	4.460	4.500	24.0	388	25	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 Low Smoke Zero-Halogen Thermoplastic 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 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 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, it is ideal for field installation in confined, public areas such as subways, tunnels, etc.

[see product detail »](#)