

# Type HFEMCS

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

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.

Type HFEMCS 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" – 2" Fully Interlocked Profile
- Shielded with a tinned copper braid

### 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)



HFSLA, HFEMS, and HFEMCS are trademarks of Electri-Flex Company, registered in the U.S. Patent and Trademark Office.



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## 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](#)

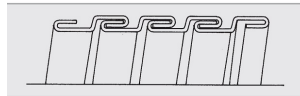
### STANDARD COLORS

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

### WORKING TEMPERATURES:

-40°C to 80°C

-40°F to 176°F



Interlock

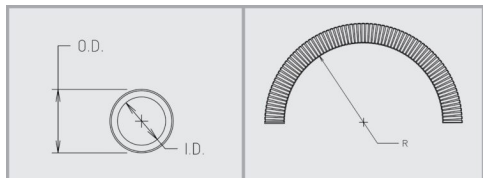
## Combustion & Flammability Properties

COMBUSTION & FLAMMABILITY	TEST	VALUE
Vertical Burn (Material)	UL94	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:

Aerospace, Cell Towers, DataComm, Defense, Healthcare, Renewable Energy, Security, Ship Building, Telecommunications



## 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	HFEMCS-10	12.3	12.8	17.5	18.0	76	12	30	86001	150	86003
1/2"	20	16	HFEMCS-11	15.8	16.3	20.8	21.3	76	16	30	86101	150	86103
3/4"	25	21	HFEMCS-12	20.8	21.3	26.2	26.7	102	20	30	86201	150	86204
1"	32	27	HFEMCS-13	26.4	27.1	32.8	33.4	102	39	30	86302	120	86304
1 1/4"	40	35	HFEMCS-14	35.1	35.8	41.4	42.2	114	46	15	86402	60	86404
1 1/2"	50	41	HFEMCS-15	40.0	40.6	47.4	48.3	178	64	15	86502	45	86504
2"	63	53	HFEMCS-16	51.3	51.9	59.4	60.3	241	82	15	86602	30	86604

### 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 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.

[see product detail »](#)



### Type EMCS

Part of the SHIELD-FLEX® family of EMI/RFI Shielding conduits. Type EMCS is a hybrid of SLA and EMS. It utilizes the same bronze core and PVC jacket as EMS, but gets further screening protection from a tinned copper braid as found in the SLA product.

[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 »](#)