

Type LFH-SP

Liquid resistant, enhanced low fire hazard conduit



Liquid resistant, enhanced low fire hazard covered galvanized steel flexible conduit.

Certifications / Approvals:



Fire performance / EMC:

Please refer to TDS000081 for the chemical resistance guide



Applications:

- Rail & buildings where low smoke & toxicity is a primary concern



Material / Materials / Finishes:

- Galvanized steel core
- Low fire hazard polyolefin jacket
- Colour - black only

Degree of mechanical protection:

- Medium flexibility and fatigue life

Temperature range:

°C	-65	-45	-25	-5	0	5	60	90	105	120	150	250
°F	-85	-49	-13	23	32	41	140	194	221	248	302	482
	Static											
							Dynamic					

Ingress protection:

Fitting	IP54	IP65
A	•	-
B	•	-
M	-	•

Conforms to:

- BS EN 61386
- NF F16-101 (I1 F1)
- London Underground 1-085
- EN45545-2 HL3 - R22 & R23
- LVD (Low Voltage Directive) 2014/35/EU
- NFPA130 / ASTM E 162, ASTM E 662 and Bombardier SMP 800-C

Fire performance:

- Halogen free
- Low toxicity
- Self extinguishing
- ELFH - Enhanced low fire hazard

Test standard*	Performance rating
EN 45545	HL3
NF F16-101	I1 F1
LUL 1-085	✓
BS 6853	Class 1 A

*For detailed test reports contact cmg.conduitsystems@abb.com

Chemical resistance:

- High - Please refer to TDS000081

UV Resistance:

- High - Please refer to TDS000081

Compatible with:

- Adaptasteel Type SP - Type A, B, C, E, F, M and C90 fittings

Type LFH-SP Conduit – Part numbers and dimensions

Part No.	Conduit size			Dimensions (mm)				Coil Colour
	IEC/EN (mm)	US / CAN in	US / CAN mm	Outside Dia. (A)	Inside Dia. (B)	Bend radi (C)	Standard lengths (m)	
LFH-SP12	12	1/2"	12	14.0	10.3	30	25, 50	●
LFH-SP16	16	5/8"	16	17.0	13.0	35	10, 25, 50	●
LFH-SP20	20	2/3"	20	21.5	16.9	45	10, 25, 50	●
LFH-SP25	25	1"	25	26.0	21.4	55	10, 25, 50	●
LFH-SP32	32	1 1/3"	32	34.0	28.1	60	10, 25	●
LFH-SP40	40	1 1/2"	40	44.5	37.7	80	10, 25	●
LFH-SP50	50	2"	50	55.0	48.4	90	10, 25	●
LFH-SP63	63	2 1/2"	63	64.5	57.5	115	10	●
LFH-SP75	75	3"	75	79.0	70.0	150	10	●

Part number example: To order quote part number, colour & conduit coil length, e.g. LFH-SP16/BL/50m.

IEC/EN 61386 Classification

Type	Fitting	Compression	Impact	Min. Temp	Max. Temp	Bending	Electrical
LFH-SP	SP (M)	4	4	2	3	4	2
Classification level		>1250N	>6J	-5°C	105°C	Flexible	Insulator

Type	Fitting	IP Solids	IP Water	Corrosion	Tensile propagating	Non-flame	Suspended load
LFH-SP	SP (M)	6	5	-	4	1	5
Classification level		IP(6)X	IPX(5)	-	<1000N	n/a	>850N

Tensile tests to IEC 61386 gives the minimum classification value only. Actual values will depend on the type and size of the fittings used and will always be greater than the minimum. Impact strength is the minimum classification value at the minimum temperature. Actual values will depend on size and temperature. Specific values available on request.

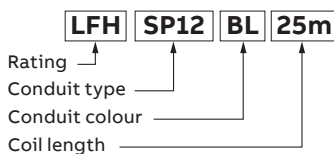
Mechanical properties

Standard	Test type	Requirement	Status
IEC/EN 61386-1	Maximum compression @ 23°C	10% crush	1800N
IEC/EN 61386-1	Maximum tensile strength @ 23°C	-	1450N
IEC/EN 61386-1	Maximum impact strength @ 23°C	No cracks <20% deformation	>20J

Thermal properties

Standard	Test type	Requirement	Min. temperature	Long term max. temperature
IEC/EN 61386-23	Static	Retention of 50% of mechanical properties	-25°C	+90°C
IEC/EN 61386-23	Dynamic	Dynamic 5000 cycles	-5°C	+105°C

Part number information



Type LFH-SP conduit - Low fire hazard SP Conduit for a 12mm Metric thread, in black and a 25m coil length.