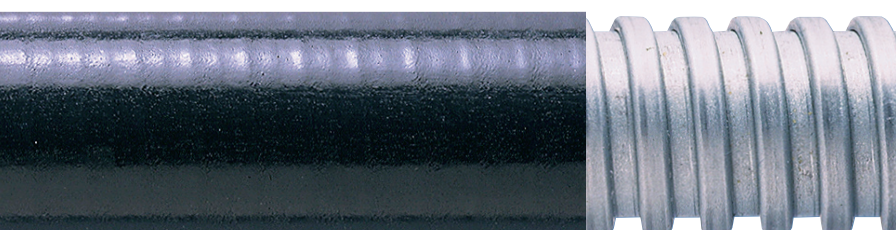


Type SPLHC

Liquid tight, extreme temperature, covered conduit



Liquid tight, extreme temperature, covered galvanised steel, flexible conduit. Suitable for liquid tight, extreme temperature environments.

Certifications / Standards:
(Refer to tables for certifications details)



Features & benefits:

- Liquid tight, extreme temperature covered, galvanised steel flexible conduit
- Very high flexibility and very high fatigue life
- Very high chemical resistance levels
- Very high UV resistance
- Available in black only

Applications:

- Machinery, machine tools, equipment and construction - Extreme temperature environments

Temperature range:

- Static applications: -65°C to +135°C (-85°F to +275°F)
- Moving applications: -45°C to +150°C (-49°F to +302°F)

Ingress protection:

For use with Adaptasteel Type SPL - Type A, B, E, M C90 and C45 fittings

- IP66 - with SPL Type M, C45 & C90 fittings
- IP67 - with SPL Type A, B, M, C45 & C90 fittings
- IP68 - with SPL Type M, C45 & C90 fittings (10 bar 30 mins)

UV Resistance:

- Very high

Material / Materials / Finishes:

- Galvanised steel core, string packing
- Thermoplastic rubber covering

Conforms to:

- CE marked to Low Voltage Directive 2014/35/EU
- BSI Kitemark KM35161 to BS EN 61386
- UL Recognised to UL1696 File number E135398

Fire performance:

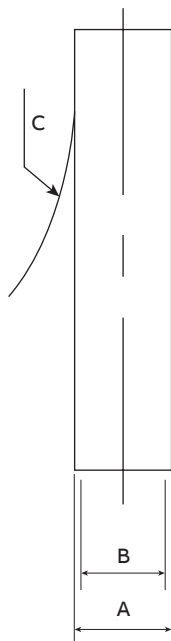
Test standard	Performance rating
BS EN 61386-1	Pass
SMP-800C	Pass
ASTM E662	<500
Self Extinguishing	Pass
Low Smoke Zero Halogen (LSOH)	Pass

Degree of mechanical protection:

- Very high flexibility and very high fatigue life

Chemical resistance:

- Very high chemical resistance levels



Type SPLHC Conduit – Part numbers and dimensions

Part No.	Conduit size		Dimensions (mm)		
	Metric (mm)	US (Trade size)	Outside Dia. (A)	Inside Dia. (B)	Bend radi (C)
SPLHC10	10	1/4"	11.8	7.0	40
SPLHC12	12	5/16"	14.2	10.0	45
SPLHC16	16	3/8"	17.8	12.5	50
SPLHC20	20	1/2"	21.1	15.9	80
SPLHC25	25	3/4"	26.4	21.0	110
SPLHC32	32	1"	33.1	26.7	145
SPLHC40	40	1 1/4"	41.8	35.3	180
SPLHC50	50	1 1/2"	47.8	40.4	240
SPLHC63	63	2"	59.9	51.6	345

Part number example: To order quote part number, colour & conduit coil length, e.g. SPLHC16/BL/25M or use GID code.

BS EN 61386 Classification

Type	Fitting	Compression	Impact	Min. Temp	Max. Temp	Bending	Electrical
SPLHC	SPL (M)	4	4	5	5	4	0

Type	Fitting	IP Solids	IP Water	Corrosion	Tensile	Non-flame propagating	Suspended load
SPLHC	SPL (M)	6	7	–	4	1	5

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

Test type	Standard	Requirement	Status
Crush strength @ 23°C	BS EN IEC 61386-1	<25% crush >90% recovery	>1250N
Crush strength @ 23°C	–	10% crush, instantaneous value	2500N
Tensile strength	BS EN IEC 61386-1	With Type M fitting	>1000N class 4
Tensile strength	–	Ultimate pullout of Type M fitting	1600N
Impact strength @ 23°C	BS EN IEC 61386-1	No cracks <20% deformation	>20J
Impact strength @ -45°C	BS EN IEC 61386-1	No cracks <20% deformation	>6J
Dynamic bend radius @ -45°C	BS EN IEC 61386-23	5,000 cycles minimum	6 x OD

Thermal properties

Test type	Standard	Requirement	Value
Min / Max temperature	BS EN IEC 61386-23	Dynamic 5000 cycles	-45°C to +150°C
Min / Max static	–	Permanent Use (30,000) Hours	-65°C to +135°C

Flammability

Test type	Standard	Requirement	Result	Value
Oxygen index	ISO 4589-2	% Oxygen to support combustion	22	%
Glow wire rating	IEC 60695-11-2	No Ignition to Extinguish with 30s	750	°C
Flammability	UL94	Vertical (V0, V2) or Horizontal (HB)	HB	–
Flammability	BS EN IEC 61386-1	1Kw Burner @ 45°	Pass	–
Surface flammability	ASTM E162	Is	300	–

Fire performance overview

Property	Low Fire Hazard	Enhanced Low Fire Hazard	Super Low Fire Hazard	Inherent Low Fire Hazard
				
Property	LFH	EFLH	SLFH	ILFH
Oxygen Index ISO4589	$32\% \geq OI \geq 28\%$	$OI \geq 32\%$	$OI \geq 32\%$	Inherent Low Fire Hazard, i.e. Type S, SS Metallic conduit & fittings
BS6853 Smoke Density 3m ³	$0.02 \leq A. \leq 0.03$	$0.0005 \pm A. \leq 0.02$	$A. \leq 0.005$	
Zero Halogen	✓	✓	✓	
Zero Phosphorus	✓	✓	✓	
Zero Sulphur	✓	✓	✓	
NFF16-102	I3F2	I2F2	I2F1	
EN45545-2	HL2	HL3	HL3	

Pre-test conditions

Duration	Standard	Temperature	Relative humidity
168 (hrs)	IEC 61386	23°C	50%