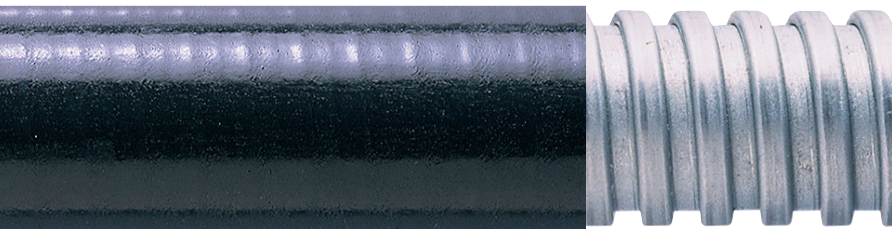


Type SPL

Liquid tight, oil resistant covered conduit



Liquid tight, oil resistant covered, galvanised steel flexible conduit. Suitable for indoor/outdoor applications, marine and buildings.

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



Features & benefits:

- Liquid tight, oil resistant covered, galvanised steel flexible conduit
- Medium flexibility and fatigue life
- High chemical resistance levels
- Medium flexibility and fatigue life
- Very high UV resistance
- Available in black, grey and orange

Applications:

- Suitable for indoor/outdoor applications, marine and buildings

Temperature range:

- Static applications: -20°C to +105°C (-4°F to +221°F)
- Moving applications: -5°C to +105°C (+23°F to +221°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)
- IP69 - with SPL Type M, C45 & C90 fittings

UV Resistance:

- Very high

Material / Materials / Finishes:

- Galvanised steel core, string packing
- PVC covering

Conforms to:

- CE marked to Low Voltage Directive 2014/35/EU
- BSI Kitemark KM35161 to BS EN 61386
- AS/NZS 2053.1:2001
- AS/NZS 2053.8:1995

Fire performance:

Test Standard	Performance Rating
ISO 4589-2	28%
IEC 60695	850°C
UL94	V0
IEC 61386-1	Pass

Degree of mechanical protection:

- Medium flexibility and fatigue life

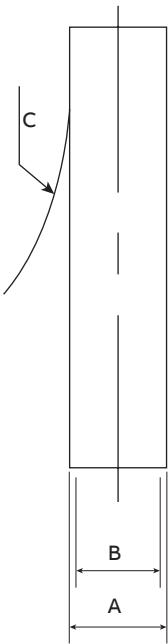
Chemical resistance:

- High chemical resistance levels

Type SPL 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)
SPL10	10	1/4"	11.8	7.0	40
SPL12	12	5/16"	14.2	10.0	45
SPL16	16	3/8"	17.8	12.5	50
SPL20	20	1/2"	21.1	15.9	80
SPL25	25	3/4"	26.4	21.0	110
SPL32	32	1"	33.1	26.7	145
SPL40	40	1 1/4"	41.8	35.4	180
SPL50	50	1 1/2"	47.5	40.4	240
SPL63	63	2"	59.7	51.6	345

Part number example: To order quote part number, colour & conduit coil length, e.g. SPL16/BL/25M or use GID code.



BS EN 61386 Classification

Type	Fitting	Compression	Impact	Min. Temp	Max. Temp	Bending	Electrical
SPL	SPL (M)	4	4	2	3	4	2

Type	Fitting	IP Solids	IP Water	Corrosion	Tensile	Non-flame propagating	Suspended load
SPL	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	IEC61386-1	<25% crush >90% recovery	>1250N
Crush strength @ 23°C	-	10% crush, instantaneous value	1800N
Tensile strength	IEC61386-1	With Type M fitting	>1000N
Tensile strength	-	Ultimate pullout of Type M fitting	1600N
Impact strength @ 23°C	IEC61386-1	No cracks <20% deformation	>20J
Impact strength @ -5°C	IEC61386-1	No cracks <20% deformation	>6J
Dynamic bend radius @ -5°C	IEC61386-23	5,000 cycles minimum	4xOD





Thermal properties

Test type	Standard	Requirement	Value
Min / Max temperature	IEC 61386-23	Dynamic 5000 cycles	-5°C to +105°C
Min / Max static	-	Permanent use	-20°C to +105°C

Flammability

Test type	Standard	Requirement	Result	Value
Oxygen Index	ISO 4589-2	% Oxygen to support combustion	28	%
Glow Wire Rating	IEC 60695	No Ignition to Extinguish with 30s	850	°C
Flammability	UL94	Vertical (V0, V2) or Horizontal (HB)	V0	
Flammability	IEC 61386-1	1Kw Burner @ 45°	Pass	Pass/Fail

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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% ≥ OI ≥ 28%	OI ≥ 32%	OI ≥ 32%	
BS6853 Smoke Density 3m ³	0.02 ≤ A. ≤ 0.03	0.0005 ± A. ≤ 0.02	A. ≤ 0.005	
Zero Halogen	✓	✓	✓	Inherent Low Fire Hazard i.e Type S, SS Metallic Conduit & Fittings
Zero Phosphorus	✓	✓	✓	
Zero Sulphur	✓	✓	✓	
NFF16-102	I3F2	I2F2	I2F1	
EN45545-2	HL2	HL3	HL3	

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Pre-test conditions

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