



**Conduit**  
Liquid Tight Oil Resistant  
Extreme Temperature



**Construction**  
Thermoplastic Rubber covered Galvanised Steel

## Metallic Systems TYPE SPLHC

**Applications** Extreme Temperature Environments  
Machine Tool

**Fittings**  
IP69k – Type SP Fittings M  
IP68 – Type SP Fittings M  
IP67 – Type SP Fittings A, B & M  
IP66 – Type SP Fittings M & C90

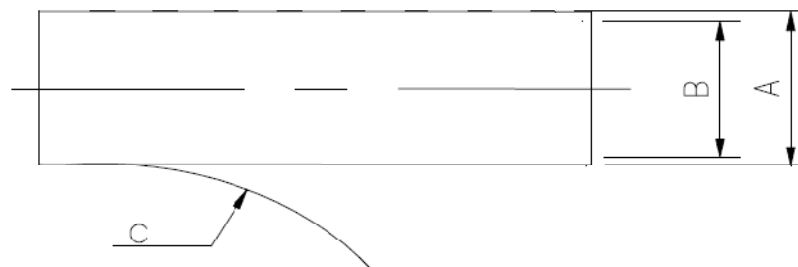
**Characteristics** Very High UV resistance  
Very High Flexibility  
High Fatigue Life  
Halogen Free  
Self Extinguishing

**Approvals**  
BSI Kitemark IEC61386  
CE LVD

**Material** Thermo Plastic rubber covered galvanised steel.



Part No.	Conduit Size			Dimensions				Colour
	NC	NW	Pitch	(B) Inside Diameter	(A) Outside Diameter	Reel Length	(C) Min Bend Radius	
SPLHC10	10	-	-	7.0	11.8	25, 50	40	BL
SPLHC12	12	-	-	12	14.2	25, 50	45	BL
SPLHC16	16	-	-	12.5	17.8	25	50	BL
SPLHC20	20	-	-	15.9	21.1	25	80	BL
SPLHC25	25	-	-	21.0	26.4	25	110	BL
SPLHC32	32	-	-	26.7	33.1	25	145	BL
SPLHC40	40	-	-	35.4	41.8	25	180	BL
SPLHC50	50	-	-	40.4	47.9	25	240	BL
SPLHC63	63	-	-	51.6	59.7	25	345	bl





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## Metallic Systems TYPE SPLHC

### Mechanical Properties

Test Type	Method/Standards	Requirements	Value
Crush Strength @ 23 °C	IEC61386-1	<25% crush >90% recovery	>1250N
Crush Strength @23 °C	AFX norm C1989	10% crush instantaneous value	2500N
Impact strength @ -45 °C	IEC61386-1	No Cracks <20% deformation	>6J
Imapct strenth @ 23 °C		No Cracks. <20% deformation	>20J
Tensile Strength	IEC61386-1	With M type fitting	>1000N
Tensile Strength	AFX norm T1987	Ultimate pull off of fitting	1600N
Static Bend Radius @23 °C	AFX norm S1985	-	40mm
Dynamic Bend radius @ -45 °C	IEC61386-2.3	5000 cycles minimum	120mm

### Thermal Properties

Test Type	Method/Standards	Requirements	Value
Minimum Temperature	-	Permanent use	-65 °C
Maximum Temperature	-	Permanent use	135 °C
Dynamic Bend Radius @ -45 °C	IEC61386-2.3	5000 Cycles @ 120mm	Pass

### Flammability, Smoke and Toxicity (FST) Performance

Test Type	Method/Standard	Requirement	Result	Unit
Halogen Fere	LUL	<0.5%	Yes	Yes/No
Phosphorus Free	LUL	<0.5%	Yes	Yes/No
Sulphur Free	LUL	<0.5%	Yes	Yes/No
Oxygen Index	ISO 4589	% Oxygen to support combustion	22	%
Glow wire rating	IEC 695	No Ignition extinguish within 2 s	750	°C
Flammability	UL94	Vertical (V0, V2) or Horizontal (HB)	V2	
Flammability	IEC61386-1	1kW burner @ 45 °	Pass	Pass/Fail

### Pre test Conditions

Duration	Standard	Temperature	Relative Humidity
168 (Hours)	EN50086/IEC61386	23 (°C)	50 (%)



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### Chemical Properties

Suitable Limited Suitability

Astm No.1		Methanol	
Astm No.2		Methyl Bromide	
Astm No.3		MEK	
Acetic Acid (10%)		Nitric Acid (10%)	
Acetone		Nitric Acid (70%)	
Aluminium Chloride		Oxalic Acid	
Aniline		Ozone (Gas)	
Benzaldehyde		Paraffin oil	
Benzene	UNSUITABLE	Petrol	
Carbon tetrachloride		Phenol	
Chlorine water		Sea Water	
Chloroform		Silver Nitrate	
Citric Acid		Skydrol	
Copper Sulphate		Sodium Chloride	
Cresol		Sodium Hydroxide (10%)	
Diesel oil		Sodium Hydroxide (60%)	
Diethylamine		Sulphur Dioxide (Gas)	
Ethanol		Sulphuric Acid (10%)	
Ether		Sulphuric Acid (70%)	
Ethylamine		Toluene	UNSUITABLE
Ethylene Glycol		Transformer Oil	
Ethyl Ethanoate		1,1,1-Trichloroethane	
Freon 32	UNSUITABLE	Trichloroethylene	UNSUITABLE
Hydrochloric Acid (10%)		Turpentine	UNSUITABLE
Hydrochloric Acid (36%)		Vegetable Oil	
Hydrogen Peroxide (35%)		Vinyl Acetate	
Hydrogen Peroxide (87%)	UNSUITABLE	Water	
Lactic Acid		White Spirit	
Lubricating oil		Zinc Chloride	

The information above is given as a guide only and is based on published technical data and experience. The chemical resistance of the above products is dependant on factors such as chemical exposure, concentration of the chemical and temperature. The above chemicals are valid for a temperature of 23°C. Use of the above table is at the users own discretion and risk. Those using it must satisfy themselves that their application presents no health and safety risks. The end user should assess compatibility with their application and contact Adaptaflex for further information.

### IEC 61386 CLASSIFICATION

	Fitting	Compression	Impact	Min temp	Max temp	Bending	Electrical	IP Solids	IP Water	Corrosion	Tensile	Non-Flame Propagation	Suspended Load
SPLHC	SPL(M)	4	4	5	5	4	0	6	7	-	4	1	5



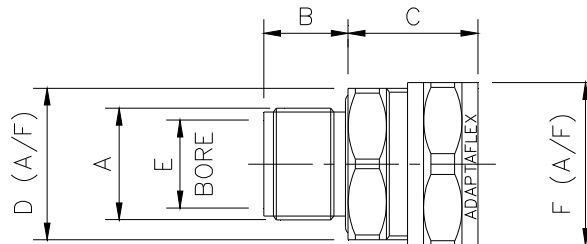
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## Metallic Systems TYPE SPLHC

## Dimension charts for associated fittings TYPE M



PART No.	THREAD A	NOMINAL DIMENSIONS (mm)					WEIGHT
		B	C	D	E	F	
SPL10/M12/M	M12x1.5	10.0	20	22	5.7	22.0	40g
SPL10/M16/M	M16x1.5	12.0	20	22	5.7	22.0	40g
SPL12/M16/M	M16x1.5	12.0	20	22	8.6	24.0	42g
SPL16/M16/M	M16x1.5	12.0	21	24	10.3	25.4	45g
SPL16/M20/M	M20x1.5	13.0	21	28	10.3	25.4	50g
SPL20/M20/M	M20x1.5	12.5	22	25	14.3	28.5	52g
SPL25/M25/M	M25x1.5	15.0	25	32	17.6	35.0	97g
SPL32/M32/M	M32x1.5	15.0	30	38	24.0	42.0	145g
SPL40/M40/M	M40x1.5	16.0	38	50	33.0	52.0	205g
SPL50/M50/M	M50x1.5	18.0	41	60	38.5	60.0	350g
SPL63/M63/M	M63x1.5	25.0	46	70	50.0	70.0	510g

PART No.	THREAD A	NOMINAL DIMENSIONS (mm)					WEIGHT
		B	C	D	E	F	
SPL10/PG7/M	PG7	11.0	20	20	5.7	22.0	41g
SPL12/PG9/M	PG9	11.0	20	22	8.1	24.0	46g
SPL16/PG11/M	PG11	11.0	21	24	10.3	25.4	50g
SPL16/PG13/M	PG13.5	11.0	21	24	10.3	25.4	55g
SPL20/PG16/M	PG16	11.0	22	25	14.3	28.5	58g
SPL25/PG21/M	PG21	12.0	25	32	17.6	35.0	106g
SPL32/PG29/M	PG29	12.0	30	38	24.0	42.0	163g
SPL40/PG36/M	PG36	16.0	38	50	33.0	52.0	215g
SPL50/PG42/M	PG42	18.0	41	60	38.5	60.0	356g
SPL63/PG48/M	PG48	25.0	46	70	50.0	70.0	535g

PART No.	THREAD A	NOMINAL DIMENSIONS (mm)					WEIGHT
		B	C	D	E	F	
SPL16/038/M	3/8" NPT	11.0	21	24	10.3	25.4	47g
SPL20/050/M	1/2" NPT	15.0	22	25	14.3	28.5	52g
SPL25/075/M	3/4" NPT	16.0	25	32	17.6	35.0	100g
SPL32/100/M	1" NPT	19.0	30	38	24.0	42.0	150g
SPL40/125/M	1 1/4" NPT	20.0	34	50	33.0	52.0	208g
SPL50/150/M	1 1/2" NPT	21.0	41	60	38.5	60.0	354g