



Conduit
Liquid Tight Oil Resistant

Construction
PVC Covered Galvanised Steel



Metallic Systems TYPE SPL

Applications Machine Tool

Fittings
IP69k Type SPL - M Type
IP68 Type SPL – M Type
IP67 Type SPL – A, B & M Type
IP66 Ype SPL – M & C90

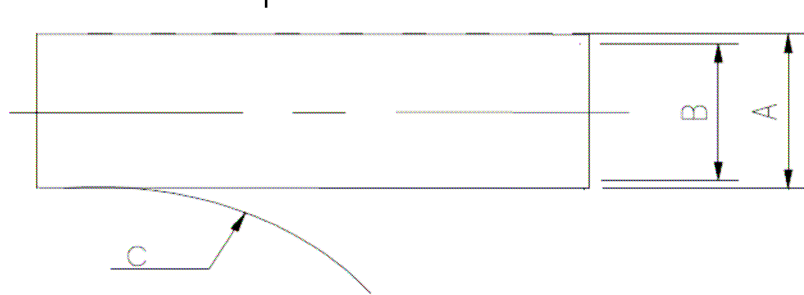
Characteristics Very High UV Resistance
Medium Flexibility
Medium Fatigue Life
Self Extinguishing

Approvals
CE LVD
IEC61386
UL Recognition
Lloyds Register of Shipping (Type Approval)

Material PVC Covered Galvanised Steel



Part No.	Conduit Size			Dimensions				
	NC	NW	Pitch	(B) Inside Diameter	(A) Outside Diameter	Reel Length	(C) Min Bend Radius	Colour
SPL10	10	-	-	7.0	11.8	10, 25, 50	40	BL/OR/GR
SPL12	12	-	-	10	14.2	10, 25, 50	45	BL/OR/GR
SPL16	16	-	-	12.5	17.8	10, 25, 50	50	BL/OR/GR
SPL20	20	-	-	15.9	21.1	10, 25, 50	80	BL/OR/GR
SPL25	25	-	-	21.0	26.4	10, 25, 50	110	BL/OR/GR
SPL32	32	-	-	26.7	33.1	10, 25	145	BL/OR/GR
SPL40	40	-	-	35.4	41.8	10, 25	180	BL/OR/GR
SPL50	50	-	-	40.4	47.49	10,25	240	BL/OR/GR
SPL63	63	-	-	51.6	59.7	10, 25	345	BL/OR/GR





Conduit
Liquid Tight Oil Resistant

Construction
PVC Covered Galvanised Steel



Metallic Systems TYPE SPL

Mechanical Properties

Test Type	Method/Standards	Requirements	Value
Crush Strength @ 23 °C	IEC61386-1	<25% crush >90% recovery	>1250N
Crush Strength @ 23 °C	IEC61386-1	10% Crush, Instantaneous Value	2500N
Impact Strength @ 23 °C		No Cracks <20% deformation	>20J
Impact Strength @ -25 °C	IEC61386-1	No Cracks. <20% deformation	>6J
Tensile Strength	IEC61386-1	With M Type Fitting	>1000N
Tensile Strength	AFX norm T1987	Ultimate pull-out of M-Type Fitting	1600N
Static Bend Radius @ 23 °C	AFX norm S1985	-	80mm
Dynamic Bend radius @ -5 °C	IEC61386-2.3	5000 cycles minimum	160mm

Thermal Properties

Test Type	Method/Standards	Requirements	Value
Minimum Temperature	-	Permanent use	-20 °C
Maximum Temperature	-	Permanent use	105 °C
Dynamic Bend Radius @ -5 °C	IEC61386-2.3	5000 Cycles @ 160mm	Pass

Flammability, Smoke and Toxicity (FST) Performance

Test Type	Method/Standard	Requirement	Result	Unit
Halogen Free	LUL	<0.5%	No	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	28	%
Glow Wire rating	IEC 695	No ignition, Extinguish within 2 s	850	°C
Flammability	UL94	Vertical (V0, V2) or Horizontal (HB)	V0	
Flammability	IEC61386	Self Extinguishing-1kW bruners @ 45 °	Pass	Pass/Fail

Pre test Conditions

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



Conduit
Liquid Tight Oil Resistant

Construction
PVC Covered Galvanised Steel



Metallic Systems TYPE SPL

Chemical Properties

Suitable

Limited Suitability

Astm No.1		Methanol	UNSUITABLE
Astm No.2		Methyl Bromide	UNSUITABLE
Astm No.3		MEK	UNSUITABLE
Acetic Acid (10%)		Nitric Acid (10%)	
Acetone	UNSUITABLE	Nitric Acid (70%)	
Aluminium Chloride		Oxalic Acid	
Aniline	UNSUITABLE	Ozone (Gas)	
Benzaldehyde	UNSUITABLE	Paraffin oil	
Benzene	UNSUITABLE	Petrol	
Carbon tetrachloride		Phenol	
Chlorine water	UNSUITABLE	Sea Water	
Chloroform	UNSUITABLE	Silver Nitrate	
Citric Acid		Skydrol	UNSUITABLE
Copper Sulphate		Sodium Chloride	
Cresol		Sodium Hydroxide (10%)	
Diesel oil		Sodium Hydroxide (60%)	
Diethylamine		Sulphur Dioxide (Gas)	
Ethanol	UNSUITABLE	Sulphuric Acid (10%)	
Ether		Sulphuric Acid (70%)	
Ethylamine		Toluene	UNSUITABLE
Ethylene Glycol		Transformer Oil	
Ethyl Ethanoate	UNSUITABLE	1,1,1-Trichloroethane	UNSUITABLE
Freon 32		Trichloroethylene	UNSUITABLE
Hydrochloric Acid (10%)		Turpentine	
Hydrochloric Acid (36%)		Vegetable Oil	
Hydrogen Peroxide (35%)		Vinyl Acetate	UNSUITABLE
Hydrogen Peroxide (87%)		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
SLP	SPL(M)	4	4	2	3	4	2	6	7	-	4	1	5



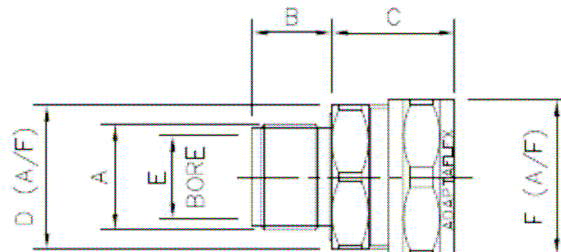
Conduit
Liquid Tight Oil Resistant

Construction
PVC Covered Galvanised Steel



Metallic Systems
TYPE SPL

Dimension charts for associated fittings
TYPE A



METRIC THREADS

PART No.	THREAD A	NOMINAL DIMENSIONS (mm)				
		B	C	D	E	F
SPL10/M16/A	M16x1.5	10.0	18.0	18.0	5.7	18.0.
SPL12/M16/A	M16x1.5	13.0	18.0	20.6	8.6	20.6
SPL16/M16/A	M16x1.5	13.0	20.0	22.0	10.3	24.0
SPL16/M20/A	M20x1.5	13.5	20.0	24.0	10.3	24.0
SPL20/M20/A	M20x1.5	15.0	22.0	25.4	14.3	27.0
SPL25/M25/A	M25x1.5	17.0	28.0	32.0	17.6	34.0
SPL32/M32/A	M32x1.5	19.0	34.0	38.0	24.0	42.0
SPL40/M40/A	M40x1.5	20.0	38.0	50.0	33.0	52.0
SPL50/M50/A	M50x1.5	24.0	43.0	60.0	38.5	60.0
SPL63/M63/A	M63x1.5	28.0	56.0	70.0	50.0	70.0

PG THREADS

PART No.	THREAD A	NOMINAL DIMENSIONS (mm)				
		B	C	D	E	F
SPL10/PG7/A	PG7	10.0	18.0	17.0	5.7	18.0
SPL12/PG9/A	PG9	13.0	18.0	20.6	8.1	20.6
SPL16/PG11/A	PG11	13.0	20.0	24.0	10.3	24.0
SPL16/PG13/A	PG13.5	13.5	20.0	24.0	10.3	24.0
SPL20/PG16/A	PG16	15.0	22.0	25.4	14.3	27.0
SPL25/PG21/A	PG21	17.0	28.0	34.0	17.6	34.0
SPL32/PG29/A	PG29	19.0	34.0	42.0	24.0	42.0
SPL40/PG36/A	PG36	20.0	38.0	52.0	33.0	52.0
SPL50/PG42/A	PG42	24.0	43.0	60.0	38.5	60.0
SPL63/PG48/A	PG48	28.0	56.0	70.0	50.0	70.0