Conduit
High Flexibility – High Fatigue Life

Construction
Galvanised Steel

Metallic

TYPE S INHERENT LOW FIRE HAZARD STEEL CONDUIT

Applications
Lighting/Cable Track
Under Floor Wiring
Light Industrial

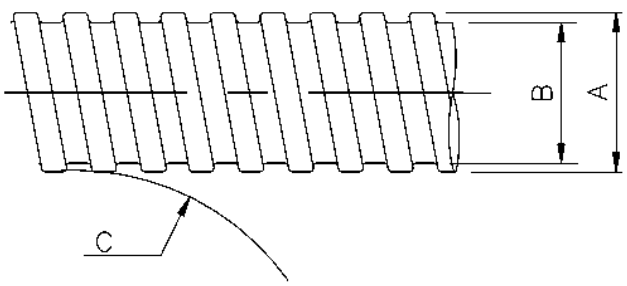
Characteristics
High UV Rating
High Flexibility
High Fatigue Life
ILFH

Material
Galvanised Steel

Fittings
IP40 – Type S Fittings – Type A, B, C & F

Approvals
IEC 61386
CE Low Voltage Directive
ILFH

Part No.	Conduit Size			Dimensions				
	NC	NW	Pitch	(B) Inside Diameter	(A) Outside Diameter	Reel Length	(C) Min Bend Radius	Colour
S10	10	-	-	6.8	9.0	25, 50	25	Self
S12	12	-	-	10.3	13	10, 25, 50	30	Self
S16	16	-	-	13.0	16	10, 25, 50	35	Self
S20	20	-	-	16.9	20.5	10, 25, 50	45	Self
S25	25	-	-	21.4	25.0	10, 25, 50	55	Self
S32	32	-	-	28.1	32.0	10, 25	60	Self
S40	40	-	-	37.7	42.5	10, 25	80	Self
S50	50	-	-	48.4	53.0	10, 25	90	Self
S63	63	-	-	57.5	62.5	10	115	Self
S75	75	-	-	70	77.0	10	150	Self



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Mechanical Properties

Test Type	Temp ℃	Method/Standards	Requirements	Value	Unit
Impact Strength	-25	IEC61386-1	No Cracks. <20% deformation	>6.0	J
Impact Strength	23	IEC61386-1	No Cracks. <20% deformation	>20	J
Crush Strength	23	IEC61386-1	<25% Crushwith >90% Recovery	1500	N
Crush Strength	23	AFX norm C1989	10% Crush, Instentanious Value	2200	N
Tensile Strength	23	AFX norm T1987	Ultimate Pull-Out of S Type Fitting	1450	N
Tensile Strength	23	IEC61386-1	With S Type Fitting	>1000	N

Thermal Properties

Test Type	Temp ℃	Method/Standards	Requirements	Value	Unit
Static Bend radius	23	AFX Norm S1985	-	45	mm
Dynamic Bend radius	-45	IEC61386-2.3	5000 Cycles	50	mm
Minimum Temp	-	-	Permanent Use	-50	℃
Maximum Temp	-	-	Permanent Use	300	℃

Pre test Conditions

Duration	Standard	Temperature	Relative Humidity
168 (Hours)	EN50086/IEC61386	23 (ºC)	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%)	UNSUITABLE	Nitric Acid (10%)	UNSUITABLE
Acetone		Nitric Acid (70%)	UNSUITABLE
Aluminium Chloride	UNSUITABLE	Oxalic Acid	UNSUITABLE
Aniline		Ozone (Gas)	UNSUITABLE
Benzaldehyde		Paraffin oil	
Benzene		Petrol	
Carbon tetrachloride		Phenol	
Chlorine water	UNSUITABLE	Sea Water	UNSUITABLE
Chloroform		Silver Nitrate	UNSUITABLE
Citric Acid		Skydrol	
Copper Sulphate		Sodium Chloride	UNSUITABLE
Cresol		Sodium Hydroxide (10%)	UNSUITABLE
Diesel oil		Sodium Hydroxide (60%)	UNSUITABLE
Diethylamine		Sulphur Dioxide (Gas)	UNSUITABLE
Ethanol		Sulphuric Acid (10%)	UNSUITABLE
Ether		Sulphuric Acid (70%)	UNSUITABLE
Ethylamine		Toluene	
Ethylene Glycol	UNSUITABLE	Transformer Oil	
Ethyl Ethanoate		1,1,1-Trichloroethane	UNSUITABLE
Freon 32	UNSUITABLE	Trichloroethylene	UNSUITABLE
Hydrochloric Acid (10%)	UNSUITABLE	Turpentine	
Hydrochloric Acid (36%)	UNSUITABLE	Vegetable Oil	
Hydrogen Peroxide (35%)	UNSUITABLE	Vinyl Acetate	UNSUITABLE
Hydrogen Peroxide (87%)	UNSUITABLE	Water	UNSUITABLE
Lactic Acid	UNSUITABLE	White Spirit	
Lubricating oil		Zinc Chloride	UNSUITABLE

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
S	S	4	4	5	6	4	0	4	0	1	4	1	5

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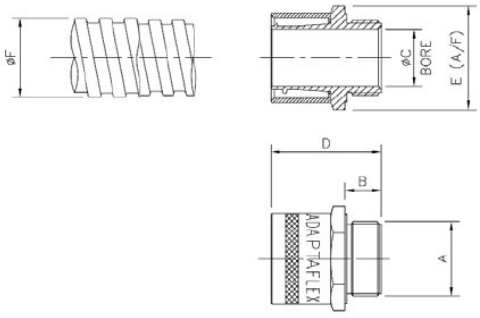
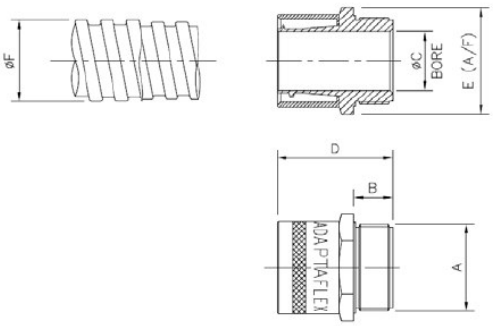
Dimension charts for associated fittings
TYPE A

Type A fittings (Metric & PG threads)





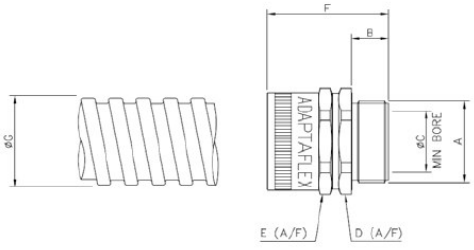
METRIC THREADS

PART No.	THREAD A	NOMINAL DIMENSIONS (mm)				NOMINAL CONDUIT øF
		B	C	D	E	
S10/M12/A	M12 x1.5	8.0	5.5	23.0	14.0	10.0
S12/M16/A	M16 x1.5	8.0	8.5	23.0	17.0	14.0
S16/M16/A	M16 x1.5	10.0	11.5	25.5	20.0	17.0
S16/M20/A	M20x1.5	10.0	11.5	25.5	22.0	17.0
S20/M20/A	M20x1.5	13.0	15.3	29.0	24.0	21.0
S25/M25/A	M25x1.5	12.0	19.0	36.5	30.0	26.0
S32/M32/A	M32x1.5	14.0	26.2	39.0	38.0	34.0
S40/M40/A	M40x1.5	15.0	34.2	43.0	50.0	44.5
S50/M50/A	M50x1.5	15.0	45.0	45.0	66.5	55.0
S63/M63/A	M63x1.5	20.0	54.0	57.0	76.5	64.5
S75/M75/A	M75x1.5	20.0	66.5	60.0	84.0	79.0

PG THREADS

PART No.	THREAD A	NOMINAL DIMENSIONS (mm)				NOMINAL CONDUIT øF
		B	C	D	E	
S10/PG7/A	PG7	8.0	5.5	23.0	14.0	10.0
S12/PG9/A	PG9	8.0	8.5	23.0	17.0	14.0
S16/PG11/A	PG11	10.0	11.5	25.5	20.0	17.0
S20/PG16/A	PG16	12.0	15.3	29.0	24.0	21.0
S25/PG21/A	PG21	12.0	19.0	36.5	30.0	26.0
S32/PG29/A	PG29	14.0	26.2	39.0	38.0	34.0
S40/PG36/A	PG36	15.0	34.2	43.0	50.0	44.5
S50/PG42/A	PG42	15.0	45.0	45.0	66.5	55.0
S63/PG48/A	PG48	20.0	54.0	57.0	76.5	64.5

Dimension charts for associated fittings
TYPE B



METRIC THREADS

PART No.	THREAD A	NOMINAL DIMENSIONS (mm)					NOMINAL CONDUIT øG
		B	C	D	E	F	
S10/M12/B	M12 x1.5	8.0	5.5	14.0	14.0	29.2	9.0
S12/M16/B	M16 x1.5	8.0	7.5	17.0	17.0	29.5	13.0
S16/M16/B	M16 x1.5	8.3	10.2	20.0	20.0	31.6	16.0
S16/M20/B	M20x1.5	9.0	10.2	20.0	20.0	32.4	16.0
S20/M20/B	M20x1.5	10.0	14.5	24.0	24.0	33.9	20.5
S25/M25/B	M25x1.5	12.0	16.9	30.0	30.0	46.0	25.0
S32/M32/B	M32x1.5	14.0	24.1	38.0	38.0	47.0	32.0
S40/M40/B	M40x1.5	15.0	30.8	50.0	50.0	55.7	42.5
S50/M50/B	M50x1.5	15.0	42.5	66.5	66.5	57.9	53.0

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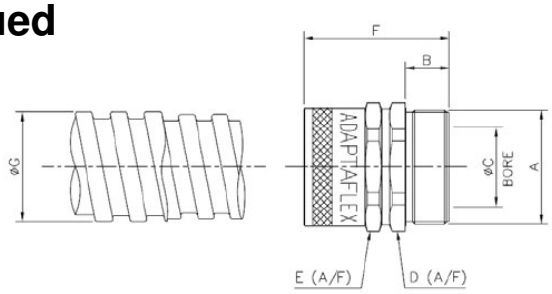
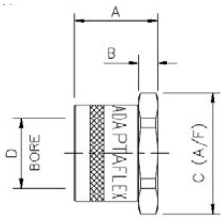
Dimension charts for associated fittings
TYPE B - Continued



PG THREADS

PART No.	THREAD A	NOMINAL DIMENSIONS (mm)					NOMINAL CONDUIT ØG
		B	C	D	E	F	
S10/PG7/B	PG7	8.0	4.1	14.0	14.0	29.0	10.0
S12/PG9/B	PG9	7.8	7.5	17.0	16.8	29.5	14.0
S16/PG11/B	PG11	9.0	10.2	20.0	20.0	32.4	17.0
S20/PG16/B	PG16	10.0	14.5	24.0	24.0	33.9	21.0
S25/PG21/B	PG21	12.0	16.9	30.0	30.0	46.0	26.0
S32/PG29/B	PG29	14.0	24.1	38.0	38.0	47.0	34.0
S40/PG36/B	PG36	15.0	30.8	50.0	50.0	55.7	44.5
S50/PG42/B	PG42	15.0	42.5	66.5	66.5	57.9	55.0

Dimension charts for associated fittings
TYPE C



PART No.	TO SUIT CONDUIT	NOMINAL DIMENSIONS (mm)			
		A	B	C	D
S10/9/C	S10	15.5	3.5	14.0	5.5
S12/12/C	S12	15.5	3.5	17.0	8.5
S16/16/C	S16	15.5	3.5	20.0	11.5
S20/20/C	S20	15.5	4.0	24.0	15.3
S25/25/C	S25	22.0	4.0	28.0	19.0
S32/32/C	S32	25.0	5.0	38.0	26.2
S40/40/C	S40	27.5	5.5	54.0	34.2
S50/51/C	S50	28.0	6.0	60.0	45.0
S63/61/C	S63	31.0	7.0	76.0	54.0
S75/75/C	S75	36.0	6.0	84.0	66.5

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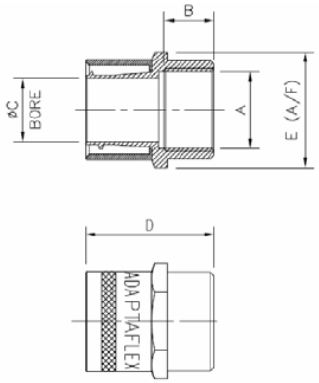
Dimension charts for associated fittings
TYPE F



PART No.	TO SUIT CONDUIT	THREAD A	NOMINAL DIMENSIONS (mm)			
			B	C	D	E
SP20/M20/F	SP20	M20x1.5	11.0	15.3	27.2	21.0
SP25/M25/F	SP25	M25x1.5	15.0	19.0	38.5	26.0
SP32/M32/F	SP32	M32x1.5	15.0	26.2	41.5	34.0

Fittings associated with S conduit	
A Type	Straight scroll fitting with external thread and ferrule
B Type	Straight scroll swivel fitting with external thread and ferrule
C Type	Smooth entry bush with ferrule
F Type	Straight scroll fitting with female internal thread and ferrule

90° and 45° elbows are also available