



Conduit
Highly Flexible – High Fatigue life

Construction
Standard Weight Polyamide 6



Non-Metallic Systems TYPE PAS

Applications Machinery (Low mechanical protection)
Buildings (No Fire Risk)
Rail

Fittings IP68 ATS, Adaptaseal, Adaptalok + ALS Seal Fittings
IP66 ATS, Adaptaseal, Adaptalok Fittings
IP40 Adapting Fittings, Jumbo Fittings

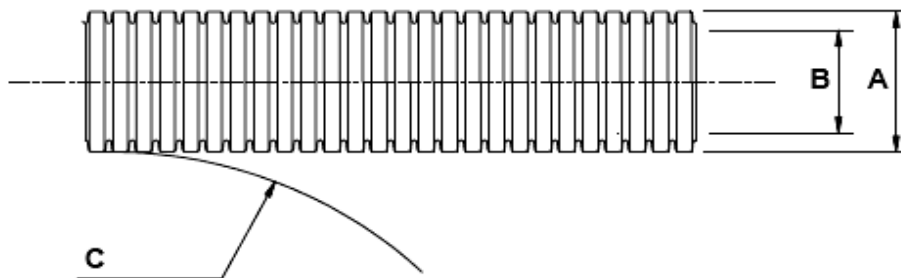
Characteristics High UV Resistance
High Flexibility and Fatigue Life
Self Extinguishing
Halogen Free

Approvals NFR 13-903
NFR 16-10/12 I3,F3
Deutsche Bahn S4, SR2, ST2
London Underground (On Concession)
Lloyd's Register of Shipping (Type Approval)
BSI Kitemark KM35161
UL Recognition File: E135398
CE LVD
ASTM E662

Material Flame Retardant
Heat Stabilised
Polyamide 6



Part No.	Conduit Size			Dimensions				
	NC	NW	Pitch	(B) Inside Diameter	(A) Outside Diameter	Reel Length	(C) Min Bend Radius	Colour
PAFS10	10	8.5	F	6.5	10	50	15	BL/GR
PAFS13	13	10.0	F	9.6	13	50	25	BL/GR
PAFS16	16	13.0	F	11.8	15.8	50	35	BL/GR
PAFS21	21	17.0	F	16.5	21.2	50	45	BL/GR
PAFS28	28	23.0	F	22.6	28.5	50	50	BL/GR
PACS28	28	23.0	C	21.7	28.5	50	50	BL/GR
PAFS34	34	29.0	F	28.8	34.5	50	60	BL/GR
PACS34	34	29.0	C	27.7	34.5	50	60	BL/GR
PACS42	42	36.0	C	35.2	42.5	25	65	BL/GR
PACS54	54	48.0	C	46.5	54.5	25	75	BL/GR
PACS80	80	70.0	C	67.0	79.3	10	160	BL/GR
PACS106	106	95.0	C	91.5	106.0	10	210	BL/GR





Conduit
Highly Flexible – High Fatigue life

Construction
Standard Weight Polyamide 6



Non-Metallic Systems TYPE PAS

Mechanical Properties

Test Type	Method/Standards	Requirements	Value
Crush Strength	IEC 61386	<25% crush >90% recovery	>320N
Tensile Strength	AFX norm T1987	Pull off of fitting	100N
Impact Strength	IEC 61386	No Cracks. <20% deformation	>6.0 J
Static Bend Radius	AFX norm T1985		45mm
Dynamic Bend radius	IEC 61386	5000 cycles minimum	80mm

Thermal Properties

Test Type	Method/Standards	Requirements	Value
Minimum Temperature		Permanent use	-40 °C
Maximum Temperature		Permanent use	120 °C
Maximum Short Term Temperature		Temporary use	150 v
Cold Bend @ -40 °C	NFR13-903	2xOD	Pass

Flammability, Smoke and Toxicity (FST) Performance

Test Type	Method/Standard	Requirement	Result	Unit
Flammability	IEC 61386	Vertical Burn	Pass	Pass/Fail
Flammability	UL94	Vertical Burn	V2	HB-V0
Oxygen Index	ISO 4589		38	%
Ignition Rating	NFF 16-101/2	Glow Wire & oxygen Index	I3	-
Fume Rating	NFF 16-101/2	Smoke & Toxicity	F3	-
Sulphur Content	London Underground	<0.5%	Pass<0.1%	Pass/Fail
Halogen Content	London Underground	<0.5%	Pass<0.1%	Pass/Fail
Phosphorus Content	London Underground	<.5%	Pass<0.1%	Pass/Fail
Glow Wire	IEC 695	>750 °C	>850 °C	°C
Toxicity (Marine)	NES713 Issue 3	<10.0	5.2	-
Toxicity	BS 6853 App B.1		2.17	-
Smoke Density	ASTM E662	Ds <100 in both modes	21/65	Ds max

Pre test Conditions

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



Conduit
Highly Flexible – High Fatigue life

Construction
Standard Weight Polyamide 6



Non-Metallic Systems TYPE PAS

Chemical Properties

Suitable Limited Suitability

Astm No.1		Methanol	
Astm No.2		Methyl Bromide	Not Suitable
Astm No.3		MEK	
Acetic Acid (10%)		Nitric Acid (10%)	Not Suitable
Acetone		Nitric Acid (70%)	Not Suitable
Aluminium Chloride		Oxalic Acid	
Aniline		Ozone (Gas)	Not Suitable
Benzaldehyde		Paraffin oil	
Benzene		Petrol	
Carbon tetrachloride		Phenol	Not Suitable
Chlorine water	Not Suitable	Sea Water	
Chloroform	Not Suitable	Silver Nitrate	
Citric Acid		Skydrol	
Copper Sulphate		Sodium Chloride	
Cresol	Not Suitable	Sodium Hydroxide (10%)	
Diesel oil		Sodium Hydroxide (60%)	
Diethylamine		Sulphur Dioxide (Gas)	Not Suitable
Ethanol		Sulphuric Acid (10%)	Not Suitable
Ether		Sulphuric Acid (70%)	Not Suitable
Ethylamine		Toluene	
Ethylene Glycol		Transformer Oil	
Ethyl Ethanoate		1,1,1-Trichloroethane	
Freon 32		Trichloroethylene	
Hydrochloric Acid (10%)	Not Suitable	Turpentine	
Hydrochloric Acid (36%)	Not Suitable	Vegetable Oil	
Hydrogen Peroxide (35%)		Vinyl Acetate	
Hydrogen Peroxide (87%)	Not Suitable	Water	
Lactic Acid		White Spirit	
Lubricating oil		Zinc Chloride	Not Suitable

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
PA Standard	AL	2	4	2	4	4	0	6	6	-	1	1	0



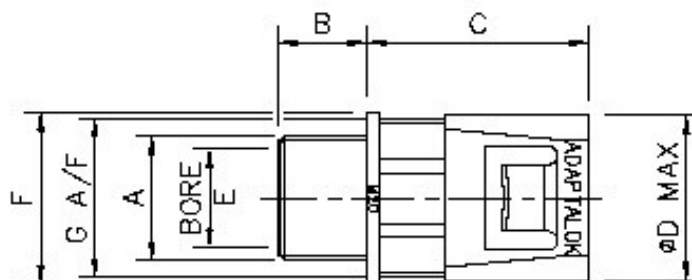
Conduit
Highly Flexible – High Fatigue life

Construction
Standard Weight Polyamide 6



Non-Metallic Systems
TYPE PAS

Dimension charts for associated fittings
ADAPTALOK



PART No.	THREAD A	NOMINAL DIMENSIONS (mm)						WEIGHT gms.
		B	C	D	E	F	G	
AL10/M12/A	M12x1.5	10.0	25.0	16.1	7.5	15.2	12.5	3
AL13/M16/A	M16x1.5	11.5	33.0	21.3	11.6	19.0	17.0	5
AL16/M16/A	M16x1.5	11.5	33.0	23.7	11.6	23.7	19.8	6
AL16/M20/A	M20x1.5	11.5	33.0	23.7	15.3	23.4	19.8	7
AL18/M20/A	M20x1.5	11.5	34.0	26.3	15.0	23.0	21.6	7
AL20/M20/A	M20x1.5	13.0	34.8	28.1	14.8	26.8	21.7	9
AL21/M20/A	M20x1.5	14.0	34.7	28.9	14.8	26.7	25.0	9
AL21/M25/A	M25x1.5	11.0	35.75	29.0	17.8	31.5	25.0	10
AL25/M25/A	M25x1.5	16.0	35.9	32.8	20.0	30.8	28.7	12
AL28/M25/A	M25x1.5	16.2	36.8	36.8	20.0	35.5	32.3	14
AL28/M32/A	M32x1.5	12.2	37.1	36.8	22.3	37.7	32.5	17
AL34/M32/A	M32x1.5	16.0	37.8	43.2	26.5	41.5	38.9	20
AL34/M40/A	M40x1.5	12.1	37.9	43.0	30.3	45.3	39.0	23
AL42/M40/A	M40x1.5	16.0	47.8	53.8	31.0	52.8	49.5	45
AL42/M50/A	M50x1.5	12.1	48.1	54.0	37.8	66.8	50.0	57
AL54/M50/A	M50x1.5	16.0	53.0	66.9	40.2	67.2	62.6	71
AL54/M63/A	M63x1.5	16.0	53.0	66.9	50.0	70.0	62.6	75