

Type PA

Standard weight conduit



Flexible standard weight, PA nylon (PA6) conduit is a flame retardant conduit suitable for a wide range of applications.

Certifications / Standards:

(Refer to tables for certifications details)



Features & benefits:

- Standard weight - fire resistant conduit
- High flexibility & fatigue life
- Self-extinguishing, low smoke toxicity and halogen Free
- Very high UV resistance
- Available in black and grey

Applications:

- Construction - Commercial - Institutional
- OEM Assembly – Automation, Machinery, Panel builders
- Harness makers
- OEM Vehicles – Rail, Automotive, Marine
- Utility – Power & Energy, ICT & Data centre, Water & Waste
- Industry processing – pulp, paper, wood, food
- Infrastructure & Transport

Temperature range:

- Static applications: -40°C to +120°C
- Moving applications: -25°C to +150°C

UV Resistance:

- Very high

Material / Materials / Finishes:

- Fire Resistant Polyamide (Nylon) PA 6

Ingress protection:

- IP40 - Adapting & Jumbo Fittings
- IP65 - Jumbo Fittings with SK Seal
- IP66 - ATS, Adaptalok, Adaptaseal
- IP67 - ATS, Adaptalok with ALS Seal, Adaptaseal
- IP68 - ATS, Adaptalok with ALS Seal, Adaptaseal
- IP69 - ATS, Adaptalok with ALS Seal, Adaptaseal

Conforms to:

- CE marked to Low Voltage Directive 2014/35/EU
- RoHS Compliant to 2011/65/EU
- Conforms with end of life vehicle directive (ELV) EU200/53/EC
- BS Kitemark KM-35161
- Deutsche Bahn S4, SR2, ST2
- EN45545-2 HL2 (R22 & R23)
- UL1696 / CSA 22.2 No:227.3 - File number E173968

Fire performance:

Test standard	Performance rating
EN45545	HL2 (R22 & R23)
BS6855-1	Pass
UL94	V2
DIN 5510-2	S4 SR2 ST2

Chemical resistance:

- View our chemical resistance guide [here](#).

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Type PA_S Conduit – Part numbers and dimensions

Part No.	Conduit size		Dimensions (mm)			Reel Length (m)
	(NC)	Conduit Pitch	Outside Dia. (A)	Inside Dia. (B)	Bend radi (C)	
**PAFS10	10	Fine	10.05	6.20	15	50
**PAFS13	13	Fine	13.10	9.65	25	50
PAFS16	16	Fine	16.05	11.15	35	50
PAFS18	18	Fine	18.40	13.85	40	50
PAFS21	21	Fine	21.20	16.45	45	50
PAFS25	25	Fine	25.80	21.10	45	50
PACS25	25	Coarse	24.85	19.80	50	50
PAFS28	28	Fine	28.35	22.50	50	50
PACS28	28	Coarse	28.35	21.50	50	50
PAFS34	34	Fine	34.50	28.60	60	50
PACS34	34	Coarse	34.50	27.50	60	50
PACS42	42	Coarse	42.40	34.80	65	25
PACS48	48	Coarse	48.20	40.60	70	25
PACS54	54	Coarse	54.30	46.20	75	25
PACS80	80	Coarse	79.30	67.00	160	10
PACS106	106	Coarse	106.00	91.50	210	10

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Mechanical properties

Test type	Standard	Requirement	Status
Crush strength	BS EN 61386-1	<25% crush >90% recovery	>320N (Class 2)
Impact strength @ 23°C	BS EN 61386-1	No cracks <20% deformation min value	>20J (Class 5)
Impact strength @ -25°C	BS EN 61386-1	No cracks <20% deformation min value	>6J (Class 4)
Tensile strength	BS EN 61386-1	Fitting pull off (Type S fitting)	>100N
Dynamic bend radius @ -15 °C	BS EN 61386-1	5000 cycles minimum	4xOD

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Thermal properties

Test type	Standard	Requirement	Value
Minimum temperature	-	Permanent use static	-40°C
Minimum temperature	BS EN 61386-23	Dynamic Use (5000 cycles)	-25°C
Maximum temperature	-	Permanent use	120°C
Maximum temperature	BS EN 61386-23	Dynamic Use (5000 cycles)	150°C

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Flammability

Test type	Standard	Requirement	Result	Value
Oxygen index	ISO 4589-2	% Oxygen to support combustion	28.5	%
Glow wire	IEC 60695	No ignition to extinguish within 30s	850	°C
Flammability	UL94	Vertical (V0, V2) or Horizontal (HB)	V2	
Flammability	BS EN 61386-1	1KW burner at 45°	Pass	

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Smoke

Test type	Standard	Requirement	Result	Unit
Optical Density	ISO-5659-2	<150 (HL3 R22)	148	
Smoke Density	BS-6853	A <0.061 (Class II)	0.026	A _o
Smoke Density	ISO 5659-2	Ds Max	21/65	Ds Max

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Toxicity

Test type	Standard	Requirement	Result	Value
Halogen free	LUL	<0.5%	Pass	Pass/Fail
Phosphorous free	LUL	<0.5%	Pass	Pass/Fail
Sulphur free	LUL	<0.5%	Pass	Pass/Fail
Toxicity	NF X70-100-1&2	C.I.T NLP <0.75 (HL3 R22)	0.59	
Toxicity	BS 6853	<3.6 (Class II)	2.95	

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Pre-test conditions

Duration	Standard	Temperature	Relative humidity
168 (hrs)	BS EN 61386-1	23°C	50%

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