

Type PALS

Lightweight slit conduit



Flexible lightweight, slit, 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:

- Lightweight - 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
- Retorfitting conduit to existing installations

Temperature range:

- Static applications: -40°C to +120°C
- Dynamic applications: -5°C to +120°C

UV Resistance:

- Very high

Material / Materials / Finishes:

- Fire Resistant Polyamide (Nylon) PA 6

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

Fire performance:

Test standard	Performance rating
IEC 61386	Pass
LUL	Pass
UL94	HB

Chemical resistance:

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

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Type PA_L 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)	
PAFL10-S	10	Fine	10.05	6.2	20	50
PAFL13-S	13	Fine	13.10	9.6	25	50
PAFL16-S	16	Fine	16.05	11.7	35	50
PAFL21-S	21	Fine	21.20	16.65	45	50
PAFL25-S	25	Fine	25.60	21.1		100
PACL28-S	28	Coarse	28.35	22.6	50	50
PACL34-S	34	Coarse	34.50	28.70	60	50
PACL42-S	42	Coarse	42.40	34.80	65	25
PACL54-S	54	Coarse	54.30	46.5		25

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Mechanical properties

Test type	Standard	Requirement	Status
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 61386-23	5000 cycles minimum	80mm

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Thermal properties

Test type	Standard	Requirement	Value
Minimum temperature	-	Permanent static use	-40°C
Minimum temperature	BS EN 61386-23	Dynamic Use (5000 cycles)	-5°C
Maximum temperature	-	Permanent use	120°C
Maximum temperature	BS EN 61386-23	Dynamic Use (5000 cycles)	150°C
Cold bend test @40°C	BS EN 61386-23	2xOD	Pass

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Flammability

Test type	Standard	Requirement	Result	Value
Oxygen index	ISO 4589-2	% Oxygen to support combustion	22	%
Flammability	UL94	Vertical (V0, V2) or Horizontal (HB)	HB	
Flammability	BS EN 61386-1	1KW burner at 45°	Pass	

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Toxicity

Test type	Standard	Requirement	Result	Value
Halogen free	LUL	<0.5%	Pass	
Phosphorous free	LUL	<0.5%	Pass	
Sulphur free	LUL	<0.5%	Pass	

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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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