

# Type PADL

## Heavy weight conduit



Flexible heavyweight, PADL 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:**

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

**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: -5°C to +120°C

**UV Resistance:**

- Very high

**Material / Materials / Finishes:**

- Modified Polyamide (Nylon) PA 6

**Ingress protection:**

- IP40 - Adaptalok
- IP65 - Adaptalok
- IP66 - ATS or PC
- IP67 - ATS or PC
- IP68 - ATS or PC
- IP69K - ATS or PC

**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
- UL1696 File number E173968

**Fire performance:**

Test standard	Performance rating
EN45545	HL2 (R22 & R23)
BS6855-1	Pass
UL94	V0
DIN 5510-2	S4 SR2 ST2 FED 0.504

**Chemical resistance:**

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

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**Type PADL Conduit – Part numbers and dimensions**

Part No.	Conduit size		Dimensions (mm)			Reel Length (ft)
	(NC)	Conduit Pitch	Outside Dia. (A)	Inside Dia. (B)	Bend radi (C)	
PADL16	16	Coarse	15.8	12.0	30	100
PADL21	21	Coarse	21.2	16.2	40	100
PADL28	28	Coarse	28.5	22.6	45	100
PADL34	34	Coarse	34.5	29.0	55	100
PADL42	42	Coarse	42.5	36.5	60	100
PADL54	54	Coarse	54.5	47.5	70	100

Part number example: To order quote part number & reel length, e.g. PACH21/BL/50M.

\*\*UR not applicable to size 13

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**Mechanical properties**

Test type	Standard	Requirement	Status
Compression strength	IEC61386		Class 1
Impact strength @ 23°C	IEC61386-1	No cracks <20% deformation min value	>4.5J
Tensile strength		Fitting pull off minimum vale	>250N
Static bend radius			2x OD
Dynamic bend radius @ -25 °C		5000 cycles minimum	4x OD

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**Thermal properties**

Test type	Standard	Requirement	Value
Minimum temperature	-	Permanent static use	-40°C
Minimum temperature	IEC61386	Dynamic Use (5000 cycles)	-25°C
Maximum temperature	-	Permanent use	120°C
Maximum temperature		Short term	160°C

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**Flammability**

Test type	Standard	Requirement	Result	Value
Flammability	UL94	Vertical (V0, V2) or Horizontal (HB)	V2	
Flammability	IEC61386-1	1KW burner at 45°	Pass	

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**Toxicity**

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

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**Pre-test conditions**

Duration	Standard	Temperature	Relative humidity
168 (hrs)	UL1696	23°C	50%

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