



Flexible Conduit Systems

Type PA Standard Weight (Polyamide 6) LFH Conduit

Description

PA standard weight conduit is made from flame retardant Nylon 6 and is specially formulated to complement LFH cable increasingly being specified where public safety or the integrity of electronic equipment are of concern.

PA conduits provide protection against mechanical shock and ingress of water whilst maintaining their form through tight bend radii.

Applications

PA is particularly used in applications requiring low fire hazard performance, lightweight, flexibility and extremes of temperature.

PA is extensively used in hospitals, cinemas, computer suites, high-rise buildings and marine applications.

PA is designed for connection to all Adaptaflex Adaptalok and Adaptaseal fittings.

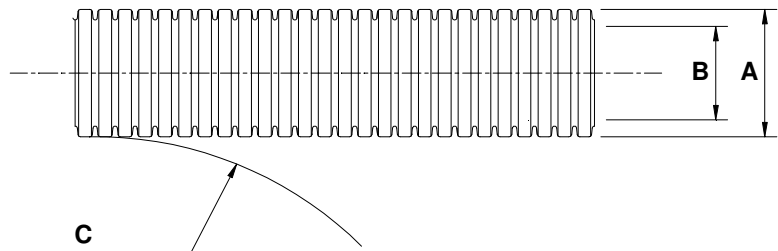
PA conduits are available in a range of popular sizes. The standard colour is black with dark grey (7031) also being available on request.

Approvals

PA conduits have many approvals covering many applications. Some of the more popular ones are detailed below...

NFR13-903
 NFF16-101/2 I3, F3
 Deutsche Bahn S4, SR2, ST2
 London Underground (On concession)
 Lloyd's Register of Shipping (Type Approval)
 ASTM E662
 BSI Kitemark KM35161
 CE LVD
 UL Recognition UL File: E135398

Contact us for details



Part Number	Size	US Size	O/D	Min Bore	Wgt g per m	Bend radius
	NW	Inch	A	B		C
PAFS10	7	1/4	10.0	6.5	19	15
PAFS13	10	5/16	13.0	9.6	28	25
PAFS16	12	3/8	15.8	11.8	38	35
PAFS18	14		17.8	14.2	49	40
PAFS21	17	1/2	21.2	16.6	60	45
PACS21	17	1/2	21.8	14.7	67	45
PAFS28	23	3/4	28.5	22.6	100	50
PACS28	23	3/4	28.5	21.7	100	50
PAFS34	29	1	34.5	28.8	135	60
PACS34	29	1	34.5	27.7	135	60
PACS42	36	1 1/4	42.5	35.2	165	65
PACS54	48	1 1/2-2	54.5	46.6	235	75
PACS80	70	3	79.5	66.6	550	160
PACS106	95	4	106.0	91.0	870	210

Note : dimensions are in mm

Fittings associated with PA conduit	
Adaptalok System	Push on fittings, straight, elbows, metallic swivels, flanges
Adaptaseal System	To give the conduit a liquid tight seal, includes straight and elbow fittings
Adapting System	Swivel compression fittings, straight and elbow fittings
Each of the systems has a large range of fittings in it's own right, to view the full range see the Adaptaflex catalogue.	



Contact details:

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Conduits
 Document ref. PA_S version 3



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Specifications

Material: Flame retardant
Heat stabilised
Polyamide 6

Colour: Black

IP rating:
With Adaptaseal fittings IP68 2bar / 30mins
With Adaptalok fittings IP66
Adaptalok + ALS seal IP68 1.1bar / 35mins
IP69k (Din 40050)

Pre test conditioning

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

Performance characteristics

The tables below provide test data for PA Conduits in accordance with leading standards

Contact us for chemical compatibility data

Performance Characteristics

Test type	Method/ Standard	Requirement	Value
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Mechanical performance

Crush strength @ 23°C	EN50086-1	<25% crush with >90% recovery	> 320N
Tensile strength with Adaptalok fittings	EN50086-1	Pull off of fitting	>100N
Impact strength @ 23°C	EN50086-1	No cracks. < 20% deformation	> 6.0 J
Static bend radius @ 23°C	AFX norm S1985	—	45mm
Dynamic bend radius @ -45°C	EN50086-2.3	5000 cycles minimum	80mm

Thermal performance

Minimum temperature	—	Permanent use	-40°C
Maximum temperature	—	Permanent use	120°C
Maximum short term temperature	—	Temporary use	150°C
Cold bend @-40°C	NFR13-903	2xOD	Pass

Flammability, smoke and toxicity (FST) performance

Test type	Standard / method	Requirement	Result	Unit
Flammability	EN50086-1	Vertical burn	PASS	pass/fail
Flammability	UL94	Vertical burn	V2	HB – V0
Oxygen index	ISO 4589		28	%
Ignition rating	NFF16-101/2	Glow wire & oxygen index	I3	
Fume rating	NFF 16-101/2	Smoke & toxicity	F3	
Halogen content	London Underground	< 0.5 %	Yes < 0.1%	Pass/ Fail
Sulphur content	London Underground	< 0.5 %	Yes < 0.1%	Pass/ Fail
Phosphorus content	London Underground	< 0.5 %	Yes < 0.1%	Pass/ Fail
Glow wire	IEC 695	> 750 C	> 850 C	°C
Toxicity	NES713 Issue 3	< 10.0	5.2	
Smoke density	ASTM E662	Ds < 100 in both modes	21/65	Ds max

EN Classification Number	242440660110
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notes: values are based on nominal 21mm conduit size
MBR = minimum bend radius
OD = outside diameter

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