

non-metallic conduit and fittings

Non-metallic systems are typically lighter, easier to work with and more cost effective to install. With advances in material technologies non-metallic systems can provide an alternative solution where typically only metal systems had been considered previously. We have a range of products which can offer properties dependant on your requirement for impact resistance, flexibility, fatigue life, operating temperature and fire performance to name but a few.



IEC EN 61386



FPAS

Construction: Standard weight, flame retardant nylon (PA6) corrugated flexible conduit. Colour black or grey (RAL 7031). Orange available on request.*

Typical Applications: All types of machinery, public buildings.

Conduit

- Highly flexible and high fatigue life
- High impact strength and recovers if crushed
- Temperature range -40°C to +120°C (-20°C to +100°C for moving applications)
- Lloyd's Register Type Approval
- UL listed / UL recognized
- Low Fire Hazard (LFH), see page 82
- UL 94 V2 flame retardancy
- Halogen, sulphur and phosphorus free
- UV resistant (black)
- Abrasion resistant
- Highly resistant to solvents and oils



FPAL

Construction: Light weight nylon (PA6) corrugated flexible conduit. Colour black or grey (RAL 7031).

Typical Applications: Machines where lower mechanical protection is required and buildings.

Conduit

- Highly flexible and high fatigue life
- High impact strength and recovers if crushed
- Temperature range -40°C to +120°C (-20°C to +100°C for moving applications)
- UL recognized
- Highly resistant to solvents and oils
- Self extinguishing
- Halogen, sulphur and phosphorus free



nominal size (mm)
pitch

		FPAS					FPAL				
		part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)
10	F	FPAS10	50	10.0	6.3	15	FPAL10	50	10.0	6.5	15
11	F	FPAS11	50	11.5	8.2	20	FPAL11	50	11.5	8.4	20
13	F	FPAS13	50	13.0	9.8	25	FPAL13	50	13.0	10.0	25
16	F	FPAS16	25, 50	15.8	11.8	35	FPAL16	50	15.8	12.0	35
18	F	FPAS18	50	18.5	14.2	40	FPAL18	50	18.5	14.2	35
20	C	FPAS20	50	20.0	14.8	45	FPAL20	50	20.0	15.0	40
21	F	FPAS21	25, 50	21.2	16.7	45	FPAL21	50	21.2	16.9	40
21	C										
25	C	FPAS25	50	25.0	19.1	50	FPAL25	50	25.0	19.3	45
25.4	F										
28	F	FPAS28	25, 50	28.5	22.8	50	FPAL28	50	28.5	23.0	45
28	C	FPAS28C	50	28.5	21.6	50					
34	C	FPAS34	25, 50	34.5	28.1	60	FPAL34	25, 50	34.5	28.3	55
42	C	FPAS42	10, 25	42.5	35.5	70	FPAL42	25	42.5	35.7	65
54	C	FPAS54	10, 25	54.5	47.2	80	FPAL54	25	54.5	47.4	80
67	C	FPAS67	10	67.2	56.3	130	FPAL67	10	67.2	56.5	80

F = fine pitch C = coarse pitch



FPA system IP66

nylon

Construction: Nylon (PA66) moulded fitting.



Fittings

IP66

FPA

straight external thread

One piece, fast fit, external threaded fitting. Suitable for knockouts or threaded entries.



IP66

FPA

straight UNEF
swivel internal thread

One piece, fast fit fitting with anodised aluminium swivel UNEF internal thread for attachment to circular connectors.



NEW

IP66

FPA

flange

One piece, fast fit fitting with nylon swivel flange.



IP66

FPA90

90° elbow external thread

One piece, fast fit, external threaded 90 degree elbow fitting. Suitable for knockouts.



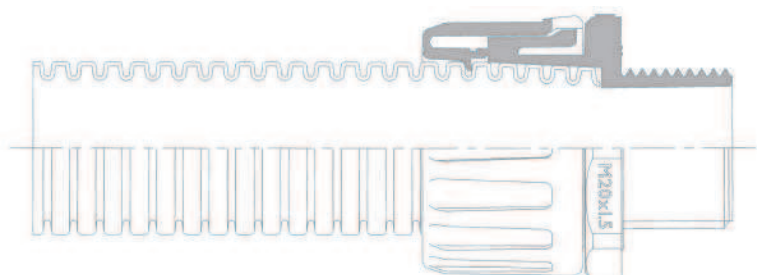
nominal size (mm)

OD mm

		Straight Metric	Straight PG	Straight NPT	Straight UNEF	Straight Flange	90 Degree Metric	90 Degree PG	90 Degree NPT
10	10.0	FPA10-M12	FPA10-PG7				FPA10-M12-90	FPA10-PG7-90	
10		FPA10-M16	FPA10-PG9						
11	11.5	FPA11-M12	FPA11-PG7				FPA11-M12-90		
13	13.0	FPA13-M12	FPA13-PG7				FPA13-M16-90	FPA13-PG9-90	
13		FPA13-M16	FPA13-PG9						
13		FPA13-M20	FPA13-PG11						
16	15.8	FPA16-M16	FPA16-PG9	FPA16-038	FPA16-U075B	FPA16-FL	FPA16-M16-90	FPA16-PG9-90	
16		FPA16-M20	FPA16-PG11	FPA16-050	FPA16-U100B		FPA16-M20-90	FPA16-PG11-90	FPA16-050-90
16			FPA16-PG13		FPA16-U119B			FPA16-PG13-90	
16	16.1		FPA16-PG16						
18	18.5	FPA18-M20	FPA18-PG13					FPA18-PG13-90	
18			FPA18-PG16						
20	20.0	FPA20-M20					FPA20-M20-90		
21	21.2	FPA21-M20	FPA21-PG13	FPA21-050	FPA21-U100B	FPA21-FL	FPA21-M20-90	FPA21-PG13-90	FPA21-050-90
21			FPA21-PG16		FPA21-U119B			FPA21-PG16-90	
21					FPA21-U138B				
25	25.0	FPA25-M25					FPA25-M25-90		
25.4	25.4								
28	28.5	FPA28-M25	FPA28-PG21	FPA28-075	FPA28-U144B	FPA28-FL	FPA28-M25-90	FPA28-PG21-90	FPA28-075-90
28		FPA28-M32	FPA28-PG29		FPA28-U175B				
34	34.5	FPA34-M32	FPA34-PG29	FPA34-100	FPA34-U175B	FPA34-FL	FPA34-M32-90	FPA34-PG29-90	FPA34-100-90
34		FPA34-M40							
42	42.5	FPA42-M40	FPA42-PG36	FPA42-125	FPA42-U200B	FPA42-FL	FPA42-M40-90		FPA42-125-90
42		FPA42-M50		FPA42-150			FPA42-M50-90		FPA42-150-90
54	54.5	FPA54-M50	FPA54-PG42	FPA54-150			FPA54-M50-90	FPA54-PG48-90	FPA54-150-90
54		FPA54-M63	FPA54-PG48	FPA54-200			FPA54-M63-90		FPA54-200-90
67	67.0	FPA67-M63	FPA67-PG48	FPA67-200			FPA67-M63-90	FPA67-PG48-90	FPA67-200-90

Ordering Notes

- Specify black or grey (B = Black, G = Grey) eg. FPA16-M16B
- The IP rating onto a UNEF threaded connector may be dependent on the design of the connector
- Available on request:
 - additional sizes
 - alternative threads
 - additional UNEF threads and combinations
 - nickel plated brass UNEF threads



MSL & MPC systems IP40 IP65

MSL moulded in PA66 black and grey RAL7031.

Pull off strength 10kg with FPAS21.

MPC moulded in PA66 black. Pull off strength 15kg with FPY20.



Fittings

IP40

MSL

straight hinged fitting
external thread

PA66 and PP hinged, snap on fittings including locknuts.

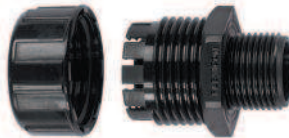


IP65

MPC

straight nylon PA66
external thread

2 part compression fitting with internal spigot and all round external teeth to grip conduit (FPY and FPYS).



EC

end cap

Nylon PA66 end cap to snap over end of conduit and provide a smooth entry bush.



FCL

nylon conduit clip with integral lid

Nylon PA66 conduit clip with integral lid for increased security. Incorporates internal ribs to prevent conduit from pulling through.



Ext Metric (PA66)	Ext Metric (PP)	Ext Metric	End Cap	Conduit Clip	nominal size (mm)	OD mm
				FCL10	10	10.0
					10	
					11	11.5
		MPC-12-M16		FCL13	13	13.0
					13	
					13	
			EC16B	FCL16	16	15.8
					16	
		MPC-16-M16		FCL16	16	16.1
				FCL18	18	18.5
					18	
				FCL20	20	20.0
MSL-21-M20	MSL-21-M20-PP	MPC-20-M20	EC21B	FCL21	21	21.2
					21	
				FCL25	25	25.0
MSL-26-M25	MSL-26-M25-PP	MPC-25-M25		FCL25	25.4	25.4
			EC28B	FCL28	28	28.5
					28	
		MPC-32-M32	EC34B	FCL34	34	34.5
					34	
			EC42B	FCL42	42	42.5
					42	
			EC54B	FCL54	54	54.5
					54	
					67	67.0



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Ordering Notes

- Available on request:
other colours