



non- metallic conduit & fittings



BS EN IEC 61386



non-metallic conduit application guide

Page number	conduit system	IP rating available	compression strength kg/100mm 21/20mm nominal size	pull-off strength kg 21/20mm nominal size	Colours
20	FPAS nylon LFH PA6 corrugated, std weight	IP66, IP67, IP68, IP69	75	40	Black, Grey
20	FPAL nylon PA6 corrugated, light weight	IP66, IP67, IP68, IP69	60	30	Black, Grey
20	FPAH nylon LFH PA6 corrugated, heavy weight	IP66, IP67, IP68, IP69	120	70	Black
21	FPR nylon extra LFH PA6 corrugated, std weight	IP66, IP67, IP68, IP69	75	40	Black
21	FPI nylon PA12 corrugated, standard weight	IP66, IP67, IP68, IP69	45	30	Black
21	FPIH nylon PA12 corrugated, heavy weight	IP66, IP67, IP68, IP69	60	50	Black
21	FPADS nylon PA6 double slit corrugated	IP40	60	15	Black
22	FPP polypropylene corrugated, std weight	IP40, IP66, IP67, IP68	35	25	Black, Grey, White
22	FPP-NFR polypropylene corrugated non flame retarded NEW	IP40, IP66, IP67, IP68	35	25	Black, Grey
22	FPPH polypropylene corrugated heavy weight NEW	IP40, IP66, IP67, IP68	100	40	Black, Grey
40	FPL upvc corrugated	IP40, IP66, IP67	150	30	Black, Grey, White
42	FPY nylon PA6 corrugated	IP40, IP67	60	25	Black
42	FPYS slit nylon PA6 corrugated	N/A	N/A	N/A	Black
42	FPYL nylon PA6 corrugated, light weight	IP40, IP67	45	15	Black
42	FPYLS slit nylon PA6 corrugated, light weight	N/A	N/A	N/A	Black
44	FPY nylon PA6, large diameter	IP40, IP65	N/A	N/A	Black, Grey
46	FPCB pvc spiral reinforced black	IP65	60	25	Black
46	FPCG pvc spiral reinforced grey	IP65	60	25	Light Grey
46	FPCGN pvc spiral reinforced green oil resistant	IP65	60	25	Green
46	FPCBU pvc spiral reinforced blue high temperature	IP65	60	25	Blue
48	LPC smooth, pvc spiral reinforced	IP66, IP67, IP68, IP69	120	70	Black, Light Grey
48	LPCO smooth pvc spiral orange ultra flexible	IP66, IP67, IP68, IP69	120	45	Orange
48	LPCGN smooth pvc spiral green oil resistant	IP66, IP67, IP68, IP69	120	60	Green
48	LPCBU smooth pvc spiral blue high temperature	IP66, IP67, IP68, IP69	120	60	Blue

For Nylon / FPP ranges: Grey RAL 7031

For FPC and LPC ranges: Light Grey RAL 7001, Blue RAL 5012 Green RAL 6001, Orange RAL 2008



86 accessories



90 contractor packs



92 chemical resistance

non-metallic conduit and fittings

high fatigue life	temperature range	flexible	pliable	low fire hazard	halogen free	self extinguishing	high abrasion resistance	high UV outdoor use	
●	-40°C to +120°C	●		●	●	●	●	●	FPAS nylon LFH PA6 corrugated, std weight
●	-40°C to +120°C	●			●	●			FPAL nylon PA6 corrugated, light weight
	-40°C to +120°C	●		●	●	●	●	●	FPAH nylon LFH PA6 corrugated, heavy weight
	-40°C to +120°C	●		●	●	●	●	●	FPR nylon extra LFH PA6 corrugated, std weight
●	-50°C to +110°C	●		●	●	●		●	FPI nylon PA12 corrugated, standard weight
●	-50°C to +110°C	●		●	●	●		●	FPIH nylon PA12 corrugated, heavy weight
	-40°C to +120°C		●		●	●	●	●	FPADS nylon PA6 double slit corrugated
	-20°C to +90°C	●				●			FPP polypropylene corrugated, std weight
	-20°C to +90°C	●			●				FPP-NFR polypropylene corrugated non flame retarded
	-20°C to +90°C	●				●			FPPH polypropylene corrugated heavy weight
	-5°C to +70°C		●			●		●	FPL upvc corrugated
●	-40°C to +120°C	●			●	●			FPY nylon PA6 corrugated
	-40°C to +120°C	●			●	●			FPYS slit nylon PA6 corrugated
	-40°C to +120°C	●			●				FPYL nylon PA6 corrugated, light weight
	-40°C to +120°C	●			●				FPYLS slit nylon PA6 corrugated, light weight
	-40°C to +120°C	●			●	●		●	FPY nylon PA6, large diameter
	-5°C to +70°C	●				●		●	FPCB pvc spiral reinforced black
	-20°C to +70°C	●				●			FPCG pvc spiral reinforced grey
	-20°C to +70°C	●				●			FPCGN pvc spiral reinforced green oil resistant
	-20°C to +90°C	●				●			FPCBU pvc spiral reinforced blue high temperature
	-5°C to +70°C	●				●		●	LPC smooth, pvc spiral reinforced
	-20°C to +70°C	●				●			LPCO smooth pvc spiral orange ultra flexible
	-20°C to +70°C	●				●			LPCGN smooth pvc spiral green oil resistant
	-20°C to +90°C	●				●			LPCBU smooth pvc spiral blue high temperature





non-metallic selection guide



- UK manufactured products to the highest standards
- Highest IP performance as standard
- Highest tensile strength performance fittings - FPA and FPAX due to all round teeth design
- Simple construction for ease of installation - Fixed and Swivel versions
- Multiple thread variations available - Metric, PG, NPT, UNEF, external threads, internal threads, integral strain relief versions
- Tested and approved to the latest National and International Standards
- Vibration tested for secure installations
- Widest choice whatever your application

FLEXILOK™ Fittings



IP66

See Pg 38, 39, 40 & 41

Compression Fittings



IP40 IP67

See Pg 43, 46, 47 & 49

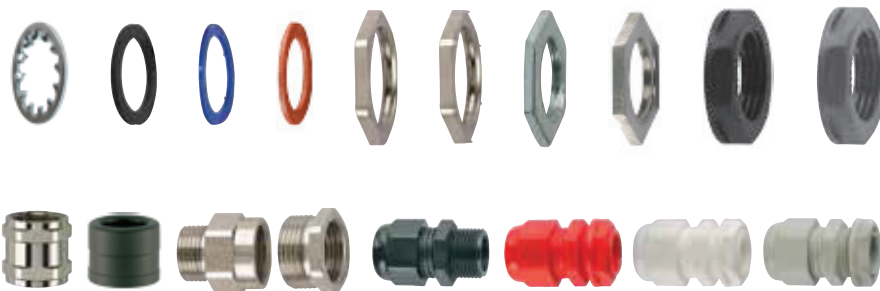
Flange



IP40 IP65

See Pg 44

Accessories



See Pg 22, 45, 86, 87 & 88

Stopping Plugs



Clips/Clamp





IP66

FPA

Straight Fittings - 10mm to 67mm



IP66

See Pg 24 & 27

90° Elbow - 10mm to 67mm



IP66

See Pg 24, 25, 27 & 28

45° Elbow - 16mm To 54mm



IP66

See Pg 25, 26 & 28

Coupler

Coupler - Flexible to Rigid Conduit

T-Pieces

Reducer

Reducing Divider



IP66

See Pg 26

See Pg 36

Fittings with Integral Strain Relief



IP66

See Pg 29

IP66

IP67

IP68

IP69

FPAX

Straight Fittings - 13mm to 54mm



IP66

IP67

IP68

IP69

See Pg 30 & 33

90° Elbow - 13mm to 54mm



IP66

IP67

IP68

IP69

See Pg 31, 33 & 34

45° Elbow - 16mm To 54mm



IP66

IP67

IP68

IP69

See Pg 32 & 34

T-Pieces

Reducer

Reducing Divider



IP66

IP67

IP68

IP69

See Pg 37

Fittings with Integral Strain Relief



IP66

IP67

IP68

IP69

See Pg 35

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.

non-metallic conduit and fittings

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.

- 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 recognised
- Low Fire Hazard (LFH), see page 102
- UL 94 V2 flame retardancy
- Halogen, sulphur and phosphorus free
- UV resistant (black)
- Abrasion resistant
- Highly resistant to solvents and oils
- Slit version also available FPAS-S please contact us

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.

- 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 recognised
- Highly resistant to solvents and oils
- Self extinguishing
- Halogen, sulphur and phosphorus free

FPAH

Construction: Heavy weight, flame retardant, nylon (PA6) corrugated flexible conduit. Colour black.

Typical Applications: All types of machinery and public buildings where high mechanical strength required.

- High mechanical strength
- High impact resistance
- Temperature range -40°C to +120°C
- UL recognised
- Low Fire Hazard (LFH), see page 102
- UL 94 V2 flame retardancy
- Halogen, sulphur and phosphorus free
- UV resistant
- Abrasion resistant
- Highly resistant to solvents and oils

european (NW) sizes	nominal size (mm)	pitch	FPAS				FPAL				FPAH							
			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)	part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	
7	10	F	FPAS10	50	10.0	6.3	15	FPAL10	50	10.0	6.5	15						
8	11	F	FPAS11	50	11.5	8.2	20	FPAL11	50	11.5	8.4	20						
10	13	F	FPAS13	25, 50	13.0	9.8	25	FPAL13	50	13.0	10.0	25	FPAH13	50	13.0	9.0	35	
12	16	F	FPAS16	25, 50	15.8	11.8	35	FPAL16	50	15.8	12.0	35	FPAH16	50	15.8	11.5	45	
14	18	F	FPAS18	50	18.5	14.2	40	FPAL18	50	18.5	14.2	35						
	20	C	FPAS20	10, 25, 50	20.0	14.8	45	FPAL20	50	20.0	15.0	40						
17	21	F	FPAS21	10, 25, 50	21.2	16.7	45	FPAL21	50	21.2	16.9	40						
	21	C											FPAH21	50	21.2	15.5	55	
	25	C	FPAS25	10, 25, 50	25.0	19.1	50	FPAL25	50	25.0	19.3	45						
23	28	F	FPAS28	10, 25, 50	28.5	22.8	50	FPAL28	50	28.5	23.0	45						
	28	C	FPAS28C*	50	28.5	21.6	50						FPAH28	50	28.5	21.3	60	
29	34	C	FPAS34	25, 50	34.5	28.1	60	FPAL34	25, 50	34.5	28.3	55	FPAH34	25	34.5	27.6	70	
29	34	F	FPAS34F	50	34.5	28.8	60											
36	42	C	FPAS42	10, 25, 50	42.5	35.5	70	FPAL42	25	42.5	35.7	65	FPAH42	25	42.5	34.6	80	
48	54	C	FPAS54	10, 25, 50	54.5	47.2	80	FPAL54	25	54.5	47.4	80	FPAH54	25	54.5	46.0	90	
56	67	C	FPAS67	10	67.2	56.3	130	FPAL67	10	67.2	56.5	110						

F = fine pitch C = coarse pitch

NOTE: Other reel lengths are available upon request

Ordering Notes

- Specify black or grey (B = Black, G = Grey) and reel length eg: FPAS21B-50M for a Black 50m reel
- Some reel lengths are MTO in grey
- See cutting tool page 89
- **Available on request:**
 - longer lengths and bulk packaging
 - cut lengths and assemblies
 - other colours
 - full copies of independent test results confirming LFH properties

- conduit with pre-installed draw wire
- fine pitch 34mm sizes
- Contractor Packs available see page 90 & 91



We have a range of products that can offer properties dependant on your requirement for impact resistance, flexibility, fatigue life, operating temperature and fire performance to name but a few.

MORE CONDUITS OVERLEAF!

FPR	NEW FPADS	FPI	FPIH
<p>Construction: Standard weight nylon (highly flame retardant PA6) corrugated flexible conduit. Colour black.</p> <p>Typical Applications: Railways, underground and public buildings.</p> <ul style="list-style-type: none"> 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 recognised Lloyd's Register Type Approval Extra Low Fire Hazard (LFH) Compliant to LUL Std 1-085 UL 94 V0 flame retardancy Halogen, sulphur and phosphorus free UV resistant Abrasion resistant Highly resistant to solvents and oils 	<p>Construction: Double slit nylon (PA6) corrugated conduit. Colour black.</p> <p>Typical Applications: Retrofit and cable assemblies with pre terminated plugs.</p> <ul style="list-style-type: none"> Made from 2 interlocking slit corrugated conduits Temperature range -40°C to +120°C Cables can be inserted laterally Provides abrasion resistance and routing of cables for static applications Self extinguishing Halogen, sulphur and phosphorus free UV resistant 	<p>Construction: Standard weight nylon (PA12) corrugated flexible conduit. Colour black.</p> <p>Typical Applications: Robots and continual flexing.</p> <ul style="list-style-type: none"> Highly flexible Exceptional fatigue life High impact resistance even at very low temperatures UV resistant Displays self recovery if crushed Temperature range -50°C to +110°C UL recognised Highly resistant to solvents and oils Self extinguishing Low fire hazard Halogen, sulphur and phosphorus free 	<p>Construction: Heavy weight nylon (PA12) corrugated flexible conduit. Colour black.</p> <p>Typical Applications: Robots and continual flexing where higher mechanical strength required.</p> <ul style="list-style-type: none"> Highly flexible and high fatigue life High mechanical strength High impact resistance even at very low temperatures UV resistant Displays self recovery if crushed Temperature range -50°C to +110°C UL recognised Highly resistant to solvents and oils Self extinguishing Low fire hazard Halogen, sulphur and phosphorus free

european (NW) sizes	nominal size (mm)	pitch	FPR				FPADS				FPI				FPIH							
			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)	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)
7	10	F	FPR10	50	10.0	6.3	15	FPADS11*	50	11.5	6.2	70	FPI13	50	13.0	9.8	25	FPIH13	50	13.0	9.0	25
8	11	F	FPR13	50	13.0	9.8	25	FPADS13	50	13.0	7.9	75	FPI16	50	15.8	11.8	30	FPIH16	50	15.8	11.5	35
10	13	F	FPR16	50	15.8	11.8	35	FPADS16	50	15.8	10.3	100										
12	16	F																				
14	18	F																				
20	20	C	FPR20	50	20.0	14.8	45															
17	21	F	FPR21	50	21.2	16.7	45	FPADS21	50	21.2	13.9	120	FPI21	50	21.2	16.7	35					
21	21	C																FPIH21	50	21.2	15.0	45
25	25	C	FPR25	50	25.0	19.1	50															
23	28	F																				
28	28	C	FPR28	50	28.5	21.7	50	FPADS28	50	28.5	20.5	170	FPI28	50	28.5	21.7	45	FPIH28	50	28.5	21.3	50
29	34	C	FPR34	50	34.5	28.1	60	FPADS34	25	34.5	26.6	180	FPI34	25	34.5	28.1	55	FPIH34	25	34.5	27.6	60
29	34	F																				
36	42	C	FPR42	25	42.5	35.5	70	FPADS42	25	42.5	32.0	200	FPI42	25	42.5	35.5	60	FPIH42	25	42.5	34.6	70
48	54	C	FPR54	25	54.5	47.2	80	FPADS54	25	54.5	43.0	240	FPI54	25	54.5	47.2	70	FPIH54	25	54.5	46.0	80
56	67	C											FPI67	10	67.2	56.3	120					

F = fine pitch C = coarse pitch

NOTE: refer to conduit properties for applicable standards

Standards

Important Note



• For LFH performance see page 102

FPP

Construction: Standard weight polypropylene, flexible conduit. Colour black, grey (RAL 7031) or white (see page 41)

Typical Applications: Buildings, particularly where buried in concrete or plaster.

- Acid resistant
- Temperature range -20°C to +90°C
- Self extinguishing
- Slit version also available FPP-S

Other options available:

FPP-NFR

LSOH conduit for data cabling applications.

FPPH

Heavy weight conduit for buried underground applications.

FCL

nylon corrugated conduit clip with integral lid

Nylon PA66 conduit clip with integral lid for increased security. Incorporates internal ribs to prevent corrugated conduit from pulling through, 20 Kg with FPAS21.

FCLAMP

non-metallic, heavy duty conduit clamp

Nylon PA66, conduit fixing clamp for corrugated conduit. Suitable for use with fine or coarse pitch conduits. Can be used with a range of accessories including cover plates and weld plates (available separately - see page 45).

EC

end cap

Nylon PA66 end cap to snap over end of conduit and provide a smooth entry bush to prevent snagging and sharp edges, and provide a neat finish when no connectors are used.

REC

rubber end cap

Thermoplastic elastomer cap used to seal end of conduit. Can be cut to size depending on size of cable. Can be additionally secured using cable tie (not supplied).



european (NW) sizes	nominal size (mm)	pitch	FPP					Conduit Clip	FCLAMP	End Cap	REC		
			part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)				part number	to fit conduit size	outlet ID mm
7	10	F	FPP10	50	10.0	6.3	15	FCL10			REC10	10	0-7
8	11	F									REC10	11	0-7
10	13	F	FPP13	50	13.0	9.8	25	FCL13			REC13	13	0-7
12	16	F	FPP16	50	15.8	11.8	35	FCL16	FCLAMP- 3-16	EC16B	REC16	16	0-11
14	18	F						FCL18					
20	20	C	FPP20	50	20.0	14.8	40	FCL20					
17	21	F	FPP21	50	21.2	16.7	40	FCL21	FCLAMP- 3-21	EC21B	REC21	21	0-15
21	21	C						FCL21					
25	25	C	FPP25	50	25.0	19.1	50	FCL25					
23	28	F	FPP28	50	28.5	22.8	55	FCL28	FCLAMP- 4-28	EC28B	REC28	28	0-21
28	28	C						FCL28					
29	34	C	FPP34	25, 50	34.5	28.1	65	FCL34	FCLAMP- 5-34	EC34B	REC34	34	0-25
29	34	F						FCL34					
36	42	C	FPP42	25	42.5	35.5	80	FCL42	FCLAMP- 6-42	EC42B	REC42	42	0-34
48	54	C	FPP54	25	54.5	47.2	100	FCL54	FCLAMP- 7-54	EC54B	REC54	54	0-46
56	67	C	FPP67	10	67.2	56.3	150		FCLAMP- 7-67				

F = fine pitch C = coarse pitch

FCLAMP- 8-80 for use with 80mm conduit

NOTE: FPP - NFR and FPPH. Contact us for more details

Ordering Notes

- Specify colour (B = Black, G = Grey) and reel length eg: FPY16B-50M for a Black 50m reel
- Some lengths are MTO in grey
- Available on request:
 - longer lengths and bulk packaging
 - cut lengths and assemblies
 - additional sizes
 - other colours
- conduit with pre-installed draw wire
- FPADS in Polypropylene (PP)



non-metallic conduit and fittings

To make your selection from our wide range of flexible conduits easier, we have devised a table (see below) which offers a one page summary to help you when you come to select your fittings.

We have a wide selection of fittings that can be used with the conduits listed below.

Simply use the pull out page as a guide to see which fittings from the FPA, FPAX, Flexilok and T-pieces you can use with your chosen conduit.



Using this fold out page will illustrate the wide range of non-metallic corrugated conduits we offer. There are nine different non-metallic conduit families listed in this spread and these are detailed across Pages 20 - 22.

Ordering Notes

Once you have chosen your conduit from our wide range of products listed on Pages 20, 21 and 22, simply use this fold out page as a guide to see which fittings correspond with your selected conduit.

The fold out conduit summary chart below lines up with the respective subsequent fittings pages to allow you to still see your selected conduit, whilst selecting your fittings.

european (NW) sizes	pitch	nominal size (mm)								
			FPAS	FPAL	FPAH	FPR	FPADS	FPI	FPIH	FPP
			part number	part number	part number	part number	part number	part number	part number	part number
7	F	10	FPAS10	FPAL10		FPR10				
7	F	10								
8	F	11	FPAS11	FPAL11			FPADS11			
10	F	13	FPAS13	FPAL13	FPAH13	FPR13	FPADS13	FPI13	FPIH13	FPP13
10	F	13								
10	F	13								
12	F	16	FPAS16	FPAL16	FPAH16	FPR16	FPADS16	FPI16	FPIH16	FPP16
12	F	16								
12	F	16								
12	F	16								
14	F	18	FPAS18	FPAL18						
14	C	18								
	C	20	FPAS20			FPR20				FPP20
17	F	21	FPAS21	FPAL21		FPR21		FPI21		FPP21
	C	21			FPAH21		FPADS21		FPIH21	
	C	21								
	C	25	FPAS25	FPAL25		FPR25				FPP25
23	F	28	FPAS28	FPAL28		FPR28				FPP28
	C	28	FPAS28C		FPAH28		FPADS28	FPI28	FPIH28	
29	C	34	FPAS34	FPAL34	FPAH34	FPR34	FPADS34	FPI34	FPIH34	FPP34
29	F	34	FPAS34F							
36	C	42	FPAS42	FPAL42	FPAH42	FPR42	FPADS42	FPI42	FPIH42	FPP42
36	C	42								
48	C	54	FPAS54	FPAL54	FPAH54	FPR54	FPADS54	FPI54	FPIH54	FPP54
48	C	54								
56	C	67	FPAS67	FPAL67				FPI67		FPP67

Standards



IEC EN 61386



FPA system nylon


Construction: Nylon (PA66) moulded fitting.



IP66



Fittings

			FPA			FPA		FPA	FPA90		
			straight external thread			straight UNEF swivel internal thread		flange	90° elbow external thread		
			One piece, fast fit, external threaded fitting. Suitable for knockouts or threaded entries.			One piece, fast fit fitting with nickel plated brass swivel UNEF internal thread for attachment to circular connectors.		One piece, fast fit fitting with nylon swivel flange with 'O' ring.	One piece, fast fit, external threaded 90 degree elbow fitting. Suitable for knockouts.		
			IP66			IP66		IP66	IP66		
											
European (NW) sizes	nominal size (mm)	OD mm	Ext Metric	Ext PG	Ext NPT	Ext UNEF	Thread	Ext Flange	90 Degree Metric	90 Degree PG	90 Degree NPT
7	10	10.0	FPA10-M12	FPA10-PG7					FPA10-M12-90	FPA10-PG7-90	
7	10		FPA10-M16	FPA10-PG9							
8	11	11.5	FPA11-M12	FPA11-PG7					FPA11-M12-90		
10	13	13.0	FPA13-M12	FPA13-PG7		FPA13-BU075	(3/4")		FPA13-M16-90	FPA13-PG9-90	
10	13		FPA13-M16	FPA13-PG9							
10	13		FPA13-M20	FPA13-PG11							
12	16	15.8	FPA16-M16	FPA16-PG9	FPA16-038	FPA16-BU075	(3/4")	FPA16-FL	FPA16-M16-90	FPA16-PG9-90	FPA16-050-90
12	16		FPA16-M20	FPA16-PG11	FPA16-050	FPA16-BU100	(1")		FPA16-M16-90	FPA16-PG11-90	
12	16			FPA16-PG13		FPA16-BU119	(1 1/8")			FPA16-PG13-90	
12	16			FPA16-PG16							
14	18	18.5	FPA18-M20	FPA18-PG13					FPA18-M20-90		
14	18										
	20	20.0	FPA20-M20						FPA20-M20-90		
17	21	21.2	FPA21-M20	FPA21-PG13	FPA21-050	FPA21-BU100	(1")	FPA21-FL	FPA21-M20-90	FPA21-PG16-90	FPA21-050-90
	21			FPA21-PG16		FPA21-BU119	(1 1/8")				
	21					FPA21-BU138	(1 3/8")				
	25	25.0	FPA25-M25						FPA25-M25-90		
23	28	28.5	FPA28-M25	FPA28-PG21	FPA28-075	FPA28-BU138	(1 3/8")	FPA28-FL	FPA28-M25-90	FPA28-PG21-90	FPA28-075-90
	28		FPA28-M32	FPA28-PG29		FPA28-BU144	(1 7/8")				
29	34	34.5	FPA34-M32	FPA34-PG29	FPA34-100	FPA34-BU144	(1 7/8")	FPA34-FL	FPA34-M32-90	FPA34-PG29-90	FPA34-100-90
29	34		FPA34-M40			FPA34-BU175	(1 3/4")				
36	42	42.5	FPA42-M40	FPA42-PG36	FPA42-125	FPA42-BU200	(2")	FPA42-FL	FPA42-M40-90	FPA42-PG36-90	FPA42-125-90
36	42		FPA42-M50		FPA42-150	FPA42-BU225	(2 1/4")		FPA42-M50-90		FPA42-150-90
48	54	54.5	FPA54-M50	FPA54-PG42	FPA54-150	FPA54-BU200	(2")		FPA54-M50-90	FPA54-PG48-90	FPA54-150-90
48	54		FPA54-M63	FPA54-PG48	FPA54-200	FPA54-BU225	(2 1/4")		FPA54-M63-90		FPA54-200-90
56	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

* Indicates parts made to order on request and may be subject to MOQ and lead time

• **Available on request:**







- additional sizes, alternative threads
- additional UNEF threads and combinations
- all nylon UNEF threads

properties

- 1 part fast fit
- IP rating: IP66
- Vibration and shock tested to EN61373 Cat 2
- Tamper resistant
- All round teeth give high pull off strength 70kg with FPAH21

- Can be removed using a screwdriver
- Both 90° and 45° elbows incorporate swept bore to facilitate cable installation and protect cables when installed
- Suitable for fine and coarse pitch conduits
- Temperature range -50°C to +135°C
- **Metric nylon threads supplied complete with locknuts**

- Swivel UNEF threads allow assembly to military style electrical connectors without twisting of cables and includes sealing 'O' ring face seal.
- Low Fire Hazard (LFH), see page 102
- Halogen, sulphur and phosphorus free
- Available in black or grey (RAL 7031)

FPA90		FPA90		FPA45			FPA45		nominal size (mm)	OD mm
90° elbow UNEF swivel internal thread		flange		45° elbow external thread			45° elbow UNEF swivel internal thread			
One piece, fast fit, 90 degree elbow fitting with nickel plated brass swivel UNEF internal thread for attachment to circular connectors.		One piece, fast fit 90 degree elbow fitting with nylon swivel flange with 'O' ring face seal.		One piece, fast fit, external threaded 45 degree elbow fitting. Suitable for knockouts.			One piece, fast fit, 45 degree elbow fitting with nickel plated brass swivel UNEF internal thread for attachment to circular connectors.			
IP66		IP66		IP66			IP66			
										
90 Degree UNEF	Thread	90 Degree Flange	45 Degree Metric	45 Degree PG	45 Degree NPT	45 Degree UNEF	Thread			
								10	10.0	
								10		
								11	11.5	
FPA13-BU075-90	(3/4")							13	13.0	
								13		
								13		
FPA16-BU075-90	(3/4")	FPA16-FL-90	FPA16-M20-45	FPA16-PG13-45	FPA16-050-45			16	15.8	
FPA16-BU100-90	(1")					FPA16-BU100-45	(1")	16		
FPA16-BU119-90	(1 1/16")					FPA16-BU119-45	(1 1/16")	16		
								16		
								18	18.5	
								18		
								20	20.0	
FPA21-BU100-90	(1")	FPA21-FL-90	FPA21-M20-45	FPA21-PG13-45	FPA21-050-45	FPA21-BU100-45	(1")	21	21.2	
FPA21-BU119-90	(1 1/16")			FPA21-PG16-45		FPA21-BU119-45	(1 1/16")	21		
FPA21-BU138-90	(1 3/8")					FPA21-BU138-45	(1 3/8")	21		
								25	25.0	
FPA28-BU138-90	(1 3/8")	FPA28-FL-90	FPA28-M25-45	FPA28-PG21-45	FPA28-075-45	FPA28-BU138-45	(1 3/8")	28	28.5	
FPA28-BU144-90	(1 7/16")					FPA28-BU144-45	(1 7/16")	28		
FPA34-BU144-90	(1 7/16")	FPA34-FL-90	FPA34-M32-45	FPA34-PG29-45	FPA34-100-45	FPA34-BU144-45	(1 7/16")	34	34.5	
FPA34-BU175-90	(1 3/4")					FPA34-BU175-45	(1 3/4")	34		
FPA42-BU200-90	(2")	FPA42-FL-90	FPA42-M50-45	FPA42-PG36-45	FPA42-150-45	FPA42-BU200-45	(2")	42	42.5	
FPA42-BU225-90	(2 1/4")					FPA42-BU225-45	(2 1/4")	42		
FPA54-BU200-90	(2")	FPA54-FL-90*	FPA54-M50-45		FPA54-150-45	FPA54-BU200-45	(2")	54	54.5	
FPA54-BU225-90	(2 1/4")					FPA54-BU225-45	(2 1/4")	54		
								67	67.0	

Standards



BS EN IEC 61386





FPA system nylon

Construction: Nylon (PA66) moulded fittings.

FPA system brass threaded

Construction: Nylon (PA66) moulded fitting with nickel plated brass swivel thread. Colour black or grey.



IP66

Fittings

FPA45

flange

One piece, fast fit 45 degree elbow fitting with nylon swivel flange with 'O' ring face seal.

IP66



45 Degree Flange

FPA-FPA

coupler

One piece, fast fit, coupler to join corrugated conduits. Also available in FPAX version.

IP66



Coupler

FPA-MPC

coupler

One piece, fast fit, coupler to join corrugated conduit to rigid conduit.

IP66



Rigid Conduit Coupler

European (NW) sizes	nominal size (mm)	OD mm
7	10	10.0
7	10	
8	11	11.5
10	13	13.0
10	13	
10	13	
12	16	15.8
12	16	
12	16	
12	16	
14	18	18.5
14	18	
	20	20.0
17	21	21.2
17	21	
17	21	
	25	25.0
23	28	28.5
23	28	
29	34	34.5
29	34	
36	42	42.5
36	42	
48	54	54.5
48	54	
56	67	67.0

European (NW) sizes	nominal size (mm)	OD mm	FPA45	FPA-FPA	FPA-MPC
7	10	10.0			
7	10				
8	11	11.5			
10	13	13.0			
10	13				
10	13				
12	16	15.8	FPA16-FL-45	FPA16-FPA16	FPA16-MPC16
12	16				
12	16				
12	16				
14	18	18.5			
14	18				
	20	20.0			
17	21	21.2	FPA21-FL-45	FPA20-FPA20 FPA21-FPA21	FPA21-MPC20
17	21				
17	21				
	25	25.0			
23	28	28.5	FPA28-FL-45	FPA25-FPA25 FPA28-FPA28	FPA28-MPC25
23	28				
29	34	34.5	FPA34-FL-45	FPA34-FPA34	FPA34-MPC32
29	34				
36	42	42.5	FPA42-FL-45	FPA42-FPA42	FPA42-MPC40
36	42				
48	54	54.5	FPA54-FL-45	FPA54-FPA54	
48	54				
56	67	67.0			

Ordering Notes

* Indicates parts made to order on request

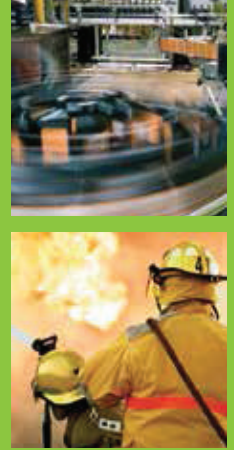
• NPB = Nickel Plated Brass

• Available on request:

- colour grey, other threads
- for brass locknuts and sealing washers see accessories, page 86
- EMC braid clamp version see page 85

properties

- 1 part fast fit
- IP rating: IP66
- Vibration and shock tested to EN61373 Cat 2
- Tamper resistant
- Can be removed using a screwdriver
- All round teeth give high pull off strength 70kg with FPAH21
- Both 90° and 45° elbows incorporate swept bore to facilitate cable installation and protect cables when installed
- Suitable for fine and coarse pitch conduits
- Temperature range -50°C to +135°C
- Low Fire Hazard (LFH), see page 102
- Halogen, sulphur and phosphorus free
- Available in black or grey (RAL 7031)



FPA

straight swivel brass external thread

One piece, fast fit, swivel, nickel plated brass external threaded fitting. Suitable for knockouts or threaded entries.

IP66



NPB Ext Metric

NPB Ext PG

FPA

straight swivel brass internal thread

One piece, fast fit, swivel, nickel plated brass internal threaded fitting.

IP66



NPB Int Metric

NPB Int PG

FPA90

90° elbow swivel brass external thread

One piece, fast fit, swivel, 90 degree elbow, nickel plated brass external threaded fitting. Suitable for knockouts or threaded entries.

IP66



NPB Ext Metric

NPB Ext PG

nominal size (mm)
OD mm
european (NW) sizes

FPA		FPA		FPA90		nominal size (mm)	OD mm	european (NW) sizes
FPA13-BM16	FPA13-BPG9	FPA13-BFM16	FPA13-BFPG9*	FPA13-BM16-90	FPA13-BPG9-90	10	10.0	7
						10		7
						11	11.5	8
						13	13.0	10
						13		10
						13		10
FPA16-BM16	FPA16-BPG9	FPA16-BFM16	FPA16-BFPG11*	FPA16-BM16-90	FPA16-BPG9-90	16	15.8	12
FPA16-BM20	FPA16-BPG11	FPA16-BFM20	FPA16-BFPG16*	FPA16-BM20-90	FPA16-BPG11-90	16		12
						16		12
						16		12
						16		12
						18	18.5	14
						18		14
						20	20.0	
FPA21-BM20	FPA21-BPG13 FPA21-BPG16	FPA21-BFM20	FPA21-BFPG16*	FPA21-BM20-90	FPA21-BPG13-90 FPA21-BPG16-90	21	21.2	17
						21		17
						21		17
						25	25.0	
FPA28-BM25	FPA28-BPG21	FPA28-BFM25	FPA28-BFPG21*	FPA28-BM25-90	FPA28-BPG21-90	28	28.5	23
						28		23
FPA34-BM32	FPA34-BPG29	FPA34-BFM32	FPA34-BFPG29*	FPA34-BM32-90	FPA34-BPG29-90	34	34.5	29
						34		29
FPA42-BM40	FPA42-BPG36	FPA42-BFM40	FPA42-BFPG36*	FPA42-BM40-90	FPA42-BPG36-90	42	42.5	36
FPA42-BM50				FPA42-BM50-90		42		36
FPA54-BM50	FPA54-BPG48*	FPA54-BFM50		FPA54-BM50-90	FPA54-BPG48-90*	54	54.5	48
FPA54-BM63				FPA54-BM63-90		54		48
FPA67-BM63						67	67.0	56

Standards



BS EN IEC 61386





FPA system brass threaded

Construction: Nylon (PA66) moulded fitting with nickel plated brass swivel thread. Colour black or grey.



Fittings

FPA90

90° elbow swivel brass internal thread

One piece, fast fit, swivel, 90 degree elbow, nickel plated brass internal threaded fitting.



NPB Int Metric

NPB Int PG

FPA45

45° elbow swivel brass external thread

One piece, fast fit, swivel, 45 degree elbow, nickel plated brass external threaded fitting. Suitable for knockouts or threaded entries.



NPB Ext Metric

NPB Ext PG

FPA45

45° elbow swivel brass internal thread

One piece, fast fit, swivel, 45 degree elbow, nickel plated brass internal threaded fitting.



NPB Int Metric

NPB Int PG

European (NW) sizes
nominal size (mm)
OD mm

European (NW) sizes	nominal size (mm)	OD mm	FPA90 NPB Int Metric	FPA90 NPB Int PG	FPA45 NPB Ext Metric	FPA45 NPB Ext PG	FPA45 NPB Int Metric	FPA45 NPB Int PG
7	10	10.0						
7	10							
8	11	11.5						
10	13	13.0	FPA13-BFM16-90	FPA13-BFPG9-90*				
10	13							
10	13							
12	16	15.8	FPA16-BFM16-90	FPA16-BFPG11-90*	FPA16-BM16-45	FPA16-BPG13-45	FPA16-BFM20-45	FPA16-BFPG16-45*
12	16		FPA16-BFM20-90	FPA16-BFPG16-90*	FPA16-BM20-45	FPA16-BPG16-45		
12	16							
12	16							
14	18	18.5						
14	18							
	20	20.0						
17	21	21.2	FPA21-BFM20-90	FPA21-BFPG16-90*	FPA21-BM20-45	FPA21-BPG13-45	FPA21-BFM20-45	FPA21-BFPG16-45*
17	21					FPA21-BPG16-45		
17	21							
	25	25.0						
23	28	28.5	FPA28-BFM25-90	FPA28-BFPG21-90*	FPA28-BM25-45	FPA28-BPG21-45	FPA28-BFM25-45	FPA28-BFPG21-45*
23	28							
29	34	34.5	FPA34-BFM32-90	FPA34-BFPG29-90*	FPA34-BM32-45	FPA34-BPG29-45	FPA34-BFM32-45	FPA34-BFPG29-45*
29	34							
36	42	42.5	FPA42-BFM50-90	FPA42-BFPG36-90*	FPA42-BM40-45	FPA42-BPG36-45	FPA42-BFM50-45	FPA42-BFPG36-45*
36	42				FPA42-BM50-45			
48	54	54.5	FPA54-BFM50-90		FPA54-BM50-45	FPA54-BPG48-45	FPA54-BFM50-45	
48	54				FPA54-BM63-45			
56	67	67.0						

Ordering Notes

* Indicates parts made to order on request

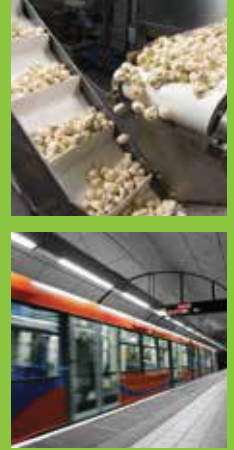
• NPB = Nickel Plated Brass

• Available on request:

- colour grey, other threads
- for brass locknuts and sealing washers see accessories, page 86
- EMC braid clamp version, see page 85

properties

- 1 part fast fit
- IP rating: **of conduit & fitting: IP66**
of cable gland: IP68 (10 bar) +IP69
- Vibration and shock tested to EN61373 Cat 2
- Tamper resistant
- Can be removed using a screwdriver
- All round teeth give high pull off strength 70kg with FPAH21
- Both 90° and 45° elbows incorporate swept bore to facilitate cable installation and protect cables when installed
- Suitable for fine and coarse pitch conduits
- Temperature range: **conduit fitting: -50°C to +135°C**
cable gland: -40°C to +100°C static
-20°C to +100°C dynamic
- Low Fire Hazard (LFH), see page 102
- Halogen, sulphur and phosphorus free
- Refer to accessories for clamping range page 87



FPA NEW

cable gland

One piece, fast fit, swivel, nickel plated brass external threaded cable gland fitting. Suitable for knockouts or threaded entries.

IP66

NPB Metric NPB PG

FPA90 NEW

cable gland

One piece, fast fit, swivel, 90 degree elbow, nickel plated brass external threaded cable gland fitting. Suitable for knockouts or threaded entries.

IP66

NPB Metric

FPA45 NEW

cable gland

One piece, fast fit, swivel, 45 degree elbow, nickel plated brass external threaded cable gland fitting. Suitable for knockouts or threaded entries.

IP66

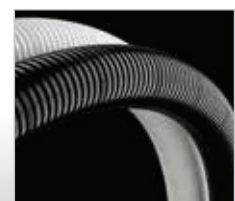
NPB Metric

				nominal size (mm)	OD mm	European (NW) sizes
				10	10.0	7
				10		7
				11	11.5	8
				13	13.0	10
				13		10
				16	15.8	12
				16		12
				16		12
				16		12
				18	18.5	14
				18		14
				20	20.0	
				21	21.2	17
				21		17
				21		17
				25	25.0	
				28	28.5	23
				28		23
				34	34.5	29
				34		29
				42	42.5	36
				42		36
				54	54.5	48
				54		48
				67	67.0	56

Standards



BS EN IEC 61386





FPAX system nylon

Construction: Nylon (PA66) moulded fitting incorporating internal elastomeric seal. Colour black or grey on request*.



IP66

IP67

IP68

IP69

Fittings

FPAX

straight external thread

Fast fit, external threaded fitting with additional conduit seal. Suitable for knockouts or threaded entries.

IP66 IP67 IP68 IP69



FPAX

straight UNEF swivel internal thread

Fast fit fitting with nickel plated brass swivel UNEF internal thread for attachment to circular connectors with additional conduit seal.

IP66 IP67 IP68 IP69



FPAX

flange

Fast fit fitting with nylon swivel flange with additional conduit seal and with 'O' ring face seal.

IP66 IP67 IP68 IP69



European (NW) sizes
nominal size (mm)
OD mm

European (NW) sizes	nominal size (mm)	OD mm	Ext Metric	Ext PG	Ext NPT	Int UNEF	Thread	Flange
7	10	10.0						
7	10							
8	11	11.5						
10	13	13.0	FPAX13-M16	FPAX13-PG9				
10	13							
10	13							
12	16	15.8	FPAX16-M16	FPAX16-PG9	FPAX16-038	FPAX16-BU075	(3/4")	FPAX16-FL
12	16		FPAX16-M20	FPAX16-PG11	FPAX16-050	FPAX16-BU100	(1")	
12	16			FPAX16-PG13		FPAX16-BU119	(1 3/16")	
12	16			FPAX16-PG16				
14	18	18.5						
14	18							
	20	20.0						
17	21	21.2	FPAX21-M20	FPAX21-PG13	FPAX21-050	FPAX21-BU100	(1")	FPAX21-FL
17	21			FPAX21-PG16		FPAX21-BU119	(1 3/16")	
17	21					FPAX21-BU138	(1 3/8")	
	25	25.0						
23	28	28.5	FPAX28-M25	FPAX28-PG21	FPAX28-075	FPAX28-BU138	(1 3/8")	FPAX28-FL
23	28		FPAX28-M32	FPAX28-PG29		FPAX28-BU144	(1 7/16")	
29	34	34.5	FPAX34-M32	FPAX34-PG29	FPAX34-100	FPAX34-BU144	(1 7/16")	FPAX34-FL
29	34		FPAX34-M40					
36	42	42.5	FPAX42-M40	FPAX42-PG36	FPAX42-125	FPAX42-BU200	(2")	FPAX42-FL
36	42		FPAX42-M50		FPAX42-150	FPAX42-BU225	(2 1/4")	
48	54	54.5	FPAX54-M50	FPAX54-PG42	FPAX54-150	FPAX54-BU200	(2")	
48	54		FPAX54-M63	FPAX54-PG48	FPAX54-200	FPAX54-BU225	(2 1/4")	
56	67	67.0						

Ordering Notes

* Indicates parts made to order on request

• NPB = Nickel Plated Brass

• **Available on request:**

- colour grey, other threads
- for brass locknuts and sealing washers see accessories, page 86
- EMC braid clamp version, see page 85

properties

- Fast fit
- Supplied with additional conduit seal and retained face seal
- Face seal details:
 - Nylon and Brass external threads supplied with Polyester elastomer washer
 - UNEF and Flange supplied with O-ring
- IP rating: IP66 + IP67 + IP68 (2 bar) + IP69
- Vibration and shock tested to EN61373 Cat 2
- Tamper resistant
- Can be removed using a screwdriver
- All round teeth give high pull off strength 70kg with FPAH21
- Both 90° and 45° elbows incorporate swept bore to facilitate cable installation and protect cables when installed
- Suitable for fine and coarse pitch conduits
- Temperature range -50°C to +135°C
- Metric nylon threads supplied complete with locknuts
- Swivel UNEF threads allow assembly to military style electrical connectors without twisting of cables and includes sealing 'O' ring face seal
- Low Fire Hazard (LFH), see page 102
- Halogen, sulphur and phosphorus free



FPAX90

90° elbow external thread

Fast fit, external threaded 90 degree elbow fitting with additional conduit seal. Suitable for knockouts.

IP66 IP67 IP68 IP69



Ext Metric

Ext PG

Ext NPT

FPAX90

90° elbow UNEF swivel internal thread

Fast fit, 90 degree elbow fitting with nickel plated brass swivel UNEF internal thread for attachment to circular connectors with additional conduit seal.

IP66 IP67 IP68 IP69



Int UNEF

Thread

FPAX90

flange

Fast fit 90 degree elbow fitting with nylon swivel flange with additional conduit seal with 'O' ring face seal.

IP66 IP67 IP68 IP69



Flange

nominal size (mm)
OD mm
european (NWX) sizes

FPAX13-M16-90		FPAX13-PG9-90							
						10	10.0	7	
						10		7	
						11	11.5	8	
						13	13.0	10	
						13		10	
						13		10	
						16	15.8	12	
						16		12	
						16		12	
						16		12	
						18	18.5	14	
						18		14	
						20	20.0		
						21	21.2	17	
						21		17	
						21		17	
						25	25.0		
						28	28.5	23	
						28		23	
						34	34.5	29	
						34		29	
						42	42.5	36	
						42		36	
						54	54.5	48	
						54		48	
						67	67.0	56	

Standards



BS EN IEC 61386





FPAX system nylon & brass threaded



Construction: Nylon (PA66) moulded fitting incorporating internal elastomeric seal.

Construction: Nylon (PA66) moulded fitting with swivel metal thread. External and internal metallic threads are made from nickel plated brass and incorporate an internal elastomeric seal. Colour black, grey on request*.

Fittings

FPAX45

45° elbow external thread

Fast fit, external threaded 45 degree elbow fitting with additional conduit seal. Suitable for knockouts.



Ext Metric Ext PG Ext NPT

FPAX45

45° elbow UNEF swivel internal thread

Fast fit, 45 degree elbow fitting with nickel plated brass swivel UNEF internal thread for attachment to circular connectors with additional conduit seal.



Int UNEF Thread

FPAX45

flange

Fast fit 45 degree elbow fitting with nylon swivel flange with additional conduit seal and 'O' ring face seal.



Flange

European (NW) sizes
nominal size (mm)
OD mm

European (NW) sizes	nominal size (mm)	OD mm	Ext Metric	Ext PG	Ext NPT	Int UNEF	Thread	Flange
7	10	10.0						
7	10							
8	11	11.5						
10	13	13.0						
10	13							
10	13							
12	16	15.8	FPAX16-M20-45	FPAX16-PG13-45	FPAX16-050-45	FPAX16-BU100-45 FPAX16-BU119-45	(1") (1 1/16")	FPAX16-FL-45
12	16							
12	16							
12	16							
14	18	18.5						
14	18							
	20	20.0						
17	21	21.2	FPAX21-M20-45	FPAX21-PG13-45 FPAX21-PG16-45	FPAX21-050-45	FPAX21-BU100-45 FPAX21-BU119-45 FPAX21-BU138-45	(1") (1 1/16") (1 1/8")	FPAX21-FL-45
17	21							
17	21							
	25	25.0						
23	28	28.5	FPAX28-M25-45	FPAX28-PG21-45	FPAX28-075-45	FPAX28-BU138-45 FPAX28-BU144-45	(1 1/8") (1 1/16")	FPAX28-FL-45
23	28							
29	34	34.5	FPAX34-M32-45	FPAX34-PG29-45	FPAX34-100-45	FPAX34-BU144-45	(1 1/16")	FPAX34-FL-45
29	34							
36	42	42.5	FPAX42-M50-45	FPAX42-PG36-45	FPAX42-150-45	FPAX42-BU200-45 FPAX42-BU225-45	(2") (2 1/4")	FPAX42-FL-45
36	42							
48	54	54.5	FPAX54-M50-45		FPAX54-150-45	FPAX54-BU200-45 FPAX54-BU225-45	(2") (2 1/4")	
48	54							
56	67	67.0						

Ordering Notes

- Specify black or grey (B=Black, G=Grey)
eg: FPAX16-M20-45B
- NPB = Nickel Plated Brass
- Available on request:
 - colour grey, other threads
 - for brass locknuts and sealing washers see accessories, page 86
 - EMC braid clamp version, see page 85

properties

- Fast fit
- Supplied with additional conduit seal and retained face seal
- Face seal details:
 - Nylon and Brass external threads supplied with Polyester elastomer washer
 - UNEF and Flange supplied with O-ring
- IP rating: IP66 + IP67 + IP68 (2 bar) + IP69
- Vibration and shock tested to EN61373 Cat 2
- Tamper resistant
- Can be removed using a screwdriver
- All round teeth give high pull off strength 70kg with FPAH21
- Both 90° and 45° elbows incorporate swept bore to facilitate cable installation and protect cables when installed
- Suitable for fine and coarse pitch conduits
- Temperature range -50°C to +135°C
- Metric nylon threads supplied complete with locknuts
- Swivel UNEF threads allow assembly to military style electrical connectors without twisting of cables and includes sealing 'O' ring face seal
- Low Fire Hazard (LFH), see page 102
- Halogen, sulphur and phosphorus free

FPAX

straight swivel brass external thread

Fast fit, swivel, nickel plated brass external threaded fitting with additional conduit seal. Suitable for knockouts or threaded entries.

IP66 IP67 IP68 IP69



NPB Ext Metric

NPB Ext PG

FPAX

straight swivel brass internal thread

Fast fit, swivel, nickel plated brass internal threaded fitting with additional conduit seal.

IP66 IP67 IP68 IP69



NPB Int Metric

NPB Int PG

FPAX90

90° elbow swivel brass external thread

Fast fit, swivel, 90 degree elbow, nickel plated brass external threaded fitting with additional conduit seal. Suitable for knockouts or threaded entries.

IP66 IP67 IP68 IP69



NPB Ext Metric

NPB Ext PG

nominal size (mm)
OD mm
european (NW) sizes

FPAX		FPAX		FPAX90		nominal size (mm)	OD mm	european (NW) sizes
						10	10.0	7
						10		7
						11	11.5	8
						13	13.0	10
						13		10
						13		10
						16	15.8	12
						16		12
						16		12
						16		12
						18	18.5	14
						18		14
						20	20.0	
						21	21.2	17
						21		17
						21		17
						25	25.0	
						28	28.5	23
						28		23
						34	34.5	29
						34		29
						42	42.5	36
						42		36
						54	54.5	48
						54		48
						67	67.0	56

Standards



BS EN IEC 61386





FPAX system brass threaded

Construction: Nylon (PA66) moulded fitting with swivel metal thread. External and internal metallic threads are made from nickel plated brass and incorporate an internal elastomeric seal. Colour black, grey on request*.



IP66

IP67

IP68

IP69

Fittings

FPAX90

90° elbow swivel brass internal thread

Fast fit, swivel, 90 degree elbow, nickel plated brass internal threaded fitting with additional conduit seal.

IP66 IP67 IP68 IP69



NPB Int Metric

NPB Int PG

FPAX45

45° elbow swivel brass external thread

Fast fit, swivel, 45 degree elbow, nickel plated brass external threaded fitting with additional conduit seal. Suitable for knockouts or threaded entries.

IP66 IP67 IP68 IP69



NPB Ext Metric

NPB Ext PG

FPAX45

45° elbow swivel brass internal thread

Fast fit, swivel, 45 degree elbow, nickel plated brass internal threaded fitting with additional conduit seal.

IP66 IP67 IP68 IP69



NPB Int Metric

NPB Int PG

European (NW) sizes
nominal size (mm)
OD mm

European (NW) sizes	nominal size (mm)	OD mm	FPAX90 NPB Int Metric	FPAX90 NPB Int PG	FPAX45 NPB Ext Metric	FPAX45 NPB Ext PG	FPAX45 NPB Int Metric	FPAX45 NPB Int PG
7	10	10.0						
7	10							
8	11	11.5						
10	13	13.0	FPAX13-BFM16-90	FPAX13-BFPG9-90*				
10	13							
10	13							
12	16	15.8	FPAX16-BFM16-90	FPAX16-BFPG11-90*	FPAX16-BM16-45	FPAX16-BPG13-45	FPAX16-BFM20-45	FPAX16-BFPG16-45*
12	16		FPAX16-BFM20-90	FPAX16-BFPG16-90*	FPAX16-BM20-45	FPAX16-BPG16-45		
12	16							
12	16							
14	18	18.5						
14	18							
	20	20.0						
17	21	21.2	FPAX21-BFM20-90	FPAX21-BFPG16-90*	FPAX21-BM20-45	FPAX21-BPG13-45	FPAX21-BFM20-45	FPAX21-BFPG16-45*
17	21					FPAX21-BPG16-45		
17	21							
	25	25.0						
23	28	28.5	FPAX28-BFM25-90	FPAX28-BFPG21-90*	FPAX28-BM25-45	FPAX28-BPG21-45	FPAX28-BFM25-45	FPAX28-BFPG21-45*
23	28							
29	34	34.5	FPAX34-BFM32-90	FPAX34-BFPG29-90*	FPAX34-BM32-45	FPAX34-BPG29-45	FPAX34-BFM32-45	FPAX34-BFPG29-45*
29	34							
36	42	42.5	FPAX42-BFM50-90	FPAX42-BFPG36-90*	FPAX42-BM40-45	FPAX42-BPG36-45	FPAX42-BFM50-45	FPAX42-BFPG36-45*
36	42				FPAX42-BM50-45			
48	54	54.5	FPAX54-BFM50-90		FPAX54-BM50-45	FPAX54-BPG48-45*	FPAX54-BFM50-45	
48	54				FPAX54-BM63-45			
56	67	67.0						

Ordering Notes

- NPB = Nickel Plated Brass
 - Available on request:
 - colour grey, other threads
 - for brass locknuts and sealing washers see accessories, page 86
 - EMC braid clamp version, see page 85
- * Indicates parts made to order on request

properties

- Fast fit
- Supplied with additional conduit seal & retained face seal
- Face seal details:
 - Nylon and Brass external threads supplied with Polyester elastomer washer
 - UNEF and Flange supplied with O-ring
- IP rating: for conduit & fitting IP66 + IP67 + IP68 (2 bar) + IP69 for cable gland: IP68 (10 bar)+IP69
- Vibration and shock tested to EN61373 Cat 2
- Tamper resistant
- Both 90° and 45° elbows incorporate swept bore to facilitate cable installation and protect cables when installed
- Can be removed using a screwdriver
- All round teeth give high pull off strength 70kg with FPAH21
- Both 90° and 45° elbows incorporate swept bore to facilitate cable installation and protect cables when installed
- Suitable for fine and coarse pitch conduits
- Temperature range:
 - conduit fitting: -50°C to +135°C
 - cable gland: -40°C to +100°C static
-20°C to +100°C dynamic
- Low Fire Hazard (LFH), see page 102
- Halogen, sulphur and phosphorus free
- Refer to accessories for clamping range page 87

FPAX		FPAX90		FPAX45		nominal size (mm)	OD mm	european (NW) sizes
NEW		NEW		NEW				
cable gland Fast fit, swivel, nickel plated brass external threaded cable gland fitting with additional conduit seal. Suitable for knockouts or threaded entries.		cable gland Fast fit, swivel, 90 degree elbow, nickel plated brass external threaded cable gland fitting with additional conduit seal. Suitable for knockouts or threaded entries.		cable gland Fast fit, swivel, 45 degree elbow, nickel plated brass external threaded cable gland fitting with additional conduit seal. Suitable for knockouts or threaded entries.				
IP66	IP67	IP68	IP69	IP66	IP67			
IP66	IP67	IP68	IP69	IP66	IP67			
NPB Metric	NPB PG	NPB Metric		NPB Metric				
FPAX13-BM16-CG		FPAX13-BM16-CG-90		FPAX16-BM16-CG-90	FPAX16-BM20-CG-45	10	10.0	7
						10		7
						11	11.5	8
						13	13.0	10
						13		10
						13		10
FPAX16-BM16-CG	FPAX16-BPG11-CG*	FPAX16-BM16-CG-90		FPAX16-BM20-CG-90		16	15.8	12
FPAX16-BM20-CG	FPAX16-BPG16-CG*	FPAX16-BM20-CG-90				16		12
						16		12
						16		12
						18	18.5	14
						18		14
						20	20.0	
FPAX21-BM20-CG	FPAX21-BPG16-CG*	FPAX21-BM20-CG-90		FPAX21-BM20-CG-90	FPAX21-BM20-CG-45	21	21.2	17
						21		17
						21		17
						25	25.0	
FPAX28-BM25-CG	FPAX28-BPG21-CG*	FPAX28-BM25-CG-90		FPAX28-BM25-CG-90	FPAX28-BM25-CG-45	28	28.5	23
						28		23
FPAX34-BM32-CG	FPAX34-BPG29-CG*	FPAX34-BM32-CG-90		FPAX34-BM32-CG-90	FPAX34-BM32-CG-45	34	34.5	29
						34		29
FPAX42-BM40-CG	FPAX42-BPG36-CG*	FPAX42-BM40-CG-90		FPAX42-BM40-CG-90	FPAX42-BM40-CG-45	42	42.5	36
						42		36
FPAX54-BM50-CG*		FPAX54-BM50-CG-90*		FPAX54-BM50-CG-90*	FPAX54-BM50-CG-45*	54	54.5	48
						54		48
						67	67.0	56

Standards

Technical Drawing



BS EN IEC 61386



FPA & FPAX T Pieces and Dividers

NEW

Construction: Nylon (PA66) moulded fitting. FPA colour black or grey as standard. FPAX incorporate internal elastomeric seal(s). Colour black, grey on request.*



IP66

IP67

IP68

IP69

Fittings

FPA

T piece with inspection lid
Fast fit T piece with inspection lid.

IP66



FPA

NEW

Reducing divider
Fast fit reducing divider

IP66



Reducer/ Stop Plug

Fitting to reduce or blank off any outlets.

IP66



R



SP

European (NW) sizes
Conduit In (mm)
Conduit Out x 2 for divider

12	16	13	FPA16T	FPA16-13-13	FPA13-R16 SP-R16
			FPA20T		
17	21	16	FPA21T	FPA21-16-16	FPA16-R21 FPA13-R21 SP-R21
23	28	21	FPA28T	FPA28-21-21	FPA25-R28 FPA21-R28 FPA20-R28 FPA16-R28 FPA13-R28 SP-R28
29	34	28	FPA34T	FPA34-28-28	FPA28-R34 FPA21-R34 FPA16-R34 SP-R34
36			FPA42T		FPA34-R42 FPA28-R42 FPA21-R42

Ordering Notes

* Indicates parts made to order on request and may be subject to MOQ and lead time

- Available on request:
- other colours

How to read the fittings code

FPAX21-R28

Conduit Size ———
T-piece or Reducer Size ———

properties

- Fast fit
- IP rating: FPA IP66
 FPAX IP66 + IP67 + IP68 (2 bar)
 FPAX Divider IP66 + IP67 + IP68 (2 bar) + IP69
- Maintains all the benefits of FPA and FPAX fittings
- Vibration and shock tested to EN61373 Cat 2
- Tamper resistant
- All round teeth give high pull off strength
- Low Fire Hazard (LFH), see page 102
- Halogen, sulphur & phosphorous free
- Inspection lid facilitates pull through of cables easing installation on the T-piece
- Rounded internal corners protect cable insulation during installation and use
- Incorporates mounting lugs to aid secure fixing



FPAX

T piece with inspection lid

Fast fit T piece with inspection lid and additional seals for enhanced IP rating.

- IP66
- IP67
- IP68



FPAX

NEW

Divider

Fast fit reducing divider with additional seals for enhanced IP ratings

- IP66
- IP67
- IP68
- IP69



Reducer/ Stop Plug

Fitting to reduce or blank off any outlets.

- IP66
- IP67
- IP68



European (NW) sizes
 Conduit In
 Conduit Out x 2 for divider

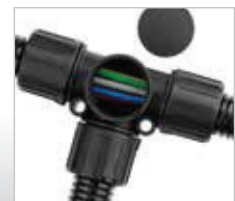
12	16	13	FPAX16T	FPAX16-13-13	FPAX13-R16
17	21	16	FPAX21T	FPAX21-16-16	FPAX16-R21 SP-R21
23	28	21	FPAX28T	FPAX28-21-21	FPAX21-R28 FPAX16-R28 SP-R28
29	34	28	FPAX34T	FPAX34-28-28	FPAX28-R34 FPAX21-R34 FPAX16-R34
36			FPAX42T		FPAX34-R42 FPAX28-R42 FPAX21-R42



Standards



BS EN IEC 61386





Flexilok[®] system

Construction: Nylon (PA66) moulded fitting.

- One piece fast fit
- Slim design
- IP rating: IP66
- Anti-vibration and tamper resistant
- Pull off strength with:
 - (FLK21 - FPAS21 25kg)
 - (FLK21 - FPAL21 20kg)
- Can be removed using a screwdriver
- Suitable for fine and coarse pitch conduits
- Temperature range -40°C to +120°C
- **Metric threads supplied complete with locknuts**
- Low Fire Hazard (LFH), see page 102
- Halogen, sulphur and phosphorus free
- Available in black, grey (RAL 7031) and white, see page 41
- 42mm and 54mm feature 4 teeth for added strength



IP66

Fittings

			FLK NEW		FLK NEW		FLK-FLK	
			straight external thread		Push in		coupler	
			Nylon, one piece, slim, fast fit, external threaded fitting suitable for knockouts or threaded entries.		Simple, one piece, push in fitting suitable for knockouts with no need for locknuts. Ideal for use when enclosure access is restricted.		One piece, slim, fast fit coupler for joining 2 conduits together.	
			IP66		IP66		IP66	
								
European (NW) sizes	nominal size (mm)	OD mm	Ext Metric	Ext PG				Coupler
7	10	10.0	FLK10-M12	FLK10-PG7				
7	10							
8	11	11.5						
10	13	13.0	FLK13-M16	FLK13-PG9				
10	13							
10	13							
12	16	15.8	FLK16-M16	FLK16-PG11		FLK16-PL20		FLK16-FLK16
12	16		FLK16-M20	FLK16-PG13				
12	16							
12	16							
14	18	18.5						
14	18							
	20	20.0	FLK20-M20			FLK20-PL20		FLK20-FLK20
17	21	21.2	FLK21-M20	FLK21-PG16		FLK21-PL20		FLK21-FLK21
17	21							
17	21							
	25	25.0	FLK25-M25			FLK25-PL25		FLK25-FLK25
23	28	28.5	FLK28-M25	FLK28-PG21		FLK28-PL25		FLK28-FLK28
23	28							
29	34	34.5	FLK34-M32	FLK34-PG29		FLK34-PL32		FLK34-FLK34
29	34							
36	42	42.5	FLK42-M40	FLK42-PG36				
36	42		FLK42-M50					
48	54	54.5	FLK54-M50	FLK54-PG48				
48	54		FLK54-M63					
56	67	67.0						

Ordering Notes

- Specify black or grey (B=Black, G=Grey) eg. FLK20-M20B
- For white version see page 69
- Details for removal tools can be found on page 89

Also Available

- Push in fitting removal tool - see accessories page 89
- Brass threaded versions
- Two teeth version of 42mm and 54mm available on request

Removal Tool



NOTE: 42mm and 54mm require a removal tool to aid removal if necessary see page 89.

properties

- One piece fast fit
- Slim design
- IP rating: IP66
- Anti-vibration and tamper resistant
- Pull off strength with:
 - (FLK21 - FPAS21 25kg)
 - (FLK21 - FPAL21 20kg)
 - (FLK20-PP - FPP20 13kg)
- Can be removed using a screwdriver
- Suitable for fine and coarse pitch conduits
- Temperature range -40°C to +120°C
- **Metric threads supplied complete with locknuts**
- Halogen, sulphur and phosphorus free
- Available in black, grey (RAL 7031) and white, see page 41



FLK90

90° elbow external thread

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

IP66



Ext Metric

Ext PG

FLK45

NEW

45° elbow external thread

One piece, slim, fast fit, external threaded 45 degree elbow fitting suitable for knockouts.

IP66



Ext Metric

FLK-PP

straight external thread

Polypropylene, one piece, slim, fast fit, external threaded fitting suitable for knockouts or threaded entries.

IP66



Ext Metric (PP)

nominal size (mm)
OD mm
european (NW) sizes

FLK90		FLK45		FLK-PP		nominal size (mm)	OD mm	european (NW) sizes
						10	10.0	7
						10		7
						11	11.5	8
						13	13.0	10
						13		10
						13		10
FLK16-M16-90	FLK16-PG11-90	FLK16-M16-45		FLK16-M16-PP		16	15.8	12
FLK16-M20-90		FLK16-M20-45				16		12
						16		12
						16		12
						18	18.5	14
						18		14
FLK20-M20-90		FLK20-M20-45		FLK20-M20-PP		20	20.0	
FLK21-M20-90	FLK21-PG16-90	FLK21-M20-45				21	21.2	17
						21		17
						21		17
FLK25-M25-90		FLK25-M25-45		FLK25-M25-PP		25	25.0	
FLK28-M25-90	FLK28-PG21-90	FLK28-M25-45				28	28.5	23
						28		23
FLK34-M32-90	FLK34-PG29-90	FLK34-M32-45		FLK34-M32-PP		34	34.5	29
						34		29
						42	42.5	36
						42		36
						54	54.5	48
						54		48
						67	67.0	56

Standards





FPL system

upvc corrugated pliable conduit

IP40

IP66

IP67

Conduit

Fittings

FPL

Construction: Standard weight, upvc, corrugated pliable conduit. Colour black, grey (RAL 7045) or white. (see page 41 in certain sizes.)

Typical Applications: Static connections in buildings.

- High compression strength
- Bends to a small radius
- IP rating:
 - IP40 with MP and T fittings
 - IP66 with FLK fittings
 - IP67 with MPS fittings
- Temperature range
 - 5°C to +70°C
- Self extinguishing
- UV resistant (black)
- Tensile strength:
 - FLK20 25kg
 - MP20 20kg
 - MPS20 15kg

FLK

straight external thread

One piece, slim, fast fit, nylon external threaded fitting suitable for knockouts or threaded entries.

IP66

FLK90

90° elbow external thread

One piece, slim, fast fit, nylon external threaded 90 degree elbow fitting suitable for knockouts.

IP66

MP

straight external thread

Straight nylon compression fitting external thread including locknut.

IP40

MPS

straight external thread

Straight nylon compression fitting with seal external thread including locknut.

IP67



nominal size (mm)	FPL part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)
16	FPL16	100	16.0	12.0	25
20	FPL20	50, 100	20.0	15.0	30
25	FPL25	50	25.0	19.5	40
34	FPL34	25	34.5	27.9	50

metric thread part number	metric thread part number	metric thread part number	metric thread part number
FLK16-M16	FLK16-M16-90	MP-16-M16	MPS-16-M16
FLK16-M20	FLK16-M20-90	MP-16-M20	MPS-16-M20
FLK20-M20	FLK20-M20-90	MP-20-M20	MPS-20-M20
FLK25-M25	FLK25-M25-90	MP-25-M25	MPS-25-M25
FLK34-M32	FLK34-M32-90	MP-32-M32	MPS-32-M32

* Push in fittings available on page 38

Ordering Notes

- Specify black or grey (B = Black, G = Grey)
- FPL can be used with FPA fittings
- Available on request:
 - longer lengths and bulk packaging
 - cut lengths and assemblies, additional sizes
 - alternative threads, other colours

Don't Forget



See page 45

Standards

BS EN IEC 61386



White Products

Construction: Polypropylene or upvc conduit system with nylon straight, 90° elbow, coupler and conduit clips options.



NEW

Conduit

Fittings

FPP

For details see page 22

IP66

FPL

For details see page 40

IP66

nominal size (mm)	OD mm	FPP 50m coil	FPL 50m & 100m coil
20	20.0	FPP20W-50M	FPL20W-100M
25	25.0	FPP25W-50M	FPL25W-50M
34	34.5	FPP34W-50M	

FLK

straight external thread

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

IP66

FLK-90

90° elbow external thread

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

IP66

FLK-FLK

90° elbow external thread

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

IP66

FCL

nylon corrugated conduit clip with integral lid

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

FCL-P

nylon plain conduit clip with integral lid

Nylon PA66 conduit clip with integral lid for increased security and plain internal diameter for use with rigid conduit or smoothbore flexible conduit.



Ext Metric	Ext Metric			
FLK20-M20W	FLK20-M20-90W	FLK20-FLK20W	FCL20W	FCL20W-P
FLK25-M25W	FLK25-M25-90W	FLK25-FLK25W	FCL25W	FCL25W-P
FLK34-M32W				

PVC - Contractor pack white

NEW

FPL-CP20W	M20 thread
FPL-CP25W	M25 thread



- 10m of FPL white conduit
- 10 x Flexilok® fittings
- 10 x Locknuts

Cable Glands white

IP68

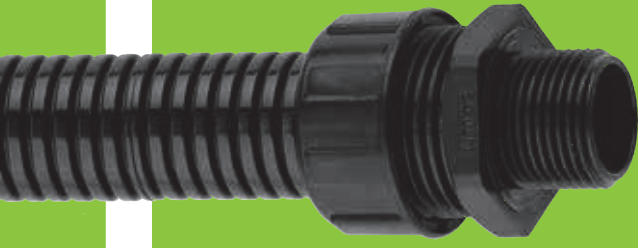


Thread No.	White Part No.	Thread Length (mm)	Cable Dia (min) (mm)	Cable Dia (max) (mm)	Spanner Size (mm)	Pack Quantity
M16	CGM16W	11	5	10	22	100
M20	CGM20SW	11	6	12	24	100
M20	CGM20W	11	10	14	27	100
M25	CGM25W	11	13	18	33	50

supplied with locknut
For other colours see page 87

Standards





FPY, FPYS, FPYL, FPYLS system

corrugated flexible conduit properties

- Highly flexible and high fatigue life
- High impact strength and recovers if crushed
- Temperature range -40°C to +120°C
- Highly resistant to solvents and oils
- **Self extinguishing (FPY and FPYS)**
- Halogen, sulphur and phosphorus free

Conduit

FPY	FPYS	FPYL	FPYLS
<p>Construction: Nylon (PA6) corrugated flexible conduit. Colour black.</p> <p>Typical Applications: Automotive</p>	<p>Construction: Slit nylon (PA6) corrugated flexible conduit. Colour black.</p> <p>Typical Applications: Automotive looms, harnesses and retrofit.</p>	<p>Construction: Nylon (PA6) corrugated flexible conduit. Colour black.</p> <p>Typical Applications: Lightweight automotive.</p>	<p>Construction: Slit, light weight nylon (PA6) corrugated flexible conduit. Colour black.</p> <p>Typical Applications: Lightweight automotive looms, harnesses and retrofit.</p>

european (NW) sizes	nominal size (mm)	pitch	FPY				FPYS				FPYL				FPYLS							
			part number	real length (m)	outside dia (mm)	inside dia (mm)	min. inside bend radius (mm)	part number	real length (m)	outside dia (mm)	inside dia (mm)	min. inside bend radius (mm)	part number	real length (m)	outside dia (mm)	inside dia (mm)	min. inside bend radius (mm)	part number	real length (m)	outside dia (mm)	inside dia (mm)	min. inside bend radius (mm)
7	7	F	FPY6B	100	7.1	4.8	10	FPYS6B	50	10.0	6.5	15	FPYL6B*	100	10.0	6.5	15	FPYLS6B*	100	10.0	6.5	15
7	10	F	FPY8B	50	10.0	6.5	15	FPYS8B	50	10.0	6.5	15	FPYL8B*	100	10.0	6.5	15	FPYLS8B*	100	10.0	6.5	15
8	11	F	FPY10B	50	11.5	8.5	20	FPYS10B	50	11.5	8.5	20	FPYL10B*	100	11.5	8.5	20	FPYLS10B*	100	11.5	8.5	20
10	13	F	FPY12B	50	13.0	10.0	25	FPYS12B	50	13.0	10.0	25	FPYL12B*	100	13.0	10.1	25	FPYLS12B*	100	13.0	10.1	25
12	16	F	FPY16B	50	16.1	12.8	35	FPYS16B	50	16.1	12.8	35	FPYL16B*	100	16.1	13.0	35	FPYLS16B*	100	16.1	13.0	35
12	16	F																				
14	18	F	FPY18B	50	18.5	14.2	35	FPYS18B	50	18.5	14.2	35	FPYL18B*	100	18.5	14.4	35	FPYLS18B*	100	18.5	14.4	35
17	21	F	FPY20B	50	21.2	16.9	40	FPYS20B	50	21.2	16.9	40	FPYL20B*	100	21.2	17.1	40	FPYLS20B*	100	21.2	17.1	40
22	25.4	F	FPY25B	50	25.4	21.4	45	FPYS25B	50	25.4	21.4	45	FPYL25B*	100	25.4	21.6	45	FPYLS25B*	100	25.4	21.6	45
23	28	F	FPY28B	50	28.5	23.0	45	FPYS28B	50	28.5	23.0	45	FPYL28B*	50	28.5	23.2	45	FPYLS28B*	50	28.5	23.2	45
29	34	C	FPY32B	25	34.5	28.3	55	FPYS32B	25	34.5	28.3	55	FPYL32B*	50	34.5	28.5	55	FPYLS32B*	50	34.5	28.5	55
36	42	C	FPY40B	25	42.5	35.7	65	FPYS40B	25	42.5	35.7	65	FPYL40B*	50	42.5	35.9	65	FPYLS40B*	50	42.5	35.9	65
48	54	C	FPY50B	25	54.5	47.4	80	FPYS50B	25	54.5	47.4	80	FPYL50B*	50	54.5	47.6	80	FPYLS50B*	50	54.5	47.6	80

F = fine pitch C = coarse pitch

Ordering Notes

- **Metric threads supplied complete with locknuts**
 - **Available on request:**
 - reduced outlet T pieces
 - other colours
 - PG threads
- * FPYL & FPYLS are made to order on request and maybe subject to MOQ and lead times.



MP, MP90 & T system

IP40

IP67

Construction: Nylon compression fittings. Colour - black.

MP fitting with nylon retaining clip provides a pull off strength of 20kg with FPY20 and 15kg with FPYL20 and IP40.

MPS fitting with a neoprene sealing ring provides a pull off strength of 15kg with FPY20 and 10kg with FPYL20 and IP67.



Fittings

MP	MPS	MP90	MPS90	T	TS
straight external thread Straight nylon compression fitting external thread including locknut.	straight external thread Straight nylon compression fitting, with seal, external thread including locknut.	90° elbow external thread 90° elbow nylon compression fitting external thread including locknut.	90° elbow external thread 90° elbow nylon compression fitting, with seal, external thread including locknut.	T Piece fitting T piece nylon compression fitting.	T Piece fitting with seals T piece nylon compression fitting, with seals.
IP40	IP67	IP40	IP67	IP40	IP67



MP shown



MP shown



IP40
T shown

Ext Metric

Ext Metric

Ext Metric

Ext Metric

T Piece

T Piece

European (NW) sizes

nominal size (mm)

OD mm

						7	10	10.0
						8	11	11.5
MP-12-M16	MPS-12-M16			T12X12X12	TS12X12X12	10	13	13.0
MP-16-M16	MPS-16-M16	MP90-16-M16	MPS90-16-M16	T16X16X16	TS16X16X16	12	16	15.8
MP-16-M20	MPS-16-M20	MP90-16-M20	MPS90-16-M20			12	16	
						14	18	18.5
MP-20-M20	MPS-20-M20	MP90-20-M20	MPS90-20-M20	T20X20X20	TS20X20X20	17	21	21.2
MP-25-M25	MPS-25-M25	MP90-25-M25	MPS90-25-M25	T25X25X25	TS25X25X25	22	25	25.4
MP-28-M25	MPS-28-M25	MP90-28-M25	MPS90-28-M25			23	28	28.5
MP-32-M32	MPS-32-M32	MP90-32-M32	MPS90-32-M32			29	34	34.5
MP-40-M40		MP90-40-M40				36	42	42.5
MP-50-M50						48	54	54.5

Standards



BS EN IEC 61386





FPY system large diameter nylon

IP40

IP65

Conduit

FPY

Construction:

Nylon (PA6) corrugated flexible conduit.
Colour black or grey.

Typical Applications: Machines and large control cabinets.

- Highly flexible
- High impact strength and recovers if crushed
- IP rating: IP40 or IP65
- Temperature range -40°C to +120°C
- Highly resistant to solvents and oils
- Self extinguishing
- Halogen, sulphur and phosphorus free
- UV resistant (black)

Fittings

MP

straight flanged nylon clamp fitting

Flanged body with 2 clamps.

IP40

MPS

straight flanged nylon clamp fitting with seals

Flanged body with 2 clamps and seals.

IP65

MP90

90° flanged nylon clamp fitting

Flanged 90° body with 2 clamps.

IP40

MPS90

90° flanged nylon clamp fitting with seals

Flanged 90° body with 2 clamps and seals.

IP65



European (NW) sizes
nominal size (mm)

FPY		part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)
70	80	FPY80	10	80.0	67.0	160
95	106	FPY106	10	106.0	91.5	210

termination	part number	termination	part number	termination	part number	termination	part number
FL	MP-80-FL	FL	MPS-80-FL	FL	MP90-80-FL	FL	MPS90-80-FL
FL	MP-106-FL	FL	MPS-106-FL	FL	MP90-106-FL	FL	MPS90-106-FL

Ordering Notes

- Specify black or grey (B = Black, G = Grey)
eg: FPY80B-10M for Black 10m reel
- Available on request:
 - longer lengths and bulk packaging
 - cut lengths and assemblies
 - alternative conduit material
- FCC75 and FCC106 PVC lined plated steel P-clips
- 80mm can be used with F-Clamps - see page 45

Standards

BS EN IEC 61386



Conduit Fixing Accessories

properties

- Suitable for use with flexible and pliable conduits
- Clips and F-Clamps manufactured from nylon PA66
- Temperature Range -50° to 135°
- UV resistant
- Low Fire Hazard see page 102
- Halogen, Sulphur & Phosphorous Free
- Self extinguishing
- For installation instructions see page 100



Fittings

conduit clips

nylon conduit clip with integral lid - black or grey



Conduit size (mm)

conduit clip for corrugated

conduit clip for plain or rigid

FCLAMP

non-metallic, heavy duty conduit clamp

Nylon PA66, conduit fixing clamp for corrugated conduit.



part number

FCLAMP-CP

plated steel cover plate for use with FCLAMP



part number

FCLAMP-WP

plated steel weld plate to fix FCLAMP



part number

FCLAMP-EWP

plated steel elongated weld plate to fix FCLAMP



part number

FCLAMP-BOLT

fixing bolts to secure FCLAMPS

For information on stacking bolts consult our website.



part number

10	FCL10						
13	FCL13						
16	FCL16	FCL16B-P	FCLAMP-3-16	FCLAMP-CP3	FCLAMP-WP3	FCLAMP-EWP3	FCLAMP-BOLT3
18	FCL18	FCL18B-P					
20	FCL20	FCL20B-P					
21	FCL21	FCL21B-P	FCLAMP-3-21	FCLAMP-CP3	FCLAMP-WP3	FCLAMP-EWP3	FCLAMP-BOLT3
25	FCL25	FCL25B-P					
26		FCL26B-P					
28	FCL28		FCLAMP-4-28	FCLAMP-CP4	FCLAMP-WP4	FCLAMP-EWP4	FCLAMP-BOLT4
32		FCL33B-P					
34	FCL34		FCLAMP-5-34	FCLAMP-CP5	FCLAMP-WP5	FCLAMP-EWP5	FCLAMP-BOLT5
42	FCL42		FCLAMP-6-42	FCLAMP-CP6	FCLAMP-WP6	FCLAMP-EWP6	FCLAMP-BOLT6
54	FCL54		FCLAMP-7-54	FCLAMP-CP7	FCLAMP-WP7	FCLAMP-EWP7	FCLAMP-BOLT7
67			FCLAMP-7-67	FCLAMP-CP7	FCLAMP-WP7	FCLAMP-EWP7	FCLAMP-BOLT7
80			FCLAMP-8-80	FCLAMP-CP8	FCLAMP-WP8	FCLAMP-EWP8	FCLAMP-BOLT8

mounting rail

NEW

suitable for mounting FCL & FCL-P conduit clips and F-CLAMPS.
Supplied in 0.6m, 1.2m or 2.4m lengths.
For rail dimensions or for other lengths consult us or visit our website.



size	stainless steel	aluminium	galv steel	plastic
a	MRSSA-#	MRAA-#	MRGSA-#	MRPA-#
b	MRSSB-#	MRAB-#	MRGSB-#	MRPB-#
c	MRSSC-#	MRAC-#	MRGSB-#	MRPC-#

- enter desired length e.g 1.2m # = 1.2M

For stacking arrangements of our F-Clamps visit our website for further details

mounting rail fixing accessories

NEW

used to fix positions of FCL clips and F-Clamps on mounting rail and prevent movement.

Universal channel rail adaptor - suitable for mounting F-Clamps when used with channel rails such as Unistrut®, Halfen and Hiiti.



	MRFAL	MRFAM	MRFAM	MRFAM	UNIVERSAL
material					
stainless steel	MRFALSS	MRFAMSS	MRFAMSS	MRFAMSS	
aluminium	MRFALA	MRFAMA	MRFAMA	MRFAMA	
nickel plated brass	MRFALNPB	MRFAMNPB	MRFAMNPB	MRFAMNPB	
nickel plated steel					MRFAMNS

See page 100 for installation instructions



FPCB system

spiral reinforced pvc

FPCG, FPCGN & FPCBU system

spiral reinforced pvc with special properties



IP65

Conduit

Fittings

FPCB

Construction: Smooth bore, helically formed pvc, flexible conduit with spiral upvc reinforcement and flexible pvc jacket. Colour black.

Typical Applications: Routing of cables within machines.

FPCGN

NEW

Construction: Smooth bore, helically formed pvc, flexible conduit with spiral upvc reinforcement and flexible pvc jacket. Colour green

Typical Applications: As FPCB but where oil resistance is required. UL recognised.

FPCG

NEW

Construction: As FPCB except colour grey.

Typical Applications: As FPCB. UL recognised.

FPCBU

NEW

Construction: As FPCB except colour blue.

Typical Applications: As FPCB but where high temperature is required. UL recognised.

MPC

NEW

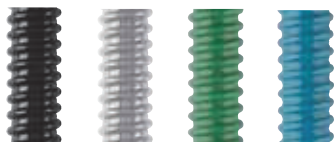
straight nylon compression fitting external thread

2 part compression fitting with internal spigot and all round external teeth to grip conduit. Available in black or grey (RAL 7001).

IP65



nominal size (mm)	FPC				reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	metric thread part number	PG thread part number	NPT part number
	part number Black	Grey (RAL 7001)	Green (RAL 6001)	Blue (RAL 5012)							
12	FPC12B	FPC12G*	FPC12GN*	FPC12BU*	30	14.5	10.0	25	MPC-12-M16	MPC-12-PG9	
16	FPC16B	FPC16G*	FPC16GN*	FPC16BU*	30	16.5	12.0	25	MPC-16-M16	MPC-16-PG11	
16									MPC-16-M20	MPC-16-PG13	MPC-16-050
20	FPC20B	FPC20G*	FPC20GN*	FPC20BU*	30	21.0	16.0	35	MPC-20-M20	MPC-20-PG16	MPC-20-050
25	FPC25B	FPC25G*	FPC25GN*	FPC25BU*	30	27.5	22.0	45	MPC-25-M25	MPC-25-PG21	MPC-25-075
30	FPC30B*	FPC30G*			30	30.5	25.0	55	MPC-30-M32*	MPC-30-PG29*	
32	FPC32B	FPC32G*	FPC32GN*	FPC32BU*	10,30	33.5	28.0	60	MPC-32-M32	MPC-32-PG29	MPC-32-100
40	FPC40B	FPC40G*	FPC40GN*	FPC40BU*	10,30	41.0	35.0	80	MPC-40-M40	MPC-40-PG36	MPC-40-125
50	FPC50B	FPC50G*	FPC50GN*	FPC50BU*	10,30	46.4	40.0	105	MPC-50-M50	MPC-50-PG42	MPC-50-150
63	FPC63B	FPC63G*	FPC63GN*	FPC63BU*	10,30	57.0	50.0	120	MPC-63-M63	MPC-63-PG48	MPC-63-200



Ordering Notes

- Add reel length eg: FPC20B-30M for 30M
- Available on request:
 - additional sizes
 - alternative threads
 - other colours
- * Indicates parts made to order on request and may be subject to MOQ and lead time
- For UL recognised black conduit order FPCURB*



properties

- Highly flexible
- Accepts torsional movement
- Vibration and shock tested to EN61373 Cat 2
- IP rating: IP65
- Temperature range
 - 5°C to +70°C (FPCB - black)
 - 20°C to +70°C (FPCG - grey)
 - 20°C to +70°C (FPCGN - green)
 - 20°C to +90°C (FPCBU - blue)
 - 5°C to +70°C (LTS - silver grey)
- FPCB (black) is UV resistant
- FPCGN (green) is oil resistant
- FPCBU (blue) is high temperature
- Self extinguishing
- Metric threads supplied complete with locknuts
- FPCG, FPCGN, FPCBU and FPCURB are UL recognised to UL1696 for use in US and Canada
- LTS (silver grey) is smooth outer and smooth bore



MPC90 NEW

90° elbow nylon compression fitting external thread

2 part compression, 90 degree elbow fitting with internal spigot and all round external teeth to grip conduit. Available in black or grey (RAL 7001).

IP65

MPC45 NEW

45° elbow nylon compression fitting external thread

2 part compression, 45 degree elbow fitting with internal spigot and all round external teeth to grip conduit. Available in black or grey (RAL 7001).

IP65

LTS NEW

smooth bore liquid tight sheathing

PVC, silver grey sheathing ideal for routing cables within machines. IP66 rating when used with MPC fittings.



metric thread part number	PG thread part number	NPT part number	metric thread part number	NPT part number	part number	reel length (m)	outside dia (mm)	inside dia (mm)	nominal size (mm)
MPC90-16-M16	MPC90-16-PG11								12
MPC90-16-M20	MPC90-16-PG13	MPC90-16-050	MPC45-16-M20	MPC45-16-050	LTS16SG-50M	50	16.5	12	16
MPC90-20-M20	MPC90-20-PG16	MPC90-20-050	MPC45-20-M20	MPC45-20-050	LTS20SG-50M	50	21.0	16	20
MPC90-25-M25	MPC90-25-PG21	MPC90-25-075	MPC45-25-M25	MPC45-25-075	LTS25SG-50M	50	27.5	22	25
									30
MPC90-32-M32	MPC90-32-PG29	MPC90-32-100	MPC45-32-M32	MPC45-32-100	LTS32SG-50M	50	33.5	28	32
MPC90-40-M40	MPC90-40-PG36	MPC90-40-125							40
MPC90-50-M50		MPC90-50-150							50
MPC90-63-M63		MPC90-63-200							63

Standards

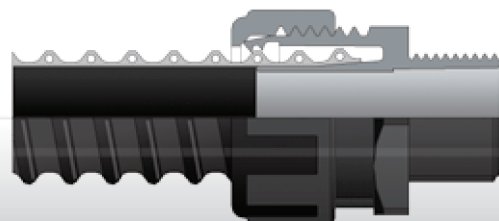


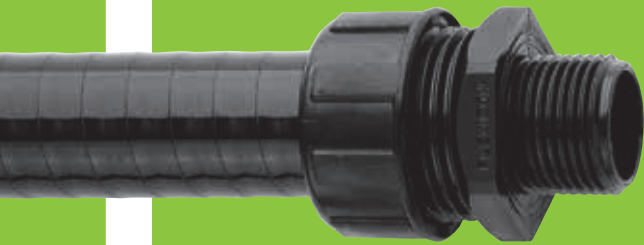
BS EN IEC 61386



* refer to conduit properties for applicable standards

Technical Drawing





LPC system

smooth spiral reinforced pvc

IP66

IP67

IP68

IP69

Conduit

Fittings

LPC

Construction: Smooth bore, smooth cover, helically formed pvc, flexible conduit with spiral upvc reinforcement and flexible pvc jacket. Colour black or grey.

Typical Applications: Food processing machines and wash-down installations. LPCG is suitable for food contact.



LPCO

Construction: As LPC except colour orange.

Typical Applications: As LPC but where high flexibility is required.

LPCGN

Construction: As LPC except colour green.

Typical Applications: As LPC but where oil resistance is required.

LPCBU

Construction: As LPC except colour blue.

Typical Applications: As LPC but where high temperature is required.

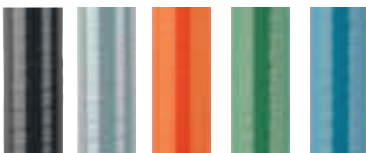
FCL-P

non metallic conduit clip

Nylon conduit fixing clip for smooth conduit. Available in black or grey (RAL 7001).



nominal size (mm)	LPC part number	Grey (RAL 7001)	Orange (RAL 2008)	Green (RAL 6001)	Blue (RAL 5012)	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	metric thread part number
12	LPC12B	LPC12G*	LPC12O*	LPC12GN*	LPC12BU*	30	14.2	10.0	50	
16	LPC16B	LPC16G	LPC16O	LPC16GN*	LPC16BU*	30	17.8	12.6	50	FCL18-P
20	LPC20B	LPC20G	LPC20O	LPC20GN*	LPC20BU*	10, 30	21.1	16.0	70	FCL21-P
25	LPC25B	LPC25G	LPC25O	LPC25GN*	LPC25BU*	10, 30	26.4	21.0	90	FCL26-P
32	LPC32B	LPC32G	LPC32O	LPC32GN*	LPC32BU*	10, 30	33.1	26.5	140	FCL33-P
40	LPC40B	LPC40G*	LPC40O*	LPC40GN*	LPC40BU*	10, 30	41.8	35.4	190	
50	LPC50B	LPC50G*	LPC50O*	LPC50GN*	LPC50BU*	10, 30	47.9	40.0	240	
63	LPC63B	LPC63G*	LPC63O*	LPC63GN*	LPC63BU*	10, 30	59.7	51.3	270	



Ordering Notes

* Indicates parts made to order on request and may be subject to MOQ and lead time

• **Available on request:**

- additional sizes
- alternative threads
- alternative materials (eg. PU)

- other colours
- conduit couplers
- 45 degree brass elbow
- combined conduit fitting with cable gland, see page 84

Alternatives



properties

- Smooth, wipe clean surface
- Accepts some torsional movement
- IP rating: IP66, IP67 and IP68 with MPC fittings
 - IP66, IP67, IP68 (2 bar) + IP69 with metal C-type compression fittings
- Temperature range -5°C to +70°C (LPC and LPCG)
 - 20°C to +70°C (LPCO and LPCGN)
 - 20°C to +90°C (LPCBU)
- LPCG (grey) is suitable for food contact
- LPCO (orange) is highly flexible
- LPCGN (green) is oil resistant
- LPCB (black) is UV resistant
- Self extinguishing
- Metric nylon fittings supplied complete with locknut
- Vibration and shock tested to EN 61373 Cat 2



MPC

NEW

straight nylon compression fitting external thread including locknut

2 part compression fitting with internal spigot and all round external teeth to grip conduit. Available in black or grey (RAL 7001).

IP66 IP67 IP68

MPC90

NEW

90° elbow nylon compression fitting external thread

2 part compression, 90 degree elbow fitting with internal spigot and all round external teeth to grip conduit. Available in black or grey (RAL 7001).

IP66 IP67 IP68

MPC45

NEW

45° elbow nylon fitting external thread

2 part compression, 45 degree elbow fitting with internal spigot and all round external teeth to grip conduit. Available in black or grey (RAL 7001).

IP66 IP67 IP68



metric thread part number	PG thread part number	NPT thread part number	metric thread part number	PG thread part number	NPT thread part number	metric thread part number	NPT thread part number	nominal size (mm)
MPC-12-M16	MPC-12-PG9							12
MPC-16-M16	MPC-16-PG11		MPC90-16-M16	MPC90-16-PG11				16
MPC-16-M20	MPC-16-PG13	MPC-16-050	MPC90-16-M20	MPC90-16-PG13	MPC90-16-050	MPC45-16-M20	MPC45-16-050	16
MPC-20-M20	MPC-20-PG16	MPC-20-050	MPC90-20-M20	MPC90-20-PG16	MPC90-20-050	MPC45-20-M20	MPC45-20-050	20
MPC-25-M25	MPC-25-PG21	MPC-25-075	MPC90-25-M25	MPC90-25-PG21	MPC90-25-075	MPC45-25-M25	MPC45-25-075	25
MPC-32-M32	MPC-32-PG29	MPC-32-100	MPC90-32-M32	MPC90-32-PG29	MPC90-32-100	MPC45-32-M32	MPC45-32-100	32
MPC-40-M40	MPC-40-PG36	MPC-40-125	MPC90-40-M40	MPC90-40-PG36	MPC90-40-125			40
MPC-50-M50	MPC-50-PG42	MPC-50-150	MPC90-50-M50		MPC90-50-150			50
MPC-63-M63	MPC-63-PG48	MPC-63-200	MPC90-63-M63		MPC90-63-200			63

Standards

Technical Drawing



BS EN IEC 61386



LPC system

metallic fittings for use with
LPC conduits

IP66

IP67

IP68

IP69

FG
FOOD GRADE

Fittings

C

NEW

external metric thread nickel plated brass

Multipart compression fitting including elastomeric seal. Can be used for knockout or threaded entries as fitting rotates until tightened.

IP66 IP67 IP68 IP69

C-S

NEW

swivel external thread nickel plated brass

Compression fitting for knockout or threaded entries.

Multipart compression fitting including elastomeric seal. The external thread swivels about the main body even after tightening.

IP66 IP67 IP68 IP69

C-90

NEW

external thread nickel plated brass

Multipart compression fitting including elastomeric seal. Can be used for knockouts.

IP66 IP67 IP68 IP69

C45

external thread nickel plated brass

45° multipart compression fitting including elastomeric seal. Can be used for knockouts.

IP66 IP67

IP68 IP69



nominal size (mm)

LPC

conduit see page 48

	metric thread part number	for PG thread size	for NPT thread size	thread	metric thread part number	metric thread part number	metric thread part number
12	LPC12	LPC12-M16-C	LPC12-PG9-C		LPC12-M16-S	LPC12-M16-C90	
16		LPC16-M16-C	LPC16-PG11-C		LPC16-M16-S	LPC16-M16-C90	
16	LPC16	LPC16-M20-C	LPC16-PG13-C	LPC16-050-C (1/2")	LPC16-M20-S	LPC16-M20-C90	LTP16-M20-C45
20	LPC20	LPC20-M20-C	LPC20-PG16-C	LPC20-050-C (1/2")	LPC20-M20-S	LPC20-M20-C90	LTP20-M20-C45
25	LPC25	LPC25-M25-C	LPC25-PG21-C	LPC25-075-C (3/4")	LPC25-M25-S	LPC25-M25-C90	LTP25-M25-C45
32	LPC32	LPC32-M32-C	LPC32-PG29-C	LPC32-100-C (1")	LPC32-M32-S	LPC32-M32-C90	LTP32-M32-C45
40	LPC40	LPC40-M40-C	LPC40-PG36-C	LPC40-125-C (1 1/4")	LPC40-M40-S	LPC40-M40-C90	LTP40-M40-C45
50	LPC50	LPC50-M50-C	LPC50-PG42-C	LPC50-150-C (1 1/2")		LPC50-M50-C90	LTP50-M50-C45
63	LPC63	LPC63-M63-C	LPC63-PG48-C	LPC63-200-C (2")		LPC63-M63-C90	LTP63-M63-C45

* Please see conduit range information page 48

Ordering Notes

* Indicates parts made to order on request and may be subject to MOQ and lead time

• Available on request:

- additional sizes
- alternative threads
- alternative materials (eg. PU)

- other colours
- conduit couplers
- 45 degree brass elbow
- combined conduit fitting with cable gland, see page 84

Alternatives



properties

- Smooth, wipe clean surface
- Accepts some torsional movement
- IP rating: IP66, IP67 and IP68 with MPC fittings
IP66, IP67, IP68 (2 bar) + IP69 with metal C-type compression fittings
- Temperature range -5°C to +70°C (LPC and LPCG)
-20°C to +70°C (LPCO and LPCGN)
-20°C to +90°C (LPCBU)
- LPCG (grey) is suitable for food contact

- C-FG - IP66, IP67, IP68 (2 bar) and IP69
- C-FG fitting designed in accordance with EN1672-2 and EN ISO 14159
- C-FG fitting manufactured from stainless steel grade 316L
- C-FG also suitable for use with LTP liquid tight conduits



CSS NEW

external thread stainless steel

Multipart compression fitting including elastomeric seal. Can be used for knockout or threaded entries as fitting rotates until tightened.

IP66 IP67 IP68 IP69

C90-SS NEW

external thread stainless steel

Multipart compression fitting including elastomeric seal. Can be used for knockouts.

IP66 IP67 IP68 IP69

C-FG NEW FG
FOOD GRADE

external thread stainless steel food grade

Multipart compression fitting designed using principles given in EN1672-2 and EN ISO 14159. Manufactured from 316L stainless steel, complete with polyester elastomer compression seals to prevent ingress of food or bacteria. Can be used for knockout or threaded entries as fitting rotates until tightend.

IP66 IP67 IP68 IP69



metric thread
part number



metric thread
part number



metric thread
part number

nominal size (mm)

metric thread part number	metric thread part number	metric thread part number	nominal size (mm)
LPC16-M16-CSS		LPC16-M16-C-FG	12
LPC16-M20-CSS	LPC16-M20-CSS90		16
LPC20-M20-CSS	LPC20-M20-CSS90	LPC20-M20-C-FG	20
LPC25-M25-CSS	LPC25-M25-CSS90	LPC25-M25-C-FG	25
LPC32-M32-CSS	LPC32-M32-CSS90	LPC32-M32-C-FG	32
LPC40-M40-CSS		LPC40-M40-C-FG*	40
LPC50-M50-CSS		LPC50-M50-C-FG*	50
			63

Standards

Technical Drawing



BS EN IEC 61386

