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FLEXICON

FLEXIBLE CONDUIT SOLUTIONS

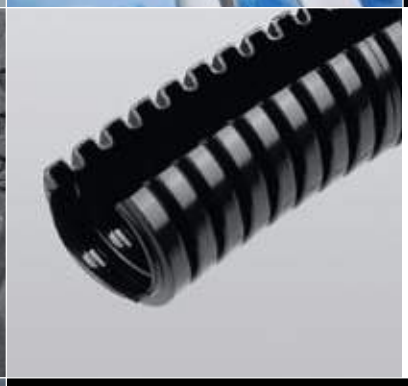












10TH edition





product & solutions guide

THE POWER IN CABLE MANAGEMENT





foreword

Welcome to the 10th edition of our Product & Solutions Guide for Flexible and Pliable Conduit systems.

Featuring many new products, we have once again demonstrated our commitment to innovation and we can now boast over 47 different conduit systems to choose from.

We have experienced major growth in both home and overseas markets through our commitment and dedication and we are certainly the brand you can rely on.

We continue to operate as an independently owned family business. Designing and manufacturing Cable Management products in the UK for a wide range of markets including the Construction Industry, Rail, Marine, Defence, Machinery & OEM's to name but a few. We can now add solutions for Hazardous Areas to this list following the introduction of our new range of EXD flameproof glands.

Our mission is to continually develop products that are easy to use and widely available offering real value, through our extensive network of selected distributors, agents and stockists.

We hope you like our new look and we look forward to meeting our customers requirements and exceeding your expectations in the future.



Adrian Poulton
Managing Director

Visit our website to keep up to date with all our latest developments...

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www.thorneandderrick.com

www.flexicon.uk.com

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Flexicon group introduction

Utilising the latest technologies in production and automation, our manufacturing expertise and efficiencies allow us to be competitive in todays Global marketplace.

With a comprehensive stock holding we strive to deliver service excellence to meet our customers demands faster, ensuring you can count on us.

Flexicon offers

FLEXICON
FLEXIBLE CONDUIT SOLUTIONS



Flexicon continues to invest in its UK based headquarters and manufacturing facilities, ensuring excellence, innovation and assurance are second to none.

Committed to exceeding customer expectations when it comes to Flexible Conduit, Flexicon continue to innovate in product development, supported by exceptional levels of service and support.

Flexicon, leading the way in today's global marketplace.

- **Independently tested products that comply with relevant global standards**
- **User friendly products offering time saving innovations**
- **Quality products from the global experts when it comes to flexible conduit**
- **A true cable management solution whether its standard products or bespoke made to order assemblies**
- **Global outlets serving the industry**
- **Progressive and expanding product portfolio**

Flexicon Pty



After only eight years in Australia, Flexicon are seen as market leader and the trade's first choice, with recognised superior quality, value and service.

Many of the Flexicon range of products provide unique features, setting them apart from the rest, saving installation time and reducing lifetime costs with reduced maintenance and replacement.

A prime example is Flexicon's long-life nickel plated brass fittings, precision manufactured to enable ease of assembly and installation, and proven tough in all manner of Australia's harsh industrial and environmental conditions.

FLEXICON also manufacture flexible metallic conduit, which as with all Flexicon product, is manufactured and tested to meet and exceed the high AS/NZ standards giving total peace of mind.

Australia's trade chooses Flexicon – ultimate quality – always value and service.

Griflex

GRIFLEX
hose & ducting solutions

Griflex is a leading manufacturer providing hose & ducting solutions for the UK and overseas.

Our products are available in a range of sizes from ¼" to 10" internal diameter and are intended for use in a diverse range of applications. These include the suction and delivery of water, oil, sewage, slurries, powders and the conveyance of liquids and gasses in factory air lines, pneumatic equipment & general workshop use.

As part of an ongoing plan, considerable investment has taken place in our UK based manufacturing facility ensuring that Griflex utilise the latest production technologies. As a result we have seen improvements in efficiency and the development of new products broadening our product range.

Products include:

- Springflex™ clear/wire reinforced suction hose
- Unreinforced tubing & braided PVC hose
- PVC spiral reinforced suction & delivery hose
- Wire reinforced Vacuflex ducting



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Flexicon a global presence

- *Excellence through engineering*
- *Progression through innovation*
- *Assurance through competence*





www.flexicon.us.com | www.flexicon.uk.com | www.flexicon.eu.com | www.flexiconaustralia.com

Flexicon - When quality, safety and value counts

Our product offering has been developed and tested to the most demanding quality standards and have been awarded quality approvals and compliance worldwide;

BS EN IEC 61386

We offer you peace of mind when it comes to your supply chain for flexible conduit and accessories. Are you confident your current solution has been independently tested and offers compliance to local and global standards?

NEW

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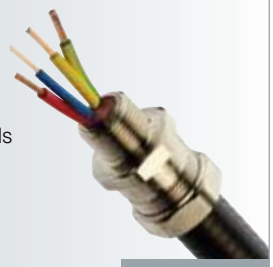
what's new?

As a progressive company we are continually investing in new product development to expand our range hence offering you more choice.

We have added nearly "500" new products since our last Catalogue.
A selection of these products are highlighted below;

EXD - Flameproof Barrier Glands

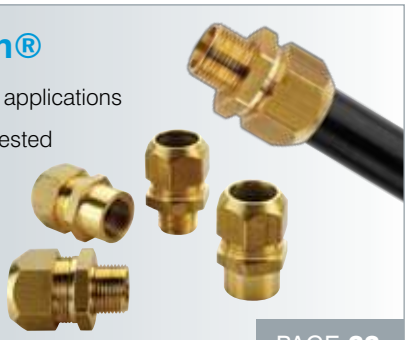
- A true conduit system solution for Hazardous areas
- Independently tested and approved to the latest standards
- EX d, EX e and EX t approved applications with both ATEX and IECEx certification



PAGE **30**

Ultrascreen®

- EMC screening applications
- Independently tested and approved
- High tensile strength
- High IP ratings



PAGE **33**

Internally Braided Liquid Tight

- High mechanical strength
- High IP ratings
- High flexibility
- EMC Screening performance



PAGE **28**

FPA & FPAX Dividers

- Fast fit reducing divider
- Rounded internal corners facilitates easy pull through of cables
- Mounting lugs for secure fixing
- All the benefits of the FPA/FPAX connector



PAGE **66**

Liquid Tight IP69K fittings

- Widest range of Liquid Tight fittings
- Superior product performance as standard – washdown and steam cleaning applications
- Metallic and non-metallic conduit solutions for IP66, IP67, IP68 & IP69K applications



PAGE **26**

White conduits range

- Aesthetic offer
- Simple and easy to fit
- Complete solution of conduits, fittings and accessories in white



PAGE **69**

FPU and LTPPU - polyurethane coated conduits

- High fatigue life
- High abrasion resistance
- Good low temperature performance
- Halogen Free



PAGE **24 & 28**

Cable glands

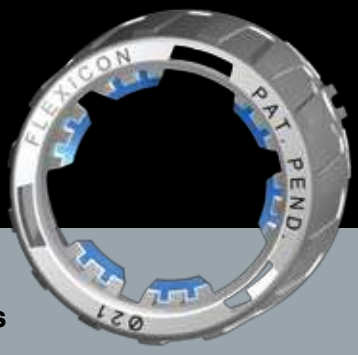
- Provides cable strain relief
- Can be used with 20 conduit systems
- Nickel plated brass fittings
- Can provide enhanced IP rating on cable inside the conduit



PAGE **43**

new product focus

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FPA & FPAX
the ***ultimate*** range
of nylon PA66 fittings

- **Fast fit** less than 3 seconds
- **High tensile strength** 70kg
- **High IP rating** IP66 + IP67 + IP68 (2 bar) + IP69K

STANDARD
LOW FIRE
HAZARD
★



1 The *Ultimate* Security

Safest fitting

All round teeth provide anti vibration protection together with a high pull off strength, i.e. 40kg with FPAS21 conduit and 70kg with FPAH21 conduit

2 The *Ultimate* Connection

Perfomance you can rely on

Ingress Protection

- FPA IP66
- FPAX IP66 + IP67+ IP68(2Bar)+IP69K

3 The *Ultimate* Simplicity & Speed

Fast fit

Push fit connection suitable for fine & coarse pitch Nylon and Polypropylene Conduits. Can be fitted in less than 3 seconds.

4 The *Ultimate* Range

10mm up to 67mm in black or grey

13 conduit sizes with Metric, PG, NPT and UNEF thread variants available as well as Nickel plated brass threads

5 The *Ultimate* in Convenience

Ready to install

Nylon metric threads supplied with glass reinforced nylon locknuts. FPAX fittings supplied with face sealing washers

6 The *Ultimate* Removal facility

Reduce whole life costs

Can be removed using a screwdriver if required

The *Ultimate* Choice!

BS EN IEC 61386

Solutions for Construction

Market Segments

Flexible conduit is commonly used for the protection and containment of vulnerable electrical cables, wiring and fibre optics. It is an extremely effective form of cable management, available in a variety of systems, which can cope with a diverse range of environmental factors and operating conditions.







Whether it's for conventional power cables or the latest cable specification for data networking, flexible conduit offers the ideal solution for cable routing and protection for all building types.

Typical products include



FU
products & systems



FSU
products & systems



LFHU
products & systems



FP
nylon products and systems



Flexilok
nylon products and systems

Applications include

- Facility wiring
- Underfloor wiring distribution – home run and tap off units
- CCTV / Access Control / Exterior Lighting
- BMS's (Building Management Systems)
- Structured Cabling networks
- Machine and process equipment

Benefits

- Products are quick and easy to install
- Inherent flexibility for future proofing installations
- Protection for critical cabling to provide continuity of supply

Industry Approvals

RoHS

BS EN IEC 61386

CE



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Solutions for Defence & Marine



For further info visit our micro-site
www.flexicon.uk.com/mod/





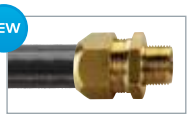






Flexicon offer an expanding range of products for this demanding sector. Requiring protection of critical systems this sector demands reliability within the severest of environments.

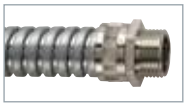
Typical products include



ULTRASCREEN®
products & systems



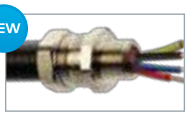
FP
High impact nylon products & systems



SS
Stainless Steel products & systems



LT
Liquid Tight systems



EXD
Hazardous area products



Braided
products and systems

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Applications include

- Naval Vessels
- Fighting Vehicles
- Weapon systems
- Operation & system control rooms
- Portable Buildings
- Ship and Dock Yards
- Ship/Boat engine rooms



Benefits

- High performance products offering superior tensile strength
- Designed to meet the strictest standards – EMC testing, vibration and shock standards
- Swivel type UNEF fittings as standard to eliminate cable twisting

Industry Approvals

RoHS BS EN IEC 61386 CE

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Solutions for Rail



For further info visit our micro-site
www.flexicon.uk.com/rail/









Flexicon offer a range of products for this technically demanding sector. IP ratings, tensile strength characteristics, weight, corrosion resistances, fire performance properties and operating temperature ranges are all factors to consider.

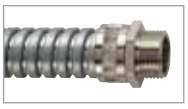
Typical products include



LFH
Low Fire Hazard products & systems



FP
High impact nylon products & systems



SS
Stainless Steel products and systems



LT
Liquid Tight systems



FPA(X)
Up to IP69K Ingress Protection



Braided
Products and systems

Applications include

- Infrastructure – Tunnels and stations
- Signalling
- Telecoms
- Passenger Information Systems
- Points Machines
- Lighting
- OEM solutions for rolling stock
- Rail Carriage construction (interior / exterior / inter carriage connection) metro and trolleybuses
- EMC on safety systems
- Equipment monitoring
- Security systems - CCTV/Monitoring
- HVAC

Benefits

- High performance products offering superior tensile and impact / compression strength
- Designed to meet the strictest standards – EMC testing / vibration
- Wide product range to meet all applications
- Independently tested to the relevant standards
- Vibration proof
- Anti-tamper



Industry Approvals

RoHS
BS EN IEC 61386
CE
UL
UNDERGROUND
Achilles
LINK-UP

Solutions for Manufacturing

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This sector demands reliability due to the potentially significant cost implications of downtime. A constant strive for efficiency often results in faster speeds and more intense usage. Mechanical strength, flexibility, abrasion resistance and the ability to withstand repeated movements are typical requirements.

Typical products include



FP
Nylon products & systems

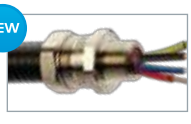


LT
Liquid Tight systems



LPC
Spiral reinforced products and systems

NEW



EXD
Hazardous area products



Braided
Products and systems

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Applications include



- CNC Machines
- Wood / Metal working machines
- Welding Machines
- Air conditioning units
- Robotics
- Conveyer systems
- Factory automation

Benefits

- Wide product range to meet all applications
- Swivel type fittings to avoid cable twisting

Industry Approvals

RoHS BS EN IEC 61386 CE cULus UL



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Solutions for Hazardous Areas



For further info visit our micro-site
www.flexicon.uk.com/hazardous/











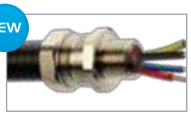
In certain sectors of industry, flammable substances such as gases, vapours, mist or dust can escape during manufacture, processing, storage and transport thus potentially creating an explosive atmosphere. Our new range of high performance products have been designed for highly demanding applications and meet the latest relevant ATEX and IECEx requirements.

Typical products include



LT
Liquid Tight Conduits

NEW



EXD
Flameproof - Hazardous Area Barrier glands

Applications include

- On-shore and off-shore petrochemical and refining plants
- Distilleries
- Paint Spraying Plants
- Flour Mills
- Woodworking Machine Plants
- Water Industry / Sewage treatment
- Petrol forecourt environments
- Pharmaceutical industry

Benefits

- Designed to meet the strictest standards
- Independently tested to the relevant standards

Industry Approvals

RoHS ✓ **BS EN IEC 61386** CE 0518

Ex IECEx

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Solutions for Tailored Applications

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Flexicon can offer a bespoke design service should you not be able to find what you are looking for. We have the skills, knowledge and experience to develop specials with minimal lead times providing you the choice you deserve

Typical products include

- Different coloured conduits
- Bespoke lengths
- Alternative thread combinations
- Bulk packaging
- Conduit with draw wire
- Assemblies

Applications include

- Medical
- Telecoms
- Renewable energy
- Utilities
- Rail
- Processing plants
- Security



Benefits

- Custom made solutions to meet your exact requirements
- Reduce your installation times



Contact us to discuss your requirements

Email: sales@flexicon.uk.com

Tel: +44(0)1675 466900

or visit our website and use the "contact us" facility

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With over 26 different metal conduit systems to select from there is sure to be a system to meet your application. Choose from conduit systems ranging from 10mm to 75mm in size, manufactured in galvanised steel or stainless steel and with or without a range of coverings/overbraiding.

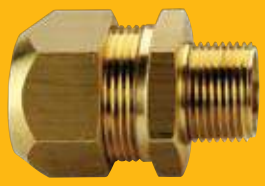


Key Features

- High compression strength
- High pull off strength
- Wide temperature tolerances
- High impact strength
- EMC screening performance
- High IP rating - up to IP69K

Key Benefits

- Suitable for a range of applications including heavy duty
- Maintains integrity of the system in extreme applications
- Suitable for a diverse range of operating environments
- Can withstand impact forces such as falling objects
- Protection against electromagnetic interference
- No risk of water or dust ingress



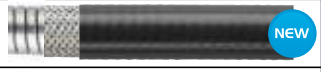



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metallic conduit & fittings

BS EN IEC 61386

Page number	conduit system		IP rating available	compression strength kg/100mm 20mm nominal size	pull-off strength kg 20mm nominal size	minimum bend radius 20mm nominal size	colours
20	**FU** galvanised steel		IP40	350	120	45	zinc
20	**SSU** stainless steel, grade 316		IP40	400	170	45	stainless steel
22	**FSU** galvanised steel, pvc coated		IP54, IP65	350	120	45	black, grey orange
22	**FNU** galvanised steel, nylon coated		IP54, IP65	350	120	45	black
24	**LFHU** galvanised steel, LFH coated		IP54, IP65	350	120	45	black
24	**FPU** galvanised steel, polyurethane coated	 NEW	IP54, IP65	350	120	45	black
26	**LTP** galv steel, pvc coated, liquid tight		IP66, IP67, IP68, IP69K	400	130	65	black, grey orange
26	**LTPHC** galv steel, thermoplastic rubber, liquid tight		IP66, IP67, IP68, IP69K	400	130	65	black
26	**LTPUL** galv steel, pvc coated, liquid tight		IP66, IP67, IP68, IP69K	500	160	90	black
26	**LTPE** galv steel, pvc coated, liquid tight	 NEW	IP66, IP67, IP68, IP69K	350	120	65	black
28	**LTPSS** stainless steel, pvc coated, liquid tight		IP66, IP67, IP68, IP69K	400	130	65	black
28	**LTPPU** galv steel, polyurethane coated, liquid tight	 NEW	IP66, IP67, IP68, IP69K	400	130	65	black
28	**LTBRDP** galv steel, braided core, pvc coated, liquid tight	 NEW	IP66, IP67, IP68, IP69K	400	130	65	black
28	**LTBRDLFH** galv steel, braided core, LFH coated, liquid tight	 NEW	IP66, IP67, IP68, IP69K	400	130	130	black
32	**FL** galvanised steel, pliable		IP40	300	30	35	zinc
32	**FLP** galvanised steel, pvc coated, pliable		IP66, IP67, IP68,	300	50, 100	35	black
33	**LFHP** galvanised steel, LFH coated, pliable	 NEW	IP66, IP67, IP68,	570	50, 100	40	black
34	**FSB** galv steel, pvc, galv steel overbraid		IP54, IP65	350	120, 300	45	zinc
34	**LFHUBRD** galv steel, LFH coated, SS316 overbraid		IP54, IP65	350	120, 300	45	stainless steel
36	**FB** galvanised steel, galv steel overbraid		IP40	350	120	45	zinc
36	**FUSSB** galvanised steel, SS316 overbraid		IP40	350	120	45	stainless steel
38	**LTPBRD** galv steel, rubber coated, SS316 overbraid		IP66, IP67, IP68, IP69K	400	350	65	stainless steel
40	**FPRSS** PA6 corrugated, SS316 overbraid		IP67	75	100	45	stainless steel
40	**FPRTC** PA6 corrugated, tinned copper overbraid		IP67	75	75	45	tin
40	**FPISS** PA12 corrugated, SS316 overbraid		IP67	45	100	45	stainless steel
40	**FPIHSS** PA12 corrugated, SS316 overbraid		IP67	60	100	45	stainless steel

high fatigue life	temperature range	flexible	pliable	low fire hazard	halogen free	self extinguishing	EMC screening @1MHz	high abrasion resistance	high UV resistance	
	-100˚C to +300˚C	●		●	●	●		●		**FU** galvanised steel
	-100˚C to +400˚C	●		●	●	●		●	●	**SSU** stainless steel, grade 316
●	-15˚C to +70˚C	●				●				**FSU** galvanised steel, pvc coated
	-40˚C to +120˚C	●			●	●		●		**FNU** galvanised steel, nylon coated
	-25˚C to +90˚C	●		●	●	●				**LFHU** galvanised steel, LFH coated
●	-40˚C to +80˚C	●			●	●		●		**FPU** galvanised steel, polyurethane coated
	-20˚C to +105˚C	●				●			●	**LTP** galv steel, pvc coated, liquid tight
	-45˚C to +135˚C	●			●	●			●	**LTPHC** galv steel, thermoplastic rubber, liquid tight
	-15˚C to +75˚C	●				●			●	**LTPUL** galv steel, pvc coated, liquid tight
	-15˚C to +70˚C	●				●			●	**LTPE** galv steel, pvc coated, liquid tight
	-20˚C to +105˚C	●				●			●	**LTPSS** stainless steel, pvc coated, liquid tight
●	-40˚C to +80˚C	●			●	●		●		**LTPPU** galv steel, polyurethane coated, liquid tight
	-20˚C to +105˚C	●				●	60dB		●	**LTBRDP** galv steel, braided core, pvc coated, liquid tight
	-25˚C to +90˚C	●		●	●	●	60dB			**LTBRDLFH** galv steel, braided core, LFH coated, liquid tight
	-40˚C to +120˚C		●	●	●	●	70dB			**FL** galvanised steel, pliable
	-15˚C to +70˚C		●			●	70dB		●	**FLP** galvanised steel, pvc coated, pliable
	-25˚C to +90˚C		●	●	●	●	70dB			**LFHP** galvanised steel, LFH coated, pliable
	-15˚C to +70˚C	●				●	55dB	●		**FSB** galv steel, pvc, galv steel overbraid
	-25˚C to +90˚C	●		●	●	●	49dB	●		**LFHUBRD** galv steel, LFH coated, SS316 overbraid
	-100˚C to +300˚C	●		●	●	●	55dB	●		**FB** galvanised steel, galv steel overbraid
	-100˚C to +300˚C	●		●	●	●	49dB	●		**FUSSB** galvanised steel, SS316 overbraid
	-45˚C to +135˚C	●			●	●	49dB	●	●	**LTPBRD** galv steel, rubber coated, SS316 overbraid
	-40˚C to +120˚C	●		●	●	●	49dB	●	●	**FPRSS** PA6 corrugated, SS316 overbraid
	-40˚C to +120˚C	●		●	●	●	67dB			**FPRTC** PA6 corrugated, tinned copper overbraid
●	-50˚C to +110˚C	●			●	●	49dB	●	●	**FPISS** PA12 corrugated, SS316 overbraid
●	-50˚C to +110˚C	●		●	●	●	49dB	●	●	**FPIHSS** PA12 corrugated, SS316 overbraid



THORNE & DERRICK INTERNATIONAL
www.thorneandderrick.com

metallic selection guide

IP66 IP67 IP68 IP69K

RoHS BS EN IEC 61386 CE Lloyd's Register TYPE APPROVAL

Achilles UL UNDERGROUND IECEx Ex SP

- UK manufactured products to the highest standards
- Highest IP performance for liquid tight fittings as standard
- Highest tensile strength performance fittings
- Stainless Steel variants available
- Vibration tested for secure installations
- Simple construction for ease of installation - Fixed and Swivel versions
- Multiple thread variations available - Metric, PG, NPT
- Tested and approved to the latest National and International Standards
- Widest choice whatever your application

IP40 IP54

Fixed External



Swivel



Fixed Internal



Plain Hole



See Pg 20, 21, 22, 23, 24 & 25

IP40

Stainless Steel



See Pg 20 & 21

Insert



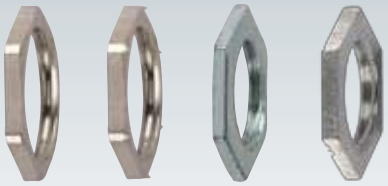
Cable Gland



Clips



Locknuts



See Pg 78 & 79



IP66 IP67 IP68 IP69K

Liquid Tight Fittings



See Pg 26 & 27

IP66 IP67 IP68 IP69K

Liquid Tight Stainless Steel



See Pg 29

IP66 IP67 IP68 IP69K

LTP Fitting with Strain Relief



See Pg 43

EXD Flameproof Barrier Glands



See Pg 31

IP40 IP66 IP67 IP68 IP69K

FL Straight



FLP Straight



IP66 IP67 IP68 IP69K

ULTRASCREEN® External



ULTRASCREEN® Internal



See Pg 32 & 33

IP40 IP54

Braided Fittings



See Pg 34 & 36

IP65 IP66 IP67 IP68 IP69K

Braided Compression Fittings



See Pg 35, 38, 39, 40 & 41

IP66 IP67 IP68 IP69K

Braided Fitting with Strain Relief



See Pg 43

Accessories



Elbows



Couplers



Reducers & Adaptors



See Pg 78 & 79

See Pg 80



FU & SSU system
galvanised steel and stainless steel

INHERENT LOW FIRE HAZARD ★★★

CONDUIT

FU

Construction: Galvanised steel, helically wound, flexible conduit. Colour zinc, self colour.

Typical Applications: Underfloor wiring in office blocks.

SSU

Construction: Stainless steel (grade 316), helically wound, flexible conduit. Colour stainless steel, self colour.

Typical Applications: Instrumentation and security.

FITTINGS

IP40

M

fixed external thread nickel plated brass

Two part fitting comprising shell and body with external thread. This fitting can be inserted into a knockout and secured with a locknut.

IP40

M-SS

fixed external thread stainless steel

Two part fitting comprising shell and body with external thread. This fitting can be inserted into a knockout and secured with a locknut.

IP40

S

swivel external thread nickel plated brass

Two part fitting comprising shell and body. The external thread swivels about the main body. Can be used with threaded entries, or knockout secured with a locknut.





nominal size (mm)	FU part number	reel length (m)	SSU part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	M metric thread part number	M PG thread part number	M-SS metric thread part number	S metric thread part number	S PG thread part number
10	FU10+	25, 50	SSU10+	10, 25	9.0	6.8	25	FU10-M12-M	FU10-PG7-M	SSU10-M12-M	FU10-M12-S	FU10-PG7-S
12	FU12	25, 50	SSU12	10, 25	13.0	10.2	30	FU12-M16-M	FU12-PG9-M	SSU12-M16-M	FU12-M16-S	FU12-PG9-S
16	FU16	10, 25, 50	SSU16	10, 25	16.0	13.0	40	FU16-M16-M	FU16-PG11-M	SSU16-M16-M	FU16-M16-S	FU16-PG11-S
16								FU16-M20-M			FU16-M20-S	FU16-PG13-S
20	FU20	10, 25, 50	SSU20	10, 25	20.5	16.9	45	FU20-M20-M	FU20-PG16-M	SSU20-M20-M	FU20-M20-S	FU20-PG16-S
25	FU25	10, 25, 50	SSU25	10, 25	25.0	21.1	55	FU25-M25-M	FU25-PG21-M	SSU25-M25-M	FU25-M25-S	FU25-PG21-S
32	FU32	10, 25	SSU32	10, 25	32.0	28.1	60	FU32-M32-M	FU32-PG29-M	SSU32-M32-M	FU32-M32-S	FU32-PG29-S
40	FU40	10, 25	SSU40	10	42.5	37.6	80	FU40-M40-M	FU40-PG36-M	SSU40-M40-M	FU40-M40-S	FU40-PG36-S
50	FU50	10, 25	SSU50	10	53.0	48.4	90	FU50-M50-M	FU50-PG48-M	SSU50-M50-M	FU50-M50-S	FU50-PG42-S
63	FU63	10	SSU63*	10	62.5	57.5	115	FU63-M63-M		SSU63-M63-M*	FU63-M63-S	
75	FU75	10			77.0	70.0	150	FU75-M75-M				

ORDERING NOTES

- Add reel length eg: FU20-25M for 25m reel

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

\+ Double interlock section

- **Available on request:**
- longer lengths and bulk packaging
- cut lengths and assemblies
- alternative threads

How to read the fittings code

FU10-M12-M

conduit
thread
fitting type

system properties

- High mechanical strength
- Highly flexible
- Inherently Low Fire Hazard (LFH)
- Fully compliant to LUL Std I-085
- Temperature range -100˚C to +300˚C (FU)
  -100˚C to +400˚C (SSU)
- IP rating: IP40
- SSU is highly corrosion resistant
- Nickel plated brass fittings
- Stainless steel (316) fittings





IP40

S-SS

swivel external thread stainless steel

Two part fitting comprising shell and body. The external thread swivels about the main body. Can be used with threaded entries, or knockout secured with a locknut.

IP40

P

plain hole connector nickel plated brass

Two part fitting comprising shell and body without thread. The body is fitted through the opposite side of the entry to the conduit and acts as a locking device also providing a smooth entry bush.

IP40

F

fixed internal thread nickel plated brass

Two part fitting comprising shell and body with internal thread which can be used to connect with an external thread.

FCC

plated steel P clip with pvc liner stainless steel P clips

P clip to support conduit.

90° elbow

internal and external threaded nickel plated brass elbow

90˚ elbow which can be screwed onto external threaded fittings.











metric thread part number	hole size (mm)	part number	metric thread part number	plated steel part number	stainless steel part number	part number	
SSU10-M12-S	9	FU10-P		FCC10	FCC10-SS*	BM90-PG7	10
SSU12-M16-S	12	FU12-P		FCC12	FCC12-SS*	BM90-16M	12
SSU16-M16-S	16	FU16-P	FU16-M16-F	FCC16	FCC16-SS	BM90-16M	16
			FU16-M20-F	FCC16	FCC16-SS	BM90-20M	16
SSU20-M20-S	20	FU20-P	FU20-M20-F	FCC20	FCC20-SS	BM90-20M	20
SSU25-M25-S	25	FU25-P	FU25-M25-F	FCC25	FCC25-SS	BM90-25M	25
SSU32-M32-S	32	FU32-P	FU32-M32-F	FCC32	FCC32-SS	BM90-32M	32
	40	FU40-P		FCC40	FCC40-SS	BM90-40M	40
	51	FU50-P		FCC50	FCC50-SS*	BM90-50M	50
	61	FU63-P		FCC63			63
	75	FU75-P		FCC75			75

STANDARDS

UNDERGROUND

RoHS

BS EN IEC 61386

CE

TECHNICAL DRAWING





FSU & FNU system
galvanised steel pvc or nylon coated

CONDUIT

FSU

Construction: Galvanised steel, helically wound, flexible conduit with pvc coating. Colour black. Grey or orange on request.*

Typical Applications: General factory wiring and connections to machines.

FNU

Construction: Galvanised steel, helically wound, flexible conduit with elastomeric nylon coating. Colour black.

Typical Applications: Demanding applications requiring higher temperatures or solvent and abrasion resistance.

FITTINGS

IP54

M

fixed external thread nickel plated brass

Two part fitting comprising shell and body with external thread. This fitting can be inserted into a knockout and secured with a locknut.

IP54

S

swivel external thread nickel plated brass

Two part fitting comprising shell and body. The external thread swivels about the main body. Can be used with threaded entries, or knockout secured with a locknut.

IP54

P

plain hole connector nickel plated brass

Two part fitting comprising shell and body without thread. The body is fitted through the opposite side of the entry to the conduit and acts as a locking device also providing a smooth entry bush.









nominal size (mm)	FSU part number	reel length (m)	FNU part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	metric thread part number	PG thread part number	metric thread part number	PG thread part number	hole size (mm)	part number
10	FSU10B+	25, 50			10.0	6.8	25	FSU10-M12-M	FSU10-PG7-M	FSU10-M12-S	FSU10-PG7-S	9	FSU10-P
12	FSU12B	25, 50			14.0	10.2	30	FSU12-M16-M	FSU12-PG9-M	FSU12-M16-S	FSU12-PG9-S	12	FSU12-P
16	FSU16B	10, 25, 50	FNU16B	25	17.0	13.0	40	FSU16-M16-M	FSU16-PG11-M	FSU16-M16-S	FSU16-PG11-S	16	FSU16-P
16								FSU16-M20-M		FSU16-M20-S	FSU16-PG13-S		
20	FSU20B	10, 25, 50	FNU20B	25	21.5	16.9	45	FSU20-M20-M	FSU20-PG16-M	FSU20-M20-S	FSU20-PG16-S	20	FSU20-P
25	FSU25B	10, 25, 50	FNU25B	25	26.0	21.1	55	FSU25-M25-M	FSU25-PG21-M	FSU25-M25-S	FSU25-PG21-S	25	FSU25-P
32	FSU32B	10, 25	FNU32B	10	34.0	28.1	60	FSU32-M32-M	FSU32-PG29-M	FSU32-M32-S	FSU32-PG29-S	32	FSU32-P
40	FSU40B	10, 25			44.5	37.6	80	FSU40-M40-M	FSU40-PG36-M	FSU40-M40-S	FSU40-PG36-S	40	FSU40-P
50	FSU50B	10, 25			55.0	48.4	90	FSU50-M50-M	FSU50-PG48-M	FSU50-M50-S	FSU50-PG42-S	51	FSU50-P
63	FSU63B	10			64.5	57.5	115	FSU63-M63-M		FSU63-M63-S		61	FSU63-P
75	FSU75B	10			79.0	70.0	150	FSU75-M75-M				75	FSU75-P

ORDERING NOTES

- Add reel length eg: FSU20-25M for 25m reel
- FSU fittings used for FNU conduit

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

\+ Double interlock section

- **Available on request:**
- low temperature (-40°C) version of FSU
- longer lengths and bulk packaging
- cut lengths and assemblies
- other colours
- stainless steel fittings (grade 316)
- alternative threads
- 45° elbows 16 to 32mm
- UV resistant version of FSU

How to read the fittings code

FSU10-M12-M

conduit
thread
fitting type

properties

- High mechanical strength
- Highly flexible
- IP rating: IP54 with standard fittings,
  IP65 with type C compression fittings
- Temperature range -15˚C to +70˚C (FSU)
  -40˚C to +120˚C (FNU)
- FNU offers high abrasion resistance and solvent resistance
- Low Fire Hazard version available (see type LFHU on page 24)
- Nickel plated brass fittings





IP54

F

fixed internal thread nickel plated brass

Two part fitting comprising shell and body with internal thread which can be used to couple two pieces of conduit together when used with a swivel fitting.

IP65

C

external thread nickel plated brass

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

IP65

C-S

external thread nickel plated brass

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

IP65

C90

external thread elbow nickel plated brass

Multipart 90˚ compression fitting including elastomeric seal.

IP65

coupler

nickel plated brass

Multi part compression coupler including nylon seals to join 2 conduits.

E

insert nickel plated brass

Single part, machined insert to cap end of conduit.



metric thread part number	metric thread part number	PG thread part number	NPT thread part number	metric thread part number	metric thread part number	part number	part number	nominal size (mm)
	FSU10-M12-C						FSU10-E	10
	FSU12-M16-C	FSU12-PG9-C		FSU12-M16-C-S	FSU12-M16-C90		FSU12-E	12
FSU16-M16-F	FSU16-M16-C	FSU16-PG11-C	FSU16-050-C	FSU16-M16-C-S	FSU16-M16-C90		FSU16-E	16
FSU16-M20-F	FSU16-M20-C	FSU16-PG13-C		FSU16-M20-C-S	FSU16-M20-C90		FSU16-E	16
FSU20-M20-F	FSU20-M20-C	FSU20-PG16-C	FSU20-050-C	FSU20-M20-C-S	FSU20-M20-C90	FSU20-FSU20	FSU20-E	20
FSU25-M25-F	FSU25-M25-C	FSU25-PG21-C	FSU25-075-C	FSU25-M25-C-S	FSU25-M25-C90	FSU25-FSU25	FSU25-E	25
FSU32-M32-F	FSU32-M32-C	FSU32-PG29-C	FSU32-100-C	FSU32-M32-C-S	FSU32-M32-C90		FSU32-E	32
	FSU40-M40-C						FSU40-E	40
	FSU50-M50-C						FSU50-E	50
							FSU63-E	63
							FSU75-E	75

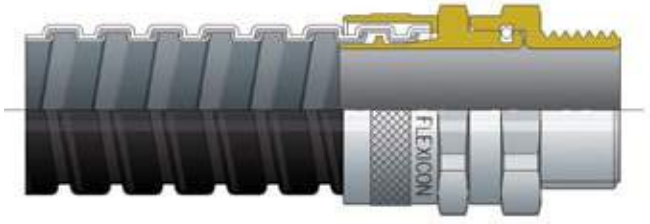
STANDARDS

BS EN IEC 61386

CE

RoHS

TECHNICAL DRAWING





LFHU system
galvanised steel LFH coated

EXTRA LOW FIRE HAZARD **

FPU system
NEW

galvanised steel
polyurethane coated

CONDUIT

LFHU

Construction: Galvanised steel, helically wound, flexible steel conduit with Low Fire Hazard (LFH) coating. Colour black.

Typical Applications: Public and commercial buildings and tunnels.

FPU

Construction: Galvanised steel, helically wound, flexible steel conduit with low temperature, high abrasion, high fatigue life halogen free polyurethane coating. Colour black and metallic blue.

Typical Applications: Where low temperature and mechanical strength are important.

FITTINGS

IP54

M

fixed external thread nickel plated brass

Two part fitting comprising shell and body with external thread. This fitting can be inserted into a knockout and secured with a locknut.

IP54

S

swivel external thread nickel plated brass

Two part fitting comprising shell and body. The external thread swivels about the main body. Can be used with threaded entries, or knockout secured with a locknut.

IP54

P

plain hole connector nickel plated bras

Two part fitting comprising shell and body without thread. The body is fitted through the opposite side of the entry to the conduit and acts as a locking device also providing a smooth entry bush.





nominal size (mm)	LFHU part number	reel length (m)	FPU part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	metric thread part number	PG thread part number	metric thread part number	PG thread part number	hole size (mm)	part number
12	LFHU12B*	25	FPU12B*	25	14.0	10.2	30	FSU12-M16-M	FSU12-PG9-M	FSU12-M16-S	FSU12-PG9-S	12	FSU12-P
16	LFHU16B	25, 50	FPU16B*	25, 50	17.0	13.0	40	FSU16-M16-M	FSU16-PG11-M	FSU16-M16-S	FSU16-PG11-S	16	FSU16-P
16								FSU16-M20-M		FSU16-M20-S	FSU16-PG13-S		
20	LFHU20B	25, 50	FPU20B*	25, 50	21.5	16.9	45	FSU20-M20-M	FSU20-PG16-M	FSU20-M20-S	FSU20-PG16-S	20	FSU20-P
25	LFHU25B	25, 50	FPU25B*	25	26.0	21.1	55	FSU25-M25-M	FSU25-PG21-M	FSU25-M25-S	FSU25-PG21-S	25	FSU25-P
32	LFHU32B	10, 25	FPU32B*	25	34.0	28.1	60	FSU32-M32-M	FSU32-PG29-M	FSU32-M32-S	FSU32-PG29-S	32	FSU32-P
40	LFHU40B	10, 25	FPU40B*	10	44.5	37.6	80	FSU40-M40-M	FSU40-PG36-M	FSU40-M40-S	FSU40-PG36-S	40	FSU40-P
50	LFHU50B	10, 25	FPU50B*	10	55.0	48.4	90	FSU50-M50-M	FSU50-PG48-M	FSU50-M50-S	FSU50-PG42-S	51	FSU50-P
63	LFHU63B	10	FPU63B*	10	64.5	57.5	115	FSU63-M63-M		FSU63-M63-S		61	FSU63-P
75	LFHU75B	10	FPU75B*	10	79.0	70.0	150	FSU75-M75-M				75	FSU75-P

Important Note

- For LFH performance see page 94

ORDERING NOTES

- Add reel length eg: LFHU20B-25M for 25m reel
- FSU fittings used on LFHU conduit
- For metallic blue change B to BU eg FPU20BU-25m

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



- **Available on request:**
  - longer lengths and bulk packaging
  - cut lengths and assemblies additional sizes
  - stainless steel fittings (grade 316)
  - alternative threads
  - full copies of independent test reports confirming screening effectiveness
  - 45° C type elbows 16 to 32mm

How to read the fittings code

FSU10-M12-M

conduit
thread
fitting type

properties

- High mechanical strength
- Highly flexible
- IP rating: IP54 with standard fittings,
  IP65 with type C compression fittings
- Extra low Fire Hazard UL94 V0, for LFH see page 94 (LFHU)
- High fatigue life and high abrasion resistant (FPU)
- Halogen, sulphur and phosphorus free
- Compliant to LUL Std 1-085 (LFHU)
- Temperature range: -25˚C to +90˚C (LFHU)
  -40˚C to +80˚C (FPU)
- Nickel plated brass fittings
- Vibration and shock tested to EN61373 Cat 2





IP54

F

fixed internal thread nickel plated brass

Two part fitting comprising shell and body with internal thread which can be used to couple two pieces of conduit together when used with a swivel fitting.

IP65

C

external thread nickel plated brass

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

IP65

C-S

external thread nickel plated brass

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

IP65

C90

external thread elbow nickel plated brass

Multipart 90˚ compression fitting including elastomeric seal.

IP65

coupler

nickel plated brass

Multi part compression coupler including nylon seals to join 2 conduits.

E

insert nickel plated brass

Single part, machined insert to cap end of conduit.



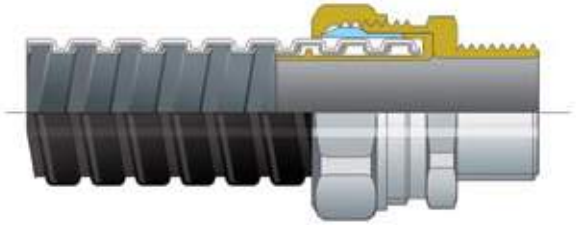
metric thread part number	metric thread part number	PG thread part number	NPT thread part number	metric thread part number	metric thread part number	part number	part number	nominal size (mm)
	FSU12-M16-C	FSU12-PG9-C		FSU12-M16-C-S	FSU12-M16-C90		FSU12-E	12
FSU16-M16-F	FSU16-M16-C	FSU16-PG11-C	FSU16-050-C	FSU16-M16-C-S	FSU16-M16-C90		FSU16-E	16
FSU16-M20-F	FSU16-M20-C	FSU16-PG13-C		FSU16-M20-C-S	FSU16-M20-C90		FSU16-E	16
FSU20-M20-F	FSU20-M20-C	FSU20-PG16-C	FSU20-050-C	FSU20-M20-C-S	FSU20-M20-C90	FSU20-FSU20	FSU20-E	20
FSU25-M25-F	FSU25-M25-C	FSU25-PG21-C	FSU25-075-C	FSU25-M25-C-S	FSU25-M25-C90	FSU25-FSU25	FSU25-E	25
FSU32-M32-F	FSU32-M32-C	FSU32-PG29-C	FSU32-100-C	FSU32-M32-C-S	FSU32-M32-C90		FSU32-E	32
	FSU40-M40-C						FSU40-E	40
	FSU50-M50-C						FSU50-E	50
							FSU63-E	63
							FSU75-E	75

STANDARDS

BS EN IEC 61386

* refer to conduit properties for applicable standards

TECHNICAL DRAWING





LTP, LTPHC, LTPUL & LTPE

galvanised steel, plastic coated liquid tight

CONDUIT

LTP

Construction: Galvanised steel, helically wound, flexible conduit with smooth oil resistant and high temperature pvc cover. Colour black. Grey or orange on request.*

Typical Applications: Machine tools or outdoor installations where liquid tight is a requirement.

LTPHC

Construction: Galvanised steel, helically wound, flexible conduit with smooth thermoplastic rubber cover. Colour black.

Typical Applications: Machine tools or outdoor installations where low or high temperature rating is required. ie. food processing

LTPUL

Construction: Galvanised steel, helically wound, flexible steel conduit including copper bonding strip (up to 32mm) with smooth pvc cover. Colour black.

Typical Applications: As for LTP but where UL listing or CSA approval is required.

LTPE

Construction: Galvanised steel, helically wound, flexible conduit with smooth pvc cover. Colour black.

Typical Applications: Machine tools or outdoor installations where liquid tight is a requirement.



FITTINGS

IP66 IP67 IP68 IP69K

C

external thread nickel plated brass

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



nominal size (mm)	US trade size (")	outside dia (mm)	inside dia (mm)	LTP part number	reel length (m)	min inside bend radius (mm)	LTPHC part number	reel length (m)	min inside bend radius (mm)	LTPUL part number	reel length (m)	min inside bend radius (mm)	LTPE part number	reel length (m)	min inside bend radius (mm)
10	¼	11.8	7.0	LTP10B+	50	35									
10															
12	⅝	14.2	10.0	LTP12B	25, 50	40	LTPHC12B	25	40						
16	⅜	17.8	12.6	LTP16B	10, 25, 50	45	LTPHC16B	25	45	LTPUL16B	25	50	LTPE16B	25	45
16															
20	½	21.1	16.0	LTP20B	10, 25, 50	65	LTPHC20B	25	65	LTPUL20B	25	90	LTPE20B	25	65
25	¾	26.4	21.0	LTP25B	10, 25, 50	100	LTPHC25B	25	100	LTPUL25B	25	110	LTPE25B	25	100
32	1	33.1	26.5	LTP32B	10, 25	135	LTPHC32B	25	135	LTPUL32B	15	140	LTPE32B	10, 25	135
40	1¼	41.8	35.4	LTP40B	10, 25	175	LTPHC40B	10	175	LTPUL40B	15	180	LTPE40B*	10, 25	175
50	1½	47.9	40.4	LTP50B+	10, 25	230	LTPHC50B+	10	230	LTPUL50B+	15	230	LTPE50B*	10, 25	230
63	2	59.7	51.6	LTP63B+	10, 25	280	LTPHC63B*+	10	280	LTPUL63B+	15	280	LTPE63B*	10, 25	280

metric thread part number	PG thread part number	NPT thread part number
LTP10-M12-C		
LTP10-M16-C		
LTP12-M16-C	LTP12-PG9-C	
LTP16-M16-C	LTP16-PG11-C	
LTP16-M20-C	LTP16-PG13-C	LTP16-050-C
LTP20-M20-C	LTP20-PG16-C	LTP20-050-C
LTP25-M25-C	LTP25-PG21-C	LTP25-075-C
LTP32-M32-C	LTP32-PG29-C	LTP32-100-C
LTP40-M40-C	LTP40-PG36-C	LTP40-125-C
LTP50-M50-C	LTP50-PG42-C	
LTP63-M63-C	LTP63-PG48-C	

Note: Stainless steel fittings also available see page 29

ORDERING NOTES

- Add reel length eg: LTP20B-25M for a 25m reel
- For LTP specify colour (B = Black, G = Grey)

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

\+ Double interlock section

- **Available on request:**
  - longer lengths and bulk packaging
  - cut lengths and assemblies
  - C-S with PG threads
  - other colours
  - internal thread fittings

How to read the fittings code

LTP20-M20-C

conduit
thread
fitting type

properties

- High mechanical strength
- IP rating: IP66 + IP67 + IP68 (5 bar) + IP69K
- Smooth, wipe clean outer cover
- Cover does not wrinkle when bent
- Temperature range -20˚C to +105˚C (LTP)
  -45˚C to +135˚C (LTPHC)
  -15˚C to +75˚C (LTPUL)
  -15˚C to +70˚C (LTPE)
- LTP has Lloyd's Register Type Approval
- LTPUL conduits are UL listed and CSA approved
- Resistant to oils and greases (except LTPE)
- Good flexibility
- UV resistant (black) and suitable for external use
- Nickel plated brass or stainless steel fittings as shown on page 29
- Vibration and shock tested to EN61373 Cat 2





IP66 IP67 IP68 IP69K

C-S

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 IP69K

C90

external thread nickel plated brass

90˚ multipart compression fitting including nylon seal. Can be used for knockout.

IP66 IP67 IP68 IP69K

C45

external thread nickel plated brass

45˚ multipart compression fitting including nylon seal. Can be used for knockout.

IP66 IP67 IP68 IP69K

coupler

nickel plated brass

Multi part compression coupler including nylon seals to join 2 conduits.

E

insert nickel plated brass

Single part, machined insert to cap end of conduit.

FCC

plated steel P clip with pvc liner stainless steel P clips

P clip to support conduit.















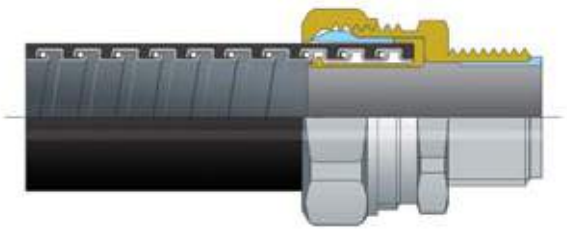
metric thread part number	metric thread part number	metric thread part number	part number	part number	plated steel part number	stainless steel part number	nominal size (mm)
				LTP10-E	FCC10	FCC10-SS*	10
				LTP10-E	FCC10	FCC10-SS*	10
LTP12-M16-S	LTP12-M16-C90			LTP12-E	FCC12	FCC12-SS*	12
LTP16-M16-S	LTP16-M16-C90			LTP16-E	FCC16	FCC16-SS	16
LTP16-M20-S	LTP16-M20-C90	LTP16-M20-C45		LTP16-E	FCC16	FCC16-SS	16
LTP20-M20-S	LTP20-M20-C90	LTP20-M20-C45	LTP20-LTP20	LTP20-E	FCC20	FCC20-SS	20
LTP25-M25-S	LTP25-M25-C90	LTP25-M25-C45	LTP25-LTP25	LTP25-E	FCC25	FCC25-SS	25
LTP32-M32-S	LTP32-M32-C90	LTP32-M32-C45		LTP32-E	FCC32	FCC32-SS	32
LTP40-M40-S	LTP40-M40-C90	LTP40-M40-C45		LTP40-E	FCC40	FCC40-SS	40
LTP50-M50-S	LTP50-M50-C90	LTP50-M50-C45		LTP50-E	FCC50	FCC50-SS*	50
	LTP63-M63-C90	LTP63-M63-C45		LTP63-E	FCC63		63

STANDARDS

BS EN IEC 61386

* refer to conduit properties for applicable standards

TECHNICAL DRAWING





Specialist liquid tight products

LTPSS system stainless steel pvc coated liquid tight

LTPPU system galvanised steel, polyurethane coated liquid tight

NEW

CONDUIT

LTPSS

Construction: Stainless steel (316), helically wound, flexible conduit with oil resistant and high temperature pvc smooth cover. Colour black.

Typical Applications: Food processing machinery or outdoor applications where high corrosion resistance and liquid tight are a requirement.

LTPPU

Construction: Galvanised steel, helically wound, flexible steel conduit with smooth halogen free polyurethane cover. Colour black and blue.

Typical Applications: Where low temperature performance, high abrasion, high fatigue life and liquid tight are a requirement.

LTBRDP

Construction: Galvanised steel, helically wound, flexible conduit with galvanised steel braid and oil resistant and high temperature pvc smooth cover. Colour black.

Typical Applications: Machinery or outdoor applications where high corrosion resistance and liquid tight are a requirement combined with EMC screening

LTBRDLFH

Construction: Galvanised steel, helically wound, flexible conduit with galvanised steel braid and smooth LFH cover. Colour black.

Typical Applications: Installations where liquid tight is a requirement and where low fire hazard properties and EMC screening are required.





FITTINGS

IP66 IP67 IP68 IP69K

C

external thread nickel plated brass

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



nominal size (mm)	US trade size (")	outside dia (mm)	inside dia (mm)	LTPSS part number	reel length (m)	min inside bend radius (mm)	LTPPU part number	reel length (m)	min inside bend radius (mm)	LTBRDP part number	reel length (m)	min inside bend radius (mm)	LTBRDLFH part number	reel length (m)	min inside bend radius (mm)	metric thread part number	PG thread part number	NPT thread part number
10	¼	11.8	7.0				LTPPU10*	25	35							LTP10-M12-C		
10																LTP10-M16-C		
12	5/16	14.2	10.0				LTPPU12*	25	40							LTP12-M16-C	LTP12-PG9-C	
16	⅜	17.8	12.6	LTPSS16*	25	45	LTPPU16*	25	45							LTP16-M16-C	LTP16-PG11-C	
16																LTP16-M20-C	LTP16-PG13-C	LTP16-050-C
20	½	21.1	16.0	LTPSS20	25	65	LTPPU20*	25	65	LTBRDP20B	25	65	LTBRDLFH20B*	25	130	LTP20-M20-C	LTP20-PG16-C	LTP20-050-C
25	¾	26.4	21.0	LTPSS25	25	100	LTPPU25*	25	100	LTBRDP25B	25	100	LTBRDLFH25B*	25	200	LTP25-M25-C	LTP25-PG21-C	LTP25-075-C
32	1	33.1	26.5	LTPSS32	10	135	LTPPU32*	25	135	LTBRDP32B	25	120	LTBRDLFH32B*	25	270	LTP32-M32-C	LTP32-PG29-C	LTP32-100-C
40	1¼	41.8	35.4				LTPPU40*	10	175	LTBRDP40B	10	140				LTP40-M40-C	LTP40-PG36-C	LTP40-125-C
50	1½	47.9	40.4				LTPPU50*	10	230	LTBRDP50B	10	180				LTP50-M50-C	LTP50-PG42-C	
63	2	59.7	51.6				LTPPU63*	10	280							LTP63-M63-C	LTP63-PG48-C	

ORDERING NOTES

- Add reel length eg: LTPSS20B-25M for a 25m reel
- Stainless Steel LTP fittings can be used with any of the conduits shown on page 26
- Add colour for LTPPU ie B=Black, BU=Blue eg. LTPPU20B is Black

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

- **Available on request:**
  - longer lengths and bulk packaging
  - cut lengths and assemblies
  - other colours
  - 45 degree stainless steel elbows

How to read the fittings code

LTP20-M20-C

conduit
thread
fitting type

LTBRDP system

galv steel, galv steel braid, pvc coated liquid tight

LTBRDLFH system

galv steel, galv steel braid, LFH coated liquid tight

properties

- High mechanical strength
- Good flexibility
- IP rating: IP66 + IP67 + IP68 (5 bar) + IP69K
- Smooth, wipe clean outer cover
- Cover does not wrinkle when bent
- Resistant to oils and greases
- Temperature range:
  - -20˚C to +105˚C (LTPSS & LTBRDP)
  - -20˚C to +90˚C (LTBRDLFH)
  - -40˚C to +80˚C (LTPPU)
- UV resistant and suitable for external use
- High abrasion, high fatigue life (LTPPU)
- Vibration and shock tested to EN61373 Cat 2
- Provides EMC screening (LTBRDP, LTBRDLFH)
- Compliant to LUL Std 1-085 (LTBRDLFH)

IP66 IP67 IP68 IP69K

C-SS

external thread stainless steel

Multipart compression fitting with Stainless Steel (316) body and nut and nickel plated brass insert, including nylon seal.
Can be used for knockout or threaded entries as fitting rotates until tightened.

IP66 IP67 IP68 IP69K

C-90-SS

external thread stainless steel (316)

90˚ multipart compression fitting with Stainless Steel (316) body and nut and nickel plated brass insert, including nylon seal. Can be used for knockout.

LOCKNUTS

stainless steel (316) locknuts

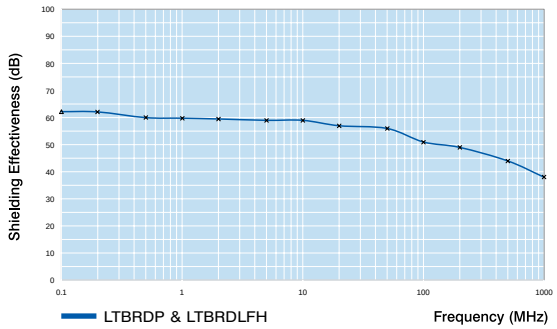
Hexagonal locknut to secure fitting.

FCC-SS

stainless steel (316) P clips

P clip to support conduit.

EMC SCREENING PERFORMANCE











metric thread part number	metric thread part number	part number	part number	nominal size (mm)
				10
				10
				12
LTP16-M16-CSS		SS-M16	FCC16-SS	16
LTP16-M20-CSS	LTP16-M20-CSS90	SS-M20	FCC16-SS	16
LTP20-M20-CSS	LTP20-M20-CSS90	SS-M20	FCC20-SS	20
LTP25-M25-CSS	LTP25-M25-CSS90	SS-M25	FCC25-SS	25
LTP32-M32-CSS	LTP32-M32-CSS90	SS-M32	FCC32-SS	32
LTP40-M40-CSS	LTP40-M40-CSS90	SS-M40	FCC40-SS	40
LTP50-M50-CSS	LTP50-M50-CSS90	SS-M50	FCC50-SS*	50

STANDARDS

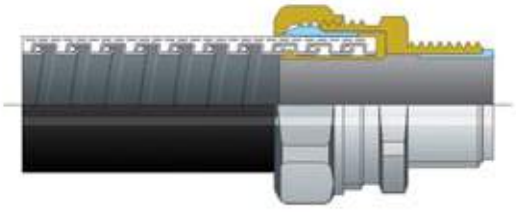
UNDERGROUND

BS EN IEC 61386

CE RoHS

* refer to conduit properties for applicable standards

TECHNICAL DRAWING





NEW

Hazardous area liquid tight conduit solutions

EXD Conduit Glands

Flameproof EXD Barrier gland

HAZARDOUS AREA CLASSIFICATIONS AND ZONES

Introduction

Hazardous Areas exist where a flammable mixture of gas and air, or dust and air, can exist in large enough quantities and for long enough periods to create a risk of explosion if an ignition source is present. Wherever possible it is important to minimise the risk of explosive mixtures forming and / or the risk of ignition. In the instances where this is impossible or impractical then means of providing a level of protection are required.

This guide will briefly explain how people and plant can be protected in hazardous areas. The guide is particularly focussed towards applications for the Flexicon EXD conduit gland and is not intended to be a full guide to hazardous areas. Users of this conduit gland should be fully qualified, competent and conversant with hazardous area requirements.

Flammable mixtures and ignition sources

Flammable gases when mixed with air can be explosive. Gases are categorised into 3 groups with Group A being the least explosive and Group C being the most explosive. Equipment is also classified from T1 to T6 according to maximum allowed temperature resulting from the ignition temperature of the gas/air mix

Certain fine dusts dispersed in air can also be explosive

Ignition sources include: sparking due to static discharge, electrical arcs, lightning, hot engine exhaust, hot equipment and heat from chemical reactions.

Hazardous Area Zones

The level of risk in hazardous areas is defined by a zoning system.

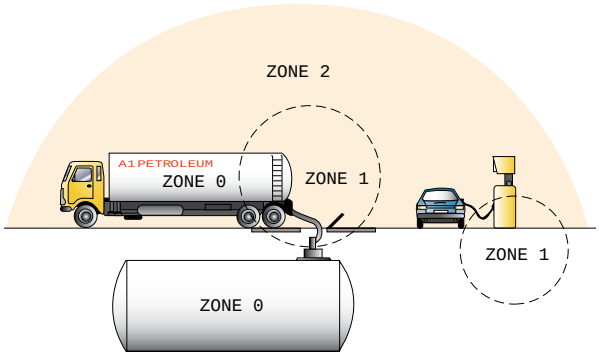
Zone 0
An area where an explosive gas atmosphere is present continuously or for long periods of time.

Zone 1
An area where an explosive gas atmosphere may exist under normal operating conditions.

Zone 2
An area where an explosive gas atmosphere is not likely to exist under normal operating conditions, but if it does it will exist only for a short period of time.

Zone 21
An area, in which combustible dust, as a cloud, is occasionally present during normal operation, in sufficient quantity to be capable of producing an explosive concentration of combustible dust in a mixture with air.

Zone 22
An area, in which combustible dust, as a cloud, may occur infrequently and persist for only a short period, or in which accumulations of layers of combustible dust may give rise to an explosive concentration of combustible dust in a mixture with air.

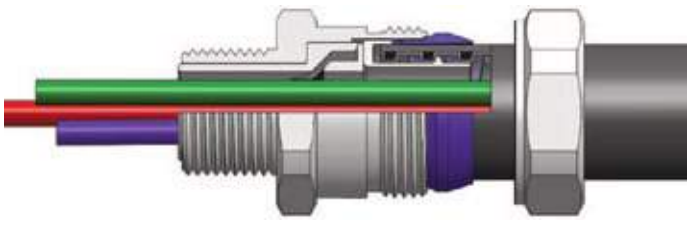


Flexicon EXD barrier glands can be used in Zone 1 and Zone 2 areas where Group A, B or C gases are present. As the gland does not add to the temperature of the enclosure, it does not have a temperature classification and so can be used with all temperature classes. Flexicon EXD barrier glands can be used in Zone 21 and Zone 22 where explosive dust may be present.

ORDERING NOTES

- Additional epoxy compound packs - contact us
- NPT threads on request
- Stainless steel (316) on request
- EXD Reducers, enlargers, thread convertors and stop plugs on request
- Face sealing washers are sold separately

TECHNICAL DRAWING



properties

- IP Rating: IP66 + IP67 + IP68 (5bar) + IP69K
- Material: Nickel Plated Brass
- Suitable for threaded entries
- Operating Temperature of gland -60˚C to +85˚C
- High mechanical strength
- Can be used with individual cores or oversheathed cable
- Can be used in Zone 1, Zone 2, Zone 21 and Zone 22 Hazardous areas when used with Flexicon's Liquid Tight range of flexible conduits
- ATEX and IECEx EX d (Flameproof)
- ATEX and IECEx EX e (Increased Safety)
- ATEX and IECEx EX t (Dust Ignition Protection)





Hazardous area Approvals

ATEX APPROVAL:	Sira Certificate No Sira 10ATEX1172X
Ex d FLAMEPROOF	Ex d IIC Gb EN 60079-1 2007
Ex e INCREASED SAFETY	Ex e IIC Gb EN 60079-7 2007
Ex t DUST IGNITION PROTECTION	Ex ta IIIC Da IP6X IEC 60079-31 2008

IECEx APPROVAL	Sira Certificate No IECEx SIR 10.0094X
Ex d FLAMEPROOF	Ex d IIC Gb IEC 60079-1 2007
Ex e INCREASED SAFETY	Ex e IIC Gb IEC 60079-7 2006-7
Ex t DUST IGNITION PROTECTION	Ex ta IIIC Da IP6X IEC 60079-31 2008



LTP - EXD

IP66 IP67 IP68 IP69K

Construction: Nickel Plated Brass fitting with a nylon seal and two part epoxy resin pack. Supplied in boxes of one complete with instructions and gloves.

Typical Applications: Flameproof barrier gland offering a high specification high quality solution for Ex d, Ex e and Ex t applications. IP rating: IP66, + IP67 + IP68(5bar) + IP69K



Part No.	To fit Conduit Size (mm)	Thread Size
LTP16-M20-EXD	16	M20
LTP20-M20-EXD	20	M20
LTP25-M25-EXD	25	M25
LTP32-M32-EXD	32	M32
LTP40-M40-EXD	40	M40
LTP50-M50-EXD	50	M50
LTP63-M63-EXD	63	M63



STANDARDS

CE 0518 Ex IECEx

BS EN IEC 61386 RoHS









FL system
galvanised steel pliable

FLP system
galvanised steel
pvc coated, pliable

SUPER EMC SCREEN ★★★

INHERENT LOW FIRE HAZARD ★★★

SUPER EMC SCREEN ★★★

CONDUIT

FL

Construction: Corrugated galvanised steel with kraft paper lining. Colour, zinc self colour.

Typical Applications: Any installation where there is no movement.

- High compression strength
- Provides EMC screening
- IP rating: IP40,
- Can be formed into shape requiring fewer clips
- Temperature range -40˚C to +120˚C
- Nickel plated brass fittings
- Inherently low fire hazard

FITTINGS

IP40

C Type

external thread
nickel plated brass

Multipart compression fitting including nylon compression seal. Can be used for knockout or threaded entries as fitting rotates until tightened. Provides EMC screening.

CONDUIT

FLP

Construction: Corrugated galvanised steel with kraft paper lining and smooth pvc outer cover. Colour black.

Typical Applications: Any installation where there is no movement and a high IP rating is required.

- High compression strength
- Pull off strength: Type C 50kg (20mm)
- Provides EMC screening
- IP rating: IP66 + IP67 for Type C
- Smooth, wipe clean outer cover
- Does not wrinkle when bent
- Can be formed into shape requiring fewer clips
- Temperature range -15˚C to +70˚C
- Lloyd's Register Type Approved

FITTINGS

IP66 IP67

C Type

external thread
nickel plated brass

Multipart compression fitting including serrated nylon seal. Can be used for knockout or threaded entries as fitting rotates until tightened. Provides EMC screening once pvc is trimmed from end of conduit.









nominal size (mm)	FL part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	metric thread part number
16						
20	FL20	25	19.0	14.6	35	FL20-M20-C
25	FL25	25	25.1	20.4	45	FL25-M25-C
32						
40						
50						

nominal size (mm)	FLP part number	reel length (m)	min inside bend radius (mm)	outside dia (mm)	metric thread part number
16	FLP16B	25	35	17.8	FLP16-M16-C
20	FLP20B	10,25,50	35	20.9	FLP20-M20-C
25	FLP25B	10,25,50	45	27.3	FLP25-M25-C
32	FLP32B	10,30	55	34.0	FLP32-M32-C
40	FLP40B	25	70	40.4	use C-HS
50	FLP50B	20	110	53.1	use C-HS

STANDARDS

Lloyds Register TYPE APPROVAL

UNDERGROUND

BS EN IEC 61386

CE

RoHS

* refer to conduit properties for applicable standards

TECHNICAL DRAWING



Flexicon Ultrascreen™ NEW

LFHP system

galvanised steel extra LFH coated, pliable





CONDUIT

LFHP

Construction: Corrugated galvanised steel with kraft paper lining and smooth extra LFH outer cover. Colour black.

Typical Applications: Any installation where there is no movement and a high IP rating is required.

- Pull off strength: Type C-HS 100kg (20mm)
- Extra low fire hazard, oil resistant and UV resistant
- Vibration and shock tested to EN61373 Cat 2
- High compression strength 570kg/100mm
- Provides EMC screening
- IP rating: IP66 + IP67 + IP68 (5 bar) + IP69K
- Can be formed into shape requiring fewer clips
- Temperature range -25˚C to +90˚C
- Smooth, wipe clean outer cover
- Does not wrinkle when bent
- Lloyd's Register Type Approved



FITTINGS

IP66 IP67 IP68 IP69K

C-HS

external thread
brass - high specification

Multipart compression fitting including serrated nylon seal. Can be used for knockout or threaded entries as fitting rotates until tightened. Provides EMC screening once cover is trimmed from end of conduit.

IP66 IP67 IP68 IP69K

F-HS

internal thread
brass - high specification

Multipart compression fitting including serrated nylon seal. Provides EMC screening once cover is trimmed from end of conduit.



FLHP part number	reel length (m)	min inside bend radius (mm)	outside dia (mm)	inside dia (mm)	metric thread part number	metric thread part number
LFHP16B	25	40	17.8	11.6	FLP16-M16-C-HS	FLP16-M16-F-HS
LFHP20B	25	40	20.9	14.6	FLP20-M20-C-HS	FLP20-M20-F-HS
LFHP25B	25	55	27.3	20.4	FLP25-M25-C-HS	FLP25-M25-F-HS
LFHP32B	25	65	34.0	26.7	FLP32-M32-C-HS	FLP32-M32-F-HS
LFHP40B	25	85	40.4	32.8	FLP40-M40-C-HS	FLP40-M40-F-HS
LFHP50B	25	130	53.1	45.3	FLP50-M50-C-HS	FLP50-M50-F-HS

ORDERING NOTES

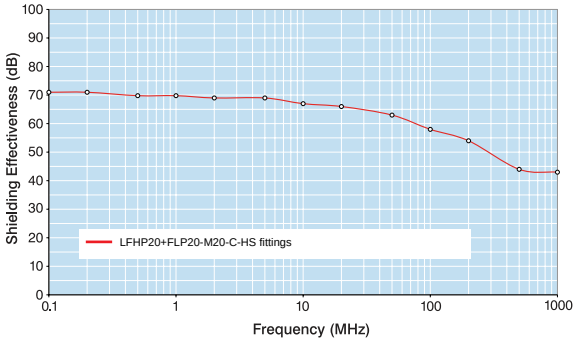
- Add reel length eg: FLP20B-25M for 25m reel
- **Available on request:**
  - longer lengths
  - cut lengths and assemblies
  - additional sizes
  - full copies of independent test report confirming screening effectiveness

How to read the fittings code

FLP20-M20-C

- conduit
- thread
- fitting type

EMC SCREENING PERFORMANCE





FSB system galvanised steel core, pvc coated, galvanised steel overbraid

STANDARD EMC SCREEN

LFHUBRD system galvanised steel core, extra LFH coated, stainless steel overbraid

STANDARD EMC SCREEN

INHERENT LOW FIRE HAZARD

CONDUIT

FSB

Construction: Galvanised steel, helically wound, flexible conduit with pvc coating and galvanised steel overbraid. Colour zinc, self colour.

Typical Applications: Industrial environments where higher abrasion resistance or screening are required.

LFHUBRD

Construction: Galvanised steel, helically wound, flexible conduit with extra LFH coating and stainless steel (316) overbraid.

Typical Applications: Metro rail stations where LFH, EMC screening and anti-vandal properties are required. Compliant to LUL std 1-085.

FITTINGS

IP54

M

fixed external thread nickel plated brass

Two part fitting comprising of shell and body with external thread. This fitting can be inserted into a knockout and secured with a locknut.

IP54

S

swivel external thread nickel plated brass

Two part fitting comprising of shell and body. The external thread swivels about the main body. Can be used with threaded entries, or knockout secured with a locknut.







nominal size (mm)	FSB part number	LFHUBRD part number	reel length (m)	outside dia (mm)	inside dia (mm)	min. inside bend radius (mm)	metric thread part number	PG thread part number	metric thread part number	PG thread part number
12	FSB12		25	15.2	10.2	30	FSB12-M16-M	FSB12-PG9-M	FSB12-M16-S	FSB12-PG9-S
16	FSB16		25	18.2	13.0	40	FSB16-M16-M	FSB16-PG11-M	FSB16-M16-S	FSB16-PG11-S
16							FSB16-M20-M		FSB16-M20-S	
20	FSB20	LFHUBRD20	25	22.7	16.9	45	FSB20-M20-M	FSB20-PG16-M	FSB20-M20-S	FSB20-PG16-S
25	FSB25	LFHUBRD25	25	27.2	21.1	55	FSB25-M25-M	FSB25-PG21-M	FSB25-M25-S	FSB25-PG21-S
32	FSB32	LFHUBRD32	25	35.2	28.1	70	FSB32-M32-M	FSB32-PG29-M	FSB32-M32-S	FSB32-PG29-S
40	FSB40		10	45.7	37.6	80	FSB40-M40-M	FSB40-PG36-M	FSB40-M40-S	FSB40-PG36-S
50	FSB50		10	57.7	48.4	90	FSB50-M50-M	FSB50-PG48-M	FSB50-M50-S	FSB50-PG42-S

ORDERING NOTES

- Add reel length eg: FSB20-25M for 25m reel
- **Available on request:**
- longer lengths, cut lengths and assemblies
- additional sizes, stainless steel overbraided
- PG threads, female threaded fittings
- full copies of independent test report confirming screening effectiveness

How to read the fittings code

FSB20-M20-M

conduit
thread
fitting type

STANDARDS

Lloyd's Register TYPE APPROVAL

UNDERGROUND

BS EN IEC 61386

CE

RoHS

* refer to conduit properties for applicable standards

properties

- High mechanical strength
- Tensile strength with standard fittings 120kg for 20mm size
- Tensile strength with C type fittings 300kg for 20mm size
- Highly flexible
- IP rating: IP54 for standard fittings, IP65 for C type fittings
- High abrasion resistance
- Resists hot metal swarf and splashes
- Provides EMC screening
- Temperature range
  - -15˚C to +70˚C (FSB)
  - -20˚C to +90˚C (LFHUBRD)
- LFHUBRD is extra low fire hazard
- Compliant to LUL Std 1-085 (LFHUBRD)
- Nickel plated brass fittings
- Vibration and shock tested to EN61373 Cat 2





IP54

P

plain hole connector nickel plated brass

Two part fitting comprising of shell and body without thread. The body is fitted through the opposite side of the entry to the conduit and acts as a locking device also providing a smooth entry bush.

IP65

C

fixed external thread nickel plated brass

Multipart compression fitting including elastomeric seal. Can be used for knockouts. Braid is locked between inner and outer compression nuts.

IP65

C-S

swivel external thread nickel plated brass

Multipart compression fitting including elastomeric seal can be used for knockouts or threaded entries. Braid is locked between inner and outer compression nuts.

IP65

C90

external thread elbow nickel plated brass

Multipart 90˚ compression fitting including elastomeric seal. Braid is locked between inner and outer compression nuts.



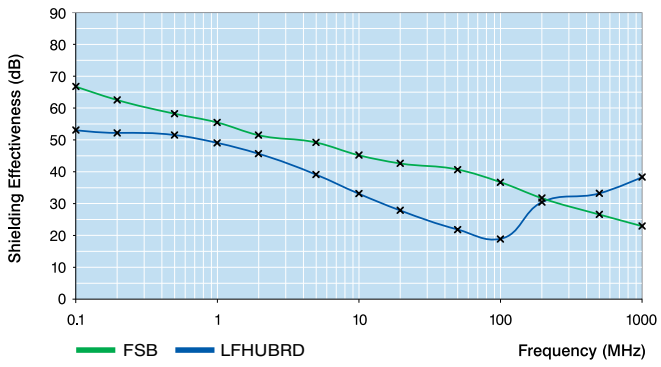




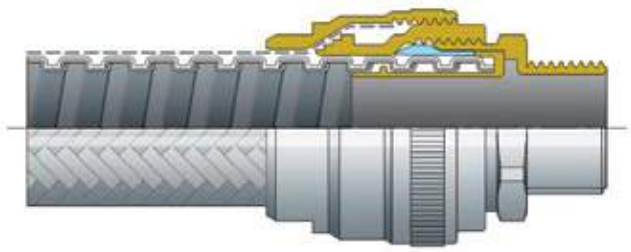


hole size (mm)	part number	metric thread part number	PG thread part number	metric thread part number	metric thread part number	nominal size (mm)
12	FSB12-P					12
16	FSB16-P	FSB16-M16-C	FSB16-PG11-C	FSB16-M16-C-S	FSB16-M16-C90	16
		FSB16-M20-C	FSB16-PG13-C	FSB16-M20-C-S	FSB16-M20-C90	16
20	FSB20-P	FSB20-M20-C	FSB20-PG16-C	FSB20-M20-C-S	FSB20-M20-C90	20
25	FSB25-P	FSB25-M25-C	FSB25-PG21-C	FSB25-M25-C-S	FSB25-M25-C90	25
32	FSB32-P	FSB32-M32-C	FSB32-PG29-C	FSB32-M32-C-S	FSB32-M32-C90	32
40	FSB40-P					40
50	FSB50-P					50

EMC SCREENING PERFORMANCE



TECHNICAL DRAWING





FB system
galvanised steel core
galvanised steel overbraid

FUSSB system
galvanised steel core
stainless steel overbraid

CONDUIT

FB

Construction: Galvanised steel, helically wound conduit with galvanised steel overbraid. Colour zinc, self colour.

Typical Applications: Industrial environments and high temperatures.

FUSSB

Construction: Galvanised steel, helically wound, flexible conduit with stainless steel (316) overbraid.

Typical Applications: Underground stations where LFH properties and EMC screening are required.



FITTINGS

M

IP40

fixed external thread nickel plated brass

Two part fitting comprising shell and body with external thread. This fitting can be inserted into a knockout and secured with a locknut.



S

IP40

swivel external thread nickel plated brass

Two part fitting comprising shell and body. The external thread swivels about the main body. Can be used with threaded entries, or knockout secured with a locknut.



nominal size (mm)	FB part number	FUSSB part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	M metric thread part number	M PG thread part number	S metric thread part number	S PG thread part number
12	FB12		25	14.0	10.2	30	FB12-M16-M	FB12-PG9-M	FB12-M16-S	FB12-PG9-S
16	FB16		25	17.5	13.0	40	FB16-M16-M	FB16-PG11-M	FB16-M16-S	FB16-PG11-S
16							FB16-M20-M		FB16-M20-S	
20	FB20	FUSSB20	25	21.5	16.9	45	FB20-M20-M	FB20-PG16-M	FB20-M20-S	FB20-PG16-S
25	FB25	FUSSB25	25	26.0	21.1	55	FB25-M25-M	FB25-PG21-M	FB25-M25-S	FB25-PG21-S
32	FB32	FUSSB32	25	34.0	28.1	70	FB32-M32-M	FB32-PG29-M	FB32-M32-S	FB32-PG29-S
40	FB40		10	43.5	37.6	80	FB40-M40-M	FB40-PG36-M	FB40-M40-S	FB40-PG36-S
50	FB50		10	54.5	48.4	90	FB50-M50-M	FB50-PG48-M	FB50-M50-S	FB50-PG42-S

ORDERING NOTES

- Add reel length eg: FB20-25M for 25m reel

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

- **Available on request:**

- longer lengths, cut lengths and assemblies
- additional sizes, stainless steel overbraided
- PG threads, female threaded fittings
- full copies of independent test report confirming screening effectiveness

How to read the fittings code

FB20-M20-M

conduit
thread
fitting type

STANDARDS

UNDERGROUND

CE

RoHS

BS EN IEC 61386

properties

- High mechanical strength
- Highly flexible
- IP rating: IP40
- High abrasion resistance
- Resists hot metal swarf and splashes
- Provides EMC screening
  - 55dB@1MHz (FB)
  - 49dB@1MHz (FUSSB)
- Temperature range -100˚C to +300˚C
- Inherently Low Fire Hazard (LFH)
- Fully compliant to LUL Std 1-085
- Nickel plated brass fittings





IP40

P

plain hole connector nickel plated brass

Two part fitting comprising shell and body without thread. The body is fitted through the opposite side of the entry to the conduit and acts as a locking device also providing a smooth entry bush.

90° elbow

internal and external threaded nickel plated brass elbow

90˚ elbow which can be screwed onto external threaded fittings.

locknuts

galvanised steel and nickel plated brass locknuts

Hexagonal locknut to secure fitting. EMC locknuts have raised corners to ensure good continuity.

FCC

plated steel P clip with pvc liner, stainless steel P clips

P clip to support conduit.



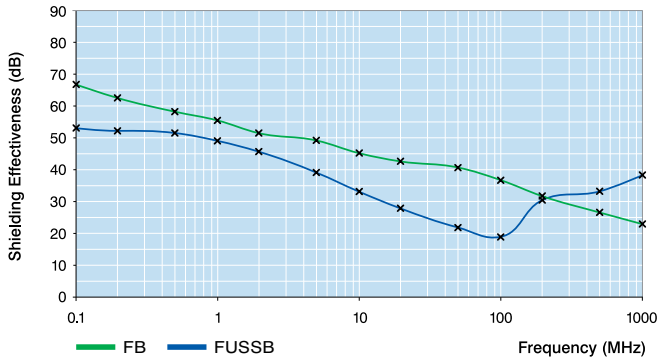




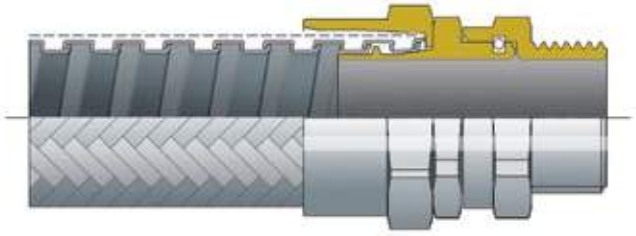


hole size (mm)	part number	metric thread part number	metric thread steel part number	metric thread EMC part number	metric thread brass part number	plated steel part number	stainless steel part number	nominal size (mm)
12	FB12-P	BM90-16M	S-M16		B-M16	FCC12	FCC12-SS*	12
16	FB16-P	BM90-16M	S-M16		B-M16	FCC16	FCC16-SS	16
		BM90-20M	S-M20	B-M20-EMC	B-M20	FCC16	FCC16-SS	16
20	FB20-P	BM90-20M	S-M20	B-M20-EMC	B-M20	FCC20	FCC20-SS	20
25	FB25-P	BM90-25M	S-M25	B-M25-EMC	B-M25	FCC25	FCC25-SS	25
32	FB32-P	BM90-32M	S-M32	B-M32-EMC	B-M32	FCC32	FCC32-SS	32
40	FB40-P	BM90-40M	S-M40	B-M40-EMC	B-M40	FCC40	FCC40-SS	40
51	FB50-P	BM90-50M	S-M50		B-M50	FCC50	FCC50-SS*	50

EMC SCREENING PERFORMANCE



TECHNICAL DRAWING





LTPBRD system

galvanised steel core, thermoplastic rubber coated and stainless steel overbraid

STANDARD EMC SCREEN

CONDUIT

LTPBRD

Construction: Galvanised steel, helically wound, flexible conduit with thermoplastic rubber cover (same as LTPHC) and stainless steel (grade 316) overbraid.

Typical Applications: Very arduous industrial environments such as steel works.

FITTINGS

IP66 IP67 IP68 IP69K

C

external thread nickel plated brass

Multipart compression fitting including nylon seal. Can be used for knockout. Braid is locked between inner and outer compression nuts.

IP66 IP67 IP68 IP69K

C-S

swivel external thread nickel plated brass

Multipart compression fitting including nylon seal can be used for knockouts or threaded entries. Braid is locked between inner and outer compression nuts.







nominal size (mm)	LTPBRD part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	metric thread part number	metric thread part number
16	LTPBRD16	25	19.3	12.6	45	LTPB16-M16-C	LTPB16-M16-S
16						LTPB16-M20-C	LTPB16-M20-S
20	LTPBRD20	25	22.6	16.0	65	LTPB20-M20-C	LTPB20-M20-S
25	LTPBRD25	25	27.9	21.0	100	LTPB25-M25-C	LTPB25-M25-S
32	LTPBRD32	25	34.6	26.5	135	LTPB32-M32-C	LTPB32-M32-S
40	LTPBRD40	10	43.3	35.4	175	LTPB40-M40-C	LTPB40-M40-S
50	LTPBRD50+	10	49.3	40.4	230	LTPB50-M50-C	LTPB50-M50-S

ORDERING NOTES

- Add reel length eg: LTPBRD20B-25M for 25m reel

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

\+ Double interlock section

- **Available on request:**

- longer lengths
- 45° available in sizes 16-50mm
- cut lengths and assemblies
- additional sizes
- full copies of independent test report confirming screening effectiveness

How to read the fittings code

LTPB20-M20-M

- conduit
- thread
- fitting type

STANDARDS

BS EN IEC 61386

RoHS

properties

- High mechanical strength
- Good flexibility
- IP rating: IP66 + IP67 + IP68 (5 bar) IP69K
- Temperature range -45˚C to +135˚C
- High abrasion resistance
- Very high tensile strength
- Vibration and shock tested to EN61373 Cat 2





IP66 IP67 IP68 IP69K

C90 elbow

external threaded elbow nickel plated brass

Multipart compression fitting including nylon seal. Braid is locked between inner and outer compression nuts.

sealing washers

fibre face sealing washers

Sealing washer to maintain IP rating of fitting to adjacent equipment.

locknuts

galvanised steel and nickel plated brass locknuts

Hexagonal locknut to secure fitting. EMC locknuts have raised corners to ensure good continuity.

FCC

plated steel P clip with pvc liner, stainless steel P clips

P clip to support conduit.



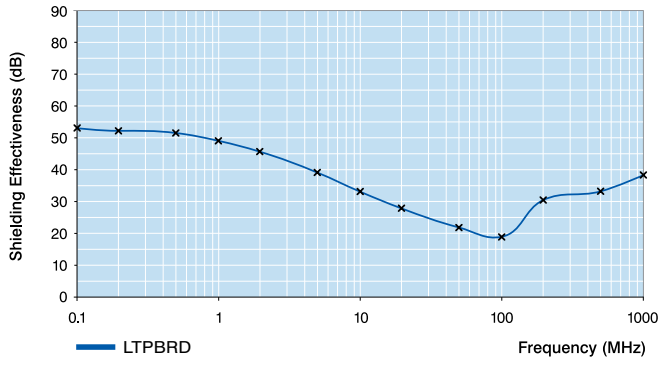




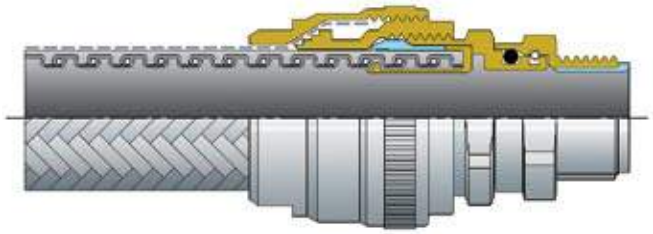


metric thread part number	part number	metric thread steel part number	metric thread EMC part number	metric thread brass part number	plated steel part number	stainless steel part number	nominal size (mm)
LTPB16-M16-C90	FW16	S-M16		B-M16	FCC16	FCC16-SS	16
LTPB16-M20-C90	FW20						16
LTPB20-M20-C90	FW20	S-M20	B-M20-EMC	B-M20	FCC20	FCC20-SS	20
LTPB25-M25-C90	FW25	S-M25	B-M25-EMC	B-M25	FCC25	FCC25-SS	25
LTPB32-M32-C90	FW32	S-M32	B-M32-EMC	B-M32	FCC32	FCC32-SS	32
LTPB40-M40-C90	FW40	S-M40	B-M40-EMC	B-M40	FCC40	FCC40-SS	40
LTPB50-M50-C90	FW50	S-M50		B-M50	FCC50	FCC50-SS*	50

EMC SCREENING PERFORMANCE



TECHNICAL DRAWING





FPRSS system corrugated nylon, stainless steel overbraid

FPRTC system corrugated nylon, tinned copper overbraid

EXTRA LOW FIRE HAZARD ★★ STANDARD EMC SCREEN ★

EXTRA LOW FIRE HAZARD ★★ ENHANCED EMC SCREEN ★★

CONDUIT

FPRSS

Construction: Standard weight, extra low fire hazard, corrugated nylon (PA6), with stainless steel (316) overbraid.

Typical Applications: Metro rail stations for anti-vandal.

FPRTC

Construction: Standard weight, extra low fire hazard, corrugated nylon (PA6), with tinned copper overbraid.

Typical Applications: Inside railway carriages where screening is required.

FPISS

Construction: Standard weight, corrugated nylon (PA12), with stainless steel (316) overbraid.

Typical Applications: Moving machinery where low temperatures, abrasion and impacts occur.

FPIHSS

Construction: Heavy weight, corrugated nylon (PA12), with stainless steel (316) overbraid.

Typical Applications: Under railway carriages where low temperatures, abrasion, impact and regular movement occurs.

FITTINGS

IP67

C

fixed external thread nickel plated brass

Multipart compression fitting including conduit retention clip and elastomeric seal. Can be used with knockouts. Braid is locked between inner and outer compression nuts.

IP67

C-S

swivel external thread nickel plated brass

Multipart compression fitting including conduit retention clip and elastomeric seal. Can be used for knockouts and threaded entries. Braid is locked between inner and outer compression nuts.





nominal size (mm)	FPRSS part number	FPRTC part number	FPISS part number	FPIHSS part number	outside dia (mm)	min inside dia (mm)	min inside bend radius (mm)	metric thread part number	metric thread part number	PG thread part number
16	FPRSS16-50M	FPRTC16-50M*	FPISS16-50M*	FPIHSS16-50M	17.3	11.5	35	BC16-M16-C	BC16-M16-S	BC16-PG11-S
20	FPRSS21-50M	FPRTC21-50M*	FPISS21-50M*	FPIHSS21-50M	22.7	15.0	45	BC21-M20-C	BC21-M20-S	BC21-PG16-S
25	FPRSS28-50M	FPRTC28-50M*	FPISS28-50M*	FPIHSS28-50M	30.0	21.3	50	BC28-M25-C	BC28-M25-S	BC28-PG21-S
32	FPRSS34-50M	FPRTC34-50M*	FPISS34-25M*	FPIHSS34-25M	36.0	26.9	60	BC34-M32-C	BC34-M32-S	BC34-PG29-S
40	FPRSS42-25M*	FPRTC42-25M*	FPISS42-25M*	FPIHSS42-25M*	44.0	35.5	70	BC42-M40-C	BC42-M40-S	
50	FPRSS54-25M*	FPRTC54-25M*	FPISS54-25M*	FPIHSS54-25M*	46.0	47.2	80	BC54-M50-C	BC54-M40-S	

ORDERING NOTES

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

- **Available on request:**
- longer lengths
- cut lengths and assemblies
- additional sizes
- full copies of independent test report
- confirming screening effectiveness

How to read the fittings code

BC21-M20-C

conduit
thread
fitting type

STANDARDS

UNDERGROUND

BS EN IEC 61386 CE RoHS

* refer to conduit properties for applicable standards

FPISS system
corrugated nylon,
stainless steel overbraid

FPIHSS system
corrugated nylon,
stainless steel overbraid

properties

FPRSS & FPRTC

- Highly flexible and high fatigue life
- High impact strength
- Temperature range -40˚C to +120˚C
- Extra low fire hazard
- Provides EMC screening
  - 49dB@1MHz (FPRSS)
  - 67dB@1MHz (FPRTC)
- FPRSS provides high tensile strength and resistance to abrasion, corrosion and vandals
- Vibration and shock tested to EN61373 Cat 2

FPISS & FPIHSS

- Highly flexible
- Exceptional fatigue life
- Very high impact resistance even at low temperatures
- Temperature range -50˚C to +110˚C
- Low fire hazard
- Provides EMC screening 49dB@1MHz
- Provides high tensile strength and resistance to abrasion, corrosion and vandals
- Vibration and shock tested to EN61373 Cat 2

IP67

C90

external thread elbow nickel plated brass

Multipart 90˚ compression fitting including conduit retention clip and elastomeric seal. Can be used with knockouts. Braid is locked between inner and outer compression nuts.

90°elbow

internal and external threaded nickel plated brass elbow

90˚ elbow which can be screwed onto external threaded fittings.

sealing washers

fibre face sealing washers

Sealing washer to maintain IP rating of fitting to adjacent equipment.

locknuts

galvanised steel and nickel plated brass locknuts

Hexagonal locknut to secure fitting. EMC locknuts have raised corners to ensure good continuity.

FCC

plated steel P clip with pvc liner, stainless steel P clips

P clip to support conduit.



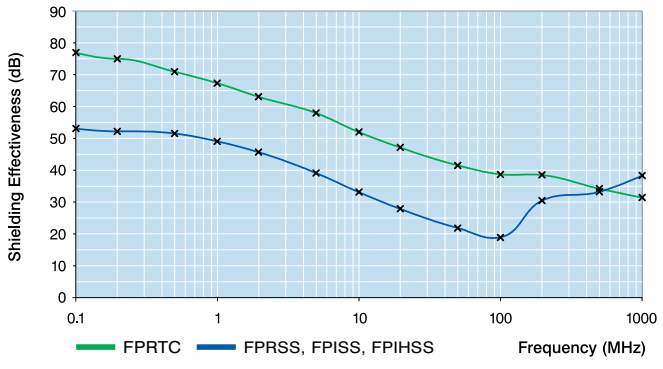




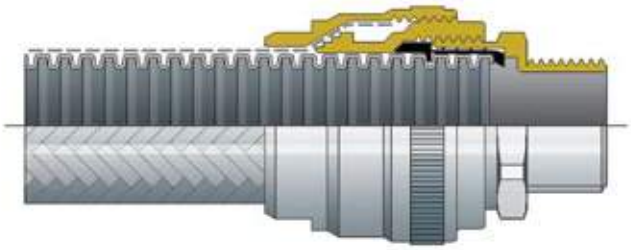


metric thread part number	metric thread part number	part number	metric thread steel part number	metric thread EMC part number	metric thread brass part number	plated steel part number	stainless steel part number	nominal size (mm)
	BM90-16M	FW16	S-M16		B-M16	FCC16	FCC16-SS	16
BC21-M20-C90	BM90-20M	FW20	S-M20	B-M20-EMC	B-M20	FCC20	FCC20-SS	20
	BM90-25M	FW25	S-M25	B-M25-EMC	B-M25	FCC25	FCC25-SS	25
	BM90-32M	FW32	S-M32	B-M32-EMC	B-M32	FCC32	FCC32-SS	32
	BM90-40M	FW40	S-M40	B-M40-EMC	B-M40	FCC40	FCC40-SS	40
	BM90-50M	FW50	S-M50		B-M50	FCC50	FCC50-SS*	50

EMC SCREENING PERFORMANCE



TECHNICAL DRAWING





FTCB Braided sleeving

tinned copper braid system for EMC screening

NEW

ENHANCED EMC SCREEN ★★

INHERENT LOW FIRE HAZARD ★★★

properties

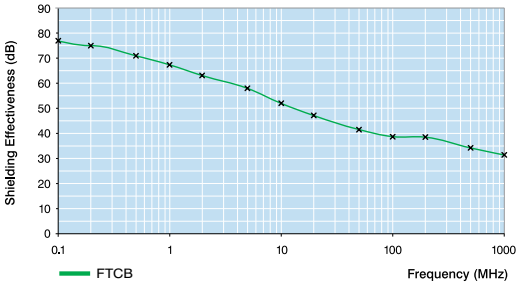
- EMC Screening 67dB @ 1Mhz for 20mm
- Minimum optical cover 90%
- Can offer mechanical support
- Can offer abrasion resistance

OVERBRAID

FTCB

Construction: Tinned copper braided sleeving. Colour: self colour

Typical Applications: Screening of cables from electromagnetic, electrostatic and RF interference. Can be sleeved over cables before they are drawn into conduits.



FTCB part number	Reel length (m)	Nominal I/D(mm)	Usable ø mm min	Usable ø mm max	Cross sectional area - mm²
FTCB3	100	3.0	2.0	3.5	1.06
FTCB4	100	4.0	3.0	5.0	1.49
FTCB5	100	5.0	4.0	6.0	1.91
FTCB6	100	6.0	5.0	7.0	2.23
FTCB10	50	10.0	7.0	12.0	4.43
FTCB12	50	12.5	11.0	13.0	4.83
FTCB15	50	15.0	13.0	18.0	8.29
FTCB20	50	20.0	17.0	23.0	9.65
FTCB25	50	25.0	22.0	28.0	12.54
FTCB30	25	30.0	27.0	36.0	19.30
FTCB35	25	35.0	30.0	50.0	19.30
FTCB50	25	50.0	45.0	65.0	35.63

Note;

- As the diameter increases towards the maximum expansion the sleeving decreases in length.
- Normally supplied on disposable PVC former or can be supplied in flat form on a reel by request
- Temperature performance:

  -50°C to +300°C

IP66

FPA

IP66 IP67 IP68 IP69K

FPAX

Construction: Nylon PA66 & Nickel Plated Brass. Colour: Black

Typical Applications: Straight fitting with internal braid clamp assembly for use with braided sleeving inside corrugated conduit.

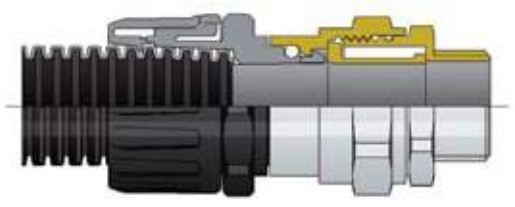


Conduit Size (mm)	FPA part number	FPAX part number	Use with Braid
21	FPA21-M20-SBCA	FPAX21-M20-SBCA	FTCB10, FTCB12, FTCB15
28	FPA28-M25-SBCA	FPAX28-M25-SBCA	FTCB15, FTCB20, FTCB25
34	FPA34-M32-SBCA	FPAX34-M32-SBCA	FTCB20, FTCB25, FTCB30
42	FPA42-M40-SBCA	FPAX42-M40-SBCA	FTCB25, FTCB30, FTCB35

ORDERING NOTES

- **Available on request:**
- 90° and 45° elbows
- PG threads

TECHNICAL DRAWING



Cable Gland Fittings

NEW

cable strain relief and enhanced IP rating for Flexicon conduits

For applications that require the conduit system to provide strain relief and enhanced IP rating to the cables being mechanically protected eg. rail market or heavy machinery construction sector.

properties

- Combined properties of conduit fitting and cable gland
- Cable strain relief
- Additional IP rating on cable inside conduit*
- Nickel plated brass fittings
- Cable gland properties: IP68 (10bar) + IP69K
- Temperature range
  - -40˚C to +100˚C for static applications
  - -20˚C to +100˚C for dynamic applications
- EMC cable gland version on request

CONDUIT FITTINGS

Conduit size (mm)	Part Number	Suitable for the following conduits	Conduit	Fitting	IP rating of conduit system	IP rating of cable gland	Clamping range of cable gland
20	**FSU20-M20-CG**	FU & SSU			IP40	IP68(10bar)+IP69K	7-13mm
25	**FSU25-M25-CG**						9-17mm
32	**FSU32-M32-CG**						11-21mm
20	**FSU20-M20-CG**	FSU, FNU, LFHU and FPU			IP65	IP68(10bar)+IP69K	7-13mm
25	**FSU25-M25-CG**						9-17mm
32	**FSU32-M32-CG**						11-21mm
20	**LTP20-M20-CG**	LTP, LTPHC, LTPUL,			IP66+IP67+ IP68(5bar)+IP69K	IP68(10bar)+IP69K	7-13mm
25	**LTP25-M25-CG**	LTPE, LTPSS,					9-17mm
32	**LTP32-M32-CG**	LTBRDP, LTBRDLFH and LTPPU					11-21mm
20	**FSB20-M20-CG**	FB & FUSSB			IP40	IP68(10bar)+IP69K	7-13mm
25	**FSB25-M25-CG**						9-17mm
32	**FSB32-M32-CG**						11-21mm
20	**FSB20-M20-CG**	FSB & LFHUBRD			IP65	IP68(10bar)+IP69K	7-13mm
25	**FSB25-M25-CG**						9-17mm
32	**FSB32-M32-CG**						11-21mm
20	**LTPB20-M20-CG**	LTPBRD			IP66+IP67+ IP68(5bar)+IP69K	IP68(10bar)+IP69K	7-13mm
25	**LTPB25-M25-CG**						9-17mm
32	**LTPB32-M32-CG**						11-21mm
20	**LPC20-M20-CG**	LPC			IP66+IP67+ IP68(5bar)+IP69K	IP68(10bar)+IP69K	7-13mm
25	**LPC25-M25-CG**						9-17mm
32	**LPC32-M32-CG**						11-21mm

* IP rating up to IP68(10bar), IP69K dependent on cable used

STANDARDS

BS EN IEC 61386



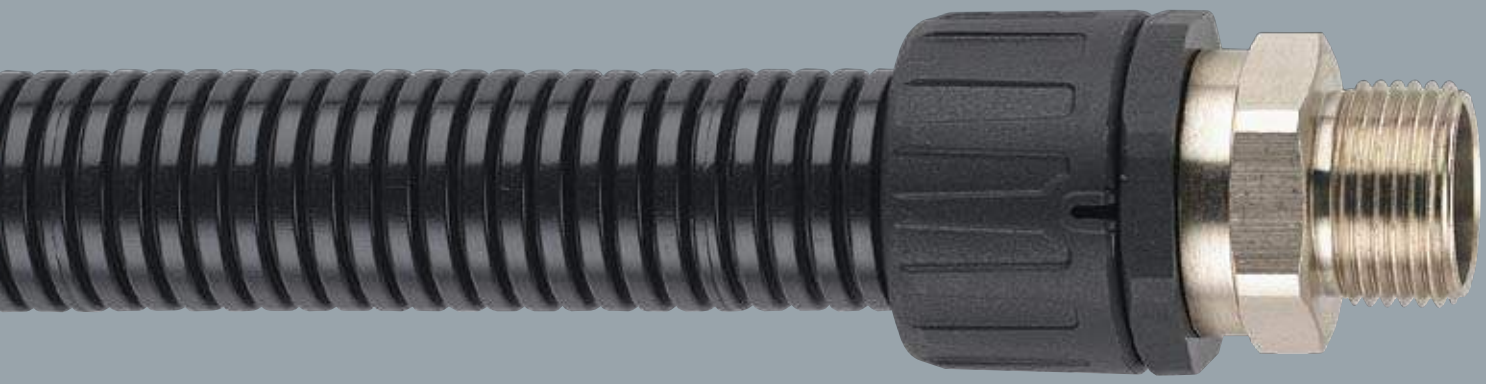









With over 21 different non metallic conduit systems to choose from we are sure to have a system to meet your application. Systems are available in a wide variety of sizes, ranging from 10mm up to 106mm, manufactured from a range of materials offering different properties.



Key Features

- Wide range of sizes
- Light weight
- Easy to cut
- High fatigue life
- Superior IP ratings - up to IP69K
- Slit versions available
- Non corrosive
- Highly flexible

Key Benefits

- Suitable for a wide range of applications
- Easy to work with for ease of installation
- Reduced installation times
- Reduced whole life costs
- No risk of water or dust ingress
- Suitable for retrofit applications
- Suitable for diverse environments
- Movement without any impact on performance






non-metallic
conduit & fittings

RoHS

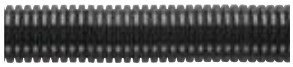
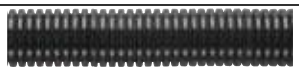
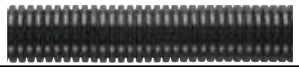
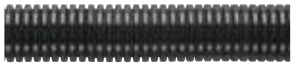
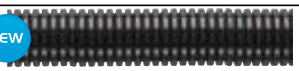
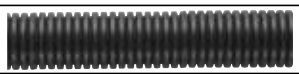
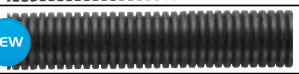
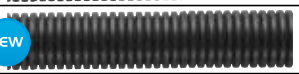
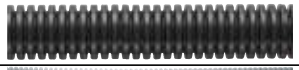
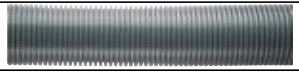
BS EN IEC 61386

CE

Lloyd's Register TYPE APPROVAL

Link-up

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
50	**FPAS** nylon LFH PA6 corrugated, std weight		IP66, IP67, IP68, IP69K	75	40	Black Grey
50	**FPAL** nylon PA6 corrugated, light weight		IP66, IP67, IP68, IP69K	60	30	Black Grey
51	**FPAH** nylon LFH PA6 corrugated, heavy weight		IP66, IP67, IP68, IP69K	120	70	Black
51	**FPR** nylon extra LFH PA6 corrugated, std weight		IP66, IP67, IP68, IP69K	75	40	Black
51	**FPI** nylon PA12 corrugated, standard weight		IP66, IP67, IP68, IP69K	45	30	Black
51	**FPIH** nylon PA12 corrugated, heavy weight		IP66, IP67, IP68, IP69K	60	50	Black
52	**FPY** nylon PA6 corrugated, light weight		IP40, IP66, IP67, IP68	60	25	Black Grey
52	**FPADS** nylon PA6 double slit corrugated	NEW 	IP40	60	15	Black
52&69	**FPP** polypropylene corrugated, std weight		IP40, IP66, IP67, IP68	35	25	Black, Grey White
52	**FPP-NFR** polypropylene corrugated non flame retarded	NEW 	IP40, IP66, IP67, IP68	35	25	Black, Grey
52	**FPPH** polypropylene corrugated heavy weight	NEW 	IP40, IP66, IP67, IP68	100	40	Black, Grey
72	**FPCB** pvc spiral reinforced black		IP65	60	25	Black
72	**FPCG** pvc spiral reinforced grey		IP65	60	25	Light Grey
72	**FPCGN** pvc spiral reinforced green oil resistant		IP65	60	25	Green
72	**FPCBU** pvc spiral reinforced blue high temperature		IP65	60	25	Blue
74	**LPC** smooth, pvc spiral reinforced		IP67, IP68, IP69K	120	70	Black Light Grey
74	**LPCO** smooth pvc spiral orange ultra flexible		IP67, IP68, IP69K	120	45	Orange
74	**LPCGN** smooth pvc spiral green oil resistant		IP67, IP68, IP69K	120	60	Green
74	**LPCBU** smooth pvc spiral blue high temperature		IP67, IP68, IP69K	120	60	Blue
76&69	**FPL** upvc corrugated		IP40, IP66, IP67	150	30	Black, Grey White
77	**FPY** nylon PA6, large diameter, std weight		IP40, IP65	N/A	N/A	Black Grey

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

78 accessories 82 contractor packs 86 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 resistance	
●	-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 +100˚C	●			●	●			**FPY** nylon PA6 corrugated, light weight
	-40˚C to +110˚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	●				●		●	**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
	-5˚C to +70˚C	●				●			**LPCO** smooth pvc spiral orange ultra flexible
	-5˚C to +70˚C	●				●			**LPCGN** smooth pvc spiral green oil resistant
	-20˚C to +90˚C	●				●			**LPCBU** smooth pvc spiral blue high temperature
	-5˚C to +70˚C		●			●		●	**FPL** upvc corrugated
	-40˚C to +120˚C	●			●	●		●	**FPY** nylon PA6, large diameter, std weight



non-metallic selection guide

BS EN IEC 61386

- 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

IP66

Flexilok™ fittings



See Pg 68

IP67 IP40

Compression fittings



See Pg 72, 73, 74 & 75

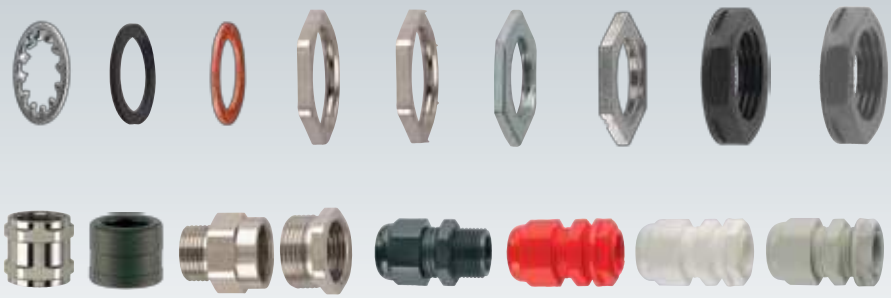
IP65 IP40

Jumbo



See Pg 77

Accessories



Stopping Plugs



Clips



See Pg 78 & 79




FPA

IP66

Straight Fittings - 10mm to 67mm



See Pg 54 & 57

IP66

90 deg elbow - 10mm to 67mm



See Pg 54, 55, 57 & 58

IP66

45 deg elbow - 16mm to 54mm



See Pg 55, 56 & 58

IP66

Coupler | Coupler - Flexible to Rigid conduit | T-pieces | Reducing Divider | Reducer



See Pg 56

See Pg 66

IP66

Fittings with integral strain relief



See Pg 42 & 59

FPAX

IP66 IP67 IP68 IP69K

Straight Fittings - 10mm to 67mm



See Pg 60 & 63

IP66 IP67 IP68 IP69K

90 deg elbow - 10mm to 67mm



See Pg 61, 63 & 64

IP66 IP67 IP68 IP69K

45 deg elbow - 16mm to 54mm



See Pg 62 & 64

IP66 IP67 IP68 IP69K

T-pieces | Reducer | Reducing Divider



See Pg 67

IP66 IP67 IP68 IP69K

Fittings with integral strain relief strain relief



See Pg 65

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.

FPAS

STANDARD LOW FIRE HAZARD *

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.

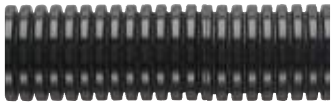
- Highly flexible and high fatigue life
- High impact strength and recovers if crushed
- Temperature range -40˚C to +120˚C (-20˚C to +100˚C for moving applications)
- Lloyd's Register Type Approval
- UL listed / UL recognised
- Low Fire Hazard (LFH), see page 94
- UL 94 V2 flame retardancy
- Halogen,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

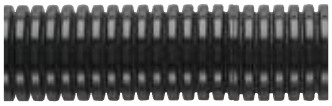
FPAL

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.

- 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





european (NW) sizes	nominal size (mm)	pitch	FPAS part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	FPAL 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	50	13.0	9.8	25	FPAL13	50	13.0	10.0	25
12	16	F	FPAS16	25, 50	15.8	11.8	35	FPAL16	50	15.8	12.0	35
14	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
17	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
22	25.4	F										
23	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					
29	34	C	FPAS34	25, 50	34.5	28.1	60	FPAL34	25, 50	34.5	28.3	55
29	34	F	FPAS34F	25, 50	34.5	28.8	60					
36	42	C	FPAS42	10, 25	42.5	35.5	70	FPAL42	25	42.5	35.7	65
48	54	C	FPAS54	10, 25	54.5	47.2	80	FPAL54	25	54.5	47.4	80
56	67	C	FPAS67	10	67.2	56.3	130	FPAL67	10	67.2	56.5	110

F = fine pitch C = coarse pitch

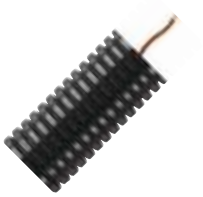
NOTE: Other reel lengths are available upon request

ORDERING NOTES

- Specify black or grey (B = Black, G = Grey) and reel length eg: FPAS21B-50M for a Black 50m reel
- See cutting tool page 81

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

- **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



MORE CONDUITS OVERLEAF!

FPAH

STANDARD LOW FIRE HAZARD ★

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 94
- UL 94 V2 flame retardancy
- Halogen, sulphur and phosphorus free
- UV resistant
- Abrasion resistant
- Highly resistant to solvents and oils

FPR

EXTRA LOW FIRE HAZARD ★★

Construction: Standard weight nylon (highly flame retardant PA6) corrugated flexible conduit. Colour black.

Typical Applications: Railways, underground and 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)
- 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

FPI

STANDARD LOW FIRE HAZARD ★

Construction: Standard weight nylon (PA12) corrugated flexible conduit. Colour black.

Typical Applications: Robots and continual flexing.

- 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

FPIH

STANDARD LOW FIRE HAZARD ★

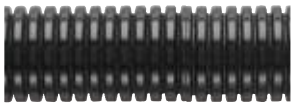
Construction: Heavy weight nylon (PA12) corrugated flexible conduit. Colour black.

Typical Applications: Robots and continual flexing where higher mechanical strength required.

- 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	FPAH part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	FPR part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	FPI part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	FPIH 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										
8	11	F																				
10	13	F	FPAH13	50	13.0	9.0	35	FPR13	50	13.0	9.8	25	FPI13	50	13.0	9.8	25	FPIH13	50	13.0	9.0	25
12	16	F	FPAH16	50	15.8	11.5	45	FPR16	50	15.8	11.8	35	FPI16	50	15.8	11.8	30	FPIH16	50	15.8	11.5	35
14	18	F																				
	20	C						FPR20	50	20.0	14.8	45										
17	21	F						FPR21	50	21.2	16.7	45	FPI21	50	21.2	16.7	35					
	21	C	FPAH21	50	21.2	15.5	55											FPIH21	50	21.2	15.0	45
	25	C						FPR25	50	25.0	19.1	50										
22	25.4	F																				
23	28	F																				
	28	C	FPAH28	50	28.5	21.3	60	FPR28	50	28.5	21.7	50	FPI28	50	28.5	21.7	45	FPIH28	50	28.5	21.3	50
29	34	C	FPAH34	25	34.5	26.9	70	FPR34	50	34.5	28.1	60	FPI34	25	34.5	28.1	55	FPIH34	25	34.5	26.9	60
29	34	F																				
36	42	C	FPAH42	25	42.5	34.6	80	FPR42	25	42.5	35.5	70	FPI42	25	42.5	35.5	60	FPIH42	25	42.5	34.6	70
48	54	C	FPAH54	25	54.5	46.0	90	FPR54	25	54.5	47.2	80	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

STANDARDS

* refer to conduit properties for applicable standards

BS EN IEC 61386

FM58347

IMPORTANT NOTE

- For LFH performance see page 94

FOLD PAGE OUT!

FPY

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

Typical Applications: Machines and commercial vehicles.

- Highly flexible and high fatigue life
- High impact strength and recovers if crushed
- Temperature range -40˚C to +100˚C
- Highly resistant to solvents and oils
- Self extinguishing
- Halogen, sulphur and phosphorus free
- FPY6 also available, 7.3mm OD x 5mm ID
- Slit version, FPYS, also available. Cable can be inserted laterally using tool shown on page 81.



FPADS NEW

Construction: Double slit nylon (PA6) corrugated conduit. Colour black.

Typical Applications: Retrofit.

- 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



FPP

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

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

- Acid resistant
- Temperature range -20˚C to +90˚C
- Self extinguishing
- Slit version available on request*

Other options available:

FPP-NFR NEW

LSOH conduit for data calling applications

FPPH NEW

Heavy weight conduit for buried underground applications.



FCL

nylon 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.



european (NW) sizes	nominal size (mm)	pitch	FPY part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	FPADS part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	FPP part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	Conduit Clip
7	10	F	FPY8	50	10.0	6.5	15						FPP10	50	10.0	6.3	15	FCL10
8	11	F	FPY10	50	11.5	8.5	20	FPADS11*	50	11.5	6.2	70						
10	13	F	FPY12	50	13.0	10.0	25	FPADS13	50	13.0	7.9	75	FPP13	50	13.0	9.8	25	FCL13
12	16	F	FPY16	50	16.1	12.8	35	FPADS16	50	15.8	10.3	100	FPP16	50	15.8	11.8	35	FCL16
14	18	F																FCL18
	20	C											FPP20	50	20.0	14.8	40	FCL20
17	21	F	FPY20	50	21.2	16.9	40	FPADS21	50	21.2	13.9	120	FPP21	50	21.2	16.7	40	FCL21
	21	C																FCL21
	25	C											FPP25	50	25.0	19.1	50	FCL25
22	25.4	F	FPY25	50	25.4	21.4	45						FPP26	50	25.4	21.4	50	FCL25
23	28	F	FPY28	50	28.5	23.0	45						FPP28	50	28.5	22.8	55	FCL28
	28	C						FPADS28	50	28.5	20.5	170						FCL28
29	34	C	FPY32	25	34.5	28.3	55	FPADS34	25	34.5	26.6	180	FPP34	50	34.5	28.1	65	FCL34
29	34	F																FCL34
36	42	C	FPY40	25	42.5	35.7	65	FPADS42	25	42.5	32.0	200	FPP42	25	42.5	35.5	80	FCL42
48	54	C	FPY50	25	54.5	47.4	80	FPADS54	25	54.5	43.0	240	FPP54	25	54.5	47.2	100	FCL54
56	67	C											FPP67	10	67.2	56.3	150	

F = fine pitch C = coarse pitch

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



- **Available on request:**
  - longer lengths and bulk packaging
  - cut lengths and assemblies
  - additional sizes
  - other colours
  - conduit with pre-installed draw wire
  - FPADS in PP

non-metallic
conduit and fitting

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, T-pieces, MP, MPS and MSL you can use with your chosen conduit.

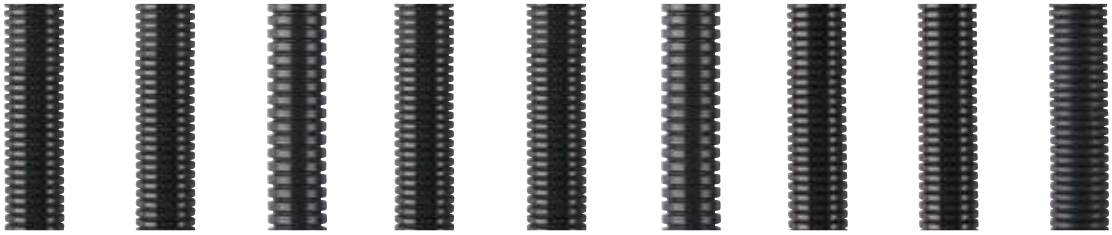


Using this fold out page will illustrate the wide range of non metallic corrugated conduits we offer. There are nine different non metallic conduit families listed in this spread and these are detailed across Pages 50 - 52.

Ordering Notes

Once you have chosen your conduit from our wide range of products listed on Pages 50, 51 and 52, 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 susequent fittings pages to allow you to still see your selected conduit, whilst selecting your fittings.



european (NW) sizes pitch	nominal size (mm)	FPAS part number	FPAL part number	FPAH part number	FPR part number	FPI part number	FPIH part number	FPY part number	FPADS part number	FPP part number
7 F	10	FPAS10	FPAL10		FPR10			FPY8		
7 F	10									
8 F	11	FPAS11	FPAL11					FPY10	FPADS11	
10 F	13	FPAS13	FPAL13	FPAH13	FPR13	FPI13	FPIH13	FPY12	FPADS13	FPP13
10 F	13									
10 C	13									
12 F	16	FPAS16	FPAL16	FPAH16	FPR16	FPI16	FPIH16		FPADS16	FPP16
12 C	16									
12 C	16									
12 F	16							FPY16		
14 F	18	FPAS18	FPAL18							
14 C	18									
C	20	FPAS20			FPR20					FPP20
17 F	21	FPAS21	FPAL21		FPR21	FPI21		FPY20		FPP21
C	21			FPAH21			FPIH21		FPADS21	
C	21									
C	25	FPAS25	FPAL25		FPR25					FPP25
22 F	25.4							FPY25		FPP26
23 F	28	FPAS28	FPAL28		FPR28			FPY28		FPP28
C	28	FPAS28C		FPAH28		FPI28	FPIH28		FPADS28	
29 C	34	FPAS34	FPAL34	FPAH34	FPR34	FPI34	FPIH34	FPY32	FPADS34	FPP34
29 F	34	FPAS34F								
36 C	42	FPAS42	FPAL42	FPAH42	FPR42	FPI42	FPIH42	FPY40	FPADS42	FPP42
36 C	42									
48 C	54	FPAS54	FPAL54	FPAH54	FPR54	FPI54	FPIH54	FPY50	FPADS54	FPP54
48 C	54									
56 C	67	FPAS67	FPAL67			FPI67				FPP67

ORDERING NOTES

IEC EN 61386

FPA system nylon

Construction: Nylon (PA66) moulded fitting.

STANDARD LOW FIRE HAZARD *

IP66





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 nickel plated brass swivel UNEF internal thread for attachment to circular connectors.



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.



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-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	(¾")	FPA16-FL	FPA16-M16-90	FPA16-PG9-90	FPA16-050-90
12	16		FPA16-M20	FPA16-PG11	FPA16-050	FPA16-BU100	(1")		FPA16-M20-90	FPA16-PG11-90	
12	16			FPA16-PG13		FPA16-BU119	(1 3/16")			FPA16-PG13-90	
12	16	16.1		FPA16-PG16							
14	18	18.5	FPA18-M20	FPA18-PG13					FPA18-M20-90	FPA18-PG13-90	
14	18			FPA18-PG16						FPA18-PG16-90	
	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-PG13-90	FPA21-050-90
	21			FPA21-PG16		FPA21-BU119	(1 3/16")			FPA21-PG16-90	
	21					FPA21-BU138	(1 3/8")				
	25	25.0	FPA25-M25						FPA25-M25-90		
22	25.4	25.4									
23	28	28.5	FPA28-M25	FPA28-PG21	FPA28-075	FPA28-BU144	(1 7/16")	FPA28-FL	FPA28-M25-90	FPA28-PG21-90	FPA28-075-90
	28		FPA28-M32	FPA28-PG29		FPA28-BU175	(1¾")				
29	34	34.5	FPA34-M32	FPA34-PG29	FPA34-100	FPA34-BU175	(1¾")	FPA34-FL	FPA34-M32-90	FPA34-PG29-90	FPA34-100-90
29	34		FPA34-M40								
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	(2¼")		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	(2¼")		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.
- Low Fire Hazard (LFH), see page 90
- Halogen, sulphur and phosphorus free
- Available in black or grey (RAL 7031)

IP66

FPA90

90° 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.



IP66

FPA90

flange

One piece, fast fit 90 degree elbow fitting with nylon swivel flange.



IP66

FPA45

45° elbow external thread

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



IP66

FPA45

45° elbow UNEF swivel internal thread

One piece, fast fit, 45 degree elbow fitting with nickel plated brass swivel UNEF internal thread for attachment to circular connectors.



90 Degree UNEF	Thread	90 Degree Flange	45 Degree Metric	45 Degree PG	45 Degree NPT	45 Degree UNEF	Thread	nominal size (mm)	OD mm
								10	10.0
								10	
								11	11.5
								13	13.0
								13	
								13	
FPA16-BU075-90	(¾")	FPA16-FL-90	FPA16-M20-45	FPA16-PG13-45	FPA16-050-45	FPA16-BU100-45	(¾")	16	15.8
FPA16-BU100-90	(1")					FPA16-BU119-45	(1")	16	
FPA16-BU119-90	(1 3/16")							16	
								16	16.1
								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 3/16")			FPA21-PG16-45		FPA21-BU119-45	(1 3/16")	21	
FPA21-BU138-90	(1 3/8")					FPA21-BU138-45	(1 3/8")	21	
								25	25.0
								25.4	25.4
FPA28-BU144-90	(1 7/16")	FPA28-FL-90	FPA28-M25-45	FPA28-PG21-45	FPA28-075-45	FPA28-BU144-45	(1 7/16")	28	28.5
FPA28-BU175-90	(1¾")					FPA28-BU175-45	(1¾")	28	
FPA34-BU175-90	(1¾")	FPA34-FL-90	FPA34-M32-45	FPA34-PG29-45	FPA34-100-45	FPA34-BU175-45	(1¾")	34	34.5
								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	(2¼")					FPA42-BU225-45	(2¼")	42	
FPA54-BU200-90	(2")	FPA54-FL-90*	FPA54-M50-45		FPA54-150-45	FPA54-BU200-45	(2")	54	54.5
FPA54-BU225-90	(2¼")					FPA54-BU225-45	(2¼")	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.

STANDARD LOW FIRE HAZARD *

IP66

FITTINGS

IP66

FPA45

flange

One piece, fast fit 45 degree elbow fitting with nylon swivel flange.



IP66

FPA-FPA

coupler

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



IP66

FPA-MPC

coupler

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



european (NW) sizes	nominal size (mm)	OD mm	45 Degree Flange	Coupler	Rigid Conduit Coupler
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	16.1			
14	18	18.5			
14	18				
	20	20.0		FPA20-FPA20	
17	21	21.2	FPA21-FL-45	FPA21-FPA21	FPA21-MPC20
17	21				
17	21				
	25	25.0		FPA25-FPA25	
22	25.4	25.4			
23	28	28.5	FPA28-FL-45	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-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 78
- EMC braid clamp version see page 42

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 94
- Halogen, sulphur and phosphorus free
- Available in black or grey (RAL 7031)





IP66

FPA

straight swivel brass external thread

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



IP66

FPA

straight swivel brass internal thread

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



IP66

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.



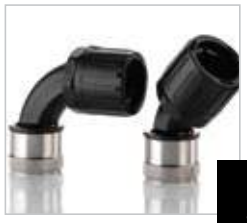
NPB Ext Metric	NPB Ext PG	NPB Int Metric	NPB Int PG	NPB Ext Metric	NPB Ext PG	nominal size (mm)	OD mm	european (NW) sizes
						10	10.0	7
						10		7
						11	11.5	8
FPA13-BM16	FPA13-BPG9	FPA13-BFM16	FPA13-BFPG9	FPA13-BM16-90	FPA13-BPG9-90	13	13.0	10
						13		10
						13		10
FPA16-BM16	FPA16-BPG9	FPA16-BFM16	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	16.1	12
						18	18.5	14
						18		14
						20	20.0	
FPA21-BM20	FPA21-BPG13	FPA21-BFM20	FPA21-BFPG16	FPA21-BM20-90	FPA21-BPG13-90	21	21.2	17
	FPA21-BPG16				FPA21-BPG16-90	21		17
						21		17
						25	25.0	
						25.4	25.4	22
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-BFM40		FPA42-BM50-90		42	42.5	36
FPA42-BM50						42		36
FPA54-BM50		FPA54-BFM50		FPA54-BM50-90		54	54.5	48
FPA54-BM63						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.

STANDARD LOW FIRE HAZARD *

IP66

FITTINGS

IP66

FPA90

90° elbow swivel brass internal thread

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



IP66

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.



IP66

FPA45

45° elbow swivel brass internal thread

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



european (NW) sizes	nominal size (mm)	OD mm	NPB Int Metric	NPB Int PG	NPB Ext Metric	NPB Ext PG	NPB Int Metric	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	16.1						
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						
22	25.4	25.4						
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-BM50-45		FPA42-BFM50-45	
36	42							
48	54	54.5	FPA54-BFM50-90		FPA54-BM50-45		FPA54-BFM50-45	
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 78
- EMC braid clamp version, see page 42

properties

- 1 part fast fit
- IP rating: of conduit & fitting: IP66
  of cable gland: IP68 (10 bar)+IP69K
- 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 94
- Halogen, sulphur and phosphorus free
- Refer to accessories for clamping range page 79





IP66

FPA NEW

cable gland

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



IP66

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

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.



NPB Metric	NPB PG	NPB Metric	NPB Metric	nominal size (mm)	OD mm	european (NW) sizes
				10	10.0	7
				10		7
				11	11.5	8
FPA13-BM16-CG		FPA13-BM16-CG-90		13	13.0	10
				13		10
				13		10
FPA16-BM16-CG	FPA16-BPG11-CG*	FPA16-BM16-CG-90	FPA16-BM20-CG-45	16	15.8	12
FPA16-BM20-CG	FPA16-BPG16-CG*	FPA16-BM20-CG-90		16		12
				16		12
				16	16.1	12
				18	18.5	14
				18		14
				20	20.0	
FPA21-BM20-CG	FPA21-BPG16-CG*	FPA21-BM20-CG-90	FPA21-BM20-CG-45	21	21.2	17
				21		17
				21		17
				25	25.0	
				25.4	25.4	22
FPA28-BM25-CG	FPA28-BPG21-CG*	FPA28-BM25-CG-90	FPA28-BM25-CG-45	28	28.5	23
				28		23
FPA34-BM32-CG	FPA34-BPG29-CG*	FPA34-BM32-CG-90	FPA34-BM32-CG-45	34	34.5	29
				34		29
FPA42-BM40-CG		FPA42-BM40-CG-90	FPA42-BM40-CG-45	42	42.5	36
				42		36
FPA54-BM50-CG*		FPA54-BM50-CG-90	FPA54-BM50-CG-45	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*.

STANDARD LOW FIRE HAZARD *

IP66 IP67 IP68 IP69K

FITTINGS

IP66 IP67 IP68 IP69K

FPAX

straight external thread

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



IP66 IP67 IP68 IP69K

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 IP69K

FPAX

flange

Fast fit fitting with nylon swivel flange with additional conduit seal.



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	(¾")	FPAX16-FL
12	16		FPAX16-M20	FPAX16-PG11	FPAX16-050	FPAX16-BU100	(1")	
12	16			FPAX16-PG13		FPAX16-BU119	(1 3/16")	
12	16	16.1		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	(1⅜")	
	25	25.0						
22	25.4	25.4						
23	28	28.5	FPAX28-M25	FPAX28-PG21	FPAX28-075	FPAX28-BU144	(1 7/16")	FPAX28-FL
23	28		FPAX28-M32	FPAX28-PG29		FPAX28-BU175	(1¾")	
29	34	34.5	FPAX34-M32	FPAX34-PG29	FPAX34-100	FPAX34-BU175	(1¾")	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	(2¼")	
48	54	54.5	FPAX54-M50	FPAX54-PG42	FPAX54-150	FPAX54-BU200	(2")	
48	54		FPAX54-M63	FPAX54-PG48	FPAX54-200	FPAX54-BU225	(2¼")	
56	67	67.0						

ORDERING NOTES

- Specify black or grey (B = Black, G = Grey) eg: FPAX16-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
- all nylon UNEF threads

properties

- Fast fit
- Supplied with additional conduit seal and face seal
- Face seal details:
  Nylon thread - neoprene washer
  UNEF and Flange - O-ring
  Brass external thread - Fibre washer
- IP rating:
  IP66 + IP67 + IP68 (2 bar) + IP69K
- 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
- Low Fire Hazard (LFH), see page 94
- Halogen, sulphur and phosphorus free





IP66 IP67 IP68 IP69K

FPAX90

90° elbow external thread

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

IP66 IP67 IP68 IP69K

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 IP69K

FPAX90

flange

Fast fit 90 degree elbow fitting with nylon swivel flange with additional conduit seal.







Ext Metric	Ext PG	Ext NPT	Int UNEF	Thread	Flange	nominal size (mm)	OD mm	european (NW) sizes
						10	10.0	7
						10		7
						11	11.5	8
FPAX13-M16-90	FPAX13-PG9-90					13	13.0	10
						13		10
						13		10
FPAX16-M16-90	FPAX16-PG9-90	FPAX16-050-90	FPAX16-BU075-90	(¾")	FPAX16-FL-90	16	15.8	12
FPAX16-M20-90	FPAX16-PG11-90		FPAX16-BU100-90	(1")		16		12
	FPAX16-PG13-90		FPAX16-BU119-90	(1 3/16")		16		12
						16	16.1	12
						18	18.5	14
						18		14
						20	20.0	
FPAX21-M20-90	FPAX21-PG13-90	FPAX21-050-90	FPAX21-BU100-90	(1")	FPAX21-FL-90	21	21.2	17
	FPAX21-PG16-90		FPAX21-BU119-90	(1 3/16")		21		17
			FPAX21-BU138-90	(1 3/8")		21		17
						25	25.0	
						25.4	25.4	22
FPAX28-M25-90	FPAX28-PG21-90	FPAX28-075-90	FPAX28-BU144-90	(1 7/16")	FPAX28-FL-90	28	28.5	23
			FPAX28-BU175-90	(1¾")		28		23
FPAX34-M32-90	FPAX34-PG29-90	FPAX34-100-90	FPAX34-BU175-90	(1¾")	FPAX34-FL-90	34	34.5	29
						34		29
FPAX42-M40-90	FPAX42-PG36-90	FPAX42-125-90	FPAX42-BU200-90	(2")	FPAX42-FL-90	42	42.5	36
FPAX42-M50-90		FPAX42-150-90	FPAX42-BU225-90	(2¼")		42		36
FPAX54-M50-90	FPAX54-PG48-90	FPAX54-150-90	FPAX54-BU200-90	(2")		54	54.5	48
FPAX54-M63-90		FPAX54-200-90	FPAX54-BU225-90	(2¼")		54		48
						67	67.0	56

STANDARDS

BS EN IEC 61386









FPAX system
nylon & brass threaded

STANDARD LOW FIRE HAZARD *

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

IP66 IP67 IP68 IP69K

FPAX45

45° elbow external thread

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



IP66 IP67 IP68 IP69K

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.



IP66 IP67 IP68 IP69K

FPAX45

flange

Fast fit 45 degree elbow fitting with nylon swivel flange with additional conduit seal.



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	(1")	FPAX16-FL-45
12	16					FPAX16-BU119-45	(1 3/16")	
12	16							
12	16	16.1						
14	18	18.5						
14	18							
	20	20.0						
17	21	21.2	FPAX21-M20-45	FPAX21-PG13-45	FPAX21-050-45	FPAX21-BU100-45	(1")	FPAX21-FL-45
17	21			FPAX21-PG16-45		FPAX21-BU119-45	(1 3/16")	
17	21					FPAX21-BU138-45	(1 3/8")	
	25	25.0						
22	25.4	25.4						
23	28	28.5	FPAX28-M25-45	FPAX28-PG21-45	FPAX28-075-45	FPAX28-BU144-45	(1 7/16")	FPAX28-FL-45
23	28					FPAX28-BU175-45	(1 3/4")	
29	34	34.5	FPAX34-M32-45	FPAX34-PG29-45	FPAX34-100-45	FPAX34-BU175-45	(1 3/4")	FPAX34-FL-45
29	34							
36	42	42.5	FPAX42-M50-45	FPAX42-PG36-45	FPAX42-150-45	FPAX42-BU200-45	(2")	FPAX42-FL-45
36	42					FPAX42-BU225-45	(2 1/4")	
48	54	54.5	FPAX54-M50-45		FPAX54-150-45	FPAX54-BU200-45	(2")	
48	54					FPAX54-BU225-45	(2 1/4")	
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 78
- EMC braid clamp version

properties

- Fast fit
- Supplied with additional conduit seal and face seal
- Face seal details:
  - Nylon thread - neoprene washer
  - UNEF and Flange - O-ring
  - Brass threads - Fibre washer
- IP rating: IP66 + IP67 + IP68 (2 bar) + IP69K
- 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
- Low Fire Hazard (LFH), see page 94
- Halogen, sulphur and phosphorus free

IP66 IP67 IP68 IP69K

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 IP69K

FPAX

straight swivel brass internal thread

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



IP66 IP67 IP68 IP69K

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.



NPB Ext Metric	NPB Ext PG	NPB Int Metric	NPB Int PG	NPB Ext Metric	NPB Ext PG	nominal size (mm)	OD mm	european (NW) sizes
						10	10.0	7
						10		7
						11	11.5	8
FPAX13-BM16	FPAX13-BPG9	FPAX13-BFM16	FPAX13-BFPG9	FPAX13-BM16-90	FPAX13-BPG9-90	13	13.0	10
						13		10
						13		10
FPAX16-BM16	FPAX16-BPG9	FPAX16-BFM16	FPAX16-BFPG11	FPAX16-BM16-90	FPAX16-BPG9-90	16	15.8	12
FPAX16-BM20	FPAX16-BPG11	FPAX16-BFM20	FPAX16-BFPG16	FPAX16-BM20-90	FPAX16-BPG11-90	16		12
						16		12
						16	16.1	12
						18	18.5	14
						18		14
						20	20.0	
FPAX21-BM20	FPAX21-BPG13	FPAX21-BFM20	FPAX21-BFPG16	FPAX21-BM20-90	FPAX21-BPG13-90	21	21.2	17
	FPAX21-BPG16				FPAX21-BPG16-90	21		17
						21		17
						25	25.0	
						25.4	25.4	22
FPAX28-BM25	FPAX28-BPG21	FPAX28-BFM25	FPAX28-BFPG21	FPAX28-BM25-90	FPAX28-BPG21-90	28	28.5	23
						28		23
FPAX34-BM32	FPAX34-BPG29	FPAX34-BFM32	FPAX34-BFPG29	FPAX34-BM32-90	FPAX34-BPG29-90	34	34.5	29
						34		29
FPAX42-BM40		FPAX42-BFM40		FPAX42-BM50-90		42	42.5	36
FPAX42-BM50						42		36
FPAX54-BM50		FPAX54-BFM50		FPAX54-BM50-90		54	54.5	48
FPAX54-BM63						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*.

STANDARD LOW FIRE HAZARD *

IP66 IP67 IP68 IP69K

FITTINGS

IP66 IP67 IP68 IP69K

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 IP69K

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 IP69K

FPAX45

45° elbow swivel brass internal thread

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



european (NW) sizes	nominal size (mm)	OD mm	NPB Int Metric	NPB Int PG	NPB Ext Metric	NPB Ext PG	NPB Int Metric	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	16.1						
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						
22	25.4	25.4						
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-BM50-45		FPAX42-BFM50-45	
36	42							
48	54	54.5	FPAX54-BFM50-90		FPAX54-BM50-45		FPAX54-BFM50-45	
48	54							
56	67	67.0						

ORDERING NOTES

- NPB = Nickel Plated Brass

* Indicates parts made to order on request

- **Available on request:**
- colour grey, other threads
- for brass locknuts and sealing washers see accessories, page 78
- EMC braid clamp version, see page 42

properties

- Fast fit
- Supplied with additional conduit seal & face seal
- Face seal details:
  Nylon thread - neoprene washer
  UNEF and Flange - O-ring
  Brass threads - Fibre washer
- IP rating: for conduit & fitting IP66 + IP67 + IP68 (2 bar) + IP69K
  for cable gland: IP68 (10 bar)+IP69K
- 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 94
- Halogen, sulphur and phosphorus free
- Refer to accessories for clamping range page 79

IP66 IP67 IP68 IP69K

FPAX NEW

cable gland

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



IP66 IP67 IP68 IP69K

FPAX90 NEW

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.



IP66 IP67 IP68 IP69K

FPAX45 NEW

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.



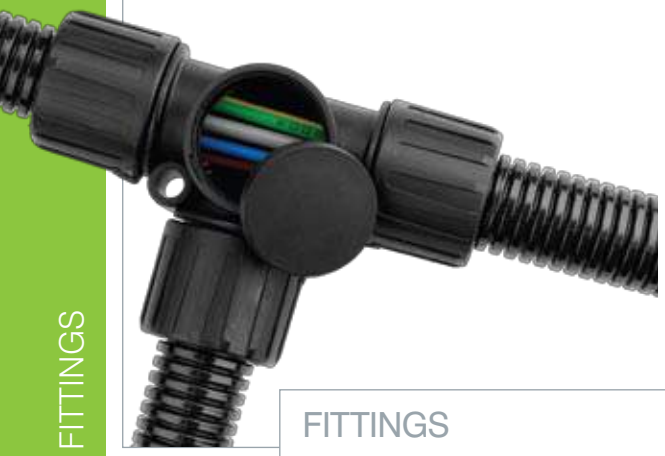
NPB Metric	NPB PG	NPB Metric	NPB Metric	nominal size (mm)	OD mm	european (NW) sizes
				10	10.0	7
				10		7
				11	11.5	8
FPAX13-BM16-CG		FPAX13-BM16-CG-90		13	13.0	10
				13		10
				13		10
FPAX16-BM16-CG	FPAX16-BPG11-CG*	FPAX16-BM16-CG-90	FPAX16-BM20-CG-45	16	15.8	12
FPAX16-BM20-CG	FPAX16-BPG16-CG*	FPAX16-BM20-CG-90		16		12
				16		12
				16	16.1	12
				18	18.5	14
				18		14
				20	20.0	
FPAX21-BM20-CG	FPAX21-BPG16-CG*	FPAX21-BM20-CG-90	FPAX21-BM20-CG-45	21	21.2	17
				21		17
				21		17
				25	25.0	
				25.4	25.4	22
FPAX28-BM25-CG	FPAX28-BPG21-CG*	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-45	34	34.5	29
				34		29
FPAX42-BM40-CG		FPAX42-BM40-CG-90	FPAX42-BM40-CG-45	42	42.5	36
				42		36
FPAX54-BM50-CG*		FPAX54-BM50-CG-90*	FPAX54-BM50-CG-45*	54	54.5	48
				54		48
				67	67.0	56

STANDARDS

BS EN IEC 61386

TECHNICAL DRAWING





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 or grey on request.

STANDARD LOW FIRE HAZARD *

IP66 IP67 IP68 IP69K

FITTINGS

IP66

FPA

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



IP66

FPA NEW

Divider
Fast fit reducing divider



IP66

Reducer/ Stop Plug

Fitting to reduce or blank off any outlets.





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)
- 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 94
- 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



IP66 IP67 IP68

FPAX

T piece with inspection lid

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



IP66 IP67 IP68 IP69K

FPAX NEW

Divider

Fast fit reducing divider with additional seals for enhanced IP ratings



IP66 IP67 IP68

Reducer/ Stop Plug

Fitting to reduce or blank off outlets with additional seal for enhanced IP rating.



R



SP







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	42		FPAX42T		FPAX34-R42 FPAX28-R42 FPAX21-R42

STANDARDS

BS EN IEC 61386









Flexilok® system

Construction: Nylon (PA66) or polypropylene 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)
  (FLK20-PP - FPP20 13kg)
- Can be removed using a screwdriver
- Suitable for fine and coarse pitch conduits
- Temperature range -50˚C to +135˚C
- Metric threads supplied complete with locknuts
- Low Fire Hazard (LFH), see page 94
- Halogen, sulphur and phosphorus free
- Available in black, grey (RAL 7031) and white, see page 69

STANDARD LOW FIRE HAZARD

IP66

FITTINGS

IP66

FLK

straight external thread

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



IP66

FLK

NEW

Push in

Simple, one piece, push in fitting suitable for knockouts with no need for locknuts.



IP66

FLK90

90° elbow external thread

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



IP66

FLK-FLK

coupler

One piece, slim, fast fit coupler for joining 2 conduits together.



european (NW) sizes	nominal size (mm)	OD mm	Ext Metric	Ext Metric (PP)	Ext PG		Ext Metric	Ext PG	Coupler
7	10	10.0	FLK10-M12*						
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-M16-PP	FLK16-PG11	FLK16-PL20	FLK16-M16-90	FLK16-PG11-90	FLK16-FLK16
12	16		FLK16-M20		FLK16-PG13		FLK16-M20-90		
12	16								
12	16	16.1							
14	18	18.5							
14	18								
	20	20.0	FLK20-M20	FLK20-M20-PP		FLK20-PL20	FLK20-M20-90		FLK20-FLK20
17	21	21.2	FLK21-M20		FLK21-PG16	FLK21-PL20	FLK21-M20-90	FLK21-PG16-90	FLK21-FLK21
17	21								
17	21								
	25	25.0	FLK25-M25	FLK25-M25-PP		FLK25-PL25	FLK25-M25-90		FLK25-FLK25
22	25.4	25.4							
23	28	28.5	FLK28-M25		FLK28-PG21	FLK28-PL25	FLK28-M25-90	FLK28-PG21-90	FLK28-FLK28
23	28								
29	34	34.5	FLK34-M32	FLK34-M32-PP	FLK34-PG29	FLK34-PL32	FLK34-M32-90	FLK34-PG29-90	FLK34-FLK34
29	34								
36	42	42.5	FLK42-M40*						
36	42								
48	54	54.5	FLK54-M50*						
48	54								
56	67	67.0							

ORDERING NOTES

- Specify black or grey (B=Black, G=Grey) eg. FLK20-M20B
- For white version see page 69

* Coming soon

ALSO AVAILABLE

- Push in fitting removal tool - see accessories page 75
- Brass threaded versions

SPECIALS



White Products

NEW

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



CONDUIT FITTINGS

IP66

FPP

For details see page 52



IP66

FLK

straight external thread

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

IP66

FLK90

90° elbow external thread

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

IP66

FLK-FLK

coupler

One piece, slim, fast fit coupler for joining 2 conduits together.

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.

FCL-P

nylon conduit clip with integral lid

Nylon PA66 conduit clip with integral lid for increased security and plain ID for rigid conduit.

FPL

For details see page 76













nominal size (mm)	OD mm	FPP 50m coil	FPL 50m & 100m coil	Ext Metric	Ext Metric			
20	20.0	FPP20W-50M	FPL20W-100M	FLK20-M20W	FLK20-M20-90W	FLK20-FLK20W	FCL20W	FCL20W-P
25	25.0	FPP25W-50M	FPL25W-50M	FLK25-M25W	FLK25-M25-90W	FLK25-FLK25W	FCL25W	FCL25W-P
34	34.5	FPP34W-50M		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 79

STANDARDS

CE RoHS









MP, MP90 & T system

Construction: Nylon compression fittings. Colour - black, grey on request*.

MP fitting with nylon retaining clip provides a pull off strength of 20kg with FPAS21 and IP40.

MPS fitting with a neoprene sealing ring provides a pull off strength of 15kg with FPAS21 and IP67.

STANDARD LOW FIRE HAZARD *

IP40 IP67

FITTINGS

IP40 MP	IP67 MPS	IP40 MP90	IP67 MPS90	IP40 T	IP67 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 T shown

european (NW) sizes	nominal size (mm)	OD mm	Ext Metric	Ext Metric	Ext Metric	Ext Metric	T Piece	T Piece
7	10	10.0						
7	10							
8	11	11.5						
10	13	13.0	MP-12-M16	MPS-12-M16			T12X12X12	TS12X12X12
10	13							
10	13							
12	16	15.8	MP-16-M16	MPS-16-M16	MP90-16-M16	MPS90-16-M16	T16X16X16	TS16X16X16
12	16		MP-16-M20	MPS-16-M20	MP90-16-M20	MPS90-16-M20		
12	16							
12	16	16.1	MP-16-M16	MPS-16-M16	MP90-16-M16	MPS90-16-M16	T16X16X16	TS16X16X16
14	18	18.5						
14	18							
	20	20.0	MP-20-M20	MPS-20-M20	MP90-20-M20	MPS90-20-M20	T20X20X20	TS20X20X20
17	21	21.2	MP-20-M20	MPS-20-M20	MP90-20-M20	MPS90-20-M20	T20X20X20	TS20X20X20
17	21							
17	21							
	25	25.0	MP-25-M25	MPS-25-M25	MP90-25-M25	MPS90-25-M25	T25X25X25	TS25X25X25
22	25.4	25.4	MP-25-M25	MPS-25-M25	MP90-25-M25	MPS90-25-M25	T25X25X25	TS25X25X25
23	28	28.5	MP-28-M25	MPS-28-M25	MP90-28-M25	MPS90-28-M25		
23	28							
29	34	34.5	MP-32-M32	MPS-32-M32	MP90-32-M32	MPS90-32-M32		
29	34							
36	42	42.5	MP-40-M40	MPS-40-M40	MP90-40-M40	MPS90-40-M40		
36	42							
48	54	54.5	MP-50-M50	MPS-50-M50	MP90-50-M50	MPS90-50-M50		
48	54							
56	67	67.0						

ORDERING NOTES

- **Metric threads supplied complete with locknuts**
- **Available on request:**
- reduced outlet T pieces
- other colours
- PG threads

MSL & MPC system

MSL moulded in nylon or PP hinged fitting black and grey RAL7031.
Pull off strength 10kg with FPP21.

MPC nylon compression fitting black. Pull off strength 15kg with FPY20.

IP40 IP65





IP40

MSL

straight hinged fitting external thread

Nylon and PP hinged, snap on fittings including locknuts.



IP65

MPC

straight nylon external thread

Nylon compression fitting, external thread including locknut.



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 (Nylon)	Ext Metric (PP)	Ext Metric	End Cap	Conduit Clip	nominal size (mm)	OD mm	european (NW) sizes
				FCL10	10	10.0	7
					10		7
					11	11.5	8
		MPC-12-M16		FCL13	13	13.0	10
					13		10
					13		10
			EC16B	FCL16	16	15.8	12
					16		12
					16		12
		MPC-16-M16		FCL16	16	16.1	12
				FCL18	18	18.5	14
					18		14
				FCL20	20	20.0	
MSL-21-M20	MSL-21-M20-PP	MPC-20-M20	EC21B	FCL21	21	21.2	17
					21		17
					21		17
				FCL25	25	25.0	
MSL-26-M25	MSL-26-M25-PP	MPC-25-M25		FCL25	25.4	25.4	22
			EC28B	FCL28	28	28.5	23
					28		23
		MPC-32-M32	EC34B	FCL34	34	34.5	29
					34		29
			EC42B	FCL42	42	42.5	36
					42		36
			EC54B	FCL54	54	54.5	48
					54		48
					67	67.0	56

STANDARDS

RoHS ✓ BS EN IEC 61386 CE









FPCB system
spiral reinforced pvc

FPCG, FPCGN & FPCBU system
spiral reinforced pvc with special properties

IP65

CONDUIT

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

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.

FPCG

Construction: As FPCB except colour grey.

Typical Applications: As FPCB

FPCBU

Construction: As FPCB except colour blue.

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



FITTINGS

IP65

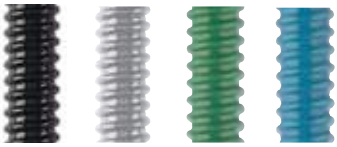
MPC

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).



nominal size (mm)	FPC part number Black	Grey (RAL 7001)	Green (RAL 6001)	Blue (RAL 5012)	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	metric thread part number	PG thread part number
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
20	FPC20B	FPC20G*	FPC20GN*	FPC20BU*	30	21.0	16.0	35	MPC-20-M20	MPC-20-PG16
25	FPC25B	FPC25G*	FPC25GN*	FPC25BU*	30	27.5	22.0	45	MPC-25-M25	MPC-25-PG21
30	FPC30B*	FPC30G*			30	30.5	25.0	55	MPC-30-M30*	MPC-30-PG29*
32	FPC32B	FPC32G*	FPC32GN*	FPC32BU*	10,30	33.5	28.0	60	MPC-32-M32	MPC-32-PG29
40	FPC40B	FPC40G*	FPC40GN*	FPC40BU*	10,30	41.0	35.0	80	MPC-40-M40	MPC-40-PG36
50	FPC50B	FPC50G*	FPC50GN*	FPC50BU*	10,30	46.4	40.0	105	MPC-50-M50	MPC-50-PG42
63	FPC63B	FPC63G*	FPC63GN*	FPC63BU*	10,30	57.0	50.0	120	MPC-63-M63	MPC-63-PG48



ORDERING NOTES

- Add reel length eg: FPC20B-30M for 30M

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

- For UL recognised black conduit order FPCURB*

- **Available on request:**
  additional sizes
  alternative threads
  other colours

ALTERNATIVES



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)
- FPCB (black) is UV resistant
- FPCGN (green) is oil resistant
- Self extinguishing
- Metric threads supplied complete with locknuts
- UL recognised to UL1696 for use in US and Canada





IP65

MPC90

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

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).





metric thread part number	PG thread part number	metric thread part number
MPC90-16-M16	MPC90-16-PG11	MPC45-16-M20
MPC90-16-M20	MPC90-16-PG13	
MPC90-20-M20	MPC90-20-PG16	MPC45-20-M20
MPC90-25-M25	MPC90-25-PG21	MPC45-25-M25
		MPC45-32-M32
MPC90-32-M32	MPC90-32-PG29	
MPC90-40-M40	MPC90-40-PG36	

STANDARDS

c UL us

BS EN IEC 61386

CE RoHS

* refer to conduit properties for applicable standards

TECHNICAL DRAWING





LPC system
smooth spiral reinforced pvc
LPCO, LPCGN & LPCBU system
IP67 IP68 IP69K
smooth spiral reinforced pvc with special properties

CONDUIT

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.

LPCGN

Construction: As LPC except colour green.

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

LPCO

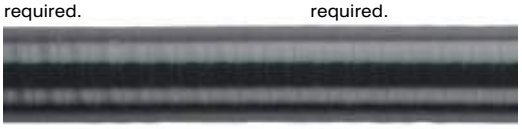
Construction: As LPC except colour orange.

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

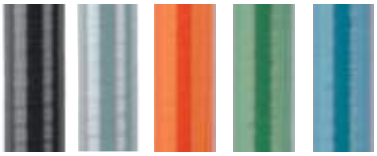
LPCBU

Construction: As LPC except colour blue.

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



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)
12	LPC12B	LPC12G*	LPC12O*	LPC12GN*	LPC12BU*	30	14.2	10.0	50
16	LPC16B	LPC16G	LPC16O	LPC16GN*	LPC16BU*	30	17.8	12.6	50
16									
20	LPC20B	LPC20G	LPC20O	LPC20GN*	LPC20BU*	10,30	21.1	16.0	70
25	LPC25B	LPC25G	LPC25O	LPC25GN*	LPC25BU*	10,30	26.4	21.0	90
32	LPC32B	LPC32G	LPC32O	LPC32GN*	LPC32BU*	10,30	33.1	26.5	140
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



FITTINGS

IP66 IP67

MPC

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

MPC90

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).





metric thread part number	PG thread part number	NPT thread part number	metric thread part number	PG thread part number
MPC-16-M16	MPC-16-PG11	MPC-16-050	MPC90-16-M16	MPC90-16-PG11
MPC-16-M20	MPC-16-PG13		MPC90-16-M20	MPC90-16-PG13
MPC-20-M20	MPC-20-PG16	MPC-20-050	MPC90-20-M20	MPC90-20-PG16
MPC-25-M25	MPC-25-PG21	MPC-25-075	MPC90-25-M25	MPC90-25-PG21
MPC-32-M32	MPC-32-PG29	MPC-32-100	MPC90-32-M32	MPC90-32-PG29
MPC-40-M40	MPC-40-PG36	MPC-40-125	MPC90-40-M40	MPC90-40-PG36
MPC-50-M50	MPC-50-PG42			
MPC-63-M63	MPC-63-PG48			

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 43

ALTERNATIVES



properties

- Smooth, wipe clean surface
- Accepts some torsional movement
- IP rating: IP67 with MPC fittings
  IP66, IP67, IP68 (2 bar) + IP69K with metal C-type compression fittings
- Temperature range -5˚C to +70˚C
- LPCBU (blue) temperature range -20˚C to +90˚C
- 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





MPC45

IP66 IP67

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).

C

IP66 IP67 IP68 IP69K

NEW

external metric thread nickel plated brass

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

C-S

IP66 IP67 IP68 IP69K

NEW

swivel external thread NPB

Compression fitting for knockout or threaded entries.

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

C90

IP66 IP67 IP68 IP69K

NEW

external thread NPB

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

CSS

IP66 IP67 IP68 IP69K

external thread stainless steel

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

C90-SS

IP66 IP67 IP68 IP69K

NEW

external thread stainless steel

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













metric thread part number	metric thread part number	PG thread part number	metric thread part number	metric thread part number	metric thread part number	metric thread part number	nominal size (mm)
	LPC12-M16-C			LPC12-M16-C90			12
MPC45-16-M20	LPC16-M16-C	LPC16-PG11-C	LPC16-M16-S	LPC16-M16-C90	LPC16-M16-CSS	LPC16-M20-CSS90	16
	LPC16-M20-C	LPC16-PG13-C	LPC16-M20-S	LPC16-M20-C90	LPC16-M20-CSS		16
MPC45-20-M20	LPC20-M20-C	LPC20-PG16-C	LPC20-M20-S	LPC20-M20-C90	LPC20-M20-CSS	LPC20-M20-CSS90	20
MPC45-25-M25	LPC25-M25-C	LPC25-PG21-C	LPC25-M25-S	LPC25-M25-C90	LPC25-M25-CSS	LPC25-M25-CSS90	25
MPC45-32-M32	LPC32-M32-C	LPC32-PG29-C	LPC32-M32-S	LPC32-M32-C90	LPC32-M32-CSS	LPC32-M32-CSS90	32
	LPC40-M40-C			LPC40-M40-C90			40
	LPC50-M50-C			LPC50-M50-C90			50
	LPC63-M63-C			LPC63-M63-C90			63

STANDARDS

BS EN IEC 61386

CE

RoHS

TECHNICAL DRAWING





FPL system
upvc corrugated pliable conduit

IP40 IP66 IP67

CONDUIT

FPL

Construction: Standard weight, upvc, corrugated pliable conduit. Colour black, grey (RAL 7045) or white. (see page 63)

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:
  - FLK 25kg
  - MP 20kg
  - MPS 15kg

FITTINGS

IP66

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.

IP40

MP

straight external thread

Straight nylon compression fitting external thread including locknut.

IP67

MPS

straight external thread

Straight nylon compression fitting with seal external thread including locknut.









MP shown

nominal size (mm)	FPL part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	metric thread part number	metric thread part number	metric thread part number	metric thread part number
16	FPL16	100	16.0	12.0	25	FLK16-M16	FLK16-M16-90	MP-16-M16	MPS-16-M16
16						FLK16-M20	FLK16-M20-90	MP-16-M20	MPS-16-M20
20	FPL20	100	20.0	15.0	30	FLK20-M20	FLK20-M20-90	MP-20-M20	MPS-20-M20
25	FPL25	50	25.0	19.5	40	FLK25-M25	FLK25-M25-90	MP-25-M25	MPS-25-M25
34	FPL32	25	34.5	27.9	50	FLK34-M32	FLK34-M32-90	MP-32-M32	MPS-32-M32

* Push in fittings available on Page 68

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 52

STANDARDS

BS EN IEC 61386

CE

RoHS

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

IP40
MP
straight flanged nylon clamp fitting
Flanged body with 2 clamps.

IP65
MPS
straight flanged nylon clamp fitting with seals
Flanged body with 2 clamps and seals.

IP40
MP90
90° flanged nylon clamp fitting
Flanged 90° body with 2 clamps.

IP65
MPS90
90° flanged nylon clamp fitting with seals
Flanged 90° body with 2 clamps and seals.





european (NW) sizes	nominal size (mm)	FPY part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	termination	part number	termination	part number	termination	part number	termination	part number
70	80	**FPY80**	10	80.0	67.0	160	FL	**MP-80-FL**	FL	**MPS-80-FL**	FL	**MP90-80-FL**	FL	**MPS90-80-FL**
95	106	**FPY106**	10	106.0	91.5	210	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
- FCC80 and FCC106 PVC lined plated steel P-clips

STANDARDS

BS EN IEC 61386

metric locknuts

nickel plated brass, plated steel, stainless steel, nylon black or grey



nickel plated brass part number	nickel plated EMC part number	plated steel part number	stainless steel part number	nylon part number	metric part number
B-M12				LM12-N#	SP-M12*
B-M16		S-M16	SS-M16	LM16-N#	SP-M16
B-M20	B-M20-EMC	S-M20	SS-M20	LM20-N#	SP-M20
B-M25	B-M25-EMC	S-M25	SS-M25	LM25-N#	SP-M25
B-M32	B-M32-EMC	S-M32	SS-M32	LM32-N#	SP-M32
B-M40	B-M40-EMC	S-M40	SS-M40	LM40-N#	
B-M50		S-M50	SS-M50*	LM50-N#	
B-M63		S-M63	SS-M63*	LM63-N#	
B-M75					

stop plug

nylon metric black



PG locknuts

nickel plated brass, nylon black or grey



nickel plated brass part number	nylon part number	PG part number
B-PG7	PG7-N#	SP-PG7*
B-PG9	PG9-N#	SP-PG9
B-PG11	PG11-N#	SP-PG11
B-PG13	PG13-N#	SP-PG13
B-PG16	PG16-N#	SP-PG16
B-PG21	PG21-N#	SP-PG21
B-PG29	PG29-N#	SP-PG29
B-PG36	PG36-N#	
B-PG42	PG42-N#	
B-PG48	PG48-N#	

stop plug

nylon PG



add B or G to specify colour. eg. LM20-NB for Black

rubber end sleeves



part number	to fit conduit size	outlet ID mm
ES10-13	13	5
ES14-17	16	5
ES17-20	20/21	7
ES19-22	21	8
ES21-24	25	9

90° elbow

internal and external threaded nickel plated brass 90° elbow



threads	part number
PG7	BM90-PG7
M16	BM90-16M
M20	BM90-20M
M25	BM90-25M
M32	BM90-32M
M40	BM90-40M
M50	BM90-50M

couplers

nickel plated brass internally threaded



thread	metric thread part number
M16	B-M16-C
M20	B-M20-C
M25	B-M25-C
M32	B-M32-C
M40	B-M40-C
M50	B-M50-C
M63	B-M63-C
M75	B-M75-C

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

sealing washers

neoprene and fibre face sealing washers



metric thread part number	metric thread part number	PG thread part number	PG thread part number
SW12	FW12	SWPG7	FWPG7
SW16	FW16	SWPG9	FWPG9
SW20	FW20	SWPG11	FWPG11
SW25	FW25	SWPG13	FWPG13
SW32	FW32	SWPG16	FWPG16
SW40	FW40	SWPG21	FWPG21
SW50	FW50	SWPG29	FWPG29
SW63	FW63	SWPG36	FWPG36
		SWPG42	
		SWPG48	FWPG48

earthing washers

shake proof washer

earth tag washer



metric thread part number	metric thread part number
SPW16	
SPW20	ET-M20
SPW25	ET-M25
SPW32	

fixing clips

plated steel with black pvc liner or stainless steel.

LFH liner available on request



to fit conduit size	part number	part number
10	FCC10	FCC10-SS*
12	FCC12	FCC12-SS*
16	FCC16	FCC16-SS
20	FCC20	FCC20-SS
25	FCC25	FCC25-SS
32	FCC32	FCC32-SS
40	FCC40	FCC40-SS
50	FCC50	FCC50-SS*
63	FCC63	
75	FCC75	

conduit clip

NEW

nylon conduit clip with integral lid - black or grey



conduit clip for corrugated	conduit clip for plain or rigid
FCL10	
FCL13	
FCL16	FCL16B-P
FCL20	FCL20B-P
FCL25	FCL25B-P
FCL34	FCL33B-P
FCL42	
FCL54	

cable glands

NEW

Our range of Cable glands provides an easy to assemble, fast fit, liquid tight solution for multipurpose applications.
Available in four colours, Black, Red (RAL 3020), White and Light Grey (RAL 7035) they have been designed to provide the highest degree of functionality and safety.



Thread Size.	Black Part No.	Red Part No.	White Part No.	Grey Part No.	Thread Length (mm)	Cable Dia (min) (mm)	Cable Dia (max) (mm)	Spanner Size (mm)	Pack Quantity
M16	CGM16B	CGM16R	CGM16W	CGM16G	11	5	10	22	100
M20	CGM20SB	CGM20SR	CGM20SW	CGM20SG	11	6	12	24	100
M20	CGM20B	CGM20R	CGM20W	CGM20G	11	10	14	27	100
M25	CGM25B	CGM25R	CGM25W	CGM25G	11	13	18	33	50
M32	CGM32B				11	18	25	41	25

Red, white and grey supplied with locknut. Black supplied without locknut.



Thread Size.	Nickel plated brass	Thread Length (mm)	Cable Dia (min) (mm)	Cable Dia (max) (mm)	Spanner Size (mm)	Pack Quantity
M16	B-M16-CG	12	4.5	10	20	10
M20	B-M20-CG	12	7	13	24	10
M25	B-M25-CG	12	9	17	29	10
M32	B-M32-CG	15	11	21	36	2
M40	B-M40-CG	15	19	28	45	2
M50	B-M50-CG	15	27	35	54	1

Technical Details

- Material: PA6
- IP Rating; IP68 (4 bar)
- Nitrile Rubber seal
- Produced and tested in accordance with EN 50262:1999
- Temperature range; -20˚C to +90˚C

Technical Details

- Material: Nickel plated brass
- IP Rating; IP68 (10bar) + IP69K
- Produced and tested in accordance with EN 50262:1999
- Temperature range;
  -40˚C to +100˚C (static)
  -20˚C to +100˚C (dynamic)
- UL Listed

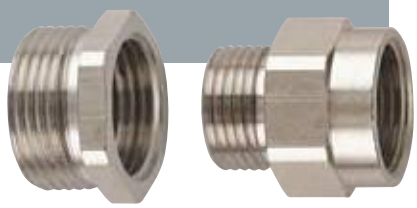
available on request: EMC versions, short threaded, Reduced clamp range.

STANDARDS

CE RoHS UL

* refer to technical details

convertors



nickel plated brass thread convertors, reducers and enlargers external and internal thread

Metric Threads

external thread	internal thread	M16	M20	M25	M32	M40	M50
M16			B-M16-M20				
M20		B-M20-M16		B-M20-M25			
M25			B-M25-M20		B-M25-M32		
M32				B-M32-M25		B-M32-M40	
M40					B-M40-M32		
M50					B-M50-M32	B-M50-M40	
M63						B-M63-M40	B-M63-M50
PG7		B-PG7-M16					
PG9		B-PG9-M16	B-PG9-M20				
PG11		B-PG11-M16	B-PG11-M20				
PG13.5		B-PG13-M16	B-PG13-M20				
PG16		B-PG16-M16	B-PG16-M20	B-PG16-M25			
PG21			B-PG21-M20	B-PG21-M25	B-PG21-M32		
PG29			B-PG29-M20	B-PG29-M25	B-PG29-M32	B-PG29-M40	
PG36					B-PG36-M32	B-PG36-M40	
PG42							
PG48						B-M48-M40	
½″ NPT			B-050-M20				
¾″ NPT			B-075-M20	B-075-M25			
1″ NPT					B-100-M32		

PG Threads

external thread	internal thread	PG7	PG9	PG11	PG13.5	PG16	PG21	PG29	PG36
M16		B-M16-PG7	B-M16-PG9	B-M16-PG11					
M20		B-M20-PG7	B-M20-PG9	B-M20-PG11	B-M20-PG13	B-M20-PG16	B-M20-PG21		
M25							B-M25-PG21		
M32								B-M32-PG29	
M40								B-M40-PG29	
M50									B-M50-PG36
PG7			B-PG7-PG9						
PG9		B-PG9-PG7		B-PG9-PG11					
PG11		B-PG11-PG7	B-PG11-PG9		B-PG11-PG13				
PG13.5		B-PG13-PG7	B-PG13-PG9	B-PG13-PG11		B-PG13-PG16			
PG16		B-PG16-PG7	B-PG16-PG9	B-PG16-PG11	B-PG16-PG13		B-PG16-PG21		
PG21				B-PG21-PG11	B-PG21-PG13	B-PG21-PG16		B-PG21-PG29	
PG29						B-PG29-PG16	B-PG29-PG21		B-PG29-PG36
PG36								B-PG36-PG29	
PG42									B-PG42-PG36
PG48									B-PG48-PG36

tools

The following tools and accessories are available to aid installation. See page 92 for cutting and assembly advice.
Alternatively visit our website & view our handy video clips to aid your installation.

clamp

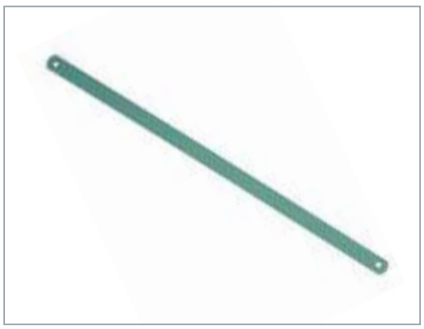
cutting vice to hold metallic conduits and guide hacksaw



Part Number	
BSB	clamp

hacksaw blade

fine tooth (32 TPI) blade for standard hacksaw



Part Number
HACKSAWBLADE

bandsaw

bench mounted, 240v, fine toothed (32TPI) bandsaw



Part Number	
BANDSAW	
BANDSAWBLADE	(spare blades)

conduit cutter

for any non metallic flexible and rigid conduits



Part Number	
CC01	up to 34mm conduits
CC02	up to 67mm conduits

slitting tool

can be used to slit all corrugated conduits down to 13mm



Part Number	
CS01	slitting tool

slit conduit insertion tool

for easy installation of wires into slit conduit.



Part Number	for conduit
ST16	**FPYS16 + FPYS12**
ST20	**FPYS20**
ST25	**FPYS25**
ST32	**FPYS32**

removal tool for push in Flexilok® fittings (see page 68)



Part Number	For use with:
RTPF20	**FLK16-PL20, FLK20-PL20, FLK21-PL20**
RTPF25	**FLK25-PL25, FLK28-PL25**
RTPF32	**FLK34-PL32**

STANDARDS

CE RoHS

Each pack contains:

10m conduit
10 fittings
10 locknuts

Benefits

- Simplistic ordering
- Easy storage
- Ready to use



FPYE-CP25B

IP66

PVC
white

NEW

FPL-CP20W	M20 thread
FPL-CP25W	M25 thread

- 10 metres of white corrugated UPVC FPL20 or FPL25
- Pliable conduit for static applications
- Self extinguishing
- 10 white nylon Flexilok fittings and locknuts FLK20-M20W or FLK25-M25W
- IP66
- 1 part, fast fit



SLIT POLYPROPYLENE
grey

NEW

FPPS-TP21G

- 10 metres of slit grey polypropylene FPP21G
- Self extinguishing
- Can be slipped over existing cables to tidy up and protect them
- 1 slit conduit insertion tool ST20





IP54

STEEL
- pvc coating - black

FSU-CP20B M20 thread



- 10 metres of galvanised steel with PVC coating
- Temperature range -15˚C to +70˚C
- Self extinguishing
- High mechanical strength
- Highly flexible
- 5 M20 fixed fittings
- 5 M20 swivel fittings
- 10 steel locknuts
- IP54

IP66

NYLON
- black

FPAS-CP21B M20 thread
FPAS-CP25B M25 thread



- 10 metres of standard weight nylon PA6 FPAS21 or FPAS25
- Low fire hazard
- Halogen free
- Self extinguishing
- Low smoke and Low toxicity
- High flexibility and fatigue life
- High impact strength
- Oil and solent resistant
- UV resistant
- Temperature range -40˚C to +120˚C
- 10 FPA fittings and locknuts FPA21-M20B or FPA25-M25B
- One part, fast fit
- Removable using a screwdriver
- High pull-off strength
- Anti-vibration
- IP66
- UV resistant

IP65

PVC SPIRAL
- black

FPC-CP20B M20 thread
FPC-CP25B M25 thread



- 10 metres of spiral reinforced pvc FPC20 or FPC25
- Highly flexible
- Accepts torsional movement
- Self extinguishing
- UV resistant
- Temperature range -5˚C to +70˚C
- 10 MPC fittings and locknuts
- IP65
- UV resistant

IP66

NYLON
- black

NEW

FPYE-CP20B M20 thread
FPYE-CP25B M25 thread



- 10 metres of light weight nylon PA6 FPAL20 or FPAL25
- Flexible
- Halogen free
- Self extinguishing
- Temperature range -40˚C to +120˚C
- 10 Flexilok fittings and locknuts FLK20-M20B or FLK25-M25B
- IP66
- One part, fast fit

IP66

POLYPROPYLENE
- black or grey

NEW

FPP-CP20B M20 thread
FPP-CP25B M25 thread



- 10 metres of polypropylene FPP20 or FPP25
- Temperature range -20˚C to +90˚C
- Self extinguishing
- To specify grey change B to a G eg: FPP-CP20G
- 10 Flexilok (PP) fittings and locknuts FLK20-M20-PP or FLK25-M25-PP
- IP66
- One part, fast fit

STANDARDS

CE RoHS

DON'T FORGET

See page 52



energy management products

Our Control products can be used to control lighting, heating and ventilation for the purpose of energy savings.







Energy management doesn't need to be complicated. Energy savings can be quickly realised by using our simple and easy to use range of Timer products.

Ensuring that lighting and other loads are only on when required can greatly reduce your electricity bill. Automatic control can offer improved functionality (by bringing lights on automatically when required rather than requiring a manual switching action) for building occupants as well as reducing your carbon footprint.

Lighting is one of the most significant loads within a building (often accounting for 70% in a commercial office environment). Our Control products can be used to control lighting, heating and ventilation for the purpose of energy savings.

Range of Products

- **Pneumatic push button timeswitches - FTS**
- **Electronic push button timeswitches - FTE** NEW



Flexicon Timeswitch range;

The easy to use, easy to fit switch that turns off automatically with an adjustable time delay.

- **No more switches left on - save money**
- **Reduce wasted energy and work to environmental targets**
- **Single gang design suits new installations or replaces existing wall switches**
- **Ideal for staircases, hallways and corridors**
- **Simple to install - fits standard 20mm or 25mm BS single gang accessory boxes**
- **IP66 version suitable for outdoor applications**
- **Slave connection available on Electronic switches**
- **Large push pad eases activation**
- **Aesthetic design - no screws visible fixing**

time delay switches





Pneumatic

Time Delay Switches

Part No.	Description
FTS40	**Single Pole Changeover**
FTS41	**Single Pole Changeover c/w Neon**
FTS42	**Double Pole Changeover**
FTS43	**Double Pole Changeover c/w Neon**
FTS163	**Weatherproof Shroud**

Product Selection;

- **Switch Current at 240V AC:**
  Incandescent (GLS) 6A
  Fluorescent 3A
  Compact fluorescent 3A
  (6 fittings max)
- **Adjustable Time Delay:**
  10 seconds to 10 minutes
- **Connections:**
  No neutral required
  NO (normally open) and NC (normally closed) contacts
  Use as intermediate if wired in parallel



FTS40

Electronic

Time Delay Switches

Part No.	Description
FTE2PBE	**Single pole timer - ECO**
FTE2PBP	**Single pole timer - Premier**

NEW

Product Selection;

- **Switch Current at 240V AC:**
  Incandescent (GLS) 16A
  Fluorescent 16A
  Compact fluorescent 16A
- **Adjustable Time Delay:**
  FTE2PBE 5 secs. to 20 mins.
  FTE2PBP 5 secs. to 2 hrs.
- **Connections:**
  No neutral required
  Use as intermediate if wired in parallel
  Slave connection available



FTE2PBP

Weatherproof Time Delay Switches

Part No.	Description
FTE2PBW	**Single pole timer - Waterproof**

NEW

Product Selection;

- **Switch Current at 240V AC:**
  Incandescent (GLS) 16A
  Fluorescent 16A
  Compact fluorescent 16A
- **Adjustable Time Delay:**
  FTE2PBW 5 secs. to 2 hrs.
- **Connections:**
  No neutral required
  Use as intermediate if wired in parallel
  Slave connection available
- **IP rating IP66**



FTE2PBW

- NB. For connection diagrams see pages 93 or visit our website.

resistance to chemicals

Page number	conduit system	ASTM NO. 1	ASTM NO. 2	ASTM NO. 3	ACETIC ACID (10%)	ACETONE	ALUMINIUM CHLORIDE	BENZENE	CARBON TETRACHLORIDE	CHLOROFORM	CITRIC ACID	COPPER SULPHATE	CRESOL	DIESEL OIL	DIETHYLAMINE	ETHANOL	ETHER	ETHYLAMINE	ETHYLENE GLYCOL	FREON 32	HYDROCHLORIC ACID (10%)	HYDROCHLORIC ACID (30%)
20	**FU** galvanised steel	✓	✓	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X
20	**SSU** stainless steel, grade 316	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X
22	**FSU** galvanised steel, pvc coated	X	X	X	L	X	X	X	X	X	✓	✓	L	L	X	X	X	X	L	L	✓	X
22	**FNU** galvanised steel, nylon coated	✓	✓	✓	L	✓	X	L	✓	X	✓	L	X	✓	✓	✓	✓	✓	✓	✓	X	X
24	**LFHU** galvanised steel, LFH coated	L	L	L	✓	X	X	X	X	X	✓	✓	X	X	✓	X	X	X	✓	X	X	X
24	**FPU** galvanised steel, polyurethane coated	✓	✓	✓	X	L	L	L	L	X	✓	✓	X	✓	L	✓	L	X	✓	X	X	X
26	**LTP** galv steel, pvc coated, liquid tight	L	L	L	✓	X	X	X	L	X	✓	✓	L	L	L	X	L	L	L	L	L	X
26	**LTPHC** galv steel, thermoplastic rubber, liquid tight	✓	L	L	✓	✓	X	X	L	L	✓	✓	✓	✓	✓	✓	✓	L	✓	X	✓	✓
26	**LTPUL** galv steel, pvc coated, liquid tight	✓	✓	✓	✓	X	X	X	L	X	✓	✓	L	✓	L	X	L	L	L	L	L	X
26	**LTPE** galv steel, pvc coated, liquid tight	✓	✓	✓	✓	X	X	X	L	X	✓	✓	L	✓	L	X	L	L	L	L	L	X
28	**LTPSS** stainless steel, pvc coated, liquid tight	✓	✓	✓	✓	X	X	X	L	X	✓	✓	L	✓	L	X	L	L	L	L	L	X
28	**LTPPU** galv steel, polyurethane coated, liquid tight	✓	✓	✓	X	L	L	L	L	X	✓	✓	X	✓	L	✓	L	X	✓	X	X	X
28	**LTBRDP** galv steel, braided core, pvc coated, liquid tight	✓	✓	✓	✓	X	X	X	L	X	✓	✓	L	✓	L	X	L	L	L	L	L	X
28	**LTBRDLFH** galv steel, braided core, pvc coated, liquid tight	L	L	L	✓	X	X	X	X	X	✓	✓	X	X	✓	X	X	X	✓	X	X	X
32	**FL** galvanised steel, pliable	✓	✓	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X
32	**FLP** galvanised steel, pvc coated, pliable	X	X	X	L	X	X	X	L	X	✓	✓	L	L	L	X	L	L	L	L	✓	L
32	**LFHP** galvanised steel, LFH coated, pliable	L	L	L	✓	X	X	X	X	X	✓	✓	X	X	✓	X	X	X	✓	X	X	X
34	**FSB** galv steel, pvc, galv steel overbraid	X	X	X	L	X	X	X	X	X	✓	✓	L	L	X	X	X	X	L	L	✓	X
34	**LFHUBRD** galv steel, LFH coated, SS316 overbraid	L	L	L	✓	X	X	X	X	X	✓	✓	X	X	✓	X	X	X	✓	X	X	X
36	**FB** galvanised steel, galv steel overbraid	✓	✓	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X
36	**FUSSB** galvanised steel, SS316 overbraid	✓	✓	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X
38	**LTPBRD** galv steel, rubber coated, SS316 overbraid	✓	L	L	✓	✓	X	X	L	L	✓	✓	✓	✓	✓	✓	✓	L	✓	X	✓	✓
40	**FPRSS** PA6 corrugated, SS316 overbraid	✓	✓	✓	L	✓	X	✓	✓	X	✓	L	X	✓	✓	✓	✓	✓	✓	✓	X	X
40	**FPRTC** PA6 corrugated, tinned copper overbraid	✓	✓	✓	L	✓	X	✓	✓	X	✓	L	X	✓	✓	✓	✓	✓	X	X	X	X
40	**FPISS** PA12 corrugated, SS316 overbraid	✓	✓	✓	L	✓	L	✓	✓	X	✓	L	X	✓	L	L	✓	L	✓	✓	X	X
40	**FPIHSS** PA12 corrugated, SS316 overbraid	✓	✓	✓	L	✓	L	✓	✓	X	✓	L	X	✓	L	L	✓	L	✓	✓	X	X

key

✓ good resistance
L limited resistance
PP suitable with polypropylene fittings
SS suitable with stainless steel fittings
X poor resistance

metallic conduit and fittings

HYDROGEN PEROXIDE (30%)	HYDROGEN PEROXIDE (60%)	LACTIC ACID	LUBRICATING OIL	METHANOL	METHYL BROMIDE	MEK	NITRIC ACID (10%)	NITRIC ACID (60%)	OXALIC ACID	OZONE (GAS)	PARAFFIN OIL	PETROL	PHENOL	SEA WATER	SILVER NITRATE	SKYDROL	SODIUM CHLORIDE	SODIUM HYDROXIDE (10%)	SODIUM HYDROXIDE (60%)	SULPHUR DIOXIDE (GAS)	SULPHURIC ACID (10%)	TOLUENE	TRANSFORMER OIL	1,1,1-TRICHLOROETHANE	TRICHLOROETHYLENE	TURPENTINE	VEGETABLE OIL	VINYL ACETATE	WATER	WHITE SPIRIT	ZINC CHLORIDE	
X	X	X	✓	✓	✓	✓	X	X	X	X	✓	✓	✓	X	X	✓	X	X	X	X	X	✓	✓	X	X	✓	✓	X	X	✓	X	**FU** galvanised steel
✓	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	✓	✓	SS	✓	✓	SS	✓	L	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	**SSU** stainless steel, grade 316
✓	✓	L	L	X	X	X	✓	✓	X	L	L	X	X	L	✓	X	X	✓	L	X	X	X	L	X	X	L	L	X	✓	L	✓	**FSU** galvanised steel, pvc coated
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	L	✓	✓	X	✓	✓	X	X	✓	✓	✓	L	✓	✓	L	✓	✓	X	**FNU** galvanised steel, nylon coated
X	X	✓	L	X	X	X	✓	X	✓	✓	X	X	X	L	✓	X	✓	✓	✓	X	X	L	L	L	L	X	L	X	✓	X	✓	**LFHU** galvanised steel, LFH coated
L	X	L	L	L	X	L	X	X	L	L	L	✓	X	✓	L	X	✓	L	X	L	L	X	L	X	X	X	✓	X	✓	L	L	**FPU** galvanised steel, polyurethane coated
L	X	L	✓	X	X	L	L	X	✓	L	✓	✓	L	SS	✓	X	SS	✓	✓	X	SS	X	L	X	X	L	✓	X	✓	L	X	**LTP** galv steel, pvc coated, liquid tight
L	X	L	L	✓	L	✓	✓	✓	✓	L	✓	✓	✓	SS	✓	✓	SS	✓	X	✓	SS	X	X	L	X	X	✓	✓	✓	X	✓	**LTPHC** galv steel, thermoplastic rubber, liquid tight
L	X	L	✓	X	X	X	L	X	✓	L	✓	✓	L	SS	✓	X	SS	✓	✓	X	SS	X	L	X	X	L	✓	X	✓	L	X	**LTPUL** galv steel, pvc coated, liquid tight
L	X	L	L	X	X	X	L	X	✓	L	L	✓	L	SS	✓	X	SS	✓	✓	X	SS	X	L	X	X	L	L	X	✓	L	X	**LTPE** galv steel, pvc coated, liquid tight
L	X	L	✓	X	X	X	L	X	✓	L	✓	✓	L	SS	✓	X	SS	✓	✓	X	SS	X	L	X	X	L	✓	X	✓	L	X	**LTPSS** stainless steel, pvc coated, liquid tight
L	X	L	L	L	X	L	X	X	L	L	L	✓	X	✓	L	X	✓	L	X	L	L	X	L	X	X	X	✓	X	✓	L	L	**LTPPU** galv steel, polyurethane coated, liquid tight
L	X	L	✓	X	X	L	L	X	✓	L	✓	✓	L	SS	✓	X	SS	✓	✓	X	SS	X	L	X	X	L	✓	X	✓	L	X	**LTBRDP** galv steel, braided core, pvc coated, liquid tight
X	X	✓	L	X	X	X	✓	X	✓	✓	X	X	X	L	✓	X	✓	✓	✓	X	X	L	L	L	L	X	L	X	✓	X	✓	**LTBRDLFH** galv steel, braided core, pvc coated, liquid tight
X	X	X	✓	✓	✓	✓	X	X	X	X	✓	✓	✓	X	X	✓	X	X	X	X	X	✓	✓	X	X	✓	✓	X	X	✓	X	**FL** galvanised steel, pliable
✓	✓	L	L	X	X	X	✓	✓	L	L	L	X	L	L	✓	X	L	✓	L	X	X	X	L	X	X	L	L	X	✓	L	✓	**FLP** galvanised steel, pvc coated, pliable
X	X	✓	L	X	X	X	✓	X	✓	✓	X	X	X	L	✓	X	✓	✓	✓	X	X	L	L	L	L	X	L	X	✓	X	✓	**LFHP** galvanised steel, LFH coated, pliable
X	X	X	L	X	X	X	X	X	X	X	L	X	X	X	X	X	X	X	X	X	X	X	L	X	X	L	L	X	X	L	X	**FSB** galv steel, pvc, galv steel overbraid
X	X	✓	L	X	X	X	✓	X	✓	✓	X	X	X	L	✓	X	✓	✓	✓	X	X	L	L	L	L	X	L	X	✓	X	✓	**LFHUBRD** galv steel, LFH coated, SS316 overbraid
X	X	X	✓	✓	✓	✓	X	X	X	X	✓	✓	✓	X	X	✓	X	X	X	X	X	✓	✓	X	X	✓	✓	X	X	✓	X	**FB** galvanised steel, galv steel overbraid
X	X	X	✓	✓	✓	✓	X	X	X	X	✓	✓	✓	X	X	✓	X	X	X	X	X	✓	✓	X	X	✓	✓	X	X	✓	X	**FUSSB** galvanised steel, SS316 overbraid
L	X	L	L	✓	L	✓	✓	✓	✓	L	✓	✓	✓	SS	✓	✓	SS	✓	X	✓	SS	X	X	L	X	X	✓	✓	✓	X	✓	**LTPBRD** galv steel, rubber coated, SS316 overbraid
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	L	✓	✓	L	✓	✓	X	**FPRSS** PA6 corrugated, SS316 overbraid
X	X	X	✓	L	X	✓	X	X	X	X	✓	✓	X	X	X	X	X	X	X	X	X	✓	✓	X	L	✓	X	L	✓	✓	X	**FPRTC** PA6 corrugated, tinned copper overbraid
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	L	X	X	✓	✓	✓	X	✓	✓	L	✓	✓	X	**FPISS** PA12 corrugated, SS316 overbraid
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	L	X	X	✓	✓	✓	X	✓	✓	L	✓	✓	X	**FPIHSS** PA12 corrugated, SS316 overbraid

The chart above is based on exposure to single chemicals at room temperature and should be used as a selection guide. For additional chemicals, higher concentrations, elevated temperatures or combinations of chemicals, please call +44 (0)1675 466900 for technical advice.

resistance to chemicals

Page number	conduit system	ASTM NO. 1	ASTM NO. 2	ASTM NO. 3	ACETIC ACID (10%)	ACETONE	ALUMINIUM CHLORIDE	BENZENE	CARBON TETRACHLORIDE	CHLOROFORM	CITRIC ACID	COPPER SULPHATE	CRESOL	DIESEL OIL	DIETHYLAMINE	ETHANOL	ETHER	ETHYLAMINE	ETHYLENE GLYCOL	FREON 32	HYDROCHLORIC ACID (10%)	HYDROCHLORIC ACID (30%)
50	**FPAS** nylon LFH PA6 corrugated, std weight	✓	✓	✓	L	✓	X	✓	✓	X	✓	L	X	✓	✓	✓	✓	✓	✓	✓	X	X
50	**FPAL** nylon PA6 corrugated, light weight	✓	✓	✓	L	✓	X	✓	✓	X	✓	L	X	✓	✓	✓	✓	✓	✓	✓	X	X
51	**FPAH** nylon LFH PA6 corrugated, heavy weight	✓	✓	✓	L	✓	X	✓	✓	X	✓	L	X	✓	✓	✓	✓	✓	✓	✓	X	X
51	**FPR** nylon extra LFH PA6 corrugated, std weight	✓	✓	✓	L	✓	X	✓	✓	X	✓	L	X	✓	✓	✓	✓	✓	✓	✓	X	X
51	**FPI** nylon PA12 corrugated, standard weight	✓	✓	✓	L	✓	L	✓	✓	X	✓	L	X	✓	L	L	✓	L	✓	✓	X	X
51	**FPIH** nylon PA12 corrugated, heavy weight	✓	✓	✓	L	✓	L	✓	✓	X	✓	L	X	✓	L	L	✓	L	✓	✓	X	X
52	**FPY** nylon PA6 corrugated, light weight	✓	✓	✓	L	✓	X	✓	✓	X	✓	L	X	✓	✓	✓	✓	✓	✓	✓	X	X
52&69	**FPADS** nylon PA6 double slit corrugated	✓	✓	✓	L	✓	X	✓	✓	X	✓	L	X	✓	✓	✓	✓	✓	✓	✓	X	X
52	**FPP** polypropylene corrugated, std weight	✓	✓	L	PP	✓	L	L	L	L	✓	L	X	✓	✓	✓	✓	✓	✓	✓	PP	PP
52	**FPP-NFR** polypropylene corrugated, non flame retarded	✓	✓	L	PP	✓	L	L	L	L	✓	L	X	✓	✓	✓	✓	✓	✓	✓	PP	PP
52	**FPPH** polypropylene corrugated, heavy weight	✓	✓	L	PP	✓	L	L	L	L	✓	L	X	✓	✓	✓	✓	✓	✓	✓	PP	PP
72	**FPCB** pvc spiral reinforced black	X	X	X	L	X	L	X	L	X	✓	L	X	L	L	X	L	L	L	L	X	X
72	**FPCG** pvc spiral reinforced grey	X	X	X	L	X	L	X	L	X	✓	L	X	L	L	X	L	L	L	L	X	X
72	**FPCGN** pvc spiral reinforced green oil resistant	✓	✓	✓	✓	X	X	X	L	X	✓	✓	L	✓	L	X	L	L	L	L	L	X
72	**FPCBU** pvc spiral reinforced blue high temperature	X	X	X	L	X	L	X	L	X	✓	L	X	L	L	X	L	L	L	L	X	X
74	**LPC** smooth, pvc spiral reinforced	✓	✓	✓	✓	X	X	X	L	X	✓	✓	L	✓	L	X	L	L	L	L	L	X
74	**LPCO** smooth pvc spiral orange ultra flexible	✓	✓	✓	✓	X	X	X	L	X	✓	✓	L	✓	L	X	L	L	L	L	L	X
74	**LPCGN** smooth pvc spiral green oil resistant	✓	✓	✓	✓	X	X	X	L	X	✓	✓	L	✓	L	X	L	L	L	L	L	X
74	**LPCBU** smooth pvc spiral blue high temperature	✓	✓	✓	✓	X	X	X	L	X	✓	✓	L	✓	L	X	L	L	L	L	L	X
76&69	**FPL** upvc corrugated	✓	✓	✓	L	X	L	X	L	X	✓	L	X	✓	L	✓	✓	L	✓	L	X	X
77	**FPY** nylon PA6, large diameter, std weight	✓	✓	✓	L	✓	X	✓	✓	X	✓	L	X	✓	✓	✓	✓	✓	✓	✓	X	X

key

✓ good resistance
L limited resistance
PP suitable with polypropylene fittings
SS suitable with stainless steel fittings
X poor resistance

non-metallic conduit and fittings

HYDROGEN PEROXIDE (30%)	HYDROGEN PEROXIDE (60%)	LACTIC ACID	LUBRICATING OIL	METHANOL	METHYL BROMIDE	MEK	NITRIC ACID (10%)	NITRIC ACID (60%)	OXALIC ACID	OZONE (GAS)	PARAFFIN OIL	PETROL	PHENOL	SEA WATER	SILVER NITRATE	SKYDROL	SODIUM CHLORIDE	SODIUM HYDROXIDE (10%)	SODIUM HYDROXIDE (60%)	SULPHUR DIOXIDE (GAS)	SULPHURIC ACID (10%)	TOLUENE	TRANSFORMER OIL	1,1,1-TRICHLOROETHANE	TRICHLOROETHYLENE	TURPENTINE	VEGETABLE OIL	VINYL ACETATE	WATER	WHITE SPIRIT	ZINC CHLORIDE	
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	L	✓	✓	L	✓	✓	X	**FPAS** nylon LFH PA6 corrugated, std weight
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	L	✓	✓	L	✓	✓	X	**FPAL** nylon PA6 corrugated, light weight
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	L	✓	✓	L	✓	✓	X	**FPAH** nylon LFH PA6 corrugated, heavy weight
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	L	✓	✓	L	✓	✓	X	**FPR** nylon extra LFH PA6 corrugated, std weight
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	L	X	X	✓	✓	✓	X	✓	✓	L	✓	✓	X	**FPI** nylon PA12 corrugated, standard weight
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	L	X	X	✓	✓	✓	X	✓	✓	L	✓	✓	X	**FPIH** nylon PA12 corrugated, heavy weight
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	L	✓	✓	L	✓	✓	X	**FPY** nylon PA6 corrugated, light weight
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	L	✓	✓	L	✓	✓	X	**FPADS** nylon PA6 double slit corrugated
X	X	PP	✓	L	X	✓	PP	PP	PP	X	✓	✓	X	✓	✓	✓	✓	✓	✓	PP	PP	✓	✓	L	L	X	✓	L	✓	✓	X	**FPP** polypropylene corrugated, std weight
X	X	PP	✓	L	X	✓	PP	PP	PP	X	✓	✓	X	✓	✓	✓	✓	✓	✓	PP	PP	✓	✓	L	L	X	✓	L	✓	✓	X	**FPP-NFR** polypropylene corrugated, non flame retarded
X	X	PP	✓	L	X	✓	PP	PP	PP	X	✓	✓	X	✓	✓	✓	✓	✓	✓	PP	PP	✓	✓	L	L	X	✓	L	✓	✓	X	**FPPH** polypropylene corrugated, heavy weight
L	X	L	L	X	X	X	X	X	L	X	L	X	X	✓	✓	X	✓	✓	L	X	X	X	L	X	X	L	L	X	✓	L	X	**FPCB** pvc spiral reinforced black
L	X	L	L	X	X	X	X	X	L	X	L	X	X	✓	✓	X	✓	✓	L	X	X	X	L	X	X	L	L	X	✓	L	X	**FPCG** pvc spiral reinforced grey
L	X	L	✓	X	X	X	L	X	✓	L	✓	✓	L	SS	✓	X	SS	✓	✓	X	SS	X	L	X	X	L	✓	X	✓	L	X	**FPCGN** pvc spiral reinforced green oil resistant
L	X	L	L	X	X	X	X	X	L	X	L	X	X	✓	✓	X	✓	✓	L	X	X	X	L	X	X	L	L	X	✓	L	X	**FPCBU** pvc spiral reinforced blue high temperature
L	X	L	✓	X	X	X	L	X	✓	L	✓	✓	L	SS	✓	X	SS	✓	✓	X	X	X	L	X	X	L	✓	X	✓	L	X	**LPC** smooth, pvc spiral reinforced
L	X	L	✓	X	X	X	L	X	✓	L	✓	✓	L	SS	✓	X	SS	✓	✓	X	X	X	L	X	X	L	✓	X	✓	L	X	**LPCO** smooth pvc spiral orange ultra flexible
L	X	L	✓	X	X	X	L	X	✓	L	✓	✓	L	SS	✓	X	SS	✓	✓	X	SS	X	L	X	X	L	✓	X	✓	L	X	**LPCGN** smooth pvc spiral green oil resistant
L	X	L	✓	X	X	X	L	X	✓	L	✓	✓	L	SS	✓	X	SS	✓	✓	X	X	X	L	X	X	L	✓	X	✓	L	X	**LPCBU** smooth pvc spiral blue high temperature
X	X	L	✓	L	X	X	X	X	L	X	✓	✓	X	✓	✓	X	✓	✓	✓	X	X	X	✓	X	X	✓	✓	X	✓	✓	X	**FPL** upvc corrugated
X	X	L	✓	L	X	✓	X	X	L	X	✓	✓	X	✓	✓	✓	✓	✓	✓	X	X	✓	✓	✓	L	✓	✓	L	✓	✓	X	**FPY** nylon PA6, large diameter, std weight

The chart above is based on exposure to single chemicals at room temperature and should be used as a selection guide. For additional chemicals, higher concentrations, elevated temperatures or combinations of chemicals, please call +44 (0)1675 466900 for technical advice.

thread data and cable carrying capacity

metric

standard thread conforming to EN60423

Thread size	External thread outside diameter (mm)	Internal thread inside diameter (mm)	Pitch mm
M12	12.0	10.4	1.5
M16	16.0	14.4	1.5
M20	20.0	18.4	1.5
M25	25.0	23.4	1.5
M32	32.0	30.4	1.5
M40	40.0	38.4	1.5
M50	50.0	48.4	1.5
M63	63.0	61.4	1.5
M75	75.0	73.4	1.5

PG

German standard thread conforming to DIN40430

Thread size	External thread outside diameter (mm)	Internal thread inside diameter (mm)	Pitch mm
PG7	12.5	11.3	1.27
PG9	15.2	13.9	1.41
PG11	18.6	17.3	1.41
PG13.5	20.4	19.1	1.41
PG16	22.5	21.2	1.41
PG21	28.3	26.8	1.59
PG29	37.0	35.5	1.59
PG36	47.0	45.5	1.59
PG42	54.0	52.5	1.59
PG48	59.3	57.8	1.59

NPT

American taper pipe thread conforming to ANS/ASME B1.20.1 - 1983

Thread size (inches)	External thread outside diameter (mm)	Pitch mm
⅜"	16.7	1.14
½"	21.0	1.81
¾"	26.4	1.81
1"	33.3	2.21
1¼"	41.9	2.21
1½"	47.8	2.21
2"	59.6	2.21

PF/ gas

Japanese conduit thread conforming to JIS B 0202

Thread size (inches)	External thread outside diameter (mm)	Internal thread inside diameter (mm)	Pitch mm
½"	21.0	18.6	1.81
¾"	26.4	24.1	1.81
1"	33.3	30.3	2.31
1¼"	41.9	39.0	2.31
1½"	47.8	44.8	2.31
2"	59.6	56.7	2.31

UNEF/UNS/UN

American unified thread conforming to BS1580 used on circular connectors

UNEF imperial sizes	Thread size (inches)	External thread outside diameter (mm)	Internal thread inside diameter (mm)	Pitch mm
⅝" - 24 UNEF	⅝"	15.9	14.7	1.06
¾" - 20 UNEF	¾"	19.1	17.7	1.27
⅞" - 20 UNEF	⅞"	22.2	20.9	1.27
1" - 20 UNEF	1"	25.4	24.0	1.27
1⅜" - 18 UNEF	1⅜"	30.2	28.6	1.41
1⅜" - 18 UNEF	1⅜"	34.9	33.4	1.41
1¼" - 18 UNEF	1¼"	31.8	30.2	1.41
1⅞" - 18 UNEF	1⅞"	36.5	35.0	1.41
1¾" - 18 UNS	1¾"	44.5	42.9	1.41
2" - 18 UNS	2"	50.8	49.3	1.41
2¼" - 18 UN	2¼"	57.2	55.4	1.41

cable carrying capacity

UK wiring regulations BS7671, recommend that the total cross sectional area of the sum of the individual cables should not exceed 40% of the cross sectional area of the conduit. The nominal cross sectional area of single-core, stranded, PVC insulated cables is provided as a guide only. Other cables may have different dimensions.

Nominal conductor size (mm^2)	Nominal overall cross sectional area (mm^2) of cable
1.0	6.6
1.5	7.6
2.5	9.6
4.0	14.5
6.0	18.8
10.0	29.3
16.0	40.2
25.0	63.8
35.0	83.5
50.0	113.0
70.0	149.0
95.0	204.0

Example: is LTP20 suitable for five 4.0mm^2 cables?

- The total cross sectional area of the conductors is 5 x 14.5mm^2 = 73mm^2
- The cross sectional area of LTP20 is 3.142 x $\left[\frac{\text{inside diameter}}{2}\right]^2$ = 201mm^2
- % of conduit cross sectional area $\frac{73}{201}$ = 36%

This is less than 40%; therefore this conduit is suitable for this combination of cables.

UK wiring regulations

UK wiring regulations BS7671 prohibit the use of flexible or pliable conduit as an earthing conductor.

Where conduits of 40mm and above penetrate fire barriers in buildings the wiring regulations stipulate that internal seals should be used to maintain fire resistance.

To meet the UK wiring regulations conduit should be self extinguishing unless they are to be buried or contained in non combustible material e.g: concrete or plaster.

Please telephone the Flexicon hotline for further guidance.

IP rating and technical guidance

IP ratings guide

(Ingress Protection to BS EN 60529)

IP40

1st digit – protection against solid objects

0	No protection
1	Protected against objects greater than 50mm
2	Protected against objects greater than 12mm
3	Protected against objects greater than 2.5mm
4	Protected against objects greater than 1.0mm
5	Ingress of dust is not totally prevented but dust does not enter in harmful quantities
6	No ingress of dust

IP40

2nd digit – protection against water

0	No protection
1	Protected against falling drops
2	Protected against drops falling at 15°
3	Low pressure spray – similar to shower head at up to 60° from vertical
4	Low pressure spray – similar to shower head – from any angle for 5 minutes
5	Medium pressure jet – similar to garden hose – from any angle for 3 minutes
6	High pressure jet – similar to fire hose – from any angle for 3 minutes
7	Submersion at 1 metre for 30 minutes
8	Higher water pressure eg: 2 bar for 2 hours. Conduits are tested in-house at up to 10 bar. (equivalent to 100m underwater)
9K	Steam clean, high pressure high temp jet wash to DIN40050.

Buyer beware

IP tests are type tests of short duration and do not guarantee long term performance. EN 60529 states that equipment conforming to to IP67 or IP68 cannot be assumed to meet IP66 and that the manufacturer shall declare the pressure and duration of the test, for example, FPAX 2 bar for 2 hours.

Technical guidance

Application advice

Flexicon can offer impartial advice on which of our wide range of conduit systems is most suited to your application. Factors which may be important include:-

- Compression strength
- Tensile strength
- Impact strength
- Temperature range
- Flexibility
- Fatigue life
- Electrical insulation or continuity
- IP rating
- Chemical resistance
- Corrosion resistance
- Abrasion resistance
- UV resistance
- Anti vibration
- Fire performance
- EMC screening
- Dimensions
- Weight
- Colours
- Ease of installation
- Anti tamper
- Hazardous Areas

Standards, performance and approvals

Flexicon conduits and fittings are manufactured by Flexicon to comply with the IEC and European conduit standard BS EN IEC 61386 - see classification table below.

Certain tests are carried out internally by Flexicon, other testing is carried out externally by accredited test laboratories. Specific test reports are available upon request.

Vibration and shock testing to EN61373 Cat 2.

Certain conduit systems have been tested and approved to the relevant parts of the Australian Standard AS2053.

Where product performance data over and above the requirements of BS EN IEC 61386 is provided e.g: Low Fire Hazard testing and EMC screening, other appropriate standards have been used.

Cable glands are manufactured to EN 50262.

Push button timers are manufactured to EN 60730-2-7.

Further information regarding standards and approvals can be found on page 96.

Technical data sheets are available for most products
Please call 01675 466900 for technical information and application advice.

Flexicon has classified EMC screening as follows

STANDARD EMC SCREEN ★	ENHANCED EMC SCREEN ★★	SUPER EMC SCREEN ★★★
Standard 50dB @ IMHz	Enhanced 60dB @ IMHz	Super 70dB @ IMHz

Classification of conduit systems to BS EN IEC 61386

Level	1st digit Compression Strength N/50mm	2nd digit Impact Strength Joules at min temp	3rd digit Minimum Temp deg C	4th digit Maximum Temp deg C	5th digit Conduit Type	6th digit Electrical Properties	7th digit IP Rating Solids	8th digit IP Rating Water	9th digit Corrosion Resistance (water)	10th digit Tensile Strength N	11th digit Flame Propogation	12th digit Suspended Load N/48hr
0						None declared		0	None declared	None declared		
1	V. Light (125)	V. Light (0.5)	5	60	Rigid	Continuous		1	Low in & out	V. Light (100)	Non Flame Propogating	V. Light (20)
2	Light (320)	Light (1)	-5	90	Pliable	Insulating		2	Medium in & out	Light (250)	Flame Propogating	Light (30)
3	Medium (750)	Medium (2)	-15	105	Pliable self recoving	Continuous + Insulating	3	3	Medium in & high out	Medium (500)		Medium (150)
4	Heavy (1250)	Heavy (6)	-25	120	Flexible		4	4	High in & out	Heavy (1000)		Heavy (450)
5	V. Heavy (4000)	V. Heavy (20)	-45	150			5	5		V. Heavy (2500)		V. Heavy (850)
6				250			6	6				
7				400				7				

cutting & assembly guidance

Visit our website for instructional videos offering useful hints on how to speed up your conduit installation using our products – **www.flexicon.uk.com**

Cutting Conduit

Non-Metallic



Non-metallic conduits and FLP up to 34mm can be easily cut with Flexicon Conduit Cutters, part no. CC01. Use CC02 for sizes up to 67mm. Drop the blade into a corrugation and squeeze and twist until conduit is cut 50% through. Cut the remaining 50% without twisting to achieve a square cut.

Metallic



Metallic conduits should be cut with a fine tooth (32 TPI) hacksaw or bandsaw. Ensure you make a straight vertical cut. Our clamping vice, part no. BSB makes the use of a hacksaw much easier.

Overbraided



Cutting of overbraided conduit is made much easier by tightly wrapping self adhesive tape around the conduit and sawing through the middle of the tape. The tape should be removed if EMC screening is required. Ensure you make a straight vertical cut.

Flexicon offer a bench mounted bandsaw designed to cut metallic conduit easily – see Page 81. Conduit length is measured under light tension. When cutting an exact number of lengths from a reel (e.g. 5 x 5m from 25m) please take into account the length tolerance of the reel and each cut length.

Non-Metallic Fittings

FPA Fitting



Our range of non-metallic conduit fittings, Flexilok®, FPA and FPAX are all push fit fittings which are quick to assemble once you have cut the conduit to length.

FPA



For Flexilok® and FPA fittings simply push the conduit into the end of the fitting with a slight twist until it will go no further. Pull back slightly to ensure the locking teeth mechanism has engaged with the corrugations.

FPAX



The FPAX fitting features a conduit seal to provide the ultimate IP rating up to IP69K. This simply fits onto the end of the conduit before the fitting is connected to the conduit. To aid assembly moisten this seal. An FPA fitting cannot be uprated to IP69K with the addition of a seal. Pull back slightly to ensure the locking teeth mechanism has engaged with the corrugations.

To remove the FPA or FPAX fittings simply insert a small screwdriver into the screwdriver slot and move the screwdriver handle towards the "off" position. Remove the screwdriver then manually twist the cap further towards the off position - the fitting can then be released from the conduit. Once removed, the fitting can be reused by simply twisting the cap so that the screwdriver slot lines up with the ON position.

Metallic Fittings

FSU Conduit



Our fitting's components are supplied part assembled to illustrate how they go together. Our C type fittings consist of a compression nut, an elastomeric seal, an insert and a body.

Insert being fitted



Firstly place the back nut on the conduit followed by the seal (note the orientation). Next, screw the insert into the end of the conduit until this gives a secure fit.

Attaching the body



Bring the body to mate with the back nut. Metal fittings should be tightened with grips or spanner to ensure security and IP rating.

cutting & assembly guidance

BRAIDED FITTINGS

Our type-C braided fittings consist of an outer compression nut, an inner compression nut, an elastomeric seal, an insert and a body. Firstly place the outer compression nut on the conduit as per 1. Remove the tape securing the braid and pull back to allow the inner compression nut to be fitted as per 2. Next, fit the elastomeric seal (note the orientation) and screw the insert into the end of the conduit until this gives a secure fit as per 3.

Bring the body to mate with the inner compression nut and secure. Next, bring the back shell to mate with the inner compression nut to secure the braid as per 4. Metal fittings should be tightened with grips or spanner to ensure securing and IP rating as per 5.



EMC SCEENING USING PLIABLE CONDUIT

To obtain EMC screening on pliable FLP conduit, the PVC sheath must be trimmed back prior to assembly of the fitting to ensure good electrical contact with the tapered bore of the fitting body as shown



FLP conduit with sheath trimmed back

PUSH IN FLEXILOK® REMOVAL TOOL

Snap in Flexilok® fittings can be removed by using a tool – see page 81



GENERAL

We recommend that SW rubber sealing washers are used with plastic threads and FW fibre washers are used with metal threads to maintain IP rating between systems, see page 79.

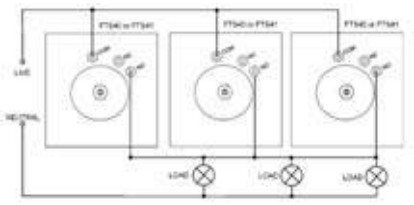
The easiest way of installing cables into flexible and pliable conduit is to simultaneously draw in the cables with the conduit in straight condition before installation.

Energy Management Products

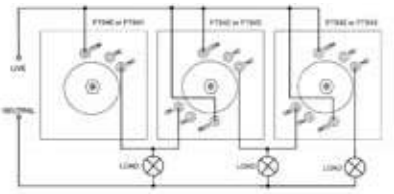
Refer to our website to view a copy of our product instruction sheets

FTS Pneumatic Timeswitch connections

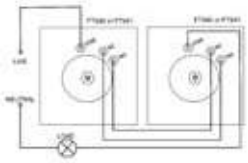
1. Corridor lighting



2. Staircase lighting

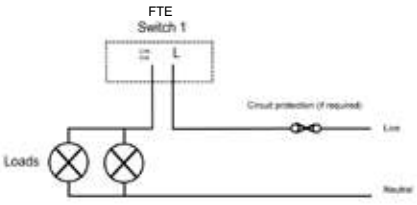


3. Two way switching

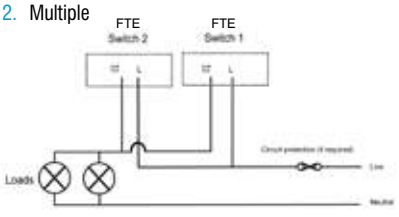


FTE Electronic Timeswitch connections: FTE2PBE, FTE2PBP and FTE2PBW

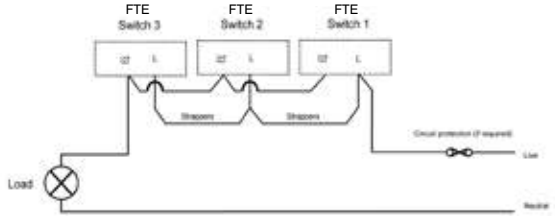
1. Conventional



2. Multiple



3. Replace intermediate



Safety Warning:

The product should be installed by a qualified electrician in accordance with the latest edition of the UK wiring regulations.

Disconnect the power supply before attempting any work on the Timer or connected circuits.

The electrical connection lead must be dead during installation. Therefore, switch off the mains power first and verify that the circuit is dead using a voltage tester.

low fire hazard (LFH) performance

LFH encompasses LSF (low smoke and fume) and LSOH (low smoke zero halogen)

Low Fire Hazard (LFH) conduit systems are becoming an increasing part of the specification in many cabling applications. Public buildings, retail outlets, high rise office blocks, hospitals and transport installations - these are just a few of the instances where Low Fire Hazard products may be demanded.

Low Fire Hazard systems are required to protect personnel and property in the event of a fire and may be demanded by specifiers, occupiers, fire services or even insurers.

At Flexicon we define a Low Fire Hazard product by having **all** of the following properties:

- **Highly Flame Retardant** to prevent a fire or limit its development if one does start.
- **Low Smoke** emission in the event of a fire to enable personnel to see their way to escape.
- **Low Toxicity** in the event of a fire to ensure personnel are not overcome during their escape.
- **Halogen Free** gives an indication of low smoke and low toxicity. It also rules out halogen acid gas emission - a fact that is of interest to insurers as acid smoke can destroy computer equipment and damage the structure of a building. Halogens are Fluorine, Chlorine, Bromine and Iodine.

Tests used

Flame Retardancy BS EN IEC 61386 tests that conduits and fittings are self extinguishing. Vertical samples of conduit are subjected to a 1KW flame test. Fittings are subjected to a 750°C glow wire test.

BS EN ISO 4589 determines the Limiting Oxygen Index (LOI) of a material. This is the percentage of oxygen in the air that would have to be present for the material to burn. Normal air contains 21% oxygen, BS 6853:1999, the UK code of practice for railway rolling stock requires 28% LOI for overground and 34% LOI for underground passenger carriages.

UL 94 is a UL (Underwriters Laboratories) standard to assess the flammability of materials. Classifications are HB, V2, V1, and V0 in order of increasing flame retardancy. UL 94 HB allows horizontal burning up to a certain rate, UL 94 V0 is highly flame retardant.

Smoke Opacity is evaluated by burning a known amount of product or material in a specified smoke chamber. A light is shone through the smoke and the loss in transmittance of light is measured over time.

Toxicity is evaluated by burning a sample of material under known conditions. The fumes are analysed to find the volume of each gas that is given off. The volume of each gas is multiplied by its toxic potency to give a toxicity index for the material.

Standards

All of the following standards assess flame retardancy, smoke emission and toxicity including halogen content.

BS 6853	UK rail rolling stock
LUL 1-085	London Underground rolling stock and stations
NFF 16-101/2	French rail rolling stock
DIN 5510	German rail rolling stock
TS 45545	New European rail rolling stock
AS/NZS 1530	Australian/New Zealand rail rolling stock
Defence Standard 61-12 part 31	UK Ministry Of Defence

Buyer Beware

All four properties: **Highly Flame Retardant, Low Smoke, Low Toxicity, Halogen Free,** must be present to claim LFH.

Halogen free does not assure low smoke and low toxicity.

A low smoke and fume product may not be self-extinguishing let alone highly flame retardant. Ensure your supplier provides performance data on all four aspects of Low Fire Hazard performance.

Full independent test reports are available on request.

STANDARD LOW FIRE HAZARD ★

EXTRA LOW FIRE HAZARD ★★

INHERENT LOW FIRE HAZARD ★★★

Performance of Flexicon LFH Products

FU, SSU, FB, FUSSB and metal fittings

These products are made exclusively of metal (steel, stainless steel or brass) and are all inherently low fire hazard.

Fully compliant to LUL Std I-085 LUL product registration certificate 296.

LFHU, LFHP, LTBRDLFH and LFHUBRD

Self extinguishing	to EN 61386
Highly flame retardant	LOI = 43% UL 94 V0
Low smoke to BS6853	maximum opacity Ao = 0.01
Compliant to BS 6853:1999 - Table 7 Interior use, for Categories 1a, 1b, II Table 8 Exterior use, for Categories 1a, 1b, II Compliant with GM/RT2120 issue 2, Appendix 1	
Low toxicity	toxicity index to NES713 = 1
Compliant to LUL Std I-085 Limited and dispersed use. LUL product registration certificate 297	
Halogen, sulphur & phosphorus free	

FPAS and FPAH

Self extinguishing	to EN 61386
Highly flame retardant	LOI = 26% UL 94 V2
Low smoke to BS6853	maximum opacity Ao = 0.02
Low toxicity	toxicity index to BS6853 Annex B = 1.55
Ignition and fume rating to	NFF16-101/2 = I4F1
Halogen, sulphur & phosphorus free	



FPI, FPIH, FPISS and FPIHSS

Self extinguishing	to EN 61386
Flame retardant	LOI = 22%
Low smoke to BS6853	maximum opacity Ao = 0.05
Low toxicity	toxicity index to BS6853 Annex B = 1.32
Ignition and fume rating to	NFF16-101/2 = I4F2
Halogen, sulphur & phosphorus free	

FPR, FPRSS and FPRTC

Self extinguishing	to EN 61386
Highly flame retardant	- LOI = 35% - UL 94 V0
Low smoke to BS6853	- maximum opacity Ao = 0.01
Compliant to BS 6853:1999 - Table 7 Interior use, for Categories 1a, 1b, II Table 8 Exterior use, for Categories 1a, 1b, II Compliant with GM/RT2120 issue 2, Appendix 1	
Low toxicity	- toxicity index to BS6853 Annex B = 0.99
Ignition and fume rating to	- NFF16-101/2 = I2F1
DIN 5510 rating = S4 SR2 ST2	
Compliant to LUL Std I-085 Limited and dispersed use LUL product registration certificate 298	
Halogen, sulphur & phosphorus free	

Nylon fittings (PA66)

Self extinguishing	to EN 61386
Highly flame retardant	- LOI = 28% - UL 94 V2
Low smoke to BS6853	- maximum opacity Ao = 0.03
Compliant to BS 6853:1999 - Table 7 Interior use, for Category II Table 8 Exterior use, for Category II Compliant with GM/RT2120 issue 2, Appendix 1	
Low toxicity	- toxicity index to NES713 = 10
Ignition and fume rating to	- NFF16-101/2 = I3F2
Halogen, sulphur & phosphorus free	

Standards and Approvals

FM58347

BSEN ISO9001 2008

ISO 9001

Flexicon is accredited to ISO 9001 2008 by the British Standards Institution (BSI) for the design and manufacture of conduit systems and accessories. Certificate No FM58347.



BS EN IEC 61386

BS EN IEC 61386

BS EN IEC 61386 is the new worldwide standard for conduit systems and is superceding the previous European conduit standard EN 50086. Flexicon were one of the first companies in the UK to have its products tested to the new standard.

Our Technical Director, Ian Gibson, is the chairman of both the IEC (worldwide) and CENELEC (European) committees that prepare conduit standards.

CE

Flexicon are marked with the CE mark to show that they comply with the essential requirements of the relevant European Directives.

RoHS

All Flexicon's products meet the requirements of the European RoHS Directive, Restriction of Hazardous substances. This precludes the use of certain toxic materials and heavy metals.

REACH

All Flexicon products in the catalogue meet the requirement of the European REACH regulation, Regulation, Evaluation, Authorisation and restriction of Chemicals.

Lloyds Register of Shipping Type Approval

Specific conduit systems from Flexicon have Lloyds Register of Shipping Type Approval having been assessed for suitability for marine and other arduous applications.



Standards Australia (AS)

Standards Australia (AS)

Standards Australia is Australia's peak standards body. It co-ordinates standardisation activities, develops internationally aligned Australian Standards and facilitates the accreditation of other Standards Development Organisations. Certain conduit systems have been tested and approved to the relevant parts of the Australian Standard AS2053.

WEEE

Flexicon's conduit products are not covered by the European WEEE Directive, Waste Electrical and Electric Equipment.

North American Approvals



Most of Flexicon's nylon conduits and fittings have UL (Underwriters Laboratories) recognition for component use within UL listed equipment. File No. E229161.

Some nylon conduits have cUL listing to the UL standard UL1660 and CSA standard C22.2 No. 227.2.1. File No. 246572.

Some nylon fittings have cUL listing to UL514B and CSA standard C22.2 No. 18.3-04. File No. E247502.

LTPUL conduit is UL listed to UL360 and CSA approved.

FPC conduits and MPC fittings are UL recognised to UL1696 and CSA standard 22.2 No. 227 for use in USA and Canada. File No. E229161.

Rail accreditations



Flexicon's Low Fire Hazard conduits and fittings have been independently tested to following international rail fire standards.

France NFF 16-101/2, Germany DIN 5510, UK BS 6853, London Underground LUL 1-085 GM/RT2120, Australia/New Zealand AS/NZS 1530, European TS 45545.

Flexicon holds a wide range of Product Registration Certificates issued by Transport for London, London Underground Ltd.

Hazardous Area Approvals

Flexicon's EXD glands have been tested and accredited by SIRA to both ATEX and IECEx Ex d, Ex e and Ex t applications.

UK MOD

Flexicon is a registered supplier to the UK Ministry of Defence NCAGE No. U5256 and holds NATO codification numbers for specific conduits.

BEAMA Installation Member

BEAMA Installation Limited is the UK's trade body for manufacturers of electrical installation and cable management products.

Errors, omissions and amendments excepted

Information given in this catalogue is for guidance only as our policy is one of continuous development and specifications may change. Flexicon is not liable for claims arising from product misuse.

Terms and Conditions of Sale

Products are supplied subject to Flexicon terms and conditions of sale. These can be viewed on our website www.flexicon.uk.com

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