

# metallic conduit & fittings













# metallic selection application guide

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	<b>FSU</b> 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	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	<b>   </b>	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	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	galvanised steel, galv steel overbraid	IIII ereveevannan	IP40	350	120	45	zinc
36	FUSSB galvanised steel, SS316 overbraid	IIII eeessessessesses	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











## metallic conduit and fittings

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	•		•	•	•		•		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	•		•	•	•				LFH U 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			galvanised steel, pliable
	-15°C to +70°C		•			•	70dB		•	FLP galvanised steel, pvc coated, pliable
	-25°C to +90°C		•	•	•	•	70dB			<b>LFHP</b> galvanised steel, LFH coated, pliable
	-15°C to +70°C	•				•	55dB	•		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	•		F E3 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









# metallic selection guide































- 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





















IP66 IP67 IP68 IP69K

Liquid Tight Stainless Steel















19 See Pg 80

## FU & SSU system

galvanised steel and stainless steel



## **CONDUIT**

## **FITTINGS**

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.

#### fixed external thread stainless steel

M-SS

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

## SSU

office blocks.

FU

self colour

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

Construction: Galvanised steel, helically

Typical Applications: Underfloor wiring in

wound, flexible conduit. Colour zinc,

**Typical Applications:** Instrumentation and security.









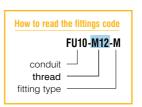


nominal size (mm)	FU nart number		SSU part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)
10	FU10	+ 25, 50	SSU10	<sup>+</sup> 10, 25	9.0	6.8	25
12	FU12	25, 50	SSU12	10, 25	13.0	10.2	30
16	FU16	10, 25, 50	SSU16	10, 25	16.0	13.0	40
16							
20	FU20	10, 25, 50	SSU20	10, 25	20.5	16.9	45
25	FU25	10, 25, 50	SSU25	10, 25	25.0	21.1	55
32	FU32	10, 25	SSU32	10, 25	32.0	28.1	60
40	FU40	10, 25	SSU40	10	42.5	37.6	80
50	FU50	10, 25	SSU50	10	53.0	48.4	90
63	FU63	10	SSU63*	10	62.5	57.5	115
75	FU75	10			77.0	70.0	150

metric thread part number	PG thread part number	metric thread part number	metric thread part number	PG thread part number
FU10-M12-M	FU10-PG7-M	SSU10-M12-M	FU10-M12-S	FU10-PG7-S
FU12-M16-M	FU12-PG9-M	SSU12-M16-M	FU12-M16-S	FU12-PG9-S
FU16-M16-M	FU16-PG11-M	SSU16-M16-M	FU16-M16-S	FU16-PG11-S
FU16-M20-M			FU16-M20-S	FU16-PG13-S
FU20-M20-M	FU20-PG16-M	SSU20-M20-M	FU20-M20-S	FU20-PG16-S
FU25-M25-M	FU25-PG21-M	SSU25-M25-M	FU25-M25-S	FU25-PG21-S
FU32-M32-M	FU32-PG29-M	SSU32-M32-M	FU32-M32-S	FU32-PG29-S
FU40-M40-M	FU40-PG36-M	SSU40-M40-M	FU40-M40-S	FU40-PG36-S
FU50-M50-M	FU50-PG48-M	SSU50-M50-M	FU50-M50-S	FU50-PG42-S
FU63-M63-M		SSU63-M63-M*	FU63-M63-S	
FU75-M75-M				

- 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



## system properties

- · High mechanical strength
- · Highly flexible
- · Inherently Low Fire Hazard (LFH)
- Fully compliant to LUL Std I-085
- Temperature range  $-100^{\circ}$ C to  $+300^{\circ}$ C (FU)
  - -100°C to +400°C (SSU)

P

- IP rating: IP40
- · SSU is highly corrosion resistant
- · Nickel plated brass fittings
- · Stainless steel (316) fittings





P40

## 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.

#### 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

## 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			<b>75</b>

**STANDARDS** 

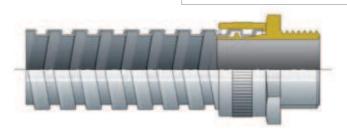




BS EN IEC 61386









## FSU & FNU system

galvanised steel pvc or nylon coated

## **CONDUIT**

## **FITTINGS**

M

## **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.

## II-

## 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

#### 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.



#### plain hole connector nickel plated brass

P

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)	FS∪ part number	reel length (m)	FNU	part number reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)
10	FSU10B	+ 25, 50			10.0	6.8	25
12	FSU12B	25, 50			14.0	10.2	30
16	FSU16B	10, 25, 50	FNU1	<b>6B</b> 25	17.0	13.0	40
16							
20	FSU20B	10, 25, 50	FNU2	<b>OB</b> 25	21.5	16.9	45
25	FSU25B	10, 25, 50	FNU2	<b>25B</b> 25	26.0	21.1	55
32	FSU32B	10, 25	FNU3	<b>2B</b> 10	34.0	28.1	60
40	FSU40B	10, 25			44.5	37.6	80
50	FSU50B	10, 25			55.0	48.4	90
63	FSU63B	10			64.5	57.5	115
75	FSU75B	10			79.0	70.0	150

metric thread part number	PG thread part number	metric thread part number	PG thread part number	hole size (mm)	part number
FSU10-M12-M	FSU10-PG7-M	FSU10-M12-S	FSU10-PG7-S	9	FSU10-P
FSU12-M16-M	FSU12-PG9-M	FSU12-M16-S	FSU12-PG9-S	12	FSU12-P
FSU16-M16-M	FSU16-PG11-M	FSU16-M16-S	FSU16-PG11-S	16	FSU16-P
FSU16-M20-M		FSU16-M20-S	FSU16-PG13-S		
FSU20-M20-M	FSU20-PG16-M	FSU20-M20-S	FSU20-PG16-S	20	FSU20-P
FSU25-M25-M	FSU25-PG21-M	FSU25-M25-S	FSU25-PG21-S	25	FSU25-P
FSU32-M32-M	FSU32-PG29-M	FSU32-M32-S	FSU32-PG29-S	32	FSU32-P
FSU40-M40-M	FSU40-PG36-M	FSU40-M40-S	FSU40-PG36-S	40	FSU40-P
FSU50-M50-M	FSU50-PG48-M	FSU50-M50-S	FSU50-PG42-S	51	FSU50-P
FSU63-M63-M		FSU63-M63-S		61	FSU63-P
FSU75-M75-M				75	FSU75-P

- · 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 32mmUV resistant version of FSU
- FSU10-M12-M
  conduit thread
  fitting type

- · 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





## Б

#### 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.

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.

## C-S

#### external thread nickel plated brass

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

## **C90**

#### external thread elbow nickel plated brass

Multipart 90° compression fitting including elastomeric

## coupler

## nickel plated

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

## 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 (r
	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

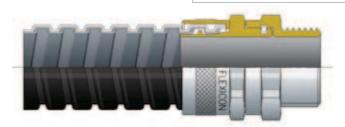
**STANDARDS** 

**BS EN IEC 61386** 











## **LFHU** system

galvanised steel LFH coated



## FPU system

galvanised steel polyurethane coated

S

## CONDUIT

## **FITTINGS**

## 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.



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.



#### swivel external thread nickel plated

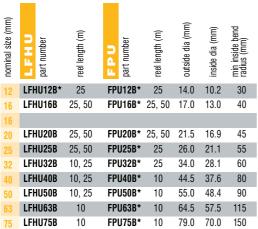
Two part fitting comprising shell and body. The external thread swivels about the main body. Can be used with threaded entries, or knockout secured with a locknut.



#### 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.















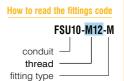
metric thread part number	PG thread part number	metric thread part number	PG thread part number	hole size (mm)	part number
FSU12-M16-M	FSU12-PG9-M	FSU12-M16-S	FSU12-PG9-S	12	FSU12-P
FSU16-M16-M	FSU16-PG11-M	FSU16-M16-S	FSU16-PG11-S	16	FSU16-P
FSU16-M20-M		FSU16-M20-S	FSU16-PG13-S		
FSU20-M20-M	FSU20-PG16-M	FSU20-M20-S	FSU20-PG16-S	20	FSU20-P
FSU25-M25-M	FSU25-PG21-M	FSU25-M25-S	FSU25-PG21-S	25	FSU25-P
FSU32-M32-M	FSU32-PG29-M	FSU32-M32-S	FSU32-PG29-S	32	FSU32-P
FSU40-M40-M	FSU40-PG36-M	FSU40-M40-S	FSU40-PG36-S	40	FSU40-P
FSU50-M50-M	FSU50-PG48-M	FSU50-M50-S	FSU50-PG42-S	51	FSU50-P
FSU63-M63-M		FSU63-M63-S		61	FSU63-P
FSU75-M75-M				75	FSU75-P

· For LFH performance see page 94

- · 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



- · 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)

C

- · 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





Б

#### 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.

## external thread nickel plated brass

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

## C-S

#### external thread nickel plated brass

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

## **C**90

#### external thread elbow nickel plated brass

Multipart 90° compression fitting including elastomeric

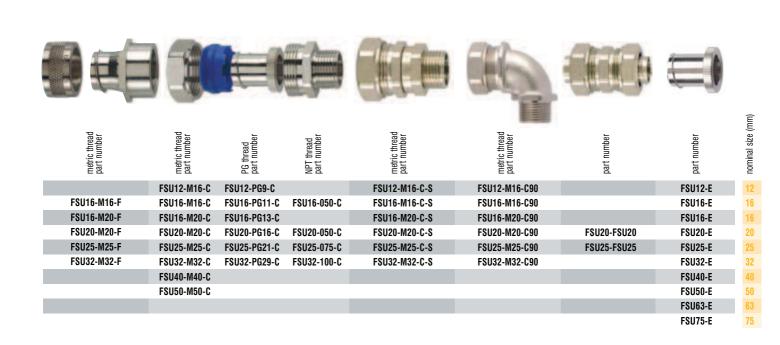
#### nickel plated brass

coupler

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

## insert nickel

plated brass Single part, machined insert to cap end of conduit.



## **STANDARDS**



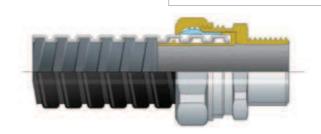






**BS EN IEC 61386** 

\* refer to conduit properties for applicable standards





## 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**

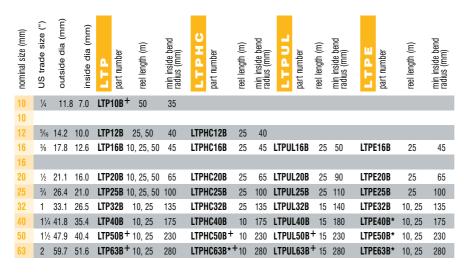


#### C

## external thread nickel plated brass

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





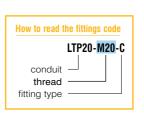


metric threac part number	PG thread part number	NPT thread part number
LTP10-M12-C		
LTP10-M16-C		
LTP12-M16-C	LTP12-PG9-C	
LTP16-M16-C	LTP16-PG11-C	
LTP16-M20-C	LTP16-PG13-C	LTP16-050-C
LTP20-M20-C	LTP20-PG16-C	LTP20-050-C
LTP25-M25-C	LTP25-PG21-C	LTP25-075-C
LTP32-M32-C	LTP32-PG29-C	LTP32-100-C
LTP40-M40-C	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

- · 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



- · 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



























coupler

Multi part compression coupler including nylon

nickel plated brass







insert nickel plated brass

Single part. machined insert to cap end of

FCC

plated steel P clip with pvc liner stainless steel P clips

P clip to support conduit.

## 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.

## **C90**

#### external thread nickel plated brass

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

## C45 external thread

nickel plated brass 45° multipart compression fitting including nylon seal. Can be used for

# seals to join 2 conduits.











metric thread part number

metric thread part number

part number

plated steel part number

stainless steel part number

nominal size (mm)

LTP10-E FCC10 FCC10-SS\* LTP10-E FCC10 FCC10-SS' 10 LTP12-M16-C90 LTP12-M16-S LTP12-E FCC12 FCC12-SS\* LTP16-M16-C90 LTP16-M16-S LTP16-E FCC16 FCC16-SS LTP16-M20-S LTP16-M20-C90 LTP16-M20-C45 FCC16 FCC16-SS LTP16-E LTP20-M20-S LTP20-M20-C90 LTP20-M20-C45 LTP20-LTP20 LTP20-E FCC20 FCC20-SS LTP25-M25-S LTP25-M25-C90 LTP25-M25-C45 LTP25-LTP25 LTP25-E FCC25 FCC25-SS LTP32-M32-S LTP32-M32-C90 LTP32-M32-C45 LTP32-E FCC32 FCC32-SS LTP40-M40-S LTP40-M40-C90 LTP40-M40-C45 LTP40-E FCC40 FCC40-SS LTP50-M50-S LTP50-M50-C90 LTP50-M50-C45 LTP50-E FCC50 FCC50-SS\* LTP63-M63-C90 LTP63-M63-C45 LTP63-E FCC63

## **STANDARDS**





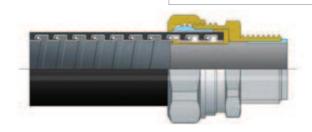
**BS EN IEC 61386** 













## **Specialist liquid tight products**

LTPSS system stainless steel pvc coated liquid tight

LTPPU system galvanised steel, polyurethane coated liquid tight



## **CONDUIT**

## **FITTINGS**

## **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.

## **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



#### external thread nickel plated brass

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

## 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.

## 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.





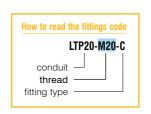


nominal size (n	US trade siz	outside dia	inside dia (r	LTPS	part number	reel length (m)	min inside benc radius (mm)	LTPP part number	reel length (m)	min inside benc radius (mm)	LTBR	part number	reel length (m)	min inside benc radius (mm)	LTBR	part number	reel length (m)	min inside benc radius (mm)
10	1/4	11.8	7.0					LTPPU10*	25	35								
10																		
12	5/16	14.2	10.0					LTPPU12*	25	40								
16	3/8	17.8	12.6	LTP	SS16*	25	45	LTPPU16*	25	45								
16																		
20	1/2	21.1	16.0	LTP	SS20	25	65	LTPPU20*	25	65	LTBRE	DP20B	25	65	LTBI	RDLFH20B	25	130
25	3/4	26.4	21.0	LTP	SS25	25	100	LTPPU25*	25	100	LTBRE	DP25B	25	100	LTBF	RDLFH25B	25	200
32	1	33.1	26.5	LTP	SS32	10	135	LTPPU32*	25	135	LTBRE	DP32B	25	120	LTBI	RDLFH32B	25	270
40	11/4	41.8	35.4					LTPPU40*	10	175	LTBRE	DP40B	10	140				
50	11/2	47.9	40.4					LTPPU50*	10	230	LTBRE	OP50B	10	180				
63	2	59.7	51.6					LTPPU63*	10	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	
TP63-M63-C	1TP63-PG48-C	

- · 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



## LTBRDP system 🗪 🕮



galv steel, galv steel braid, pvc coated liquid tight

## LTBRDLFH system w





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

until tightened.

#### 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



## 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	t number
me	part

LTP16-M16-CSS		SS-M16	FCC16-SS
LTP16-M20-CSS	LTP16-M20-CSS90	SS-M20	FCC16-SS
LTP20-M20-CSS	LTP20-M20-CSS90	SS-M20	FCC20-SS
LTP25-M25-CSS	LTP25-M25-CSS90	SS-M25	FCC25-SS
LTP32-M32-CSS	LTP32-M32-CSS90	SS-M32	FCC32-SS
LTP40-M40-CSS	LTP40-M40-CSS90	SS-M40	FCC40-SS
LTP50-M50-CSS	LTP50-M50-CSS90	SS-M50	FCC50-SS*

nominal size (mm)

10

LTP16-M16-CSS		SS-M16	FCC16-SS
LTP16-M20-CSS	LTP16-M20-CSS90	SS-M20	FCC16-SS
LTP20-M20-CSS	LTP20-M20-CSS90	SS-M20	FCC20-SS
LTP25-M25-CSS	LTP25-M25-CSS90	SS-M25	FCC25-SS
LTP32-M32-CSS	LTP32-M32-CSS90	SS-M32	FCC32-SS
LTP40-M40-CSS	LTP40-M40-CSS90	SS-M40	FCC40-SS
ITP50_M50_CSS	1TP50_M50_C\$\$00	\$\$_M50	ECC20-66*

**STANDARDS** 



BS EN IEC 61386



\* refer to conduit properties for applicable standards





# 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.

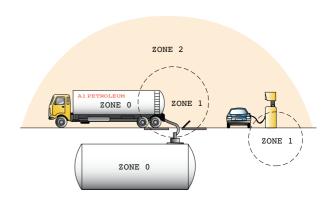
#### Zone 21

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

**TECHNICAL DRAWING** 

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.

- 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

- 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

1.1		
ATEX APPROVAL:	Sira Certificate No Sira 10ATEX1172X	
Ex d FLAMEPROOF	Ex d IIC Gb EN 60079-1 2007	<b>⟨とヾ⟩</b>
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	110
Ex d FLAMEPROOF	Ex d IIC Gb IEC 60079-1 2007	IEC
Ex e INCREASED SAFETY	Ex e IIC Gb IEC 60079-7 2006-7	2
Ex t DUST IGNITION PROTECTION	Ex ta IIIC Da IP6X IEC 60079-31 2008	

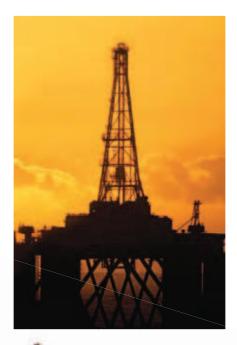


Construction: Nickel Plated Brass fitting with a nylon seal and two part epoxy resin pack. Supplied in boxes of one complete with instructions and gloves.

**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**



**BS EN IEC 61386** 















## **FL** system

galvanised steel pliable









# **FLP** system

galvanised steel pvc coated, pliable

## CONDUIT

## **FITTINGS**

## CONDUIT

## **FITTINGS**

C Type

external thread

conduit.

nickel plated brass

Multipart compression fitting

entries as fitting rotates until

including serrated nylon seal. Can be used for knockout or threaded

tightened. Provides EMC screening

once pvc is trimmed from end of



## EL.

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

## 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.

## 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









nominal size (mm)	F L 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**



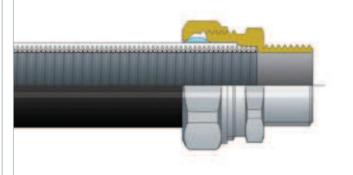








<sup>\*</sup> refer to conduit properties for applicable standards



## Flexicon Ultrascreen™



## **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**

## 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.

## 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.

FLP40-M40-F-HS

FLP50-M50-F-HS





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

## **ORDERING NOTES**

85

130

25

40.4

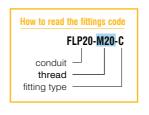
32.8

- Add reel length eg: FLP20B-25M for 25m reel
- · Available on request:
- longer lengths

LFHP40B

LFHP50B

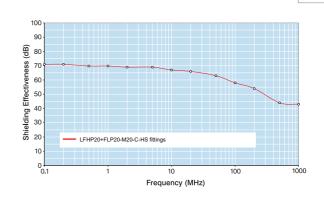
- cut lengths and assemblies
- additional sizes
- full copies of independent test report confirming screening effectiveness



## **EMC SCREENING PERFORMANCE**

FLP40-M40-C-HS

FLP50-M50-C-HS





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



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



## 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**

М

#### 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.



#### 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.





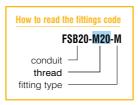


nominal size (mm)	FSB part number	LFHUBRD part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	
12	FSB12		25	15.2	10.2	30	
16	FSB16		25	18.2	13.0	40	
16							
20	FSB20	LFHUBRD20	25	22.7	16.9	45	
25	FSB25	LFHUBRD25	25	27.2	21.1	55	
32	FSB32	LFHUBRD32	25	35.2	28.1	70	
40	FSB40		10	45.7	37.6	80	
50	FSB50		10	57.7	48.4	90	

metric thread part number	PG thread part number	metric thread part number	PG thread part number
FSB12-M16-M	FSB12-PG9-M	FSB12-M16-S	FSB12-PG9-S
FSB16-M16-M	FSB16-PG11-M	FSB16-M16-S	FSB16-PG11-S
FSB16-M20-M		FSB16-M20-S	
FSB20-M20-M	FSB20-PG16-M	FSB20-M20-S	FSB20-PG16-S
FSB25-M25-M	FSB25-PG21-M	FSB25-M25-S	FSB25-PG21-S
FSB32-M32-M	FSB32-PG29-M	FSB32-M32-S	FSB32-PG29-S
FSB40-M40-M	FSB40-PG36-M	FSB40-M40-S	FSB40-PG36-S
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



## **STANDARDS**









<sup>\*</sup> refer to conduit properties for applicable standards

- · 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.

## fixed external thread nickel plated brass

C

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

## 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.

**C**90

#### external thread elbow nickel plated brass

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



FSB50-P

50



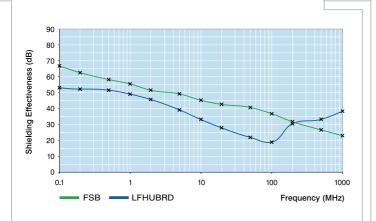


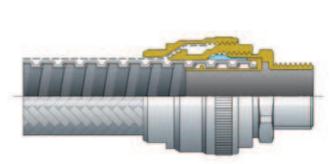


hole size (mm)	part number	metric thread part number	PG thread part number	metric thread part number	metric thread part number
12	FSB12-P				
16	FSB16-P	FSB16-M16-C	FSB16-PG11-C	FSB16-M16-C-S	FSB16-M16-C90
		FSB16-M20-C	FSB16-PG13-C	FSB16-M20-C-S	FSB16-M20-C90
20	FSB20-P	FSB20-M20-C	FSB20-PG16-C	FSB20-M20-C-S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

nominal size (mm)

## **EMC SCREENING PERFORMANCE**









## 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

## M

#### fixed external thread nickel plated brass

**FITTINGS** 

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

#### 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.

## **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.







nominal size (mm)	r s part number	FUSSB part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	
12	FB12		25	14.0	10.2	30	
16	FB16		25	17.5	13.0	40	
16							
20	FB20	FUSSB20	25	21.5	16.9	45	
25	FB25	FUSSB25	25	26.0	21.1	55	
32	FB32	FUSSB32	25	34.0	28.1	70	
40	FB40		10	43.5	37.6	80	
50	FB50		10	54.5	48.4	90	

metric thread part number	PG thread part number	metric thread part number	PG thread part number
FB12-M16-M	FB12-PG9-M	FB12-M16-S	FB12-PG9-S
FB16-M16-M	FB16-PG11-M	FB16-M16-S	FB16-PG11-S
FB16-M20-M		FB16-M20-S	
FB20-M20-M	FB20-PG16-M	FB20-M20-S	FB20-PG16-S
FB25-M25-M	FB25-PG21-M	FB25-M25-S	FB25-PG21-S
FB32-M32-M	FB32-PG29-M	FB32-M32-S	FB32-PG29-S
FB40-M40-M	FB40-PG36-M	FB40-M40-S	FB40-PG36-S
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**







**BS EN IEC 61386** 

- · 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.











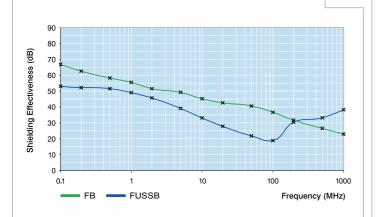


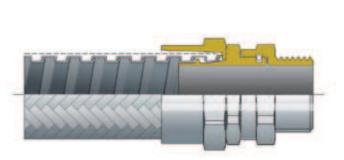


hole size (mm)	part number	metric thread part number	metric thread steel part number	metric thread EMC part number	metric thread brass part number	plated steel part number	stainless steel part number
12	FB12-P	BM90-16M	S-M16		B-M16	FCC12	FCC12-SS*
16	FB16-P	BM90-16M	S-M16		B-M16	FCC16	FCC16-SS
		BM90-20M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

nominal size (mm)

## **EMC SCREENING PERFORMANCE**







## LTPBRD system

galvanised steel core, thermoplastic rubber coated and stainless steel overbraid



## 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**

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.

How to read the fittings code

conduit

thread fitting type

LTPB20-M20-M







#### 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)	
16	LTPBRD16	25	19.3	12.6	45	
16						
20	LTPBRD20	25	22.6	16.0	65	
25	LTPBRD25	25	27.9	21.0	100	
32	LTPBRD32	25	34.6	26.5	135	
40	LTPBRD40	10	43.3	35.4	175	
50	LTPBRD50+	10	49.3	40.4	230	

metr part	metr
LTPB16-M16-C	LTPB16-M16-S
LTPB16-M20-C	LTPB16-M20-S
LTPB20-M20-C	LTPB20-M20-S
LTPB25-M25-C	LTPB25-M25-S
LTPB32-M32-C	LTPB32-M32-S
LTPB40-M40-C	LTPB40-M40-S
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
- full copies of independent test report confirming screening effectiveness

## **STANDARDS**









38

- · 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





## C90 elbow

external threaded elbow nickel plated brass

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

## sealing

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.











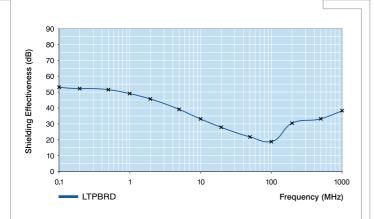


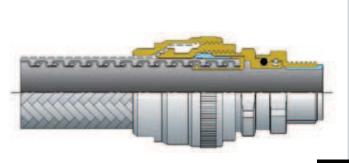
metric thread part number	part number	metric thread steel part number metric thread EMC	par i number metric thread brass part number	plated steel part number	stainless steel part number
LTPB16-M16-C90	FW16	S-M16	B-M16	FCC16	FCC16-SS
LTPB16-M20-C90	FW20				
LTPB20-M20-C90	FW20	S-M20 B-M20-	EMC B-M20	FCC20	FCC20-SS
LTPB25-M25-C90	FW25	S-M25 B-M25	EMC B-M25	FCC25	FCC25-SS
LTPB32-M32-C90	FW32	S-M32 B-M32-	EMC B-M32	FCC32	FCC32-SS
LTPB40-M40-C90	FW40	S-M40 B-M40-	EMC B-M40	FCC40	FCC40-SS
LTPB50-M50-C90	FW50	S-M50	B-M50	FCC50	FCC50-SS*

nominal size (mm)

16

## **EMC SCREENING PERFORMANCE**







## FPRSS system corrugated nylon, stainless steel overbraid







## FPRTC system corrugated nylon, tinned copper overbraid

## 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.

## **FPISS**

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

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

## **FPRTC**

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

Typical Applications: Inside railway carriages where screening is required.

## **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**

#### fixed external thread nickel plated brass

C

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

## 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.





FPIHSS54-25M<sup>3</sup>

FPISS54-25M\*



metric threa part numbe	metric threa part numbe	PG thread part numbe
BC16-M16-C	BC16-M16-S	BC16-PG11-S
BC21-M20-C	BC21-M20-S	BC21-PG16-S
BC28-M25-C	BC28-M25-S	BC28-PG21-S
BC34-M32-C	BC34-M32-S	BC34-PG29-S
BC42-M40-C	BC42-M40-S	
RC54-M50-C	RC54-M40-S	

## ORDERING NOTES

FPRTC54-25M\*

- \* Indicates parts made to order on request and may be subject to MOQ and lead time
- · Available on request:

FPRSS54-25M\*

- 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

46.0

47.2

80

## **STANDARDS**







\* 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



## **C**90

#### 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

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.

















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BM90-16M

BM90-20M

RM90-25M

part number	
FW16	
FW20	

FW25

FW32

FW40

FW50

metric thread steel part number	metric thread EMC
S-M16	

S-M20

S-M25

S-M32

S-M40

S-M50

metric thread EMC part number	
	ı
B-M20-EMC	Ī

B-M25-EMC

R-M32-FMC

R-M40-FMC

	metric thread brass part number	
	B-M16	
;	B-M20	

R-M32

B-M40

B-M50

plated stee part numbi
FCC16
FCC20
FCC25

FCC32

FCC40

FCC50

stainless steel part number FCC16-SS

FCC20-SS

FCC25-SS

FCC32-SS

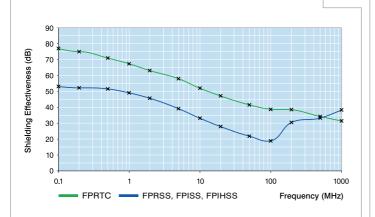
FCC40-SS

FCC50-SS<sup>3</sup>

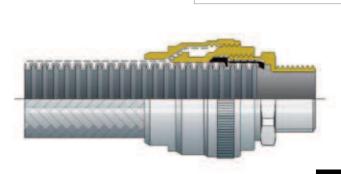
## RC21-M20-C90

BIVI9U-3ZIVI	
BM90-40M	
BM90-50M	

## TECHNICAL DRAWING



**EMC SCREENING PERFORMANCE** 





## **FTCB Braided sleeving**

## tinned copper braid system for EMC screening







- 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 (/D(mm)	Usable ø mm min	Usable ø mm max	Cross sectional area -m
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

ım<sup>2</sup>

## FPA

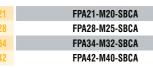
## **FPAX**

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

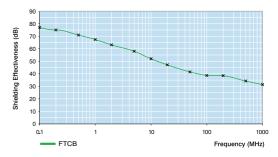
Typical Applications: Straight fitting with internal braid clamp assembly for use with braided sleeving inside corrugated conduit.

Conduit Size (mm)





FPAX21-M20-SBCA
FPAX28-M25-SBCA
FPAX34-M32-SBCA
FPAX42-M40-SBCA



## 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



Use with Braid

FTCB10, I	FTCB12,	FTCB15	
FTCB15, I	FTCB20,	FTCB25	
FTCB20, I	FTCB25,	FTCB30	
FTCB25, I	FTCB30,	FTCB35	

## ORDERING NOTES

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

## **Cable Gland Fittings**



## 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**

	0011001	•		1010			
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 25 32	FSU20-M20-CG FSU25-M25-CG FSU32-M32-CG	FU & SSU		1050	IP40	IP68(10bar)+IP69K	7-13mm 9-17mm 11-21mm
20 25 32	FSU20-M20-CG FSU25-M25-CG FSU32-M32-CG	FSU, FNU, LFHU and FPU			IP65	IP68(10bar)+IP69K	7-13mm 9-17mm 11-21mm
20 25 32	LTP20-M20-CG LTP25-M25-CG LTP32-M32-CG	LTP, LTPHC, LTPUL, LTPE, LTPSS, LTBRDP, LTBRDLFH and LTPPU		10.50	IP66+IP67+ IP68(5bar)+IP69K	IP68(10bar)+IP69K	7-13mm 9-17mm 11-21mm
20 25 32	FSB20-M20-CG FSB25-M25-CG FSB32-M32-CG	FB & FUSSB	) ) ) ) )		IP40	IP68(10bar)+IP69K	7-13mm 9-17mm 11-21mm
20 25 32	FSB20-M20-CG FSB25-M25-CG FSB32-M32-CG	FSB & LFHUBRD			IP65	IP68(10bar)+IP69K	7-13mm 9-17mm 11-21mm
20 25 32	LTPB20-M20-CG LTPB25-M25-CG LTPB32-M32-CG	LTPBRD			IP66+IP67+ IP68(5bar)+IP69K	IP68(10bar)+IP69K	7-13mm 9-17mm 11-21mm
20	LPC20-M20-CG	LPC			IP66+IP67+	IP68(10bar) + IP69K	7-13mm

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

IP68(5bar) + IP69K

## **STANDARDS**

LPC25-M25-CG

LPC32-M32-CG





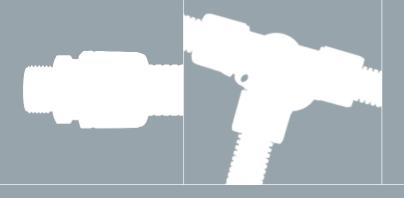






9-17mm

11-21mm







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



