

FLEXICON FLEXIBLE CONDUIT & ACCESSORIES



Distributor:



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Working with FLEXICON

Faster, accurate specifying makes your job easier every time

We know how important speed and efficiency are to a cost effective business.

When you choose Flexicon you'll save time finding the right product to meet the application exactly. Multipurpose systems will make holding stock simpler. User-friendly fittings and quality manufacturing mean Flexicon systems help you to complete the job faster.

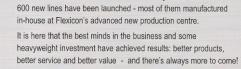
Cut through the conduit confusion with Flexicon



State-of-the-art manufacturing and world class quality from FLEXICON









Expanded FPA system

Since the new look Flexicon took the trade by storm, no less than

More Contractor Packs

High technology tooling and automated production enables Flexicon to meet demand for a brilliant range of products. As well as metallic systems, advanced engineered plastics offer comparable compression strength and greater flexibility

Designed to give you more choice and more cost efficiency!

Quality Standards and Approvals

Flexicon products are tested to the most demanding quality standards and have been awarded quality approvals worldwide, including ISO 9001: 2000.













CONDUIT APPLICATION GUIDE



type FU

galvanised steel

stainless steel, grade 316

type FSU
galvanised steel, pvc coated

type FNU
galvanised steel, thermoplastic coated

type LFHU
galvanised steel, LFH coated

type FSB
galv steel, pvc, galv steel over braid

type FB
galv steel, galv steel over braid

type LTP
galv steel, pvc coated, liquid tight

type LTPHC
galv steel, thermoplastic rubber, liquid tight

type LTPUL
galv steel, pvc coated, liquid tight

type FLP
galv steel, pvc coated, pliable

type FPAS
nylon LFH PA6 corrugated, std weight

type FPAL

type FPAH
nylon LFH PA6 corrugated, heavy wght

type **FPR**nylon extra LFH PA6 corrugated, std wght

type FPI nylon PA12 corrugated, standard wght type FPIH nylon PA12 corrugated, heavy weight type FPY nylon PA6 corrugated, light weight type FPP polypropylene corrugated, std weight type FPY nylon PA6, large diameter, std weight type FPL upvc corrugated type FPC pvc spiral reinforced type LPC smooth, pvc spiral reinforced

nylon PA6 corrugated, light weight

metallic conduit and fittings

nonmetallic conduit and fittings

conduit	system	IP rating available	compression strength kg/100mm 20mm size	pull-off strength kg 20mm size	high fatigue life	temperature range	flexible	pliable	low fire hazard	halogen free	self extin- guishing	EMC screening	high abrasion resistance	high UV resistance - black
type FU galvanised steel		IP40	350	120		-50°C to +300°C	•		•	•	•		•	
type SSU stainless steel, grade 316		IP40	400	170		-50°C to +300°C	•		•	•	•		•	
type FSU galvanised steel, pvc coated		IP54, IP65	350	120	•	-15°C to +70°C	•				•			
type FNU galvanised steel, thermoplastic coated	ARARAGARAGARAGAN ASSUSSESSESSESSES	IP54, IP65	350	120		-40°C to +120°C	•			•	•		•	
type LFHU galvanised steel, LFH coaled		IP54, IP65	350	120		-25°C to +90°C	•		•	•	•			
type FSB galv steel, pvc, galv steel over braid		IP54	350	120		-15°C to +70°C	•				•	•	•	
type FB galv steel, galv steel over braid		IP40	350	120		-50°C to +300°C	•		•	•	•	•	•	
type LTP galv steel, pvc coated, liquid tight		IP66, IP67, IP68	400	130		-20°C to +105°C	•				•			•
type LTPHC galv steel, thermoplastic rubber, liquid tight		IP66, IP67, IP68	400	130		-45°C to +135°C				•				
type LTPUL galv steel, pvc coated, liquid tight	****	IP66, IP67, IP68	500	160		-15°C to +75°C								•
type FLP galv steel, pvc coated, pliable		IP66, IP67	400	50		-15°C to +70°C		•			•	•		
type FPAS nylon LFH PA6 corrugated, std weight		IP66, IP67, IP68	75	40		-40°C to +120°C				•				•
type FPAL nylon PA6 corrugated, light weight		IP66, IP67, IP68	60	30		-40°C to +120°C	•			•				
type FPR nylon extra LFH PA6 corrugated, std wght		IP66, IP67, IP68	75	40		-40°C to +120°C	•			•				•
type FPAH nylon LFH PA6 corrugated, heavy wght		IP66, IP67, IP68	120	70		-40°C to +120°C				•				
type FPI nylon PA12 corrugated, standard wght		IP66, IP67, IP68	45	30		-50°C to +110°C	•			•				
type FPIH nylon PA12 corrugated, heavy weight	200000000000000000000000000000000000000	IP66, IP67, IP68	60	50		-50°C to								
type FPY nylon PA6 corrugated, light weight		IP40, IP66, IP67, IP68	60	25		+110°C								
type FPP polypropylene corrugated, std weight		IP40, IP66, IP67, IP68	35	25		+100°C -20°C to								
type FPY nylon PA6, large diameter, std weight		IP40, IP65				+90°C -40°C to								
type FPL upvc corrugated	00000000000000000000000000000000000000	IP40, IP66, IP67, IP68	150	30		+120°C -5°C to								
type FPC pvc spiral reinforced		IP65	60	25		+70°C -5°C to								
type LPC smooth, pvc spiral reinforced		IP67	120	50		+70°C								



galvanised steel



type **FU**

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

Typical Applications: Underfloor wiring in office blocks.

type SSU

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

Typical Applications: Instrumentation and security.

Conduit

- High mechanical strength
- Highly flexible
- Inherently Low Fire Hazard (LFH)
- Temperature range -50°C to +300°C
- IP rating: IP40

75 FU75

- SSU version offers corrosion resistance
- Nickel plated brass fittings
- Stainless steel (316) fittings

fittings

fixed external thread

Two part fitting comprising shell and body with external

thread. This fitting can be inserted into a knockout and secured with a locknut.

nickel plated brass

type





fixed external thread

Two part fitting comprising shell and body with external

thread. This fitting can be inserted into a knockout and secured with a locknut.

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

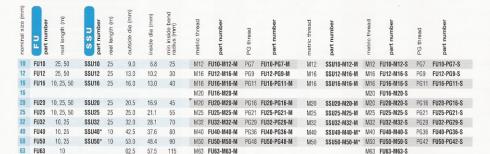












M75 FU75-M75-M

77.0 70.0 150







Typical applications for type

FU conduit and fittings include underfloor cabling in

commercial buildings.

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.





type

fixed internal thread

Two part fitting comprising

shell and body with internal thread which can

pieces of conduit together when used with a swivel

be used to couple two

nickel plated brass



type

FCC

plated steel P clip with

stainless steel P clips









locknuts

nickel plated brass

and stainless steel

plated steel



type

brass elbow

90°elbow

internal and external

threaded nickel plated



hole size	part number	metric thread	part number	plated steel part number	stainless steel part number	metric thread	part number	metric thread	steel part number	brass part number	stainless steel part number	
9	FU10-P			FCC10	FCC10-SS*	PG7	BM90-PG7	M12		B-M12		10
12	FU12-P			FCC12	FCC12-SS*	M16	BM90-16M	M16	S-M16	B-M16		12
16	FU16-P			FCC16	FCC16-SS	M16	BM90-16M	M16	S-M16	B-M16	SS-M16	16
		M20	FU16-M20-F	FCC16	FCC16-SS	M20	BM90-20M	M20	S-M20	B-M20	SS-M20	16
20	FU20-P	M20	FU20-M20-F	 FCC20	FCC20-SS	M20	BM90-20M	M20	S-M20	B-M20	SS-M20	20
25	FU25-P	M25	FU25-M25-F	FCC25	FCC25-SS	M25	BM90-25M	M25	S-M25	B-M25	SS-M25	25
32	FU32-P	M32	FU32-M32-F	FCC32	FCC32-SS	M32	BM90-32M	M32	S-M32	B-M32	SS-M32	32
40	FU40-P			FCC40	FCC40-SS*	M40	BM90-40M	M40	S-M40	B-M40	SS-M40*	40
51	FU50-P			FCC50	FCC50-SS*	M50	BM90-50M	M50	S-M50	B-M50	SS-M50*	50
61	FU63-P			FCC63				M63	S-M63	B-M63		63
75	FU75-P			FCC75						B-M75		75

- Add reel length eg: FU20-25M
- Available on request:

longer lengths and bulk packaging cut lengths and assemblies alternative threads stainless steel swivel fittings

*indicates parts made to order on request







metallic conduit and fittings

type FSU

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

Typical Applications: General factory wiring and connections to machines.

Conduit

- High mechanical strength
- Highly flexible

FSU12B 25, 50

FSU40B 10, 25

10

FSU50B 10, 25

FSU63B 10

75 FSU75B

FSU16B 10, 25, 50 FNU16B 25 17.0 FSU20B 10, 25, 50 FNU20B 25 21.5 FSU25B 10, 25, 50 FNU25B 25 26.0 FSU32B 10, 25 FNU32B 10 34.0

- IP rating: IP54 with standard fittings, IP65 with type C compression fittings
- Temperature range FSU -15°C to +70°C FNU -40°C to +120°C
- FNU offers high abrasion resistance and solvent resistance
- Low Fire Hazard version available
- Nickel plated brass fittings

type FNU

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

Typical Applications: Demanding

applications requiring higher temperatures or solvent and abrasion resistance.



Two part fitting comprising shell and body with external

inserted into a knockout and secured with a locknut.

thread. This fitting can be.









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.



fittings

type





















outside	inside di	min insid radius (m	metric th	part nun	PG threa	part nun	metric th	part nun	PG threa	part nun	hole size	part nun	
10.0	6.8	-25	M12	FSU10-M12-M	PG7	FSU10-PG7-M	M12	FSU10-M12-S	PG7	FSU10-PG7-S	9	FSU10-P	
14.0	10.2	30	M16	FSU12-M16-M	PG9	FSU12-PG9-M	M16	FSU12-M16-S	PG9	FSU12-PG9-S	12	FSU12-P	
17.0	13.0	40	M16	FSU16-M16-M	PG11	FSU16-PG11-M	M16	FSU16-M16-S	PG11	FSU16-PG11-S	16	FSU16-P	
			M20	FSU16-M20-M			M20	FSU16-M20-S					
21.5	16.9	45	"M20	FSU20-M20-M	PG16	FSU20-PG16-M	M20	FSU20-M20-S	PG16	FSU20-PG16-S	20	FSU20-P	
26.0	21.1	55	M25	FSU25-M25-M	PG21	FSU25-PG21-M	M25	FSU25-M25-S	PG21	FSU25-PG21-S	25	FSU25-P	
34.0	28.1	70	M32	FSU32-M32-M	PG29	FSU32-PG29-M	M32	FSU32-M32-S	PG29	FSU32-PG29-S	32	FSU32-P	
44.5	37.6	80	M40	FSU40-M40-M	PG36	FSU40-PG36-M	M40	FSU40-M40-S	PG36	FSU40-PG36-S	40	FSU40-P	
55.0	48.4	90	M50	FSU50-M50-M	PG48	FSU50-PG48-M	M50	FSU50-M50-S	PG42	FSU50-PG42-S	51	FSU50-P	
64.5	57.5	115	M63	FSU63-M63-M			M63	FSU63-M63-S			61	FSU63-P	
79.0	70.0	150	M75	FSU75-M75-M							75	FSU75-P	

fittings

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

type



Typical applications for type

FSU conduit and fittings

include general factory

wiring.





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

type C90

external thread nickel plated brass

Multipart 90" compression fitting including elastomeric seal.

type

FCC

plated steel P clip with pvc liner

nickel plated brass insert to cap end of conduit.

insert to cap end of

type

conduit





metric thread	part number	metric thread	part number	metric thread	part number	part number	part number	nominal size (mr
		M12	FSU10-M12-C			FSU10-E	FCC10	10
		M16	FSU12-M16-C	M16	FSU12-M16-C90	FSU12-E	FCC12	12
		M16	FSU16-M16-C	M16	FSU16-M16-C90	FSU16-E	FCC16	16
M20	FSU16-M20-F	M20	FSU16-M20-C	M20	FSU16-M20-C90	FSU16-E	FCC16	16
M20	FSU20-M20-F	M20	FSU20-M20-C	M20	FSU20-M20-C90	FSU20-E	FCC20	20
M25	FSU25-M25-F	M25	FSU25-M25-C	M25	FSU25-M25-C90	FSU25-E	FCC25	25
M32	FSU32-M32-F	M32	FSU32-M32-C	M32	FSU32-M32-C90	FSU32-E	FCC32	32
		M40	FSU40-M40-C			FSU40-E	FCC40	40
		M50	FSU50-M50-C			FSU50-E	FCC50	50
							FCC63	63
							FCC75	75

- Add reel length eg: FSU20B-25M
- FSU fittings used for FNU conduit
- Available on request:

longer lengths and bulk packaging cut lengths and assemblies other colours stainless steel fittings (grade 316)







galvanised steel LFH coated





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

Typical Applications: Public and commercial buildings and tunnels.

- High mechanical strength
- Highly flexible
- IP rating: IP54 with standard fittings, IP65 with type C compression fittings
- Extra low Fire Hazard (LFH) see page 35 UL 94 V0

50 LFHU50B 10 55.0

- Halogen, sulphur and phosphorus free Temperature range -25°C to +90°C
- Nickel plated brass fittings

fittings



fixed external thread

Two part fitting comprising

shell and body with external thread. This fitting can be inserted into a knockout and

secured with a locknut.

nickel plated brass





swivel external thread

Two part fitting comprising

shell and body. The external thread swivels about the main body. Can be used

with threaded entries, or

locknut.

knockout secured with a

nickel plated brass





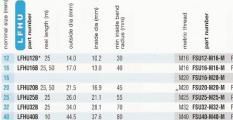
Two part fitting comprising shell and body without thread. The body is fitted through the opposite side of the entry to the conduit and acts as a locking device also entry bush.











48 4

metric thread	part number	PG thread	part number	metric thread	part number	PG thread	part number	hole size	part number	
M16	FSU12-M16-M	PG9	FSU12-PG9-M	M16	FSU12-M16-S	PG9	FSU12-PG9-S	12	FSU12-P	
M16	FSU16-M16-M	PG11	FSU16-PG11-M	M16	FSU16-M16-S	PG11	FSU16-PG11-S	16	FSU16-P	
M20	FSU16-M20-M			M20	FSU16-M20-S					
"M20	FSU20-M20-M	PG16	FSU20-PG16-M	M20	FSU20-M20-S	PG16	FSU20-PG16-S	20	FSU20-P	
M25	FSU25-M25-M	PG21	FSU25-PG21-M	M25	FSU25-M25-S	PG21	FSU25-PG21-S	25	FSU25-P	
M32	FSU32-M32-M	PG29	FSU32-PG29-M	M32	FSU32-M32-S	PG29	FSU32-PG29-S	32	FSU32-P	
M40	FSU40-M40-M	PG36	FSU40-PG36-M	M40	FSU40-M40-S	PG36	FSU40-PG36-S	40	FSU40-P	
M50	FSU50-M50-M	PG48	FSU50-PG48-M	M50	FSU50-M50-S	PG42	FSU50-PG42-S	51	FSU50-P	

fittings



nickel plated brass

Two part fitting comprising

shell and body with internal thread which can

pieces of conduit together when used with a swivel

be used to couple two

fitting.



Multipart compression

knockouts or threaded

tightened.

fitting including elastomeric seal. Can be used for

entries as fitting rotates until

type





elbow nickel plated brass

Multipart 90" compression fitting including elastomeric

type

conduit

insert to cap end of

nickel plated brass

type

Locknuts

plated steel and nickel plated brass

Single part, machined insert to cap end of conduit.











metric thread	part number	metric thread	part number	metric thread	part number	part number	metric thread	steel part number	brass part number	nominal size (m
				M16	FSU12-M16-C90	FSU12-E	M16	S-M16	B-M16	12
		M16	FSU16-M16-C	M16	FSU16-M16-C90	FSU16-E	M16	S-M16	B-M16	16
M20	FSU16-M20-F	M20	FSU16-M20-C	M20	FSU16-M20-C90	FSU16-E	M20	S-M20	B-M20	16
M20	FSU20-M20-F	M20	FSU20-M20-C	M20	FSU20-M20-C90	FSU20-E	M20	S-M20	B-M20	20
M25	FSU25-M25-F	M25	FSU25-M25-C	M25	FSU25-M25-C90	FSU25-E	M25	S-M25	B-M25	25
M32	FSU32-M32-F	M32	FSU32-M32-C	M32	FSU32-M32-C90	FSU32-E	M32	S-M32	B-M32	32
		M40	FSU40-M40-C			FSU40-E	M40	S-M40	B-M40	40
		M50	FSU50-M50-C			FSU50-E	M50	S-M50	B-M50	50



- Add reel length eg: LFHU20B-25M
- FSU fittings used on LFHU 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 LFH properties







galvanised steel braided



type 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.

Conduit

- High mechanical strength
- Highly flexible
- IP rating: IP54
- High abrasion resistance
- Resists hot metal swarf and splashes
- Provides EMC screening
- Temperature range -15°C to +70°C
- Nickel plated brass fittings

fittings

type

fixed external thread

Two part fitting comprising shell and body with external

thread. This fitting can be inserted into a knockout and

secured with a locknut.

nickel plated brass





swivel external thread

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.

nickel plated brass





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.

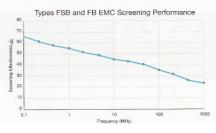








nominal size (mm)	FSB part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)	metric thread	part number	metric thread	part number	hole size	part number	
12	FSB12	25	15.2	10.2	30	M16	FSB12-M16-M	M16	FSB12-M16-S	12	FSB12-P	
16	FSB16	25	18.2	13.0	40	M16	FSB16-M16-M	M16	FSB16-M16-S	16	FSB16-P	
16						M20	FSB16-M20-M	M20	FSB16-M20-S			
20	FSB20	25	22.7	16.9	45	M20	FSB20-M20-M	M20	FSB20-M20-S	20	FSB20-P	
25	FSB25	25	27.2	21.1	55	M25	FSB25-M25-M	M25	FSB25-M25-S	25	FSB25-P	
32	FSB32	25	35.2	28.1	70	M32	FSB32-M32-M	M32	FSB32-M32-S	32	FSB32-P	
40	FSB40	10	45.7	37.6	80	M40	FSB40-M40-M	M40	FSB40-M40-S	40	FSB40-P	
50	ESB50	10	57.7	48.4	on	M50	ESR50-M50-M	M50	ESB50-M50-S	51	FSB50-P	







type FB

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

Typical Applications: Industrial environments and high temperatures. Typical applications for braided conduit and fittings include industrial environments.



Conduit

- High mechanical strength
- Highly flexible
- IP rating: IP40
- High abrasion resistance
- Resists hot metal swarf and splashes
- Provides EMC screening
- Temperature range -50°C to +300°C
- Inherently Low Fire Hazard (LFH)
- Nickel plated brass fittings

fittings

fixed external thread

Two part fitting comprising

shell and body with external thread. This fitting can be

inserted into a knockout and

secured with a locknut.

nickel plated brass

type















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.











F B part number	reel length (m)	outside dia (mm)	inside dia (mm)	min inside bend radius (mm)		metric thread	part number	metric thread	part number	hole size	part number	
FB12	25	14.0	10.2	30		M16	FB12-M16-M	M16	FB12-M16-S	12	FB12-P	
FB16	25	17.5	13.0	40		M16	FB16-M16-M	M16	FB16-M16-S	16	FB16-P	
						M20	FB16-M20-M	M20	FB16-M20-S			
FB20	25	21.5	16.9	45		M20	FB20-M20-M	M20	FB20-M20-S	20	FB20-P	
FB25	25	26.0	21.1	55	10	M25	FB25-M25-M	M25	FB25-M25-S	25	FB25-P	
FB32	25	34.0	28.1	70		M32	FB32-M32-M	M32	FB32-M32-S	32	FB32-P	
FB40	10	43.5	37.6	80		M40	FB40-M40-M	M40	FB40-M40-S	40	FB40-P	

ordering notes

- Add reel length eg: FB20-25M or FSB20-25M
- Available on request:

20

longer lengths cut lengths and assemblies additional sizes stainless steel overbraid female threaded fittings full copies of independent test report

confirming screening effectiveness





galv steel pvc coated liquid tight

type LTP Construction:

Galvanised steel, helically wound, flexible conduit with smooth pvc cover. Colour black. Grey or orange on request.

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

type 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.

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

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

fittings

 High mechanical strength Good flexibility

- IP rating: IP66 + IP67 + IP68 Smooth, wipe clean outer
- . Cover does not wrinkle when
- Temperature range LTP -20°C to +105°C LTPHC -45°C to +135°C
- LTPUL -15°C to +75°C LTP has Lloyd's Register Type Approval
- LTPUL is UL listed and CSA approved
- Resistant to oils and greases LTP and LTPUL are UV resistant and suitable for external use
- Nickel plated brass or stainless steel fittings









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

Compression fitting for knockout or threaded entries. (not shown)

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



nominal size (mm)	LT P part number	reel length (m)	min inside bend radius (mm)	LTPHC part number	reel length (m)	min inside bend radius (mm)	LT PUL part number	reel length (m)	min inside bend radius (mm)	US trade size (")	outside dia (mm)	inside dia (mm)		metric thread	part number	metric thread	part number	metric thread	part number
10	LTP10	50	35							1/4			11.8	M12	LTP10-M12-C				
12	LTP12	25, 50	40	LTPHC12B	25	40				%s	14.2	10.0		M16	LTP12-M16-C	M16	LTP12-M16-S	M16	LTP12-M16-C90
16	LTP16	10, 25, 50	45	LTPHC16B	25	45	LTPUL16B	25	50	%	17.8	12.6		M16	LTP16-M16-C	M16	LTP16-M16-S	M16	LTP16-M16-C90
16														M20	LTP16-M20-C	M20	LTP16-M20-S	M20	LTP16-M20-C90
20	LTP20	10, 25, 50	65	LTPHC20B	25	65	LTPUL20B	25"	90	1/2	21.1	16.0		M20	LTP20-M20-C	M20	LTP20-M20-S	M20	LTP20-M20-C90
25	LTP25	10, 25, 50	100	LTPHC25B	25	100	LTPUL25B	25	110	%	26.4	21.0		M25	LTP25-M25-C	M25	LTP25-M25-S	M25	LTP25-M25-C90
32	LTP32	10, 25	135	LTPHC32B	25	135	LTPUL32B	15	140	1	33.1	26.5		M32	LTP32-M32-C	M32	LTP32-M32-S	M32	LTP32-M32-C90
40	LTP40	10, 25	175				LTPUL40B	15	180	1%	41.8	35.4		M40	LTP40-M40-C			M40	LTP40-M40-C90
50	LTP50	10, 25	230				LTPUL50B	15	230	1%	47.9	40.4		M50	LTP50-M50-C			M50	LTP50-M50-C90
63	LTP63	10, 25	280				LTPUL63B	15	280	2	59.7	51.6		M63	LTP63-M63-C			M63	LTP63-M63-C90

 45° and stainless steel versions also available











Typical application for type LTP conduit and fittings as used on machines.

fittings

type E

insert to cap end of conduit nickel plated brass

Single part machined insert

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

external thread

stainless steel (grade

316) body and nut

type

css

sealing

washers

neoprene face sealing washers

locknuts

galvanised steel, nickel plated brass and stainless steel locknuts

type

FCC

plated steel P clip with pvc liner stainless steel P clip

















part number	metric thread	part number		metric thread	part number	metric thread	steel part number	brass part number	stainless steel part number	plated steel part number	stainless steel part number	nominal size (mm)
LTP10-E				M12	SW12	M12		B-M12		FCC10		10
LTP12-E	M16	LTP12-M16-CSS*		M16	SW16	M16	S-M16	B-M16		FCC12	FCC12-SS*	12
LTP16-E	M16	LTP16-M16-CSS		M16	SW16	M16	S-M16	B-M16	SS-M16	FCC16	FCC16-SS	16
LTP16-E	M20	LTP16-M20-CSS		M20	SW20	M20	S-M20	B-M20	SS-M20	FCC16	FCC16-SS	16
LTP20-E	M20	LTP20-M20-CSS	B	M20	SW20	M20	S-M20	B-M20	SS-M20	FCC20	FCC20-SS	20
LTP25-E	M25	LTP25-M25-CSS		M25	SW25	M25	S-M25	B-M25	SS-M25	FCC25	FCC25-SS	25
LTP32-E	M32	LTP32-M32-CSS		M32	SW32	M32	S-M32	B-M32	SS-M32	FCC32	FCC32-SS	32
LTP40-E	M40	LTP40-M40-CSS*		M40	SW40	M40	S-M40	B-M40	SS-M40*	FCC40	FCC40-SS*	40
LTP50-E	M50	LTP50-M50-CSS*		M50	SW50	M50	S-M50	B-M50	SS-M50*	FCC50	FCC50-SS*	50
LTP63-E	M63	LTP63-M63-CSS*		M63	SW63	M63	S-M63	B-M63	SS-M63*	FCC63	FCC63-SS*	63

- Add reel length eg: LTP20B-25M
- For LTP specify colour (B = Black, G = Grey)
- Available on request:

longer lengths and bulk packaging cut lengths and assemblies other colours alternative threads such as PG or NPT overbraided conduit

stainless steel conduit *indicates parts made to order on request













galvanised steel, pvc coated, pliable

type **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
- Provides EMC screening
- IP rating: IP66 + IP67
- Smooth, wipe clean outer cover Does not wrinkle when bent
- Can be bent into shape requiring fewer clips
- Temperature range -15°C to +70°C
- Nickel plated brass fittings

fittings

external thread

nickel plated brass

type C (P66 (P67)

type 90°elbows

brass elbow

washers internal and external neoprene face threaded nickel plated sealing washers

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.

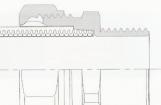






sealing

nominal size (mm)	FLP 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
16	FLP16B	10, 25, 50	17.8	11.6	35	M16	FLP16-M16-C	M16	BM90-16M	M16	SW16
20	FLP20B	10, 25, 50	20.9	14.6	35	M20	FLP20-M20-C	M20	BM90-20M	M20	SW20
25	FLP25B	10, 25, 50	27.3	20.4	45	M25	FLP25-M25-C	M25	BM90-25M	M25	SW25
32	FLP32B	10, 25	34.0	26.4	55	M32	FLP32-M32-C	M32	BM90-32M	M32	SW32
40	FLP40B	25	44.5	37.1	80	" M40	FLP40-M40-C	M40	BM90-40M	M40	SW40
50	FLP50B	20	56.5	49.1	150	M50	FLP50-M50-C	M50	BM90-50M	M50	SW50







fittings

Typical application for type FLP conduit and fittings

includes static machines.

locknuts

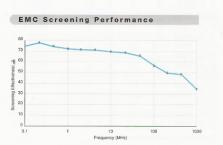
galvanised steel and nickel plated brass locknuts

plated steel P clip with pvc liner





metric thread	steel part number	brass part number	part number	nominal size (mr	
M16	S-M16	B-M16	FCC16	16	
M20	S-M20	B-M20	FCC20	20	
M25	S-M25	B-M25	FCC25	25	
M32	S-M32	B-M32	FCC32	32	
M40	S-M40	B-M40	FCC40	40	
M50	S-M50	B-M50	FCC50	50	



ordering notes

- Add reel length eg: FLP20B-25M
- Available on request:

longer lengths cut lengths and assemblies additional sizes uncoated version full copies of independent test report confirming screening effectiveness

LFH version now available







Low Fire Hazard (LFH) performance

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.

tests used

Flame Retardancy

Limiting Oxygen Index (LOI) to BSEN ISO 4589 determines the percentage of oxygen in air that would need to be present to support combustion. The higher the percentage the greater flame retardancy.

Oxygen present in normal air 21%. The UK Code of Practice for railway rolling stock requires 28% for overground and 34% for underground passenger carriages.

UL 94 is an underwriter laboratories standard with flammability classifications HB, V0, V1, V2. HB allows horizontal burning up to a maximum speed, V0 is highly flame retardant.

Smoke Density is evaluated to BS6853 annex D.8.3. Code of Practice for fire precautions in the design and construction of passenger carrying trains. A plaque of materials is burnt in a 3 metre cubic chamber. A graph of smoke opacity against time is plotted which shows the maximum opacity (Ao) and the time taken to reach that opacity. LFH materials should have Ao < 0.03.

Toxic Fumes

Naval standard NES713 and rail standard BS6853 burns a set amount of material and analyses the gases given off. The volume of each gas is multiplied by the toxicity index for each gas. The toxicity index for each gas are added together to give an overall toxicity index for the material.

NFF16-101/2 is a French Norm, used by railways, which gives an ignition and fume rating from oxygen index, glow wire ignition, smoke density and smoke toxicity tests.

Buyer Beware

All four properties 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.

FU, SSU, FB and metal fittings

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

LFHU

Self extinguishing Highly flame retardant -1.01 = 43%

- UL 94 V0

Low smoke to BS6853

- maximum opacity Ao = 0.01

Low toxicity

- toxicity index to NES713 = 1 Halogen, sulphur & phosphorus free

FPAS

Self extinguishing Highly flame retardant

- LOI = 26%

- UL 94 V2

Low smoke to BS6853

- maximum opacity Ao = 0.02

- toxicity index to BS6853

Annex B = 1.55

Halogen, sulphur & phosphorus free

FPAH

Self extinguishing 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 Halogen, sulphur & phosphorus free

Self extinguishing Highly flame retardant

-1.01 = 35%

- UL 94 V0

Low smoke to BS6853

- maximum opacity Ao = 0.01 Low toxicity

toxicity index to BS6853

Annex B = 0.99Ignition and fume rating to

- NFF16-101/2 = I2F1 Halogen, sulphur & phosphorus free

Nylon fittings (PA66)

Self extinguishing Highly flame retardant

-L01 = 28%

- III 94 V/2

Low smoke to BS6853

- maximum opacity Ao = 0.03

toxicity index to BS6853 Annex B = 1.18

Halogen, sulphur & phosphorus free



resistance to chemicals

metallic conduit and fittings

>

nonmetallic conduit and fittings

key

L limited resistance

poor resistance

PP suitable with

SS suitable with

anc cal		ASTA NO. 1 ASTA NO. 2 ASTA NO. 2 ASTA NO. 2 ASTA NO. 2 ACETIO ACTORE ALUMINIUM CHLORIDE BINZENE CARRON CITRIC ACID COPPER SULPHATE CACID COPPER SULPHATE CITRIC ACID COPPER SULPHATE COPPER SULPHA	
Pag numl	conduit system	ASTM NO. 1 ASTM NO. 2 ASTM NO. 2 ASTM NO. 2 ASTM NO. 3 ACETICA ACID (10% ACETICA ACID (10% ACETICA ACID (10% ACETICA ACID (10% COPPER SULPHAT CORPORA CITRIC ACID COPPER SULPHAT COPPER SU	
6	type FU galvanised steel	/	type FU galvanised steel
6	type SSU stainless steel, grade 316	/	type SSU stainless steel, grade 316
8	type FSU galvanised steel, pvc coated	X X X L X X X X X Z Z L L X X X L L Z X Z Z Z L L X X X Z Z X X L L X X L Z X X Z L X X X L X X L L X Z L Z	type FSU galvanised steel, pvc coated
8	type FNU galvanised steel, thermoplastic coated	/	type FNU galvanised steel, thermoplastic coated
10	type LFHU galvanised steel, LFH coated	L L L / X X X X X / X X X X X X X X X X	type LFHU galvanised steel, LFH coated
12	type FSB galv steel, pvc, galv steel over braid	$\times \times \times L \times \times \times \times \times \times L \times \times \times \times \times \times \times \times \times$	type FSB galv steel, pvc, galv steel over braid
10	type FB galv steel, galv steel over braid	//×/×///////××××××///×××××//×××××//×××××	type FB galv steel, galv steel over braid
_ 14	galv steel, pvc coated, liquid tight		type LTP galv steel, pvc coated, liquid tight
14	type LTPHC galv steel, thermoplastic rubber, liquid tight		type LTPHC galv steel, thermoplastic rubber, liquid tight
_ 14	type LTPUL galv steel, pvc coated, liquid tight		type LTPUL galv steel, pvc coated, liquid tight
16	type FLP galv steel, pvc coated, pliable	*** L * * * L * * C L L * C L L * C L * C L * C	type FLP galv steel, pvc coated, pliable
18	type FPAS nylon LFH PA6 corrugated, std weight	××××L×,,,_××××××××××××××××××	type FPAS nylon LFH PA6 corrugated, std weight
18	type FPAL nylon PA6 corrugated, light weight	/	type FPAL nylon PA6 corrugated, light weight
18	type FPR nylon extra LFH PA6 corrugated, std wght	/	type FPR nylon extra LFH PA6 corrugated, std wght
19	type FPAH nylon LFH PA6 corrugated, heavy wght	/	type FPAH nylon LFH PA6 corrugated, heavy wght
19	type FPI nylon PA12 corrugated, standard wght	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	type FPI nylon PA12 corrugated, standard wght
19	type FPIH nylon PA12 corrugated, heavy weight	<pre></pre>	type FPIH nylon PA12 corrugaled, heavy weight
_26	type FPY nylon PA6 corrugated, light weight	<pre></pre>	type FPY nylon PA6 corrugated, light weight
_26	type FPP polypropylene corrugated, std weight		type FPP polypropylene corrugated, std weight
28	nylon PA6, large diameter, std weight	/ / / L / × / / × / L × / / / / / / × × × ×	type FPY nylon PA6, large diameter, std weight
29	upvc corrugated	/	type FPL upvc corrugated
30	pvc spiral reinforced	××× L × L × L × L L L L X × L X L L X × × × ×	type FPC pvc spiral reinforced
3	type LPC smooth, pvc spiral reinforced		type LPC smooth, pvc spiral reinforced

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.

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

PF

Japanese conduit thread conforming to JIS B 0202

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

NPT

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

Thread size (inches)	External thread outside diameter (mm)	Pitch mm	
%	16.7	1.14	
1/2	21.0	1.81	
%	26.4	1.81	
1	33.3	2.21	
1%	41.9	2.21	
1%	47.8	2.21	
2	59.6	2.21	

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

UNEF/UNS

American unified thread conforming to BS1580 used on circular connectors

Thread size (inches)	External thread outside diameter (mm)	Internal thread inside diameter (mm)	Pitch mm
%	15.9	14.7	1.06
%	19.1	17.7	1.27
%	22.2	20.9	1.27
1	25.4	24.0	1.27
1%e	30.2	28.6	1.41
1%	31.8	30.2	1.41
1%e	36.5	35.0	1.41
1%	44.5	42.9	1.41
2	50.8	49.3	1.41
2%	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 (mm²)	Nominal overall cross sectional area (mm²)	
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 4.0mm2 cables?

- The total cross sectional area of the conductors is 5 x 14.5mm² = 73mm²
- The cross sectional area of LTP20 is 3.142 x $large \frac{\text{inside diameter}}{2}$ = 201mm²
- % of conduit cross sectional area $\frac{73}{201} = 36\%$

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



IP ratings and technical guidance

IP ratings guide

(Ingress Protection to BS EN 60529)

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

Ingress of dust is not totally prevented but dust does not enter in harmful quantities

6 No ingress of dust

2nd digit - protection against water

•		
0	No	protection

- 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
- Medium pressure jet similar to garden hose from any angle
- 6 High pressure jet similar to fire hose from any angle
- 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 5 bar. Please call +44 (0) 1675 466900 for more details.

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.

Technical guidance

Application advice

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

Compression strength Abrasion resistance Tensile strength UV resistance Impact strength Fire performance Temperature range EMC screening Flexibility Dimensions Fatigue life Weight Electrical insulation or continuity Colours IP rating Ease of installation

Chemical resistance

Please call 01675 466900 for technical information and application advice.

Standards, performance and approvals

Flexicon conduits and fittings are manufactured by Flexicon to comply with BS EN 50086, the European conduit standard.

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.

Where product performance data over and above the requirements of BS EN 50086 is provided e.g.: Low Fire Hazard testing and EMC screening, other appropriate standards have been used.

Flexicon is currently building up a portfolio of test data and product approvals. Please call +44 (0) 1675 466900 for further information and technical advice.

Cutting and Assembly Guidance

All non-metallic conduits and FLP up to 34mm can be easily cut with Flexicon cutters, part no. CC01.

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

Cutting of overbraided conduit is made much easier by 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.

Flexicon can supply bench mounted bandsaws designed to cut metallic conduit easily.

To obtain EMC screening on pliable FLP conduit, the PVC sheath must be trimmed back prior to assembly.

Metal fittings should be nipped with grips or spanner to ensure securing and IP rating.

Face sealing washers may be required to maintain IP rating between systems.

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.

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.