

FLEXIBLE CONDUIT SOLUTIONS

A PART OF  **atkore**
INTERNATIONAL

Hygienic Product Range Brochure

THE POWER IN CABLE PROTECTION

3RD
edition

WWW.FLEXICON.UK.COM

Product Features & Benefits

Our range of Hygienic Flexible Conduits offers a smooth, easy to clean surface. With the additional Stainless Steel Hygienic fittings & accessories it creates a complete system ideal for Food & Beverage, Machinery & OEM's, Healthcare and Pharmaceutical applications.

Introducing Flexicon's range of hygienic systems

- Flexicon offer Cable Protection products which allow for efficient cleaning whilst providing system integrity for Hygienic environments.
- Our products protect against the build up of microbes and bacteria and also ensure that cleaning processes do not damage or compromise equipment operation. Manufactured in accordance with EN1672-2 and EN ISO 14159
- Our new range of Stainless Steel Round Connection boxes have been designed using SS Grade 316L and feature a range of connection options.
- Hygienic Glands are available as a short thread version to ensure a secure connection whilst maximising wiring space within the box.

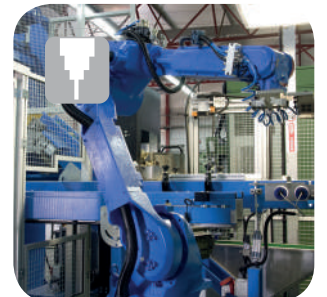
Features & Benefits

- 1 Hygienic design**
 - In accordance with EN1672-2 & EN ISO 14159
- 2 High Tensile Strength**
 - 70kg for LPC conduit & fitting*
 - 130kg for LTP conduit & fitting*
- 3 Smooth finish**
 - Eliminate build up of bacteria & micro-organisms
- 4 High IP rating**
 - IP66, IP67, IP68 (2 Bar) & IP69
- 5 Corrosion resistance**
 - Material type (SS316L)
- 6 High chemical and thermal resistance**
 - Resistant to chemicals & cleaning agents
- 7 Fewer components**
 - Ease of assembly and integrated barrier seal to prevent contamination.

*For 20mm conduit











Request your sample today



Flexicon Hygienic System

	LPC-FG	LTP-FG	LTBRDP-FG	LTPSS-FG
Material	uPVC Reinforced with PVC Jacket	Galvanised Steel Core with PVC Cover	Galvanised Steel Core & Inner Braid with PVC Cover	Stainless Steel Core with PVC Cover
Compression Strength (kg/100mm)	120	400	400	400
Tensile Strength (kg) (20mm)	70	130	130	130
Temperature Range	-20°C to +90°C	-20°C to +105°C	-20°C to +105°C	-20°C to +105°C
Min Bend Radius (20mm Nom Size)	70	65	65	65
Halogen Free	No	No	No	No
Self Extinguishing	Yes	Yes	Yes	Yes
IP Rating	IP66, 67, 68 & 69	IP66, 67, 68 & 69	IP66, 67, 68 & 69	IP66, 67, 68 & 69
Provides EMC	No	No	Yes	No
Available Colours	● ● ●	● ●	● ●	●
BS EN IEC 61386	Yes	Yes	Yes	Yes
CE	Yes	Yes	Yes	Yes
ROHS	Yes	Yes	Yes	Yes
REACH	Yes	Yes	Yes	Yes
EU Regulation 10/2011	Yes	Yes	Yes	Yes
FDA Approved Ingredients	Yes	Yes	Yes	Yes

nominal size (mm)								
	LPC-FG			LTP-FG		LTBRDP-FG		LTPSS-FG
12	LPCWFG12	LPCBFG16	LPCGFG12	LTPWFG12	LTPBFG12			
16	LPCWFG16	LPCBFG16	LPCGFG16	LTPWFG16	LTPBFG16			LTPSSBFG16
20	LPCWFG20	LPCBFG20	LPCGFG16	LTPWFG20	LTPBFG20	LTBRDPWFG20	LTBRDPBFG20	LTPSSBFG20
25	LPCWFG25	LPCBFG25	LPCGFG16	LTPWFG25	LTPBFG25	LTBRDPWFG25	LTBRDPBFG25	LTPSSBFG25
32	LPCWFG32	LPCBFG32	LPCGFG16	LTPWFG32	LTPBFG32	LTBRDPWFG32	LTBRDPBFG32	LTPSSBFG32
40	LPCWFG40	LPCBFG40	LPCGFG16	LTPWFG40	LTPBFG40	LTBRDPWFG40	LTBRDPBFG40	LTPSSBFG40
50	LPCWFG50	LPCBFG50	LPCGFG16	LTPWFG50	LTPBFG50	LTBRDPWFG50	LTBRDPBFG50	LTPSSBFG50
63	LPCWFG63	LPCBFG63	LPCGFG16	LTPWFG63	LTPBFG63			

Also Available - UL Listed Conduits

For more information on UL listed hygienic conduits, please contact us on flexiconsales@atkore.com

UL Type LFNC-B Splash Zone Liquid Tight conduit

Construction: UL liquid tight PVC jacket that inhibits bacteria growth.



UL Type LFMC Splash Zone Liquid Tight conduit

Construction: Zinc coated galvanised low carbon steel strip with a white UL liquid tight PVC jacket that inhibits bacteria growth.



Non-Metallic System

HR
HYGIENIC
RANGE

LPC-FG conduit

White, Blue or Grey Reinforced uPVC with PVC Jacket

Construction: Smooth bore, smooth cover, helically formed PVC, flexible conduit with spiral uPVC reinforcement and flexible PVC jacket. Colour white, blue or grey available.

Typical Applications: Suitable for repeat contact with all food types, excluding fatty foods, at full temperature.

The flexible PVC is manufactured from FDA approved ingredients and has been independently tested to European Food regulation 10/2011.

LPC-C-FG fitting

Metric threads

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

IP66

IP67

IP68
2 bar

IP69



Nominal size (mm)	ID (mm)	OD (mm)	Reel Length (m)	Conduit Part No. White	Conduit Part No. Blue	Conduit Part No. Grey
12	10.0	14.2	30	LPCWFG12	LPCBUEFG12	LPCGFG12
16	12.0	17.8	30	LPCWFG16	LPCBUEFG16	LPCGFG16
20	16.0	21.1	10, 30	LPCWFG20	LPCBUEFG20	LPCGFG20
25	21.0	26.4	10, 30	LPCWFG25	LPCBUEFG25	LPCGFG25
32	26.5	33.1	10, 30	LPCWFG32	LPCBUEFG32	LPCGFG32
40	35.4	41.8	10, 30	LPCWFG40	LPCBUEFG40	LPCGFG40
50	40.0	47.9	10, 30	LPCWFG50	LPCBUEFG50	LPCGFG50
63	51.3	59.7	10, 30	LPCWFG63	LPCBUEFG63	LPCGFG63

Fitting Part No.	Thread Size
LPC12-M12-C-FG	M12
LPC16-M16-C-FG	M16
LPC20-M20-C-FG	M20
LPC25-M25-C-FG	M25
LPC32-M32-C-FG	M32
LPC40-M40-C-FG	M40
LPC50-M50-C-FG	M50
LPC63-M63-C-FG	M63

Metallic Systems

HR
HYGIENIC
RANGE

LTP-FG conduit

Galvanised Steel with White or Blue PVC Cover

Construction: Galvanised steel, helically wound, flexible conduit with smooth white or blue PVC cover.

Typical Applications: Suitable for repeat contact with all food types, excluding fatty foods, at full temperature.

The flexible PVC is manufactured from FDA approved ingredients and has been independently tested to European Food regulation 10/2011.

LTBRDP-FG conduit

Galvanised Steel Core & Braid with a White or Blue PVC Cover

Construction: Galvanised steel, helically wound, flexible conduit with galvanised steel braid and a white or blue PVC smooth cover.

Typical Applications: Suitable for applications where high corrosion resistance and liquid tight are a requirement combined with EMC screening. The flexible PVC is manufactured from FDA approved ingredients and has been independently tested to European Food regulation 10/2011.

Nominal size (mm)	ID (mm)	OD (mm)	Conduit Part No. White	Reel Length (m)	Conduit Part No. Blue	Reel Length (m)
12	10.0	14.2	LTPWFG12	25, 50	LTPBUEFG12	25, 50
16	12.6	17.8	LTPWFG16	25	LTPBUEFG16	25
20	16.0	21.1	LTPWFG20	10, 25	LTPBUEFG20	10, 25
25	21.0	26.4	LTPWFG25	10, 25	LTPBUEFG25	10, 25
32	26.5	33.1	LTPWFG32	10, 25	LTPBUEFG32	10, 25
40	35.4	41.8	LTPWFG40	10	LTPBUEFG40	10
50	40.0	47.9	LTPWFG50	10	LTPBUEFG50	10
63	51.3	59.7	LTPWFG63	10	LTPBUEFG63	10

Conduit Part No. White	Reel Length (m)	Conduit Part No. Blue	Reel Length (m)
LTBRDPWFG20	10, 25	LTBRDPBUEFG20	10, 25
LTBRDPWFG25	10, 25	LTBRDPBUEFG25	10, 25
LTBRDPWFG32	10, 25	LTBRDPBUEFG32	10, 25
LTBRDPWFG40	10	LTBRDPBUEFG40	10
LTBRDPWFG50	10	LTBRDPBUEFG50	10

I-Pack

The I-Pack consists of 3 metres of conduit, 2 Hygienic fittings and 2 Stainless Steel Locknuts.

Featuring a smooth inner bore, the LPC-FG makes it easy to run cables through the conduit, simplifying installation.

Benefits

- **Simplistic ordering** - one part number
- **Easy Storage** - short length coiled for space saving
- **Ready to use** - all components to create a system

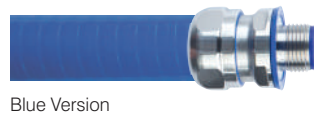


20mm I-PACK



I-PACKBUFG20

3m x LPCBUFG20 Conduit
2x LPC-C-FG Fittings
2x SS-M20 Locknuts



Blue Version

I-PACKWFG20

3m x LPCWFG20 Conduit
2x LPC-C-FG Fittings
2x SS-M20 Locknuts



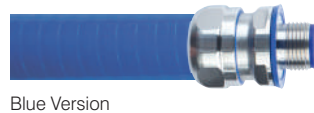
White Version

25mm I-PACK



I-PACKBUFG25

3m x LPCBUFG25 Conduit
2x LPC-C-FG Fittings
2x SS-M25 Locknuts



Blue Version

I-PACKWFG25

3m x LPCWFG25 Conduit
2x LPC-C-FG Fittings
2x SS-M25 Locknuts



White Version



LTPSS-FG conduit

**Stainless Steel Core with
Blue PVC Cover**

Construction: Stainless Steel (316L), helically wound, flexible PVC blue smooth cover.

Typical Applications: Suitable for repeat contact with all food types, excluding fatty foods, at full temperature.

The PVC is manufactured from FDA approved ingredients and has been independently tested to European Food regulation 10/2011.



Nominal size (mm)	Conduit Part No. Blue	Reel Length (m)
12		
16	LTPSSBUFG16	25
20	LTPSSBUFG20	25
25	LTPSSBUFG25	25
32	LTPSSBUFG32	10
40	LTPSSBUFG40	10
50	LTPSSBUFG50	10
63		

LTP-C-FG fitting

Metric threads

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



Fitting Part No.	Thread size
LTP12-M12-C-FG	M12
LTP16-M16-C-FG	M16
LTP20-M20-C-FG	M20
LTP25-M25-C-FG	M25
LTP32-M32-C-FG	M32
LTP40-M40-C-FG	M40
LTP50-M50-C-FG	M50
LTP63-M63-C-FG	M63

Stainless Steel Round Box

Round Connection Box hygienic Stainless Steel



4 Way Box shown
2 mounting holes on base
M20 Thread Entries

Construction: Stainless Steel (Grade 316L) Round box consisting of a base and lid. Designed using the principles of EN 1672-2 and EN ISO 14159 supplied with blue high visibility polyester elastomer lid and base seals. Available with either 2 (through) or 4 holes, other versions available on request. 2 Fixing holes are provided, together with component Mounting holes to help with installation. Slots in the lid allow for secure tightening of the lid and aids opening for maintenance or upgrade. Design offers high Ingress Protection combined with high corrosion resistance.

IP66	IP67	IP68	IP69
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Typical Applications: Ideal use as a Junction Box for the interconnection of circuits for Hygienic Applications. The lid and base construction provides access to cabling routed through connecting conduits. Pre drilled Mounting holes provide easy option to fix terminals or DIN rail within the box. Ideal for extending or modifying circuits whilst maintaining system integrity. The Box offers the possibility to connect and interface with Cable Glands or different types of cabling installations.

	Part Number	Height (mm)	Diameter (mm)
2 Way	FBOX75X60-M20X2-SS	65	75
4 Way	FBOX75X60-M20X4-SS	65	75

LPC & LTP short thread fitting Metric threads

Construction: Manufactured from 316L Stainless Steel.

Typical Applications: For use with round connection box to maximise available wiring space within the box.



IP66	IP67	IP68 5 bar	IP69
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For LPC Conduit	For LTP, LTBRDP & LTPSS Conduit
LPC20-M20ST-C-FG	LTP20-M20ST-C-FG

Fixing Clip Stainless Steel

Fixing clip to support conduit. Manufactured from 316L Stainless Steel. Can be used with both metallic and non-metallic hygienic conduits.



Ø	Fixing Clip Part Number
12	FCC12-SS
16	FCC16-SS
20	FCC20-SS
25	FCC25-SS
32	FCC32-SS
40	FCC40-SS
50	FCC50-SS
63	

SP blanking plug Stainless Steel

Construction: Stainless Steel (Grade 316L) designed using the principles of EN 1672-2 and EN ISO 14159 supplied with blue high visibility polyester seal.

Typical Applications: Can be used to seal off any unused ways on the Stainless Steel Round Connection Box.



Blanking Plug Part Number
SP-M20-FG-SS

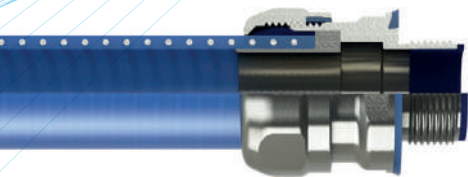
Locknut Stainless Steel

Hexagonal locknut to secure fitting. Manufactured from 316L Stainless Steel. Can be used with LPC-C-FG and LTP-C-FG fittings.



Thread Size	Locknut Part Number
M12	SS-M12
M16	SS-M16
M20	SS-M20
M25	SS-M25
M32	SS-M32
M40	SS-M40
M50	SS-M50
M63	SS-M63

Why use Flexible Conduit



Cleaning regimes are an important and essential process to ensure the safety and quality of a company's output and goods. Whilst machinery or plant is being cleaned or maintained, production or service output is zero therefore this time should be as effective as possible, without compromising safety and quality.

"Flexicon can offer Hygienic Cable Protection solutions that save time and money"

Flexicon are the leading solutions provider to protect your critical power and data cables in Hygienic environments from damage caused by mechanical, electrical or environmental influences.



Why use Flexible Conduit over cable?

Flexible Conduit is ideal for the Cable Protection, Management and Routing of power and / or data cables.



Simplicity

No need for specialist cables. Standard and single core cables can be grouped and protected in one system. Mechanical protection is provided by the conduit system. Fewer components mean less product inventory throughout the supply chain.



Space Saving

Grouping standard cables into one system means less glanding space / area required to terminate. Cost savings can be achieved by using smaller enclosures, less components and reducing installation time required to terminate.



Speed of Installation

Grouping cables using flexible conduit means fewer cable entry points to the enclosure / equipment therefore less installation time. Flexible Conduit offers the ability to route around equipment and plant without the need for specialist bending equipment.



Fixing

Multiple circuits can be fixed and secured in one system. This makes cleaning easy with one smooth outer cover. A range of fixing and mounting solutions are available to secure the Conduit in place throughout its lifetime.



Reduced Maintenance

Existing circuits can be replaced or added with ease using a conduit system, throughout the life of the installation. Less cable entry points means less opportunity for Ingress Protection failure during washdown or cleaning schedules.

Typical hazards & product considerations

- Chemicals
- Ingress Protection
- Corrosion – Chemicals and Wash down
- Steam jets
- Build up of Microbes and Bacteria



- Contamination
- Temperature
- Vibration
- Abrasion
- Continuous & Repeated Movement
- Explosive Gases



Industry Standards and Specifications include...



BS EN ISO9001 2015

EN 61373 Cat2

EN 1672-2



Approved Ingredients



BS EN IEC 61386

EU Regulation 10/2011

EN ISO 14159

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