

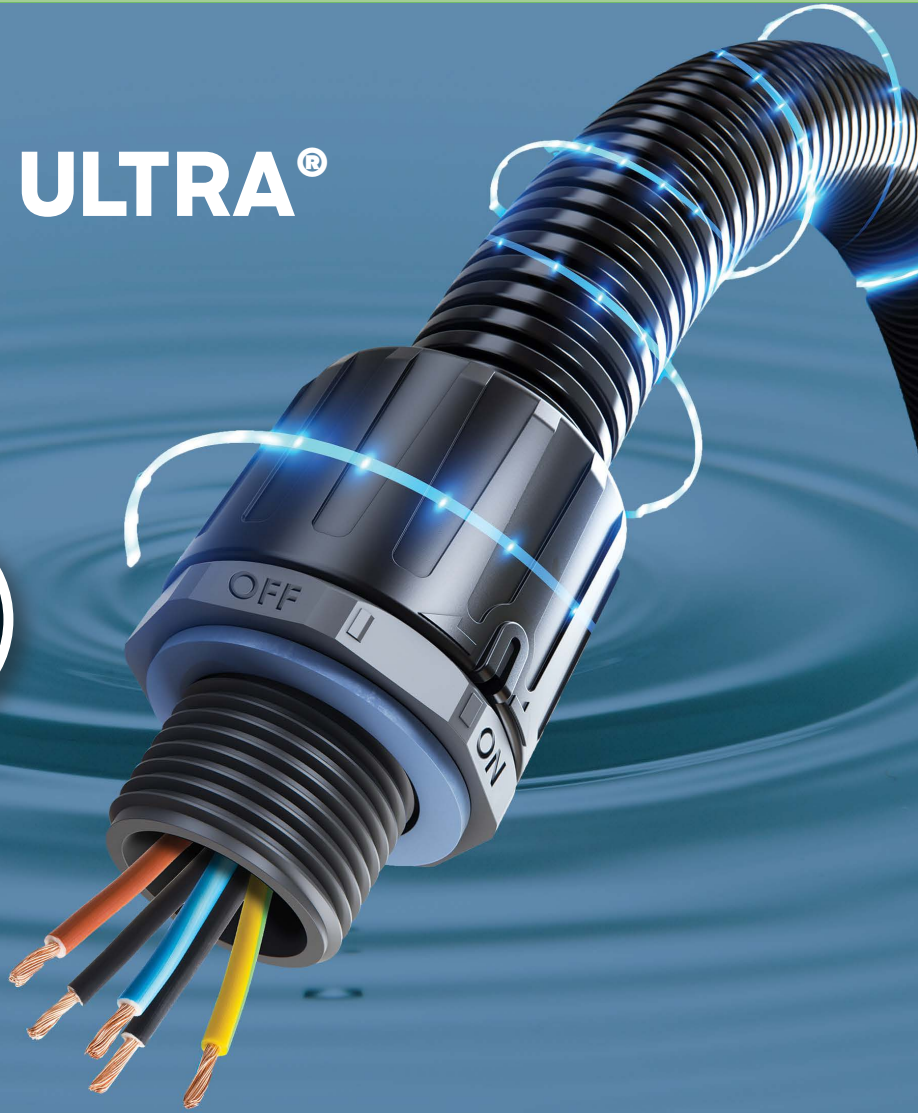
PRODUCT SELECTION GUIDE

Flexible conduit solutions for performance
and safety critical systems

NEW

Flexicon ULTRA®

Integrated
Sealing
Technology



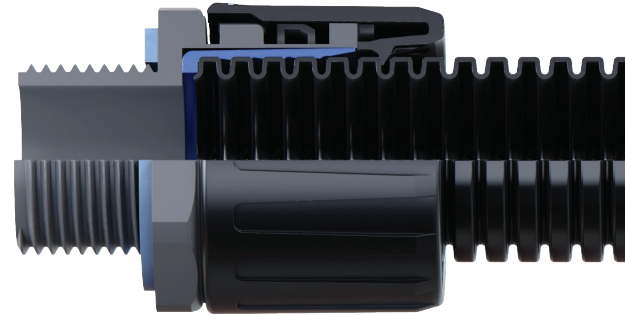
AtkoreTM
Flexicon

Testing & Applications



The risks of Cable Protection failure can have significant consequences to Personal Safety, Continuity of Power / Data Supply and System Integrity.

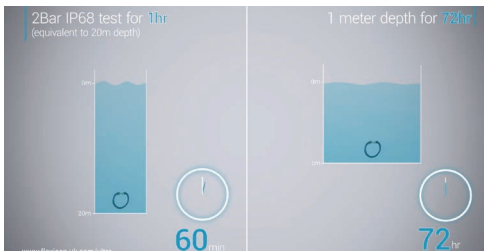
Flexicon ULTRA® is the world's best solution to protect critical cabling and vulnerable installations. Ideal for the harshest environments and technically demanding applications, Flexicon ULTRA® exceeds expectations when it comes to Cable Protection Performance.



Flexicon ULTRA® is ideal for applications which demand...



- **Simplicity:** One piece solution - no separate parts or pre-assembly required
- **High level of Ingress Protection:** IP66, IP67, IP68 and IP69 performance
- **Dynamic performance:** Highest tensile strength non-metallic fitting, up to 75kg
- **Light weight:** Non-metallic components
- **Reliability:** Tested to extremes
- **Corrosion resistance:** Long life performance



Our products have been tested to the extremes to ensure suitability for technically demanding environments.

For example, to demonstrate the Ingress Protection performance to IP68 we've tested our products for Ingress Protection to 1 meter depth for a period of 72 hours, far beyond the requirements of the BS EN IEC 60529.

We've also tested our products for 2 Bar (equivalent to 20 meter depth) for a period of one hour.

Typical applications include...



Rail



Automation

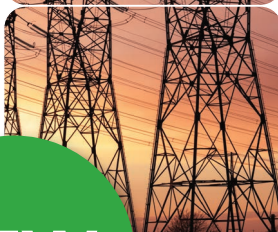
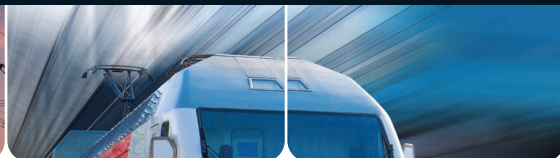


Utilities



Marine

Product Features & Benefits



NEW

Offering **Integrity**, **Strength** and **Assurance**, Flexicon ULTRA® is the best solution for Performance & Safety Critical applications.

Integrity

- **One Piece** – Integrated Sealing Technology
- IP68, IP69 performance
- Simple push and twist connection

Strength

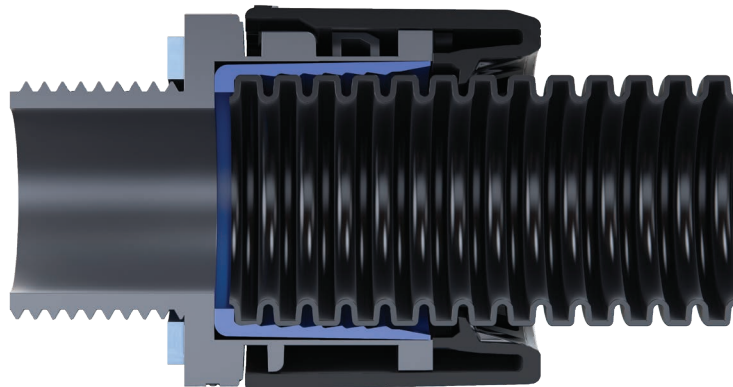
- **360° Strength** – All round teeth
- 75kg Tensile Strength
- Anti-tamper, Dynamic & Vibration performance

Assurance

- **Lifetime sealing & reliability**
- Independently tested to extremes



Integrated
Sealing
Technology



non-metallic conduit

NEW

	FPASC	FPAS	FPR	FPAH	FPI	FPIH	FPIHR
Weight	Heavy	Standard	Standard	Heavy	Standard	Heavy	Heavy
Material	PA6	PA6	PA6*	PA6	PA12	PA12	PA12*
Compression Strength	120kg	75kg	75kg	120kg	45kg	60kg	60kg
High Fatigue Life	Yes	Yes	Yes	-	Yes	Yes	Yes
Temperature Range	-40°C to +120°C	-40°C to +120°C	-40°C to +120°C	-40°C to +120°C	-50°C to +110°C	-50°C to +110°C	-50°C to +110°C
Low Temperature Impact	5J @ -40°C	5J @ -40°C	3J @ -40°C	5J @ -40°C	6J @ -50°C	6J @ -50°C	9.8J @ -50°C
Low Fire Hazard							
Halogen Free	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Self Extinguishing	Yes	Yes	Yes	Yes	Yes	Yes	Yes
High Abrasion Resistance	Yes	Yes	Yes	Yes	-	Yes	Yes
Resistant to Solvents & Oils	Yes	Yes	Yes	Yes	Yes	Yes	Yes
High UV Resistance (Black)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
BS EN IEC 61386	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lloyds Register Approved	Yes	Yes	Yes	-	-	-	-
UL Recognized	-	Yes - E229161	Yes - E229161	Yes - E229161	Yes - E229161	Yes - E229161	Yes - E229161
UL Listed	Yes - E246572	-	-	-	-	-	-
EN 45545-2	-	-	HL3	-	-	-	HL3
LUL 1-085	-	-	Yes	-	-	-	Under Test
BS 6853	Yes	Yes	Yes	Yes	Yes	Yes	Under Test
NF F 16-101/2	Yes	Yes	Yes	Yes	Yes	Yes	Under Test
DIN 5510	-	-	Yes	-	Yes	Yes	Under Test
CEI 11170	-	-	Yes	-	-	-	Under Test
AS/NZS 1530.3	-	-	Yes	-	-	-	Under Test
ASTM E 162	-	-	Yes	-	-	-	Under Test
ASTM E 662	-	-	Yes	-	Yes	Yes	Under Test
CE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ROHS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
REACH	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*Highly Flame retardant

european (NW) sizes

pitch

nominal size (mm)



FPASC

part number



FPAS

part number



FPR

part number



FPAH

part number



FPI

part number



FPIH

part number



FPIHR

part number

NEW

10	F	13		FPAS13	FPR13	FPAH13	FPI13	FPIH13	FPIHR13
12	F	16		FPAS16	FPR16	FPAH16	FPI16	FPIH16	FPIHR16
12	F	16							
12	F	16							
17	F	21		FPAS21C	FPAS21	FPR21		FPI21	
	C	21							
	C	21				FPAH21		FPIH21	FPIHR21
23	F	28		FPAS28C	FPAS28	FPR28			
	C	28							
	C	28				FPAH28	FPI28	FPIH28	FPIHR28
29	C	34		FPAS34C	FPAS34	FPR34	FPI34	FPIH34	FPIHR34
29	F	34			FPAS34F				
36	C	42		FPAS42C	FPAS42	FPR42	FPI42	FPIH42	FPIHR42
36	C	42							
48	C	54		FPAS54C	FPAS54	FPR54	FPI54	FPIH54	FPIHR54
48	C	54							

Flexicon ULTRA® - The World's Best Conduit Fitting!

FPAU system nylon and metallic threaded options

Featuring Integrated Sealing Technology, Flexicon ULTRA® provides a true one piece solution when it comes to cable protection for technically demanding environments.

With all round teeth to secure the conduit, Flexicon ULTRA® offers superior dynamic performance providing Integrity, Strength & Assurance in one package.

For technically demanding, safety and performance critical applications such as Rail, Machinery & OEM's, Automation or Marine, Flexicon ULTRA® is the proven one piece fitting for all round performance.



Flexicon ULTRA® system straight

NEW



STRAIGHT	STRAIGHT	FLANGE	STRAIGHT	STRAIGHT	STRAIGHT
external thread Fast fit, external threaded fitting with integrated conduit seal. Suitable for knockouts or threaded entries.	UNE F swivel internal thread Fast fit fitting with nickel plated brass UNE F internal thread for attachment to circular connectors with integrated conduit seal.	flange Fast fit fitting with nylon swivel flange with integrated conduit seal and with 'O' ring face seal.	swivel brass external thread Fast fit, swivel, nickel plated brass external threaded fitting with integrated conduit seal. Suitable for knockouts or threaded entries.	swivel brass internal thread Fast fit, swivel, nickel plated brass internal threaded fitting with integrated conduit seal.	cable gland Fast fit, swivel, nickel plated brass external threaded cable gland fitting with integrated conduit seal. Suitable for knockouts or threaded entries.
IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69

european (NW) sizes	pitch	nominal size (mm)												
			Ext NPT	Ext Metric	Int UNE F	Flange	NPB Ext Metric	NPB Int Metric	NPB Metric					
10	F	13		FPAU13-M16			FPAU13-BM16	FPAU13-BFM16	FPAU13-BM16-CG					
12	F	16	FPAU16-038	FPAU16-M16	FPAU16-BU075	FPAU16-FL	FPAU16-BM16	FPAU16-BFM16	FPAU16-BM16-CG					
12	F	16	FPAU16-050	FPAU16-M20	FPAU16-BU100		FPAU16-BM20	FPAU16-BFM20	FPAU16-BM20-CG					
12	F	16			FPAU16-BU119									
17	F	21	FPAU21-050	FPAU21-M20	FPAU21-BU100	FPAU21-FL	FPAU21-BM20	FPAU21-BFM20	FPAU21-BM20-CG					
	C	21			FPAU21-BU119									
	C	21			FPAU21-BU138									
23	F	28	FPAU28-075	FPAU28-M25	FPAU28-BU138	FPAU28-FL	FPAU28-BM25	FPAU28-BFM25	FPAU28-BM25-CG					
	C	28			FPAU28-BU144									
29	F	34	FPAU34-100	FPAU34-M32	FPAU34-BU144	FPAU34-FL	FPAU34-BM32	FPAU34-BFM32	FPAU34-BM32-CG					
29	C	34												
36	C	42	FPAU42-125	FPAU42-M40	FPAU42-BU200	FPAU42-FL	FPAU42-BM40	FPAU42-BFM40	FPAU42-BM40-CG					
36	C	42	FPAU42-150	FPAU42-M50	FPAU42-BU225		FPAU42-BM50							
48	C	54	FPAU54-150	FPAU54-M50	FPAU54-BU200		FPAU54-BM50	FPAU54-BFM50	FPAU54-BM50-CG					
48	C	54	FPAU54-200	FPAU54-M63	FPAU54-BU225		FPAU54-BM63							

Flexicon ULTRA® fittings

Properties

- Fast fit - True one piece component
- PA66 Nylon molded fitting
- Metallic threads made from Nickel Plated Brass
- Retained Face seal details:
 - Nylon and Brass external threads include Retained High Performance washer
 - UNEF and Flange supplied with O-ring
- IP rating: for conduit & fitting IP66 + IP67 + IP68 (2 bar) + IP68 (72hrs @ 1m) + IP69
- Vibration and shock tested to EN61373 Cat 2
- Tamper resistant
- Both 90° and 45° elbows incorporate swept bore to facilitate cable installation and protect cables when installed
- Can be removed using a screwdriver
- All round teeth give high pull off strength 70kg with FPAH21
- Suitable for fine and coarse pitch conduits
- Temperature range:
 - conduit fitting: -50 °C to +135 °C
- Low Fire Hazard (LFH)
- Halogen, sulphur and phosphorus free
- UV resistant
- Swivel threads allow assembly without twisting of cables
- Flexicon Ultra® fittings are UL Listed, File No. E247502

Industry Approvals



Flexicon ULTRA® system 45°



IP66

IP67

IP68

IP69

NEW

45° ELBOW	45° ELBOW	FLANGE	45° ELBOW	45° ELBOW	45° ELBOW
external thread Fast fit, external threaded 45 degree elbow fitting with integrated conduit seal. Suitable for knockouts.	UNEF swivel internal thread Fast fit, 45 degree elbow fitting with nickel plated brass swivel UNEF internal thread for attachment to circular connectors with integrated conduit seal.	flange Fast fit 45 degree elbow fitting with nylon swivel flange with integrated conduit seal and 'O' ring face seal.	swivel brass external thread Fast fit, swivel, 45 degree elbow, nickel plated brass external threaded fitting with integrated conduit seal. Suitable for knockouts or threaded entries.	swivel brass internal thread Fast fit, swivel, 45 degree elbow, nickel plated brass internal threaded fitting with integrated conduit seal.	cable gland Fast fit, swivel, 45 degree elbow, nickel plated brass external threaded cable gland fitting with integrated conduit seal. Suitable for knockouts or threaded entries.
IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69	IP66 IP67 IP68 IP69



European (NW) sizes
pitch
nominal size (mm)

Ext NPT	Ext Metric	Int UNEF	Flange	NPB Ext Metric	NPB Int Metric	NPB Metric
10 F 13						
12 F 16	FPAU16-M20-45	FPAU16-BU100-45 FPAU16-BU119-45	FPAU16-FL-45	FPAU16-BM16-45 FPAU16-BM20-45	FPAU16-BFM20-45	FPAU16-BM20-CG-45
12 F 16	FPAU16-M20-45					
12 F 16						
17 F 21	PAU21-M20-45	FPAU21-BU100-45 FPAU21-BU119-45 FPAU21-BU138-45	FPAU21-FL-45	FPAU21-BM20-45	FPAU21-BFM20-45	FPAU21-BM20-CG-45
17 C 21						
17 C 21						
23 F 28	FPAU28-M25-45	FPAU28-BU138-45 FPAU28-BU144-45	FPAU28-FL-45	FPAU28-BM25-45	FPAU28-BFM25-45	FPAU28-BM25-CG-45
23 C 28						
29 F 34	FPAU34-M32-45	FPAU34-BU144-45	FPAU34-FL-45	FPAU34-BM32-45	FPAU34-BFM32-45	FPAU34-BM32-CG-45
29 C 34						
36 F 42	FPAU42-M50-45	FPAU42-BU200-45 FPAU42-BU225-45	FPAU42-FL-45	FPAU42-BM40-45 FPAU42-BM50-45	FPAU42-BFM50-45	FPAU42-BM40-CG-45
36 C 42						
48 F 54	FPAU54-M50-45	FPAU54-BU200-45		FPAU54-BM50-45	FPAU54-BFM50-45	FPAU54-BM50-CG-45
48 C 54	FPAU54-M200-45	FPAU54-BU225-45		FPAU54-BM63-45		

Flexicon ULTRA® fittings

Flexicon ULTRA® fitting works with both fine and coarse pitch conduits



Fine Pitch



Coarse Pitch

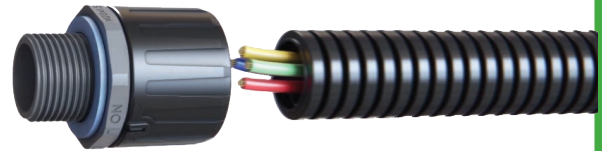
How to identify a Flexicon ULTRA® fitting



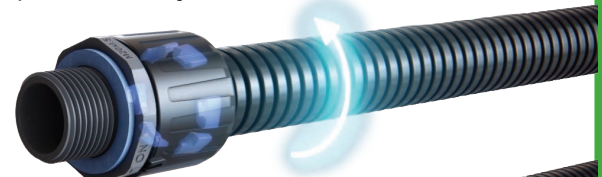
- Two-tone color - Capnut different to Body
- IP69 marked on product
- Blue insert seal with visible ribs within capnut
- Retained Face Sealing Washer
- Flexicon Ultra® logo is featured on the body

How to install a Flexicon ULTRA® fitting

Step 1: Offer conduit to fitting



Step 2: Push whilst twisting conduit



Step 3: Complete



Removal with screwdriver possible if required

Flexicon ULTRA® system 90°

NEW

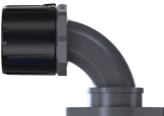


IP66

IP67

IP68

IP69

90° ELBOW			90° ELBOW			FLANGE			90° ELBOW			90° ELBOW			90° ELBOW					
external thread			UNEF swivel internal thread			flange			swivel brass external thread			swivel brass internal thread			cable gland					
Fast fit, external threaded 90 degree elbow fitting with integrated conduit ++++ for knockouts.			Fast fit, 90 degree elbow fitting with nickel plated brass swivel UNEF internal thread for attachment to circular connectors with integrated conduit seal.			Fast fit 90 degree elbow fitting with nylon swivel flange with integrated conduit seal with 'O' ring face seal.			Fast fit, swivel, 90 degree elbow, nickel plated brass external threaded fitting with integrated conduit seal. Suitable for knockouts or threaded entries.			Fast fit, swivel, 90 degree elbow, nickel plated brass internal threaded fitting with integrated conduit seal.			Fast fit, swivel, 90 degree elbow, nickel plated brass external threaded cable gland fitting with integrated conduit seal. Suitable for knockouts or threaded entries.					
IP66 IP67 IP68 IP69			IP66 IP67 IP68 IP69			IP66 IP67 IP68 IP69			IP66 IP67 IP68 IP69			IP66 IP67 IP68 IP69			IP66 IP67 IP68 IP69					
																				
Ext NPT			Ext Metric			Int UNEF			Flange			NPB Ext Metric			NPB Int Metric			NPB Metric		
			FPAU13-M16-90									FPAU13-BM16-90			FPAU13-BFM16-90			FPAU13-BM16-CG-90		
FPAU16-050-90			FPAU16-M16-90			FPAU16-BU075-90			FPAU16-FL-90			FPAU16-BM16-90			FPAU16-BFM16-90			FPAU16-BM16-CG-90		
			FPAU16-M20-90			FPAU16-BU100-90						FPAU16-BM20-90			FPAU16-BFM20-90			FPAU16-BM20-CG-90		
FPAU16-050-90						FPAU16-BU119-90														
			FPAU21-M20-90			FPAU21-BU100-90			FPAU21-FL-90			FPAU21-BM20-90			FPAU21-BFM20-90			FPAU21-BM20-CG-90		
						FPAU21-BU119-90														
						FPAU21-BU138-90														
FPAU28-075-90			FPAU28-M25-90			FPAU28-BU138-90			FPAU28-FL-90			FPAU28-BM25-90			FPAU28-BFM25-90			FPAU28-BM25-CG-90		
						FPAU28-BU144-90														
FPAU34-100-90			FPAU34-M32-90			FPAU34-BU144-90			FPAU34-FL-90			FPAU34-BM32-90			FPAU34-BFM32-90			FPAU34-BM32-CG-90		
FPAU42-125-90			FPAU42-M40-90			FPAU42-BU200-90			FPAU42-FL-90			FPAU42-BM40-90			FPAU42-BFM50-90			FPAU42-BM40-CG-90		
FPAU42-150-90			FPAU42-M50-90			FPAU42-BU225-90						FPAU42-BM50-90								
FPAU54-150-90			FPAU54-M50-90			FPAU54-BU200-90						FPAU54-BM50-90			FPAU54-BFM50-90			FPAU54-BM50-CG-90		
FPAU54-200-90			FPAU54-M63-90			FPAU54-BU225-90						FPAU54-BM63-90								



Allied Tube & Conduit ▴ AFC Cable Systems ▴ Heritage Plastics ▴ Unistrut
Unistrut Construction ▴ Cope ▴ US Tray ▴ Calbrite ▴ Calbond ▴ Kaf-Tech
Columbia-MBF ▴ Eastern Wire + Conduit ▴ ACS/Uni-Fab ▴ Cii
Power-Strut ▴ Calconduit ▴ Razor Ribbon ▴ Calpipe Security
FRE Composites ▴ Vergokan ▴ Flexicon ▴ Marco

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