

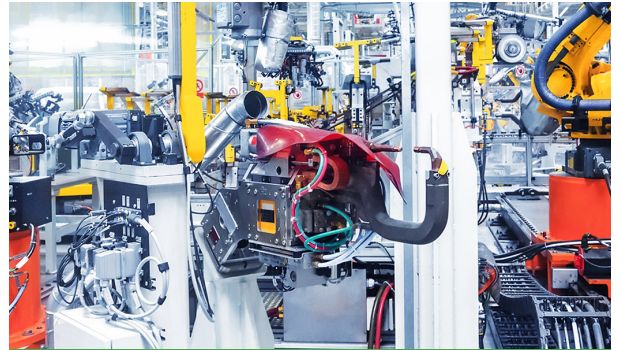
Cable Management & Protection Solutions

For Automation & Manufacturing

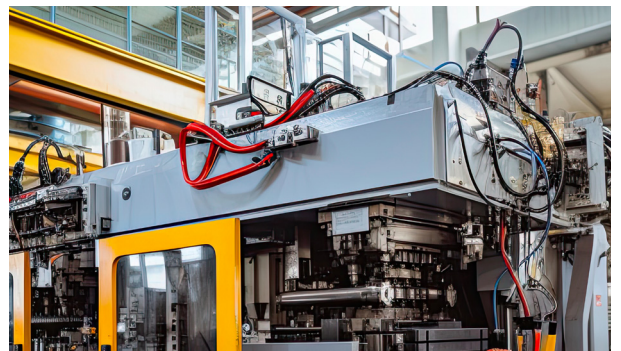


 **Atkore**TM

Building better together.



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Cable Management Systems, Page 18



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Solutions for Automation & Manufacturing

Behind the Brand 4

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Behind the Brand

Brand Portfolio

Home to market-leading brands all under one roof

Home to a leading family of brands, Atkore offers a comprehensive system to protect, manage, and route power and data cables effectively and safely. Our comprehensive range of UK manufactured product solutions have been designed to protect your critical power and data cables from the hazards caused by mechanical, electrical and environmental influences.

About Atkore

With over a century of powering and protecting the world around us, Atkore has a deep understanding of the high demands of the various industries and applications we serve. Our portfolio of industry-leading brands, coupled with our breadth of products and solutions, brings you exceptional value.

Turn-Key Solution

Our market leading brands of Atkore Unistrut, Marco, Flexicon and Vergokan provide customers with a one-stop-solution to manage and protect cables.

Atkore Advantages

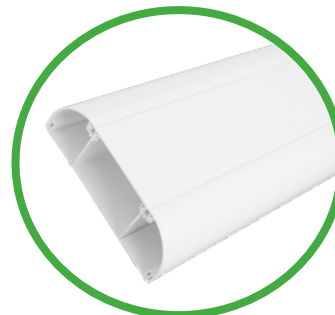
- ▲ Customer-focused: Sales & technical guidance
- ▲ Accredited CPD training programmes
- ▲ Toolbox talks by our expert team
- ▲ Engineer site visits & measures
- ▲ Custom & pre-fabricated solutions
- ▲ Over a century of innovation & expertise



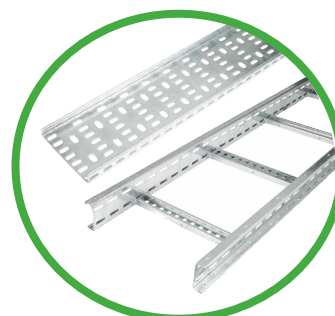
Atkore
Unistrut



Atkore
Flexicon



Atkore
Marco



Atkore
Vergokan

Industry Applications

Effective Application Solutions

Critical cable management and protection for effective manufacturing and automation

Manufacturing and automation is constantly evolving, with the rapid emergence of new technologies to achieve greater safety, efficiency and functionality.

Whether it is performing operations such as processing, assembly, inspection or materials handling - or in some cases a combination of all of these - manufacturing automation machinery relies on effective cable management and protection.

Example applications include:

- ▲ Robotics Systems
- ▲ Automation Machine Tools
- ▲ CNC Robots
- ▲ Milling and Rotary Transfer
- ▲ Metal Cutting Equipment - Drilling, Grinding, Lathes
- ▲ Laser Cutting and Punching Machines
- ▲ Moulding Machines
- ▲ Printing, Inkjet, Marking and Engraving
- ▲ Packaging - Accumulators, Baggers and Carton Machines
- ▲ Control and Instrumentation Systems



Selection Considerations

Supporting your Selection

Turn-key solutions and industry expertise to simplify your product specification

With a wide range of UK manufactured protection solutions available under one roof, choosing Atkore simplifies your product selection process.

Our longstanding expertise, coupled with a full understanding of the typical hazards faced by the industry, allows us to fully support your project from concept to completion.

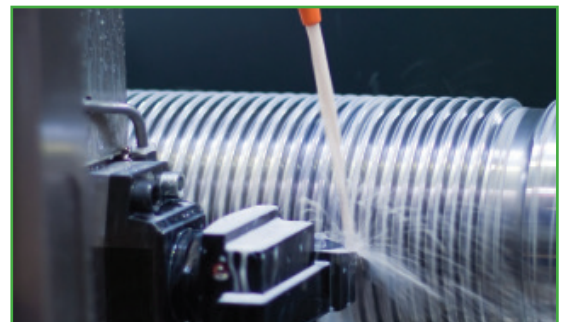
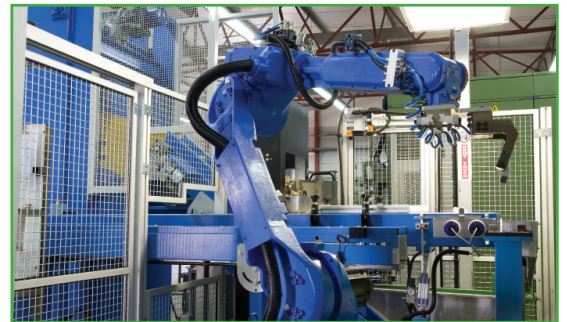
The Atkore range of cable protection is ideal for this technically demanding sector by offering a comprehensive range of product options which consider:

- ▲ Mechanical Strength
- ▲ Vibration and Shock Resistance
- ▲ Flexibility and Fatigue Life
- ▲ Operating Temperature
- ▲ Ingress Protection (IP)
- ▲ Impact
- ▲ Abrasion and Corrosion Resistance
- ▲ Hazardous Gases and Dust
- ▲ Chemical Resistance
- ▲ Tensile Strength
- ▲ EMC Screening



Our technical experts assist throughout the product selection process, ensuring you specify the system best suited to your specific requirements. Ultimately, protecting the safety of people, property and processes.

Additionally, by avoiding incorrect specification and installing a quality system which meets industry specification, it can lead to a reduction in safety hazards, machinery downtime, and operational overheads.



Leading Solutions

Quality Cable Protection

Solutions trusted to perform and manufactured to last

Our flexible conduit systems consider the hazards and challenges faced by the industry. That is why Atkore Flexicon is chosen and trusted by many OEMs requiring critical power and data cable protection. Our products typically are:

Simple to use

No need for specialist cables – standard and single core cables can be grouped into one protection system, reducing components to simplify the supply chain process.

Speed of install

Grouping of cables reduces cable entry points to equipment in turn, less installation time. Conduit flexibility allows for easy routing within the environment.

Space saving

Grouping cables reduces glanding space and area to terminate, as well as, reducing cost by using smaller enclosures, reducing components and instal time.

Reduced maintenance

Multiple circuits can be fixed and secured in one system, it reduces entry points – reducing risk of ingress for better machinery uptime. Additionally, existing circuits can be replaced or added to with ease.



FPI - PA12 Corrugated



FPAS - PA6 Corrugated



SSU - Stainless Steel



FSU - PVC Coated Galvanised Steel



FPISS - PA12 Corrugated Stainless Steel Overbraid



LTP - PVC Coated Liquid Tight (UL available)



LTPPU - Polyurethane Coated Liquid Tight

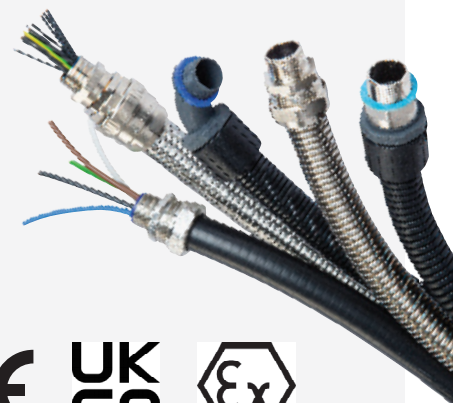


FSS - Stainless Steel

Standards and approvals

Meeting and often exceeding recognised industry standards, our conduit systems provide peace of mind.

- ▲ BS EN 61386
- ▲ ISO 9001-2015
- ▲ CE & UKCA to Low Voltage Directive
- ▲ UL Listed & Recognised Components
- ▲ IECEx & ATEX accredited



Rely on Atkore for efficient operations

Electrical cables are integral to efficient manufacturing - they assist in the power up of machinery, they are found within the mechanics, and can be seen all around heavy machinery. Therefore, choosing quality cable management and protection systems to safely protect and route critical cabling is vital. Our product solutions can be found across plants globally.



▲ Extraction & Conveying
Motor Connection -
On/into machinery



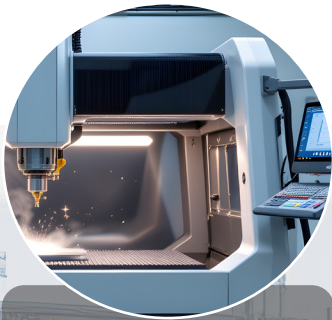
▲ Motors & Drives -
Inside machinery



▲ Guards & Safety -
On machinery

Application Solutions

Atkore in Manufacturing and Automation



▲ Lighting -
On/into machinery



▲ Power & Service
Connection - Mains power
into & within machinery



▲ Control Panels & Human
Machine Interface
(HMI) Automation



▲ Moving Arms, Tables,
Cable Chain & more -
On/into machinery

Non-Metallic Flexible Conduit

Product Highlights

With a wide range of non-metallic conduits, reliable cable protection solutions are offered in sizes from 10 to 106mm.

Our corrugated conduits are highly durable and resistant to common hazards related to the manufacturing and automation industry. Scan the QR to view our full range and for more information:

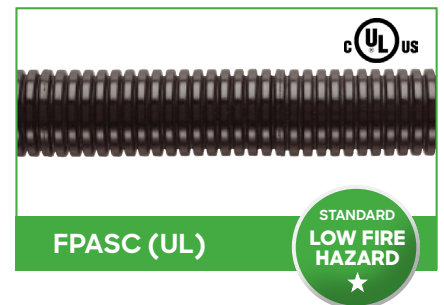


SCAN ME



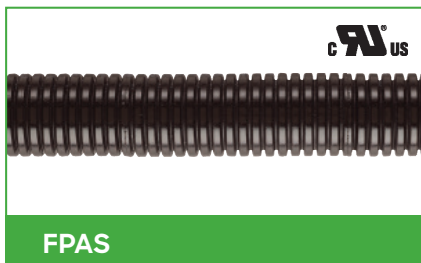
Product Specification

- ▲ Co Polyester material
- ▲ Temperature range -25°C to +135°C
- ▲ IP66 rated
- ▲ Very high flexibility & fatigue life
- ▲ Abrasion resistant
- ▲ High resistance to solvents & oils



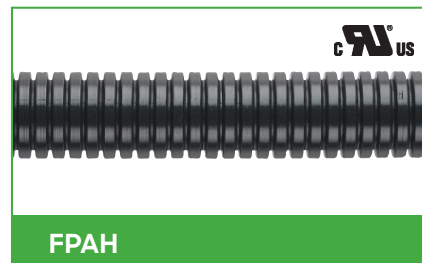
Product Specification

- ▲ PA6 material (UL)
- ▲ Temperature range -40°C to +120°C
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ High flexibility & fatigue life
- ▲ High impact & abrasion resistance
- ▲ High resistance to solvents & oils



Product Specification

- ▲ PA6 material (UR)
- ▲ Temperature range -40°C to +120°C
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ High flexibility & fatigue life
- ▲ Standard impact & abrasion resistance
- ▲ High resistance to solvents & oils



Product Specification

- ▲ PA6 material (UR)
- ▲ Temperature range -40°C to +120°C
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ High flexibility & fatigue life
- ▲ High impact & abrasion resistance
- ▲ High resistance to solvents & oils

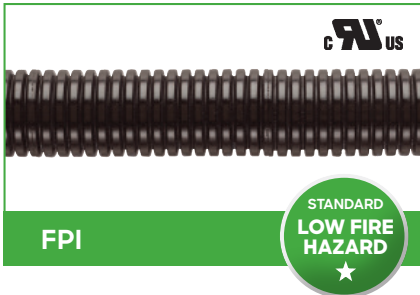


Product Specification

- ▲ Durable double slit nylon PA6 material
- ▲ Temperature range -40°C to +120°C
- ▲ IP40 rated
- ▲ Conduit wraps around cables
- ▲ Ideal for retrofitting pre-terminated cables

Non-Metallic Fittings

Product Highlights



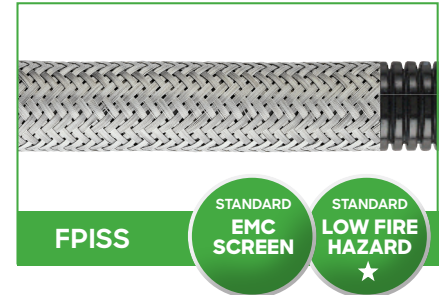
Product Specification

- ▲ PA12 material
- ▲ Temperature range -50°C to +110°C
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ High flexibility & fatigue life
- ▲ High impact resistance
- ▲ High resistance to solvents & oils



Product Specification

- ▲ Heavy weight PA12 material
- ▲ Temperature range -50°C to +110°C
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ High flexibility & fatigue life
- ▲ High impact resistance
- ▲ High resistance to solvents & oils



Product Specification

- ▲ PA12 / stainless steel material
- ▲ Temperature range -50°C to +110°C
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ Abrasion resistance
- ▲ High flexibility & impact resistance
- ▲ High resistance to solvents & oils



Product Specification

- ▲ One part fast fit - range of options including 90°, 45° & flange
- ▲ IP66 rated
- ▲ Vibration & shock tested
- ▲ Metric-PG-NPT-UNEF threads
- ▲ High pull off strength
- ▲ Temperature range -50°C to +135°C



Product Specification

- ▲ One part fast fit - range of options including 90°, 45° & flange
- ▲ IP66, 67, 68 (2 bar 1 hr) & 69 rated
- ▲ Vibration & shock tested
- ▲ Metric-PG-NPT-UNEF threads
- ▲ High pull off strength
- ▲ Temperature range -50°C to +135°C



Product Specification

- ▲ Provides strain relief to inner cable
- ▲ Enhances IP rating
- ▲ Eliminates additional components & simplifies assembly

Specification Support

For further information on our complete range of conduit and fittings, or support with system specification, please contact our technical experts. Simply submit your enquiry online at [atkore.com](https://www.atkore.com).

Metallic Flexible Conduit

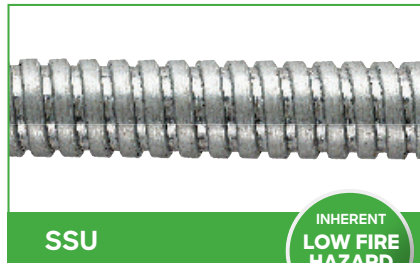
Product Highlights

With a wide range of metallic conduits, reliable cable protection solutions are offered in sizes from 10 to 75mm. Additionally, a range of colour options are available upon request.

Our conduits are highly durable and resistant to common hazards related to the manufacturing and automation industry. Scan the QR to view our catalogue:



SCAN ME



SSU



Product Specification

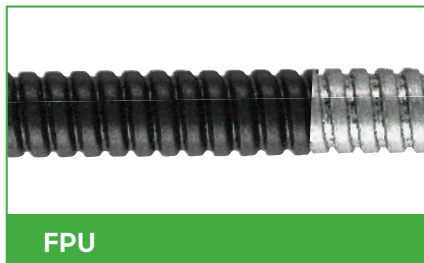
- ▲ Stainless steel (grade 316L) helically wound
- ▲ Temperature range -100°C to +600°C
- ▲ IP40 rated



FSU

Product Specification

- ▲ Galvanised steel helically wound with PVC coating
- ▲ Temperature range -15°C to +70°C
- ▲ IP54 & 65 rated



FPU

Product Specification

- ▲ Galvanised steel core with a polyurethane coating
- ▲ Temperature range -40°C to +100°C
- ▲ IP54 & 65 rated
- ▲ High abrasion & fatigue life
- ▲ High oil & chemical resistance
- ▲ Halogen free



LTP

Product Specification

- ▲ Galvanised steel core with PVC coating
- ▲ Temperature range -20°C to +105°C
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ Vibration & shock tested
- ▲ Good flexibility & oil resistant



LTPPU

Product Specification

- ▲ Galvanised steel core with a polyurethane coating
- ▲ Temperature range -40°C to +100°C
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ High oil & chemical resistance
- ▲ Vibration & shock tested
- ▲ Halogen free

Metallic Flexible Conduit

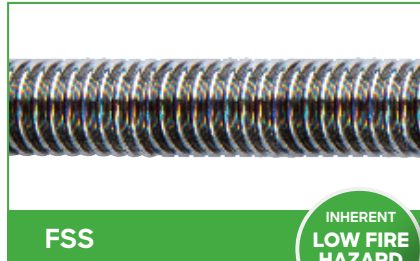
Product Highlights



LTPHC

Product Specification

- ▲ Galvanised steel thermoplastic elastomer coating
- ▲ Temperature range -60°C to +150°C
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ Vibration & shock tested
- ▲ High oil & chemical resistance
- ▲ High flexibility

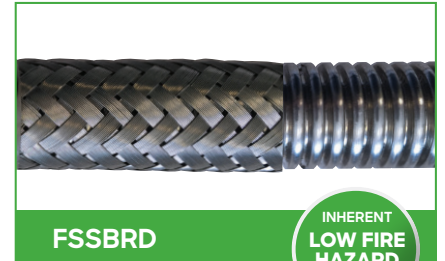


FSS

INHERENT
LOW FIRE
HAZARD
★★★

Product Specification

- ▲ Stainless steel (316L)
- ▲ Temperature range -100°C to +850°C
- ▲ IP67 & 68 (2 bar 1hr) rated
- ▲ High corrosion resistance
- ▲ High oil & chemical resistance
- ▲ High mechanical & compression strength



FSSBRD

INHERENT
LOW FIRE
HAZARD
★★★

Product Specification

- ▲ Stainless steel (316L)
- ▲ Temperature range -100°C to +850°C
- ▲ IP67 & 68 (2 bar 1hr) rated
- ▲ High corrosion resistance
- ▲ High oil & chemical resistance
- ▲ High abrasion resistance
- ▲ High mechanical & compression strength

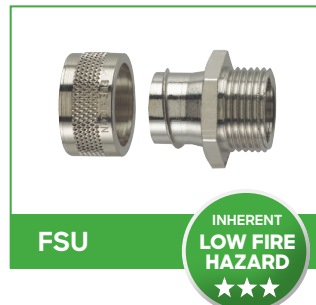


FU / SSU

INHERENT
LOW FIRE
HAZARD
★★★

Product Specification

- ▲ Nicked plated brass (FU)
- ▲ Stainless steel (SSU)
- ▲ IP40 rated
- ▲ Metric-PG threads



FSU

INHERENT
LOW FIRE
HAZARD
★★★

Product Specification

- ▲ Nicked plated brass
- ▲ IP54 rated
- ▲ Metric-PG threads



LTP / FSS

EXTRA
LOW FIRE
HAZARD
★★

Product Specification

- ▲ Nicked plated brass
- ▲ IP66, 67, 68 (5 bar 1 hr) & 69 rated
- ▲ Metric-PG-NPT threads
- ▲ UL listed versions available



Strain Relief Fittings

Product Specification

- ▲ Provides strain relief to inner cable
- ▲ Enhances IP rating
- ▲ Eliminates additional components & simplifies assembly
- ▲ Metric threads

Specification Support

For further information on our complete range of conduit and fittings, or support with system specification, please contact our technical experts. Simply submit your enquiry online at [atkore.com](https://www.atkore.com).

Flexible Conduit Accessories

Product Highlights



FCC P-Clips

Product Specification

- ▲ Supports flexible conduit
- ▲ Available in a range of sizes from 10 to 106mm



FCL Fixing Clips

Product Specification

- ▲ Nylon PA66 conduit clip
- ▲ For corrugated conduit
- ▲ Available in a range of sizes from 10 to 54mm



FCLAMP

Product Specification

- ▲ Nylon PA66
- ▲ Heavy duty fixing clamp
- ▲ For corrugated conduit
- ▲ Available in a range of sizes from 16 to 80mm



EC

Product Specification

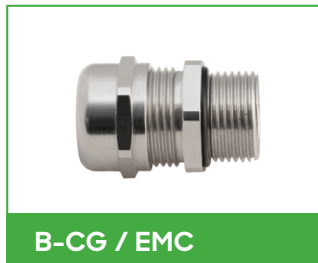
- ▲ Nylon PA66 end cap
- ▲ Snaps over end of conduit
- ▲ Provides a smooth entry bush to prevent snagging & sharp edges which could potentially damage any cables insulation



REC

Product Specification

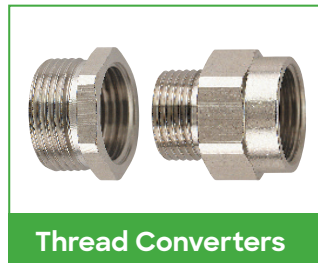
- ▲ TPV elastomer
- ▲ Seals conduit end
- ▲ Cut to suit cable size
- ▲ Can be additionally secured using cable tie



B-CG / EMC

Product Specification

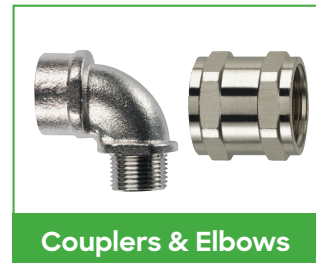
- ▲ Nickel plated brass
- ▲ IP68 (10 bar) rated
- ▲ Temperature range -40°C to +100°C
- ▲ EMC screen tested



Thread Converters

Product Specification

- ▲ Nickel plated brass
- ▲ Range includes reducers, enlargers in metric and PG threads



Couplers & Elbows

Product Specification

- ▲ Nickel plated brass
- ▲ 90° elbows
- ▲ Straight couplers

Flexible Conduit Accessories

Product Highlights

Abrasion Rings

Atkore Flexicon Abrasion Rings are designed to provide additional protection and prolong the life of non-metallic conduit systems which could be subject to extreme abrasion or potential damage from continuous rubbing.

Product Specification

- ▲ Enhanced protection for corrugated flexible conduits from abrasion
- ▲ Internal rib prevents lateral movement along the conduit
- ▲ 2 fixing points for added security
- ▲ Fix anywhere along the length of conduit
- ▲ Can be added retrospectively
- ▲ Compatible with fine pitch and coarse pitch conduits



Shell is marked to aid identification of conduit size

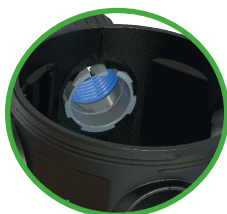
Connectabox™

Compatible with flexible conduit, cable glands, or rigid conduits, Atkore Flexicon's weatherproof Connectabox™ connection box provides a faster and simpler way to protect interconnection of circuits and all types of cabling (power and data), without the need for additional seals or gels. Featuring simple 'twist & lock' connectors, wiring space is maximised and threads or locknuts are eliminated.

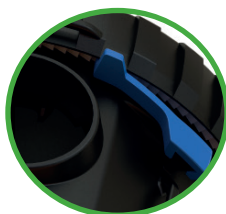
Watch a demo!



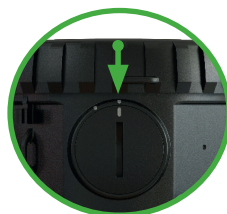
SCAN ME



Quick release system for reconfiguring outlets



Anti vibration lever



Blank off unused outlets

Product Specification

- ▲ 4x fast fit connection entry points
- ▲ Corrosion resistant modified nylon PA6
- ▲ Anti-tamper and vibration
- ▲ Configure multiple outlets/ways
- ▲ Drill to accept cable glands & rigid conduit
- ▲ IP66, 67, 68 & 69 rated

Cable protection specification guidance

With an array of solutions available, selecting and specifying the cable protection is crucial. Atkore Flexicon simplifies the process by offering an simplified and easy to specify system.

Non-Metallic							
Type	FCP	FPASC	FPAS	FPAH	FPADS	FPI / FPIH	FPISS
Continuous Movement	•					•	•
Flexible	•	•	•	•	•	•	•
Shock & Vibration	•	•	•	•	•	•	•
Abrasion			Std	Std	Std	High	High
Impact		Std	Std	High	Std	High	High
Retro Fit					•		
High Chemical Resistance					•	•	•
EMC Performance							•
Dependant on							
IP40	•	•	•	•	•	•	•
IP54	•	•	•	•		•	•
IP65		•	•	•		•	•
IP66		•	•	•		•	•
IP67		•	•	•		•	•
IP68		•	•	•		•	
IP69		•	•	•		•	
Temperature (Min) °C	-40°C	-40°C	-40°C	-40°C	-40°C	-50°C	-50°C
Temperature (Max) °C	120°C	120°C	120°C	120°C	120°C	110°C	110°C
Low Fire Hazard (LFH)		•	•	•	•	•	•
UL		•					
UR			•	•		•	
Conduit Size (Min) mm	10mm	21mm	10mm	13mm	11mm	13mm	16mm
Conduit Size (Max) mm	67mm	67mm	106mm	67mm	54mm	67mm	54mm

Selection Guide

Specification Made Simple

To help you navigate the comprehensive range of options available, the below table offers guidance in choosing the most suitable flexible conduit system to meet your needs. For further details or support, please contact us.

Metallic									
FU	SSU	FSS	FSU	FPU	LTP	LTPUL	LTPPU	LTPHC	FSSBRD
								•	
•	•		•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
Std	Std	High			Std	Std			High
High	High	High	High	High	High	High	High	High	High
•	•	•		•			•		•
		•							•
on Fitting Type									
•	•	•	•	•	•	•	•	•	•
		•	•	•	•	•	•	•	•
		•	•	•	•	•	•	•	•
		•			•	•	•	•	•
		•			•	•	•	•	•
		•			•	•	•	•	
-100°C	-100°C	-100°C	-40°C	-20°C	-20°C	-20°C	-40°C	-60°C	-100°C
300°C	600°C	850°C	120°C	100°C	105°C	105°C	100°C	150°C	850°C
•	•	•						•	•
						•			
10mm	10mm	20mm	10mm	10mm	10mm	16mm	10mm	12mm	20mm
75mm	63mm	50mm	75mm	75mm	63mm	63mm	63mm	63mm	50mm

Supporting your system specification with leading infrastructure solutions

In addition to our flexible conduit systems, Atkore is also home to industry leading brands, Unistrut and Marco, providing innovative cable management systems to effectively and safely route cables.

Atkore Unistrut

With over one hundred years of innovation, Atkore Unistrut is committed to delivering the highest quality product solutions:

- ▲ Metal Framing & Fittings
- ▲ Cable Management Systems
- ▲ Flytec Cable Trunking Solutions
- ▲ Prefabrication Services

Atkore Marco

As a UK leading manufacturer, Atkore Marco houses complex cable containment systems:

- ▲ Steel Wire Cable Tray
- ▲ uPVC Trunking
- ▲ Power Poles & Posts

Atkore Vergokan

With 3 manufacturing facilities across Europe, Atkore Vergokan specialises in metal cable support systems:

- ▲ Steel Wire Cable Tray
- ▲ Cable Tray & Ladder
- ▲ Mounting Systems
- ▲ Industrial Floor Trunking
- ▲ Flooring Installations

Atkore cable management, paired with our flexible conduit systems, provides a turn-key solution. Overall, simplifying your project specification process.



Cable Management & Metal Framing

Product Highlights

Offered in a wide range of dimensions, finishes and materials, Atkore Unistrut offers a wide range of leading solutions to efficiently route cables.

Additionally, Atkore Marco boasts quality UK made uPVC trunking and steel wire basket, safely routing cables in challenging environments.

Scan the QR to view our catalogue:



SCAN ME



Original Unistrut®

Product Specification

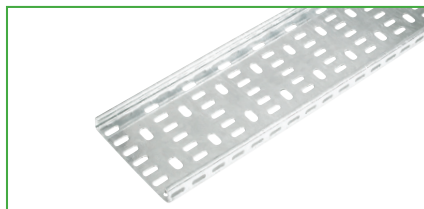
- ▲ Renowned for metal framing & cable management systems
- ▲ Industry's most comprehensive line of channels & fittings
- ▲ Complete line of hangers, pipe clamps, concrete inserts & accessories
- ▲ Available in a range of finishes & materials



Cable Ladder

Product Specification

- ▲ Welded steel system
- ▲ Ideal in harsh environments or where long maintenance free life is required
- ▲ Heavy load carrying capabilities
- ▲ Supplied in medium, heavy & extra heavy duty sizes
- ▲ Available in a range of finishes & materials



Cable Tray

Product Specification

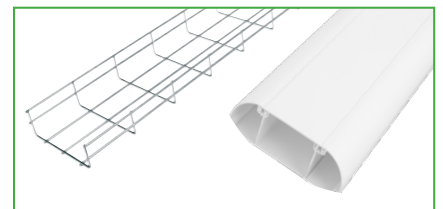
- ▲ Complete cable tray & accessories
- ▲ For use in light, medium, heavy & extra heavy duty applications where additional strength & capacity is required
- ▲ BS EN 61537 compliant, ensuring earth continuity* (no additional earthing braids or bonds required), for simplified installation
- ▲ Available in a range of finishes & materials



Flytec Trunking

Product Specification

- ▲ Quality galvanised & painted products to suit requirements
- ▲ Conforms to BS EN 50085-1, BS EN 50085-2, BS EN 10142 & BS EN 10143 standards
- ▲ Available in bespoke sizes, compartment configurations & powder coating on request



uPVC Trunking

Product Specification

- ▲ Leading uPVC cable management & the UK's largest manufacturer of steel wire cable tray
- ▲ Fully DDA & Part M compliant trunking using contrasting lids & plates
- ▲ A range of compartment options available to suit requirements
- ▲ Hygieia trunking range also available featuring built-in protective elements against 99.9% of harmful bacteria growth

Expertise to support your project journey

At Atkore, we provide an ever increasing suite of design tools and resources to help you select and install the right product solution with confidence. Explore a selection of our support and resources available:

▲ Technical Data Sheets & Certification

We offer technical data sheets for all of our products, documenting performance properties and key specification information. We can also provide, on request, copies of certification to support technical submittals.

▲ BIM Library

Our intelligence-based 3D model software system provides clash detection and reduction in cost as additional benefits.

▲ REVIT® Toolbar

Free to download, the toolbar allows contractors and BIM designers access to our products without leaving Revit.

▲ Atkore Unistrut Engineering Calculators

A valuable resource for engineers and designers doing any type of structured analysis.

▲ Atkore Unistrut Content Centre

For use with Autodesk Inventor, the content centre helps you select the best products for your specific applications.

▲ PreFab 3D

Our intelligent cloud-based system allows you to create modular frames and bespoke systems as well as automatically receive a CAD model, drawing, BOM, and connect with sales for quotation.

▲ Bespoke Services

An off-the-shelf solution may be unable to answer all of your needs and requirements, especially when specific location, timing, or environmental issues must be considered. In these cases, our bespoke solutions can offer the durability and flexibility required.

▲ Atkore Flexicon 3D CAD Models

Powered by Cadenas, our parts community provides technical information on all of our conduits, fittings, and accessories. From CAD models, dimensional diagrams, and 3D PDFs to part numbers, sizes, and downloadable data sheets – all in one place.

▲ On-Site Measuring & Compliance Service

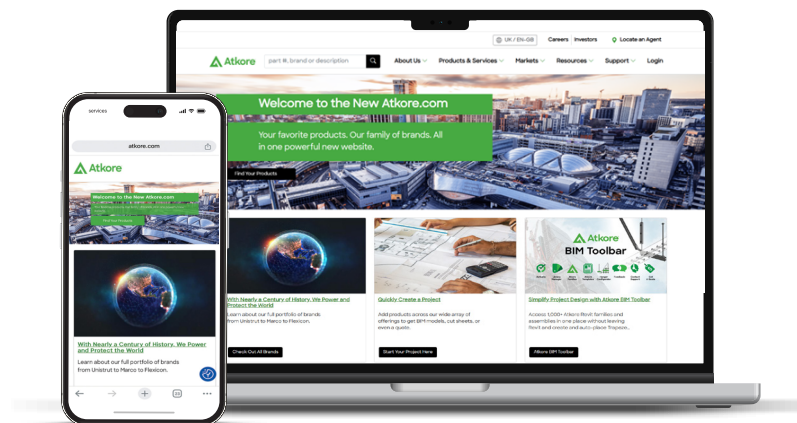
Our technical experts can provide on-site measurement services and advice, ensuring your project is compliant and successfully delivered. This flexible approach differentiates us from the market.

▲ Training Programs

Atkore offers flexible and free training across our electrical products and solutions. Online or in-person training courses are available including Toolbox Talks and approved CPD courses earning you credits. Contact for further details.

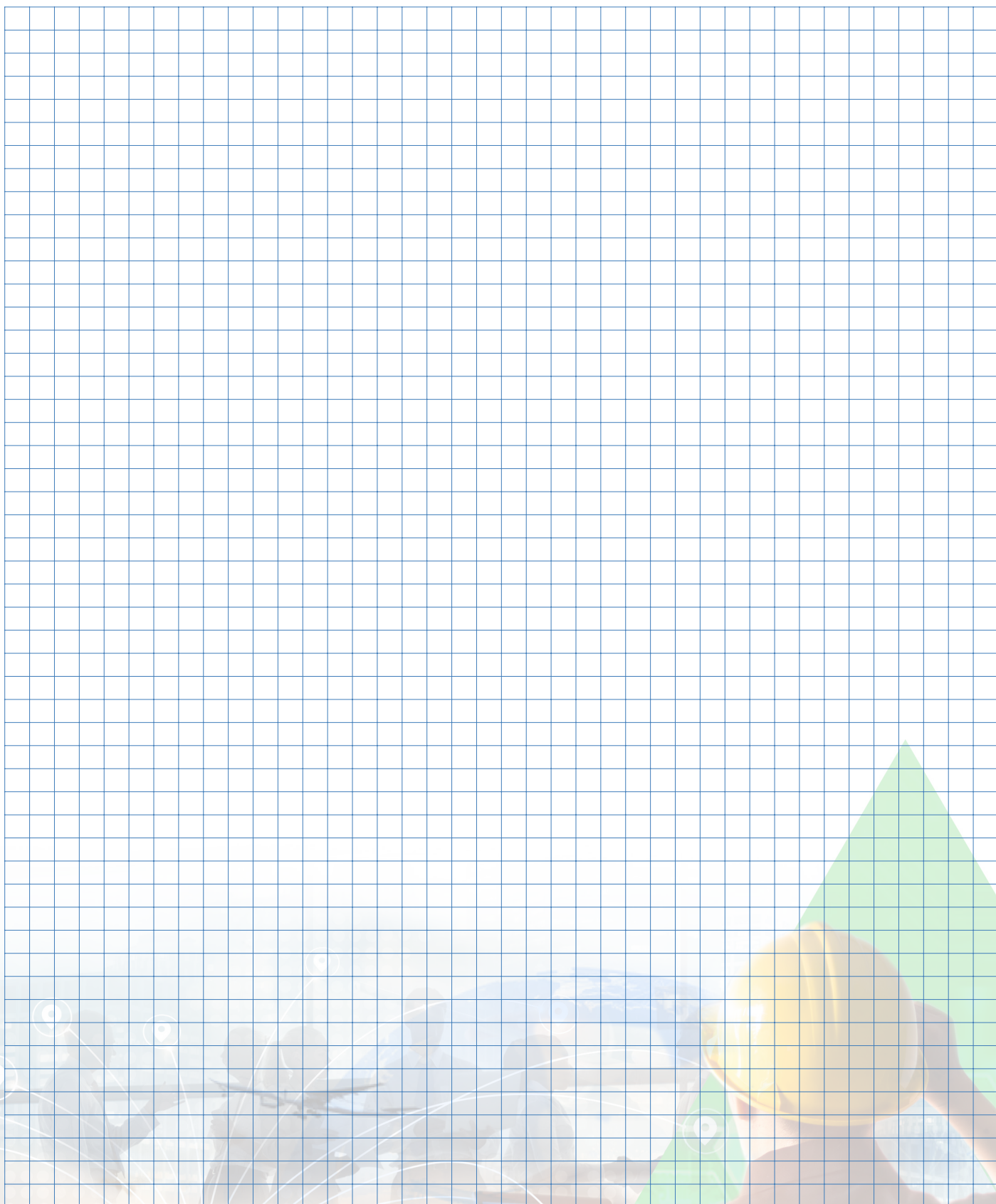
▲ Literature & Video Library

Find the latest Atkore case studies brochures, video tutorials and product launch video content across our website and YouTube channels. Visit us online at atkore.com



Notes

Key Takings





**BUILDING BETTER
TOGETHER**

Atkore

Want to join a company that helps you build
the mindset, skill set and tool set for success?
Visit us at [atkore.com/careers](https://www.atkore.com/careers)