

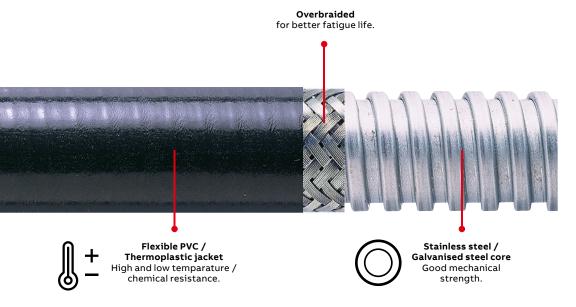
PRODUCT OVERVIEW

Flexible conduit systems

Cable protection for OEM & machine tool applications

Adaptaflex





Adaptaflex have a wide selection of non-metallic and metallic conduit manufactured either in nylon, galvanized steel or stainless steel.

A wide range of different conduit types provide a solution for liquid resistant specifications, with further conduit options in liquid tight covered steel conduit for especially demanding environments.

Cable protection

for OEM & machine tool applications

Adaptaflex flexible conduit systems are used to protect critical power and data cabling. Established in 1972, Adaptaflex has developed into a leading player within the flexible conduit market.



Adaptaflex is a market-leading flexible conduit system brand that can be found all over the world. Combining innovative design with dedicated manufacture it offers customers one of the world's broadest ranges of cable protection products and solutions. With a choice of over 6000 products the range covers metallic and non-metallic flexible conduit systems for the protection of critical power and data cable.

The system solutions from Adaptaflex need to perform in a wide variety of environments, from high temperature to freezing conditions. The products are designed and tested to withstand constant vibrations, water ingress and offer corrosion and chemical resistance. Products are available in many different materials, including halogen free, low smoke and low toxicity materials.



An extensive range of engineered solutions

Designed to withstand the rigours of some of the most technically-demanding markets. So whatever your project involves, our experience will provide the answer, helping you to specify the correct flexible conduit system.



Industry standards

As one of the world's leading flexible conduit system manufacturers, Adaptaflex has achieved many international approvals, for our manufacturing as well as our product ranges. Adaptaflex are able to use our experience and knowledge to ensure safety and quality levels are maintained now and in the future.



Customer support

All our products are backed up by a full technical support team, sales teams, customer care team and in-house marketing specialists. All dedicated teams working together to ensure that you have the best support in the market place.

OVERVIEW & MARKETS







Machine building OEMs

& factory automation



Overview & markets

This market is driven by the needs to meet the best in lean manufacturing. To achieve this every piece of equipment in this sector is pushed for greater efficiency by working more intensely and faster. As a result any conduit installed in these applications will need to provide excellent mechanical strength, flexibility and abrasion resistance, in order to supply the best possible solution to provide protection along the entire length of all the moving parts.



Dynamic application

In this hardworking environment of both dynamic and static applications, it is essential that any cable management products continue to deliver performance in areas where resistance to oils and chemicals is paramount. Any downtime in manufacturing can be very costly so products that can offer high ingress protection are fundamental - Adaptaflex can offer a wide range of solutions to meet all of these needs.

Typical applications:

- · Plastics processing Motor, automated sensors, temp sensors and cable channelling
- Metal cutting equipment Drilling / Grinding / Lathes / Milling / Rotary transfer, including power supplies and electrical panels
- Robotics Continual movement applications and abrasion
- Control & Instrumentation Systems Detection / Measurement, including sensor leads and automation cable
- · Materials handling equipment / Logistics -Palletizers / Conveyers / Mixing & dosing, including drive motors and control equipment panels
- Packaging Accumulators / Baggers / Carton machines, including electrical supplies
- Fabrication equipment Bending / Presses / Welding / Forming, including electrical supplies
- Refrigeration Storage / Temperature controlled Environments
- Plant room Equipment Electrical and mechanical services
- · Air conditioning systems, large motor drives, sensors and actuators











Standards, approvals and certifications

Adaptaflex products are approved by a range of recognised industry standards including:

- · BSI Kitemark to IEC61386
- CE marked to the Low Voltage Directive
- Fully compliant to BS7671 Wiring Regulations code of practice
- UL/UR
- CSA

Cable protection

for OEM & machine tool applications

ABB Adaptaflex conduit systems are designed to protect complex processing equipment with sensitive electrical wiring systems, controls and automation. These solutions enable processors to increase revenue, plant sustainability, safety and brand equity.

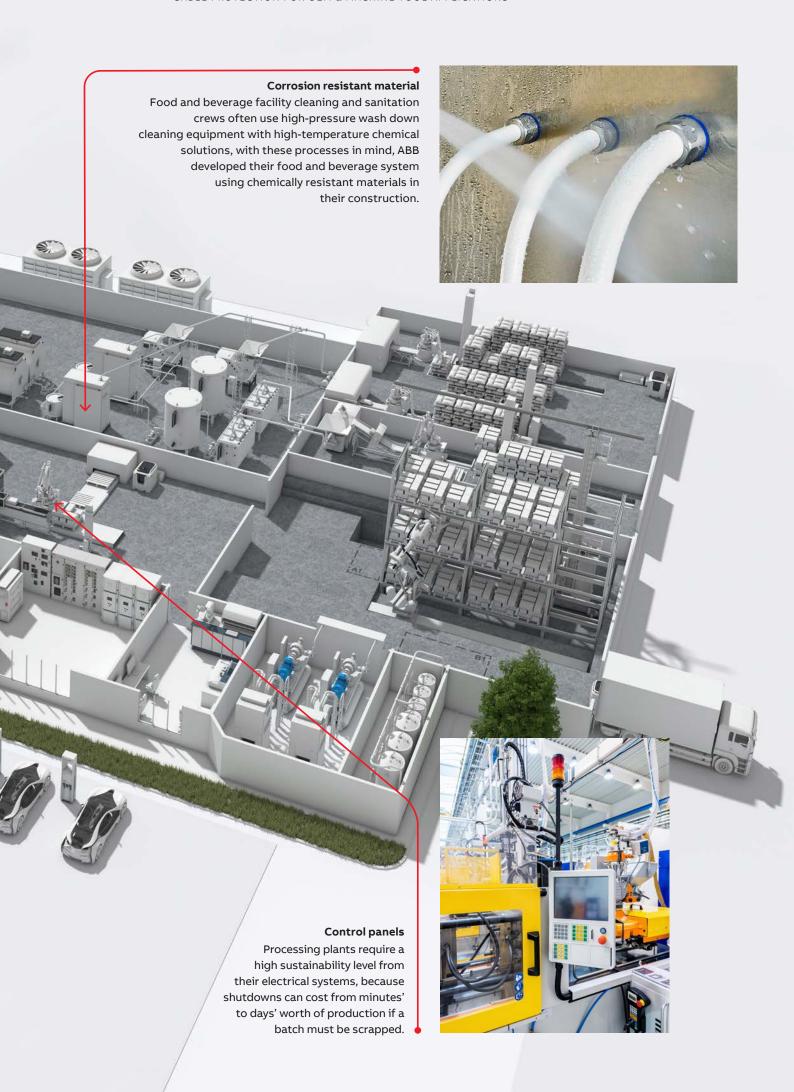
Machine tool and OEM

Businesses are driven by the need to deliver the best lean manufacturing processes. To achieve this, every piece of equipment is pushed for greater efficiency by working faster and more intensely. As a result, any conduit system installed for use in these applications will need to provide excellent mechanical strength, flexibility and abrasion resistance.



Internal wiring networks

The liquidtight nature of the system - up to IP69 - steel core, anti-microbial protection and new single piece stainless steel fitting, combine to protect power and data cables from within, allowing machinery to operate efficiently, safely, and hygienically, without compromising production and systems.



Non-metallic conduit



Adaptaflex have more than 20 different types of non-metallic conduit systems, all providing different technical properties for your cable

management applications.

The popular and easy-to-fit Adaptalok system delivers a range of conduits and fittings, specifically designed to maintain system integrity. Fitting types are available in straight, 90°, 45°, with metric, PG, PF, & NPT threads. We are proud of our best-in-class Adaptalok ATS™ fitting, a unique and innovative solution in flexible conduit systems.

Advantages of non-metallic:

- · No corrosion
- · Wide variety of fittings much larger solution choice
- · Quicker to install (cut & assemble fittings)
- · Lighter in weight compared with metallics
- Better fatigue life
- · No memory in case of impact (return to shape)

Most of our conduit systems have industry recognised approvals including British Kitemark, CE Approval, UL 1696, NF, LUL and DIN amongst others.



Type PA Standard weight / Heavyweight / Slit

Approvals



Characterictics

- Polyamide (Nylon) 6 / Black (BL), Grey (GR)
- High flexibility / High fatigue life
- Self-extinguishing / Halogen free / Very high UV
- IP40-IP69 Rated (Dependent on fitting*)
- Low fire hazard (LFH)
- *Heavyweight IP40 IP68 only.



Type PKTC Hi-specification (High EMI screening)









Characterictics:

- Polyetherketone (Tinned copper overbraid)
- High flexibility / High fatigue life
- Self-extinguishing / Halogen free / Very high UV
- IP66-IP67 Rated / Super low fire hazard (SLFH)
- High specification / High EMI screening
- Tinned copper over braid PKTC is also available.



Type PB Hi-Spec Type A fitting

Approvals











Characterictics

- Nickel plated brass / Liquidtight seal
- Straight fitting Fixed external male thread
- IP66 & IP67 / Fire performance & EMI Screening
- For use with Type PKSS, PRSS, PKTC & PRTC



Type PR Standard weight

Approvals



Characterictics

- Modified polyamide 6 and polyester / Black (BL)
- High flexibility / High fatigue life
- Self-extinguishing / Halogen free / Very high UV
- IP40-IP69 Rated
- Enhanced fire performance & EMI screening



Type PKSS Hi-specification (Standard EMI screening)











Characterictics

- Polyetherketone (Stainless steel overbraid)
- High flexibility / High fatigue life
- Self-extinguishing / Halogen free / Very high UV
- IP66-IP67 Rated / Super low fire hazard (SLFH)
- High specification / Standard EMI screening
- *Tinned copper over braid PRTC is also available.



Type PB Hi-Spec Type B fitting

Approvals











Characterictics

- Nickel plated brass / Liquidtight seal
- Straight fitting Swivel external male thread
- IP66 & IP67 / Fire performance & EMI Screening
- For use with Type PKSS, PRSS, PKTC & PRTC

Non-metallic fittings





Adaptalok ATS™ represents a unique and innovative solution in flexible conduit systems. Until now, manufacturers have produced fittings and seals separately, and assembled them together, or had the customer assemble them. This increases assembly time and introduces the possibility for errors.

Adaptalok ATS™ uses a sophisticated moulding process to mould an internal conduit seal and a face seal washer. This makes installation times very fast, and extremely reliable, because the seals cannot be left out. The conduit system also benefits from the highest IP rating possible.

Additional key features:

- · Nylon 66 body
- · Lighter in weight
- Quicker to install (cut & assemble fittings)
- · Wide variety of fittings much larger solution choice
- · Better fatigue life
- · Return to shape

Adatalok ATS™

One-Piece Polyamide (Nylon) 66 fittings

Approvals







Blue Elastomer version only.



Characterictics

- One-piece fitting with integrated seal / Yellow (Y) / Blue (B) Elastometer
- Polyamide (Nylon) 66 / Black (BL)
- IP40, IP65, IP68 (4 bar 30mins), IP69 Rated
- Straight, 90° & 45° elbow versions
- Metric threads, PG, NPT & UNEF
- Male, female & nickel plated brass thread options
- Thermoplastic elastometers



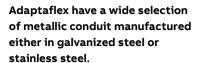
Adaptalok AL Polyamide (Nylon) 66 Fittings



- One-piece fitting with ALS insert seal
- Polyamide (Nylon) 66 / Black (BL)
- IP66, IP67, IP68 & IP69 Rated
- Straight, 90° & 45° elbow versions
- Metric threads, PG, NPT & UNEF
- Male, female & nickel plated brass thread options
- Push-in, swivel flange & jumbo options

Metallic conduit





A wide range of different conduit types provide a solution for liquid resistant specifications, with further conduit options in liquid tight covered steel conduit for especially demanding environments. Conduit ranges are offered in nominal conduit size from 3mm for CCTV / roller shutter doors and for protecting fibre optics cables right up to 75mm for larger cable carrying capacity.

Overbraided conduits are particularly suitable for installation in abrasive environments. Where applications call for enhanced low fire hazard properties or EMI screening then there is the option of high specification tinned copper overbraided for greater EMI protection levels.



Type EMIEF-SPL / Enhanced fire performance (EMI/EMC screen) liquidtight

Approvals







Characterictics

- Galvanised steel core & overbraid
- Very high flexibility / High fatigue life
- Self-extinguishing / Halogen free / Very high UV
- IP66-IP69 Rated / Low fire hazard jacket
- Enhanced low fire hazard (ELFH)



Type EMILFH-SPL Low fire hazard (EMI/EMC screen) liquidtight

Approvals









Characterictics

- Galvanised steel core & overbraid
- Medium flexibility / Medium fatigue life
- Self-extinguishing / Halogen free / High UV
- IP40-IP69 Rated / Low fire hazard jacket
- Low fire hazard (LFH)



Type SPL-EF Enhanced fire performance liquitight

Approvals







Characterictics

- Galvanised steel core / Low fire hazard jacket
- Very high flexibility / High fatigue life
- Self-extinguishing / Halogen free / Very high UV
- IP66-IP69 Rated
- Enhanced low fire hazard (ELFH)



Type LFH-SPL Low fire hazard liquidtight

Approvals













Characterictics

- Galvanised steel core / Low fire hazard jacket
- Very high flexibility / High fatigue life
- Self-extinguishing / Halogen free / Very high UV
- IP66-IP69 Rated
- Low fire hazard (LFH)



Type SB Braided superflexible (EMI screen)

Approvals









Characterictics

- Galvanised steel core & overbraid
- High flexibility / High fatigue life
- Enhanced EMI screening / Very high UV
- IP40 Rated
- Inherent low fire hazard (ILFH)



Type SPLHCB – Extreme temperature, abuse resistant, overbraided, EMI screening

Approvals







Characterictics

- Galvanised steel core* / Stainless steel overbraid
- Very high flexibility / High fatigue life
- Self-extinguishing & halogen free / Very high UV
- IP66-68 Rated with appropriate fittings
- Temperature range: -65°C to +150°C

*With smooth thermoplastic jacket.

Metallic fittings



Adaptaflex have a wide selection

of metallic fittings manufactured

The SSPL, SPL, SP & S range of fittings are specifically designed to maintain system integrity including fixed and swivel fittings, straights, 90°, 45°, and a host of accessories including locknuts, enlargers, reducers

either in galvanized steel or

stainless steel.

and converters.



Type SSPL Type M fitting

Approvals









- 316 stainless steel / Liquidtight seal
- Straight fitting Fixed external male thread
- IP66-IP69 Rated
- For use with all liquidtight conduit



Type SPL / SP Type C90 combined fitting & elbow

- Nickel plated brass / Liquidtight seal

- For use with all liquidtight conduit

- Fixed external male thread / IP66-IP69 Rated





Characterictics:

Type SPL version only.



- Nickel plated brass / Liquidtight seal
 - 45° Elbow Fixed external male thread

 - IP66-IP69 Rated
 - For use with all liquidtight conduit



Type SPL Type U coupler

Approvals





Characterictics

- Nickel plated brass / Co-polyester seal
- Type U coupler
- IP66-IP69 Rated
- For use with all liquidtight conduit



Type SPL Type M fitting

Approvals







Characterictics

- Nickel plated brass / Liquidtight seal
- Straight fitting Fixed external male thread
- IP66-IP69 Rated
- For use with all liquidtight conduit



Type SPL Type MF fitting

Approvals





Characterictics

- Nickel plated brass / Liquidtight
- Straight female internal thread fitting
- IP66-IP69 Rated
- For use with all liquidtight conduit







Approvals





Characterictics

- Nickel plated brass / Liquidtight seal
- Straight fitting Fixed external male thread
- IP66-IP68 Rated / EMI Screen
- For use with Type SPLHCB conduit



Type SPLHC Type C45 fitting

Approvals





Characterictics



Metallic conduit



Type SPL-EF
Enhanced fire performance liquitight

Approvals

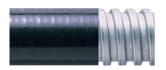








- Galvanised steel core / Low fire hazard jacket
- Very high flexibility / High fatigue life
- Self-extinguishing / Halogen free / Very high UV
- IP66-IP69 Rated
- Enhanced low fire hazard (ELFH)



Type LFH-SP Low fire hazard liquidtight

Approvals





Characterictics

- Galvanised steel core / Low fire hazard jacket
- Medium flexibility / Medium fatigue life
- Self-extinguishing / Halogen free / Very high UV
- IP66-IP69 Rated
- Low fire hazard (LFH)



Type SN Liquid resistant

Approvals





Characterictics

- Galvanised steel core / Nylon cover
- Medium flexibility / Medium fatigue life
- Self-extinguishing / Halogen free / High UV
- IP54-IP65 Rated
- Liquid resistant general purpose



Type SP Liquid resistant

Approvals





Characterictics:

- Galvanised steel core / PVC cover
- High flexibility / Medium fatigue life
- Self-extinguishing / Very high UV
- IP54-IP65 Rated
- Liquid resistant general purpose



Type SB Braided superflexible (EMI screen)

Approvals





Characterictics

- Galvanised steel core & overbraid
- High flexibility / High fatigue life
- Enhanced EMI screening / Very high UV
- IP40 Rated
- Inherent low fire hazard (ILFH)



Type S Superflexible

Approvals





Characterictics

- Superflexible galvanised steel
- High flexibility / High fatigue life
- Very high UV
- IP40 Rated
- Inherent low fire hazard (LFH)



Type SS Superflexible stainless steel

Approvals





Characterictics

- Superflexible stainless steel
- High flexibility / High fatigue life
- Very high UV
- IP40 Rated
- Inherent low fire hazard (LFH)



Type SSB Braided superflexible (EMI screen)

Approvals





Characterictics

- Stainless steel core & overbraid
- High flexibility / High fatigue life
- Very high UV
- IP40 Rated
- Inherent low fire hazard (ILFH)



Type STC

Braided superflexible (EMI screen)

Approvals





Characterictics:

- Galvanised steel core / Tinned copper overbraid
- High flexibility / High fatigue life
- High EMI screening / Very high UV
- IP40 Rated
- Inherent low fire hazard (ILFH)

Metallic fittings





Approvals





- Nickel plated brass / IP54 Rated
- A. Straight fitting Fixed external male thread
- B. Swivel external thread
- For use with all liquid resistant conduit



Type SP Type M fitting

Approvals







- Nickel plated brass / Liquid resistant seal
- Straight swivel fitting External male thread
- For use with all liquidtight conduit



Type SP Type E terminator

Approvals





Characterictics

- Nickel plated brass
- Type E terminator
- IP54 Rated
- For use with all liquidtight conduit



Type SP

Approvals

Type C & F fitting

Characterictics:

- C. Smooth entry bush



- Nickel plated brass / IP54 Rated







Type SP Type C90 liquid resistant elbow fitting

Approvals





Characterictics:

- Nickel plated brass / IP65 Rated
- Fixed external male thread
- Liquid resistant, 90° combined fitting & elbow
- For use with liquid resistant conduit







Type SB Type A & B fitting

Approvals





Characterictics:

- Nickel plated brass / IP40 Rated
- A. Straight fitting Fixed external male thread
- B. Straight fitting Swivel external male thread
- For use with all braided super flexible conduit



- F. Straight fitting - Fixed internal female thread

- For use with all liquid resistant conduit

Type S Type A & B fitting

Approvals





- Nickel plated brass / IP40 Rated
- A. Straight fitting Fixed external male thread
- B. Straight fitting Swivel external male thread
- For use with all braided super flexible conduit



Type S Type C & F fitting

Approvals





Characterictics

- Nickel plated brass / IP40 Rated
- C. Smooth entry bush
- F. Straight fitting Fixed internal female thread
- For use with Type S / SS conduit



ABB Cable Management Products Ltd.

Station Road, Coleshill, Birmingham, B46 1HT United Kingdom

Contact us: cmg.conduitsystems@abb.com

www.adaptaflex.com

For other ABB locations visit new.abb.com/low-voltage