

---

**Adaptaflex**

Tower Court  
Foleshill Enterprise Park  
Courtaulds Way  
Coventry CV6 5NX  
UK Sales Support Tel: +44 (0) 2476 368 500  
Customer Services E-Mail: lv.  
customerservice@gb.abb.com  
Technical Support E-Mail: cmg.  
conduitsystems@tnb.com

**[www.adaptaflex.com](http://www.adaptaflex.com)**



PRODUCT CATALOGUE

# Flexible conduit systems for critical power & data cable protection



---

**Adaptaflex is one of the market leading flexible conduit system brands 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.**

---

# Table of contents

<b>004</b> –011	<b>Introduction</b>
<b>012</b> –077	<b>Non-metallic conduit systems</b>
<b>078</b> –107	<b>Metallic conduit systems</b>
<b>108</b> –109	<b>Convenience packs</b>
<b>110</b> –111	<b>Cutting tools</b>
<b>112</b> –119	<b>Cable glands</b>
<b>120</b> –123	<b>Aquasafe</b>
<b>124</b> –131	<b>Technical section</b>
<b>132</b> –145	<b>Index</b>

---

# Introduction

## Company overview

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 one of the market leading flexible conduit system brands 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 subzero conditions. The products are designed and tested to withstand constant vibrations, water ingress, offer corrosion resistance and are available in halogen free, low smoke and low toxicity materials. An extensive range of engineered solutions are 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.

### Markets and industries

Adaptaflex flexible conduit systems are used to protect critical power and data cabling throughout a wide range of markets including:

- Commercial contracting
- Machinery
- Rail/Infrastructure
- Marine
- Mechanical
- Security/CCTV
- Data cabling
- Critical power

Our products are designed and engineered to meet a variety of market application requirements, providing product innovation, saving installation and component costs, improving the quality and the integrity of the end product.



# Introduction

## Quality approvals

### Quality approvals

The company's commitment to independent testing across a wide range of applications has led to an impressive range of certifications and quality approvals:

- BSI Kitemark
- BS EN ISO14001 Environmental standard
- IEC 61386 Conduit standard covering the performance characteristics of flexible conduits
- IP69, DIN 40050, standard with its Adaptalok range of non metallic fittings
- Offer non-metallic conduit that is fully compliant to the new dual listed UL 1696 standard. Required for any equipment destined for export to the USA and Canada
- The Hi-Spec PEEK range, designed for the most demanding electrical applications in rail infrastructure, underground and public buildings, is the only non-metallic flexible conduit system fully compliant with both BS 6853 Class 1A requirement and LUL engineering standard 1-085

### Industry standards

As one of the worlds 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.



# Introduction

## Third party testing & approvals

### Third party testing & approvals

#### **IEC61386 Performance classification standard**

Adaptaflex has achieved third party accreditation to the IEC61386 Standard from the British Standards Institution (BSI). IEC61386 conformance guarantees that products meet performance specifications for fatigue life, operating temperature, non-flame propagation, IP ratings amongst other criteria.

#### **BSI Kitemark**

Adaptaflex manufacturer to third party accreditation through the BSI Kitemark scheme. The Kitemark is one of the world's premier symbols of trust, integrity and quality. Manufacturers with the Kitemark are an elite club of some of the world's best companies being annually tested to ensure continued compliance. Having the Kitemark associated with our products illustrates that we have satisfied the most rigorous of quality processes.

#### **ISO9001 Quality standard**

Adaptaflex conform to ISO 9001:2000, the internationally recognised standard for Quality Management Systems. This standard reflects the procedures and management processes throughout the whole of the company.

### BS EN ISO14001

#### **Environmental standard**

Controlling the impact of manufacturing activities on the environment is a major challenge. Again Adaptaflex lead the way by being the first conduit manufacturer to comply with this Standard.

We also meet the requirements of EU directive 2002/95/EC on the restriction of the use of certain hazardous substances (RoHS). This forms part of the legislation on waste management and is aligned with the waste electrical and electronic equipment (WEEE). Specifically no lead, mercury, cadmium, hexavalent chromium; polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) are used in the manufacture of metallic and non-metallic flexible conduit systems.

#### **Customer support**

All our products are backed up by 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 of support in the market place.



KM35161



# Applications

## Construction applications

### Construction overview

In these environments there are ever increasing demands not only for quicker and easier to install solutions but also for increased safety and technical performances to meet the specific needs of municipal buildings. The ability to offer product ranges with enhanced low fire hazard properties for safety or overbraiding for security and EMI shielding. Where exposed interiors call for design consideration there is a choice such as conduit in different colours such as white or indifferent materials such as stainless steel to complement interior styling - Adaptaflex have a range to suit.

### Typical Applications:

- Office buildings
- Schools
- Hospitals (EMC)
- Retail developments
- Leisure complexes / Sports stadiums

### Industry approved

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

### Product recommendation

- Low fire hazard PA conduit systems
- Adaptalok fittings
- LFH-SP Liquid resistant covered flexible steel conduit systems enhanced low fire hazard



# Applications

## Machinery applications

### Machinery overview

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.

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 down time in manufacturing can be very costly so products that can offer high ingress protection are fundamental and Adaptaflex can offer a wide range of solutions to meet all of these needs.

Technology is increasingly being used in modern machine tools and the need to interface conduit to multipin-connectors is escalating. Nylon systems continue to gain popularity in this sector due to their excellent performance, flexibility and low installed cost benefits. For this reason Adaptaflex has developed a wide range of liquid tight connector interfaces in the AdaptaLok range.

### Typical Applications:

- Metal cutting and fabrication
- Milling machines
- CNC machine tool technology
- Moulding machinery
- Security & CCTV
- Robotics

### Industry approved

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/CSA
- UR

### Product recommendation

- SPL liquid tight conduit systems
- SPLHC conduit systems
- PA conduit systems
- PI conduit systems
- SPUL for machinery
- Adapting fittings USA export
- PADL conduit systems
- Overbraided conduit systems
- ATS fittings



# Applications

## Rail infrastructure applications

### Rail overview

For more than 30 years we have worked with the foremost manufacturers and suppliers of public transportation systems throughout the world. We understand not just the Standards that you need to work to, but also the Industry issues that you face including your customer service delivery expectations.

Our systems need to perform in a wide variety of environments from high temperature to freezing subzero conditions. Our products can withstand constant vibrations, water ingress, offer corrosion resistance and are available in halogen free, low smoke and low toxicity materials. If your project involves rail stations, infrastructure, signalling, tunnels, surveillance or data and information systems our experience will provide the answer helping you to specify the correct flexible conduit system.

### Typical Applications:

- Infrastructure projects - Stations, tunnels, signalling
- Low fire hazard systems
- Exposed Locations
- High impact resistance, low temperature flexing
- EMC Protection for safety critical systems
- OEM packages

### Industry approved

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

- LUL 1-085
- NF F 16-101/102
- Deutsche Bahn (DIN 5510)
- BS6853
- Siemens Transportation
- BSI Kitemark to IEC61386
- CE marked to the Low Voltage Directive
- EN 45545-2

### Approvals & standards

- PA conduit systems
- PR enhanced low fire hazard conduit systems
- PF conduit systems
- PK conduit systems
- LFH-SP conduit systems
- CP conduit systems
- IP66/67/68/69 Adaptalok/ATS fittings
- Overbraided systems



SIEMENS



# Applications

## Marine applications

### Marine overview

Safety and reliability are vital considerations within one of the harshest operational environments to be found. Products specified and installed within this sector have to face the particular damaging effects from the wind, wave and salt spray conditions in exposed areas. Whilst this demands for the most robust of products it also calls for solutions where vibration and temperature extremes add to the challenge.

Adaptaflex offer a broad range of solutions to suit this sector which are abrasion, impact, corrosion and chemical resistant, offering long service life and low fire hazard properties. Utilising Adaptalok sealing systems also offers ingress protection particularly valuable in pressure washing applications and with our specialist insert seal raises the IP rating from IP66 to IP67/68/69.

### Typical Applications:

- Ship/Boat engine rooms
- Ship and dock yards
- Leisure boats and cruisers
- Marina developments
- Ocean going craft

### Industry approved

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

- UR
- BSI Kitemark to IEC61386
- CE marked to the Low Voltage Directive

### Product recommendation

- PA conduit systems
- PR conduit systems
- IP66/67/68/69 Adaptalok ATS™ systems
- Adaptaseal systems
- Stainless steel conduit systems
- SPL conduit systems
- LFH-SP conduit systems



# Applications

## Mechanical applications

### Mechanical overview

Adaptaflex offers a range of products suited for this market, providing abrasion, impact and corrosion resistance and ingress protection. Additionally, Adaptaflex offers a range of high specification systems, braided EMI screen options.

Adaptaflex Applications Engineers offer a breadth of experience gained internationally across all different market sectors. A bespoke design service and expert technical knowledge guarantees that Adaptaflex will find the perfect product solution for your application.

Examples of individual markets served:

- Hoists
- Cranes
- Lifts
- Escalators

### Industry approved

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

### Product recommendation

- SPL liquid tight conduit systems
- PA conduit systems
- Overbraided conduit systems
- Stainless steel conduit systems
- SPLHC conduit systems
- PI conduit systems
- Adapting fittings
- ATS fittings



# Non-metallic conduit systems

## Quick selection guide



Product selection guide

Type	Pitch	Type PA	Type PA	Type PA	Type PA	Type PF	Type PF	Type PI	Type PI	Type PR	Type PADL
Part number	Fine	PAFL	PAFL-S	PAFS	PAFH	PFFS	PFFH	PIFS	PIFH	PRFS	PADL
	Coarse	PACL	PACL-S	PACS	PACH	PFCS	PFCH	PICS	PICH	PRCS	
Conduit weight		Light weight	Light weight slit	Standard weight	Heavy weight	Standard weight	Heavy weight	Standard weight	Heavy weight	Standard weight	Standard weight
Conduit material		PA6	PA6	PA6	PA6	PA12	PA12	PA11	PA11	PA6	PA6
Covering/overbraid		-	-	-	-	-	-	-	-	-	-

Conduit colour

Black (BL)	■	■	■	■	■	■	■	■	■	■	■
Grey (GR)	■	-	■	■	-	-	■	-	-	-	-
White (W)	-	-	-	-	-	-	-	-	-	-	-

IP rating (with appropriate fitting)

IP40	■	-	■	■	-	-	■	■	■	■	■
IP65	-	-	-	-	-	-	-	-	-	-	-
IP66	■	-	■	■	■	■	■	■	■	■	■
IP67	■	-	■	■	■	■	■	■	■	■	■
P68	■	-	■	■	■	■	■	■	■	■	■
P69	-	-	■	-	■	■	■	■	-	■	■

Characteristics

Temperature range

Static applications (°C)	-40 to +120	-40 to +120	-40 to +120	-40 to +120	-50 to +110	-50 to +110	-50 to +110	-50 to +110	-40 to +120	-40 to +120
Moving applications (°C)	-5 to +120	-5 to +120	-5 to +120	-5 to +120	-45 to +120	-45 to +120	-45 to +120	-45 to +120	-5 to +120	-18 to +120
UV resistance	Very high	Very high	Very high	Very high	Very high	Very high	Very high	Very high	Very high	Very high
Flexibility	High	High	High	Medium	Very high	High	Very high	High	High	Medium
Fatigue life	High	High	High	Medium	Very high	High	Very high	Very high	Medium	Medium
Low fire hazard	-	-	Standard	Standard	Standard	Standard	-	-	Enhanced	Standard
Halogen free	■	■	■	■	■	■	■	■	■	■
Self extinguishing	■	■	■	■	■	■	■	■	■	■
EMI screen	-	-	-	-	-	-	-	-	-	-
High mechanical strength	-	-	-	-	-	-	-	-	-	-
High abrasion resistance	-	-	■	■	■	■	-	-	■	■

Approvals

BSI Kitemark	■	■	■	■	■	■	■	■	■	■	-
CE	■	■	■	■	■	■	■	■	■	■	■
UL / CSA	-	-	■	■	■	■	-	-	-	-	■
DIN 5510-2	■	■	■	■	■	■	■	■	■	■	-
NF F	-	-	■	■	■	■	■	■	■	■	-
LUL 1-085	-	-	-	-	-	-	-	-	■	-	-
UNI CEI 11170	-	-	-	-	■	■	-	-	-	-	-
EN45545-2 to HL2	-	-	-	-	■	■	-	-	■	-	-
EN45545-2 to HL3	-	-	-	-	-	-	-	-	■	-	-



# Non-metallic conduit systems

## Introduction

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

—  
01 Caption facim  
lam voluptu repudae  
esendentiuur accum  
ipsandi ullendis con  
peris aut arunt adiat

—  
02 Caption facim  
lam voluptu repudae  
esendentiuur accum  
ipsandi ullendis con  
peris aut arunt adiat

Our Conduit range is available in many different materials, ranging from lightweight to heavyweight with nominal conduit sizes from 10mm right up to the Jumbo size of 106mm.

For more demanding applications, there is a wide-ranging high specification series of conduit with enhanced low fire hazard properties, EMI screening and incorporating high fatigue life. Overbraided options are available for use in abrasive environments.

Standard product is manufactured in a wide range of materials. The corrugated construction provides good flexibility and low weight. Additionally, a range of fittings are specifically designed to maintain system integrity including the popular and easy to fit Adaptalok system. Fitting types are available in straight, 90°, 45°, with metric, PG, PF, & NPT threads.

Advantages:

- Non metallic conduits do not corrode (rust)
- Wider variety of fittings - much larger solutions choice
- Quicker to install (cut & assemble fittings)
- Lighter in weight
- Better fatigue life
- Return to shape



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



01



02



## Non-metallic conduit systems

### Type PA




#### Type PA

Lightweight conduit / Materials: Polyamide (nylon) 6 / Colour: Black (BL), Grey (GR)

Part no.	Nominal conduit size (mm)	NW conduit size	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Minimum bend radius (mm)	Reel length (m)
PAFL13	13	10	Fine	13.0	10.0	25	50
PAFL16	16	13	Fine	15.8	11.9	35	50
PAFL21	21	17	Fine	21.2	16.8	45	50
PAFL28	28	23	Coarse	28.5	22.2	50	50
PAFL34	34	29	Coarse	34.5	27.9	60	50
PAFL42	42	36	Coarse	42.5	35.2	65	25
PAFL54	54	48	Coarse	54.5	46.9	75	25



To order quote part number, colour & reel length, e.g. PAFL13/BL/50M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
  	<b>For use with:</b> Adaptalok / ATS / Adapting / Adaptasteel		Static applications: -40°C to +120°C	Very high
			Moving applications: -5°C to +120°C	
	<b>IP40</b>	Adapting	<b>Flexibility &amp; fatigue life</b>	
	<b>IP65</b>	N/A	High flexibility – High fatigue life	
	<b>IP66</b>	Adaptalok, ATS or Adaptasteel	<b>Fire performance &amp; EMI screen</b>	
	<b>IP67</b>	Adaptalok + ALS Seal or ATS, Adaptasteel	Self extinguishing	
	<b>IP68</b>	Adaptalok + ALS Seal or ATS, Adaptasteel	Halogen free	
	<b>IP69</b>	N/A		




#### Type PA-Slit

Lightweight slit conduit / Materials: Polyamide (nylon) 6 / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	NW conduit size	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Minimum bend radius (mm)	Reel length (m)
PAFL13-S	13	10	Fine	13.0	10.0	25	50
PAFL16-S	16	13	Fine	15.8	11.9	35	50
PAFL21-S	21	17	Fine	21.2	16.8	45	50
PAFL28-S	28	23	Coarse	28.5	22.2	50	50
PAFL34-S	34	29	Coarse	34.5	27.9	60	50
PAFL42-S	42	36	Coarse	42.5	35.2	65	25
PAFL54-S	54	48	Coarse	54.5	46.9	75	25



To order quote part number, colour & reel length, e.g. PAFL13-S/BL/50M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
  	<b>For use with:</b> Adaptalok / ATS / Adapting / Adaptasteel		Static applications: -40°C to +120°C	Very high
			Moving applications: -5°C to +120°C	
	<b>IP40</b>	N/A	<b>Flexibility &amp; fatigue life</b>	
	<b>IP65</b>	N/A	High flexibility – High fatigue life	
	<b>IP66</b>	N/A	<b>Fire performance &amp; EMI screen</b>	
	<b>IP67</b>	N/A	Self extinguishing	
	<b>IP68</b>	N/A	Halogen free	
	<b>IP69</b>	N/A		

## Non-metallic conduit systems

### Type PA

#### Type PA

Standard weight conduit / Materials: Polyamide (nylon) 6 / Colour: Black (BL), Grey (GR)

Part no.	Nominal conduit size (mm)	NW conduit size	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Minimum bend radius (mm)	Reel length (m)	
							(BL)	(GR)
PAFS10*	10	7.5	Fine	10.0	6.5	15	50	50
PAFS13*	13	10	Fine	13.0	9.6	25	50	50
PAFS16	16	13	Fine	15.8	11.8	35	10/25/50	50
PAFS21	21	17	Fine	21.2	16.5	45	10/25/50	50
PAFS28	28	23	Fine	28.5	22.6	50	10/25/50	50
PACS28	28	23	Coarse	28.5	21.7	50	10/25/50	50
PAFS34	34	29	Fine	34.5	28.8	60	10/25/50	50
PACS34	34	29	Coarse	34.5	27.7	60	10/25/50	50
PACS42	42	36	Coarse	42.5	35.2	65	10/25	25
PACS54	54	48	Coarse	54.5	46.5	75	10/25	25
PACS80	80	70	Coarse	79.3	67.0	160	10	10
PACS106	106	95	Coarse	106.0	91.5	210	10	10

To order quote part number, colour & reel length, e.g. PAFS13/BL/50M

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Adaptalok / ATS / Adapting / Adaptaseal / Jumbo

IP40	Adapting & Jumbo
IP65	Jumbo + SK Seal
IP66	Adaptalok, ATS or Adaptaseal
IP67	Adaptalok + ALS Seal or ATS, Adaptaseal
IP68	Adaptalok + ALS Seal or ATS, Adaptaseal
IP69	Adaptalok + ALS Seal or ATS

#### Temperature range

Static applications: -40°C to +120°C  
Moving applications: -5°C to +120°C

#### Flexibility & fatigue life

High flexibility – High fatigue life

#### Fire performance & EMI screen

Self extinguishing  
Halogen free



Very high

#### Type PA

Heavyweight conduit / Materials: Polyamide (nylon) 6 / Colour: Black (BL), Grey (GR)

Part no.	Nominal conduit size (mm)	NW conduit size	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Minimum bend radius (mm)	Reel length (m)	
							(BL)	(GR)
PAFH13*	13	10	Fine	13.0	9.0	35	50	
PAFH16	16	13	Fine	15.8	11.3	45	50	
PACH21	21	17	Coarse	21.2	14.5	60	50	
PACH28	28	23	Coarse	28.5	21.3	70	50	
PACH34	34	29	Coarse	34.5	26.8	75	50	
PACH42	42	36	Coarse	42.5	34.6	90	25	
PACH54	54	48	Coarse	54.5	46.0	95	25	

To order quote part number, colour & reel length, e.g. PAFH13/BL/50M

\*These parts are not covered by the RU certification

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Adaptalok / ATS / Adapting / Adaptasteel

IP40	Adapting
IP65	N/A
IP66	Adatalk, ATS or Adaptasteel
IP67	Adaptalok + ALS Seal or ATS, Adaptasteel
IP68	Adaptalok + ALS Seal or ATS, Adaptasteel
IP69	N/A

#### Temperature range

Static applications: -40°C to +120°C  
Moving applications: -5°C to +120°C

#### Flexibility & fatigue life

High flexibility – High fatigue life

#### Fire performance & EMI screen

Self extinguishing  
Halogen free



Very high

## Non-metallic conduit systems

### Type PF

#### Type PF

Standard weight conduit / Materials: Modified polyamide 12 / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	NW conduit size	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Minimum bend radius (mm)	Reel length (m)
PFFS10*	10	7.5	Fine	10.0	6.2	20	50
PFFS13*	13	10	Fine	13.0	9.9	30	50
PFFS16	16	13	Fine	15.8	11.7	35	50
PFFS21	21	17	Fine	21.2	16.6	40	50
PFCS28	28	23	Coarse	28.5	21.7	50	50
PFCS34	34	29	Coarse	34.5	27.7	60	25
PFCS42	42	36	Coarse	42.5	35.5	65	25
PFCS54	54	48	Coarse	54.5	46.6	75	25




To order quote part number, colour & reel length, e.g. PFFS13/BL/50M  
 \*These parts are not covered by the RU certification

**Approvals**

EN45545-2 HL2 - R22 & R23

IP rating	Appropriate fitting
<b>For use with:</b> Adaptalok / ATS / Adapting / ALS	
IP40	Adapting
IP65	N/A
IP66	ATS, Adaptalok
IP67	ATS, Adaptalok + ALS Seal
IP68	ATS, Adaptalok + ALS Seal
IP69	ATS, Adaptalok + ALS Seal

Temperature range	UV resistance
Static applications: -50°C to +110°C	Very high
Moving applications: -45°C to +120°C	
<b>Flexibility &amp; fatigue life</b>	
Very high flexibility - Very high fatigue life	
<b>Fire performance &amp; EMI screen</b>	
Self extinguishing	
Halogen free	



#### Type PF

Heavyweight conduit / Materials: Modified polyamide 12 / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	NW conduit size	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Minimum bend radius (mm)	Reel length (m)
PFFH13*	13	10	Fine	13.0	9.7	40	50
PFFH16	16	13	Fine	15.8	11.5	45	50
PFCH21	21	17	Coarse	21.2	15.3	50	50
PFCH28	28	23	Coarse	28.5	21.5	60	50
PFCH34	34	29	Coarse	34.5	27.5	70	25
PFCH42	42	36	Coarse	42.5	35.5	75	25
PFCH54	54	48	Coarse	54.5	46.4	85	25




To order quote part number, colour & reel length, e.g. PFCH13/BL/50M  
 \*These parts are not covered by the RU certification

**Approvals**

EN45545-2 HL2 - R22 & R23

IP rating	Appropriate fitting
<b>For use with:</b> Adaptalok / ATS / Adapting / ALS	
IP40	Adapting
IP65	N/A
IP66	ATS, Adaptalok
IP67	ATS, Adaptalok + ALS Seal
IP68	ATS, Adaptalok + ALS Seal
IP69	ATS, Adaptalok + ALS Seal

Temperature range	UV resistance
Static applications: -50°C to +110°C	Very high
Moving applications: -45°C to +120°C	
<b>Flexibility &amp; fatigue life</b>	
High flexibility – High fatigue life	
<b>Fire performance &amp; EMI screen</b>	
Self extinguishing	
Halogen free	



## Non-metallic conduit systems

### Type PR & CP

#### Type PR

Standard weight conduit / Materials: Modified polyamide (nylon) 6 / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Minimum bend radius (mm)	Reel length (m)
PRFS13	10	7.5	Fine	10.0	6.2	20	50
PRFS16	13	10	Fine	13.0	9.9	30	50
PRFS21	16	13	Fine	15.8	11.7	35	50
PRCS21	21	17	Fine	21.2	16.6	40	50
PRCS28	28	23	Coarse	28.5	21.7	50	50
PRCS34	34	29	Coarse	34.5	27.7	60	25
PRCS42	42	36	Coarse	42.5	35.5	65	25
PRCS54	54	48	Coarse	54.5	46.6	75	25



To order quote part number, colour & reel length, e.g. PRFS13/BL/50M

#### Approvals



EN45545-2 HL3 - R22 & R23

#### IP rating

#### Appropriate fitting

For use with: Adaptalok / ATS /  
Adaptaring / Adaptaseal

IP40	Adaptaring
IP65	N/A
IP66	Adaptalok or Adaptaseal
IP67	Adaptalok + ALS Seal or Adaptaseal
IP68	Adaptalok + ALS Seal or Adaptaseal
IP69	Adaptalok + ALS Seal

#### Temperature range

Static applications: -40°C to +120°C  
Moving applications: -5°C to +120°C

#### Flexibility & fatigue life

High flexibility - Medium fatigue life

#### Fire performance & EMI screen

Self extinguishing  
Halogen free



#### Type CP

Medium weight conduit / Materials: Polyester / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Minimum bend radius (mm)	Reel length (m)
CPFM13	13	10	Fine	13.0	9.5	25	50
CPFM16	16	13	Fine	15.8	11.3	30	50
CPFM21	21	17	Fine	21.2	16.0	35	50
CPCM28	28	23	Coarse	28.5	21.3	45	50
CPCM34	34	29	Coarse	34.5	27.2	55	50
CPCM42	42	36	Coarse	42.5	34.2	60	25
CPCM54	54	48	Coarse	54.5	46.0	70	25



To order quote part number, colour & reel length, e.g. CPFM13/BL/50M

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Adaptalok / Adaptaseal

IP40	N/A
IP65	N/A
IP66	Adaptalok or Adaptaseal
IP67	Adaptalok + ALS Seal & Adaptaseal
IP68	Adaptalok + ALS Seal & Adaptaseal
IP69	Adaptalok + ALS Seal

#### Temperature range

Static applications: -50°C to +135°C  
Moving applications: -25°C to +150°C

#### Flexibility & fatigue life

Very high flexibility – Very high fatigue life

#### Fire performance & EMI screen

Self extinguishing  
Halogen free



## Non-metallic conduit systems

### Type PADL





#### Type PADL

Standard weight conduit / Materials: Modified polyamide (nylon) 6 / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Minimum bend radius (mm)	Reel length (ft)
PADL16	16	13	Coarse	15.8	11.3	45	100
PADL21	21	17	Coarse	21.2	14.5	60	100
PADL28	28	23	Coarse	28.5	22.6	70	100
PADL34	34	29	Coarse	34.5	27.7	75	100
PADL42	42	36	Coarse	42.5	35.2	80	100
PADL54	54	48	Coarse	54.5	46.0	95	100



To order quote part number, colour & reel length, e.g. PADL16/BL/100

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
   	For use with: Adaptalok / ATS		Static applications: -40°C to +120°C	Very high
	IP40	N/A	Moving applications: -18°C to +120°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	AL or ATS	Medium flexibility – Medium fatigue life	
	IP67	AL + ALS Seal or ATS	<b>Fire performance &amp; EMI screen</b>	
	IP68	AL + ALS Seal or ATS	Self extinguishing	
	IP69	AL + ALS Seal or ATS	Halogen free	



## Non-metallic conduit systems

### Type A - Adaptalok

#### Type A - Adaptalok

Straight fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)

Part no.	Nominal conduit size		Part no.	Nominal conduit size	
	(mm)	Metric thread		(mm)	PG thread
AL10/M12/A*	10	M16	AL10/PG7/A*	10	PG7
-	-	-	AL10/PG9/A*	10	PG9
AL13/M16/A*	13	M16	AL13/PG9/A*	13	PG9
AL13/M20/A*	13	M20	AL13/PG11/A*	13	PG11
-	-	-	AL13/PG13/A*	13	PG13,5
AL16/M16/A	16	M16	AL16/PG9/A	16	PG9
AL16/M20/A	16	M20	AL16/PG11/A	16	PG11
-	-	-	AL16/PG13/A	16	PG13,5
-	-	-	AL16/PG16/A	16	PG16
AL21/M20/A	21	M20	AL21/PG11/A	21	PG11
-	-	-	AL21/PG13/A	21	PG13,5
AL21/M25/A	21	M25	AL21/PG16/A	21	PG16
AL28/M25/A	28	M25	AL28/PG21/A	28	PG21
AL28/M32/A	28	M32	-	-	-
AL34/M32/A	34	M32	AL34/PG29/A	34	PG29
AL34/M40/A	34	M40	-	-	-
AL42/M40/A	42	M40	AL42/PG36/A	42	PG36
AL42/M50/A	42	M50	-	-	-
AL54/M50/A	54	M50	AL54/PG48/A	54	PG48
AL54/M63/A	54	M63	-	-	-



Part no.	Nominal conduit size		Part no.	Nominal conduit size	
	(mm)	PF thread		(mm)	NPT thread (in)
AL10/PF025/A*	10	1/4"	-	-	-
AL13/PF038/A*	13	3/8"	AL13/038/A*	13	3/8"
AL16/PF038/A	16	3/8"	AL16/038/A	16	3/8"
AL16/PF050/A	16	1/2"	AL16/050/A	16	1/2"
AL21/PF050/A	21	1/2"	AL21/050/A	21	1/2"
AL28/PF075/A	28	3/4"	AL28/075/A	28	3/4"
AL34/PF100/A	34	1"	AL34/100/A	34	1"
AL42/PF125/A	42	1 1/4"	AL42/125/A	42	1 1/4"
AL54/PF150/A	54	1 1/2"	AL54/150/A	54	1 1/2"
AL54/PF200/A	54	2"	-	-	-

For insertion into knockouts using a locknut. Locknut supplied with METRIC THREAD ONLY

To order quote part number & body colour, e.g. AL10/M12/A/BL

\*These parts are not covered by the RU certification

#### Approvals



**NF**

#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



## Non-metallic conduit systems

### Type C90 - Adaptalok

#### Type C90 - Adaptalok

90° elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)	Metric thread
AL10/M12/C90*	10	M12
AL13/M16/C90*	13	M16
AL16/M16/C90	16	M16
AL16/M20/C90	16	M20
-	-	-
AL21/M20/C90	21	M20
-	-	-
AL28/M25/C90	28	M25
AL34/M32/C90	34	M32
AL42/M40/C90	42	M40
AL54/M50/C90	54	M50
AL54/M63/C90	54	M63

Part no.	Nominal conduit size (mm)	PG thread
AL10/PG7/C90*	10	PG7
AL13/PG9/C90*	13	PG9
AL16/PG9/C90	16	PG9
AL16/PG11/C90	16	PG11
AL16/PG13/C90	16	PG13,5
AL21/PG13/C90	21	PG31,5
AL21/PG16/C90	21	PG16
AL28/PG21/C90	28	PG21
AL34/PG29/C90	34	PG29
AL42/PG36/C90	42	PG36
AL54/PG48/C90	54	PG48

Part no.	Nominal conduit size (mm)	PF thread (in)
AL13/PFO38/C90*	13	¾
AL16/PFO38/C90	16	¾
AL16/PFO50/C90	16	½
AL21/PFO50/C90	21	½
AL28/PFO75/C90	28	¾
AL34/PF100/C90	34	1
AL42/PF125/C90	42	1 ¼
AL54/PF150/C90	54	1 ½
AL54/PF200/C90	54	2

Part no.	Nominal conduit size (mm)	NPT thread (in)
AL13/038/C90*	13	¾
AL16/038/C90	16	¾
AL16/050/C90	16	½
AL21/050/C90	21	½
AL28/075/C90	28	¾
AL34/100/C90	34	1
AL42/125/C90	42	1 ¼
AL54/150/C90	54	1 ½
AL54/200/C90	54	2

For insertion into knockouts using a locknut. Locknut supplied with METRIC THREAD ONLY

To order quote part number & body colour, e.g. AL16/M20/C90/BL

\*These parts are not covered by the RU certification

#### Approvals



**NF**

#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

## Non-metallic conduit systems

### Type 45 & Push-in - Adaptalok

#### Type 45 - Adaptalok

45° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)



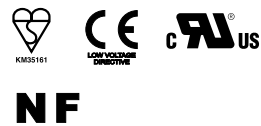
Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG thread
AL13/M16/45*	13	M16	AL13/PG9/45*	13	PG9
AL16/M16/45	16	M16	AL16/PG11/45	16	PG11
AL16/M20/45	16	M20	AL16/PG13/45	16	PG13,5
AL21/M20/45	21	M20	AL21/PG13/45	21	PG13,5
-	-	-	AL21/PG16/45	21	PG16
AL28/M25/45	28	M25	AL28/PG21/45	28	PG21
AL34/M32/45	34	M32	AL34/PG29/45	34	PG29
AL42/M50/45	42	M40	AL42/PG36/45	42	PG36
AL54/M50/45	54	M50	AL54/PG48/45	54	PG48
AL54/M63/45	54	M63	-	-	-

For insertion into knockouts using a locknut. Locknut supplied with METRIC THREAD ONLY

To order quote part number & body colour, e.g. AL21/M20/45/BL

\*These parts are not covered by the RU certification

#### Approvals



**NF**

#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Push-in - Adaptalok -

Straight fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)
AL16/KM20/A	16
AL21/KM20/A	21

Inserts into a 20mm knockout, panel thickness up to 4mm, no locknut required

To order quote part number & body colour, e.g. AL21/KM20/A/BL

#### Approvals



**NF**

#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP40	Yes
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

## Non-metallic conduit systems

### 3-Way Coupler & Insert Seal - Adaptalok

#### 3-Way Coupler - Adaptalok

3-Way PA66 fitting / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size combination (mm)
AL131010/Y	13x10x10
AL161313/Y	16x13x13
AL211616/Y	21x16x16
AL282121/Y	28x21x21

For coupling three corrugated flexible conduits  
To order quote part number & body colour, e.g. AL131010/Y/BL

Approvals	IP rating	Appropriate conduit	Temperature range
	For use with: Type PA / CP / PR / PF / PK		Static applications: -50°C to +120°C
	IP66	Yes	Moving applications: -45°C to +120°C
	IP67	Yes + ALS Seal	
	IP68	Yes + ALS Seal	
	IP69	Yes + ALS Seal	

#### Insert Seal - Adaptalok

IP67/68/69 Insert seal / Materials: Thermoplastic elastomer / Colour: Yellow (Y) Only



Part no.	Conduit pitch
ALS13/F	Fine
ALS16/F	Fine
ALS21/F	Fine
ALS28/C	Coarse
ALS34/C	Coarse
ALS42/C	Coarse
ALS54/C	Coarse

Suitable for standard weight PA/PI/PR conduit (Black or Grey)  
To order quote part number, e.g. ALS13/F  
Note: Seal needs to be inserted into the appropriate conduit to upgrade fitting system

Approvals	IP rating	Appropriate conduit	Temperature range
	For use with: Type PA / CP / PR / PF / PK		Static applications: -50°C to +120°C
	IP66	N/A	Moving applications: -45°C to +120°C
	IP67	Yes	
	IP68	Yes (1.1 bar 35mins)	
	IP69	Yes (DIN 40050)	

## Non-metallic conduit systems

### Type FL/A, FL/C90 & FL/90 - Adaptalok

#### Type FL/A - Adaptalok

Straight panel mounting swivel flange / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)
AL16/FL/A	16
AL21/FL/A	21
AL28/FL/A	28
AL54/FL/A	54

With integral face seal  
To order quote part number & body colour, e.g. AL16/FL/A/BL

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



#### Type FL/C90 - Adaptalok

90° Elbow body - Panel mount swivel flange / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)
AL13/FL/C90	13
AL16/FL/C90	16
AL21/FL/C90	21
AL28/FL/C90	28

For panel mounting via 2 hole fixing & integral face seal  
To order quote part number & body colour, e.g. AL13/FL/C90/BL

#### Type FL/90 - Adaptalok

90° Elbow body - Panel mount flange / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)
AL34/FL/90	34
AL42/FL/90	42
AL54/FL/90	54

For panel mounting via 4 hole fixing & integral face seal  
To order quote part number & body colour, e.g. AL34/FL/C90/BL

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics (FLC/90 ONLY)



## Non-metallic conduit systems

### Type FL/45 & swivel coupler - Adaptalok

#### Type FL/45 - Adaptalok

45° Panel mounting swivel flange / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)
AL16/FL/45	16
AL21/FL/45	21
AL28/FL/45	28
AL54/FL/45	54

With integral face seal

To order quote part number & body colour, e.g. AL16/FL/45/BL

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



#### Swivel coupler - Adaptalok

Straight PA66 body swivel coupler / Materials: Polyamide (nylon) 66 + aluminium / Colour: Black (BL) Only



Part no.	Nominal conduit size (mm)
AL13/A/U/BL	13
AL16/A/U/BL	16
AL21/A/U/BL	21
AL28/A/U/BL	28
AL34/A/U/BL	34
AL42/A/U/BL	42
AL54/A/U/BL	54

For coupling two corrugated flexible conduits

To order quote part number, e.g. AL13/A/U/BL

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



## Non-metallic conduit systems

### Type SA & CS90 - Adaptalok

#### Type SA - Adaptalok

Straight fitting - Swivel external male thread / Materials: Polyamide (nylon) 66, Nickel Plated Brass Thread / Colour: Black (BL), Grey (GR)

Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG thread
AL13/M16/SA*	13	M16	AL13/PG9/SA*	13	PG9
AL16/M16/SA	16	M16	AL16/PG11/SA	16	PG11
AL21/M20/SA	21	M20	AL21/PG13/SA	21	PG13,5
-	-	-	AL21/PG16/SA	21	PG16
AL28/M25/SA	28	M25	AL28/PG21/SA	28	PG21
AL34/M32/SA	34	M32	AL34/PG29/SA	34	PG29
AL42/M40/SA	42	M40	AL42/PG36/SA	42	PG36
AL54/M50/SA	54	M50	AL54/PG48/SA	54	PG48
AL54/M63/SA	54	M63	-	-	-



For insertion into threaded entries & knockouts using a locknut. Order locknut separately

To order quote part number & body colour, e.g. AL13/M16/SA/BL. NPT also available

\*These parts are not covered by the RU certification

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



#### Type CS90 - Adaptalok

90° Elbow fitting - Swivel external male thread / Materials: Polyamide (nylon) 66, nickel plated brass thread / Colour: Black (BL), Grey (GR)

Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG thread
AL13/M16/CS90*	13	M16	AL13/PG9/CS90*	13	PG9
AL16/M16/CS90	16	M16	AL16/PG11/CS90	16	PG11
AL21/M20/CS90	21	M20	AL21/PG13/CS90	21	PG13,5
-	-	-	AL21/PG16/CS90	21	PG16
AL28/M25/CS90	28	M25	AL28/PG21/CS90	28	PG21
AL34/M32/CS90	34	M32	AL34/PG29/CS90	34	PG29
AL42/M40/CS90	42	M40	AL42/PG36/CS90	42	PG36
AL54/M50/CS90	54	M50	AL54/PG48/CS90	54	PG48
AL54/M63/CS90	54	M63	-	-	-



For insertion into threaded entries & knockouts using a locknut. Order locknut separately

To order quote part number & body colour, e.g. AL13/M16/CS90/BL. NPT also available

\*These parts are not covered by the RU certification

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



## Non-metallic conduit systems

### Type S45 & SFA - Adaptalok

#### Type S45 - Adaptalok

45° Elbow Body - Swivel external male thread / Materials: Polyamide (nylon) 66, Nickel plated brass thread / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG thread
AL13/M16/S45*	13	M16	AL13/PG9/S45*	13	PG9
AL16/M16/S45	16	M16	AL16/PG11/S45	16	PG11
AL21/M20/S45	21	M20	AL21/PG13/S45	21	PG13,5
-	-	-	AL21/PG16/S45	21	PG16
AL28/M25/S45	28	M25	AL28/PG21/S45	28	PG21
AL34/M32/S45	34	M32	AL34/PG29/S45	34	PG29
AL42/M40/S45	42	M40	AL42/PG36/S45	42	PG36
AL54/M50/S45	54	M50	AL54/PG48/S45	54	PG48
AL54/M63/S45	54	M63	-	-	-

For insertion into threaded entries & knockouts using a locknut. Order locknut separately

To order quote part number & body colour, e.g. AL13/M16/S45/BL. NPT also available

\*These parts are not covered by the RU certification

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



#### Type SFA - Adaptalok

Straight body - Swivel internal female thread / Materials: Polyamide (nylon) 66, nickel plated brass thread / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG thread
AL13/M16/SFA	13	M16	AL13/PG9/SFA	13	PG9
AL16/M16/SFA	16	M16	AL16/PG11/SFA	16	PG11
AL21/M20/SFA	21	M20	AL21/PG13/SFA	21	PG13,5
-	-	-	AL21/PG16/SFA	21	PG16
AL28/M25/SFA	28	M25	AL28/PG21/SFA	28	PG21
AL34/M32/SFA	34	M32	AL34/PG29/SFA	34	PG29
AL42/M40/SFA	42	M40	AL42/PG36/SFA	42	PG36
AL54/M50/SFA	54	M50	AL54/PG48/SFA	54	PG48
AL54/M63/SFA	54	M63	-	-	-

For attaching to external threads & other fittings

To order quote part number & body colour, e.g. AL13/M16/SFA/BL

NPT also available

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



## Non-metallic conduit systems

### Type CSF90 & SF45 - Adaptalok

#### Type CSF90 - Adaptalok

90° Elbow fitting - Swivel internal female thread / Materials: Polyamide (nylon) 66, nickel plated brass thread / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG thread
AL13/M16/CSF90	13	M16	AL13/PG9/CSF90	13	PG9
AL16/M16/CSF90	16	M16	AL16/PG11/CSF90	16	PG11
AL21/M20/CSF90	21	M20	AL21/PG13/CSF90	16	PG13,5
-	-	-	AL21/PG16/CSF90	21	PG16
AL28/M25/CSF90	28	M25	AL28/PG21/CSF90	28	PG21
AL34/M32/CSF90	34	M32	AL34/PG29/CSF90	34	PG29
AL42/M40/CSF90	42	M40	AL42/PG36/CSF90	42	PG36
AL54/M50/CSF90	54	M50	AL54/PG48/CSF90	54	PG48

For attachment to external threads & other fittings  
To order quote part number & body colour, e.g. AL13/M16/CSF90/BL  
NPT also available

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



#### Type SF45 - Adaptalok

45° Elbow fitting - Swivel internal female thread / Materials: Polyamide (nylon) 66, nickel plated brass thread / Colour: Black (BL), Grey (GR)



Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG thread
AL13/M16/SF45	13	M16	AL13/PG9/SF45	13	PG9
AL16/M16/SF45	16	M16	AL16/PG11/SF45	16	PG11
AL21/M20/SF45	21	M20	AL21/PG13/SF45	16	PG13,5
-	-	-	AL21/PG16/SF45	21	PG16
AL28/M25/SF45	28	M25	AL28/PG21/SF45	28	PG21
AL34/M32/SF45	34	M32	AL34/PG29/SF45	42	PG29
AL42/M40/SF45	40	M40	AL42/PG36/SF45	48	PG36
AL54/M50/SF45	50	M50	AL54/PG48/SF45	54	PG48
AL54/M63/SF45	63	M63	-	-	-

For insertion into threaded entries & knockouts using a locknut. Order locknut separately  
To order quote part number & body colour, e.g. AL13/M16/CS90/BL. NPT also available  
\*These parts are not covered by the RU certification

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics




## Non-metallic conduit systems

### UNEF Type A





#### UNEF Type A - Adaptalok

Straight body - Swivel internal female thread / Materials: Polyamide (nylon) 66 & aluminium / Colour: Black (BL) only

	Nominal conduit size			Nominal conduit size		
	Part no.	(mm)	Connector UNEF thread	Part no.	(mm)	Connector UNEF thread
	AL13/U063/A	13	5/8" - 24	AL21/U144/A	21	1 7/16" - 18
	AL13/U075/A	13	3/4" - 20	AL21/U175/A	21	1 3/4" - 18
	AL13/U088/A	13	7/8" - 20	AL28/U088/A	28	7/8" - 20
	AL16/U063/A	16	5/8" - 24	AL28/U094/A	28	1 5/16" - 20
	AL16/U075/A	16	3/4" - 20	AL28/U100/A	28	1" - 20
	AL16/U081/A	16	1 3/16" - 20	AL28/U119/A	28	1 3/16" - 18
	AL16/U088/A	16	7/8" - 20	AL28/U138/A	28	1 3/8" - 18
	AL16/U094/A	16	1 5/16" - 20	AL28/U144/A	28	1 7/16" - 18
	AL16/U100/A	16	1" - 20	AL28/U175/A	28	1 3/4" - 18
	AL16/U119/A	16	1 3/16" - 18	AL28/U200/A	28	2" - 16
	AL16/U131/A	16	1 5/16" - 18	AL28/U225/A	28	2 1/4" - 16
	AL21/U075/A	21	3/4" - 20	AL34/U100/A	34	1" - 20
	AL21/U088/A	21	7/8" - 20	AL34/U119/A	34	1 3/16" - 18
	AL21/U094/A	21	1 5/16" - 20	AL34/U144/A	34	1 7/16" - 18
	AL21/U100/A	21	1" - 20	AL34/U175/A	34	1 3/4" - 18
	AL21/U113/A	21	1 1/8" - 18	AL34/U200/A	34	2" - 16
	AL21/U119/A	21	1 3/16" - 18	AL42/U175/A	42	1 3/4" - 18
	AL21/U131/A	21	1 5/16" - 18	AL42/U200/A	42	2" - 16
	AL21/U138/A	21	1 3/8" - 18	-	-	-

For coupling to UNEF circular connectors

To order quote part number, e.g. AL13/U063/A and add 000620

Approvals	IP rating	Appropriate conduit	Temperature range	Fitting characteristics
  	For use with: Type PA / CP / PR / PF		Static applications: -50°C to +120°C	
	IP66	Yes	Moving applications: -45°C to +120°C	
	IP67	Yes + ALS Seal		
	IP68	Yes + ALS Seal		
	IP69	Yes + ALS Seal		

## Non-metallic conduit systems

### UNEF Type C90 - Adaptalok

UNEF Type C90 - Adaptalok

90° Elbow fitting - Elbow body - Swivel internal female thread / Materials: Polyamide (nylon) 66 & aluminium / Colour: Black (BL) Only



Part no.	Nominal conduit size (mm)	Connector UNEF thread	Part no.	Nominal conduit size (mm)	Connector UNEF thread
AL13/U063/C90	13	5/8" - 24	AL21/U144/C90	21	1 7/16" - 18
AL13/U075/C90	13	3/4" - 20	AL21/U175/C90	21	1 3/4" - 18
AL13/U088/C90	16	7/8" - 20	AL28/U088/C90	28	7/8" - 20
AL16/U063/C90	16	5/8" - 24	AL28/U094/C90	28	1 5/16" - 20
AL16/U075/C90	16	3/4" - 20	AL28/U100/C90	28	1" - 20
AL16/U081/C90	16	1 3/16" - 20	AL28/U119/C90	28	1 3/16" - 18
AL16/U088/C90	16	7/8" - 20	AL28/U138/C90	28	1 3/8" - 18
AL16/U094/C90	16	1 5/16" - 20	AL28/U144/C90	28	1 7/16" - 18
AL16/U100/C90	16	1" - 20	AL28/U175/C90	28	1 3/4" - 18
AL16/U119/C90	16	1 3/16" - 18	AL28/U200/C90	28	2" - 16
AL16/U131/C90	16	1 5/16" - 18	AL28/U225/C90	28	2 1/4" - 16
AL21/U075/C90	21	3/4" - 20	AL34/U100/C90	34	1" - 20
AL21/U088/C90	21	7/8" - 20	AL34/U119/C90	34	1 3/16" - 18
AL21/U094/C90	21	1 5/16" - 20	AL34/U144/C90	34	1 7/16" - 18
AL21/U100/C90	21	1" - 20	AL34/U175/C90	34	1 3/4" - 18
AL21/U113/C90	21	1 1/8" - 18	AL34/U200/C90	34	2" - 16
AL21/U119/C90	21	1 3/16" - 18	AL42/U175/C90	42	1 3/4" - 18
AL21/U131/C90	21	1 5/16" - 18	42/U200/C90	42	2" - 16
AL21/U138/C90	21	1 3/8" - 18	-	-	-

For coupling to UNEF circular connectors

To order quote part number, e.g. AL13/U065/C90 and add 000620

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



## Non-metallic conduit systems

### UNEF Type 45 - Adaptalok

UNEF Type 45 - Adaptalok

45° Elbow fitting - Swivel internal female thread / Materials: Polyamide (nylon) 66 &amp; aluminium / Colour: Black (BL) only



Part no.	Nominal conduit size (mm)	Connector UNEF thread	Part no.	Nominal conduit size (mm)	Connector UNEF thread
AL13/U063/45	13	5/8" - 24	AL21/U144/45	21	1 7/16" - 18
AL13/U075/45	13	3/4" - 20	AL21/U175/45	21	1 3/4" - 18
AL13/U088/45	13	7/8" - 20	AL28/U088/45	28	7/8" - 20
AL16/U063/45	16	5/8" - 24	AL28/U094/45	28	1 5/16" - 20
AL16/U075/45	16	3/4" - 20	AL28/U100/45	28	1" - 20
AL16/U081/45	16	1 3/16" - 20	AL28/U119/45	28	1 3/16" - 18
AL16/U088/45	16	7/8" - 20	AL28/U138/45	28	1 3/8" - 18
AL16/U094/45	16	1 5/16" - 20	AL28/U144/45	28	1 7/16" - 18
AL16/U100/45	16	1" - 20	AL28/U175/45	28	1 3/4" - 18
AL16/U119/45	16	1 3/16" - 18	AL28/U200/45	28	2" - 16
AL16/U131/45	16	1 5/16" - 18	AL28/U225/45	28	2 1/4" - 16
AL21/U075/45	21	3/4" - 20	AL34/U100/45	34	1" - 20
AL21/U088/45	21	7/8" - 20	AL34/U119/45	34	1 3/16" - 18
AL21/U094/45	21	1 5/16" - 20	AL34/U144/45	34	1 7/16" - 18
AL21/U100/45	21	1" - 20	AL34/U175/45	34	1 3/4" - 18
AL21/U113/45	21	1 1/8" - 18	AL34/U200/45	34	2" - 16
AL21/U119/45	21	1 3/16" - 18	AL42/U175/45	42	1 3/4" - 18
AL21/U131/45	21	1 5/16" - 18	AL42/U200/45	42	2" - 16
AL21/U138/45	21	1 3/8" - 18	-	-	-

For coupling to UNEF circular connectors

To order quote part number, e.g. AL13/U065/45 and add 000620

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes + ALS Seal
IP68	Yes + ALS Seal
IP69	Yes + ALS Seal

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics



# Non-metallic conduit systems

## Jumbo Type FL/A - Adaptalok

Jumbo Type FL/A - Adaptalok

Straight panel mounting swivel flange / Materials: Polyamide (nylon) 66 / Colour: Black (BL) Only



Part no.	Nominal conduit size (mm)
ADC80/FL/A	80
ADC106/FL/A	106

For coupling to UNEF circular connectors  
To order quote part number, e.g. ADC80/FL/A/BL

**Approvals**

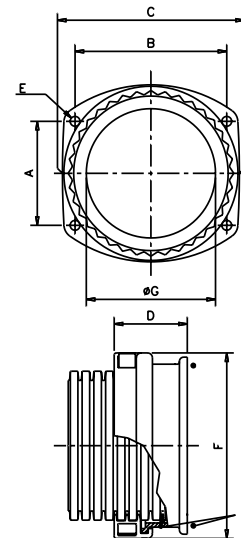


IP rating	Appropriate conduit
For use with: Type PA / CP / PR / PF	
IP40	Yes
IP65	Yes + ALS Seal
IP68	N/A
IP69	N/A

Temperature range
Static applications: -50°C to +120°C
Moving applications: -45°C to +120°C

Part no.		Nominal size
ADC80/FL/A	ADC106/FL/A	
60mm	74mm	A
80mm	108mm	B
98mm	126mm	C
52.5mm	52.5mm	D
7mm	7mm	E $\varnothing$
106mm	132mm	F

For coupling to UNEF circular connectors  
To order quote part number, e.g. ADC80/FL/A/BL



Seal (Optional)  
for IP65

## Non-metallic conduit systems

### Jumbo Type SK

Jumbo Type SK

Sealing kit / Materials: Rubber / Colour: Black (BL) only

Part no.	Nominal conduit size (mm)
ADC80/FL/A	80
ADC106/FL/A	106

For use with Jumbo fittings to achieve IP65. Consists of two sealing washers & O-ring per kit  
To order quote part number, e.g. SK80/BL



# Non-metallic conduit systems

## Introduction to Adaptalok ATS™

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.

—  
01 Caption  
—  
02 Caption

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)
  - Wider variety of fittings - much larger solutions choice
  - Better fatigue life
  - Return to shape



Integral Face Seal Washer - guaranteed fit, cannot be lost or fitted incorrectly. No Assembly.

High Visibility Elastomer - 3 visible confirmation points.

Internal Elastomer Conduit Seal - guaranteed fit, cannot be lost or fitted incorrectly. No Assembly & protects cables.

Visual Fitting Guides - highly visible elastomer markings on lugs, aids correct fitment.

Proven Clip Design - pitch independent, ensures secure fitment to coarse & fine pitch conduits.

Thread Data - thread size clearly indicated on fitting thread

Conduit Data - conduit size clearly indicated on fitting.

## Non-metallic conduit systems

### Type A - Adaptalok ATSTM™

#### Type A - Adaptalok ATSTM™

Straight Fitting - Fixed external male thread / Materials: Polyamide (nylon) 66/TPE /  
Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer

Part no.	Nominal conduit size		Part no.	Nominal conduit size		PF thread (in)	Part no.	Nominal conduit size		NPT thread (in)
	(mm)	Metric thread		(mm)				(mm)		
AT13/M16/A	13	M16	AT13/PF038/A	13		3/8	AT13/038/A	13		3/8
AT16/M16/A	16	M16	AT16/PF038/A	16		3/8	AT16/038/A	16		3/8
AT16/M20/A	16	M20	AT16/PF050/A	16		1/2	AT16/050/A	16		1/2
AT21/M20/A	21	M20	AT21/PF050/A	21		1/2	AT21/050/A	21		1/2
AT21/M25/A	21	M25	-	-		-	-	-		-
AT28/M25/A	28	M25	AT28/PF075/A	28		3/4	AT28/075/A	28		3/4
AT28/M32/A	28	M32	-	-		-	-	-		-
AT34/M32/A	34	M32	AT34/PF100/A	34		1	AT34/100/A	34		1
AT34/M40/A	34	M40	-	-		-	-	-		-
AT42/M40/A	42	M40	AT42/PF125/A	42		1 1/4	AT42/125/A	42		1 1/4
AT42/M50/A	42	M50	-	-		-	-	-		-
AT48/M50/A	48	M50	AT48/PF150/A	48		1 1/2	AT48/150/A	48		1 1/2
AT54/M50/A	54	M50	-	-		-	-	-		-
AT54/M63/A	54	M63	AT54/PF200/A	48		2	AT54/200/A	54		2

For insertion into knockouts using a locknut. Locknut supplied with METRIC thread  
To order quote part number, body colour & Elastomer colour, e.g. AT21/M20/A/BLY

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / PR / PADL / PF

IP40	Yes
IP65	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

#### Temperature range


Static applications: -50°C to +120°C  
Moving applications: -45°C to +120°C

## Non-metallic conduit systems

### Type A - Adaptalok ATS™

#### Type A - Adaptalok ATS™

Straight fitting - Fixed external male thread / Polyamide (nylon) 66/TPE /  
Colour: Black (BL), Grey (GR) / Blue (B) Elastomer

	Nominal conduit size			Nominal conduit size		
	Part no.	(mm)	Metric thread	Part no.	(mm)	NPT thread (in)
	AT13/M16/A	13	M16	AT13/038/A	13	3/8
	AT16/M16/A	16	M16	AT16/038/A	16	3/8
	AT16/M20/A	16	M20	AT16/050/A	16	1/2
	AT21/M20/A	21	M20	AT21/050/A	21	1/2
	AT21/M25/A	21	M25	-	-	-
	AT28/M25/A	28	M25	AT28/075/A	28	3/4
	AT28/M32/A	28	M32	-	-	-
	AT34/M32/A	34	M32	AT34/100/A	34	1
	AT34/M40/A	34	M40	-	-	-
	AT42/M40/A	42	M40	AT42/125/A	42	1 1/4
	AT42/M50/A	42	M50	-	-	-
	AT48/M50/A	48	M50	AT48/150/A	48	1 1/2
	AT54/M50/A	54	M50	-	-	-
	AT54/M63/A	54	M63	AT54/200/A	54	2

For insertion into knockouts using a locknut. Locknut supplied with METRIC thread  
To order quote part number, body colour & Elastomer colour, e.g. AT21/M20/A/BLB

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / PR / PADL / PF

IP40	Yes
IP65	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

#### Temperature range


Static applications: -50°C to +120°C  
Moving applications: -45°C to +120°C

## Non-metallic conduit systems

### Type C90 - Adaptalok ATS™

#### Type C90 - Adaptalok ATS™

90° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66/TPE /  
Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer

Part no.	Nominal conduit size (mm)		Metric thread	Part no.	Nominal conduit size (mm)		PF thread (in)	Part no.	Nominal conduit size (mm)		NPT thread (in)
	AT13/M16/C90	13	M16	AT13/PF038/C90	13	3/8		AT13/038/C90	13	3/8	
	AT16/M16/C90	16	M16	AT16/PF038/C90	16	3/8		AT16/038/C90	16	3/8	
	AT16/M20/C90	16	M20	AT16/PF050/C90	16	1/2		AT16/050/C90	16	1/2	
	AT21/M20/C90	21	M20	AT21/PF050/C90	21	1/2		AT21/050/C90	21	1/2	
	AT21/M25/C90	28	M25	AT28/PF075/C90	28	3/4		AT28/075/C90	28	3/4	
	AT28/M32/C90	34	M32	AT34/PF100/C90	34	1		AT34/100/C90	34	1	
	AT28/M40/C90	42	M40	AT42/PF125/C90	42	1 1/4		AT42/125/C90	42	1 1/4	
	AT34/M50/C90	48	M50	AT48/PF150/C90	48	1 1/2		AT48/150/C90	48	1 1/2	
	AT34/M50/C90	54	M50	AT54/PF150/C90	54	1 1/2		AT54/150/C90	54	1 1/2	
	AT42/M63/C90	54	M63	AT54/PF200/C90	54	2		AT54/200/C90	54	2	

For insertion into knockouts using a locknut. Locknut supplied with METRIC thread  
To order quote part number, body colour & Elastomer colour, e.g. AT21/M20/C90/BL/Y

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / PR / PADL / PF

IP40	Yes
IP65	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes


#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Type C90 - Adaptalok ATS™

90° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66/TPE /  
Colour: Black (BL), Grey (GR) / Blue (B) Elastomer

Part no.	Nominal conduit size (mm)		Metric thread	Part no.	Nominal conduit size (mm)		PF thread (in)
	13/M16/C90	13	M16	AT13/PF038/C90	13	3/8	
	16/M16/C90	16	M16	AT16/PF038/C90	16	3/8	
	16/M20/C90	16	M20	AT16/PF050/C90	16	1/2	
	21/M20/C90	21	M20	AT21/PF050/C90	21	1/2	
	21/M25/C90	28	M25	AT28/PF075/C90	28	3/4	
	28/M32/C90	34	M32	AT34/PF100/C90	34	1	
	28/M40/C90	42	M40	AT42/PF125/C90	42	1 1/4	
	AT34/M50/C90	48	M50	AT48/PF150/C90	48	1 1/2	
	AT34/M50/C90	54	M50	AT54/PF150/C90	54	1 1/2	
	AT42/M63/C90	54	M63	AT54/PF200/C90	54	2	

For insertion into knockouts using a locknut. Locknut supplied with METRIC thread  
To order quote part number, body colour & Elastomer colour, e.g. AT21/M20/A/BLB

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / PR / PADL / PF

IP40	Yes
IP65	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

#### Temperature range

Static applications: -50°C to +120°C


Moving applications: -45°C to +120°C

## Non-metallic conduit systems

### Type 45 - Adaptalok ATS™

#### Type 45 - Adaptalok ATS™

45° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66/TPE /  
Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer

Part no.	Nominal conduit size (mm)		Metric thread	Part no.	Nominal conduit size (mm)		PF thread (in)	Part no.	Nominal conduit size (mm)		NPT thread (in)
	AT13/M16/45	13	M16	AT13/PF038/45	13	3/8		AT13/038/45	13	3/8	
	AT16/M16/45	16	M16	AT16/PF038/45	16	3/8		AT16/038/45	16	3/8	
	AT16/M20/45	16	M20	AT16/PF050/45	16	1/2		AT16/050/45	16	1/2	
	AT21/M20/45	21	M20	AT21/PF050/45	21	1/2		AT21/050/45	21	1/2	
	AT21/M25/45	28	M25	AT28/PF075/45	28	3/4		AT28/075/45	28	3/4	
	AT28/M32/45	34	M32	AT34/PF100/45	34	1		AT34/100/45	34	1	
	AT28/M40/45	42	M40	AT42/PF125/45	42	1 1/4		AT42/125/45	42	1 1/4	
	AT34/M50/45	48	M50	AT48/PF150/45	48	1 1/2		AT48/150/45	48	1 1/2	
	AT34/M50/45	54	M50	-	-	-		-	-	-	

For insertion into knockouts using a locknut. Locknut supplied with METRIC thread  
To order quote part number, body colour & Elastomer colour, e.g. AT54/M50/45/BLY

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / PR / PADL / PF


IP40	Yes
IP65	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

#### Temperature range

Static applications: -50°C to +120°C  
Moving applications: -45°C to +120°C

#### Type 45 - Adaptalok ATS™

45° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66/TPE /  
Colour: Black (BL), Grey (GR) / Blue (BQ) Elastomer

Part no.	Nominal conduit size (mm)		Metric thread	Part no.	Nominal conduit size (mm)		PF thread (in)
	Γ13/M16/45	13	M16	AT13/PF038/45	13	3/8	
	Γ16/M16/45	16	M16	AT16/PF038/45	16	3/8	
	Γ16/M20/45	16	M20	AT16/PF050/45	16	1/2	
	Γ21/M20/45	21	M20	AT21/PF050/45	21	1/2	
	Γ21/M25/45	28	M25	AT28/PF075/45	28	3/4	
	Γ28/M32/45	34	M32	AT34/PF100/45	34	1	
	AT28/M40/45	42	M40	AT42/PF125/45	42	1 1/4	
	AT34/M50/45	48	M50	AT48/PF150/45	48	1 1/2	
	AT34/M50/45	54	M50	-	-	-	

For insertion into knockouts using a locknut. Locknut supplied with METRIC thread  
To order quote part number, body colour & Elastomer colour, e.g. AT54/M50/45/BLB

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / PR / PADL / PF

IP40	Yes
IP65	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

#### Temperature range


Static applications: -50°C to +120°C  
Moving applications: -45°C to +120°C

## Non-metallic conduit systems



### Type SA & CS90 - Adaptalok ATS™

#### Type SA - Adaptalok ATS™

Straight fitting - Metal swivel external male thread / Materials: Polyamide (nylon) 66, Nickel plated brass thread/TPE / Colour: Black (BL), Grey (GR) / Yellow (Y), Blue (B) Elastomer


	Part no.	Nominal conduit size		Part no.	Nominal conduit size (mm)	NPT thread (in)
		(mm)	Metric thread			
	AT13/M16/SA	13	M16	AT13/038/SA	13	3/8
	AT16/M16/SA	16	M16	AT16/038/SA	16	3/8
	AT21/M20/SA	21	M20	AT21/050/SA	21	1/2
	AT28/M25/SA	28	M25	AT28/075/SA	28	3/4
	AT34/M32/SA	34	M32	AT34/100/SA	34	1
	AT42/M40/SA	42	M40	AT42/125/SA	42	1 1/4
	AT48/M50/SA	48	M50	AT48/150/SA	48	1 1/2
	AT54/M50/SA	54	M50	AT54/150/SA	54	1 1/2
	AT54/M63/SA	54	M63	AT54/200/SA	54	2

For insertion into threaded entries & knockouts. Order locknuts separately  
To order quote part number, body colour & Elastomer colour, e.g. AT16/M16/SA/BLB



Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range
		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C
		IP40	Yes	Moving applications: -45°C to +120°C
		IP65	Yes	
		IP68	Yes (4 bar 30mins)	Fitting characteristics
		IP69	Yes	

#### Type CS90 - Adaptalok ATS™

90° Elbow fitting - Swivel external male thread / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE Colour: Black (BL), Grey (GR) / Yellow (Y), Blue (B) Elastomer

	Part no.	Nominal conduit size		Part no.	Nominal conduit size (mm)	NPT thread (in)
		(mm)	Metric thread			
	AT13/M16/CS90	13	M16	AT13/038/CS90	13	3/8
	AT16/M16/CS90	16	M16	AT16/038/CS90	16	3/8
	AT21/M20/CS90	21	M20	AT21/050/CS90	21	1/2
	AT28/M25/CS90	28	M25	AT28/075/CS90	28	3/4
	AT34/M32/CS90	34	M32	AT34/100/CS90	34	1
	AT42/M40/CS90	42	M40	AT42/125/CS90	42	1 1/4
	AT48/M50/CS90	48	M50	AT48/150/CS90	48	1 1/2
	AT54/M50/CS90	54	M50	AT54/150/CS90	54	1 1/2
	AT54/M63/CS90	54	M63	AT54/200/CS90	54	2

For insertion into threaded entries & knockouts. Order locknuts separately  
To order quote part number, body colour & Elastomer colour, e.g. AT16/M16/SA/BLB


Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range
		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C
		IP40	Yes	Moving applications: -45°C to +120°C
		IP65	Yes	
		IP68	Yes (4 bar 30mins)	Fitting characteristics
		IP69	Yes	

## Non-metallic conduit systems



### Type S45 & SFA - Adaptalok ATS™

#### Type S45 - Adaptalok ATS™

45° Elbow body - Swivel external male thread / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE  
Colour: Black (BL), Grey (GR) / Yellow (Y), Blue (B) Elastomer


	Part no.	Nominal conduit size		Part no.	Nominal conduit size (mm)	NPT thread (in)
		(mm)	Metric thread			
	AT13/M16/S45	13	M16	AT13/038/S45	13	3/8
	AT16/M16/S45	16	M16	AT16/038/S45	16	3/8
	AT21/M20/S45	21	M20	AT21/050/S45	21	1/2
	AT28/M25/S45	28	M25	AT28/075/S45	28	3/4
	AT34/M32/S45	34	M32	AT34/100/S45	34	1
	AT42/M40/S45	42	M40	AT42/125/S45	42	1 1/4
	AT48/M50/S45	48	M50	AT48/150/S45	48	1 1/2
	AT54/M50/S45	54	M50	AT54/150/S45	54	1 1/2
	AT54/M63/S45	54	M63	AT54/200/S45	54	2

For insertion into threaded entries & knockouts. Order locknuts separately  
To order quote part number, body colour & Elastomer colour, e.g. AT54/M63/S45/BLB



Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range
		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C
		IP40	Yes	Moving applications: -45°C to +120°C
		IP65	Yes	Fitting characteristics 
		IP68	Yes (4 bar 30mins)	
		IP69	Yes	

#### Type SFA - Adaptalok ATS™

Straight fitting - Swivel internal female thread / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE  
Colour: Black (BL), Grey (GR) / Yellow (Y), Blue (B) Elastomer

	Part no.	Nominal conduit size		Part no.	Nominal conduit size (mm)	NPT thread (in)
		(mm)	Metric thread			
	AT13/M16/SFA	13	M16	AT13/038/SFA	13	3/8
	AT16/M16/SFA	16	M16	AT16/038/SFA	16	3/8
	AT21/M20/SFA	21	M20	AT21/050/SFA	21	1/2
	AT28/M25/SFA	28	M25	AT28/075/SFA	28	3/4
	AT34/M32/SFA	34	M32	AT34/100/SFA	34	1
	AT42/M40/SFA	42	M40	AT42/125/SFA	42	1 1/4
	AT48/M50/SFA	48	M50	AT48/150/SFA	48	1 1/2
	AT54/M50/SFA	54	M50	-	-	-
	AT54/M63/SFA	54	M63	AT54/200/SFA	54	2

For attachments to external threads & other fittings  
To order quote part number, body colour & Elastomer colour, e.g. AT54/M63/SFA/BLB


Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range
		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C
		IP40	Yes	Moving applications: -45°C to +120°C
		IP65	Yes	Fitting characteristics 
		IP68	Yes (4 bar 30mins)	
		IP69	Yes	

## Non-metallic conduit systems







### Type CSF90 & SF45 - Adaptalok ATSTM™

#### Type CSF90 - Adaptalok ATSTM™

90° Elbow body - Swivel internal female thread / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE / Colour: Black (BL), Grey (GR) / Yellow (Y), Blue (B) Elastomer


	Nominal conduit size			Nominal conduit size		
	Part no.	(mm)	Metric thread	Part no.	(mm)	NPT thread (in)
	AT13/M16/CSF90	13	M16	AT13/038/CSF90	13	3/8
	AT16/M16/CSF90	16	M16	AT16/038/CSF90	16	3/8
	AT21/M20/CSF90	21	M20	AT21/050/CSF90	21	1/2
	AT28/M25/CSF90	28	M25	AT28/075/CSF90	28	3/4
	AT34/M32/CSF90	34	M32	AT34/100/CSF90	34	1
	AT42/M40/CSF90	42	M40	AT42/125/CSF90	42	1 1/4
	AT48/M50/CSF90	48	M50	AT48/150/CSF90	48	1 1/2
	AT54/M50/CSF90	54	M50	-	-	-
	AT54/M63/CSF90	54	M63	AT54/200/CSF90	54	2

For insertion into threaded entries & knockouts. Order locknuts separately  
To order quote part number, body colour & Elastomer colour, e.g. AT16/M16/CSF90/BLB







Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range
   Intertek	 	For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C
		IP40	Yes	Moving applications: -45°C to +120°C
		IP65	Yes	<b>Fitting characteristics</b>
		IP68	Yes (4 bar 30mins)	
		IP69	Yes	

#### Type SF45 - Adaptalok ATSTM™

45° Elbow body - Swivel internal female thread / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE Colour: Black (BL), Grey (GR) / Yellow (Y), Blue (B) Elastomer

	Nominal conduit size			Nominal conduit size		
	Part no.	(mm)	Metric thread	Part no.	(mm)	NPT thread (in)
	AT13/M16/SF45	13	M16	AT13/038/SF45	13	3/8
	AT16/M16/SF45	16	M16	AT16/038/SF45	16	3/8
	AT21/M20/SF45	21	M20	AT21/050/SF45	21	1/2
	AT28/M25/SF45	28	M25	AT28/075/SF45	28	3/4
	AT34/M32/SF45	34	M32	AT34/100/SF45	34	1
	AT42/M40/SF45	42	M40	AT42/125/SF45	42	1 1/4
	AT48/M50/SF45	48	M50	AT48/150/SF45	48	1 1/2
	AT54/M50/SF45	54	M50	-	-	-
	AT54/M63/SF45	54	M63	AT54/200/SF45	54	2

For attaching to external threads & other fittings  
To order quote part number, body colour & Elastomer colour, e.g. AT16/M16/SF45/BLB

Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range
   Intertek	 	For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C
		IP40	Yes	Moving applications: -45°C to +120°C
		IP65	Yes	<b>Fitting characteristics</b>
		IP68	Yes (4 bar 30mins)	
		IP69	Yes	

## Non-metallic conduit systems

### Swivel Housing Type SFAJ, CSF90J & SF45J - Adaptalok ATST™

#### Type SFAJ - Adaptalok ATST™

Straight fitting - Swivel housing / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE  
Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer



Part no.	Nominal conduit size (mm)	Metric thread
AT16/M16/SFAJ	16	M16
AT21/M20/SFAJ	21	M20
AT28/M25/SFAJ	28	M25
AT34/M32/SFAJ	34	M32
AT42/M40/SFAJ	42	M40
AT54/M50/SFAJ	54	M50
AT54/M63/SFAJ	54	M63

Swivel metal housing for use with Jacob PERFECT cable glands  
To order quote part number, body colour & Elastomer colour, e.g. AT54/M63/SFAJ/BLY

#### Type CSF90J - Adaptalok ATST™

90° Elbow body - Swivel Housing / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE  
Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer



Part no.	Nominal conduit size (mm)	Metric thread
AT16/M16/CSF90J	16	M16
AT21/M20/CSF90J	21	M20
AT28/M25/CSF90J	28	M25
AT34/M32/CSF90J	34	M32
AT42/M40/CSF90J	42	M40
AT54/M50/CSF90J	54	M50
AT54/M63/CSF90J	54	M63

Swivel metal housing for use with Jacob PERFECT cable glands  
To order quote part number, body colour & Elastomer colour, e.g. AT16/M16/CSF90J/BLY

#### Type SF45 - Adaptalok ATST™

45° Elbow body - Swivel housing / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE  
Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer



Part no.	Nominal conduit size (mm)	Metric thread
AT16/M16/SF45J	16	M16
AT21/M20/SF45J	21	M20
AT28/M25/SF45J	28	M25
AT34/M32/SF45J	34	M32
AT42/M40/SF45J	42	M40
AT54/M50/SF45J	54	M50
AT54/M63/SF45J	54	M63

Swivel metal housing for use with Jacob PERFECT cable glands  
To order quote part number, body colour & Elastomer colour, e.g. AT16/M16/SF45J/BLY

#### Approvals



#### IP rating Appropriate conduit

For use with: Type PA / CP / PR / PF

IP40	Yes
IP65	Yes
IP68	Yes (4 bar 30mins)
IP69	N/A

#### Temperature range

Static applications: -50°C to +120°C

Moving applications: -45°C to +120°C

#### Fitting characteristics




## Non-metallic conduit systems

### UNEF Type SFA - Adaptalok ATS™



UNEF Type SFA - Adaptalok ATS™

Straight body - Swivel internal female thread / Materials: Polyamide (nylon) 66, aluminium/TPE / Colour: Black (BL) Only / Yellow (Y), Blue (B) Elastomer

	Part no.	Nominal conduit size (mm)	Connector UNEF thread		Part no.	Nominal conduit size (mm)	Connector UNEF thread
	AT13/U063/SFA	13	5/8" - 24		AT21/U144/SFA	21	1 7/16" - 18
	AT13/U075/SFA	13	3/4" - 20		AT21/U175/SFA	21	1 3/4" - 18
	AT13/U088/SFA	13	7/8" - 20		AT28/U088/SFA	28	7/8" - 20
	AT16/U063/SFA	16	5/8" - 24		AT28/U094/SFA	28	1 5/16" - 20
	AT16/U075/SFA	16	3/4" - 20		AT28/U100/SFA	28	1" - 20
	AT16/U081/SFA	16	1 3/16" - 20		AT28/U119/SFA	28	1 3/16" - 18
	AT16/U088/SFA	16	7/8" - 20		AT28/U138/SFA	28	1 3/8" - 18
	AT16/U094/SFA	16	1 5/16" - 20		AT28/U144/SFA	28	1 7/16" - 18
	AT16/U100/SFA	16	1" - 20		AT28/U175/SFA	28	1 3/4" - 18
	AT16/U119/SFA	16	1 3/16" - 18		AT28/U200/SFA	28	2" - 16
	AT16/U131/SFA	16	1 5/16" - 18		AT28/U225/SFA	28	2 1/4" - 16
	AT21/U075/SFA	21	3/4" - 20		AT34/U100/SFA	34	1" - 20
	AT21/U088/SFA	21	7/8" - 20		AT34/U119/SFA	34	1 3/16" - 18
	AT21/U094/SFA	21	1 5/16" - 20		AT34/U144/SFA	34	1 7/16" - 18
	AT21/U100/SFA	21	1" - 20		AT34/U175/SFA	34	1 3/4" - 18
	AT21/U113/SFA	21	1 1/8" - 18		AT34/U200/SFA	34	2" - 16
	AT21/U119/SFA	21	1 3/16" - 18		AT42/U175/SFA	42	1 3/4" - 18
	AT21/U131/SFA	21	1 5/16" - 18		AT42/U200/SFA	42	2" - 16
	AT21/U138/SFA	21	1 3/8" - 18		-	-	-

For coupling to UNEF circular connectors

To order quote part number, body colour &amp; Elastomer colour, e.g. AT16/U063/SFA/BLB

Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range
		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C
		IP40	Yes	Moving applications: -45°C to +120°C
		IP65	Yes	<b>Fitting characteristics</b>
		IP68	Yes (4 bar 30mins)	
	IP69	Yes		

## Non-metallic conduit systems

### UNEF Type CSF90 - Adaptalok ATSTM







UNEF Type CSF90 - Adaptalok ATSTM

90° Elbow body - Swivel internal female thread / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE / Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer

Part no.	Nominal conduit size (mm)	Connector UNEF thread	Part no.	Nominal conduit size (mm)	Connector UNEF thread
AT13/U063/CSF90	13	5/8" - 24	AT21/U144/CSF90	21	1 7/16" - 18
AT13/U075/CSF90	13	3/4" - 20	AT21/U175/CSF90	21	1 3/4" - 18
AT13/U088/CSF90	13	7/8" - 20	AT28/U088/CSF90	28	7/8" - 20
AT16/U063/CSF90	16	5/8" - 24	AT28/U094/CSF90	28	1 5/16" - 20
AT16/U075/CSF90	16	3/4" - 20	AT28/U100/CSF90	28	1" - 20
AT16/U081/CSF90	16	1 3/16" - 20	AT28/U119/CSF90	28	1 3/16" - 18
AT16/U088/CSF90	16	7/8" - 20	AT28/U138/CSF90	28	1 3/8" - 18
AT16/U094/CSF90	16	1 5/16" - 20	AT28/U144/CSF90	28	1 7/16" - 18
AT16/U100/CSF90	16	1" - 20	AT28/U175/CSF90	28	1 3/4" - 18
AT16/U119/CSF90	16	1 3/16" - 18	AT28/U200/CSF90	28	2" - 16
AT16/U131/CSF90	16	1 5/16" - 18	AT28/U225/CSF90	28	2 1/4" - 16
AT21/U075/CSF90	21	3/4" - 20	AT34/U100/CSF90	34	1" - 20
AT21/U088/CSF90	21	7/8" - 20	AT34/U119/CSF90	34	1 3/16" - 18
AT21/U094/CSF90	21	1 5/16" - 20	AT34/U144/CSF90	34	1 7/16" - 18
AT21/U100/CSF90	21	1" - 20	AT34/U175/CSF90	34	1 3/4" - 18
AT21/U113/CSF90	21	1 1/8" - 18	AT34/U200/CSF90	34	2" - 16
AT21/U119/CSF90	21	1 3/16" - 18	AT42/U175/CSF90	42	1 3/4" - 18
AT21/U131/CSF90	21	1 5/16" - 18	AT42/U200/CSF90	42	2" - 16
AT21/U138/CSF90	21	1 3/8" - 18	-	-	-

For coupling to UNEF circular connectors

To order quote part number, body colour & Elastomer colour, e.g. AT16/U063/CSF90/BLB



Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range	Fitting characteristics
    		<b>For use with:</b> Type PA / PR / PADL / PF <b>IP40</b> Yes <b>IP65</b> Yes <b>IP68</b> Yes (4 bar 30mins) <b>IP69</b> Yes		Static applications: -50°C to +120°C Moving applications: -45°C to +120°C	

## Non-metallic conduit systems

### UNEF Type SF45 - Adaptalok ATSTM™






UNEF Type SF45 - Adaptalok ATSTM™

45° Elbow body - Swivel internal female thread / Materials: Polyamide (nylon) 66, aluminium/TPE / Colour: Black (BL) Only / Yellow (Y), Blue (B) Elastomer

	Part no.	Nominal conduit size		Part no.	Nominal conduit size	
		(mm)	Metric thread		(mm)	NPT thread
	AT13/U063/SF45	13	5/8" - 24	AT21/U144/SF45	21	1 7/16" - 18
	AT13/U075/SF45	13	3/4" - 20	AT21/U175/SF45	21	1 3/4" - 18
	AT13/U088/SF45	13	7/8" - 20	AT28/U088/SF45	28	7/8" - 20
	AT16/U063/SF45	16	5/8" - 24	AT28/U094/SF45	28	1 5/16" - 20
	AT16/U075/SF45	16	3/4" - 20	AT28/U100/SF45	28	1" - 20
	AT16/U081/SF45	16	1 3/16" - 20	AT28/U119/SF45	28	1 3/16" - 18
	AT16/U088/SF45	16	7/8" - 20	AT28/U138/SF45	28	1 7/8" - 18
	AT16/U094/SF45	16	1 5/16" - 20	AT28/U144/SF45	28	1 7/16" - 18
	AT16/U100/SF45	16	1" - 20	AT28/U175/SF45	28	1 3/4" - 18
	AT16/U119/SF45	16	1 3/16" - 18	AT28/U200/SF45	28	2" - 16
	AT16/U131/SF45	16	1 5/16" - 18	AT28/U225/SF45	28	2 1/4" - 16
	AT21/U075/SF45	21	3/4" - 20	AT34/U100/SF45	34	1" - 20
	AT21/U088/SF45	21	7/8" - 20	AT34/U119/SF45	34	1 3/16" - 18
	AT21/U094/SF45	21	1 5/16" - 20	AT34/U144/SF45	34	1 7/16" - 18
	AT21/U100/SF45	21	1" - 20	AT34/U175/SF45	34	1 3/4" - 18
	AT21/U113/SF45	21	1 1/8" - 18	AT34/U200/SF45	34	2" - 16
AT21/U119/SF45	21	1 3/16" - 18	AT42/U175/SF45	42	1 3/4" - 18	
AT21/U131/SF45	21	1 5/16" - 18	AT42/U200/SF45	42	2" - 16	
AT21/U138/SF45	21	1 3/8" - 18	-	-	-	

For coupling to UNEF circular connectors

To order quote part number, body colour &amp; Elastomer colour, e.g. AT16/U063/SF45/BLB



Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range	Fitting characteristics
   <b>NF U</b>		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C	
		IP40	Yes	Moving applications: -45°C to +120°C	
		IP65	Yes		
		IP68	Yes (4 bar 30mins)		
		IP69	Yes		

## Non-metallic conduit systems


### Swivel Coupler & Panel Mounting Type FL/A - Adaptalok ATST™

Swivel Coupler - Adaptalok ATST™

Straight PA66 body - Swivel coupler / Materials: Polyamide (nylon) 66/TPE / Colour: Black (BL) Only / Yellow (Y), Blue (B) Elastomer

	Part no.	Nominal conduit size (mm)
	AT13/A/U	13
	AT16/A/U	16
	AT21/A/U	21
	AT28/A/U	28
	AT34/A/U	34
	AT42/A/U	42
	AT48/A/U	48
	AT54/A/U	54


For coupling to corrugated flexible conduit  
To order quote part number, body colour & Elastomer colour, e.g. AT21/A/U/BLB

Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range
		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C
		IP40	Yes	Moving applications: -45°C to +120°C
		IP65	Yes	<b>Fitting characteristics</b>
		IP68	Yes (4 bar 30mins)	
		IP69	Yes	




Panel Mounting Type FL/A - Adaptalok ATST™

Straight panel mounting-swivel flange / Materials: Polyamide (nylon) 66/TPE / Colour: Black (BL) Only / Yellow (Y), Blue (B) Elastomer

	Part no.	Nominal conduit size (mm)
	AT16/FL/A	16
	AT21/FL/A	21
	AT28/FL/A	28

With integral face seal  
To order quote part number, body colour & Elastomer colour, e.g. AT21/FL/A/BLB

Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range
		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C
		IP40	Yes	Moving applications: -45°C to +120°C
		IP65	Yes	<b>Fitting characteristics</b>
		IP68	Yes (4 bar 30mins)	
		IP69	Yes	




## Non-metallic conduit systems



### Panel Mounting Type FL/C90 & FL45 - Adaptalok ATSTM™

#### Panel Mounting Type FL/C90 - Adaptalok ATSTM™

90° Elbow body - Panel mounting swivel flange / Materials: Polyamide (nylon) 66/TPE / Colour: Black (BL) Only / Yellow (Y), Blue (B) Elastomer


	Part no.	Nominal conduit size (mm)
	AT13/FL/C90	13
	AT16/FL/C90	16
	AT21/FL/C90	21
	AT28/FL/C90	28

For panel mounting via 2 hole fixing & integral face seal  
To order quote part number, body colour & Elastomer colour, e.g. AT21/FL/C90/BLB



Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range	Fitting characteristics
		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C	
		IP40	Yes	Moving applications: -45°C to +120°C	
		IP65	Yes		
		IP68	Yes (4 bar 30mins)		
		IP69	Yes		

#### Panel Mounting Type FL45 - Adaptalok ATSTM™

45° Elbow body - Panel mounting swivel flange / Materials: Polyamide (nylon) 66/TPE / Colour: Black (BL), Grey (GR) / Yellow (W), Blue (B) Elastomer

	Part no.	Nominal conduit size (mm)
	AT16/FL/45	16
	AT21/FL/45	21
	AT28/FL/45	28

With integral face seal  
To order quote part number, body colour & Elastomer colour, e.g. AT21/FL/45/BLB

Approvals	Blue Elastomer version only	IP rating	Appropriate conduit	Temperature range	Fitting characteristics
		For use with: Type PA / PR / PADL / PF		Static applications: -50°C to +120°C	
		IP40	Yes	Moving applications: -45°C to +120°C	
		IP65	Yes		
		IP68	Yes (4 bar 30mins)		
		IP69	Yes		

## Non-metallic conduit systems

### Type T - Adaptalok ATSTM

Type T- Adaptalok ATSTM

3 Way 'T' piece / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer



Nominal dimensions / Conduit size (mm)

	Part no.	A	B	C	D	E
21T	AT211316/T	82	129	21	16	13
	AT211321/T	82	122	21	21	13
	AT211613/T	83	129	21	13	16
	AT211616/T	83	129	21	16	16
	AT211621/T	83	122	21	21	16
	AT212113/T	75	129	21	21	13
	AT211616/T	83	129	21	16	16
	AT212121/T	77	122	21	21	21
28T	AT212821/T	82	152	21	21	28
	AT281321/T	88	141	28	21	13
	AT281328/T	88	129	28	28	13
	AT281621/T	90	141	28	21	16
	AT281628/T	90	129	28	28	16
	AT282121/T	93	141	28	21	21
	AT282128/T	93	129	28	28	21
	AT282828/T	82	129	28	28	28
34T	AT341634/T	98	139	34	34	16
	AT342128/T	104	150	34	28	21
	AT342134/T	104	139	34	34	21
	AT343434/T	91	139	34	34	34

To order quote part number, body colour & Elastomer colour, e.g. AT211316/T/BLY

**Approvals**



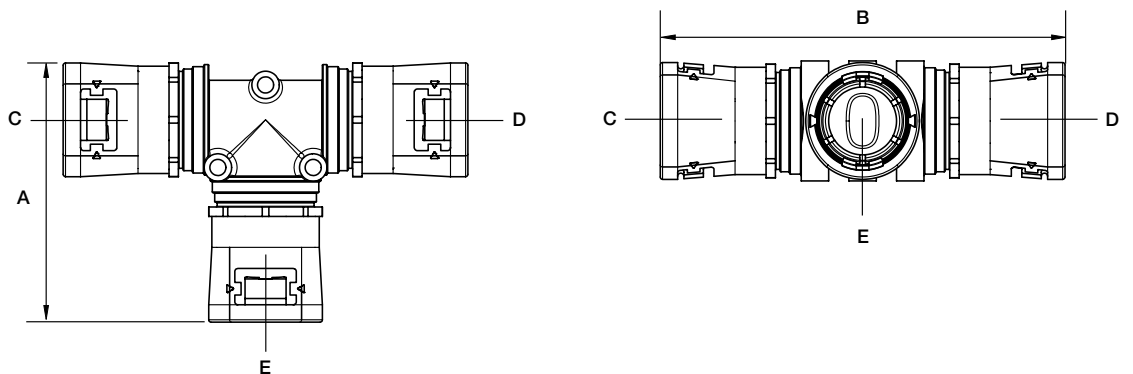
**IP rating                      Appropriate conduit**

<b>For use with:</b> Type PA / PR / PADL / PF	
IP66	Yes
IP67	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

**Temperature range**

Static applications: -50°C to +120°C  
 Moving applications: -45°C to +120°C

**Fitting characteristics**



## Non-metallic conduit systems

### Type T - Adaptalok ATSTM™

Type T- Adaptalok ATSTM™

3 Way 'T' piece / Materials: Polyamide (nylon) 66, / Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer



		Nominal dimensions/conduit size (mm)				
	Part no.	A	B	C	D	E
28Y	AT282113/Y	107.1	117.8	28	21	13
	AT282116/Y	110.6	117.8	28	21	16
	AT282121/Y	116.4	129.9	28	21	21
	AT282813/Y	108.7	124.6	28	28	13
	AT282816/Y	112.2	124.6	28	28	16
	AT282821/Y	116.6	124.6	28	28	21
	AT282828/Y	165.0	119.0	28	28	28

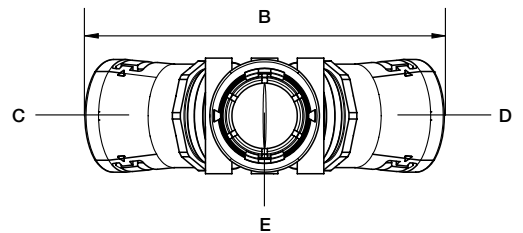
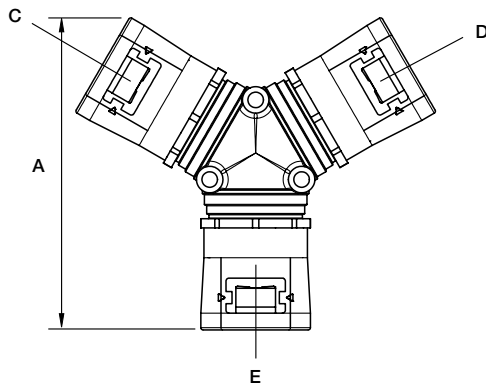
To order quote part number, body colour & Elastomer colour, e.g. AT282113/Y/BLY

**Approvals**

IP rating	Appropriate conduit
For use with: Type PA / PR / PADL / PF	
IP40	Yes
IP65	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

Temperature range
Static applications: -50°C to +120°C
Moving applications: -45°C to +120°C

**Fitting characteristics**



# Corrosion-resistant composite fittings

## Introduction

Range overview - Corrosion-resistant composite fittings for light rail and applications in exposed areas.

—  
01 Type PCC/PCF  
- CS90 - 90° Elbow  
fitting - Swivel  
external male thread

—  
02 Type PCC/PCF -  
S45 - Composite 45°  
elbow fitting - Swivel  
external male thread

Offering reduced weight, enhanced strength providing and a smooth, unrestricted internal bore in demanding applications.

Typical applications:

- Areas of potential high impact
- Train bogies
- Areas where additional mechanical need to protect against damage
- Rail infrastructure
- Trackside
- Machinery and equipment

Features:

- PCC - Coarse pitch conduit
- PCF - Fine pitch conduit
- Smooth through bore
- High strength and high impact resistance
- Full swivel function on elbow fittings
- Lightweight
- For insertion into threaded entries and knockouts using a locknut. Locknut supplied separately



Many of our conduit systems have industry recognised approvals including British Kitemark, CE Approval & UL amongst others.



—  
01



—  
02

## Non-metallic conduit systems

### Type PCC/PCF - A Type




Type PCC/PCF - A Type

Straight fitting - Fixed external male thread / Materials: Nickel plated brass, neoprene seals

Standard thread length			Short thread length		
Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	Metric thread
PCF13/M16/A*	13	M16	PCF13/M16S/A*	13	M16S
PCF16/M16/A	16	M16	PCF16/M16S/A	16	M16S
PCF21/M20/A	21	M20	PCF21/M20S/A	21	M20S
PCC28/M25/A	28	M25	PCC28/M25S/A	28	M25S
PCC34/M32/A	34	M32	PCC34/M32S/A	34	M32S
PCC42/M40/A	42	M40	PCC42/M40S/A	42	M40S
PCC54/M50/A	54	M50	PCC54/M50S/A	54	M50S

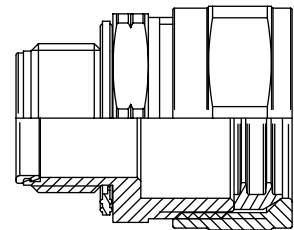


For insertion into threaded entries and knockouts using a locknut. Locknut supplied separately  
 \*These parts are not covered by the RU certification

Approvals
  

IP rating	Appropriate conduit
For use with: Type PA / CP / PR / PADL & PF	
IP66	Yes
IP67	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

Temperature range
Static applications: -50°C to +120°C
Moving applications: -45°C to +120°C



Standard thread length

## Non-metallic conduit systems

### Type PCC/PCF - CS90

Type PCC/PCF - CS90

90° Elbow fitting - Swivel external male thread / Materials: Polyamide (nylon) 66, nickel plated brass, neoprene seals / Colour: Black (BL) Only




Standard thread length			Short thread length		
Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	Metric thread
PCF13/M16/CS90*	13	M16	PCF13/M16S/CS90*	13	M16S
PCF16/M16/CS90	16	M16	PCF16/M16S/CS90	16	M16S
PCF21/M20/CS90	21	M20	PCF21/M20S/CS90	21	M20S
PCC28/M25/CS90	28	M25	PCC28/M25S/CS90	28	M25S
PCC34/M32/CS90	34	M32	PCC34/M32S/CS90	34	M32S
PCC42/M40/CS90	42	M40	PCC42/M40S/CS90	42	M40S
PCC54/M50/CS90	54	M50	PCC54/M50S/CS90	54	M50S

Housing to suit Jacob cable gland			Fitting complete with cable gland		
Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	Metric thread
PCF13/M16/CS90/J*	13	M16	PCF13/M16/S45/JRL*	13	M16
PCF16/M16/CS90/J	16	M16	PCF16/M16/S45/JRL	16	M16
PCF21/M20/CS90/J	21	M20	PCF21/M20/S45/JRL	21	M20
PCC28/M25/CS90/J	28	M25	PCC28/M25/S45/JRL	28	M25
PCC34/M32/CS90/J	34	M32	PCC34/M32/S45/JRL	34	M32
PCC42/M40/CS90/J	42	M40	PCC42/M40/S45/JRL	42	M40
PCC54/M50/CS90/J	54	M50	PCC54/M50/S45/JRL	54	M50
			PCF21/M20/S45/JLL	21	M20
			PCC28/M25/S45/JLL	28	M25
			PCC34/M32/S45/JLL	34	M32
			PCC42/M40/S45/JLL	42	M40
			PCC54/M50/S45/JLL	54	M50

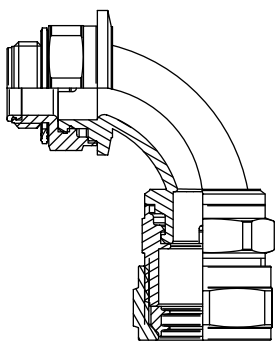


For insertion into threaded entries and knockouts using a locknut. Locknut supplied separately  
To order quote part number, body colour & Elastomer colour, e.g. AT16/U063/CSF90/BLB

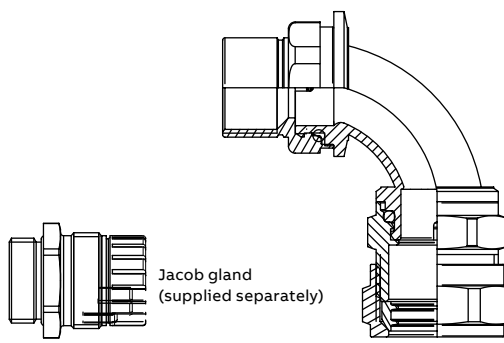
Approvals
  

IP rating	Appropriate conduit
<b>For use with:</b> Type PA / CP / PR / PADL & PF	
IP66	Yes
IP67	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

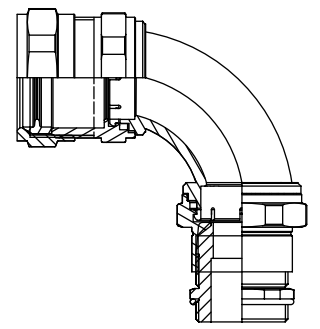
Temperature range
Static applications: -50°C to +120°C
Moving applications: -45°C to +120°C
Fitting characteristics



Standard thread length



Housing to suit Jacob cable gland



Fitting complete with cable gland

# Non-metallic conduit systems

## Type PCC/PCF - S45

Type PCC/PCF - S45

Composite 45° elbow fitting - Swivel external male thread / Materials: Polyamide (nylon) 66, nickel plated brass, neoprene seals / Colour: Black (BL) Only

Standard thread length		
Part no.	Nominal conduit size (mm)	Metric thread
PCF13/M16/S45*	13	M16
PCF16/M16/S45	16	M16
PCF21/M20/S45	21	M20
PCC28/M25/S45	28	M25
PCC34/M32/S45	34	M32
PCC42/M40/S45	42	M40
PCC54/M50/S45	54	M50



Short thread length		
Part no.	Nominal conduit size (mm)	Metric thread
PCF13/M16S/S45*	13	M16S
PCF16/M16S/S45	16	M16S
PCF21/M20S/S45	21	M20S
PCC28/M25S/S45	28	M25S
PCC34/M32S/S45	34	M32S
PCC42/M40S/S45	42	M40S
PCC54/M50S/S45	54	M50S

Housing to suit Jacob cable gland		
Part no.	Nominal conduit size (mm)	Metric thread
PCF13/M16/S45/J*	13	M16
PCF16/M16/S45/J	16	M16
PCF21/M20/S45/J	21	M20
PCC28/M25/S45/J	28	M25
PCC34/M32/S45/J	34	M32
PCC42/M40/S45/J	42	M40
PCC54/M50/S45/J	54	M50

Fitting complete with cable gland		
Part no.	Nominal conduit size (mm)	Metric thread
PCF13/M16/S45/JRL*	13	M16
PCF16/M16/S45/JRL	16	M16
PCF21/M20/S45/JRL	21	M20
PCC28/M25/S45/JRL	28	M25
PCC34/M32/S45/JRL	34	M32
PCC42/M40/S45/JRL	42	M40
PCC54/M50/S45/JRL	54	M50
PCF21/M20/S45/JLL	21	M20
PCC28/M25/S45/JLL	28	M25
PCC34/M32/S45/JLL	34	M32
PCC42/M40/S45/JLL	42	M40
PCC54/M50/S45/JLL	54	M50

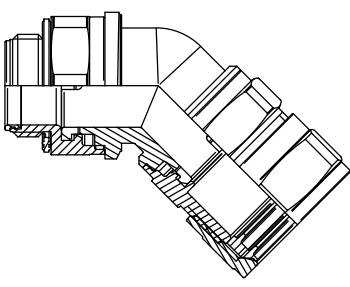
For insertion into threaded entries and knockouts using a locknut. Locknut supplied separately  
 To order quote part number & body colour, e.g. PCF13/M16/S45/BL  
 \*These parts are not covered by the RU certification

**Approvals**

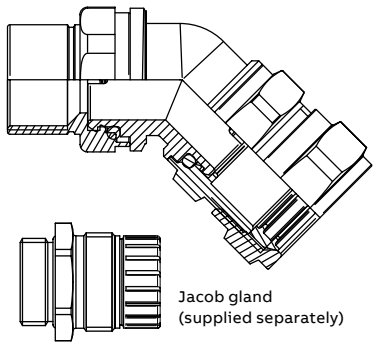
IP rating	Appropriate conduit
<b>For use with:</b> Type PA / CP / PR / PADL & PF	
IP66	Yes
IP67	Yes
IP68	Yes (4 bar 30mins)
IP69	Yes

Temperature range
Static applications: -50°C to +120°C
Moving applications: -45°C to +120°C

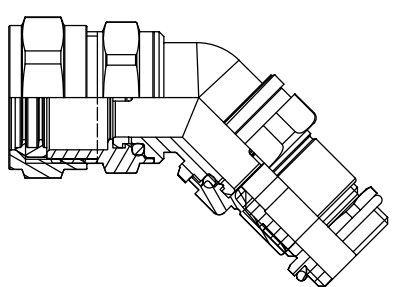
**Fitting characteristics**



Standard thread length



Housing to suit Jacob cable gland



Fitting complete with cable gland

## Non-metallic conduit systems

### Type A & C90 - Adaptaseal

#### Type A - Adaptaseal

Straight fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)

Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG thread
ASF10/M16/A	10	M16	ASF10/PG9/A	10	PG9
ASF13/M16/A	13	M16	ASF13/PG9/A	13	PG9
ASF16/M16/A	16	M16	ASF16/PG11/A	16	PG11
ASF16/M20/A	16	M20	ASF16/PG13/A	16	PG13,5
ASF21/M20/A	21	M20	ASF21/PG16/A	21	PG16
ASC21/M20/A	21	M20	ASC21/PG16/A	21	PG16
ASF28/M25/A	28	M25	ASF28/PG21/A	28	PG21
ASC28/M25/A	28	M25	ASC28/PG21/A	28	PG21
ASF34/M32/A	34	M32	ASF34/PG29/A	34	PG29
ASC34/M32/A	34	M32	ASC34/PG29/A	34	PG29
ASC42/M40/A	42	M40	ASC42/PG36/A	42	PG36
ASC54/M50/A	54	M50	ASC54/PG48/A	54	PG48



For insertion into knockouts using a locknut. Locknut supplied with METRIC THREAD ONLY  
To order quote part number & body colour, e.g. ASF10/M16/A/BL  
PF & NPT thread sizes available

#### Approvals



#### IP rating Appropriate conduit

IP rating	Appropriate conduit
<b>For use with:</b> Type PA / CP / PR / PF	
IP66	Yes
IP67	Yes
IP68	Yes (2 bar 30mins)
IP69	Yes

#### Temperature range

Static applications: -40°C to +120°C  
Moving applications: -5°C to +120°C

#### Type C90 - Adaptaseal

90° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR)

Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG Thread
ASF10/M16/C90	10	M16	ASF10/PG9/C90	10	PG9
ASF13/M16/C90	13	M16	ASF13/PG9/C90	13	PG9
ASF16/M16/C90	16	M16	ASF16/PG11/C90	16	PG11
ASF16/M20/C90	16	M20	ASF16/PG13/C90	16	PG13,5
ASF21/M20/C90	21	M20	ASF21/PG16/C90	21	PG16
ASC21/M20/C90	21	M20	ASC21/PG16/C90	21	PG16
ASF28/M25/C90	28	M25	ASF28/PG21/C90	28	PG21
ASC28/M25/C90	28	M25	ASC28/PG21/C90	28	PG21
ASF34/M32/C90	34	M32	ASF34/PG29/C90	34	PG29
ASC34/M32/C90	34	M32	ASC34/PG29/C90	34	PG29
ASC42/M40/C90	42	M40	ASC42/PG36/C90	42	PG36
ASC54/M50/C90	54	M50	ASC54/PG48/C90	54	PG48



For insertion into knockouts using a locknut. Locknut supplied with METRIC THREAD ONLY  
To order quote part number & body colour, e.g. ASF10/M16/C90/BL  
PF & NPT thread sizes available

#### Approvals



#### IP rating Appropriate conduit

IP rating	Appropriate conduit
<b>For use with:</b> Type PA / CP / PR / PF	
IP66	Yes
IP67	Yes
IP68	Yes (2 bar 30mins)
IP69	Yes

#### Temperature range


Static applications: -40°C to +120°C  
Moving applications: -5°C to +120°C

## Non-metallic conduit systems


### Type FLC90/FL90 & T - Adaptaseal

#### Type FLC90/FL90 - Adaptaseal

90° Elbow body - Panel mount swivel flange / Materials: Polyamide (nylon) 66/TPE / Colour: Black (BL) Only / Yellow (Y), Blue (B) Elastomer


	Part no.	Nominal conduit size (mm)
	ASF13/FL/C90	13
	ASF16/FL/C90	16
	ASF21/FL/C90	21
	ASC21/FL/C90	21
	ASF28/FL/C90	28
	ASC28/FL/C90	28
	ASF34/FL/90*	34
	ASC34/FL/90*	34
	ASC42/FL/90*	42
	ASC54/FL/90*	54

For panel mounting via 2/4 hole fixing & integral face seal  
To order quote part number & body colour, e.g. ASF13/FL/C90/BL  
\*These sizes are fixed panel mounting - non swivel


Approvals	IP rating	Appropriate conduit	Temperature range
	For use with: Type PA / CP / PR / PF		Static applications: -40°C to +120°C
	IP66	Yes	Moving applications: -5°C to +120°C
	IP67	Yes	
	IP68	Yes (2 bar 30mins)	
	IP69	Yes	

#### Type T - Adaptaseal

Inspection T-piece / Materials: Polyamide (nylon) 66 / Colour: Black (BL) Only

	Part no.	Nominal conduit size (mm)
	ASF10X3/T	10
	ASF13X3/T	13
	ASF16X3/T	16
	ASF21X3/T	21
	ASC21X3/T	21
	ASF28X3/T	28
	ASC28X3/T	28
	ASF34X3/T	34
	ASC34X3/T	34

For connection to corrugated flexible conduit  
To order quote part number & body colour, e.g. ASF10X3/T/BL


Approvals	IP rating	Appropriate conduit	Temperature range
	For use with: Type PA / CP / PR / PF		Static applications: -40°C to +120°C
	IP66	Yes	Moving applications: -5°C to +120°C
	IP67	Yes	
	IP68	N/A	
	IP69	N/A	

## Non-metallic conduit systems

### Type RK & AWB - Adaptaseal

#### Type RK - Adaptaseal

Reducing kit / Materials: Polyamide (nylon) 66 & neoprene rubber / Colour: Black (BL) Only

	Nominal conduit size (mm)	Conduit pitch	Part no.				Reducing to conduit size 28
			Reducing to conduit size 10	Reducing to conduit size 13	Reducing to conduit size 16	Reducing to conduit size 21	
	10	Fine	-	-	-	-	-
	13	Fine	RK13-10	-	-	-	-
	16	Fine	RK16-10	RK16-13	-	-	-
	21	Fine	RK21-10	RK21-13	RK21-16	-	-
	21	Coarse	RK21-10	RK21-13	RK21-16	-	-
	28	Fine	-	RK28-13	RK28-16	RK28-21	-
	28	Coarse	-	RK28-13	RK28-16	RK28-21	-
	34	Fine	-	-	-	RK34-21	RK34-28
	34	Coarse	-	-	-	RK34-21	RK34-28

For connection to a reduced conduit size

To order quote part number, e.g. RK13-10/BL

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP66	Yes
IP67	Yes
IP68	Yes (2 bar 30mins)
IP69	Yes


#### Temperature range

Static applications: -40°C to +120°C

Moving applications: -5°C to +120°C

#### Type AWB - Adaptaseal

Anti-vibration washer / Materials: Acetal (POM) / Colour: Black (BL) Only

	Part no.	Nominal conduit size (mm)
	AWB13	13
	AWB16	16
	AWB21	21
	AWB28	28
	AWB34	34


Prevents fitting loosening under vibration

## Non-metallic conduit systems

### Type A & C90 - Adapting

#### Type A - Adapting

Straight fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 & acetal (POM) / Colour: Black (BL) Only

	Part no.	Nominal conduit size		Part no.	Nominal conduit size	
		(mm)	Metric thread		(mm)	PG thread
	AR13/M16/A	13	M16	AR13/PG9/A	13	PG9
	AR16/M16/A	16	M16	AR16/PG11/A	16	PG11
	AR16/M20/A	16	M20	AR16/PG13/A	16	PG13,5
	AR21/M20/A	21	M20	AR21/PG16/A	21	PG16
	AR28/M25/A	28	M25	AR28/PG21/A	28	PG21
	AR34/M32/A	34	M32	AR34/PG29/A	34	PG29
	AR42/M40/A	42	M40	AR42/PG36/A	42	PG36
	AR54/M50/A	54	M50	AR54/PG48/A	54	PG48

For insertion into threaded entries & knockouts. Locknut supplied with METRIC THREAD ONLY  
To order quote part number, e.g. AR21/M20/A/BL  
PF & NPT thread sizes available

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -40°C to +120°C


Moving applications: -5°C to +120°C

#### Fitting characteristics



#### Type C90 - Adapting

90° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66, nickel plated brass thread/TPE Colour: Black (BL), Grey (GR) / Yellow (Y) Elastomer

	Part no.	Nominal conduit size	
		(mm)	Metric thread
	AR13/M16/C90	13	M16
	AR16/M16/C90	16	M16
	AR16/M20/C90	16	M20
	AR21/M20/C90	21	M20
	AR28/M25/C90	28	M25
	AR34/M32/C90	34	M32
	AR42/M40/C90	42	M40
	AR54/M50/C90	54	M50

For insertion into knockouts. Locknut supplied with METRIC THREAD ONLY  
To order quote part number & body colour, e.g. AR21/M20/C90/BL  
PF & NPT thread sizes available

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type PA / CP / PR / PF

IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -40°C to +120°C

Moving applications: -5°C to +120°C

#### Fitting characteristics




## Non-metallic conduit systems




### Type T & AWB - Adapting

#### Type T - Adapting

Rotational inspection T-piece / Materials: Polyamide (nylon) 66 & neoprene rubber / Colour: Black (BL) Only


	Part no.	Nominal conduit size (mm)
	AR13X3/T	13
AR16X3/T	16	
AR21X3/T	21	
AR28X3/T	28	
AR34X3/T	34	

For connection to corrugated flexible conduit  
To order quote part number, e.g. AR13X3/T/BL

Approvals	IP rating	Appropriate conduit	Temperature range	Fitting characteristics
 	For use with: Type PA / CP / PR / PF		Static applications: -40°C to +120°C	
	IP40	Yes	Moving applications: -5°C to +120°C	
IP65	N/A			
IP66	N/A			
IP67	N/A			
IP68	N/A			
	IP69	N/A		

#### Type AWB - Adapting

Anti-vibration washer / Materials: Acetal (POM) / Colour: Black (BL) Only

	Part no.	Nominal conduit size (mm)
	AWB13	13
AWB16	16	
AWB21	21	
AWB28	28	
AWB34	34	

Prevents fitting loosening under vibration

## Non-metallic conduit systems

### Type KF - Korifit

#### Type KF - Korifit

Lightweight conduit / Materials: PVCu / Colour: Grey (GR) Only

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
KFL16	16	13	Fine	15.8	12.1	25	50
KFL20	20	17	Fine	19.8	14.5	30	50
KFL25	25	22	Fine	24.8	19.9	40	50



To order quote part number, colour & reel length, e.g. KFL16/GR/50M

#### Type KF - Korifit

Standard weight conduit / Materials: PVCu / Colour: White (W) Only

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
KFS16	16	13	Fine	15.8	11.9	25	50
KFS20	20	17	Fine	19.8	14.3	30	50
KFS25	25	22	Fine	24.8	19.7	40	50



To order quote part number, colour & reel length, e.g. KFS16/GR/50M

#### Type KF - Korifit

Medium weight conduit / Materials: PVCu / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
KFM16	16	13	Fine	15.8	11.9	25	50
KFM20	20	17	Fine	19.8	14.3	30	50
KFM25	25	22	Fine	24.8	19.7	40	50



To order quote part number, colour & reel length, e.g. KFS16/GR/50M

#### Approvals



#### IP rating

For use with: Korifit KC & KF

IP rating	Appropriate fitting
IP40	Korifit KC
IP65	Korifit KC
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -5°C to +60°C  
Moving applications: -5°C to +60°C

#### Flexibility & fatigue life

Pliable - Low fatigue life

#### Fire performance & EMI screen

Self extinguishing

#### UV resistance

High

## Non-metallic conduit systems

### Type KC/A & KC/C90 - Korifit

#### Type KC/A - Korifit

Straight fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 /  
Colour: Black (BL), Grey (GR), White (W)



Part no.	Nominal conduit size (mm)	Metric thread
KC16/M16/A	16	M16
KC16/M20/A	16	M20
KC20/M20/A	20	M20
KC25/M25/A	20	M25

For insertion into threaded entries & knockouts. Locknut supplied  
To order quote part number & body colour, e.g. KC16/M16/A/BL

#### Approvals



#### IP rating

For use with: Korifit Type KF

IP rating	Appropriate conduit
IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -5°C to +60°C

Moving applications: -5°C to +60°C

#### Fitting characteristics



#### Type KC/C90 - Korifit

90° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 /  
Colour: Black (BL) Only



Part no.	Nominal conduit size (mm)	Metric thread
KC16/M16/C90	16	M16
KC20/M20/C90	20	M20
KC25/M25/C90	25	M25

For insertion into threaded entries & knockouts. Locknut supplied  
To order quote part number & body colour, e.g. KC16/M16/C90/BL

#### Approvals



#### IP rating

For use with: Korifit Type KF

IP rating	Appropriate conduit
IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -5°C to +60°C


Moving applications: -5°C to +60°C

## Non-metallic conduit systems



### Type KF/A & Coupler - Korifit

#### Type KF/A - Korifit

Straight fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL), Grey (GR), White (W)


	Part no.	Nominal conduit size	Metric thread
		(mm)	
	KF16/M16/A	16	M16
	KF16/M20/A	16	M20
	KF20/M20/A	20	M20
	KF25/M25/A	25	M25

For insertion into threaded entries & knockouts. Locknut supplied  
To order quote part number & body colour, e.g. KF16/M16/A/BL


Approvals	IP rating	Appropriate conduit	Temperature range	Fitting characteristics 
	For use with: Korifit Type KF		Static applications: -5°C to +60°C	
	IP40	Yes	Moving applications: -5°C to +60°C	
	IP65	N/A		
	IP66	N/A		
	IP67	N/A		
	IP68	N/A		
	IP69	N/A		

#### Coupler - Korifit

Straight one piece coupler / Materials: Polyamide (nylon) 66 / Colour: White (W) Only

	Part no.	Nominal conduit size	NW conduit size
		(mm)	(mm)
	KF2020	20	17

For coupling two corrugated flexible conduits  
To order quote part number & body colour, e.g. KF2020/W


Approvals	IP rating	Appropriate conduit	Temperature range
	For use with: Korifit Type KF		Static applications: -5°C to +60°C
	IP40	N/A	Moving applications: -5°C to +60°C
	IP65	Yes	
	IP66	N/A	
	IP67	N/A	
	IP68	N/A	
	IP69	N/A	

## Non-metallic conduit systems


### Polypropylene Type PP & PPA - Adaptalok

#### Polypropylene Type PP - Adaptalok

Medium weight conduit / Materials: Polypropylene / Colour: Black (BL) Only


	Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
	PPFM13	13	10	13.0	9.8	5	50
	PPFM16	16	13	15.8	12.1	35	50
	PPFM21	21	17	21.2	16.8	40	50
	PPFM28	28	23	28.5	23.1	60	50
	PPFM34	34	29	34.5	29.1	50	50

To order quote part number, colour & reel length, e.g. PPFM16/BL/50M




Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
	For use with: Polypropylene Type PPA		Static applications: -20°C to +90°C	Medium
	IP40	N/A	Moving applications: -5°C to +105°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	Polypropylene Type PPA	High flexibility - Medium fatigue life	
	IP67	N/A		
	IP68	N/A		
	IP69	N/A		

#### Polypropylene Type PPA - Adaptalok

Straight fitting - Fixed external male thread / Materials: Polypropylene / Colour: Black (BL) Only

	Part no.	Nominal conduit size (mm)	Metric thread
	AL13/M16/PPA	13	M16
	AL16/M16/PPA	16	M16
	AL21/M20/PPA	21	M20
	AL28/M25/PPA	28	M25
	AL34/M32/PPA	34	M32

For insertion into knockouts using locknuts. Locknuts supplied  
To order quote part number & body colour, e.g. AL21/M20/PPA/BL


Approvals	IP rating	Appropriate conduit	Temperature range	Fitting characteristics
 	For use with: Polypropylene Type PP		Static applications: -20°C to +90°C	
	IP40	N/A	Moving applications: -5°C to +105°C	
IP65	N/A	<b>Fitting characteristics</b>		
IP66	Yes			
IP67	N/A			
IP68	N/A			
	IP69	N/A		

## Non-metallic conduit systems

### PVC Type XF & RF - Xtraflex / RF

#### PVC Type XF - Xtraflex

Standard weight conduit / Materials: PVCu spiral with plasticised PVC covering / Colour: Black (BL) Only


	Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
	XF12	12	14.5	10	25	30
	XF16	16	16.5	12	30	30
	XF20	20	20.5	16	35	30
	XF25	25	27.5	22	50	30
	XF32	32	33.5	28	60	30
	XF40	40	44.0	38	80	30
	XF50	50	57.5	50	105	30

To order quote part number & reel length, e.g. XF16/30M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
	For use with: Type XF		Static applications: -5°C to +60°C	High
	IP40	N/A	Moving applications: -5°C to +60°C	
	IP65	Type XF	<b>Flexibility &amp; fatigue life</b>	
	IP66	N/A	Very high flexibility - Medium fatigue life	
	IP67	N/A	<b>Fire performance &amp; EMI screen</b>	
	IP68	N/A	Self extinguishing	
	IP69	N/A		

#### PVC Type RF - RF

Heavyweight conduit - smooth bore / Materials: PVCu spiral with plasticised PVC covering / Colour: Black (BL), Grey (GR)

	Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
	RF12	12	14.5	10	25	30
	RF16	16	16.5	12	30	30
	RF20	20	20.5	16	35	30
	RF25	25	27.5	22	50	30
	RF32	32	33.5	28	60	30

To order quote part number, colour & reel length, e.g. RF16/BL/30M


Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
	For use with: Type RF		Static applications: -20°C to +60°C	High
	IP40	N/A	Moving applications: -5°C to +60°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	N/A	Medium flexibility - Medium fatigue life	
	IP67	Type RF	<b>Fire performance &amp; EMI screen</b>	
	IP68	N/A	Self extinguishing	
	IP69	N/A		

## Non-metallic conduit systems



### PVC Type A & C90 - XF

#### Type A - XF

Straight fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL) Only


	Part no.	Nominal conduit size	
		(mm)	Metric thread
	XF12/M16/D	12	M16
	XF16/M16/D	16	M16
	XF16/M20/D	16	M20
	XF20/M20/D	20	M20
	XF25/M25/D	25	M25
	XF32/M32/D	32	M32
	XF40/M40/D	40	M40
	XF50/M50/D	50	M50

For insertion into threaded entries & knockouts. Locknuts supplied with METRIC THREAD ONLY  
To order quote part number, e.g. XF16/M16/D


Approvals	IP rating	Appropriate conduit	Temperature range	
	For use with: Xtraflex Type XF		Static applications: -5°C to +60°C	
	IP40	N/A	Moving applications: -5°C to +60°C	
	IP65	Yes		
	IP66	N/A		
	IP67	N/A		
	IP68	N/A		
	IP69	N/A		

#### Type C90 - XF

90° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL) Only

	Part no.	Nominal conduit size	
		(mm)	Metric thread
	XF16/M16/C90	16	M16
	XF20/M20/C90	20	M20
	XF25/M25/C90	25	M25
	XF32/M32/C90	32	M32

For insertion into knockouts. Locknuts supplied with METRIC THREAD ONLY  
To order quote part number, e.g. XF16/M16/C90


Approvals	IP rating	Appropriate conduit	Temperature range
	For use with: Xtraflex Type XF		Static applications: -5°C to +60°C
	IP40	Yes	Moving applications: -5°C to +60°C
	IP65	N/A	
	IP66	N/A	
	IP67	N/A	
	IP68	N/A	
	IP69	N/A	

## Non-metallic conduit systems



### PVC Type A & C90 - RF

#### Type A - RF

Straight fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL) Only


	Part no.	Nominal conduit size	Metric thread
		(mm)	
	RF12/M16/A	12	M16
	RF16/M16/A	16	M16
	RF16/M20/A	16	M20
	RF20/M20/A	20	M20
	RF25/M25/A	25	M25
	RF32/M32/A	32	M32

For insertion into threaded entries & knockouts. Locknuts supplied with METRIC THREAD ONLY  
To order quote part number, e.g. RF16/M16/C90


Approvals	IP rating	Appropriate conduit	Temperature range	
	For use with: Xtraflex Type XF		Static applications: -5°C to +60°C	
	IP40	N/A	Moving applications: -5°C to +60°C	
	IP65	Yes		
	IP66	N/A		
	IP67	N/A		
	IP68	N/A		
	IP69	N/A		

#### Type C90 - RF

90° Elbow fitting - Fixed external male thread / Materials: Polyamide (nylon) 66 / Colour: Black (BL) Only

	Part no.	Nominal conduit size	Metric thread
		(mm)	
	RF16/M16/C90	16	M16
	RF20/M20/C90	20	M20
	RF25/M25/C90	25	M25
	RF32/M32/C90	32	M32

For insertion into knockouts. Locknuts supplied with METRIC THREAD ONLY  
To order quote part number, e.g. RF16/M16/C90


Approvals	IP rating	Appropriate conduit	Temperature range
	For use with: Xtraflex Type RF		Static applications: -5°C to +60°C
	IP40	N/A	Moving applications: -5°C to +60°C
	IP65	N/A	
	IP66	N/A	
	IP67	Yes	
	IP68	N/A	
	IP69	N/A	

## Non-metallic conduit systems

### Accessories - Type LNP, SW & AC


#### Type LNP

Nylon locknuts / Materials: Polyamide (nylon) 6 / Colour: Black (BL), Grey (GR)

	Part no.			Metric thread	Part no.			PG thread
	Black	Grey			Black	Grey		
	LNPB/M12	-		M12	LNPB/PG7	LNPG/PG7	PG7	
	LNPB/M16	LNPG/M16		M16	LNPB/PG9	LNPG/PG9	PG9	
	LNPB/M20	LNPG/M20		M20	LNPB/PG11	LNPG/PG11	PG11	
	LNPB/M25	LNPG/M25		M25	LNPB/PG13	LNPG/PG13	PG13	
	LNPB/M32	LNPG/M32		M32	LNPB/PG16	LNPG/PG16	PG16	
	LNPB/M40	LNPG/M40		M40	LNPB/PG21	LNPG/PG21	PG21	
	LNPB/M50	LNPG/M50		M50	LNPB/PG29	LNPG/PG29	PG29	
	LNPB/M63	LNPG/M63		M63	LNPB/PG36	LNPG/PG36	PG36	
					LNPB/PG42	LNPG/PG42	PG42	
					LNPB/PG48	LNPG/PG48	PG48	

#### Type SW

Thread sealing washer / Colour: Black (BL), Grey (GR)

	Part no.		Metric thread	Part no.		PG thread	Part no.		NPT & PF thread
	Black	Grey		Black	Grey		Black	Grey	
	SWM12*		M12	SWPG07		PG07	SW038		3/8"
	SWM16		M16	SWPG09		PG09	SW050		1/2"
	SWM20		M20	SWPG11		PG11	SW075		3/4"
	SWM25		M25	SWPG13		PG13	SW100		1"
	SWM32		M32	SWPG16		PG16	SW125		1 1/4"
	SWM40		M40	SWPG21		PG21	SW150		1 1/2"
	SWM50		M50	SWPG29		PG29	SW200		2"
	SWM63		M63	SWPG36		PG36			

TPE - For use with Nylon threaded fittings. Nylon - For use with swivel metal threaded fittings


To order quote part number & body colour, TPE Black only, e.g. SWM12,

Nylon (N) - Black (BL), Blue (B) & Yellow (Y) Metric and NPT threads only, e.g. SWM32NB

\*Not available in Nylon

#### Type AC

Conduit clips / Materials: Polyamide (nylon) 66, Impact modified nylon - ST version only / Colour: Black (BL), Grey (GR)

	Part no.			Nominal conduit size (mm)
	Black	Grey	Impact modified (black only)	
	ACB10	ACG10		10
	ACB13	ACG13	ACB13/ST	13
	ACB16	ACG16	ACB16/ST	16
	ACB21	ACG21	ACB21/ST	21
	ACB28	ACG28	ACB28/ST	28
	ACB34	ACG34	ACB34/ST	34
	ACB42	ACG42	ACB42/ST	42
	ACB54	ACG54	ACB54/ST	54

With integral lid

## Non-metallic conduit systems

### Accessories - Type GZ, EC & RT

#### Type GZ

End sleeves / Materials: Polyamide (nylon) 66 / Colour: Black (BL) Only



Part no.	Nominal conduit size (mm)
GZ9	13
GZ11	16
GZ13	21
GZ21	28
GZ29	34
GZ36	42

For sealing cables to non-metallic conduit

#### Type EC

End caps / Materials: Acetal (POM) / Colour: Black (BL) Only



Part no.	Nominal conduit size (mm)
ECB13	13
ECB16	16
ECB21	21
ECB28	28
ECB34	34
ECB42	42
ECB54	54

Provides a smooth finish to conduit preventing any damage to cables when not terminated with a fitting

#### Type RT

Adaptalok removal tool / Materials: Polyamide (nylon) 6 / Colour: Black (BL) Only



Part no.	Adaptalok fitting size (mm)
AL13RT	13
AL16RT	16
AL21RT	21
AL28RT	28
AL34RT	34
AL42RT	42
AL54RT	54

To provide easy removal of Adaptalok & ATS Fittings  
NOTE: For a 13-34mm set use part number ALRTSET

## Non-metallic conduit systems

### Accessories - Type MB

#### Type MB

Manifold box - Multiway adapters / Materials: Polyamide (nylon) 66/TPE /  
Colour: Black (BL) Only / Yellow (Y) Elastomer




Part no.	External dimensions lid dia. X height (mm)	External dimensions fixing lugs (mm)	Max threaded entry per face
MB21	100 x 40	120	M20
MB34	136 x 55	155	M32

Non metallic enclosure which can be machined to take upto eight Adaptalok ATS™ fittings

To order quote part number, body colour & Elastomer colour, e.g. MB21/BLY

Non metallic enclosure which can be machined to take upto eight Adaptalok ATS™ fittings (or other devices) in a variety of configurations and sizes, e.g. 'Y', 'T', 'X', 'V' etc.

Each box has a removable cover for ease of access. The box seal is moulded, so remains captive. Each manifold is provided with eight blank sides which require drilling/machining to suit the application. Manifolds can be supplied ready drilled to order, subject to minimum order quantities. Threaded fittings with locknuts can be used in each entry.


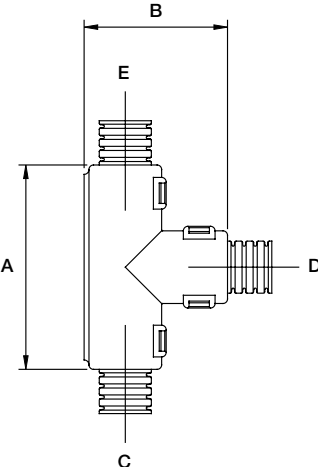
Approvals	IP rating	Appropriate conduit	Temperature range	UV resistance
	For use with: All threaded fittings in this catalogue		Static applications: -50°C to +120°C	Very high
			Moving applications: -45°C to +120°C	
	IP66	Yes		
	IP67	Yes		
	IP68	Yes (2 bar 30mins)		
	IP69	Yes		

## Non-metallic conduit systems

### Accessories - Type T, Hinged 'T' Piece

Type T

Hinged 'T' piece / Materials: Polyamide (nylon) 66 / Colour: Black (BL)

		Nominal dimensions / conduit size (mm)					
	Part no.	A	B	C	D	E	
	10T	T101010/BL	45.2	31.1	10	10	10
		T101310/BL	45.2	31.1	10	13	10
		T101613/BL	45.2	31.1	10	16	13
	13T	T131010/BL	45.2	31.1	13	10	10
		T131013/BL	45.2	31.1	13	10	13
		T131310/BL	45.2	31.1	13	13	10
		T131313/BL	45.2	31.1	13	13	13
		T131613/BL	45.2	31.1	13	16	13
	16T	T161013/BL	49.1	34.8	16	10	13
		T161313/BL	49.1	34.8	16	13	13
		T161316/BL	49.1	34.8	16	13	16
		T161613/BL	49.1	34.8	16	16	13
		T161616/BL	49.1	34.8	16	16	16
		T162113/BL	49.1	34.8	16	21	13
		T162116/BL	49.1	34.8	16	21	16
	21T	T211016/BL	56.5	41.0	21	10	16
		T211021/BL	56.5	41.0	21	10	21
		T211316/BL	56.5	41.0	21	13	16
		T211321/BL	56.5	41.0	21	13	21
		T211613/BL	56.5	41.0	21	16	13
		T211616/BL	56.5	41.0	21	16	16
		T211621/BL	56.5	41.0	21	16	21
		T212113/BL	56.5	41.0	21	21	13
		T212116/BL	56.5	41.0	21	21	16
		T212121/BL	56.5	41.0	21	21	21
	28T	T281021/BL	64.5	48.5	28	10	21
		T281028/BL	64.5	48.6	28	10	28
		T281321/BL	64.5	48.6	28	13	21
		T281328/BL	64.5	48.6	28	13	28
		T281621/BL	64.5	48.6	28	16	21
		T281628/BL	64.5	48.6	28	16	28
		T282121/BL	64.5	48.6	28	21	21
		T282128/BL	64.5	48.6	28	21	28
		T282828/BL	64.5	48.6	28	28	28
			34T	T341634/BL	72.0	55.3	34
T342128/BL	72.0			55.3	34	21	28
T342134/BL	72.0			55.3	34	21	34
T343434/BL	72.0			55.3	34	34	34

#### Approvals



#### IP rating

For use with: Type PA / PR / PF

IP rating	Appropriate conduit
IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -40°C to +120°C

Moving applications: -5°C to +120°C

#### Fitting characteristics


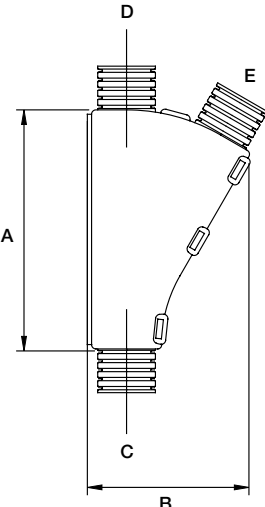
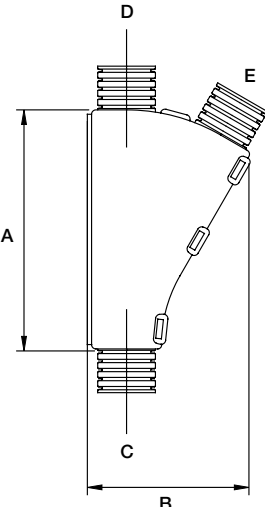
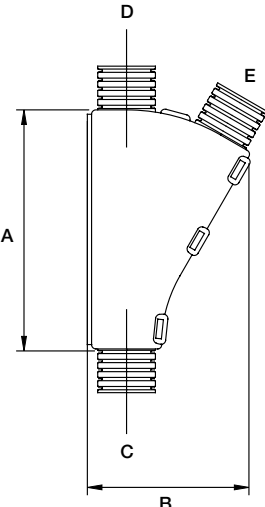
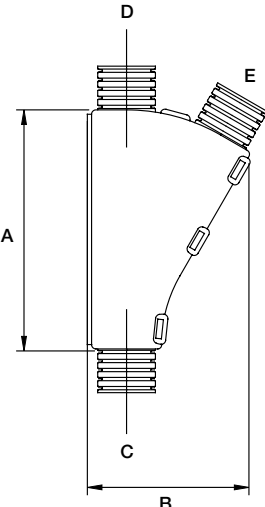
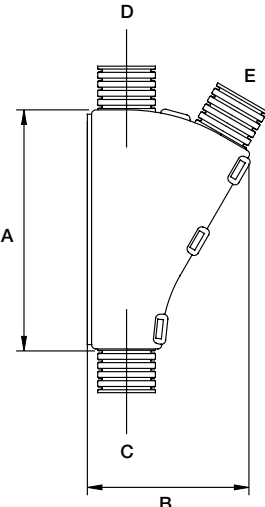
Snap fit

## Non-metallic conduit systems

### Accessories - Type Y, hinged 'Y' piece

Type T

Hinged 'T' piece / Materials: Polyamide (nylon) 66 / Colour: Black (BL)

		Nominal dimensions / conduitsSize (mm)					
	Part no.	A	B	C	D	E	
	<b>10Y</b>	Y101010/BL	54.6	37.1	10	10	10
		Y101013/BL	54.6	37.1	10	10	13
		Y101210/BL	54.6	37.1	10	12	10
	<b>13Y</b>	Y131010/BL	54.6	37.1	13	10	10
		Y131011/BL	54.6	37.1	13	10	11
		Y131310/BL	54.6	37.1	13	13	10
		Y131313/BL	54.6	37.1	13	13	13
	<b>16Y</b>	Y161013/BL	54.9	39.8	16	10	13
		Y161310/BL	54.9	39.8	16	13	10
		Y161313/BL	54.9	39.8	16	13	13
		Y161610/BL	54.9	39.8	16	16	10
		Y161613/BL	54.9	39.8	16	16	13
	<b>21Y</b>	Y211010/BL	42.8	41.0	21	10	10
		Y211310/BL	42.8	41.0	21	13	10
		Y211313/BL	42.8	41.0	21	13	13
		Y211610/BL	48.2	39.8	21	16	10
		Y211613/BL	48.2	39.6	21	16	13
		Y211616/BL	63.6	47.5	21	16	16
		Y212110/BL	57.9	44.9	21	21	10
		Y212113/BL	57.9	44.9	21	21	13
		Y212116/BL	63.6	47.5	21	21	16
	<b>28Y</b>	Y282113/BL	54.0	48.8	28	21	13
		Y282116/BL	54.0	48.8	28	21	16
		Y282121/BL	76.5	60.0	28	21	21
		Y282810/BL	67.3	55.9	28	28	10
		Y282813/BL	67.3	55.9	28	28	13
		Y282816/BL	67.3	55.9	28	28	16
		Y282821/BL	76.5	60.0	28	28	21
		Y282828/BL	90.7	67.0	28	28	28
	<b>34Y</b>	Y343416/BL	100.6	75.0	34	34	16
		Y343421/BL	100.6	76.0	34	34	21
		Y343434/BL	100.6	82.1	34	34	34

## Approvals



## IP rating

## Appropriate conduit

For use with: Type PA / PR / PF

IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

## Temperature range

Static applications: -40°C to +120°C

Moving applications: -5°C to +120°C

## Fitting characteristics

Snap fit

## Non-metallic conduit systems

### Type PK & A - Peek

Polyetherketone Type PK - Peek

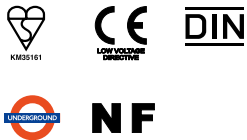
High specification conduit / Materials: Polyetherketone / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
PKFS13	13	10	Fine	13.2	10.0	35	25, 50
PKFS16	16	13	Fine	16.3	11.7	45	25, 50
PKFS21	21	17	Fine	21.2	16.6	60	25, 50
PKCS28	28	23	Coarse	28.4	21.7	65	25, 50
PKCS34	34	29	Coarse	34.3	27.7	80	25, 50



To order quote part number, colour & reel length, e.g. PKFS16/BL/50M

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Peek Type A

IP40	N/A
IP65	N/A
IP66	Peek Type A
IP67	Peek Type A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -60°C to +260°C  
Moving applications: -45°C to +260°C

#### Flexibility & fatigue life

Medium flexibility – Medium fatigue life

#### Fire performance & EMI screen

Self extinguishing  
Halogen free

#### UV resistance

Very high



### Type A - Peek

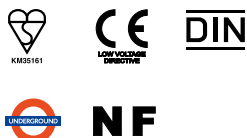
Straight fitting - Fixed external male thread / Materials: Nickel plated brass & silicone

Part no.	Nominal conduit size (mm)	Metric thread
PK13/M16/A	13	M16
PK16/M16/A	16	M16
PK21/M20/A	21	M20
PK28/M25/A	28	M25
PK34/M32/A	34	M32



For insertion into knockouts using a locknut

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Peek Type PK

IP40	N/A
IP65	N/A
IP66	Peek Type A
IP67	Peek Type A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -60°C to +260°C  
Moving applications: -45°C to +260°C

#### Fire performance & EMI screen

#### UV resistance

Very high



## Non-metallic conduit systems

### Type PKTC & PKSS - Hi-Spec

#### Type PKTC - Hi-Spec

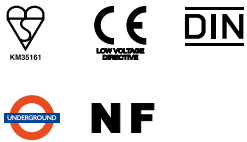
High specification, high EMI screening conduit / Materials: Polyetherketone conduit, tinned copper overbraid

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
PKFSTC13	13	10	Fine	14.1	10.0	35	25, 50
PKFSTC16	16	13	Fine	17.2	11.7	45	25, 50
PKFSTC21	21	17	Fine	23.6	16.6	60	25, 50
PKCSTC28	28	23	Coarse	30.0	21.7	65	25, 50
PKCSTC34	34	29	Coarse	36.0	27.7	80	25, 50



To order quote part number & reel length, e.g. PKFSTC13/50M

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Hi-Spec Type A & B

IP40	N/A
IP65	N/A
IP66	Hi-Spec Type A & B
IP67	Hi-Spec Type A & B
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -60°C to +260°C

Moving applications: -45°C to +260°C

#### Flexibility & fatigue life

High flexibility – High fatigue life

#### Fire performance & EMI screen

Self extinguishing

Halogen free



#### Type PKSS - Hi-Spec

High specification, standard EMI screening conduit / Materials: Polyetherketone conduit, stainless steel overbraid

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
PKFSSS13	13	10	Fine	14.1	10.0	35	25, 50
PKFSSS16	16	13	Fine	17.2	11.7	45	25, 50
PKFSSS21	21	17	Fine	23.6	16.6	60	25, 50
PKCSSS28	28	23	Coarse	30.0	21.7	65	25, 50
PKCSSS34	34	29	Coarse	36.0	27.7	80	25, 50



To order quote part number, colour & reel length, e.g. PKFS16/BL/50M

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Hi-Spec Type A & B

IP40	N/A
IP65	N/A
IP66	Hi-Spec Type A & B
IP67	Hi-Spec Type A & B
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -60°C to +260°C

Moving applications: -45°C to +260°C

#### Flexibility & fatigue life

High flexibility – High fatigue life

#### Fire performance & EMI screen

Self extinguishing

Halogen free



## Non-metallic conduit systems

### Type PKTC & PKSS - Hi-Spec

#### Type PKTC - Hi-Spec

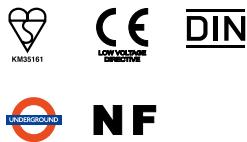
High specification, high EMI screening conduit / Materials: Polyetherketone conduit, tinned copper overbraid

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
PRFSTC16	16	13	Fine	17.2	11.7	35	50
PRFSTC21	21	17	Fine	23.6	16.6	60	50
PRCSTC28	28	23	Coarse	30.0	21.7	70	50
PRCSTC34	34	29	Coarse	36.0	27.7	75	50
PRCSTC42	42	36	Coarse	43.5	35.1	90	25
PRCSTC54	54	48	Coarse	56.5	46.6	95	25



To order quote part number, colour & reel length, e.g. PAFL13/BL/50M

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Hi-Spec Type A & B

IP40	N/A
IP65	N/A
IP66	Hi-Spec Type A & B
IP67	Hi-Spec Type A & B
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -40°C to +120°C  
Moving applications: -5°C to +120°C

#### Flexibility & fatigue life

High flexibility – Medium fatigue life

#### Fire performance & EMI screen

Self extinguishing

#### UV resistance

Very high



#### Type PKSS - Hi-Spec

High specification, standard EMI screening conduit / Materials: Polyetherketone conduit, stainless steel overbraid

Part no.	Nominal conduit size (mm)	NW conduit size (mm)	Conduit pitch	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
PRFSS16	16	13	Fine	17.2	11.7	35	50
PRFSS21	21	17	Fine	23.6	16.6	60	50
PRCSS28	28	23	Coarse	30.0	21.7	70	50
PRCSS34	34	29	Coarse	36.0	27.7	75	50
PRCSS42	42	36	Coarse	43.5	35.1	90	25
PRCSS54	54	48	Coarse	56.5	46.6	95	25



To order quote part number, colour & reel length, e.g. PRFSTC21/50M

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Hi-Spec Type A & B

IP40	N/A
IP65	N/A
IP66	Hi-Spec Type A & B
IP67	Hi-Spec Type A & B
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -40°C to +120°C  
Moving applications: -5°C to +120°C

#### Flexibility & fatigue life

High flexibility – Medium fatigue life

#### Fire performance & EMI screen

Self extinguishing

#### UV resistance

Very high




## Non-metallic conduit systems





### Type A & B - Hi-Spec

#### Type A - Hi-Spec

Straight fitting - Fixed external male thread / Materials: Nickel plated brass


	Part no.	Nominal conduit size (mm)	Metric thread
		PBF13/M16/A	13
	PBF16/M16/A	16	M16
	PBF21/M20/A	21	M20
	PBC28/M25/A	28	M25
	PBC34/M32/A	34	M32
	PBC42/M40/A	42	M40

For insertion into knockouts using a locknut






Approvals	IP rating	Appropriate fitting	Temperature range	Fire performance & EMI screen
  	<b>For use with:</b> Hi-Spec Type PKTC / PKSS / PRTC / PRSS		Static applications: -60°C to +260°C	
			Moving applications: -45°C to +260°C	
	IP40	N/A		
	IP65	N/A		
	IP66	Yes		
	IP67	Yes		
	IP68	N/A		
	IP69	N/A		

#### Type B - Hi-Spec

Straight fitting - Swivel external male thread / Materials: Nickel plated brass

	Part no.	Nominal conduit size (mm)	Metric thread
		PBF13/M16/B	13
	PBF16/M16/B	16	M16
	PBF21/M20/B	21	M20
	PBC28/M25/B	28	M25
	PBC34/M32/B	34	M32
	PBC42/M40/B	42	M40
	PBC54/M50/B	54	M50

For insertion into threaded entries & knockouts

Approvals	IP rating	Appropriate fitting	Temperature range	Fire performance & EMI screen
  	<b>For use with:</b> Hi-Spec Type PKTC / PKSS / PRTC / PRSS		Static applications: -60°C to +260°C	
			Moving applications: -45°C to +260°C	
	IP40	N/A	 	
	IP65	N/A		
	IP66	Yes		
	IP67	Yes		
	IP68	N/A		
	IP69	N/A		







# Metallic conduit systems

## Introduction

Range overview - Adaptaflex have a wide selection of metallic conduits and metallic conduit systems manufactured either in 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. 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.

In addition a 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 and converters.



Many of our conduit systems have industry recognised approvals including British Kitemark, CE Approval & UL amongst others.

#### Advantages:

- High compression/crush strength
- Tensile strength - pull off load under tension
- Impact resistance
- Inherent fire protection on uncoated versions
- Corrosion resistant - stainless steel options
- Braided - High level EMI screening with tinned copper overbraided
- Greater temperature tolerances






## Metallic conduit systems

### Type S & SS - Adaptasteel

#### Type S - Adaptasteel

Inherent low fire hazard steel conduit / Materials: Galvanised steel - general purpose

	Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
	S10	10	9.1	7.0	25	25, 50
	S12	12	13.0	10.3	30	10, 25, 50
	S16	16	16.0	13.0	35	10, 25, 50
	S20	20	20.5	16.9	45	10, 25, 50
	S25	25	25.0	21.4	55	10, 25, 50
	S32	32	32.0	28.1	60	10, 25
	S40	40	42.5	37.7	80	10, 25
	S50	50	53.0	48.4	90	10, 25
	S63	63	62.5	57.5	115	10
	S75	75	77.0	70.0	150	10

To order quote part no, & reel length, e.g. S12/25M

#### Approvals



#### IP rating

For use with: Type S

IP rating	Appropriate fitting
IP40	Type S - Type A, B, F & C
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C

Moving applications: -45°C to +250°C

#### Flexibility & fatigue life

High flexibility - High fatigue life

#### Fire Performance & EMI Screen


#### UV resistance

Very high



#### Type S - Adaptasteel

Inherent low fire hazard steel conduit / Materials: Galvanised steel - general purpose

	Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
	SS10	10	9.0	6.8	25	25, 50
	SS12	12	13.0	10.3	30	25, 50
	SS16	16	16.0	13	35	10, 25, 50
	SS20	20	20.5	16.9	45	10, 25, 50
	SS25	25	25.0	21.4	55	10, 25, 50
	SS32	32	32.0	28.1	60	10, 25

To order quote part no, & reel length, e.g. S12/25M

#### Approvals



#### IP rating

For use with: Type S

IP rating	Appropriate fitting
IP40	Type S - Type A, B, F & C
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +350°C

Moving applications: -45°C to +250°C

#### Flexibility & fatigue life

High flexibility - High fatigue life

#### Fire Performance & EMI Screen

#### UV resistance

Very high




## Metallic conduit systems

### Type A & B - Adaptasteel

#### Type A - Adaptasteel

#### Straight fitting - Fixed external male thread / Materials: Nickel plated brass

	Nominal conduit size			Nominal conduit size		
	Part no.	(mm)	Metric thread	Part no.	(mm)	PG thread
	S10/M12/A	10	M12	S10/PG7/A	10	PG7
	S12/M16/A	12	M16	S12/PG9/A	12	PG9
	S16/M16/A	16	M16	S16/PG11/A	16	PG11
	S16/M20/A	16	M20	-	-	-
	S20/M20/A	20	M20	S20/PG16/A	20	PG16
	S25/M25/A	25	M25	S25/PG21/A	25	PG21
	S32/M32/A	32	M32	S32/PG29/A	32	PG29
	S40/M40/A	40	M40	S40/PG36/A	40	PG36
	S50/M50/A	50	M50	S50/PG42/A	50	PG42
	S63/M63/A	63	M63	S63/PG48/A	63	PG48
	S75/M75/A	75	M75			

For insertion into knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type S / SS

IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A


#### Temperature range

Static applications: -50°C to +300°C

Moving applications: -45°C to +250°C

#### Type B - Adaptasteel

#### Straight fitting - Swivel external male thread / Materials: Nickel plated brass

	Nominal conduit size			Nominal conduit size		
	Part no.	(mm)	Metric thread	Part no.	(mm)	PG thread
	S10/M12/B	10	M12	S10/PG7/B	10	PG7
	S12/M16/B	12	M16	S12/PG9/B	12	PG9
	S16/M16/B	16	M16	S16/PG11/B	16	PG11
	S16/M20/B	16	M20	-	-	-
	S20/M20/B	20	M20	S20/PG16/B	20	PG16
	S25/M25/B	25	M25	S25/PG21/B	25	PG21
	S32/M32/B	32	M32	S32/PG29/B	32	PG29
	S40/M40/B	40	M40	S40/PG36/B	40	PG36
	S50/M50/B	50	M50	S50/PG42/B	50	PG42

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type S / SS

IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C

Moving applications: -45°C to +250°C

#### Fitting characteristics






## Metallic conduit systems

### Type F & C - Adaptasteel

#### Type F - Adaptasteel


Straight fitting - Fixed internal female thread / Materials: Nickel plated brass



	Part no.	Nominal conduit size	Metric thread
		(mm)	
	S20/M20/F	20	M20
	S25/M25/F	25	M25
	S32/M32/F	32	M32
For attaching to external threads & other fitting			

Approvals	IP rating	Appropriate conduit	Temperature range
 	For use with: Type S / SS		Static applications: -50°C to +300°C
	IP40	Yes	Moving applications: -45°C to +250°C
	IP65	N/A	
	IP66	N/A	
	IP67	N/A	
	IP68	N/A	
	IP69	N/A	

#### Type C - Adaptasteel

Smooth entry bush / Materials: Nickel plated brass

	Part no.	Nominal conduit size	Hole size
		(mm)	(mm)
	S10/9/C	10	9
	S12/12/C	12	12
	S16/16/C	16	16
	S20/20/C	20	20
	S25/25/C	25	25
	S32/32/C	32	32
	S40/40/C	40	40
	S50/51/C	50	51
	S63/61/C	63	61
	S75/75/C	75	75
For locking conduit into plain holes in enclosures			

Approvals	IP rating	Appropriate conduit	Temperature range
 	For use with: Type S / SS		Static applications: -50°C to +300°C
	IP40	Yes	Moving applications: -45°C to +250°C
	IP65	N/A	
	IP66	N/A	
	IP67	N/A	
	IP68	N/A	
	IP69	N/A	

# Metallic conduit systems

## Type SP & SN - Adaptasteel

**Type SP - Adaptasteel**

Liquid resistant general purpose covered steel flexible conduit / Materials: PVC covered galvanised steel / Colour: Black (BL), Grey (GR), Orange (OR)

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SP10	10	10.0	6.8	25	25, 50
SP12	12	14.0	10.3	30	25, 50
SP16	16	17.0	13.0	35	10, 25, 50
SP20	20	21.5	16.9	45	10, 25, 50
SP25	25	26.0	21.4	55	10, 25, 50
SP32	32	34.0	28.1	60	10, 25
SP40	40	44.5	37.7	80	10, 25
SP50	50	55.0	48.4	90	10, 25
SP63	63	64.5	57.5	115	10
SP75	75	79.0	70.0	150	10



To order quote part no, colour & reel length, e.g. SP12/BL/25M

**Approvals**



IP rating	Appropriate fitting	Temperature range	UV resistance
<b>For use with: Type SP</b>		Static applications: -25°C to +70°C	Very high
IP54	Type SP - Type A, B, C, E & F	Moving applications: -5°C to +90°C	
IP65	Type SP - Type M & C90	<b>Flexibility &amp; fatigue life</b>	
IP66	N/A	High flexibility - Medium fatigue life	
IP67	N/A	<b>Fire Performance &amp; EMI Screen</b>	
IP68	N/A	Self extinguishing	
IP69	N/A		

**Type SP - Adaptasteel**

Liquid resistant general purpose covered steel flexible conduit / Materials: PVC covered galvanised steel / Colour: Black (BL), Grey (GR), Orange (OR)

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SN12	12	14.0	10.3	30	25, 50
SN16	16	17.0	13.0	35	25, 50
SN20	20	21.5	16.9	45	25, 50
SN25	25	26.0	21.4	55	25, 50
SN32	32	34.0	28.1	60	25



To order quote part no, colour & reel length, e.g. SP12/BL/25M

**Approvals**



IP rating	Appropriate fitting	Temperature range	UV resistance
<b>For use with: Type SP</b>		Static applications: -40°C to +120°C	High
IP54	Type SP - Type A, B, C, E & F	Moving applications: -25°C to +150°C	
IP65	Type SP - Type M & C90	<b>Flexibility &amp; fatigue life</b>	
IP66	N/A	Medium flexibility - Medium fatigue life	
IP67	N/A	<b>Fire Performance &amp; EMI Screen</b>	
IP68	N/A	Self extinguishing	
IP69	N/A	Halogen free	

## Metallic conduit systems

### Type LFH-SP & A - Adaptasteel

#### Type LFH-SP - Adaptasteel

Liquid resistant enhanced low fire hazard covered steel flexible conduit /  
Materials: Polyolefin covered galvanised steel / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
LFH-SP12	12	14.0	10.3	30	25, 50
LFH-SP16	16	17.0	13.0	35	10, 25, 50
LFH-SP20	20	21.5	16.9	45	10, 25, 50
LFH-SP25	25	26.0	21.4	55	10, 25, 50
LFH-SP32	32	34.0	28.1	60	10, 25
LFH-SP40	40	44.5	37.7	80	10, 25
LFH-SP50	50	55.0	48.4	90	10, 25
LFH-SP63	63	64.5	57.5	115	10
LFH-SP75	75	79.0	70.0	150	10



To order quote part no, colour & reel length, e.g. SP12/BL/25M

#### Approvals



EN45545-2 HL3 - R22 & R23

#### IP rating

#### Appropriate fitting

For use with: Type SP

IP54	Type SP - Type A, B, C, E & F
IP65	Type SP - Type M & C90
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -25°C to +90°C  
Moving applications: -5°C to +105°C

#### Flexibility & fatigue life

High flexibility - Medium fatigue life

#### Fire Performance & EMI Screen

Self extinguishing  
Halogen Free



#### Type A - Adaptasteel

Straight fitting - Fixed external male thread / Materials: Nickel plated brass

Part no.	Nominal conduit size (mm)	Metric thread	Part no.	Nominal conduit size (mm)	PG thread
SP10/M12/A	10	M12	SP10/PG7/A	10	PG7
SP12/M16/A	12	M16	SP12/PG9/A	12	PG9
SP16/M16/A	16	M16	-	-	-
SP16/M20/A	16	M20	SP16/PG11/A	16	PG11
SP20/M20/A	20	M20	SP20/PG16/A	20	PG16
SP25/M25/A	25	M25	SP25/PG21/A	25	PG21
SP32/M32/A	32	M32	SP32/PG29/A	32	PG29
SP40/M40/A	40	M40	SP40/PG36/A	40	PG36
SP50/M50/A	50	M50	SP50/PG42/A	50	PG42
SP63/M63/A	63	M63	SP63/PG48/A	63	PG48
SP75/M75/A	75	M75			



For insertion into knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type SP / SN / LFH-SP

IP54	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range


Static applications: -50°C to +300°C  
Moving applications: -45°C to +250°C

## Metallic conduit systems

### Type B & C90 - Adaptasteel

#### Type B - Adaptasteel

Straight fitting - Swivel external thread / Materials: Nickel plated brass

	Part no.	Nominal conduit size		Part no.	Nominal conduit size	
		(mm)	Metric thread		(mm)	PG thread
	SP10/M12/B	10	M12	SP10/PG7/B	10	PG7
	SP12/M16/B	12	M16	SP12/PG9/B	12	PG9
	SP16/M16/B	16	M16	SP16/PG11/B	16	PG11
	SP16/M20/B	16	M20	-	-	-
	SP20/M20/B	20	M20	SP20/PG16/B	20	PG16
	SP25/M25/B	25	M25	SP25/PG21/B	25	PG21
	SP32/M32/B	32	M32	SP32/PG29/B	32	PG29
	SP40/M40/B	40	M40	SP40/PG36/B	40	PG36
	SP50/M50/B	50	M50	SP50/PG42/B	50	PG42

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

For use with: Type SP / SN / LFH-SP

IP rating	Appropriate conduit
IP54	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C  
Moving applications: -45°C to +250°C

#### Fitting characteristics



#### Type C90 - Adaptasteel

90° Combined fitting & elbow / Materials: Nickel plated brass

Part no.	Nominal conduit size (mm)	Metric thread
SP16/M16/C90	16	M16
SP16/M20/C90	16	M20
SP20/M20/C90	20	M20
SP25/M25/C90	25	M25
SP32/M32/C90	32	M32

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

For use with: Type S / SS

IP rating	Appropriate conduit
IP54	N/A
IP65	Yes
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C  
Moving applications: -45°C to +250°C

#### Fitting characteristics



## Metallic conduit systems

### Type M & F - Adaptasteel

#### Type M - Adaptasteel

#### Straight swivel fitting - External male thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	Metric thread
SP12/M16/M	12	M16
SP16/M16/M	16	M16
SP16/M20/M	16	M20
SP20/M20/M	20	M20
SP25/M25/M	25	M25
SP32/M32/M	32	M32
SP40/M40/M	40	M40
SP50/M50/M	50	M50

Part no.	Nominal conduit size (mm)	PG thread
SP12/PG9/M	12	PG9
SP16/PG11/M	16	PG11
SP16/PG13/M	16	PG13,5
SP20/PG16/M	20	PG16
SP25/PG21/M	25	PG21
SP32/PG29/M	32	PG29

Part no.	Nominal conduit size (mm)	NPT thread
SP16/038/M	16	3/8"
SP20/050/M	20	1/2"
SP25/075/M	25	3/4"
SP32/100/M	32	1"

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type SP / SN / LFH-SP

IP54	N/A
IP65	Yes
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C

Moving applications: -45°C to +250°C

#### Fitting characteristics



#### Type F - Adaptasteel

#### Straight fitting - Fixed internal female thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	Metric thread
SP20/M20/F	20	M20
SP25/M25/F	25	M25
SP32/M32/F	32	M32

For external threads and other fittings

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type SP / SN / LFH-SP

IP54	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C


Moving applications: -45°C to +250°C

## Metallic conduit systems


### Type C & E - Adaptasteel

#### Type C - Adaptasteel

Smooth entry bush / Materials: Nickel plated brass


	Part no.	Nominal conduit size (mm)	Hole size (mm)
	SP10/9/C	10	9
	SP12/12/C	12	12
	SP16/16/C	16	16
	SP20/20/C	20	20
	SP25/25/C	25	25
	SP32/32/C	32	32
	SP40/40/C	40	40
	SP50/51/C	50	51
	SP63/61/C	63	61
	SP75/75/C	75	75

For locking conduit into plain holes in enclosures


Approvals	IP rating	Appropriate conduit	Temperature range
	For use with: Type SP / SN / LFH-SP		Static applications: -50°C to +300°C
	IP54	Yes	Moving applications: -45°C to +250°C
	IP65	N/A	
	IP66	N/A	
	IP67	N/A	
	IP68	N/A	
	IP69	N/A	

#### Type E - Adaptasteel

Conduit terminator / Materials: Nickel plated brass

	Part no.	Nominal conduit size (mm)
	SP12/E	12
	SP16/E	16
	SP20/E	20
	SP25/E	25
	SP32/E	32
	SP40/E	40
	SP50/E	50

Cable Protection at exit point

Approvals	IP rating	Appropriate conduit	Temperature range
	For use with: Type SP / SN / LFH-SP		Static applications: -50°C to +300°C
	IP54	Yes	Moving applications: -45°C to +250°C
	IP65	N/A	
	IP66	N/A	
	IP67	N/A	
	IP68	N/A	
	IP69	N/A	

## Metallic conduit systems

### Type SPL & LFH-SPL - Adaptasteel

#### Type SPL - Adaptasteel

Liquid tight oil resistant covered steel flexible conduit / Materials: PVC covered galvanised steel / Colour: Black (BL), Grey (GR), Orange (OR)

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	US conduit size (in)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SPL10	10	11.8	¼"	7.0	40	10, 25, 50
SPL12	12	14.2	½"	10.0	45	10, 25, 50
SPL16	16	17.8	¾"	12.5	50	10, 25, 50
SPL20	20	21.1	½"	15.9	80	10, 25, 50
SPL25	25	26.4	¾"	21.0	110	10, 25, 50
SPL32	32	33.1	1"	26.7	145	10, 25
SPL40	40	41.8	1 ¼"	35.4	180	10, 25
SPL50	50	47.9	1 ½"	40.4	240	10, 25
SPL63	63	59.7	2"	51.6	345	10, 25



To order quote part number, colour & reel length, e.g. SPL12/BL/50M

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Type SPL

IP40	N/A
IP65	N/A
IP66	Type SPL - Type M, C45 & C90
IP67	Type SPL - Type A, B, M, C45 & C90
IP68	Type SPL - Type M, C45 & C90 (10 bar 30 mins)
IP69	Type SPL - Type M, C45 & C90

#### Temperature range

Static applications: -20°C to +105°C  
Moving applications: -5°C to +105°C

#### UV resistance

Very high

#### Flexibility & fatigue life

Medium flexibility – Medium fatigue life

#### Fire performance & EMI screen

Self extinguishing

#### Type LFH-SPL - Adaptasteel

Low fire hazard performance covered steel flexible conduit / Materials: Low fire hazard jacket covered galvanised steel / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	US conduit size (in)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
LFH-SPL16	16	17.0	¾"	13.0	50	10, 25
LFH-SPL20	20	21.5	½"	16.9	80	10, 25
LFH-SPL25	25	26.0	¾"	21.4	110	10, 25
LFH-SPL32	32	34.0	1"	28.1	145	10, 25
LFH-SPL40	40	44.5	1 ¼"	37.7	180	10
LFH-SPL50	50	55.0	1 ½"	48.4	240	10
LFH-SPL63	63	64.5	2"	57.5	345	10



To order quote part number, colour & reel length, e.g. SPL12/BL/50M

#### Approvals



EN45545-2 HL3 - R22 & R23

#### IP rating

#### Appropriate fitting

For use with: Type SPL

IP40	N/A
IP65	N/A
IP66	Type SPL - Type M, C45 & C90
IP67	Type SPL - Type A, B, M, C45 & C90
IP68	Type SPL - Type M, C45 & C90 (10 bar 30 mins)
IP69	Type SPL - Type M, C45 & C90

#### Temperature range

Static applications: -20°C to +90°C  
Moving applications: -5°C to +105°C

#### UV resistance

High

#### Flexibility & fatigue life

Medium flexibility – Medium fatigue life

#### Fire performance & EMI screen

Self extinguishing  
Halogen free



## Metallic conduit systems

### Type SPL-EF - Adaptasteel



The NEW SPL-EF conduit systems are Enhanced Fire Performance rated, highly flexible, liquid tight with a wide temperature operating range. Designed to meet the demand for ‘interoperability’ and compliance with stringent local and European fire safety requirements in the rail infrastructure market, the SPL-EF system, is accredited with the EN45545-2 standard achieving the highest HL3 fire performance rating for both interior and exterior locations.

The system provides higher performance levels of flexibility, impact and abrasion resistance, combined with enhanced chemical resistances especially to oils and greases, with a much higher and lower temperature rating (-40°C to +105°C), than any other metallic conduit system with a EN45545-2 HL3 rating.

Advantages include:

- EN45545-2 and BS EN 61386-1 & 23 accreditation
- HL3 - R22 & R23 rating
- Up to IP69 rating
- High flexibility
- Oil and hydrocarbons resistant
- Suitable for wide use underground and in any part of train vehicles and infrastructure

Many of our conduit systems have industry recognised approvals including British Kitemark, CE Approval, UL 1696, NF, LUL, DB, Lloyds Register amongst others.



#### Type SPL-EF - Adaptasteel NEW

Enhanced fire performance covered steel flexible conduit / Materials: Thermoplastic jacket covered galvanised steel / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	US conduit size (in)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SPL-EF12	12	14.2	5/16"	10.0	45	10, 25, 50
SPL-EF16	16	17.8	3/8"	12.5	50	10, 25, 50
SPL-EF20	20	21.1	1/2"	15.9	80	10, 25, 50
SPL-EF25	25	26.4	3/4"	21.0	110	10, 25, 50
SPL-EF32	32	33.1	1"	26.7	145	10, 25, 50
SPL-EF40	40	41.8	1 1/4"	35.4	180	10, 25
SPL-EF50	50	47.9	1 1/2"	40.4	240	10, 25



To order quote part number, colour & reel length, e.g. SPL-EF12/BL/50M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
  EN45545-2 HL3 - R22 & R23	For use with: Type SPL		Static applications: -40°C to +105°C	Very high
	IP40	N/A	Moving applications: -30°C to +105°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	Type SPL - Type M, C45 & C90	Very high flexibility – High fatigue life	
	IP67	Type SPL - Type A, B, M, C45 & C90	<b>Fire performance &amp; EMI screen</b>	
	IP68	Type SPL - Type M, C45 & C90 (10 bar 30 mins)	Self extinguishing	
	IP69	Type SPL - Type M, C45 & C90	Halogen free	



## Metallic conduit systems

### Type SPLHC & SPUL - Adaptasteel

#### Type SPLHC - Adaptasteel

Liquid tight extreme temperature covered steel flexible conduit /  
Materials: Thermoplastic rubber covered galvanised steel / Colour: Black (BL) Only

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	US conduit size (in)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SPLHC10	10	11.8	¼"	7.0	40	25, 50
SPLHC12	12	14.2	½"	10.0	40	25, 50
SPLHC16	16	17.8	¾"	12.5	50	25
SPLHC20	20	21.1	½"	15.9	80	25
SPLHC25	25	26.4	¾"	21.0	110	25
SPLHC32	32	33.1	1"	26.7	145	25
SPLHC40	40	41.8	1 ¼"	35.4	180	25
SPLHC50	50	47.9	1 ½"	40.4	240	25
SPLHC63	63	59.7	2"	51.6	345	25



To order quote part number, colour & reel length, e.g. SPLHC12/BL/50M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
	For use with: Type SPL		Static applications: -65°C to +135°C	Very high
	IP40	N/A	Moving applications: -45°C to +150°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	Type SPL - Type M, C45 & C90	Very high flexibility – High fatigue life	
	IP67	Type SPL - Type A, B, M, C45 & C90	<b>Fire performance &amp; EMI screen</b>	
	IP68	Type SPL - Type M, C45 & C90 (10 bar 30 mins)	Self extinguishing	
	IP69	Type SPL - Type M, C45 & C90	Halogen free	

#### Type SPUL - Adaptasteel

Liquid tight UL listed & CSA approved covered steel flexible conduit / Materials: PVC covered galvanised steel with copper packing / Colour: Black (BL), Grey (GR)

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	US conduit size (in)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SPUL16	16	17.8	¾"	12.5	50	25, 50
SPUL20	20	21.1	½"	15.9	80	50
SPUL25	25	26.4	¾"	21.0	110	25, 50
SPUL32	32	33.1	1"	26.7	145	25
SPUL40	40	41.8	1 ¼"	35.4	180	25
SPUL50	50	47.9	1 ½"	40.4	240	25
SPUL63	63	59.7	2"	51.6	345	10, 25



To order quote part number, colour & reel length, e.g. SPL12/BL/50M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
	For use with: Type SPL		Static applications: -20°C to +90°C	High
	IP40	N/A	Moving applications: -5°C to +105°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	Type SPL - Type M, C45 & C90	Medium flexibility – Medium fatigue life	
	IP67	Type SPL - Type A, B, M, C45 & C90	<b>Fire performance &amp; EMI screen</b>	
	IP68	Type SPL - Type M, C45 & C90 (10 bar 30 mins)	Self extinguishing	
	IP69	Type SPL - Type M, C45 & C90		

File No. E76358

## Metallic conduit systems

### Type A & B - Adaptasteel

#### Type A - Adaptasteel

Straight fitting - Fixed external male thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	US conduit size (in)	Metric thread
SPL16/M16/A	16	3/8"	M16
SPL16/M20/A	16	3/8"	M20
SPL20/M20/A	20	1/2"	M20
SPL25/M25/A	25	3/4"	M25
SPL32/M32/A	32	1"	M32

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type SPL / SPLHC / SPUL / SPL-EF / LFH-SPL

IP40	N/A
IP65	N/A
IP66	N/A
IP67	Yes
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -65°C to +105°C

Moving applications: -45°C to +150°C

#### Type B - Adaptasteel

Straight fitting - Fixed external male thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	US conduit size (in)	Metric thread
SPL16/M16/B	16	3/8"	M16
SPL16/M20/B	16	3/8"	M20
SPL20/M20/B	20	1/2"	M20
SPL25/M25/B	25	3/4"	M25
SPL32/M32/B	32	1"	M32

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type SPL / SPLHC / SPUL / SPL-EF / LFH-SPL

IP40	N/A
IP65	N/A
IP66	N/A
IP67	Yes
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -65°C to +105°C

Moving applications: -45°C to +150°C

#### Fitting characteristics




## Metallic conduit systems

### Type E & M - Adaptasteel

#### Type E - Adaptasteel

Conduit terminator / Materials: Nickel plated brass

	Part no.	Nominal conduit size (mm)	US conduit size (in)
	SPL10/E	10	3/4"
	SPL12/E	12	5/16"
	SPL16/E	16	3/8"
	SPL20/E	20	1/2"
	SPL25/E	25	3/4"
	SPL32/E	32	1"
	SPL40/E	40	1 1/4"
	SPL50/E	50	1 1/2"
	SPL63/E	63	2"

Cable protection at exit point

#### Approvals



#### IP rating

#### Appropriate conduit

#### Temperature range

For use with: Type SPL / SPLHC / SPUL / SPL-EF / LFH-SPL


Static applications: -65°C to +300°C

Moving applications: -45°C to +250°C

IP54	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Type M - Adaptasteel

Coupler / Materials: Nickel plated brass, co-polyester seals

	Part no.	Nominal conduit size (mm)	US conduit size (in)	Bore (mm)
	SPL16/U/M	16	3/8"	10.3
	SPL20/U/M	20	1/2"	14.3
	SPL25/U/M	25	3/4"	17.6
	SPL32/U/M	32	1"	24.0
	SPL40/U/M	40	1 1/4"	33.0
	SPL50/U/M	50	1 1/2"	38.5
	SPL63/U/M	63	2"	50.0

For coupling separate lengths of liquid tight conduit

#### Approvals



#### IP rating

#### Appropriate conduit

#### Temperature range

For use with: Type SPL / SPLHC / SPUL / SPL-EF / LFH-SPL

Static applications: -65°C to +150°C

Moving applications: -45°C to +150°C

IP54	N/A
IP65	N/A
IP66	Yes
IP67	Yes
IP68	Yes (10 bar 30 mins)
IP69	Yes

#### Fitting characteristics



## Metallic conduit systems

### Type M - Adaptasteel

Type M - Adaptasteel

Straight fitting - Fixed external male thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	US conduit size (in)	Metric thread
SPL10/M12/M	10	1/4"	M12
SPL10/M16/M	10	1/4"	M16
SPL12/M16/M	12	5/16"	M16
SPL16/M16/M	16	3/8"	M16
SPL16/M20/M	16	3/8"	M20
SPL20/M20/M	20	1/2"	M20
SPL25/M25/M	25	3/4"	M25
SPL32/M32/M	32	1"	M32
SPL40/M40/M	40	1 1/4"	M40
SPL50/M50/M	50	1 1/2"	M50
SPL63/M63/M	63	2"	M63

Part no.	Nominal conduit size (mm)	US conduit size (in)	PG thread
SPL10/PG7/M	10	1/4"	PG7
SPL12/PG9/M	12	5/16"	PG9
SPL16/PG11/M	16	3/8"	PG11
SPL16/PG13/M	16	3/8"	PG13,5
SPL20/PG16/M	20	1/2"	PG16
SPL25/PG21/M	25	3/4"	PG21
SPL32/PG29/M	32	1"	PG29
SPL40/PG36/M	40	1 1/4"	PG36
SPL50/PG42/M	50	1 1/2"	PG42
SPL63/PG48/M	63	2"	PG48

Part no.	Nominal conduit size (mm)	US conduit size (in)	NPT thread
SPL16/038/M	16	3/8"	3/8"
SPL20/050/M	20	1/2"	1/2"
SPL25/075/M	25	3/4"	3/4"
SPL32/100/M	32	1"	1"
SPL40/125/M	40	1 1/4"	1 1/4"
SPL50/150/M	50	1 1/2"	1 1/2"
SPL63/200/M	63	2"	2"

For insertion into threaded entries &amp; knockouts using a locknut (order locknut separately)

#### Approvals

UL514B  
File No. E60625

#### IP rating

#### Appropriate conduit

For use with: Type SPL / SPLHC / SPUL /  
SPL-EF / LFH-SPL

IP54	N/A
IP65	N/A
IP66	Yes
IP67	Yes
IP68	Yes (10 bar 30 mins)
IP69	Yes

#### Temperature range

Static applications: -65°C to +150°C  
Moving applications: -45°C to +150°C

#### Fitting characteristics



## Metallic conduit systems

### Type C90 & 45 - Adaptasteel

#### Type C90 - Adaptasteel

#### 90° Combined fitting & elbow - Fixed external male thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	US conduit size (in)	Metric thread	Part no.	Nominal conduit size (mm)	US conduit size (in)	NPT thread
PL16/M16/C90	16	3/8"	M16	SPL16/038/C90	16	3/8"	3/8"
PL16/M20/C90	16	3/8"	M20	SPL16/050/C90	16	3/8"	3/8"
PL20/M20/C90	20	1/2"	M20	SPL20/050/C90	20	1/2"	1/2"
PL25/M25/C90	25	3/4"	M25	SPL25/075/C90	25	3/4"	3/4"
PL32/M32/C90	32	1"	M32	SPL32/100/C90	32	1"	1"
PL40/M40/C90	40	1 1/4"	M40	SPL40/125/C90	40	1 1/4"	1 1/4"
PL50/M50/C90	50	1 1/2"	M50	SPL50/150/C90	50	1 1/2"	1 1/2"
PL63/M63/C90	63	2"	M63	SPL63/200/C90	63	2"	2"

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



UL514B  
File No. E60625

#### IP rating      Appropriate conduit

For use with: Type SPL / SPLHC / SPUL / SPL-EF / LFH-SPL

IP54	N/A
IP65	N/A
IP66	Yes
IP67	Yes
IP68	Yes (10 bar 30 mins)
IP69	Yes

#### Temperature range

Static applications: -65°C to +150°C

Moving applications: -45°C to +150°C

#### Type 45 - Adaptasteel

#### 45° Elbow - Fixed external male thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	US conduit size (in)	Metric thread	Part no.	Nominal conduit size (mm)	US conduit size (in)	NPT thread
SPL16/M16/C45	16	3/8"	M16	SPL16/038/C45	16	3/8"	3/8"
SPL16/M20/C45	16	3/8"	M20	SPL16/050/C45	16	3/8"	3/8"
SPL20/M20/C45	20	1/2"	M20	SPL20/050/C45	20	1/2"	1/2"
SPL25/M25/C45	25	3/4"	M25	SPL25/075/C45	25	3/4"	3/4"
SPL32/M32/C45	32	1"	M32	SPL32/100/C45	32	1"	1"
SPL40/M40/C45	40	1 1/4"	M40	SPL40/125/C45	40	1 1/4"	1 1/4"
SPL50/M50/C45	50	1 1/2"	M50	SPL50/150/C45	50	1 1/2"	1 1/2"
SPL63/M63/C45	63	2"	M63	SPL63/200/C45	63	2"	2"

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



UL514B  
File No. E60625

#### IP rating      Appropriate conduit

For use with: Type SPL / SPLHC / SPUL / SPL-EF / LFH-SPL

IP54	N/A
IP65	N/A
IP66	Yes
IP67	Yes
IP68	Yes (10 bar 30 mins)
IP69	Yes

#### Temperature range

Static applications: -65°C to +150°C

Moving applications: -45°C to +150°C

## Metallic conduit systems

### EMI screen Type SB & STC - Adaptasteel

#### Type SB - Adaptasteel

Galvanised steel, overbraided steel, enhanced EMI screening, flexible conduit /  
Materials: Galvanised steel conduit, galvanised steel overbraid

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SB10	10	10.0	6.8	25	25
SB12	12	14.0	10.3	30	25
SB16	16	17.5	13.0	35	25
SB20	20	21.5	16.9	45	25
SB25	25	26.0	21.4	55	25
SB32	32	34.0	28.1	60	10
SB40	40	43.6	37.7	80	10
SB50	50	56.0	48.4	90	10
SB63	63	65.0	57.5	115	10
SB75	75	80.0	70.0	150	10



To order quote part number, colour & reel length, e.g. SPLHC12/BL/50M

#### Approvals



#### IP rating      Appropriate fitting

<b>For use with: Type SB</b>	
IP40	Type SB - Type A & B
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C  
Moving applications: -45°C to +250°C

#### UV resistance

Very high

#### Flexibility & fatigue life

High flexibility – High fatigue life

#### Fire performance & EMI screen



#### Type STC - Adaptasteel

Galvanised steel, overbraided tinned copper, high EMI screening, flexible conduit /  
Materials: Galvanised steel conduit, tinned copper overbraid

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
STC10	10	10.0	6.8	25	25
STC12	12	14.0	10.3	30	25
STC16	16	17.5	13.0	35	25
STC20	20	21.5	16.9	45	25
STC25	25	26.0	21.4	55	25
STC32	32	34.0	28.1	60	10
STC40	40	43.6	37.7	80	10
STC50	50	56.0	48.4	90	10



To order quote part number & reel length, e.g. STC12/25M

#### Approvals



#### IP rating      Appropriate fitting

<b>For use with: Type SB</b>	
IP40	Type SB - Type A & B
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C  
Moving applications: -45°C to +250°C

#### UV resistance

Very high

#### Flexibility & fatigue life

High flexibility – High fatigue life

#### Fire performance & EMI screen



## Metallic conduit systems

### EMI screen Type SSB & SSBGS - Adaptasteel




#### Type SSB - Adaptasteel

Overbraided, standard EMI screening, flexible conduit / Materials: Stainless steel conduit, stainless steel overbraid

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SSB12	12	14.0	10.3	30	25
SSB16	16	17.5	13.0	35	25
SSB20	20	21.5	16.9	45	25
SSB25	25	26.0	21.4	55	25
SSB32	32	34.0	28.1	60	10



To order quote part number, colour & reel length, e.g. SPLHC12/BL/50M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
 	For use with: Type SB		Static applications: -50°C to +300°C	Very high
	IP40	Type SB - Type A & B	Moving applications: -45°C to +250°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	N/A	High flexibility – High fatigue life	
	IP67	N/A	<b>Fire performance &amp; EMI screen</b>	
	IP68	N/A	 	
	IP69	N/A		




#### Type SSBGS - Adaptasteel

Overbraided, standard EMI screening, flexible conduit / Materials: Galvanised steel conduit, galvanised steel overbraid

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SSBGS12	12	14.0	10.3	30	25
SSBGS16	16	17.5	13.0	35	25
SSBGS20	20	21.5	16.9	45	25
SSBGS25	25	26.0	21.4	55	25
SSBGS32	32	34.0	28.1	60	10



To order quote part number & reel length, e.g. SSBGS12/25M


Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
 	For use with: Type SB		Static applications: -50°C to +300°C	Very high
	IP40	Type SB - Type A & B	Moving applications: -45°C to +250°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	N/A	High flexibility – High fatigue life	
	IP67	N/A	<b>Fire performance &amp; EMI screen</b>	
	IP68	N/A	 	
	IP69	N/A		

## Metallic conduit systems

### EMI screen Type A & B - Adaptasteel

#### Type A - Adaptasteel

Straight fitting - Fixed External male thread / Materials: Nickel plated brass

	Part no.	Nominal conduit size (mm)	Metric thread
	SB10/M12/A	10	M12
	SB12/M16/A	12	M16
	SB16/M16/A	16	M16
	SB20/M20/A	20	M20
	SB25/M25/A	25	M25
	SB32/M32/A	32	M32
	SB40/M40/A	40	M40
	SB50/M50/A	50	M50
	SB63/M63/A	63	M63
	SB75/M75/A	75	M75

For insertion into knockouts using a locknut (order locknuts separately)

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type SB / STC / SSB / SSBGS

IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A


#### Temperature range

Static applications: -50°C to +300°C

Moving applications: -45°C to +250°C

#### Type B - Adaptasteel

Straight fitting - Swivel external male thread / Materials: Nickel plated brass

	Part no.	Nominal conduit size (mm)	Metric thread
	SB10/M12/B	10	M12
	SB12/M16/B	12	M16
	SB16/M16/B	16	M16
	SB20/M20/B	20	M20
	SB25/M25/B	25	M25
	SB32/M32/B	32	M32
	SB40/M40/B	40	M40
	SB50/M50/B	50	M50

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type SB / STC / SSB / SSBGS

IP40	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C

Moving applications: -45°C to +250°C

#### Fitting characteristics



## Metallic conduit systems

EMI screen, liquid resistant Type SPB & SPTC - Adaptasteel




### Type SPB - Adaptasteel

Overbraided, enhanced EMI screening, flexible conduit / Materials: Galvanised steel conduit with PVC covering, galvanised steel overbraid

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SPB10	10	11.5	6.8	25	25
SPB12	12	15.5	10.3	25	25
SPB16	16	18.5	13.0	30	25
SPB20	20	23.0	16.9	35	25
SPB25	25	27.5	21.4	55	25
SPB32	32	35.5	28.1	60	10
SPB40	40	45.1	37.7	80	10
SPB50	50	57.5	48.4	90	10



To order quote part number & reel length, e.g. SPB12/25M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
 	For use with: Type SPB		Static applications: -15°C to +70°C	Very high
	IP54	Type SB - Type A & B	Moving applications: -5°C to +90°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	N/A	High flexibility – Medium fatigue life	
	IP67	N/A	<b>Fire performance &amp; EMI screen</b>	
	IP68	N/A	Self extinguishing	
	IP69	N/A		




### Type SPTC - Adaptasteel

Overbraided tinned copper, high EMI screening, flexible conduit / Materials: Galvanised steel conduit, galvanised steel overbraid

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SPTC10	10	11.5	6.8	25	25
SPTC12	12	15.5	10.3	25	25
SPTC16	16	18.5	13.0	30	25
SPTC20	20	23.0	16.9	35	25
SPTC25	25	27.5	21.4	55	25
SPTC32	32	35.5	28.1	60	10
SPTC40	40	45.1	37.7	80	10
SPTC50	50	57.5	48.4	90	10



o order quote part number & reel length, e.g. SPTC12/25M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
 	For use with: Type SB		Static applications: -15°C to +70°C	Very high
	IP54	Type SB - Type A & B	Moving applications: -5°C to +90°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	N/A	High flexibility – Medium fatigue life	
	IP67	N/A	<b>Fire performance &amp; EMI screen</b>	
	IP68	N/A	Self extinguishing	
	IP69	N/A		

## Metallic conduit systems

EMI screen, liquid resistant Type LFH-SPSS & A - Adaptasteel

### Type LFH-SPSS - Adaptasteel

Overbraided, enhanced EMI screening, flexible conduit / Materials: Galvanised steel conduit with low fire hazard jacket, stainless steel overbraid

Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
LFH-SPSS12	12	15.0	10.3	30	25
LFH-SPSS16	16	18.0	13.0	35	25
LFH-SPSS20	20	22.5	16.9	45	25
LFH-SPSS25	25	27.0	21.4	55	25
LFH-SPSS32	32	35.0	28.1	60	10
LFH-SPSS40	40	45.5	37.7	80	10
LFH-SPSS50	50	56.0	48.4	90	10



To order quote part number, colour & reel length, e.g. SPLHC12/BL/50M

Approvals	IP rating	Appropriate fitting	Temperature range	UV resistance
	<b>For use with:</b> Type SPB		Static applications: -20°C to +90°C	Very high
	IP54	Type SB - Type A & B	Moving applications: -5°C to +105°C	
	IP65	N/A	<b>Flexibility &amp; fatigue life</b>	
	IP66	N/A	Medium flexibility – Medium fatigue life	
	IP67	N/A	<b>Fire performance &amp; EMI screen</b>	
	IP68	N/A	Self Extinguishing	
	IP69	N/A		

### Type A - Adaptasteel

Straight fitting - Fixed external male thread / Materials: Nickel plated brass

Part no.	Nominal conduit size (mm)	Metric thread
SPB10/M12/A	10	M12
SPB12/M16/A	12	M16
SPB16/M16/A	16	M16
SPB20/M20/A	20	M20
SPB25/M25/A	25	M25
SPB32/M32/A	32	M32
SPB40/M40/A	40	M40
SPB50/M50/A	50	M50



For insertion into knockouts using a locknut (order locknut separately)

Approvals	IP rating	Appropriate conduit	Temperature range
	<b>For use with:</b> Type SPB / SPTC		Static applications: -50°C to +300°C
	IP40	Yes	Moving applications: -45°C to +250°C
	IP65	N/A	
	IP66	N/A	
	IP67	N/A	
	IP68	N/A	
	IP69	N/A	

## Metallic conduit systems

EMI screen, liquid resistant Type B & Liquid tight, high strength Type SPLHCB - Adaptasteel

### Type B - Adaptasteel

Straight fitting - Swivel external male thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	Metric thread
SPB10/M12/B	10	M12
SPB12/M16/B	12	M16
SPB16/M16/B	16	M16
SPB20/M20/B	20	M20
SPB25/M25/B	25	M25
SPB32/M32/B	32	M32
SPB40/M40/B	40	M40
SPB50/M50/B	50	M50

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



#### IP rating

#### Appropriate conduit

For use with: Type SPB / SPTC

IP54	Yes
IP65	N/A
IP66	N/A
IP67	N/A
IP68	N/A
IP69	N/A

#### Temperature range

Static applications: -50°C to +300°C

Moving applications: -45°C to +250°C

#### Fitting characteristics



### Type SPLHCB - Adaptasteel

Extreme temperature, abuse resistant, overbraided, standard EMI screening, flexible conduit / Materials: Galvanised steel conduit, smooth thermoplastic rubber covering, stainless steel 316 overbraid



Part no.	Nominal conduit size (mm)	Outside diameter (mm)	Inside diameter (mm)	Min. bend radius (mm)	Reel length (m)
SPLHCB16	16	19.8	12.5	80	25
SPLHCB20	20	23.1	15.9	95	25
SPLHCB25	25	28.4	21.0	115	25
SPLHCB32	32	35.1	26.7	145	10
SPLHCB40	40	44.0	35.4	180	10
SPLHCB50	50	56.0	40.4	240	10

To order quote part number & reel length, e.g. SPLHCB16/25M

#### Approvals



#### IP rating

#### Appropriate fitting

For use with: Type SPLB

IP40	N/A
IP65	N/A
IP66	Type SPLB - Type A & B
IP67	Type SPLB - Type A & B
IP68	Type SPLB - Type A & B
IP69	N/A

#### Temperature range

Static applications: -65°C to +135°C

Moving applications: -54°C to +150°C

#### Flexibility & fatigue life

Very high flexibility – High fatigue life

#### Fire performance & EMI screen

Self extinguishing

Halogen Free



UL 1666-1 (ASTM D 1666-1) STANDARD EMI SCREEN

## Metallic conduit systems

EMI screen, liquid resistant Type LFH-SPSS & A - Adaptasteel

### Type A - Adaptasteel

Straight fitting - Fixed external male thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	Metric thread
SPLB16/M16/A	16	M16
SPLB16/M20/A	16	M20
SPLB20/M20/A	20	M20
SPLB25/M25/A	25	M25
SPLB32/M32/A	32	M32
SPLB40/M40/A	40	M40
SPLB50/M50/A	50	M50

For insertion into knockouts using a locknut (order locknut separately)

#### Approvals



IP rating	Appropriate conduit
<b>For use with: Type SPLHCB</b>	
IP40	N/A
IP65	N/A
IP66	Yes
IP67	Yes
IP68	Yes (10 bar 30 mins)
IP69	N/A

#### Temperature range

Static applications: -65°C to +135°C  
 Moving applications: -45°C to +150°C

### Type B - Adaptasteel

Straight fitting - Swivel external male thread / Materials: Nickel plated brass



Part no.	Nominal conduit size (mm)	Metric thread
SPLB16/M16/B	16	M16
SPLB16/M20/B	16	M20
SPLB20/M20/B	20	M20
SPLB25/M25/B	25	M25
SPLB32/M32/B	32	M32

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Approvals



IP rating	Appropriate conduit
<b>For use with: Type SPLHCB</b>	
IP40	N/A
IP65	N/A
IP66	Yes
IP67	Yes
IP68	Yes (10 bar 30 mins)
IP69	N/A

#### Temperature range

Static applications: -65°C to +135°C  
 Moving applications: -45°C to +150°C

#### Fitting characteristics





## Metallic conduit systems

### Accessories - Type LNB/LNS, P & PSA

#### Type LNB/LNS

Metallic locknuts / Materials: Nickel plated brass, galvanised steel

	Metric thread	Part no.		PG thread	Part no.		NPT thread	Part no.	
		Nickel plated brass	Galvanised steel		Nickel plated brass	Steel			
Type LNB Metallic Locknuts 	M12 x 1.0	LNB/M12X1	-	PG7	LNB/PG7		3/8"	LNS/038	
	M12 x 1.5	LNB/M12	-	PG9	LNB/PG9		1/2"	LNS/050	
	M16	LNB/M16	LNS/M16	PG11	LNB/PG11		3/4"	LNS/075	
	M20	LNB/M20	LNS/M20	PG13,5	LNB/PG13		1"	LNS/100	
	M25	LNB/M25	LNS/M25	PG16	LNB/PG16		1 1/4"	LNS/125	
	M32	LNB/M32	LNS/M32	PG21	LNB/PG21		1 1/2"	LNS/150	
	M40	LNB/M40		PG29	LNB/PG29		2"	LNS/200	
	M50	LNB/M50		PG36	LNB/PG36				
	M63	LNB/M63		PG42	LNB/PG42				
	M75	LNB/M75		PG48	LNB/PG48				
LNS Locknut 									


#### Type P

P-Clip Conduit Support / Materials: Plated Steel or Stainless Steel Construction with PVC Insert

	Plated steel part no.	Stainless steel part no.	Nominal conduit size (mm)	Plated steel part no.	Stainless steel part no.	Nominal conduit size (mm)
	PCLIP/12	-	12	PCLIP/40	-	40
	PCLIP/16	PCLIP/16SS	16	PCLIP/50	-	50
	PCLIP/20	PCLIP/20SS	20	PCLIP/63	-	63
	PCLIP/25	PCLIP/25SS	25	PCLIP/75	-	75

#### Type PSA


Proximity switch connectors / Materials: Nickel plated brass

	Internal thread	Part no.	
		To M16 internal thread	To PG9 internal thread
	M12 x 1.0	PSA16/M12	PSA9/M12
	M18 x 1.0	PSA16/M18	PSA9/M18
	M30	PSA16/M30	PSA9/M30


## Metallic conduit systems

### Accessories - Type 90/45, TC & Female couplers

#### Type 90/45

	Metric external male thread	Metric female metric thread	Part no.	
			Type 90°	Type 45°
	M16	M16	B/M16/90	-
	M16	M20	-	B/M16/45
	M20	M20	B/M20/90	B/M20/45
	M25	M25	B/M25/90	B/M25/45
	M32	M32	B/M32/90	B/M32/45

#### Type 45 Brass Elbow


	Metric external male thread	Metric female metric thread	Part no.	
			Type 90°	Type 45°
	PG9	M16	B/PG9/90	
	PG11	M16	B/PG11/90	B/PG11/45
	PG13,5	M20	B/PG13/90	B/PG13/45
	PG16	M20	B/PG16/90	B/PG16/45
	PG21	M25	B/PG21/90	B/PG21/45

#### Brass elbows / Materials: Nickel plated brass

NPT external male thread	Metric female metric thread	Part no.	
		Type 90°	Type 45°
½"	M20	B/050/90	B/050/45
¾"	M25	B/075/90	B/075/45
1"	M32	B/100/90	-

#### Type TC

#### Unef thread converter with two internal female threads / Materials: Nickel plated brass

	Internal thread	To M16	To M20	To M25	To M32
		internal thread	internal thread	internal thread	internal thread
	⅝" UNEF	B/063U-M16/TC	-	-	-
	¾" UNEF	B/075U-M16/TC	B/075U-M20/TC	-	-
	⅞" UNEF	-	B/088U-M20/TC	-	-
	1" UNEF	-	B/100U-M20/TC	B/100U-M25/TC	-
	1 ⅜" UNEF	-	B/119U-M20/TC	B/119U-M25/TC	-
	1 ⅝" UNEF	-	B/131U-M20/TC	-	-
	1 ⅞" UNEF	-	-	B/144U-M25/TC	B/144U-M32/TC

For insertion into threaded entries & knockouts using a locknut (order locknut separately)

#### Female Coupler

#### Brass internal female coupler / Materials: Nickel plated brass

Part no.	Metric thread	Part no.	Metric thread
B/M16/C	M16	B/M40/C	M40
B/M20/C	M20	B/M50/C	M50
B/M25/C	M25	B/M63/C	M63
B/M32/C	M32	B/M75/C	M75




## Metallic conduit systems

### Accessories - Type E, R & TC

#### Type LNB/LNS

Metallic locknuts / Materials: Nickel plated brass, galvanised steel

	External thread	To PG7 internal thread	To PG9 internal thread	To PG11 internal thread	To PG13,5 internal thread	
	Type E, R & C	M16	B/M16-PG7/TC	B/M16-PG9/TC	B/M16-PG11/TC	-
	Enlargers, Reducers & Converters	M20	B/M20-PG7/TC	B/M20-PG9/TC	B/M20-PG11/TC	B/M20-PG13/TC
		M25	-	-	-	-
		M32	-	-	-	-
		M40	-	-	-	-
		M50	-	-	-	-
		PG7	-	B/PG7-PG9/E	-	-
		PG9	B/PG9-PG7/R	-	B/PG9-PG11/E	B/PG9-PG13/E
		PG11	B/PG11-PG7/R	B/PG11-PG9/R	-	B/PG11-PG13/E
		PG13,5	B/PG13-PG7/R	B/PG13-PG9/R	B/PG13-PG11/R	-
		PG16	B/PG16-PG7/R	B/PG16-PG9/R	B/PG16-PG11/R	B/PG16-PG13/R
		PG21	-	-	B/PG21-PG11/R	B/PG21-PG13/R
		PG29	-	-	-	-
		PG36	-	-	-	-
		PG42	-	-	-	-
		PG48	-	-	-	-

External thread	To M10 internal thread	To M12 internal thread	To M16 internal thread	To M20 internal thread
M16	-	B/M16-M12/R	-	B/M16-M20/E
M20	B/M20-M10/R	B/M20-M12/R	B/M20-M16/R	-
M25	-	-	-	B/M25-M20/R
M32	-	-	-	-
M40	-	-	-	-
M50	-	-	-	-
PG7	-	-	B/PG7-M16/TC	B/PG7-M20/TC
PG9	-	-	B/PG9-M16/TC	B/PG9-M20/TC
PG11	-	-	B/PG11-M16/TC	B/PG11-M20/TC
PG13,5	-	-	B/PG13-M16/TC	B/PG13-M20/TC
PG16	-	-	B/PG16-M16/TC	B/PG16-M20/TC
PG21	-	-	B/PG21-M16/TC	B/PG21-M20/TC
PG29	-	-	-	B/PG29-M20/TC
PG36	-	-	-	-
PG42	-	-	-	-
PG48	-	-	-	-
1/2" NPT	-	-	B/050-M16/TC	B/050-M20/TC

To PG16 internal thread	To PG21 internal thread	To PG29 internal thread	To PG36 internal thread	To PG42 internal thread	To PG48 internal thread
-	-	-	-	-	-
B/M20-PG16/TC	B/M20-PG21/TC	-	-	-	-
-	B/M25-PG21/TC	-	-	-	-
-	-	B/M32-PG29/TC	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
B/PG11-PG16/E	-	-	-	-	-
B/PG13-PG16/E	B/PG13-PG21/E	-	-	-	-
-	B/PG16-PG21/E	-	-	-	-
B/PG21-PG16/R	-	B/PG21-PG29/E	-	-	-
B/PG29-PG16/R	B/PG29-PG21/R	-	B/PG29-PG36/E	-	-
-	B/PG36-PG21/R	B/PG36-PG29/R	-	B/PG36-PG42/E	B/PG36-PG48/E
-	-	B/PG42-PG29/R	B/PG42-PG36/R	-	B/PG42-PG48/E
-	-	-	B/PG48-PG36/R	B/PG48-PG42/R	-

To M25 internal thread	To M32 internal thread	To M40 internal thread	To ½" NPT internal thread
-	-	-	-
B/M20-M25/E	-	-	B/M20-050/TC
-	B/M25-M32/E	-	-
B/M32-M25/R	-	-	-
-	B/M40-M32/R	-	-
-	-	B/M50-M40/R	-
-	-	-	-
-	-	-	-
-	-	-	B/PG11-050/TC
-	-	-	-
B/PG16-M25/TC	-	-	B/PG16-050/TC
B/PG21-M25/TC	B/PG21-M32/TC	-	-
B/PG29-M25/TC	B/PG29-M32/TC	B/PG29-M40/TC	-
-	B/PG36-M32/TC	B/PG36-M40/TC	-
-	-	-	-
-	-	-	-
-	-	-	-

## Convenience packs

Professional installer conduit systems

### LFH Convenience



Type	Type	Conduit/fitting diameter (mm)	One-piece conduit fittings	Locknuts
CP-AF20A	10m Black Type PA LFH Nylon 6, 20mm diameter	20	10	10
CP-AF25A	10m Black Type PA LFH Nylon 6, 25mm diameter	25	10	10

Convenience pack / Nylon Conduit with Adaptalok One-Piece, Fast Fit, Push & Twist Fittings  
Materials: Polyamide Nylon 6 / Colour: Black (BL)

### LFH Convenience



Type	Type	Conduit/fitting diameter (mm)	One-piece conduit fittings	Locknuts
CP-AF20BS-PP	10m Grey Type PP Polypropylene, 20mm diameter	20	10	10
CP-AF25BS-PP	10m Grey Type PP Polypropylene, 25mm diameter	25	10	10
CP-AF20A-APP	Pack of 10 Grey Fittings (Straight), 20mm diameter	20	10	-
CP-AF25A-APP	Pack of 10 Grey Fittings (Straight), 25mm diameter	25	10	-

Convenience Pack / Type PP Polypropylene Conduit with One-Piece, Fast Fit, Push & Twist Fittings  
Materials: PP Polypropylene / Colour: Grey (GR)

### Retail / Office Convenience



Type	Type	Conduit/fitting diameter (mm)	One-piece conduit fittings	Locknuts
CP-AF20BS	10m Grey Type KF PVCu, 20mm diameter	20	10	10
CP-AF25BS	10m Grey Type KF PVCu, 20mm diameter	25	10	10
CP-KF20BS	10m White Type KF PVCu, 25mm diameter	20	10	10
CP-KF25BS	10m White Type KF PVCu, 25mm diameter	25	10	10

Convenience Pack / Self-Extinguishing PVC Conduit & One-Piece Fittings & Locknuts  
Materials: PVC Pliable / Colour: White (W), Grey (GR)

### Liquid Resistant Convenience



Type	Conduit type	Conduit diameter (mm)	Adaptasteeel fittings	Locknuts
CP-AF20SP-BS	10m Black Type SP PVC Covered Steel	20	N/A	10

Convenience Pack / Type SP Adaptasteeel PVC Covered Steel Conduit with Fixed and Swivel Fittings  
Materials: PVC Covered Galvanised Steel / Colour: Black (BL)

**IP rating**

IP66

IP66



**IP rating**

IP54

IP54

IP54

IP54

**IP rating**

IP66

IP66

IP66

IP66



**Fixed male fitting**

5

**Swivel male fitting**

5

**IP rating**

IP54

## Cutting Tools

### Kwikcut & Swingcut



**Kwikcut**

**Kwikcut cutting tool**

**Part no.**

KWIKCUT

#### **Kwikcut**

Kwikcut is the ideal cutting tool for non-metallic conduits (PA, PF, PI, PR, PADL, CP, KFL, KFS, KFM, PP, XF & PK) up to 32mm.

#### **Instructions**

Place the conduit between the cutting blade and lower support, squeeze the handles and rotate the conduit for a clean, easy cut. Spare blades are available.



**Swingcut**

**Swingcut cutting tool**

**Part no.**

SWINGCUT

#### **Swingcut**

Swingcut is a versatile vice and saw combination tool which facilitates a neat, square cut for liquid tight and pliable conduits between 10mm and 32mm. Six to one leverage advantage provides a strong cutting action.

#### **Instructions**

Place the conduit in the vice and secure. Move the operating handle backwards and forwards whilst applying increasing pressure to the supporting handle.

Hardened captive spring loaded retaining pins make blade replacement easy. Spare blades are available.

## Cutting Tools

### Cut-vice & Rotocut



—  
Cut-Vice

Cut-vice cutting tool

Part no.

CUT-VICE

#### Cut-Vice

Cut-vice offers the ability to produce a clean cut for conduit sizes 16mm to 40mm.

#### Instructions

Place the conduit along the vice body and tighten the clamp. Holding the conduit and integral handle together, insert a hacksaw blade into the guide and cut. For braided conduit, wrap adhesive tape around the cutting point to secure braid. Remove tape after cutting.



—  
Rotocut

Rotocut cutting tool

Part no.

ROTOCUT

#### Rotocut

Rotocut offers a simple but effective method for cutting 20mm and 25mm S, SS, SP, LFH-SP and SN steel conduit types.

#### Instructions

Adjust the clamping pin so that the conduit is just held in the recess. Squeeze the lever and body whilst rotating the cutting blade. When the blade appears on the inside of the conduit, release the pressure and remove the conduit. A simple twist will then separate the two parts. Where the conduit is covered, the covering can be cut prior to separation. Spare blades are available.

# Cable glands

## Introduction

Range overview - Incorporating high quality design and manufacture, products include cable glands and terminal blocks.

- 01 Euro Index - cable gland
- 02 Clamping bush

### Cable glands

Cable glands provide sealing and retention for a wide range of cables for general indoor and outdoor applications.



The Standard Range of “Hex” cable glands has been widely recognised as the UK “Industry Standard” for plastic cable glands for over 30 years offering excellent all-round performance. Euro Index is the next generation of Cable Glands with enhanced IP and load functionality. Also available is the Index Cable Gland range providing high strength and performance for a variety of applications. A range of accessories are available including seals, grommets, metric adaptors and reducers, locknuts and sealing washers.



01

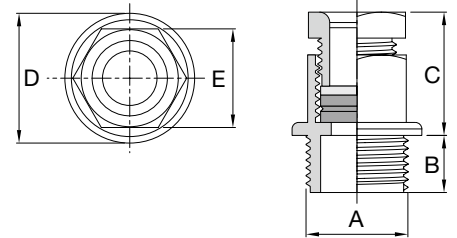


02



## Cable glands

### Standard - cable gland



#### Standard - Cable Gland

General purpose IP66 cable gland / Materials: Polyamide 6.6 with nitrile rubber seal / Colour: Red RAL 3031 (R), White RAL 9010 (W), Grey RAL 7030 (G), Black RAL 9005 (B)

Part no.	Metric thread A	Thread lengths B (mm)	Cable max diameter (mm)	Cable min diameter (mm)	Gland Depth C (mm)	Gland diameter D (mm)	Across flats dimension E (mm)	Pack quantity	Sealing washer part no.	Locknut part no.	Colours
248	M16	10	6	4	25.0	22.0	19	100	96	92	● ○ ● ●
250	M16	10	10	7	25.0	22.0	19	100	96	92	● ○ ● ●
249	M20	11	6	4	25.0	25.0	19	100	97	93	● ○ ● ●
251	M20	11	10	7	25.0	25.0	19	100	97	93	● ○ ● ●
252	M20	11	13	8	30.5	26.0	23	100	97	93	● ○ ● ●
264	M25	12	6	4	25.0	31.5	19	100	98	94	● ○ ● ●
265	M25	12	10	7	25.0	31.5	19	100	98	94	● ○ ● ●
253	M25	12	13	8	30.5	31.5	23	100	98	94	● ○ ● ●
254	M25	12	18	12	32.5	32.0	28	100	98	94	● ○ ● ●
255	M32	13	24	18	35.0	41.0	36	100	99	95	● ○ ● ●
256	M16	20	6	4	25.0	22.0	19	100	96	92	● ○ ● ●
258	M16	20	10	7	25.0	22.0	19	100	96	92	● ○ ● ●
257	M20	20	6	4	25.0	25.0	19	100	97	93	● ○ ● ●
259	M20	20	10	7	25.0	25.0	19	100	97	93	● ○ ● ●
260	M20	20	13	8	30.5	26.0	23	100	97	93	● ○ ● ●
266	M25	20	6	4	25.0	31.5	19	100	98	94	● ○ ● ●
267	M25	20	10	7	25.0	31.5	19	100	98	94	● ○ ● ●
261	M25	20	13	8	30.5	31.5	23	100	98	94	● ○ ● ●
262	M25	20	18	12	32.5	32.0	28	100	98	94	● ○ ● ●
263	M32	20	24	18	35.0	41.0	36	100	99	95	● ○ ● ●

Colour Key: Red ● / White ○ / Black ● / Grey ●

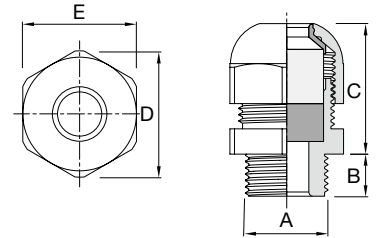
To order quote part number & colour, e.g. 248-W

Standard cable gland gives good all-round performance and is the corner stone of Elkay's diverse cable gland range

Cable glands can be supplied assembled with locknuts and sealing washers as required

## Cable glands

### Index A2P & Euro Index - cable glands



#### Index A2P - Cable Gland

High performance IP68 upto 15bar cable gland / Materials: Polyamide 6.6 with nitrile rubber seal  
Colour: Black RAL 9005 (B)

Part no.	Metric thread A	Thread lengths B (mm)	Gland length compressed C (mm)	Cable max diameter (mm)	Cable min diameter (mm)	Gland diameter D (mm)	Across flats dimension E (mm)	Pack quantity	Sealing washer	Locknut
200-8160	M16	15	24	8.0	4.0	26.0	24	50	96	92-B
200-8240	M20	15	24	8.0	4.0	26.0	24	50	97	93-B
200-8320	M20	15	25	10.0	7.5	30.0	27	50	97	93-B
200-8400	M20	15	26	13.2	9.5	35.5	32	50	97	93-B
200-8560	M25	15	28	18.0	13.0	40.0	36	25	98	94-B
200-8640	M32	15	31	25.0	17.5	51.0	46	10	99	95-B
200-8720	M40	15	31	31.5	24.5	61.0	55	10	121	111-B
200-8800	M50	15	31	37.0	31.0	78.0	70	5	122	112-B
200-8880	M50	15	31	43.0	36.5	78.0	70	5	122	112-B

#### Euro Index - Cable Gland

IP68 industrial 3 part plastic cable gland / Materials: Polyamide 6.6 with nitrile rubber seal /  
Colour: Red RAL 3031 (R), White RAL 9010 (W), Grey RAL 7030 (G), Black RAL 9005 (B), Dark Grey RAL 7001 (DG)



Part no.	Metric thread A	Thread lengths B (mm)	Cable max diameter (mm)	Cable min diameter (mm)	Gland depth C (mm)	Gland diameter D (mm)	Across flats dimension E (mm)	Pack quantity
ESM12-10	M12	8	6.5	2	23.0	19.0	17	100
ESM16-11	M16	9	10.0	4	25.5	23.5	21	100
ESM20-12	M20	10	12.0	6	27.0	27.0	24	100
ESM20-13	M20	10	14.0	10	28.5	30.0	27	100
ESM25-14	M25	11	18.0	13	29.0	33.0	30	100
ESM32-15	M32	12	25.0	17	37.0	45.5	41	50
ESM40-16	M40	13	32.0	24	42.0	55.5	50	25

To order quote part number & colour, e.g. ESM12-10B-LN

#### Approvals



#### IP rating

IP68 Yes (5 bar 30mins)

#### Temperature range

Static applications: -20°C to +90°C

#### Halogen free

Yes

#### Flammability

UL94 - V2 (Nylon material)

#### Key features

Smaller working envelope on bulkhead or panel

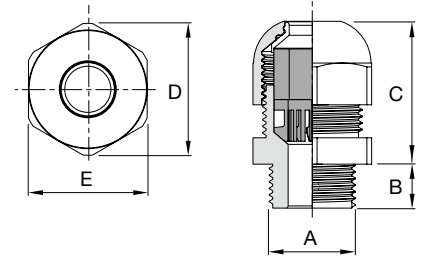
Integral claw design prevents cable twisting during installation

Wide cable acceptance range for each gland size

Designed to EN 50262:1999

## Cable glands

### Index Claw - cable gland




Index Claw - Cable Gland

High performance IP68 cable gland / Materials: Polyamide 6.6 with nitrile rubber seal / Colour: Black RAL 9005 (B)

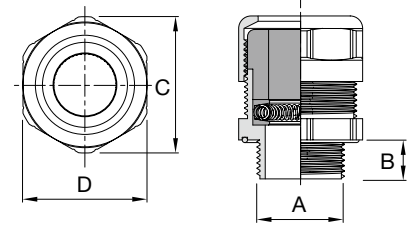
Part no.	Metric thread A	Thread lengths B (mm)	Cable max diameter (mm)	Cable min diameter (mm)	Gland depth C (mm)	Gland diameter D (mm)	Across flats dimension E (mm)	Pack quantity	Sealing washer	Locknut part no.
211-9020	M16	15	9	5	24	26	24	50	96	92-B
211-9060	M20	15	11	7	25	30	27	50	97	93-B
211-9140	M20	15	16	12	26	35	32	50	97	93-B

The Index Claw Gland is suitable for many applications where cables are subject to high tensile loads. Typical applications would range from portable equipment such as generators to highly mobile factory equipment. The performance of the Index Claw Gland allows for IP68 rating at 5 bar and cable anchorage of 15.9kgs

Approvals	IP rating	Temperature range	Halogen Free	Flammability
	IP68	Static applications: -20°C to +90°C	Yes	UL94 - V2 (Nylon material)
	<b>Key features</b> Ideal for general use IP68 Protection (5 bar 30mins) Metric			

# Cable glands

## Index EMC Type A & B - cable glands



Index EMC Type A - Cable Gland

High performance IP68 cable gland / Materials: Nickel plated brass, Stainless steel spring, rubber seal (TPE-V)

Part no.	Metric thread A	Type	Thread lengths B (mm)	Gland diameter C (mm)	Across flats dimension D (mm)	Cable max diameter (mm)	Cable min diameter (mm)	Screen dia. max (mm)	Screen dia. min (mm)	Pack quantity	Locknut part no.
260-1050	M16	A	10	26.7	24	9	6	7.5	3.5	1	260-0500
260-1100	M16	A	10	26.7	24	11	7	8.5	4	1	260-0500
260-1200	M20	A	10	26.7	24	9	6	7.5	3	1	260-0600
260-1250	M20	A	10	26.7	24	11	7	8.5	4	1	260-0600
260-1300	M25	A	11	33.5	30	9.5	6	8.5	6	1	260-0650
260-1350	M25	A	11	33.5	30	11	6	9.0	6	1	260-0650
260-1700	M32	A	13	43.5	40	26	22	21.0	15	1	260-0700
260-1750	M40	A	14	54.0	50	29	25	25.0	18	1	260-0750
260-1900	M50	A	15	65.0	60	41	37	33.0	29	1	260-0800

Index EMC Type B - Cable Gland

High performance IP68 cable gland / Materials: Nickel plated brass, stainless steel spring, rubber seal (TPE-V)

Part no.	Metric thread A	Type	Thread lengths B (mm)	Gland diameter C (mm)	Across flats dimension D (mm)	Cable max diameter (mm)	Cable min diameter (mm)	Screen dia. max (mm)	Screen dia. min (mm)	Pack quantity	Locknut part no.
260-1000	M16	B	10	26.7	24	6	4	6.0	3.0	1	260-0500
260-1150	M20	B	10	26.7	24	6	4	6.0	3.0	1	260-0600
260-1400	M25	B	11	33.5	30	11	6	10.5	6.0	1	260-0650
260-1450	M25	B	11	33.5	30	14	10	13.0	8.0	1	260-0650
260-1550	M25	B	11	33.5	30	18	14	17.5	12.5	1	260-0650
260-1650	M32	A/B	13	43.5	40	23	19	21.0	15.0	1	260-0700
260-1800	M40	B	14	54.0	50	32	29	30.5	24.0	1	260-0750

The INDEX Uni Iris range of cable glands are for use with screened cable and have been designed to connect the screen of the cable to the enclosure screening system. This is achieved by the use of two tapered rings applying force onto a continuous stainless steel spring washer pressing against the screen, ensuring positive contact. Assembly is simple, the screen is exposed, the spring and washers are slipped in place and then the gland can be tightened.

<b>Approvals</b>

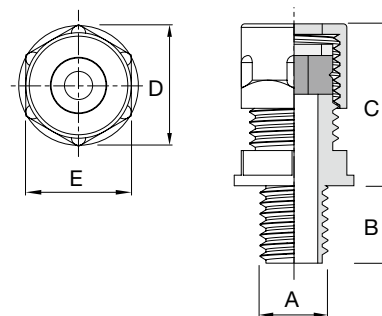
<b>IP rating</b>	<b>IP68</b> Yes (10 bar 30mins)
<b>Key features</b>	Screen continues into enclosure IP68 Protection at 10 bar for 30 minutes Metric For use with systems conforming to EN50 082-1/2

<b>Temperature range</b>	Static applications: -40°C to +135°C
<b>Type A</b>	Stripped Cable Sheath - Allowing the outer sheath to be completely stripped from the cable

<b>Halogen free</b>	Yes
<b>Type B</b>	Continuous Cable Sheath - Allowing for a ring of outer sheath only to be stripped

## Cable glands

### Miniature gland & cord grip bush




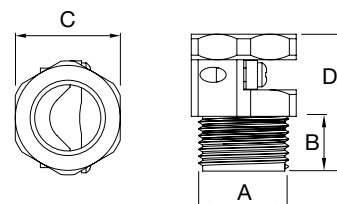
#### Miniature Gland

Small cable size IP66 cable gland / Materials: Polyamide 6.6 with nitrile rubber seal / Colour: Black RAL 9005 (B), White RAL 9010 (W) - Black part numbers listed

Part no.	Metric thread A	Thread lengths B (mm)	Cable max diameter (mm)	Cable min diameter (mm)	Gland depth C (mm)	Gland diameter D (mm)	Across flats dimension E (mm)	Pack quantity	Sealing washer	Locknut part no.
238	M10	8	5	2	21	17	15	100	68	78-B
240	M10	8	7	5	21	17	15	100	68	78-B
244	M10	20	5	2	21	17	15	100	68	78-B
246	M10	20	7	5	21	17	15	100	68	78-B
239	M13	8	5	2	21	17	15	100	69	79-B
241	M13	8	7	5	21	17	15	100	69	79-B
245	M13	20	5	2	21	17	15	100	69	79-B
247	M13	20	7	5	21	17	15	100	69	79-B

Miniature cable glands are ideal for small cable sizes and offer IP66 protection. To order quote part number & colour, e.g. 238-W  
Miniature cable glands are available with either long or short threads. Locknuts and sealing washers are available as separate items


Approvals	IP rating	Temperature range	Halogen free	Flammability
	IP66	Yes Static applications: -20°C to +90°C	Yes	UL94 - V2 (Nylon material)



#### Cord Grip Bush

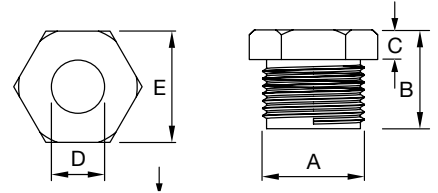
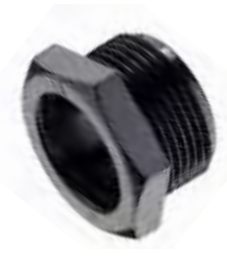
Cord grip entry bush / Materials: Polyamide 6.6 / Colour: Black RAL 9005 (B)

Part no.	Metric thread A	Thread lengths B (mm)	Cable max diameter (mm)	Cable min diameter (mm)	Across flats dimension C (mm)	Overall length D (mm)	Pack quantity	Sealing washer	Locknut part no.
743-B	M16	9	11	3.5	19	23.5	100	96	92-B
744-B	M20	12	14	4.0	23	29.5	100	97	93-B
745-B	M25	12	18	8.0	27	29.5	100	98	94-B

Approvals	IP rating	Temperature range	Halogen free	Flammability
	IP66	N/A Static applications: -20°C to +90°C	Yes	UL94 - V2 (Nylon material)

## Cable glands


### Clamping bush & stopping plugs

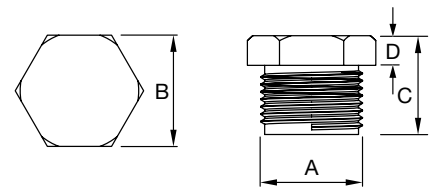


#### Clamping Bush

Smooth cable guide / Materials: Polyamide 6.6 / Colour: Black RAL 9005 (B)

Part no.	Metric thread A	Plug length B (mm)	Hexagon thickness C (mm)	Hole diameter D (mm)	Across flats dimension E (mm)	Pack quantity
46-B	M16	14	5	10.5	19	100
47-B	M20	18	6	13.0	23	100
48-B	M25	18	6	19.0	28	100


Approvals	IP rating	Temperature range	Halogen free	Flammability
	IP66	N/A Static applications: -10°C to +90°C	Yes	UL94 - V2 (Nylon material)



#### Stopping Plug

General purpose IP66 stopping plug / Materials: Polyamide 6.6 / Colour: Black RAL 9005 (B)

Part no.	Metric thread A	Across flats dimension E (mm)	Plug length C (mm)	Head depth D (mm)	Pack quantity
64-B	M16	19	14	5	100
65-B	M20	23	18	6	100
66-B	M25	28	18	7	100
67-B	M32	36	19	3	100

Approvals	IP rating	Temperature range	Halogen free	Flammability
	IP66	N/A Static applications: -10°C to +90°C	Yes	UL94 - V2 (Nylon material)

# Aquasafe

## Introduction

Range overview - In-Line (IP68 - 16A) - The in-line range is typically used where temporary connections are required for power. The range offers a variety of cable acceptances sizes, whilst maintaining a compact working envelope.

### Cable Glands

Aquasafe is suitable for temporary immersion to IP68 2 Bar for 30 minutes (Note: Not submersible). The housings are defined as either Female or Male. The Female housing has the collar moulding, and the Male housing is smaller in diameter, and fits inside the opposite housing. The inner connectors are defined as either a Plug or Socket according to the metal inserts.

### Bulkheads (IP68 - 16A)

If power is being distributed and controlled from a fixed installation, it may be more appropriate to mount products into an enclosure or electrical equipment. As an alternative to the in-line connector, Adaptaflex offer complimentary mounting options including:

- **Chassis/panel mounting** (screwed)  
Supplied with M25 Locknut and Sealing Washer as standard, the thread has flats to orientate the housing during installation
- **Bulkhead/surface mounting** (flanged)  
Flanged to suit surface mounting where space is restricted behind the application

Each bulkhead/panel mounted housing can be used in conjunction with the appropriate mating in-line connector.



IEC 61984

### Sealing Caps (IP68)

Sealing caps can be fitted to each individual housing to maintain protection when the connectors are separated. This ensures electrical safety at all times, even when the connectors are not in use. The caps are operated in exactly the same manner as the connectors, by the latch mechanism held within the collar. A strap is also provided to retain the sealing cap onto the housings, for light static applications.



# Aquasafe


## In-Line Aqua-safe



In-Line Aqua-safe

IP68 - 16A Standard in-line product / Materials: Plug & socket connector: polycarbonate, outer housing: glass filled nylon with nitrile rubber seal / Colour: Black

Part no.	Description	Conector details	Cable range	Pack quantity
185-9000	In-line waterproof connector assembly	3 pole plug & socket	5-9	1
185-9100	In-line waterproof connector assembly	3 pole plug & socket	8-13	1
185-9200	In-line waterproof connector assembly	3 pole plug & socket	12-16	1
185-OA1011-P030-1	In-line waterproof female housing	3 pole plug	5-9	1
185-OA1021-P030-1	In-line waterproof female housing	3 pole plug	8-13	1
185-OA1031-P030-1	In-line waterproof female housing	3 pole plug	12-16	1
185-1A1011-S030-1	In-line waterproof male housing	3 pole socket	5-9	1
185-1A1021-S030-1	In-line waterproof male housing	3 pole socket	8-13	1
185-1A1031-S030-1	In-line waterproof male housing	3 pole socket	12 -16	1

Approvals	IP rating	Temperature range	Halogen free	Flammability
 IEC 61984	<b>IP68</b> Yes (up to 2 bar 30mins) Note: Not submersible	Static applications: -25°C to +80°C	Yes	UL94 - V2



Bulkhead Aqua-safe  
Bulkhead Male Screwed



Bulkhead Aqua-safe  
Bulkhead Female Screwed



Bulkhead Aqua-safe  
Bulkhead Male Flanged




Bulkhead Aqua-safe  
Bulkhead Female Flanged

Bulkhead Aqua-safe

IP68 - 16A Standard bulkhead product / Materials: Plug & socket connector: polycarbonate, outer housing: glass filled nylon with nitrile rubber seal / Colour: Black

Part no.	Description	Conector details	Pack quantity
185-0B1000-P030-1	Aqua-safe Bulkhead Female Housing	Flanged 3 Pole Plug	1
185-0E1000-P030-1	Aqua-safe Bulkhead Female Housing	Screwed 3 Pole Plug	1
185-1B1000-S030-1	Aqua-safe Bulkhead Male Housing	Flanged 3 Pole Socket	1
185-1E1000-S030-1	Aqua-safe Bulkhead Male Housing	Screwed 3 Pole Socket	1

Approvals	IP rating	Temperature range	Halogen free	Flammability
 IEC 61984	<b>IP68</b> Yes (up to 2 bar 30mins) Note: Not submersible	Static applications: -25°C to +80°C	Yes	UL94 - V2

## Aquasafe

### Sealing Caps



Female sealing cap



Male Sealing Cap

#### Sealing Caps

IP68 - 16A Sealing caps / Colour: Black

Part no.	Description	Pack quantity
185-6100	Male sealing cap with strap to suit all female housings	100
185-6200	Female sealing cap with strap to suit all male housings	100



## Technical section

### Thread data

#### Metric thread data

Thread size	External thread outside diameter (mm)	Internal thread inside diameter (mm)	Pitch (mm)
M8	8	6.9	1
M10	10	8.9	1
M12	12	10.9	1
M12	12	10.4	1.5
M16	16	14.4	1.5
M18	18	16.9	1
M20	20	18.4	1.5
M25	25	23.4	1.5
M30	30	28.4	1.5
M32	32	30.4	1.5
M40	40	38.4	1.5
M50	50	48.4	1.5
M63	63	61.4	1.5
M75	75	73.4	1.5

Standard Thread Conforming to EN60423 & BS3643  
NOTE: Dimensions are nominal

#### PG thread data

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	35.5	1.59
PG36	47	45.5	1.59
PG42	54	52.5	1.59
PG48	59.3	57.8	1.59

German Standard Thread Conforming to DIN40430  
NOTE: Dimensions are nominal

#### PF thread data

Thread size (in)	External thread outside diameter (mm)	Internal thread inside diameter (mm)	Pitch (mm)
¼	13	-	1.34
⅜	16.7	15.0	1.34
½	21.0	18.6	1.81
¾	26.4	24.1	1.81
1	33.3	30.3	2.31
1 ¼	41.9	39.0	2.31
1 ½	47.8	44.8	2.31
2	59.6	56.7	2.31

Japanese Conduit Thread Conforming to JIS B 0202  
NOTE: Dimensions are nominal

#### UNEF / UNS thread data

Thread size (in)	External thread outside diameter (mm)	Internal thread inside diameter (mm)	Pitch (mm)
⅝	15.9	14.7	1.06
¾	19.1	17.7	1.27
1 <sup>3</sup> / <sub>16</sub>	20.6	19.3	1.27
7/8	22.2	20.9	1.27
1 <sup>5</sup> / <sub>16</sub>	23.8	22.4	1.27
1	25.4	24.0	1.27
1 ⅛	28.6	27.0	1.41
1 <sup>3</sup> / <sub>16</sub>	30.2	28.6	1.41
1 ¼	31.8	30.2	1.41
1 <sup>9</sup> / <sub>16</sub>	33.3	31.8	1.41
1 <sup>3</sup> / <sub>8</sub>	34.9	33.4	1.41
1 <sup>7</sup> / <sub>16</sub>	36.5	35.0	1.41
1 <sup>3</sup> / <sub>4</sub>	44.5	42.9	1.41
2	50.8	49.3	1.59
2 ¼	57.2	55.4	1.59

American Unified Thread conforming to BS1580  
NOTE: Dimensions are nominal

#### NPT thread data

Thread size (in)	External thread outside diameter (mm)	Pitch (mm)
⅝	16.7	1.14
½	21.0	1.81
¾	26.4	1.81
1	33.3	2.21
1 ¼	41.9	2.21
1 ½	47.8	2.21
2	59.6	2.21

US Taper Seal Pipe Thread Conforming to ANSI/ASME B1.20.1 - 1983  
NOTE: Dimensions are nominal

## Technical section

### EMI screen system & fire performance

#### EMI screen system

For applications where electromagnetic interference is of particular concern we have classified suitable conduit systems by means of symbols. These are related in an ascending scale of performance from Standard EMI Screen (products featuring a stainless steel overbraid) through to High EMI Screen (products featuring a tinned copper overbraid). Contact us for full details.



Standard EMI Screen	Super Low Fire Hazard	Inherent Low Fire Hazard
Screening level 40db @ 100MHz	Screening level 60db @ 100MHz	Screening level 75db @ 100MHz

#### Fire performance

Adaptaflex has introduced a set of symbols to help the user specify conduit systems for installations where fire performance is of particular concern.

Each symbol encompasses a range of properties relevant to the high specification materials used in the construction of the conduit.

They are in an ascending scale of performance from Low Fire Hazard (LFH) featuring zero halogen through to Super Low Fire Hazard (SLFH) featuring zero nitrogen. In addition, Inherent Low Fire Hazard systems (ILFH) are classified as being all metal systems.



Property	Low Fire Hazard	Enhanced Low Fire Hazard	Super Low Fire Hazard	Inherent Low Fire Hazard
	LFH	ELFH	SLFH	ILFH
Oxygen Index ISO4589	31% ≥ OI ≥ 28%	OI ≥ 32%	OI ≥ 32%	Inherent Low Fire Hazard
BS6853 Smoke Density 3m <sup>3</sup>	0.02 ≥ A0 ≥ 0.03	0.005 ≥ A0 ≥ 0.02	0.02 A0 ≤ 0.005	i.e. Type S, SS, SPB STC, SSB & SSBGS Metallic Conduit & Fittings
Zero Halogen	■	■	■	
Zero Phosphorus	■	■	■	
Zero Sulphur	■	■	■	
London Underground	Concession	Approved	Approved	
Toxicity Index NES713 Issue 3	5.0 ≥ TI ≥ 6.0	0.5 ≥ TI ≥ 5.0	TI ≤ 0.5	
NFF16-102	I3F2	I2F2	I2F1	















## Technical section

### IP ratings

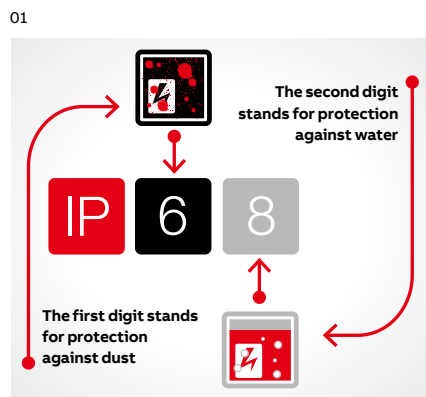
IP suitability ratings are a system for classifying the degree of protection provided by enclosures of electrical equipment.

#### Protection against solid bodies

Degree of protection for persons against access to hazardous parts inside the enclosure and/or against the ingress of solid foreign objects.

		No protection
		Objects greater than 50 mm, accidental touch by hands
		Objects greater than 12 mm, accidental touch by fingers
		Objects greater than 2.5 mm, e.g. tools/wires
		Objects greater than 1 mm, e.g. tools/wires/small wires
		Protected against dust - limited ingress (no harmful deposits)
		Totally protected against dust (dust-tight)

01 IP ratings  
The higher the number, the greater the degree of protection; they apply ONLY to properly installed equipment.



#### Protection against water

Degree of protection of equipment inside enclosures against damage from the ingress of water.

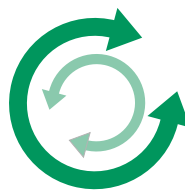
		No protection
		Protected against vertically falling drops of water
		Protected against direct sprays of water 15° from vertical
		Protected against sprays of water to 60° from vertical
		Protected against water sprayed from all directions - limited ingress permitted
		Protected against low pressure jets of water from all directions - limited ingress permitted
		Protected against strong pressure jets of water, heavy seas - limited ingress permitted
		Protection against the effects of immersion between 15cm - 1 m
		Protection against long periods of immersion under a quoted pressure, e.g. 2 bar at 24 hours
		IP69 Automotive standard DIN40050 and signifies resistance to high pressure jets of water (up to 80 bar) from any angle

**Technical section**

Fitting characteristics



Fitting swivels independently of conduit for installation purpose but is not suitable as a rotating joint in constantly moving applications.



Fitting rotates independently of the conduit to act as a rotating joint within constantly moving applications.

## Technical section

### Chemical resistance

Chemical resistance comparison table

Chemicals	Products														
Key: 2 = Suitable 1 = Limited suitability 0 = Unsuitable - = No data	PA, PR, PADL, SN	PI, PF	CP	KF, RF, SP	PP	PK	Fittings PA66	ATS Elastomer Seal	S (including braid)	SS (including braid)	LFH-SP	SPL, SPUL	SPLHC	TC braid	Fittings nickel plated brass
Astm no.1	2	2	2	0	2	2	2	2	2	2	0	2	2	2	2
Astm no.2	2	2	2	0	2	2	2	2	2	2	1	2	1	2	2
Astm no.3	2	2	2	0	1	2	2	2	2	2	1	2	1	2	2
Acetic Acid (10%)	1	1	2	1	2	2	1	1	0	2	2	2	2	1	2
Acetone	2	2	1	0	2	2	2	1	2	2	0	0	2	2	2
Aluminium Chloride	1	2	0	1	2	2	1	2	0	1	2	2	2	1	-
Aniline	1	0	0	0	2	1	1	0	2	2	1	0	2	2	2
Benzaldehyde	1	1	1	0	1	2	1	1	2	2	0	0	1	2	2
Benzene	2	2	1	0	1	2	2	1	2	2	0	0	0	2	2
Carbon tetrachloride	2	2	0	1	1	2	2	1	2	2	0	1	1	2	2
Chlorine Water	0	0	1	0	1	0	0	0	0	0	1	0	2	0	2
Chloroform	0	0	0	0	1	2	0	1	2	2	0	0	1	2	2
Citric acid	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Copper sulphate	1	2	2	2	2	2	1	2	2	2	2	2	2	2	2
Cresol	0	0	-	1	2	1	0	0	2	2	0	1	2	1	2
Diesel oil	2	2	2	1	2	2	2	2	2	2	1	2	2	2	2
Diethylamine	2	1	1	1	2	2	2	0	2	2	2	1	2	2	2
Ethanol	2	1	2	0	2	2	2	1	2	2	1	0	2	2	2
Ether	2	2	-	1	2	2	2	2	2	2	0	1	2	2	2
Ethylamine	2	1	-	1	2	2	2	0	2	2	1	1	1	2	2
Ethylene Glycol	2	2	2	1	2	2	2	2	0	2	2	1	2	2	2
Ethyl ethanoate	1	2	2	0	2	2	1	0	2	2	0	0	2	2	2
Freon 32	2	2	2	1	2	2	2	1	0	2	0	1	0	2	2
Hydrchloric acid (10%)	0	1	1	2	2	2	0	1	0	0	0	2	2	0	2
Hydrchloric acid (36%)	0	0	0	1	2	2	0	0	0	0	0	2	2	0	2
Hydrogen peroxide (35%)	1	1	1	2	2	2	1	0	0	2	1	2	1	2	2
Hydrogen peroxide (87%)	0	0	0	2	1	2	0	0	0	2	0	2	0	1	2
Lactic acid	1	2	0	1	2	2	1	2	0	2	2	1	1	2	2
Lubricating oil	2	2	2	1	2	2	2	2	2	2	1	2	1	2	2
Methanol	1	1	2	0	2	2	1	1	2	2	1	0	2	2	2
Methyl bromide	0	0	-	0	1	2	0	0	2	2	0	0	1	2	2
MEK	2	2	2	1	0	2	2	2	1	2	2	0	0	2	2
Nitric acid (10%)	0	0	1	2	2	2	0	0	0	0	2	2	2	0	2
Nitric acid (70%)	0	0	0	2	2	0	0	0	0	0	0	2	2	0	2
Oxalic acid	1	2	1	1	2	2	1	1	0	2	2	2	2	1	2
Ozone (gas)	0	0	-	1	1	2	0	2	0	2	2	1	1	2	2
Paraffin oil	2	2	2	1	2	2	2	2	2	2	1	2	2	2	2
Petrol	2	2	2	0	2	2	2	2	2	2	0	2	2	2	2
Phenol	0	0	0	1	0	1	0	1	2	2	0	1	2	1	2

**Chemical resistance comparison table**

Chemicals	Products														
	PA, PR, PADL, SN	PI, PF	CP	KF, RF, SP	PP	PK	Fittings PA66	ATS Elastomer Seal	S (including braid)	SS (including braid)	LFH-SP	SP, SPUL	SPLHC	TC braid	Fittings nickel plated brass
Sea water	2	2	2	2	2	2	2	2	0	2	2	2	2	2	1
Silver nitrate	2	2	-	2	2	2	2	2	0	2	2	2	2	2	2
Skydrol	2	2	2	0	2	2	2	1	2	2	0	0	2	2	2
Sodium chloride	2	2	2	2	2	2	2	2	0	2	2	2	2	2	1
Sodium hydroxide (10%)	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2
Sodium hydroxide (60%)	2	1	0	1	2	2	2	1	0	1	2	2	2	2	2
Sulphur dioxide (gas)	0	0	1	2	2	2	0	0	0	0	1	2	2	1	0
Sulphuric acid (10%)	0	1	2	2	2	2	0	1	0	0	2	2	2	0	0
Sulphuric acid (70%)	0	0	0	2	2	0	0	0	0	0	1	2	2	0	0
Toluene	2	2	1	0	2	2	2	0	2	2	1	0	0	2	2
Transformer oil	2	2	2	1	2	2	2	2	2	2	1	2	1	2	2
1,1,1-Trichloroethane	2	2	1	0	1	2	2	1	0	2	1	0	1	2	2
Trichloroethylene	1	0	0	0	1	2	1	1	0	2	1	0	0	2	2
Turpentine	2	2	2	1	0	2	2	1	2	2	0	1	0	2	2
Vegetable oil	2	2	2	1	2	2	2	2	2	2	1	2	2	2	2
Vinyl acetate	1	2	-	0	2	2	1	0	0	2	0	0	2	2	2
Water	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2
White spirit	2	2	-	1	2	2	2	1	2	2	0	1	1	2	2
Zinc chloride	0	2	1	2	2	2	0	2	0	2	2	2	2	1	2

**Note:** The information above is given as a guide only and is based on published technical data and experience.

The chemical resistance of the above products is dependant on factors such as chemical exposure, concentration of the chemical and temperature. The above chemicals are valid for a temperature of 23°C.

Use of the above table is at the users own discretion and risk. Those using it must satisfy themselves that their application presents no health and safety risks.

The end user should assess compatibility with their application and contact Adaptaflex for further information.

## Technical section

### Cable carrying capacity (wire fill)

#### Introduction

UK Wiring regulations BS7671 recommend that the total cross sectional area of the sum of individual cables shall not exceed 40% of the cross sectional area of the conduit based on using 3 or more cables. The tables below enable you to calculate the number of conductors that can be run within a piece of flexible conduit.

#### Instructions

- **Step 1:** Establish the number and size of each wire to be run in the conduit
- **Step 2:** Look on the Cross Sectional Area (CSA) chart (table 1), look up the CSA taken up by each of the wires from STEP 1
- **Step 3:** Add all the CSA values together (Total CSA)
- **Step 4:** Look on the conduit fill value chart (table 2).
- Choose a conduit with a 40% fill value higher than the total CSA from STEP 3

Table 1 - Cross Sectional Area (CSA) chart

Nominal conductor size (mm)	Number of wires							
	1	2	3	4	5	10	15	20
1	6.6	13.2	19.8	26.4	33	66	99	132
1.5	7.6	15.2	22.8	30.4	38	76	114	152
2.5	9.6	19.2	28.8	38.4	48	96	144	192
4	14.5	29	43.5	58	72.5	145	217.5	290
6	18.8	37.6	56.4	75.2	94	188	282	376
10	29.3	58.6	87.9	117.2	146.5	293	439.5	586
16	40.2	80.4	120.6	160.8	201	402	603	804
25	63.8	127.6	191.4	255.2	319	638	957	1276
35	83.5	167	250.5	334	417.5	835	1252	1670
50	113	226	339	452	565	1130	1695	2260
70	149	298	447	596	745	1490	2235	-
95	204	408	612	816	1020	2040	-	-

Table 2 - Wire fill of plastic & metallic conduit

Nominal diameter (mm)	Plastic conduit		Metallic conduit	
	100% fill	40% fill	100% fill	40% fill
10	33.2	13	25.5	10.2
13	72.4	29	58.1	23.2
16	109.4	44	83.3	33.3
18	158.4	63	160.6	64.2
21	213.8	86	243.3	97.3
28	369.8	148	452.4	181
34	602.6	241	855.3	342.1
42	973.1	390	1164.2	465.7
54	1698.2	680	1963.5	785.4
80	3520	1410	3473.2	1389.3
106	6500	2600	-	-

#### Example - What size of conduit to use?

- **Step 1:** 4 x 2.5mm conductors, 2 x 10mm conductors and 3 x 50mm conductors
- **Step 2:** The CSA of Four 2.5mm conductors is 38.4, Two 10mm conductors is 58.6, Three 50mm conductors is 339
- **Step 3:** Total of these groups is  $38.4 + 58.6 + 339 = 436$
- **Step 4:** Using Table 2 the conduit is either 54mm (680) Plastic or 50mm (465.7) Metallic

- **Note:** 42mm Plastic is 390 which is smaller than 436 therefore not recommended

The information given above relates to PA - Standard weight conduit and Adapalok fittings or SPL with M-Type fittings.

It is given in good faith and should be used only as a guide in conjunction with the relevant wiring regulations.

# Technical section

## IEC61386 classifications

Non-metallic & metallic - IEC61386 classifications table

	With fitting	Compression strength	Impact strength	Minimum temperature	Maximum temperature	Bending properties	Electrical properties	IP rating solids	IP rating water	Corrosion resistance	Tensile strength	Products	
												Non-flame propagating	Suspended load capacity
<b>Non-metallic conduit</b>													
PA LIGHT	AT	2	4	2	4	4	0	6	7	-	1	1	0
PA STANDARD	AT	2	4	2	4	4	0	6	7	-	1	1	0
PA HEAVY	AT	2	4	2	4	4	0	6	7	-	2	1	0
PF STANDARD	AT	1	3	5	4	4	0	6	7	-	1	1	0
PF HEAVY	AT	2	4	5	4	4	0	6	7	-	1	1	0
PI STANDARD	AT	1	3	5	4	4	0	6	7	-	1	1	0
PI HEAVY	AT	2	4	5	4	4	0	6	7	-	1	1	0
PR	AT	2	4	2	4	4	0	6	7	-	1	1	0
CP	AT	1	4	4	5	4	0	6	7	-	1	1	0
KF LIGHT	KC	2	2	2	1	2	2	4	0	-	1	1	0
KF STANDARD	KC	2	3	2	1	2	2	4	0	-	2	1	0
KF MEDIUM	KC	3	3	2	1	2	2	4	0	-	1	1	0
PK	PK	2	4	5	6	4	2	6	7	-	1	1	0
PKTC	PB	2	4	5	6	4	3	6	7	-	3	1	0
PKSS	PB	2	4	5	6	4	3	6	7	-	3	1	0
PRTC	PB	2	4	2	4	4	1	6	7	-	3	1	0
PRSS	PB	2	4	2	4	4	1	6	7	-	3	1	0
PRSS	PB	2	4	2	4	4	1	6	7	-	3	1	0
<b>Metallic conduit</b>													
S	S	4	4	5	6	4	0	4	0	1	4	1	5
SS	S	4	4	5	6	4	0	4	0	4	4	1	5
SP	SP(M)	4	4	2	2	4	2	6	5	-	4	1	5
SN	SP(M)	4	4	4	5	4	0	6	5	-	4	1	5
LFH-SP	SP(M)	4	4	2	3	4	0	6	5	-	4	1	5
SPL AL	SPL(M)	4	4	2	3	4	2	6	7	-	4	1	5
SPLHC	SPL(M)	4	4	5	5	4	0	6	7	-	4	1	5
SB	SB	4	5	5	6	4	1	4	0	1	4	1	5
STC	SB	4	4	5	6	4	1	4	0	1	4	1	5
SSB	SB	4	4	5	6	4	1	4	0	4	4	1	5
SSBGS	SB	4	4	5	6	4	1	4	0	1	4	1	5
SPB	SPB	4	4	2	2	4	3	5	4	-	4	1	5
SPTC	SPB	4	4	2	2	4	3	5	4	-	4	1	5
SPLHCB	SPLB	4	4	5	5	4	1	6	7	-	5	1	5

Performance classification key

Classification level	(N)	(J)	(°C)	(°C)				(N)	(N)			
0						Not declared		0	N/A	Not declared	Not declared	
1	125	0.5	5	60	Rigid	Conductor		1	Low	100	4	20
2	320	1	-5	90	Pliable	Insulator		2	Medium	250	7	30
3	750	2	-15	105	Pliable/semi rigid	Con/Ins	3	3	Med-hi	500		150
4	1250	6	-25	120	Flexible		4	4	High	1000		450
5	4000	20	-45	150			5	5		2500		850
6				250			6	6				
7								7				

## Appendix

### Part number index

Part no.	GID no.	Page
AL34/PG29/SA/BL	7TCA296000R1020	2/18
AL34/PG29/SF45/BL	7TCA296000R1027	2/20
AL34/PG29/SFA/BL	7TCA296000R1029	2/19
AL34/U100/45/000620	7TCA296000R1031	2/23
AL34/U100/A/000620	7TCA296000R1032	2/21
AL34/U100/C90/000620	7TCA296000R1033	2/22
AL34/U119/45/000620	7TCA296000R1034	2/23
AL34/U119/A/000620	7TCA296000R1035	2/21
AL34/U119/C90/000620	7TCA296000R1036	2/22
AL34/U144/45/000620	7TCA296000R1037	2/23
AL34/U144/A/000620	7TCA296000R1038	2/21
AL34/U144/C90/000620	7TCA296000R1040	2/22
AL34/U175/45/000620	7TCA296000R1042	2/23
AL34/U175/A/000620	7TCA296000R1043	2/21
AL34/U175/C90/000620	7TCA296000R1044	2/22
AL34/U200/45/000620	7TCA296000R1045	2/23
AL34/U200/A/000620	7TCA296000R1046	2/21
AL34/U200/C90/000620	7TCA296000R1047	2/22
AL34RT	7TCA296050R0027	2/58
AL42/125/A/BL	7TCA296000R1056	2/12
AL42/125/C90/BL	7TCA296000R1061	2/13
AL42/M40/A/BL	7TCA296000R1081	2/12
AL42/M40/C90/BL	7TCA296000R1087	2/13
AL42/M40/CS90/BL	7TCA296000R1091	2/18
AL42/M40/CSF90/BL	7TCA296000R1094	2/20
AL42/M40/S45/BL	7TCA296000R1096	2/19
AL42/M40/SA/BL	7TCA296000R1098	2/18
AL42/M40/SF45/BL	7TCA296000R1102	2/20
AL42/M40/SFA/BL	7TCA296000R1103	2/19
AL42/M50/A/BL	7TCA296000R1106	2/12
AL42/PF125/A/BL	7TCA296000R1111	2/12
AL42/PF125/C90/BL	7TCA296000R1113	2/13
AL42/PG36/45/BL	7TCA296000R1117	2/14
AL42/PG36/A/BL	7TCA296000R1122	2/12
AL42/PG36/C90/BL	7TCA296000R1130	2/13
AL42/PG36/CS90/BL	7TCA296000R1136	2/18
AL42/PG36/CSF90/BL	7TCA296000R1139	2/20
AL42/PG36/S45/BL	7TCA296000R1142	2/19
AL42/PG36/SA/BL	7TCA296000R1144	2/18
AL42/PG36/SF45/BL	7TCA296000R1149	2/20
AL42/PG36/SFA/BL	7TCA296000R1151	2/19
AL42/U175/45/000620	7TCA296000R1154	2/23
AL42/U175/A/000620	7TCA296000R1155	2/21
AL42/U175/C90/000620	7TCA296000R1156	2/22
AL42/U200/45/000620	7TCA296000R1157	2/23
AL42/U200/A/000620	7TCA296000R1158	2/21
AL42/U200/C90/000620	7TCA296000R1159	2/22
AL42RT	7TCA296050R0030	2/58
AL54/150/A/BL	7TCA296000R1173	2/12
AL54/150/C90/BL	7TCA296000R1179	2/13
AL54/200/C90/BL	7TCA296000R1197	2/13

Part no.	GID no.	Page
AL54/A/U/BL	7TCA296000R2671	2/17
AL54/FL/45/BL	7TCA296000R1203	2/17
AL54/FL/A/BL	7TCA296000R1209	2/16
AL54/M50/45/BL	7TCA296000R1210	2/14
AL54/M50/A/BL	7TCA296000R1213	2/12
AL54/M50/C90/BL	7TCA296000R1219	2/13
AL54/M50/CS90/BL	7TCA296000R1222	2/18
AL54/M50/CS90/BL	7TCA296000R1222	2/18
AL54/M50/CSF90/BL	7TCA296000R1226	2/20
AL54/M50/CSF90/BL	7TCA296000R1226	2/20
AL54/M50/S45/BL	7TCA296000R1227	2/19
AL54/M50/SA/BL	7TCA296000R1229	2/18
AL54/M50/SA/BL	7TCA296000R1229	2/18
AL54/M50/SF45/BL	7TCA296000R1231	2/20
AL54/M50/SF45/BL	7TCA296000R1231	2/20
AL54/M50/SFA/BL	7TCA296000R1232	2/19
AL54/M50/SFA/BL	7TCA296000R1232	2/19
AL54/M63/45/BL	7TCA296000R1234	2/14
AL54/M63/A/BL	7TCA296000R1236	2/12
AL54/M63/C90/BL	7TCA296000R1242	2/13
AL54/M63/CS90/BL	7TCA296000R1245	2/18
AL54/M63/CS90/BL	7TCA296000R1245	2/18
AL54/M63/S45/BL	7TCA296000R1247	2/19
AL54/M63/S45/BL	7TCA296000R1247	2/19
AL54/M63/SA/BL	7TCA296000R1249	2/18
AL54/M63/SA/BL	7TCA296000R1249	2/18
AL54/PF150/A/BL	7TCA296000R1256	2/12
AL54/PF150/C90/BL	7TCA296000R1260	2/13
AL54/PF200/A/BL	7TCA296000R1265	2/12
AL54/PF200/C90/BL	7TCA296000R1268	2/13
AL54/PG48/45/BL	7TCA296000R1272	2/14
AL54/PG48/A/BL	7TCA296000R1278	2/12
AL54/PG48/C90/BL	7TCA296000R1286	2/13
AL54/PG48/CS90/BL	7TCA296000R1291	2/18
AL54/PG48/CSF90/BL	7TCA296000R1293	2/20
AL54/PG48/S45/BL	7TCA296000R1295	2/19
AL54/PG48/SA/BL	7TCA296000R1296	2/18
AL54/PG48/SF45/BL	7TCA296000R1297	2/20
AL54/PG48/SFA/BL	7TCA296000R1298	2/19
AL54RT	7TCA296050R0033	2/58
ALS13/F	7TCA296000R1317	2/15
ALS16/F	7TCA296000R1318	2/15
ALS21/F	7TCA296000R1332	2/15
ALS28/C	7TCA296000R1345	2/15
ALS34/C	7TCA296000R1356	2/15
ALS42/C	7TCA296000R1362	2/15
ALS54/C	7TCA296000R1369	2/15
AR13/M16/A/BL	7TCA296000R1392	2/48
AR13/M16/C90/BL	7TCA296000R2670	2/48
AR13/PG9/A/BL	7TCA296000R1393	2/48
AR13X3/T/BL	7TCA296000R1394	2/49

## Appendix

### Part number index

Part no.	GID no.	Page
AR16/M16/A/BL	7TCA296000R1396	2/48
AR16/M16/C90/BL	7TCA296000R1399	2/48
AR16/M20/A/BL	7TCA296000R1405	2/48
AR16/M20/C90/BL	7TCA296000R1406	2/48
AR16/PG11/A/BL	7TCA296000R1408	2/48
AR16/PG13/A/BL	7TCA296000R1416	2/48
AR16X3/T/BL	7TCA296000R1419	2/49
AR21/M20/A/BL	7TCA296000R1420	2/48
AR21/M20/C90/BL	7TCA296000R1422	2/48
AR21/PG16/A/BL	7TCA296000R1429	2/48
AR21X3/T/BL	7TCA296000R1433	2/49
AR28/M25/A/BL	7TCA296000R1437	2/48
AR28/M25/C90/BL	7TCA296000R1439	2/48
AR28/PG21/A/BL	7TCA296000R1446	2/48
AR28X3/T/BL	7TCA296000R1451	2/49
AR34/M32/A/BL	7TCA296000R1455	2/48
AR34/M32/C90/BL	7TCA296000R1457	2/48
AR34/PG29/A/BL	7TCA296000R1462	2/48
AR34X3/T/BL	7TCA296000R1468	2/49
AR42/M40/A/BL	7TCA296000R1470	2/48
AR42/M40/C90/BL	7TCA296000R1471	2/48
AR42/PG36/A/BL	7TCA296000R1472	2/48
AR54/M50/A/BL	7TCA296000R1475	2/48
AR54/M50/C90/BL	7TCA296000R1476	2/48
AR54/PG48/A/BL	7TCA296000R1477	2/48
ASC21/M20/A/BL	7TCA296000R1483	2/45
ASC21/M20/C90/BL	7TCA296000R1486	2/45
ASC21/PG16/A/BL	7TCA296000R1495	2/45
ASC21/PG16/C90/BL	7TCA296000R1497	2/45
ASC21X3/T/BL	7TCA296000R1498	2/46
ASC28/M25/A/BL	7TCA296000R1502	2/45
ASC28/M25/C90/BL	7TCA296000R1504	2/45
ASC28/PG21/A/BL	7TCA296000R1514	2/45
ASC28/PG21/C90/BL	7TCA296000R1517	2/45
ASC28X3/T/BL	7TCA296000R1519	2/46
ASC34/FL/90/BL	7TCA296000R1521	2/62
ASC34/M32/A/BL	7TCA296000R1522	2/45
ASC34/M32/C90/BL	7TCA296000R1525	2/45
ASC34/PG29/A/BL	7TCA296000R1535	2/45
ASC34/PG29/C90/BL	7TCA296000R1538	2/45
ASC34X3/T/BL	7TCA296000R1540	2/46
ASC42/FL/90/BL	7TCA296000R1542	2/62
ASC42/M40/A/BL	7TCA296000R1545	2/45
ASC42/M40/C90/BL	7TCA296000R1548	2/45
ASC42/PG36/A/BL	7TCA296000R1554	2/45
ASC42/PG36/C90/BL	7TCA296000R1557	2/45
ASC54/FL/90/BL	7TCA296000R1560	2/62
ASC54/M50/A/BL	7TCA296000R1562	2/45
ASC54/M50/C90/BL	7TCA296000R1565	2/45
ASC54/PG48/A/BL	7TCA296000R1571	2/45
ASC54/PG48/C90/BL	7TCA296000R1574	2/45

Part no.	GID no.	Page
ASF10/M16/A/BL	7TCA296000R1576	2/45
ASF10/M16/C90/BL	7TCA296000R1577	2/45
ASF10/PG9/A/BL	7TCA296000R1578	2/45
ASF10/PG9/C90/BL	7TCA296000R1580	2/45
ASF10X3/T/BL	7TCA296000R1581	2/46
ASF13/FL/C90/BL	7TCA296000R1583	2/46
ASF13/M16/A/BL	7TCA296000R1586	2/45
ASF13/M16/C90/BL	7TCA296000R1589	2/45
ASF13/PG9/A/BL	7TCA296000R1598	2/45
ASF13/PG9/C90/BL	7TCA296000R1601	2/45
ASF13X3/T/BL	7TCA296000R1603	2/46
ASF16/FL/C90/BL	7TCA296000R1606	2/46
ASF16/M16/A/BL	7TCA296000R1608	2/45
ASF16/M16/C90/BL	7TCA296000R1612	2/45
ASF16/M20/A/BL	7TCA296000R1621	2/45
ASF16/M20/A/BL	7TCA296000R1621	2/45
ASF16/M20/C90/BL	7TCA296000R1624	2/45
ASF16/PG11/A/BL	7TCA296000R1630	2/45
ASF16/PG11/C90/BL	7TCA296000R1635	2/45
ASF16/PG13/A/BL	7TCA296000R1643	2/45
ASF16/PG13/C90/BL	7TCA296000R1647	2/45
ASF16X3/T/BL	7TCA296000R1650	2/46
ASF21/M20/A/BL	7TCA296000R1659	2/45
ASF21/M20/C90/BL	7TCA296000R1664	2/45
ASF21/PG16/A/BL	7TCA296000R1679	2/45
ASF21/PG16/A/BL	7TCA296000R1679	2/45
ASF21/PG16/C90/BL	7TCA296000R1684	2/45
ASF21X3/T/BL	7TCA296000R1687	2/46
ASF28/M25/A/BL	7TCA296000R1692	2/45
ASF28/M25/C90/BL	7TCA296000R1694	2/45
ASF28/PG21/A/BL	7TCA296000R1703	2/45
ASF28/PG21/C90/BL	7TCA296000R1706	2/45
ASF28X3/T/BL	7TCA296000R1709	2/46
ASF34/FL/90/BL	7TCA296000R1711	2/46
ASF34/M32/A/BL	7TCA296000R1714	2/45
ASF34/M32/C90/BL	7TCA296000R1717	2/45
ASF34/PG29/A/BL	7TCA296000R1727	2/45
ASF34/PG29/C90/BL	7TCA296000R1731	2/45
ASF34X3/T/BL	7TCA296000R1733	2/46
AT13/038/A/BLY	7TCA296170R0001	2/27
AT13/038/C90/BLY	7TCA296170R0005	2/28
AT13/038/SA/BLY	7TCA296170R0006	2/30
AT13/A/U/BLY	7TCA296170R0009	2/37
AT13/FL/C90/BLY	7TCA296170R0012	2/38
AT13/M16/45/BLY	7TCA296170R0016	2/29
AT13/M16/A/BLY	7TCA296170R0020	2/27
AT13/M16/C90/BLY	7TCA296170R0026	2/28
AT13/M16/CSF90/BLB	7TCA296170R0034	2/32
AT13/M16/S45/BLY	7TCA296170R0035	2/31
AT13/M16/SA/BLY	7TCA296170R0037	2/30
AT13/M16/SF45/BLB	7TCA296170R0038	2/32

## Appendix

### Part number index

Part no.	GID no.	Page
AT13/M16/SFA/BLY	7TCA296170R0040	2/31
AT13/PF038/A/BLY	7TCA296170R0043	2/27
AT13/PF038/C90/BLY	7TCA296170R0047	2/28
AT13/U063/SFA/BLY	7TCA296170R0049	2/34
AT13/U075/CSF90/BLY	7TCA296170R0050	2/35
AT13/U075/SFA/BLY	7TCA296170R0051	2/34
AT13/U088/CSF90/BLY	7TCA296170R0053	2/35
AT13/U088/SFA/BLY	7TCA296170R0055	2/34
AT16/038/A/BLY	7TCA296170R0061	2/27
AT16/038/C90/BLB	7TCA296170R0064	2/28
AT16/038/S45/BLY	7TCA296000R2667	2/31
AT16/038/SA/BLY	7TCA296170R0066	2/30
AT16/038/SFA/BLY	7TCA296170R0069	2/31
AT16/050/A/BLY	7TCA296170R0072	2/27
AT16/050/C90/BLY	7TCA296170R0078	2/28
AT16/050/S45/BLY	7TCA296170R0081	2/31
AT16/050/SA/BLY	7TCA296170R0082	2/30
AT16/050/SFA/BLY	7TCA296170R0083	2/31
AT16/A/U/BLY	7TCA296170R0085	2/37
AT16/FL/45/BLY	7TCA296170R0089	2/38
AT16/FL/C90/BLY	7TCA296170R0097	2/38
AT16/M16/45/BLY	7TCA296170R0100	2/29
AT16/M16/A/BLY	7TCA296170R0105	2/27
AT16/M16/C90/BLY	7TCA296170R0112	2/28
AT16/M16/CSF90/BLY	7TCA296170R0122	2/32
AT16/M16/CSF90J/BLY	-	2/33
AT16/M16/S45/BLY	7TCA296170R0125	2/31
AT16/M16/SA/BLY	7TCA296170R0129	2/30
AT16/M16/SF45/BLY	7TCA296170R0134	2/32
AT16/M16/SF45J/BLY	7TCA296170R0135	2/33
AT16/M16/SFA/BLY	7TCA296170R0137	2/31
AT16/M16/SFAJ/BLY	7TCA296170R0140	2/33
AT16/M20/45/BLY	7TCA296170R0142	2/29
AT16/M20/A/BLY	7TCA296170R0144	2/27
AT16/M20/C90/BLY	7TCA296170R0152	2/28
AT16/PF038/A/BLY	7TCA296170R0162	2/27
AT16/PF050/A/BLY	7TCA296170R0166	2/27
AT16/PF050/C90/BLY	7TCA296170R0170	2/28
AT16/U063/CSF90/BLY	7TCA296170R0179	2/35
AT16/U063/SFA/BLY	7TCA296170R0180	2/34
AT16/U075/CSF90/BLY	7TCA296170R0181	2/35
AT16/U075/SFA/BLY	7TCA296170R0182	2/34
AT16/U088/CSF90/BLY	7TCA296170R0184	2/35
AT16/U088/SFA/BLY	7TCA296170R0186	2/34
AT16/U100/CSF90/BLY	7TCA296170R0188	2/35
AT16/U100/SFA/BLY	7TCA296170R0190	2/34
AT16/U119/SFA/BLY	7TCA296170R0191	2/34
AT21/050/A/BLY	7TCA296170R0200	2/27
AT21/050/C90/BLY	7TCA296170R0206	2/28
AT21/A/U/BLY	7TCA296170R0225	2/37
AT21/FL/45/BLY	7TCA296170R0229	2/38

Part no.	GID no.	Page
AT21/FL/A/BLY	7TCA296170R0233	2/37
AT21/FL/C90/BLY	7TCA296170R0238	2/38
AT21/M20/45/BLY	7TCA296170R0242	2/29
AT21/M20/A/BLY	7TCA296170R0248	2/27
AT21/M20/C90/BLY	7TCA296170R0256	2/28
AT21/M20/CSF90/BLY	7TCA296170R0268	2/32
AT21/M20/CSF90J/BLY	7TCA296170R0269	2/33
AT21/M20/S45/BLY	7TCA296170R0272	2/31
AT21/M20/SA/BLY	7TCA296170R0275	2/30
AT21/M20/SF45/BLY	7TCA296170R0281	2/32
AT21/M20/SF45J/BLY	-	2/33
AT21/M20/SFA/BLY	7TCA296170R0284	2/31
AT21/M20/SFAJ/BLY	7TCA296170R0287	2/33
AT21/M25/A/BLY	7TCA296170R0291	2/27
AT21/PF050/A/BLY	7TCA296170R0300	2/27
AT21/PF050/C90/BLY	7TCA296170R0304	2/28
AT21/U075/CSF90/BLY	7TCA296170R0314	2/35
AT21/U075/SFA/BLY	7TCA296170R0316	2/34
AT21/U088/SFA/BLY	7TCA296170R0319	2/34
AT21/U094/CSF90/BLY	7TCA296170R0321	2/35
AT21/U094/SFA/BLY	7TCA296170R0324	2/34
AT21/U100/CSF90/BLY	7TCA296170R0326	2/35
AT21/U100/SF45/BLY	7TCA296170R0327	2/36
AT21/U100/SFA/BLY	7TCA296170R0329	2/34
AT21/U113/SF45/BLY	7TCA296170R0330	2/36
AT21/U119/CSF90/BLY	7TCA296170R0332	2/35
AT21/U119/SFA/BLY	7TCA296170R0335	2/34
AT21/U138/CSF90/BLY	7TCA296170R0338	2/35
AT21/U138/SFA/BLY	7TCA296170R0339	2/34
AT21/U144/CSF90/BLY	7TCA296170R0341	2/35
AT21/U144/SFA/BLY	7TCA296170R0343	2/34
AT28/075/A/BLY	7TCA296170R0352	2/27
AT28/075/C90/BLY	7TCA296170R0357	2/28
AT28/075/S45/BLY	7TCA296170R0365	2/31
AT28/075/SA/BLY	7TCA296170R0368	2/30
AT28/075/SFA/BLY	7TCA296170R0371	2/31
AT28/A/U/BLY	7TCA296170R0374	2/37
AT28/FL/45/BLY	7TCA296170R0377	2/38
AT28/FL/A/BLY	7TCA296170R0381	2/37
AT28/FL/C90/BLY	7TCA296170R0385	2/38
AT28/M25/45/BLY	7TCA296170R0389	2/29
AT28/M25/A/BLY	7TCA296170R0396	2/27
AT28/M25/C90/BLY	7TCA296170R0404	2/28
AT28/M25/CSF90/BLY	7TCA296170R0418	2/32
AT28/M25/CSF90J/BLY	-	2/33
AT28/M25/S45/BLY	7TCA296170R0421	2/31
AT28/M25/SA/BLY	7TCA296170R0425	2/30
AT28/M25/SF45/BLY	7TCA296170R0430	2/32
AT28/M25/SF45J/BLY	7TCA296170R0432	2/33
AT28/M25/SFA/BLY	7TCA296170R0434	2/31
AT28/M25/SFAJ/BLY	-	2/33

## Appendix

### Part number index

Part no.	GID no.	Page
AT28/M32/A/BLY	7TCA296170R0439	2/27
AT28/PF075/A/BLY	7TCA296170R0450	2/27
AT28/PF075/C90/BLY	7TCA296170R0452	2/28
AT28/U100/CSF90/BLY	7TCA296170R0462	2/35
AT28/U100/SFA/BLY	7TCA296170R0463	2/34
AT28/U119/SF45/BLY	7TCA296170R0465	2/36
AT28/U119/SFA/BLY	7TCA296170R0467	2/34
AT28/U138/CSF90/BLY	7TCA296170R0468	2/35
AT28/U138/SF45/BLY	7TCA296170R0469	2/36
AT28/U138/SFA/BLY	7TCA296170R0470	2/34
AT28/U144/CSF90/BLY	7TCA296170R0472	2/35
AT28/PF075/A/BLY	7TCA296170R0450	2/27
AT28/PF075/C90/BLY	7TCA296170R0452	2/28
AT28/U100/CSF90/BLY	7TCA296170R0462	2/35
AT28/U100/SFA/BLY	7TCA296170R0463	2/34
AT28/U119/SF45/BLY	7TCA296170R0465	2/36
AT28/U119/SFA/BLY	7TCA296170R0467	2/34
AT28/U138/CSF90/BLY	7TCA296170R0468	2/35
AT28/U138/SF45/BLY	7TCA296170R0469	2/36
AT28/U138/SFA/BLY	7TCA296170R0470	2/34
AT28/U144/CSF90/BLY	7TCA296170R0472	2/35
AT28/U144/SF45/BLY	7TCA296170R0473	2/36
AT28/U144/SFA/BLY	7TCA296170R0475	2/34
AT28/U175/CSF90/BLY	7TCA296170R0476	2/35
AT34/100/45/BLY	7TCA296170R0483	2/29
AT34/100/A/BLY	7TCA296170R0486	2/27
AT34/100/C90/BLY	7TCA296170R0491	2/28
AT34/100/S45/BLY	7TCA296170R0496	2/31
AT34/100/SA/BLY	7TCA296170R0498	2/30
AT34/100/SF45/BLY	7TCA296170R0501	2/32
AT34/100/SFA/BLY	7TCA296170R0503	2/31
AT34/A/U/BLY	7TCA296170R0505	2/37
AT34/M32/65/BLY	7TCA296170R0509	2/29
AT34/M32/A/BLY	7TCA296170R0514	2/27
AT34/M32/C90/BLY	7TCA296170R0522	2/28
AT34/M32/CSF90/BLY	7TCA296170R0532	2/32
AT34/M32/CSF90J/BLY	7TCA296170R0533	2/33
AT34/M32/S45/BLY	7TCA296170R0534	2/31
AT34/M32/SA/BLY	7TCA296170R0536	2/30
AT34/M32/SF45/BLY	7TCA296170R0542	2/32
AT34/M32/SF45J/BLY	-	2/33
AT34/M32/SFA/BLY	7TCA296170R0545	2/31
AT34/M32/SFAJ/BLY	7TCA296170R0548	2/33
AT34/M40/A/BLY	7TCA296170R0551	2/27
AT34/PF100/A/BLY	7TCA296170R0561	2/27
AT34/PF100/C90/BLY	7TCA296170R0565	2/28
AT34/U100/SFA/BLY	7TCA296170R0860	2/34
AT34/U119/SFA/BLY	7TCA296170R0577	2/34
AT34/U144/CSF90/BLY	7TCA296170R0579	2/35
AT34/U144/SFA/BLY	7TCA296170R0582	2/34
AT42/125/45/BLY	7TCA296170R0865	2/29

Part no.	GID no.	Page
AT42/125/A/BLY	7TCA296170R0588	2/27
AT42/125/C90/BLY	7TCA296170R0593	2/28
AT42/125/CSF90/BLY	7TCA296170R0597	2/32
AT42/125/S45/BLY	7TCA296170R0599	2/31
AT42/125/SA/BLY	7TCA296170R0601	2/30
AT42/125/SFA/BLY	7TCA296170R0605	2/31
AT42/A/U/BLY	7TCA296170R0609	2/37
AT42/M40/45/BLY	7TCA296170R0613	2/29
AT42/M40/A/BLY	7TCA296170R0618	2/27
AT42/M40/C90/BLY	7TCA296170R0625	2/28
AT42/M40/CSF90/BLY	7TCA296170R0635	2/32
AT42/M40/CSF90J/BLY	7TCA296170R0636	2/33
AT42/M40/S45/BLY	7TCA296170R0638	2/31
AT42/M40/SA/BLY	7TCA296170R0640	2/30
AT42/M40/SF45/BLY	7TCA296170R0644	2/32
AT42/M40/SF45J/BLY	-	2/33
AT42/M40/SFA/BLY	7TCA296170R0647	2/31
AT42/M40/SFAJ/BLY	-	2/33
AT42/M50/A/BLY	7TCA296170R0653	2/27
AT42/PF125/A/BLY	7TCA296170R0660	2/27
AT42/PF125/C90/BLY	7TCA296170R0663	2/28
AT48/150/45/BLY	7TCA296170R0673	2/29
AT48/150/A/BLY	7TCA296170R0677	2/27
AT48/150/C90/BLY	7TCA296170R0681	2/28
AT48/150/SFA/BLY	7TCA296170R0684	2/31
AT48/A/U/BLY	7TCA296170R0686	2/37
AT48/PF150/45/BLY	7TCA296170R0706	2/29
AT48/PF150/A/BLY	7TCA296170R0710	2/27
AT48/PF150/C90/BLY	7TCA296170R0714	2/28
AT54/150/CS90/BLY	7TCA296170R0720	2/30
AT54/150/S45/BLY	7TCA296170R0722	2/31
AT54/200/C90/BLY	7TCA296170R0731	2/28
AT54/200/S45/BLY	7TCA296170R0738	2/31
AT54/200/SA/BLY	7TCA296170R0741	2/30
AT54/200/SFA/BLY	7TCA296170R0743	2/31
AT54/A/U/BLY	7TCA296170R0745	2/37
AT54/FL/45/BLY	7TCA296170R0748	2/38
AT54/M50/45/BLY	7TCA296170R0750	2/29
AT54/M50/A/BLY	7TCA296170R0754	2/27
AT54/M50/C90/BLY	7TCA296170R0758	2/28
AT54/M50/CSF90/BLY	7TCA296170R0763	2/32
AT54/M50/CSF90J/BLY	7TCA296170R0764	2/33
AT54/M50/S45/BLY	7TCA296170R0765	2/31
AT54/M50/SA/BLY	7TCA296170R0767	2/30
AT54/M50/SF45/BLY	7TCA296170R0769	2/32
AT54/M50/SF45J/BLY	-	2/33
AT54/M50/SFAJ/BLY	7TCA296170R0772	2/33
AT54/M63/A/BLY	7TCA296170R0774	2/27
AT54/M63/C90/BLY	7TCA296170R0779	2/28
AT54/M63/CSF90J/BLY	7TCA296170R0787	2/33
AT54/M63/S45/BLY	7TCA296170R0788	2/31

## Appendix

### Part number index

Part no.	GID no.	Page
AT54/M63/SA/BLY	7TCA296170R0790	2/30
AT54/M63/SF45J/BLY	7TCA296170R0792	2/33
AT54/M63/SFA/BLY	7TCA296170R0793	2/31
AT54/M63/SFAJ/BLY	7TCA296170R0794	2/33
AT54/PF200/A/BLY	7TCA296170R0796	2/27
AT54/PF200/C90/BLY	7TCA296170R0798	2/28
AT211316/T/BLY	7TCA296170R0882	2/39
AT211321/T/BLY	7TCA296170R0883	2/39
AT211613/T/BLY	7TCA296170R0884	2/39
AT212116/T/BLY	7TCA296170R0885	2/39
AT212121/T/BLY	7TCA296170R0348	2/39
AT212113/T/BLY	7TCA296170R0347	2/39
AT211616/T/BLY	7TCA296170R0346	2/39
AT212121/T/BLY	7TCA296170R0348	2/39
AT281321/T/BLY	7TCA296170R0886	2/39
AT281328/T/BLY	7TCA296170R0887	2/39
AT281621/T/BLY	7TCA296170R0888	2/39
AT281628/T/BLY	7TCA296170R0480	2/39
AT282121/T/BLY	7TCA296170R0889	2/39
AT282128/T/BLY	7TCA296170R0890	2/39
AT282828/T/BLY	7TCA296170R0873	2/39
AT341634/T/BLY	7TCA296170R0891	2/39
AT342128/T/BLY	7TCA296170R0892	2/39
AT342134/T/BLY	7TCA296170R0893	2/39
AT343434/T/BLB	7TCA296170R0918	2/39
AWB13	7TCA296050R0071	2/47, 2/49
AWB16	7TCA296050R0072	2/47, 2/49
AWB21	7TCA296050R0073	2/47, 2/49
AWB28	7TCA296050R0074	2/47, 2/49
AWB34	7TCA296050R0075	2/47, 2/49
B/050/45	7TCA296030R0000	3/29
B/050/90	7TCA296030R0001	3/29
B/050-M16/TC	7TCA296050R0077	3/30
B/050-M20/TC	7TCA296050R0078	3/30
B/075/90	7TCA296030R0003	3/29
B/131U-M20/TC	7TCA296050R0096	3/30
B/M16/45	7TCA296030R0006	3/19
B/M16/90	7TCA296030R0007	3/29
B/M16/C	7TCA296050R0110	3/29
B/M16-M12/R	7TCA296050R0103	3/30
B/M16-M20/E	7TCA296050R0104	3/30
B/M16-PG11/TC	7TCA296050R0107	3/30
B/M16-PG7/TC	7TCA296050R0108	3/30
B/M16-PG9/TC	7TCA296050R0109	3/30
B/M20/45	7TCA296030R0009	3/19
B/M20/90	7TCA296030R0011	3/29
B/M20/C	7TCA296050R0132	3/29
B/M20-050/TC	7TCA296050R0111	3/30
B/M20-M12/R	7TCA296050R0113	3/30
B/M20-M16/R	7TCA296050R0114	3/30
B/M20-M25/E	7TCA296050R0118	3/30

Part no.	GID no.	Page
B/M20-PG11/TC	7TCA296050R0121	3/30
B/M20-PG13/TC	7TCA296050R0124	3/30
B/M20-PG16/TC	7TCA296050R0126	3/30
B/M20-PG7/TC	7TCA296050R0130	3/30
B/M20-PG9/TC	7TCA296050R0131	3/30
B/M25/45	7TCA296030R0013	3/19
B/M25/90	7TCA296030R0014	3/29
B/M25/C	7TCA296050R0142	3/29
B/M25-M20/R	7TCA296050R0135	3/29
B/M25-M32/E	7TCA296050R0138	3/29
B/M25-PG21/TC	7TCA296050R0140	3/30
B/M32/65	7TCA296030R0015	3/19
B/M32/90	7TCA296030R0016	3/29
B/M32/C	7TCA296050R0147	3/29
B/M32-M25/R	7TCA296050R0145	3/29
B/M32-PG29/TC	7TCA296050R0146	3/30
B/M40/C	7TCA296050R0149	3/29
B/M40-M32/R	7TCA296050R0148	3/29
B/M50/C	7TCA296050R0151	3/29
B/M50-M40/R	7TCA296050R0150	3/29
B/M63/C	7TCA296050R0152	3/29
B/M75/C	7TCA296050R0153	3/29
B/PG11/90	7TCA296030R0019	3/29
B/PG11-050/TC	7TCA296050R0154	3/31
B/PG11-M16/TC	7TCA296050R0155	3/30
B/PG11-M20/TC	7TCA296050R0159	3/30
B/PG11-PG13/E	7TCA296050R0162	3/30
B/PG11-PG16/E	7TCA296050R0165	3/30
B/PG11-PG7/R	7TCA296050R0166	3/30
B/PG11-PG9/R	7TCA296050R0167	3/30
B/PG13/90	7TCA296030R0021	3/29
B/PG13-M16/TC	7TCA296050R0168	3/30
B/PG13-M20/TC	7TCA296050R0170	3/30
B/PG13-PG11/R	7TCA296050R0173	3/30
B/PG13-PG16/E	7TCA296050R0174	3/30
B/PG13-PG21/E	7TCA296050R0175	3/30
B/PG13-PG9/R	7TCA296050R0177	3/30
B/PG16/90	7TCA296030R0023	3/29
B/PG16-M16/TC	7TCA296050R0179	3/30
B/PG16-M20/TC	7TCA296050R0180	3/30
B/PG16-M25/TC	7TCA296050R0184	3/30
B/PG16-PG11/R	7TCA296050R0185	3/30
B/PG16-PG13/R	7TCA296050R0186	3/30
B/PG16-PG21/E	7TCA296050R0189	3/30
B/PG21/45	7TCA296030R0024	3/29
B/PG21/90	7TCA296030R0025	3/29
B/PG21-M16/TC	7TCA296050R0195	3/30
B/PG21-M20/TC	7TCA296050R0196	3/30
B/PG21-M25/TC	7TCA296050R0199	3/30
B/PG21-M32/TC	7TCA296050R0202	3/30
B/PG21-PG11/R	7TCA296050R0203	3/30

## Appendix

### Part number index

Part no.	GID no.	Page	Part no.	GID no.	Page
B/PG21-PG16/R	7TCA296050R0205	3/30	ESM25-14B	7TCA296250R0053	6/5
B/PG21-PG29/E	7TCA296050R0208	3/30	ESM32-15B	7TCA296250R0067	6/5
B/PG29-M20/TC	7TCA296050R0209	3/30	GZ11	7TCA296050R0262	2/58
B/PG29-M25/TC	7TCA296050R0210	3/30	GZ13	7TCA296050R0263	2/58
B/PG29-M32/TC	7TCA296050R0211	3/30	GZ21	7TCA296050R0265	2/58
B/PG29-M40/TC	7TCA296050R0214	3/30	GZ29	7TCA296050R0266	2/58
B/PG29-PG16/R	7TCA296050R0215	3/30	GZ36	7TCA296050R0267	2/58
B/PG29-PG21/R	7TCA296050R0216	3/30	GZ9	7TCA296050R0268	2/58
B/PG29-PG36/E	7TCA296050R0219	3/31	KC16/M16/A/BL	7TCA296090R0001	2/51
B/PG36-M32/TC	7TCA296050R0220	3/30	KC16/M16/C90/BL	7TCA296090R0003	2/51
B/PG36-M40/TC	7TCA296050R0223	3/30	KC16/M20/A/BL	7TCA296090R0004	2/51
B/PG36-PG21/R	7TCA296050R0224	3/30	KC20/M20/A/BL	7TCA296090R0006	2/51
B/PG36-PG29/R	7TCA296050R0225	3/30	KC20/M20/C90/BL	7TCA296090R0007	2/51
B/PG42-PG29/R	7TCA296050R0230	3/30	KC25/M25/A/BL	7TCA296090R0010	2/51
B/PG42-PG36/R	7TCA296050R0231	3/31	KF16/M16/A/BL	7TCA296140R0013	2/50
B/PG48-PG42/R	7TCA296050R0235	3/31	KF20/M20/A/BL	7TCA296130R0000	2/50
B/PG7-M16/TC	7TCA296050R0237	3/30	KF25/M25/A/BL	7TCA296140R0023	2/50
B/PG7-M20/TC	7TCA296050R0239	3/30	KFL16/50M	7TCA296090R0020	2/50
B/PG7-PG9/E	7TCA296050R0240	3/30	KFL20/50M	7TCA296140R0028	2/50
B/PG9/90	7TCA296030R0026	3/29	KFL25/50M	7TCA296090R0025	2/50
B/PG9-M16/TC	7TCA296050R0241	3/30	KFM16/50M	7TCA296090R0026	2/50
B/PG9-M20/TC	7TCA296050R0243	3/30	KFM20/50M	7TCA296140R0030	2/50
B/PG9-PG11/E	7TCA296050R0245	3/30	KFM25/50M	7TCA296090R0027	2/50
B/PG9-PG13/E	7TCA296050R0246	3/30	KFS16/W/50M	7TCA296140R0035	2/50
B/PG9-PG7/R	7TCA296050R0247	3/30	KFS20/W/50M	7TCA296140R0038	2/50
CP-AF20A	7TCA296180R0006	4/2	KFS25/W/50M	7TCA296140R0040	2/50
CP-AF20BS	7TCA296180R0014	4/2	KWIKCUT	7TCA296050R0278	5/2
CP-AF20BS-PP	7TCA296180R0015	4/2	LFH-SP12/62M	7TCA296130R0003	3/10
CP-AF20SP-BS	7TCA296180R0022	4/2	LFH-SP16/50M	7TCA296130R0005	3/10
CP-AF25A	7TCA296180R0028	4/2	LFH-SP25/25M	7TCA296130R0011	3/10
CP-AF25BS	7TCA296180R0035	4/2	LFH-SP25/25M	7TCA296130R0011	3/10
CP-AF25BS-PP	7TCA296180R0036	4/2	LFH-SP32/25M	7TCA296130R0015	3/10
CPCM28/BL/50M	7TCA296000R1760	2/10	LFH-SP40/25M	7TCA296130R0018	3/10
CPCM34/BL/50M	7TCA296000R1761	2/10	LFH-SP50/10M	7TCA296130R0019	3/10
CPCM42/BL/50M	7TCA296000R1763	2/10	LFH-SP63/25M	7TCA296130R0022	3/10
CPFM13/BL/50M	7TCA296000R1765	2/10	LFH-SP75/10M	7TCA296130R0028	3/10
CPFM16/BL/50M	7TCA296000R1766	2/10	LFH-SPL16/25M	7TCA296030R0402	3/14
CPFM21/BL/50M	7TCA296000R1767	2/10	LFH-SPL16/10M	7TCA296030R0401	3/14
CP-KF20BS	7TCA296180R0042	4/2	LFH-SPL20/10M	7TCA296030R0403	3/14
CP-KF25BS	7TCA296180R0045	4/2	LFH-SPL20/25M	7TCA296030R0404	3/14
CUT-VICE	7TCA296050R0252	5/3	LFH-SPL25/10M	7TCA296030R0405	3/14
ECB13	7TCA296000R1786	2/58	LFH-SPL25/25M	7TCA296030R0406	3/14
ECB16	7TCA296000R1789	2/58	LFH-SPL32/10M	7TCA296030R0407	3/14
ECB21	7TCA296000R1792	2/58	LFH-SPL32/25M	7TCA296030R0408	3/14
ECB28	7TCA296000R1795	2/58	LFH-SPL40/10M	7TCA296030R0409	3/14
ECB34	7TCA296000R1798	2/58	LFH-SPL50/10M	7TCA296030R0410	3/14
ECB42	7TCA296000R1801	2/58	LFH-SPL63/10M	7TCA296030R0411	3/14
ECB54	7TCA296000R1804	2/58	LFH-SPSS12	-	3/25
ESM12-10B	7TCA296250R0004	6/5	LFH-SPSS16/25M	7TCA296100R0231	3/25
ESM16-11B	7TCA296250R0013	6/5	LFH-SPSS20/25M	7TCA296100R0020	3/25
ESM20-12B	7TCA296250R0027	6/5	LFH-SPSS25/25M	7TCA296100R0021	3/25

## Appendix

### Part number index

Part no.	GID no.	Page
LFH-SPSS32	-	3/25
LFH-SPSS40	-	3/25
LFH-SPSS50/10M	7TCA296040R0012	3/25
LNB/M12	7TCA296050R0288	3/28
LNB/M16	7TCA296050R0290	3/28
LNB/M20	7TCA296050R0293	3/28
LNB/M25	7TCA296050R0299	3/28
LNB/M32	7TCA296050R0304	3/28
LNB/M40	7TCA296050R0307	3/28
LNB/M50	7TCA296050R0309	3/28
LNB/M63	7TCA296050R0311	3/28
LNB/M75	7TCA296050R0313	3/28
LNB/PG11	7TCA296050R0316	3/28
LNB/PG13	7TCA296050R0317	3/28
LNB/PG16	7TCA296050R0318	3/28
LNB/PG21	7TCA296050R0319	3/28
LNB/PG29	7TCA296050R0320	3/28
LNB/PG36	7TCA296050R0321	3/28
LNB/PG42	7TCA296050R0323	3/28
LNB/PG48	7TCA296050R0324	3/28
LNB/PG7	7TCA296050R0326	3/28
LNB/PG9	7TCA296050R0327	3/28
LNPB/M12	7TCA296000R1854	2/57
LNPB/M16	7TCA296000R1855	2/57
LNPB/M20	7TCA296000R1856	2/57
LNPB/M25	7TCA296000R1857	2/57
LNPB/M32	7TCA296000R1858	2/57
LNPB/M40	7TCA296000R1859	2/57
LNPB/M50	7TCA296000R1860	2/57
LNPB/M63	7TCA296050R0329	2/57
LNPB/PG11	7TCA296050R0330	2/57
LNPB/PG13	7TCA296050R0331	2/57
LNPB/PG16	7TCA296050R0332	2/57
LNPB/PG21	7TCA296050R0333	2/57
LNPB/PG29	7TCA296050R0334	2/57
LNPB/PG36	7TCA296050R0335	2/57
LNPB/PG48	7TCA296050R0337	2/57
LNPB/PG7	7TCA296050R0338	2/57
LNPB/PG9	7TCA296050R0339	2/57
LNPG/M16	7TCA296000R1861	2/57
LNPG/M20	7TCA296000R1862	2/57
LNPG/M25	7TCA296000R1863	2/57
LNPG/M32	7TCA296000R1864	2/57
LNPG/M40	7TCA296000R1865	2/57
LNPG/M50	7TCA296220R0535	2/57
LNPG/PG11	7TCA296050R0341	2/57
LNPG/PG13	7TCA296050R0342	2/57
LNPG/PG16	7TCA296050R0343	2/57
PACS54/BL/50M	7TCA296000R2039	2/7
PACS80/BL/10M	7TCA296000R2047	2/7
PADL17/BL/50M	7TCA296000R2057	2/11

Part no.	GID no.	Page
PADL21/BL/50M	7TCA296000R2744	2/11
PADL28/BL/50M	7TCA296000R2063	2/11
PADL34/BL/50M	7TCA296000R2066	2/11
PADL42/BL/25M	7TCA296000R2068	2/11
PAFH13/BL/50M	7TCA296000R2072	2/7
PAFH16/BL/50M	7TCA296000R2077	2/7
PAFL13/BL/50M	7TCA296000R2093	2/6
PAFL13/BL/50M	7TCA296000R2093	2/6
PAFL13-S/BL/50M	7TCA296000R2088	2/6
PAFL16/BL/50M	7TCA296000R2107	2/6
PAFL16/BL/50M	7TCA296000R2107	2/6
PAFL16-S/BL/50M	7TCA296000R2102	2/6
PAFL21/BL/50M	7TCA296000R2125	2/6
PAFL21/BL/50M	7TCA296000R2125	2/6
PAFL21-S/BL/50M	7TCA296000R2120	2/6
PAFS10/BL/50M	7TCA296000R2143	2/7
PAFS13/BL/50M	7TCA296000R2155	2/7
PAFS16/BL/50M	7TCA296000R2176	2/7
PAFS21/BL/50M	7TCA296000R2207	2/7
PAFS28/BL/50M	7TCA296000R2234	2/7
PAFS34/BL/50M	7TCA296000R2251	2/7
PBC28/M25/A	7TCA296100R0024	2/65
PBC28/M25/B	7TCA296100R0025	2/65
PBC34/M32/A	7TCA296100R0030	2/65
PBC34/M32/B	7TCA296100R0031	2/65
PBC42/M40/A	7TCA296100R0036	2/65
PBC42/M40/B	7TCA296100R0037	2/65
PBC54/M50/A	7TCA296100R0039	2/65
PBC54/M50/B	7TCA296100R0040	2/65
PBF16/M16/A	7TCA296100R0044	2/65
PBF16/M16/B	7TCA296100R0045	2/65
PBF21/M20/A	7TCA296100R0051	2/65
PBF21/M20/B	7TCA296100R0052	2/65
PCC28/M25/A	7TCA296000R2695	2/41
PCC28/M25S/A	7TCA296000R2700	2/41
PCC28/M25/CS90	-	2/42
PCC28/M25S/CS90	-	2/42
PCC28/M25/CS90/J	-	2/43
PCC28/M25/S45	-	2/44
PCC28/M25S/S45	-	2/44
PCC28/M25/S45/J	-	2/44
PCC28/M25/S45/JLL	-	2/43, 2/44
PCC28/M25/S45/JRL	-	2/43, 2/44
PCC34/M32/A	7TCA296000R2696	2/41
PCC34/M32S/A	7TCA296000R2701	2/41
PCC34/M32/CS90	-	2/42
PCC34/M32S/CS90	-	2/42
PCC34/M32/CS90/J	-	2/43
PCC34/M32/S45	-	2/44
PCC34/M32S/S45	-	2/44
PCC34/M32/S45/J	-	2/44

## Appendix

### Part number index

Part no.	GID no.	Page
PCC34/M32/S45/JLL	-	2/43, 2/44
PCC34/M32/S45/JRL	-	2/43, 2/44
PCC42/M40/A	7TCA296000R2697	2/41
PCC42/M40S/A	7TCA296000R2702	2/41
PCC42/M40/CS90	-	2/42
PCC42/M40S/CS90	-	2/42
PCC42/M40/CS90/J	-	2/43
PCC42/M40/S45	-	2/44
PCC42/M40S/S45	-	2/44
PCC42/M40/S45/J	-	2/44
PCC42/M40/S45/JLL	-	2/43, 2/44
PCC42/M40/S45/JRL	-	2/43, 2/44
PCC54/M50/A	7TCA296000R2698	2/41
PCC54/M50S/A	7TCA296000R2703	2/41
PCC54/M50/CS90	-	2/42
PCC54/M50S/CS90	-	2/42
PCC54/M50/CS90/J	-	2/43
PCC54/M50/S45	-	2/44
PCC54/M50S/S45	-	2/44
PCC54/M50/S45/J	-	2/44
PCC54/M50/S45/JLL	-	2/43, 2/44
PCC54/M50/S45/JRL	-	2/43, 2/44
PCF13/M16/A	7TCA296000R2692	2/42
PCF13/M16S/A	7TCA296000R2699	2/42
PCF13/M16/CS90	-	2/43
PCF13/M16S/CS90	-	2/43
PCF13/M16/CS90/J	-	2/43
PCF13/M16/S45	-	2/44
PCF13/M16S/S45	-	2/44
PCF13/M16/S45/J	-	2/44
PCF13/M16/S45/JRL	-	2/43, 2/44
PCF16/M16/A	7TCA296000R2693	2/42
PCF16/M16S/A	7TCA296170R0903	2/42
PCF16/M16/CS90	-	2/43
PCF16/M16S/CS90	-	2/43
PCF16/M16/CS90/J	-	2/43
PCF16/M16/S45	-	2/44
PCF16/M16/S45/J	-	2/44
PCF16/M16S/S45	-	2/44
PCF16/M16/S45/JRL	-	2/43, 2/44
PCF21/M20/A	7TCA296000R2694	2/42
PCF21/M20S/A	7TCA296010R0197	2/42
PCF21/M20/CS90	-	2/43
PCF21/M20S/CS90	-	2/43
PCF21/M20/CS90/J	-	2/43
PCF21/M20/S45	-	2/44
PCF21/M20/S45/J	-	2/44
PCF21/M20S/S45	-	2/44
PCF21/M20/S45/JLL	-	2/43, 2/44
PCF21/M20/S45/JRL	-	2/43, 2/44
PCLIP/10	7TCA296050R0389	3/28

Part no.	GID no.	Page
PCLIP/12	7TCA296050R0392	3/28
PCLIP/16	7TCA296050R0395	3/28
PCLIP/16SS	7TCA296050R0540	3/28
PCLIP/20	7TCA296050R0398	3/28
PCLIP/20SS	7TCA296050R0541	3/28
PCLIP/25	7TCA296050R0401	3/28
PCLIP/25SS	7TCA296050R0542	3/28
PCLIP/32	7TCA296050R0404	3/28
PCLIP/40	7TCA296050R0407	3/28
PCLIP/50	7TCA296050R0411	3/28
PCLIP/63	7TCA296050R0414	3/28
PCLIP/75	7TCA296050R0416	3/28
PFCH21/BL/50M	7TCA296000R2269	2/8
PFCH28/BL/50M	7TCA296000R2270	2/8
PFCH34/BL/50M	7TCA296000R2272	2/8
PFCS28/BL/50M	7TCA296000R2275	2/8
PFCS34/BL/50M	7TCA296000R2277	2/8
PFCS42/BL/50M	7TCA296000R2279	2/8
PFCS54/BL/50M	7TCA296000R2281	2/8
PFFH13/BL/50M	7TCA296000R2282	2/8
PFFH16/BL/50M	7TCA296000R2283	2/8
PFFS10/BL/50M	7TCA296000R2284	2/8
PFFS13/BL/50M	7TCA296000R2285	2/8
PFFS16/BL/50M	7TCA296000R2286	2/8
PFFS21/BL/50M	7TCA296000R2287	2/8
PICH21/BL/50M	7TCA296000R2300	2/9
PICH28/BL/50M	7TCA296000R2308	2/9
PICH34/BL/50M	7TCA296000R2313	2/9
PICS106/BL/10M	7TCA296000R2324	2/9
PICS28/BL/50M	7TCA296000R2327	2/9
PICS34/BL/50M	7TCA296000R2341	2/9
PICS42/BL/50M	7TCA296000R2355	2/9
PICS80/BL/10M	7TCA296000R2368	2/9
PIFH16/BL/50M	7TCA296000R2381	2/9
PIFS10/BL/50M	7TCA296000R2389	2/9
PIFS13/BL/50M	7TCA296000R2396	2/9
PIFS16/BL/50M	7TCA296000R2404	2/9
PIFS21/BL/50M	7TCA296000R2411	2/9
PK13/M16/A	7TCA296100R0077	2/62
PK16/M16/A	7TCA296100R0078	2/62
PK21/M20/A	7TCA296100R0079	2/62
PK28/M25/A	7TCA296100R0080	2/62
PK34/M32/A	7TCA296100R0081	2/62
PKCS28/BL/25M	7TCA296100R0082	2/62
PKCS34/BL/50M	7TCA296100R0085	2/62
PKFS13/BL/50M	7TCA296100R0095	2/62
PKFS16/BL/50M	7TCA296100R0097	2/62
PKFS21/BL/50M	7TCA296100R0101	2/62
PKFSSS13/BL/25M	7TCA296100R0102	2/63
PPFM13/BL/50M	7TCA296000R2441	2/53
PPFM16/BL/50M	7TCA296000R2447	2/53

## Appendix

### Part number index

Part no.	GID no.	Page
PPFM21/BL/50M	7TCA296000R2453	2/53
PPFM28/BL/50M	7TCA296000R2461	2/53
PPFM34/BL/50M	7TCA296000R2465	2/53
PRCS21/BL/50M	7TCA296000R2472	2/10
PRCS28/BL/50M	7TCA296000R2476	2/10
PRCS34/BL/50M	7TCA296000R2483	2/10
PRCS42/BL/25M	7TCA296000R2488	2/10
PRCS54/BL/25M	7TCA296000R2491	2/10
PRCSSS28/BL/25M	7TCA296100R0117	2/62
PRCSSS34/BL/25M	7TCA296100R0122	2/62
PRCSTC28/BL/50M	7TCA296100R0129	2/62
PRFS13/BL/50M	7TCA296000R2498	2/10
PRFS16/BL/50M	7TCA296000R2503	2/10
PRFS21/BL/50M	7TCA296000R2507	2/10
PRFSSS16/BL/50M	7TCA296100R0137	2/64
PRFSSS21/BL/25M	7TCA296100R0138	2/64
PRFSTC16/BL/50M	7TCA296100R0140	2/64
PRFSTC21/BL/50M	7TCA296100R0142	2/64
PSA16/M12	7TCA296050R0418	3/28
PSA16/M18	7TCA296050R0419	3/28
PSA16/M30	7TCA296050R0420	3/28
RF12/BL/30M	7TCA296150R0000	2/54
RF16/BL/30M	7TCA296150R0001	2/54
RF16/M16/A/BL	7TCA296060R0048	2/56
RF16/M20/A/BL	7TCA296060R0050	2/56
RF20/GR/30M	7TCA296060R0063	2/54
RF20/M20/A/BL	7TCA296060R0065	2/56
RF20/M20/C90/BL	7TCA296060R0066	2/56
RF25/BL/30M	7TCA296060R0073	2/54
RF25/M25/A/BL	7TCA296060R0075	2/56
RF25/M25/C90/BL	7TCA296060R0076	2/56
RF32/BL/30M	7TCA296060R0083	2/54
RF32/M32/A/BL	7TCA296060R0085	2/56
RF32/M32/C90/BL	7TCA296060R0086	2/56
RK13-10	7TCA296000R2510	2/47
RK16-10	7TCA296000R2512	2/47
RK16-13	7TCA296000R2513	2/47
RK21-10	7TCA296000R2515	2/47
RK21-13	7TCA296050R0429	2/47
RK21-16	7TCA296050R0430	2/47
RK28-13	7TCA296000R2517	2/47
RK28-16	7TCA296050R0432	2/47
RK28-21	7TCA296000R2519	2/47
RK34-21	7TCA296000R2520	2/47
RK34-28	7TCA296000R2521	2/47
ROTOCUT	7TCA296050R0437	5/3
S10/25M	7TCA296010R0007	3/6
S10/9/C	7TCA296010R0010	3/8
S10/M12/A	7TCA296010R0013	3/7
S10/M12/B	7TCA296010R0014	3/7
S10/PG7/A	7TCA296010R0015	3/7

Part no.	GID no.	Page
S10/PG7/B	7TCA296010R0016	3/7
S12/12/C	7TCA296010R0021	3/8
S12/25M	7TCA296010R0022	3/6
S12/M16/A	7TCA296010R0026	3/7
S12/M16/B	7TCA296010R0027	3/7
S12/PG9/A	7TCA296010R0029	3/7
S12/PG9/B	7TCA296720R0000	3/7
S16/16/C	7TCA296010R0035	3/8
S16/50M	7TCA296010R0040	3/6
S16/M16/A	7TCA296010R0043	3/7
S16/M16/B	7TCA296010R0045	3/7
S16/M20/A	7TCA296010R0049	3/7
S16/M20/B	7TCA296010R0052	3/7
S16/PG11/A	7TCA296010R0054	3/7
S16/PG11/B	7TCA296010R0055	3/7
S20/20/C	7TCA296010R0062	3/8
S20/25M	7TCA296010R0063	3/6
S20/M20/A	7TCA296010R0070	3/7
S20/M20/B	7TCA296010R0074	3/7
S20/M20/F	7TCA296010R0078	3/8
S20/PG16/A	7TCA296010R0080	3/7
S20/PG16/B	7TCA296010R0081	3/7
S25/25/C	7TCA296010R0091	3/8
S25/25M	7TCA296010R0092	3/6
S25/M25/A	7TCA296010R0098	3/7
S25/M25/B	7TCA296010R0102	3/7
S25/M25/F	7TCA296010R0106	3/8
S25/PG21/A	7TCA296010R0107	3/7
S25/PG21/B	7TCA296010R0108	3/7
S32/32/C	7TCA296010R0120	3/8
S32/62M	7TCA296010R0121	3/6
S32/M32/A	7TCA296010R0123	3/7
S32/M32/B	7TCA296010R0127	3/7
S32/M32/F	7TCA296010R0130	3/8
S32/PG29/A	7TCA296010R0131	3/7
S32/PG29/B	7TCA296010R0132	3/7
S40/25M	7TCA296010R0140	3/6
S40/40/C	7TCA296010R0142	3/8
S40/M40/A	7TCA296010R0146	3/7
S40/M40/B	7TCA296010R0148	3/7
S40/PG36/A	7TCA296010R0150	3/7
S50/10M	7TCA296010R0154	3/6
S50/51/C	7TCA296010R0160	3/8
S50/M50/A	7TCA296010R0161	3/7
S50/M50/B	7TCA296010R0162	3/7
S63/61/C	7TCA296010R0173	3/8
S63/M63/A	7TCA296010R0174	3/7
S75/10M	7TCA296010R0187	3/6
S75/75/C	7TCA296020R0019	3/8
S75/M75/A	7TCA296010R0190	3/7
SB10/25M	7TCA296040R0014	3/21

## Appendix

### Part number index

Part no.	GID no.	Page
SB10/M12/A	7TCA296040R0016	3/23
SB10/M12/B	7TCA296020R0020	3/23
SB12/25M	7TCA296040R0021	3/21
SB12/M16/A	7TCA296040R0024	3/23
SB12/M16/B	7TCA296040R0025	3/23
SB16/25M	7TCA296040R0031	3/21
SB16/M16/A	7TCA296040R0033	3/23
SB16/M16/B	7TCA296040R0034	3/23
SB20/25M	7TCA296040R0040	3/21
SB20/M20/A	7TCA296040R0043	3/23
SB20/M20/B	7TCA296040R0045	3/23
SB25/25M	7TCA296040R0051	3/21
SB25/M25/A	7TCA296040R0054	3/23
SB25/M25/B	7TCA296040R0056	3/23
SB32/25M	7TCA296040R0063	3/21
SB32/M32/A	7TCA296040R0067	3/23
SB32/M32/B	7TCA296040R0069	3/23
SB40/25M	7TCA296040R0074	3/21
SB40/M40/A	7TCA296040R0076	3/23
SB40/M40/B	7TCA296040R0077	3/23
SB50/10M	7TCA296040R0080	3/21
SB50/M50/A	7TCA296040R0083	3/23
SB50/M50/B	7TCA296040R0084	3/23
SB63/10M	7TCA296040R0089	3/21
SB63/M63/A	7TCA296040R0090	3/23
SB75/10M	7TCA296040R0091	3/21
SB75/M75/A	7TCA296040R0093	3/23
SK106	7TCA296050R0444	2/24
SK80	7TCA296050R0454	2/24
SN16/BL/50M	7TCA296130R0036	3/9
SN20/BL/50M	7TCA296130R0040	3/9
SN25/BL/25M	7TCA296130R0043	3/9
SP10/9/C	7TCA296020R0024	3/8
SP10/BL/25M	7TCA296020R0027	3/9
SP10/M12/A	7TCA296020R0036	3/10
SP10/M12/B	7TCA296020R0037	3/11
SP10/PG7/A	7TCA296020R0039	3/10
SP10/PG7/B	7TCA296020R0041	3/11
SP12/12/C	7TCA296020R0044	3/8
SP12/M16/A	7TCA296020R0057	3/10
SP12/M16/B	7TCA296020R0059	3/11
SP12/M16/M	7TCA296020R0061	3/12
SP12/PG9/A	7TCA296020R0068	3/10
SP12/PG9/B	7TCA296020R0069	3/11
SP12/PG9/M	7TCA296020R0071	3/12
SP16/BL/50M	7TCA296020R0084	3/9
SP16/E	7TCA296020R0088	3/13
SP16/M16/A	7TCA296020R0093	3/10
SP16/M16/B	7TCA296020R0095	3/11
SP16/M16/C90	7TCA296020R0098	3/11
SP16/M16/M	7TCA296020R0100	3/12

Part no.	GID no.	Page
SP16/M20/A	7TCA296020R0102	3/10
SP16/M20/B	7TCA296020R0105	3/11
SP16/M20/C90	7TCA296020R0108	3/11
SP16/M20/M	7TCA296020R0109	3/12
SP16/PG11/M	7TCA296020R0118	3/12
SP16/PG13/M	7TCA296020R0121	3/12
SP20/050/M	7TCA296020R0128	3/12
SP20/20/C	7TCA296020R0129	3/13
SP20/BL/25M	7TCA296020R0138	3/9
SP20/E	7TCA296020R0145	3/13
SP20/M20/A	7TCA296020R0149	3/10
SP20/M20/B	7TCA296020R0153	3/11
SP20/M20/C90	7TCA296020R0157	3/11
SP20/M20/F	7TCA296020R0158	3/12
SP20/M20/M	7TCA296020R0159	3/12
SP20/PG16/A	7TCA296020R0163	3/10
SP20/PG16/B	7TCA296020R0165	3/11
SP20/PG16/M	7TCA296020R0170	3/12
SP25/075/M	7TCA296020R0174	3/12
SP25/25/C	7TCA296020R0176	3/13
SP25/BL/50M	7TCA296020R0186	3/9
SP25/E	7TCA296020R0189	3/13
SP25/M25/A	7TCA296020R0194	3/10
SP25/M25/B	7TCA296020R0198	3/11
SP25/M25/C90	7TCA296020R0202	3/11
SP25/M25/F	7TCA296020R0203	3/13
SP25/M25/M	7TCA296020R0204	3/12
SP25/PG21/A	7TCA296020R0208	3/10
SP25/PG21/B	7TCA296020R0210	3/10
SP25/PG21/M	7TCA296020R0215	3/12
SP32/100/M	7TCA296020R0218	3/12
SP32/32/C	7TCA296020R0220	3/13
SP32/BL/25M	7TCA296020R0227	3/9
SP32/E	7TCA296020R0239	3/13
SP32/M32/A	7TCA296020R0243	3/10
SP32/M32/B	7TCA296020R0247	3/11
SP32/M32/C90	7TCA296020R0251	3/11
SP32/M32/F	7TCA296020R0252	3/12
SP32/M32/M	7TCA296020R0253	3/12
SP32/PG29/A	7TCA296020R0256	3/10
SP32/PG29/B	7TCA296020R0258	3/10
SP32/PG29/M	7TCA296020R0262	3/12
SP40/40/C	7TCA296020R0264	3/13
SP40/BL/25M	7TCA296020R0267	3/9
SP40/E	7TCA296020R0269	3/13
SP40/M40/A	7TCA296020R0272	3/10
SP40/M40/B	7TCA296020R0274	3/11
SP40/M40/M	7TCA296020R0276	3/12
SP40/PG36/A	7TCA296020R0280	3/10
SP40/PG36/B	7TCA296020R0282	3/11
SP50/51/C	7TCA296020R0286	3/13

## Appendix

### Part number index

Part no.	GID no.	Page
SP50/BL/25M	7TCA296020R0290	3/9
SP50/E	7TCA296020R0296	3/13
SP50/M50/A	7TCA296020R0298	3/10
SP50/M50/B	7TCA296020R0299	3/11
SP50/M50/M	7TCA296020R0302	3/12
SP50/PG42/A	7TCA296020R0304	3/10
SP50/PG42/B	7TCA296020R0305	3/11
SP63/BL/10M	7TCA296020R0310	3/9
SP63/M63/A	7TCA296020R0316	3/10
SP75/75/C	7TCA296020R0334	3/13
SP75/BL/25M	7TCA296020R0337	3/9
SPB10/25M	7TCA296040R0094	3/24
SPB10/M12/A	7TCA296040R0096	3/25
SPB10/M12/B	7TCA296040R0097	3/26
SPB12/10M	7TCA296040R0100	3/24
SPB12/M16/A	7TCA296040R0106	3/25
SPB12/M16/B	7TCA296040R0107	3/26
SPB16/25M	7TCA296040R0112	3/24
SPB16/M16/A	7TCA296040R0115	3/25
SPB16/M16/B	7TCA296040R0116	3/26
SPB20/25M	7TCA296040R0122	3/24
SPB20/M20/A	7TCA296040R0126	3/25
SPB20/M20/B	7TCA296040R0127	3/26
SPB25/25M	7TCA296040R0135	3/24
SPB25/M25/A	7TCA296040R0140	3/25
SPB25/M25/B	7TCA296040R0141	3/26
SPB32/25M	7TCA296040R0149	3/24
SPB32/M32/A	7TCA296040R0153	3/25
SPB32/M32/B	7TCA296040R0154	3/26
SPB40/10M	7TCA296040R0156	3/23
SPB40/M40/A	7TCA296040R0157	3/24
SPB40/M40/B	7TCA296040R0158	3/26
SPL10/M12/M	7TCA296030R0046	3/19
SPL10/PG7/M	7TCA296030R0052	3/19
SPL12/62M	7TCA296030R0057	3/14
SPL12/E	7TCA296030R0059	3/18
SPL12/M16/M	7TCA296030R0065	3/19
SPL12/PG9/M	7TCA296030R0068	3/19
SPL16/038/M	7TCA296030R0072	3/19
SPL16/50M	7TCA296030R0080	3/14
SPL16/E	7TCA296030R0082	3/18
SPL16/M16/A	7TCA296030R0091	3/17
SPL16/M16/B	7TCA296030R0092	3/17
SPL16/M16/C45	7TCA296030R0398	3/20
SPL16/M16/C90	7TCA296030R0093	3/20
SPL16/M16/M	7TCA296030R0096	3/19
SPL16/M20/A	7TCA296030R0103	3/17
SPL16/M20/B	7TCA296030R0104	3/17
SPL16/M20/C45	7TCA296030R0397	3/20
SPL16/M20/C90	7TCA296030R0105	3/20
SPL16/M20/M	7TCA296030R0107	3/19

Part no.	GID no.	Page
SPL16/PG11/M	7TCA296030R0115	3/19
SPL16/PG13/M	7TCA296030R0122	3/19
SPL16/U/M	-	3/18
SPL20/050/M	7TCA296030R0130	3/19
SPL20/25M	7TCA296030R0140	3/14
SPL20/E	7TCA296030R0147	3/18
SPL20/M20/A	7TCA296030R0157	3/17
SPL20/M20/B	7TCA296030R0158	3/17
SPL20/M20/C45	7TCA296030R0399	3/20
SPL20/M20/C90	7TCA296030R0160	3/20
SPL20/M20/M	7TCA296030R0163	3/19
SPL20/PG16/M	7TCA296030R0174	3/19
SPL20/U/M	-	3/18
SPL25	7TCA296030R0179	3/14
SPL25/075/M	7TCA296030R0184	3/19
SPL25/E	7TCA296030R0198	3/18
SPL25/M25/A	7TCA296030R0210	3/17
SPL25/M25/B	7TCA296030R0211	3/17
SPL25/M25/C45	7TCA296030R0400	3/20
SPL25/M25/C90	7TCA296030R0212	3/20
SPL25/M25/M	7TCA296030R0215	3/19
SPL25/PG21/M	7TCA296030R0228	3/19
SPL25/U/M	-	3/18
SPL32/100/M	7TCA296030R0234	3/19
SPL32/25M	7TCA296030R0238	3/14
SPL32/E	7TCA296030R0243	3/18
SPL32/M32/A	7TCA296030R0252	3/17
SPL32/M32/B	7TCA296030R0253	3/17
SPL32/M32/C45	7TCA296030R0384	3/20
SPL32/M32/C90	7TCA296030R0254	3/20
SPL32/M32/M	7TCA296030R0256	3/19
SPL32/PG29/M	7TCA296030R0264	3/19
SPL32/U/M	-	3/18
SPL40/10M	7TCA296030R0267	3/14
SPL40/125/M	7TCA296030R0268	3/19
SPL40/E	7TCA296030R0274	3/18
SPL40/M40/C45	7TCA296030R0385	3/20
SPL40/M40/C90	7TCA296030R0391	3/20
SPL40/M40/M	7TCA296030R0283	3/19
SPL40/PG36/M	7TCA296030R0287	3/19
SPL40/U/M	-	3/18
SPL50/10M	7TCA296030R0289	3/14
SPL50/150/M	7TCA296030R0290	3/19
SPL50/E	7TCA296030R0297	3/18
SPL50/M50/C45	7TCA296030R0386	3/20
SPL50/M50/C90	7TCA296030R0392	3/20
SPL50/M50/M	7TCA296030R0305	3/19
SPL50/PG42/M	7TCA296030R0308	3/19
SPL50/U/M	-	3/18
SPL63/25M	7TCA296030R0313	3/14
SPL63/E	7TCA296030R0316	3/18

## Appendix

### Part number index

Part no.	GID no.	Page
SPL63/M63/C45	7TCA296030R0387	3/20
SPL63/M63/C90	7TCA296030R0393	3/20
SPL63/M63/M	7TCA296030R0322	3/19
SPL63/PG48/M	7TCA296030R0325	3/19
SPL63/U/M	-	3/18
SPL-EF12/10M	7TCA296030R0467	3/15
SPL-EF12/25M	7TCA296030R0468	3/15
SPL-EF16/10M	7TCA296030R0469	3/15
SPL-EF16/25M	7TCA296030R0470	3/15
SPL-EF16/50M	7TCA296030R0471	3/15
SPL-EF20/10M	7TCA296030R0472	3/15
SPL-EF20/25M	7TCA296030R0473	3/15
SPL-EF20/50M	7TCA296030R0474	3/15
SPL-EF25/10M	7TCA296030R0475	3/15
SPL-EF25/25M	7TCA296030R0476	3/15
SPL-EF25/50M	7TCA296030R0477	3/15
SPL-EF32/10M	7TCA296030R0481	3/15
SPL-EF32/25M	7TCA296030R0478	3/15
SPL-EF32/62M	7TCA296030R0479	3/15
SPL-EF40/10M	7TCA296030R0482	3/15
SPL-EF40/25M	7TCA296030R0484	3/15
SPL-EF50/10M	7TCA296030R0483	3/15
SPL-EF50/25M	7TCA296030R0480	3/15
SPLB16/M16/A	7TCA296100R0149	3/27
SPLB16/M16/B	7TCA296100R0150	3/27
SPLB16/M20/A	7TCA296100R0151	3/27
SPLB16/M20/B	7TCA296100R0152	3/27
SPLB20/M20/A	7TCA296100R0156	3/27
SPLB20/M20/B	7TCA296100R0157	3/27
SPLB25/M25/A	7TCA296100R0158	3/27
SPLB25/M25/B	7TCA296100R0159	3/27
SPLB32/M32/A	7TCA296100R0161	3/27
SPLB32/M32/B	7TCA296100R0162	3/27
SPLB40/M40/A	7TCA296100R0164	3/27
SPLB50/M50/A	7TCA296100R0166	3/27
SPLHC10/25M	7TCA296030R0330	3/16
SPLHC12/25M	7TCA296030R0332	3/16
SPLHC16/50M	7TCA296030R0336	3/16
SPLHC20/25M	7TCA296030R0340	3/16
SPLHC25/25M	7TCA296030R0345	3/16
SPLHC32/25M	7TCA296030R0348	3/16
SPLHC40/10M	7TCA296030R0351	3/16
SPLHC50/25M	7TCA296030R0357	3/16
SPLHC63/25M	7TCA296030R0360	3/16
SPLHCB16/25M	7TCA296100R0169	3/26
SPLHCB20/25M	7TCA296100R0170	3/26
SPLHCB20/25M	7TCA296100R0170	3/26
SPLHCB32/25M	7TCA296100R0173	3/26
SPLHCB40/10M	7TCA296100R0174	3/26
SPLHCB50/10M	7TCA296100R0176	3/26
SPTC10/25M	7TCA296100R0180	3/24

Part no.	GID no.	Page
SPTC12/25M	7TCA296040R0166	3/24
SPTC16/25M	7TCA296100R0182	3/24
SPTC20/25M	7TCA296100R0184	3/24
SPTC25/25M	7TCA296100R0185	3/24
SPTC32/10M	7TCA296100R0186	3/24
SPTC40/10M	7TCA296100R0187	3/24
SPTC50/10M	7TCA296100R0188	3/24
SPUL16/25M	7TCA296030R0365	3/16
SPUL16/50M	7TCA296030R0366	3/16
SPUL20/50M	7TCA296030R0367	3/16
SPUL25/25M	7TCA296030R0368	3/16
SPUL25/50M	7TCA296030R0369	3/16
SPUL32/25M	7TCA296030R0370	3/16
SPUL40/25M	7TCA296030R0371	3/16
SPUL50/25M	7TCA296030R0375	3/16
SPUL63/10M	7TCA296030R0376	3/16
SPUL63/25M	7TCA296030R0377	3/16
SS10/25M	7TCA296120R0005	3/6
SS12/25M	7TCA296120R0008	3/6
SS16/25M	7TCA296120R0014	3/6
SS20/25M	7TCA296120R0020	3/6
SS25/25M	7TCA296120R0026	3/6
SS32/25M	7TCA296120R0032	3/6
SSB12/25M	7TCA296100R0190	3/22
SSB16/25M	7TCA296100R0191	3/22
SSB20/25M	7TCA296100R0192	3/22
SSB25/25M	7TCA296100R0193	3/22
SSB32/10M	7TCA296100R0194	3/22
SSBGS12/25M	7TCA296100R0195	3/22
SSBGS16/25M	7TCA296100R0196	3/22
SSBGS20/25M	7TCA296100R0197	3/22
SSBGS25/25M	7TCA296100R0198	3/22
SSBGS32/25M	7TCA296100R0199	3/22
STC10/25M	7TCA296010R0192	3/21
STC12/25M	7TCA296100R0202	3/21
STC16/25M	7TCA296100R0204	3/21
STC20/25M	7TCA296100R0205	3/21
STC25/25M	7TCA296100R0206	3/21
STC32/10M	7TCA296100R0207	3/21
STC40/10M	7TCA296100R0209	3/21
STC50/10M	7TCA296100R0211	3/21
SWINGCUT	7TCA296050R0485	5/2
SW038	7TCA296050R0469	2/57
SW050	7TCA296050R0471	2/57
SW075	7TCA296050R0474	2/57
SW100	7TCA296050R0477	2/57
SW125	7TCA296050R0481	2/57
SW150	7TCA296050R0482	2/57
SW200	7TCA296050R0483	2/57
SW050NB	7TCA296050R0472	2/57
SW075NB	7TCA296050R0475	2/57

## Appendix

### Part number index

Part no.	GID no.	Page
SW075NBL	7TCA296050R0550	2/57
SW100NBL	7TCA296050R0551	2/57
SW050NY	7TCA296050R0473	2/57
SW075NY	7TCA296050R0476	2/57
SWM12	7TCA296050R0487	2/57
SWM16	7TCA296050R0488	2/57
SWM20	7TCA296050R0492	2/57
SWM25	7TCA296050R0497	2/57
SWM32	7TCA296050R0502	2/57
SWM40	7TCA296050R0506	2/57
SWM50	7TCA296050R0510	2/57
SWM63	7TCA296050R0514	2/57
SWM16NBL	7TCA296050R0490	2/57
SWM20NBL	7TCA296050R0495	2/57
SWM25NBL	7TCA296050R0500	2/57
SWM32NBL	7TCA296050R0504	2/57
SWM40NBL	7TCA296050R0508	2/57
SWM50NBL	7TCA296050R0512	2/57
SWM63NBL	7TCA296050R0516	2/57
SWM16NB	7TCA296050R0489	2/57
SWM20NB	7TCA296050R0494	2/57
SWM25NB	7TCA296050R0499	2/57
SWM32NB	7TCA296050R0503	2/57
SWM40NB	7TCA296050R0507	2/57
SWM50NB	7TCA296050R0511	2/57
SWM63NB	7TCA296050R0515	2/57
SWM16NY	7TCA296050R0491	2/57
SWM20NY	7TCA296050R0496	2/57
SWM25NY	7TCA296050R0501	2/57
SWM32NY	7TCA296050R0505	2/57
SWM40NY	7TCA296050R0509	2/57
SWM50NY	7TCA296050R0513	2/57
SWM63NY	7TCA296050R0517	2/57
SWPG07	7TCA296050R0518	2/57
SWPG09	7TCA296050R0519	2/57
SWPG11	7TCA296050R0520	2/57
SWPG13	7TCA296050R0521	2/57
SWPG16	7TCA296050R0522	2/57
SWPG21	7TCA296050R0523	2/57
SWPG29	7TCA296050R0524	2/57
SWPG36	7TCA296050R0525	2/57
SWPG42	7TCA296050R0526	2/57
SWPG48	7TCA296050R0527	2/57
T101010/BL	7TCA296000R2526	2/60
T101310/BL	7TCA296000R2527	2/60
T101613/BL	7TCA296000R2528	2/60
T131010/BL	7TCA296000R2531	2/60
T131013/BL	7TCA296000R2532	2/60
T131310/BL	7TCA296000R2535	2/60
T131313/BL	7TCA296000R2537	2/60
T131613/BL	7TCA296000R2539	2/60

Part no.	GID no.	Page
T161013/BL	7TCA296050R0529	2/60
T161016/BL	7TCA296000R2541	2/60
T161116/BL	7TCA296000R2543	2/60
T161313/BL	7TCA296000R2544	2/60
T161316/BL	7TCA296050R0530	2/60
T161613/BL	7TCA296000R2546	2/60
T161616/BL	7TCA296000R2547	2/60
T162116/BL	7TCA296000R2550	2/60
T211016/BL	7TCA296160R0102	2/60
T211021/BL	7TCA296000R2551	2/60
T211316/BL	7TCA296000R2554	2/60
T211321/BL	7TCA296000R2555	2/60
T211613/BL	7TCA296000R2557	2/60
T211616/BL	7TCA296000R2558	2/60
T211621/BL	7TCA296000R2559	2/60
T212113/BL	7TCA296000R2560	2/60
T212116/BL	7TCA296000R2561	2/60
T212121/BL	7TCA296000R2562	2/60
T281021/BL	7TCA296000R2576	2/60
T281028/BL	7TCA296000R2577	2/60
T281321/BL	7TCA296000R2578	2/60
T281621/BL	7TCA296000R2581	2/60
T281628/BL	7TCA296000R2582	2/60
T282121/BL	7TCA296000R2583	2/60
T282128/BL	7TCA296000R2584	2/60
T282828/BL	7TCA296000R2587	2/60
T341634/BL	7TCA296000R2589	2/60
T342128/BL	7TCA296000R2591	2/60
T342134/BL	7TCA296000R2592	2/60
T343434/BL	7TCA296000R2596	2/60
XF12/30M	7TCA296060R0095	2/54
XF12/M16/D	7TCA296060R0097	2/55
XF16/30M	7TCA296060R0101	2/54
XF16/M16/C90/BL	7TCA296060R0104	2/55
XF16/M16/D	7TCA296060R0105	2/55
XF16/M20/D	7TCA296060R0107	2/55
XF20/30M	7TCA296060R0112	2/54
XF20/M20/C90/BL	7TCA296060R0115	2/55
XF20/M20/D	7TCA296060R0116	2/55
XF25/30M	7TCA296060R0121	2/54
XF25/M25/C90/BL	7TCA296060R0124	2/55
XF25/M25/D	7TCA296060R0125	2/55
XF32/30M	7TCA296060R0131	2/54
XF32/M32/C90/BL	7TCA296060R0134	2/55
XF32/M32/D	7TCA296060R0135	2/55
XF40/30M	7TCA296060R0140	2/54
XF40/M40/D	7TCA296060R0144	2/55
XF50/30M	7TCA296060R0148	2/54
XF50/M50/D	7TCA296060R0151	2/55
Y101010/BL	7TCA296000R2603	2/61
Y101013/BL	7TCA296000R2605	2/61

## Appendix

### Part number index

<b>Part no.</b>	<b>GID no.</b>	<b>Page</b>
Y131010/BL	7TCA296000R2608	2/61
Y131310/BL	7TCA296000R2612	2/61
Y131313/BL	7TCA296000R2614	2/61
Y161310/BL	7TCA296000R2618	2/61
Y161313/BL	7TCA296000R2621	2/61
Y161610/BL	7TCA296000R2623	2/61
Y161613/BL	7TCA296000R2625	2/61
Y211010/BL	7TCA296000R2626	2/61
Y211310/BL	7TCA296000R2627	2/61
Y211313/BL	7TCA296000R2628	2/61
Y211610/BL	7TCA296000R2629	2/61
Y211613/BL	7TCA296000R2630	2/61
Y211616/BL	7TCA296000R2631	2/61
Y212110/BL	7TCA296000R2633	2/61
Y212113/BL	7TCA296000R2635	2/61
Y212116/BL	7TCA296000R2636	2/61
Y282113/BL	7TCA296000R2645	2/61
Y282116/BL	7TCA296000R2646	2/61
Y282121/BL	7TCA296000R2647	2/61
Y282810/BL	7TCA296000R2650	2/61
Y282813/BL	7TCA296000R2651	2/61
Y282816/BL	7TCA296050R0537	2/61
Y282821/BL	7TCA296000R2652	2/61
Y282828/BL	7TCA296000R2653	2/61
Y343416/BL	7TCA296000R2658	2/61
Y343421/BL	7TCA296000R2659	2/61
Y343434/BL	7TCA296000R2661	2/61

**Additional information**

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilisation of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG.

