

bulgin

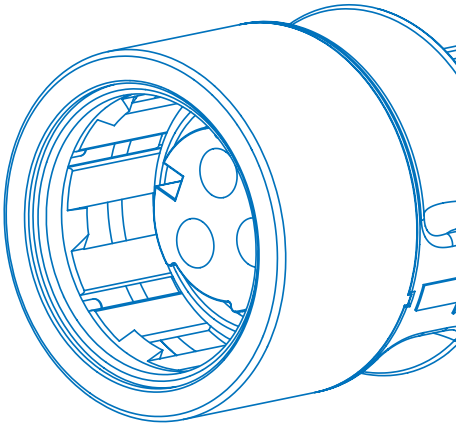
a brand of Elektron Technology

Product Catalogue

Bulgins Ethos

Borne out of their experience in developing electronic components for the world-renowned connectivity and switching brands Bulgin and Arcolectric, our teams of product development engineers based at the Connectivity Lab in Cambridge relish the challenge of delivering complex and demanding custom solutions.

Working in close collaboration with you, we identify opportunities, mitigate risks and plan how to exploit new and emerging technologies, creating category-driving innovations that deliver on highly demanding projects.



Pushing the boundaries of new product development.

At the Connectivity Lab, we offer our customers a high quality, 'one stop shop' engineering resource, using our technical expertise and extensive knowledge across a range of engineering disciplines to provide human-centered design, as well as turnkey project management capabilities. Liaising directly with our manufacturing plants, the Connectivity Lab ensures that no stone is unturned in getting your ideas off the page and progressing your prototype to full-scale manufacturing to meet the demands of your customers. This simplifies the supply chain and the manufacturing process, reduces production costs and accelerates time to market.

Excellence and experience

Having access to the right expertise, at the right time – whether it is for an individual phase of the development project or the entire production process – is a vital part of the transition from concept to finished product. At Elektron, we foster an entrepreneurial approach, equipping our engineers with state-of-the-art facilities and cutting-edge design tools, including: analytical modelling computer-aided design rapid prototyping printed circuit board manufacture testing and quality assurance

Celebrating individuality!

All of our customers are individuals and so are their projects. With diverse R&D skills covering every aspect of engineering and a quest to bring high-level innovation to the table, our bespoke services are uniquely tailored to customers' individual needs, giving you the very best results when we take an original concept from design through to manufacture.

We pay close attention to every element of the product development and manufacturing process and have designed the StageGate® Process, our own method to control and document every step. Our service offers ISO 9001 accreditation for document control so that you can reap the benefits of our carefully controlled protocols, whether for just one aspect of a project or the entire development process.

Identify - Design - Build - Validate - Sustain

Our Skills

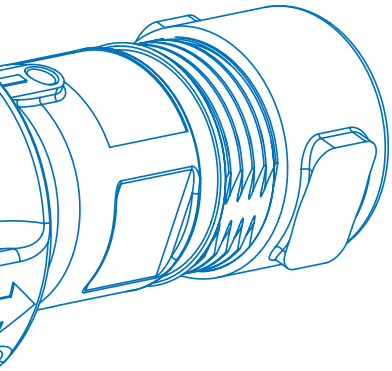
Whatever your engineering requirement is, we have the knowledge and capability in-house to bring your projects to reality.

Mechanical
- in-house 3D modelling
- nite element analysis
- rapid prototyping
- 3D rendered models

Electronics
- in-house modelling
- simulation
- rapid prototyping
- optimized printed circuit board layouts
- human-centered design

Assembly
- cable to connector complete assemblies
- overmoulding tools for all our connectors
- enclosures and complete panel assembly
- turnkey solutions for nished article or sub-assembly parts

Software
- agile software development
- continuous integration
- source code management
- straightforward graphical user interfaces
- improved usability





Approvals

Good design, high quality and maximum value have formed an integral part of the Bulgin philosophy.

We maintain a documented quality plan specifying process and product goals and are approved by BSI to ISO9001.

Investment in new plant and equipment makes an important contribution to continuous quality improvements. The risk of errors in the transition from design to manufacture is greatly reduced by the digital data flows from our CAD system, and our sophisticated automatic manufacturing equipment which can form and assemble components to consistently high quality standards.



All new products are extensively pre-production tested, in our dedicated electrical and mechanical test facility, which also conducts regular checks during manufacture.

The numerous international safety approvals gained are testimony in themselves to Bulgin's ongoing commitment to quality and the world wide market place.

These European Directives introduced environmental responsibilities for electrical and electronics equipment manufacturers. The RoHS (Restriction of use of certain Hazardous Substances) regulation (Directive 2002/95/EC) came into force July 2006. The WEEE (Waste Electrical and Electronic Equipment) regulation (Directive 2002/96/EC), came into force January 2007.

The RoHS directive effectively bans the use of certain chemicals, these are defined as:

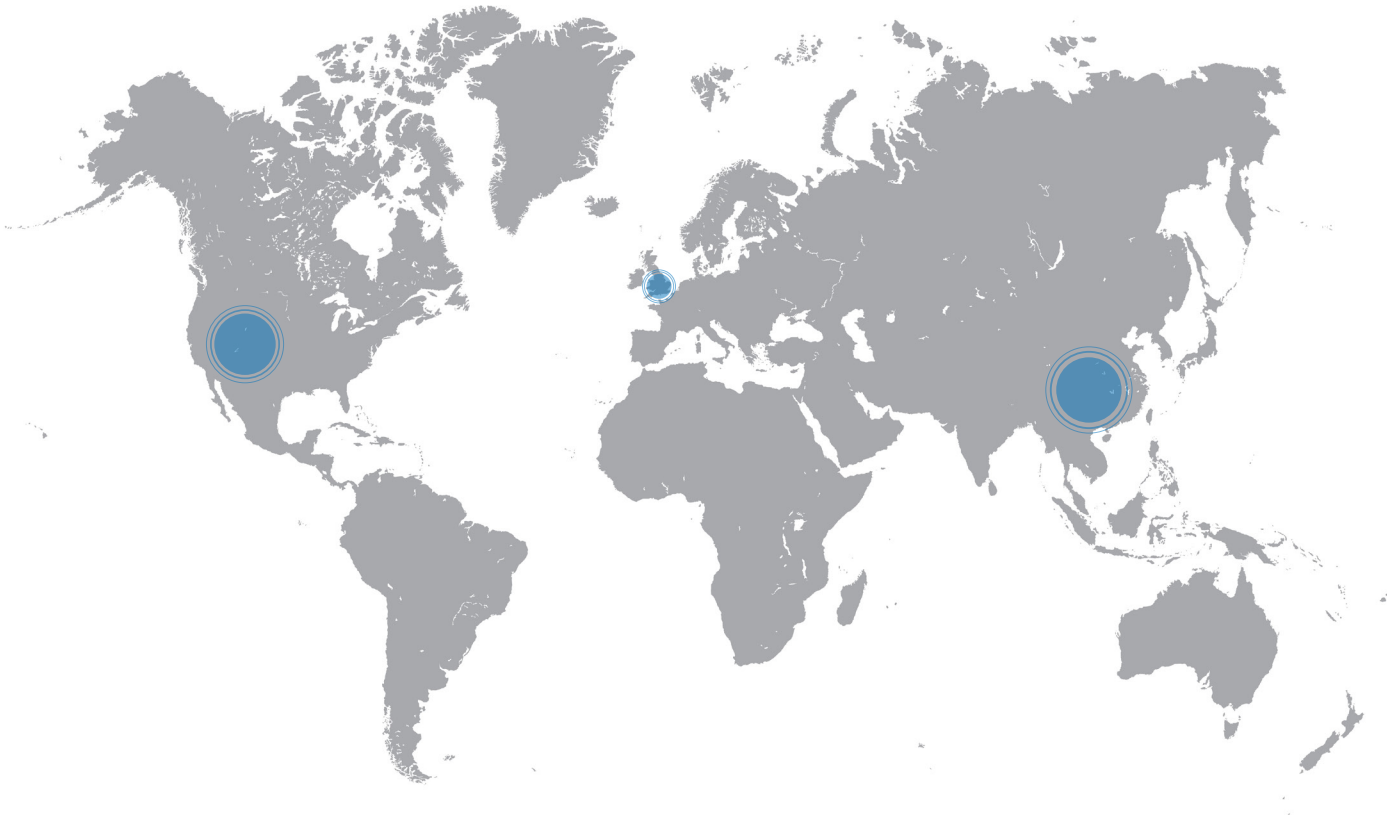
- Lead
- Cadmium
- Mercury
- Hexavalent Chromium
- Polybrominated Biphenyl (PBB) - flame retardant
- Polybrominated Diphenyl Ether (PBDE) - flame retardant (including Deca BDE)

Action has been taken to ensure all standard products meet the requirements of this directive. All packing carries RoHS compliance information as conformation.

*Our IP ratings are internally tested to EN 60529. IP68 rated products have undergone immersion testing in water at a depth of 10M for a period of 2 weeks unless otherwise stated.

Our Offices

Bulgin has a global presence, with regional offices located in the UK, US and China. Our reach is also through an extensive distribution network which covers over 200 countries worldwide.



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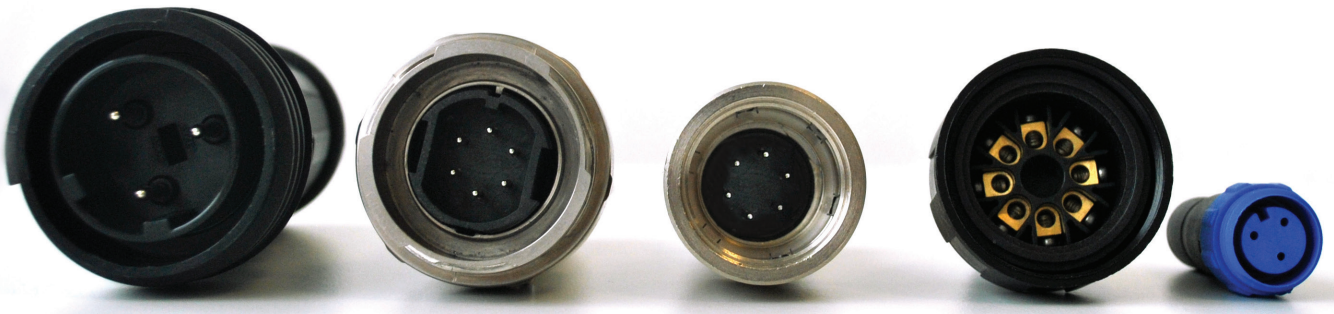


A full range of IP66, IP68 and IP69K rated environmentally sealed circular connectors designed to provide secure and safe connections in harsh or hostile conditions.

The Power Buccaneer range consist of the miniature 400, Mini, Standard, 900, 7000 and 6000 Series. Screw terminations ensure simple 'field' connection, while crimp terminations fulfil the requirement for fast effective volume connections.

Each range has flex cable connector, in-line flex cable connector and panel mounting connector options. Over molded versions of the 400 series and Standard Buccaneer provide safe, secure and tamperproof cable termination.

With a wide choice of alternatives from 2 to 32 poles, BNC connections and screw, solder or crimp terminations, the Buccaneer range provides the answer to many design problems.



Explora Series 09-14
900 Series Buccaneer 15-20
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The EXPlora range is most suited to manufacturers of ancillary electrical equipment such as motors, pumps, lighting equipment, process and control gear for use in factories and plant where hazardous or explosive atmospheres can be caused by flammable gases, mists or vapours or by combustible dusts.



Independently tested for compliance to ATEX standards for use in Zone 2 and Zone 22 environments, the new EXP series is manufactured from a tough,high grade UL94V-0 rated Polyester material and provides environmental sealing to IP68. The ATEX coding is: Ex II 3 GD and the certificated no: Baseefa09ATEX0232X.

EXPlora is rated up to 18A, 600Vac/dc for 2, 3, 4 and 5 poles, 16A, 430Vac/dc for 7 pole and 10A, 250Vac/dc for 10 poles. The 3, 4, 5 and 7 pole versions have leading earth contacts making them suitable for single or three phase applications.

EXP Series EXPlora - Hazardous Area



- ATEX approval for Zone 2 and Zone 22 applications
- Independently tested
- ATEX Coding: Ex II 3 GD
- ATEX Classification: Ex nA IIC T6 Gc
  Ex tc IIIC T85°C Dc
- ATEX Certificate No: Baseefa09ATEX0232X
- IP68 rating tested at 1.054kg/sq cm (15lb/sq in)
- 10m depth for 2 weeks
- Up to 18A, 600V ac/dc rating
- 2, 3, 4, 5, 7 and 10 pole
- Leading earth contact for 3, 4, 5 & 7 pole versions
- Trailing Neutral on 5 pole
- Plug or socket connection in each body style
- Water and dustproof to IP68 when mated
- 'Scoop proof' contacts
- Field termination - screw terminations
- Positive locating keyways - cannot be mis-connected
- Sealing caps available to maintain IP68 rating of unmated connectors
- Compact design
- Easy assembly - no special tools required
- Single or 3 phase applications
- Cost effective solution
- Cable acceptance from 7 to 22mm O/D
- Two cable connector versions for 15mm and 22mm (maximum) cable diameters
- Separate strain relief on large cable version

Flex Cable Connector



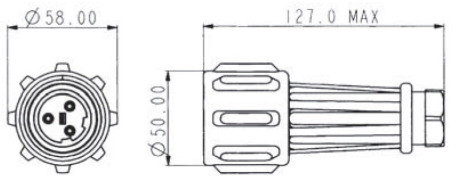
EXP-0911

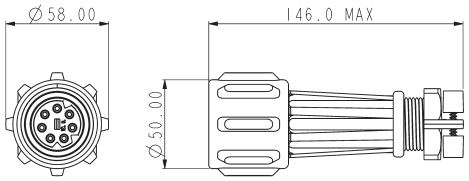
Flex Cable Connector



EXP-A911

- Mates with in-line flex or panel mounting versions
- Positive, fast acting locking ring - can be turned with a gloved hand
- Plug or socket versions
- EXP-0 Series13-15mm cable dia. acceptance as standard, 7-13mm with additional gland pack
- EXP-A Series 20-22mm cable dia. Acceptance as standard, 14-20mm with additional gland pack
- Strain Relief Clamp





Standard Cable	Large Cable	Description	Standard Cable	Large Cable	Description
EXP-0911/02/P	EXP-A911/02/P	2 pole Plug	EXP-0911/02/S	EXP-A911/02/S	2 pole Socket
EXP-0911/03/P	EXP-A911/03/P	3 pole Plug	EXP-0911/03/S	EXP-A911/03/S	3 pole Socket
EXP-0911/04/P	EXP-A911/04/P	4 pole Plug	EXP-0911/04/S	EXP-A911/04/S	4 pole Socket
EXP-0911/05/P	EXP-A911/05/P	5 pole Plug	EXP-0911/05/S	EXP-A911/05/S	5 pole Socket
EXP-0911/07/P	EXP-A911/07/P	7 pole Plug	EXP-0911/07/S	EXP-A911/07/S	7 pole Socket
EXP-0911/10/P	EXP-A911/10/P	10 pole Plug	EXP-0911/07/S	EXP-A911/10/S	10 pole Socket

In-Line Flex Cable Connector



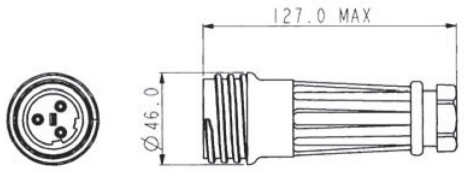
EXP-0921

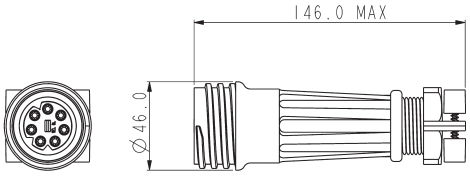
In-Line Flex Cable Connector



EXP-A921

- Mates with either EXP-0911 or EXP-A911 connectors
- Plug or socket versions
- EXP-0 Series13-15mm cable dia. acceptance as standard, 7-13mm with additional gland pack
- EXP-A Series 20-22mm cable dia. acceptance as standard, 14-20mm with additional gland pack
- Strain Relief Clamp





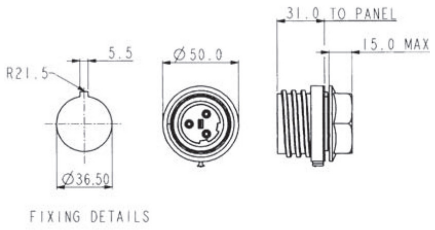
Standard Cable	Large Cable	Description	Standard Cable	Large Cable	Description
EXP-0921/02/P	EXP-A921/02/P	2 pole Plug	EXP-0921/02/S	EXP-A921/02/S	2 pole Socket
EXP-0921/03/P	EXP-A921/03/P	3 pole Plug	EXP-0921/03/S	EXP-A921/03/S	3 pole Socket
EXP-0921/04/P	EXP-A921/04/P	4 pole Plug	EXP-0921/04/S	EXP-A921/04/S	4 pole Socket
EXP-0921/05/P	EXP-A921/05/P	5 pole Plug	EXP-0921/05/S	EXP-A921/05/S	5 pole Socket
EXP-0921/07/P	EXP-A921/07/P	7 pole Plug	EXP-0921/07/S	EXP-A921/07/S	7 pole Socket
EXP-0921/10/P	EXP-A921/10/P	10 pole Plug	EXP-0921/07/S	EXP-A921/10/S	10 pole Socket

Panel Mounting Connector



EXP-0931

- Mates with EXP-0911 and EXP-A911 connectors
- Single hole fixing
- Anti-rotation key
- High grade sealing gasket
- 3-7mm panel thickness



Panel Mounting

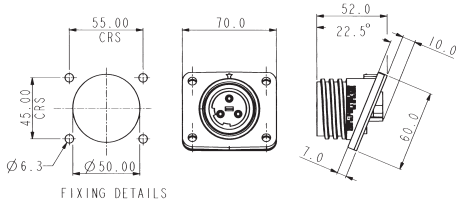
EXP-0931/02/P	2 pole Plug	EXP-0931/02/S	2 pole Socket
EXP-0931/03/P	3 pole Plug	EXP-0931/03/S	3 pole Socket
EXP-0931/04/P	4 pole Plug	EXP-0931/04/S	4 pole Socket
EXP-0931/05/P	5 pole Plug	EXP-0931/05/S	5 pole Socket
EXP-0931/07/P	7 pole Plug	EXP-0931/07/S	7 pole Socket
EXP-0931/10/P	10 pole Plug	EXP-0931/10/S	10 pole Socket

Flange Mounting Connector



EXP-0941

- Mates with EXP-0911 and EXP-A911 connectors
- Supplied with high grade sealing gasket
- Supplied with sealing grommets for panel fixing screws (M6 thread recommended)



Panel Mounting

EXP-0941/02/P	2 pole Plug	EXP-0941/02/S	2 pole Socket
EXP-0941/03/P	3 pole Plug	EXP-0941/03/S	3 pole Socket
EXP-0941/04/P	4 pole Plug	EXP-0941/04/S	4 pole Socket
EXP-0941/05/P	5 pole Plug	EXP-0941/05/S	5 pole Socket
EXP-0941/07/P	7 pole Plug	EXP-0941/07/S	7 pole Socket
EXP-0941/10/P	10 pole Plug	EXP-0941/10/S	10 pole Socket

Accessories



EXP-0990, EXP-0991, EXP-0992

- Heavy duty sealing caps to maintain IP68 rating of unmated connectors, with stainless steel straps

Sealing Caps

EXP-0990	Heavy duty sealing cap for use with EXP-0911/xx/x and EXP-A911/xx/x
EXP-0991	Heavy duty sealing cap for use with EXP-0921/xx/x and EXP-A921/xx/x
EXP-0992	Heavy duty sealing cap for use with EXP-0931 and EXP-0941

Cable Glands



PX0980, PXA980

- Packs of 3 additional pairs Cable Glands for 900 Series Flex Cable Connectors

Gland Packs

EXP-0980	Pack of 3 additional cable glands for EXP-0911 and EXP-0921 to suit cable sizes; 11-13mm, 9-11 and 7-9mm dia.
EXP-A980	Pack of 3 additional cable glands for EXP-A911 and EXP-A921 to suit cable sizes; 18-20mm, 16-18 and 14-16mm dia.

EXP Series EXPlora - Hazardous Area Connector

Part No System

EXP X9	X	X	/ XX	/ X	/ X

Series Designation

09 = Standard Cable Accommodation (7-13mm)

A9 = Large Cable Accommodation (14-22mm)

Body Styles

1 = Flex,
2 = Flex In-line,
3 = Panel,
4 = Flange Panel

Contact Termination

1 = Screw Terminal

Number Contacts

02 = 2 pole
03 = 3 pole
04 = 4 pole
05 = 5 pole
07 = 7 pole
10 = 10 pole

Contact Type

P = Plug, S = Socket

Cable Acceptance

EXP-0 version:
Blank = 13-15mm
Yellow cable gland (std)

3 = 11-13mm
Black cable gland

2 = 9-11mm
White cable gland

1 = 7-9mm
Dark Grey cable gland

EXP-A version:
Blank = 20-22mm
Yellow cable gland (std)

9 = 18-20mm
Black cable gland

8 = 16-18mm
White cable gland

7 = 14-16mm
Dark Grey cable gland

Example:

EXP-0911/07/P/3 = Flex cable connector with standard cable accommodation body, seven pin contacts, with gland to suit 11-13mm cable.

Contact Layout


2 pole


3 pole


4 pole


5 pole


7 pole


10 pole

Overall dimensions of connectors when mated together:

EXP-0911 + EXP-0921	230 mm max.
EXP-A911 + EXP-A921	270 mm max.
EXP-0911 + EXP-0931	135 mm max. (to panel)
EXP-A911 + EXP-A931	175 mm max. (to panel)
EXP-0911 + EXP-0941	145 mm max. (to panel, mid point on flange)
EXP-A911 + EXP-A941	174 mm max. (to panel, mid point on flange)

EXP Series EXPlora - Hazardous Area Connector

Specifications

Electrical:

No Poles:	2, 3, 4, 5 7 10
Current Rating:	18A 16A 10A
Voltage Rating:	600Vac/dc 430Vac/dc 250Vac/dc
Contact Resistance:	<10mΩ (initial)
Insulation Resistance:	>10^6MΩ (@ 500V dc)
Dielectric strength:	2.2kV ac min
AC Breakdown voltage:	6kV
Ambient Temperature Range:	–20°C to +55°C
Standards:	ATEX Zone 2 and Zone 22 IEC60079-0:2007 IEC60079-15:2005
ATEX Coding:	⟨Ex⟩ II 3 GD
ATEX Certificate No:	Baseefa09ATEX0232X
ATEX Classification:	Ex nA IIC T6 Gc Ex tc IIIC T85°C Dc

Materials:

Body Mouldings:	Polyester
Cap Mouldings:	Polycarbonate
Flammability Rating:	UL94V-0
UV Resistance:	To EN50021:1999
Contacts:	Machined Solid Brass, Nickel plated
O Rings:	Nitrile Panel
Sealing Gasket:	Silicone Rubber
RoHS	Compliant

Mechanical:

Sealing:	IP68, EN60529:2001 tested @ 1.054kg/sq.cm. (15lb/sq.in.) 10m depth for 2 weeks
Cable Acceptance:	EXP-0911 - EXP-0921 13 - 15mm O/D standard, 7-13mm with gland pack EXP-A911 - EXP-A921 20 - 22mm O/D standard, 14 - 20mm with gland pack
Contact Accommodation:	2-7 pole - 2.5 to 4mm2 (13 to10AWG) conductor, single or multi stranded 10 pole - 0.75 to 2mm2 (14 to 18AWG) conductor, single or multi stranded
Termination:	Axial screw terminals
Cable Retention force:	22mm dia, 150N 15mm dia, 150N 7mm dia, 80N
Gland Nut Torques:	
EXP-0 range	
13-15mm (Yellow - std.)	3.16Nm (28lbf/in)
11-13mm (black)	3.16Nm (28lbf/in)
9-11mm (white)	3.16Nm (28lbf/in)
7-9mm (dark grey)	3.16Nm (28lbf/in)
EXP-A range	
20-22mm (Yellow - std.)	3.16Nm (28lbf/in)
18-20mm (black)	3.16Nm (28lbf/in)
16-18mm (white)	3.16Nm (28lbf/in)
14-16mm (dark grey)	3.16Nm (28lbf/in)
Tightening Torques:	
Panel mount nut	2.25 Nm
Flange & Bulkhead fixing screws	0.9 Nm
Rear thread EXP-0931 series	M36 x 2-6g

900 Series Buccaneer



- IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
- 32A, 600V ac/dc rating
- 2, 3, 4, 5, 7 and 10 pole
- Plug or socket connection in each body style
- Water and dustproof to IP68 when mated
- 'Scoop proof' contacts
- Field termination - screw terminations
- Positive locating keyways - cannot be mis-connected
- Sealing caps available to maintain IP68 rating of unmated connectors
- Leading earth contact for 3, 4, 5 and 7 pole versions
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
- Trailing Neutral on 5 pole
- Compact design
- Easy assembly - no special tools required
- Single or 3 phase applications
- Bulkhead moulding available for use with flange mounting body for 45° or 90° mounting (order each separately)
- Cost effective solution
- Cable accomodation 7-22mm O/D
- Two cable connector versions for 15mm and 22mm (maximum) cable diameters
- Separate strain relief on large cable version
- CCC, UL, CSA and VDE approvals

Flex Cable Connector



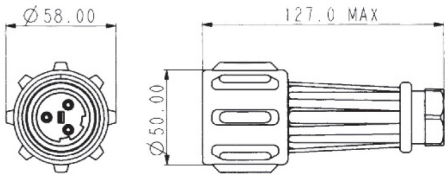
PX0911

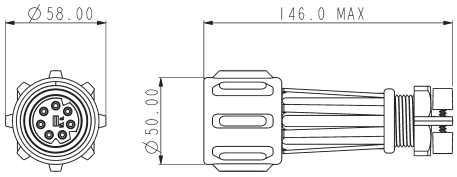
Flex Cable Connector



PXA911

- Mates with in-line flex or panel mounting versions
- Positive, fast acting locking ring - can be turned with a gloved hand
- Plug or socket versions
- PX0 Series13-15mm cable dia. as standard, 7-13mm with additional gland pack
- PXA Series 20-22mm cable dia. as standard, 14-20mm with additional gland pack
- Strain Relief Clamp





Standard Cable	Large Cable	Description	Standard Cable	Large Cable	Description
PX0911/02/P	PXA911/02/P	2 pole Plug	PX0911/02/S	PXA911/02/S	2 pole Socket
PX0911/03/P	PXA911/03/P	3 pole Plug	PX0911/03/S	PXA911/03/S	3 pole Socket
PX0911/04/P	PXA911/04/P	4 pole Plug	PX0911/04/S	PXA911/04/S	4 pole Socket
PX0911/05/P	PXA911/05/P	5 pole Plug	PX0911/05/S	PXA911/05/S	5 pole Socket
PX0911/07/P	PXA911/07/P	7 pole Plug	PX0911/07/S	PXA911/07/S	7 pole Socket
PX0911/10/P	PXA911/10/P	10 pole Plug	PX0911/10/S	PXA911/10/S	10 pole Socket

In-Line Flex Cable Connector



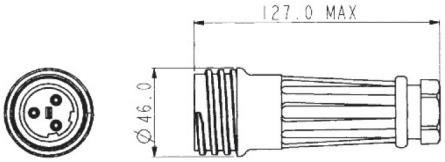
PX0921

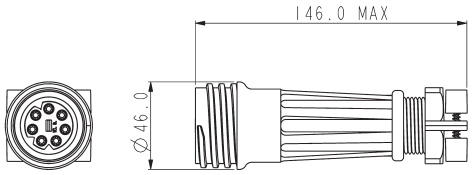
In-Line Flex Cable Connector



PXA921

- Mates with either PX0911 or
- PXA911 connectors
- Plug or socket versions
- PX0 Series 13-15mm cable dia. as standard, 7-13mm with additional gland pack
- PXA Series 20-22mm cable dia. as standard, 14-20mm with additional gland pack
- Strain Relief Clamp





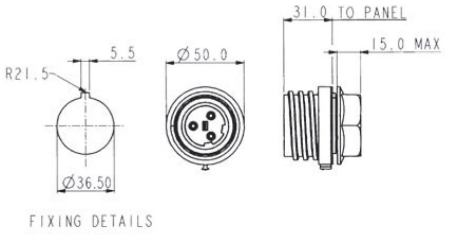
Standard Cable	Large Cable	Description	Standard Cable	Large Cable	Description
PX0921/02/P	PXA921/02/P	2 pole Plug	PX0921/02/S	PXA921/02/S	2 pole Socket
PX0921/03/P	PXA921/03/P	3 pole Plug	PX0921/03/S	PXA921/03/S	3 pole Socket
PX0921/04/P	PXA921/04/P	4 pole Plug	PX0921/04/S	PXA921/04/S	4 pole Socket
PX0921/05/P	PXA921/05/P	5 pole Plug	PX0921/05/S	PXA921/05/S	5 pole Socket
PX0921/07/P	PXA921/07/P	7 pole Plug	PX0921/07/S	PXA921/07/S	7 pole Socket
PX0921/10/P	PXA921/10/P	10 pole Plug	PX0921/10/S	PXA921/10/S	10 pole Socket

Panel Mounted Connector



PX0931

- Mates with PX0911 and PXA911 connectors
- Single hole fixing
- Anti-rotation key
- High grade sealing gasket
- 3-7mm panel thickness



Panel Mounting

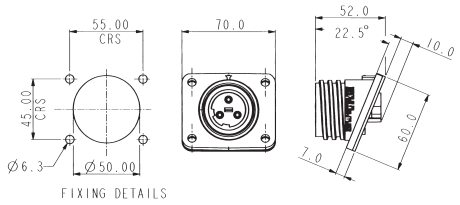
PX0931/02/P	2 pole Plug	PX0931/02/S	2 pole Socket
PX0931/03/P	3 pole Plug	PX0931/03/S	3 pole Socket
PX0931/04/P	4 pole Plug	PX0931/04/S	4 pole Socket
PX0931/05/P	5 pole Plug	PX0931/05/S	5 pole Socket
PX0931/07/P	7 pole Plug	PX0931/07/S	7 pole Socket
PX0931/10/P	10 pole Plug	PX0931/10/S	10 pole Socket

Flange Mounted Connector



PX0941

- Mates with PX0911 and PXA911 connectors
- Supplied with high grade sealing gasket
- Supplied with sealing grommets for panel fixing screws (M6 thread recommended)



Flange Mounting

PX0941/02/P	2 pole Plug	PX0941/02/S	2 pole Socket
PX0941/03/P	3 pole Plug	PX0941/03/S	3 pole Socket
PX0941/04/P	4 pole Plug	PX0941/04/S	4 pole Socket
PX0941/05/P	5 pole Plug	PX0941/05/S	5 pole Socket
PX0941/07/P	7 pole Plug	PX0941/07/S	7 pole Socket
PX0941/10/P	10 pole Plug	PX0941/10/S	10 pole Socket

Additional Bulkhead Adaptor Moulding



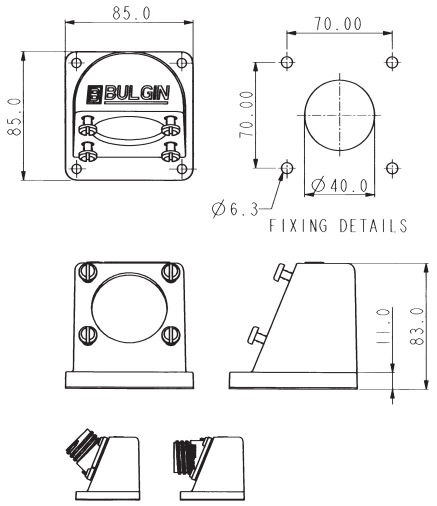
PX0950

Additional Bulkhead Adaptor Moulding



PX0950 & PX0941

- For use with flange mounting connector PX0941, to give 45° or 90° angle
- Supplied with high grade sealing gasket
- Supplied with sealing grommets for panel fixing screws (M6 thread recommended)



Accessories



PX0960, PX0970

- Sealing caps to maintain IP68 rating of unmated connectors, with plastic straps

Accessories



PX0990, PX0991, PX0992

- Heavy duty sealing caps to maintain IP68 rating of unmated connectors, with stainless steel straps

Sealing Caps

PX0960	Sealing cap for use with PX0911/xx/x and PXA911/xx/x
PX0970	Sealing cap for use with all other styles
PX0990	Heavy duty sealing cap for use with PX0911/xx/x and PXA911/xx/x
PX0991	Heavy duty sealing cap for use with PX0921/xx/x and PXA921/xx/x
PX0992	Heavy duty sealing cap for use with PX0931Wand PX0941

Gland Packs

PX0980	Pack of 3 additional cable glands for PX0911 and PX0921 to suit cable sizes; 11-13mm, 9-11 and 7-9mm dia.
PXA980	Pack of 3 additional cable glands for PXA911 and PXA921 to suit cable sizes;18-20mm, 16-18 and 14-16mm dia.

Electrical

No Poles:	2, 3	4, 5	7	10†
Current Rating:	32A 30A, CSA	32A 25A, CSA	32A 25A, CSA*	10A UL
Voltage Rating:	600V ac/dc	600V ac/dc	430V ac/dc	250V ac/dc

Contact Resistance: <10m Ω (initial)
Insulation Resistance: >10^6MΩ (@ 500V dc)
Dielectric strength: 2.2kV ac min
AC Breakdown voltage: 6kV

Operating Temperature Range: –40°C to +85°C
Approvals:
E214972
1211899
40003148
2011010203500396 – 10 Amp Rated
2011010203500396 – 32 Amp Rated

*with 75°C min. rated cable

Material

Body Mouldings:	Polyamide
Flammability Rating:	UL94V-0
UV Resistance:	To EN50021: 1999
Contacts:	Machined Solid Brass, Nickel plated
O Rings:	Nitrile
Panel Sealing Gasket:	Silicone Rubber
RoHS	Compliant

Contact Layout



2 pole 3 pole 4 pole 5 pole 7 pole 10 pole

Dimensions

Overall dimensions of connectors when mated together

PX0911 + PX0921 230 mm max.
PXA911 + PXA921 270 mm max.

PX0911 + PX0931 135 mm max. (to panel)
PXA911 + PX0931 175 mm max. (to panel)

PX0911 + PX0941 145 mm max.
(to panel, mid point on flange)

PXA911 + PX0941 174 mm max.
(to panel, mid point on flange)

Mechanical:

Sealing:	IP69K, Tested in accordance with DIN 40050/Part 9 IP6K9K. IP68, EN60529:1992+A2:2013 tested @ 1.054kg/sq.cm. (15lb/sq.in.) 10m depth for 2 weeks
Salt Mist:	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Cable Acceptance:	PX0911-PX0921 13 - 15mm O/D standard, 7-13mm with gland pack PXA911-PXA921 20 - 22mm O/D standard, 14 - 20mm with gland pack
Contact Accommodation:	2-7 pole - 2.5 to 4mm2 (13 to10AWG) conductor, single or multi stranded 10 pole - 0.75 to 2mm2 (14 to 18AWG) conductor, single or multi stranded
Termination:	Axial screw terminals
Cable Retention force:	22mm dia, 150N 15mm dia, 150N 7mm dia, 80N

Gland Nut Torques:

PX0 range	
13-15mm (Yellow - std.)	3.16Nm (28 lbf.in.)
11-13mm (black)	3.16Nm (28 lbf.in.)
7-9mm (dark grey)	3.16Nm (28 lbf.in.)
PXA range	3.16Nm (28 lbf.in.)
20-22mm (Yellow - std.)	
18-20mm (black)	3.16Nm (28 lbf.in.)
16-18mm (white)	3.16Nm (28 lbf.in.)
14-16mm (dark grey)	3.16Nm (28 lbf.in.)

Tightening Torques:

Panel mount nut	2.25Nm (20 lbf.in.)
Flange & Bulkhead fixing screws	0.9Nm (8 lbf.in.)
Inserts into Bodies	1.13Nm (10 lbf.in.) to 1.36Nm (12 lbf.in.)
Term screws - 2 to 5 poles	1.0Nm (9 lbf.in.) max
Term screws - 7 pole	0.4Nm (3.5 lbf.in.) max
Term screws - 10 pole	0.25Nm (2.2 lbf.in.) max
Rear thread PX0931 series	M36 x 2-6g

PX X9	X	X	/ XX	/ X	/ XX

Series Designation

09 = Standard Cable Accommodation (7-13mm)

A9 = Large Cable Accommodation (14-22mm)

Body Styles

1 = Flex
2 = Flex In-line
3 = Panel
4 = Flange Panel

Contact Termination

1 = Screw Terminal

Number Contacts

02 = 2 pole
03 = 3 pole
04 = 4 pole
05 = 5 pole
07 = 7 pole
10 = 10 pole

Contact Type

P = Plug, S = Socket

Cable Acceptance

EXP-0 version:
Blank = 13-15mm
Yellow cable gland (std)

3 = 11-13mm
Black cable gland

2 = 9-11mm
White cable gland

1 = 7-9mm
Dark Grey cable gland

EXP-A version:
Blank = 20-22mm
Yellow cable gland (std)

9 = 18-20mm
Black cable gland

8 = 16-18mm
White cable gland

7 = 14-16mm
Dark Grey cable gland

Example:

PX0911/07/P/03 = Flex cable connector with standard cable accommodation body, seven pin contacts, with gland to suit 11-13mm cable.

Standard Buccaneer



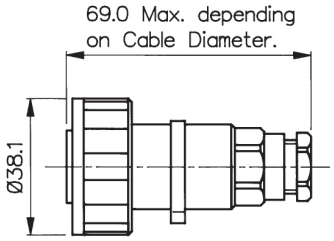
- IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks and 9.84kg/sq cm (140lb/sq in) 100m depth for 12 hours
- IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
- Water and dustproof to IP68 when mated
- 2, 3, 4, 6, 7, 9, 12 and 25 pole
- 12A, 277V ac/dc 2 pole screw terminal, 3 pole screw terminal and crimp contacts
- 10A, 277V ac/dc 4 pole screw terminal
- 5A, 277V ac/dc 6 and 7 pole screw terminal
- 5A, 150V ac/dc 9 pole crimp contacts
- 5A, 50V ac/dc 12 pole crimp and solder contacts
- 1A, 50V ac/dc 25 pole crimp and solder contacts
- Plug or socket connection in each body style
- Compact design
- Diameter over coupling ring 38mm
- Sealing caps available to maintain IP68 rating of unmated connectors
- 7 body styles - flex cable, in-line flex cable, panel mount (front), panel mount (rear), PCB mount, bulkhead and flange mount
- Leading earth contact for 3 pole socket version
- Positive locating keyways - cannot be mis-connected
- Easy assembly - no special tools required on screw terminal versions
- Cable range from 3.5mm - 9mm
- Colour coded identification variants
- Pre-wired, overmoulded cable assemblies
- CCC, UL, CSA and VDE approvals
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Flex Cable Connector



PX0731

- Mates with In-Line Flex or Panel Mounting Versions
- Screw Locking Ring
- Pin or Socket Versions
- Leading Earth on 3 pole connectors
- Poles 2, 3, 4, 6, 7, 9, 12, 25
- Standard Cable Acceptance (2 to 9 pole) 6-8mm, 3.5-9mm with alternative glands



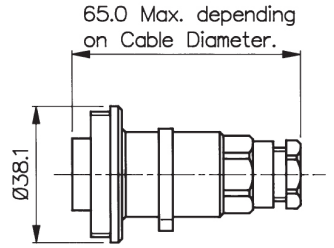
Poles	Termination	Pin Contacts	Socket Contact	Contacts
2	Screw	PX0736/P	PX0736/S	Supplied Fitted
3	Screw	PX0731/P	PX0731/S	Supplied Fitted
3	Crimp	PX0776/P	PX0776/S	Supplied Loose
4	Screw	PX0748/P	PX0748/S	Supplied Fitted
6	Screw	PX0739/P	PX0739/S	Supplied Fitted
7	Screw	PX0745/P	PX0745/S	Supplied Fitted
9	Crimp	PX0728/P	PX0728/S	Supplied Loose
12	Crimp/Solder	PX0794/P	PX0794/S	Order Separately
25	Crimp/Solder	PX0820/P	PX0820/S	Order Separately

Inline Flex Cable Connector



PX0732

- Mates with Flex or Panel Mounting Versions
- Screw Locking Ring
- Pin or Socket Versions
- Leading Earth on 3 pole connectors
- Poles 2, 3, 4, 6, 7, 9, 12, 25
- Standard Cable Acceptance (2 to 9 pole) 6-8mm, 3.5-9mm with alternative glands



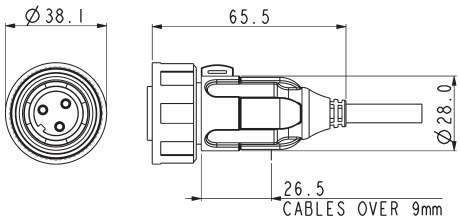
Poles	Termination	Pin Contacts	Socket Contact	Contacts
2	Screw	PX0737/P	PX0737/S	Supplied Fitted
3	Screw	PX0732/P	PX0732/S	Supplied Fitted
3	Crimp	PX0778/P	PX0778/S	Supplied Loose
4	Screw	PX0749/P	PX0749/S	Supplied Fitted
6	Screw	PX0740/P	PX0740/S	Supplied Fitted
7	Screw	PX0746/P	PX0746/S	Supplied Fitted
9	Crimp	PX0729/P	PX0729/S	Supplied Loose
12	Crimp/Solder	PX0795/P	PX0795/S	Order Separately
25	Crimp/Solder	PX0821/P	PX0821/S	Order Separately

Pre Wired Flex Cable Connector



PX0700

- Overmoulded cable assemblies
- Up to 14mm dia cable with PVC or PU jackets
- PX0700 flex cable connector
- Mates with in-line flex connector and all panel connectors

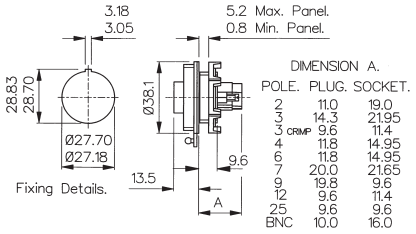


Front Panel Mounting Connector



PX0730/P

- Mates with Flex Cable Connector
- Front panel mounting
- Single Hole Fixing
- Pin or Socket Versions
- Poles 2, 3, 4, 6, 7, 9, 12, 25



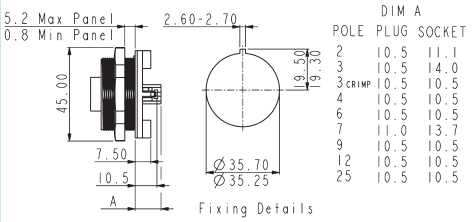
Poles	Termin ation	Pin Contacts	Socket Contact	Contacts
2	Screw	PX0735/P	PX0735/S	Supplied Fitted
3	Screw	PX0730/P	PX0730/S	Supplied Fitted
3	Crimp	PX0779/P	PX0779/S	Supplied Loose
4	Screw	PX0747/P	PX0747/S	Supplied Fitted
6	Screw	PX0738/P	PX0738/S	Supplied Fitted
7	Screw	PX0744/P	PX0744/S	Supplied Fitted
9	Crimp	PX0727/P	PX0727/S	Supplied Loose
12	Crimp/Solder	PX0796/P	PX0796/S	Order Separately
25	Crimp/Solder	PX0822/P	PX0822/S	Order Separately

Rear Panel Mounting Connector



PX0709/x/xx

- Mates with Flex Cable Connector
- Rear panel mounting
- Single Hole Fixing
- Pin or Socket Versions
- Poles 2, 3, 4, 6, 7, 9, 12 or 25



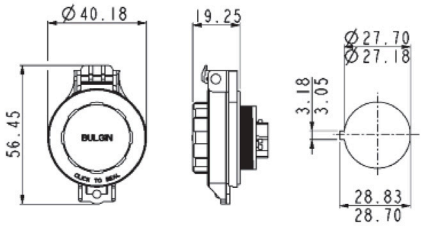
Poles	Termination	Pin Contacts	Socket Contact	Contacts
2	Screw	PX0709/P/02	PX0709/S/02	Supplied Fitted
3	Screw	PX0709/P/03	PX0709/S/03	Supplied Fitted
3	Crimp	PX0708/P/03	PX0708/S/03	Supplied Loose
4	Screw	PX0709/P/04	PX0709/S/04	Supplied Fitted
6	Screw	PX0709/P/06	PX0709/S/06	Supplied Fitted
7	Screw	PX0709/P/07	PX0709/S/07	Supplied Fitted
9	Crimp	PX0708/P/09	PX0708/S/09	Supplied Loose
12	Crimp/Solder	PX0708/P/12	PX0708/S/12	Order Separately
25	Crimp/Solder	PX0708/P/25	PX0708/S/25	Order Separately

Spring Loaded Sealing Cap



PX0713

- IP54 rated
- Spring loaded
- Clip shut to seal
- For use with front of panel mounting connector types

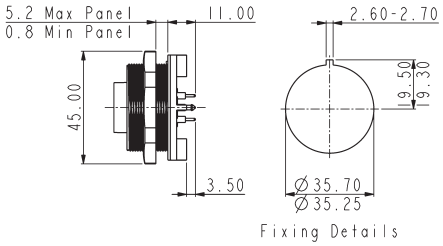


PCB Mounting Connector



PX0707/P/12

- Mates with Flex Cable connector
- Rear panel mounting
- No. poles: 3, 4, 6, 9, 12 or 25
- Pin or socket versions
- Pre-loaded Gold Plated contacts



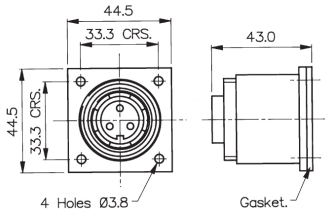
Poles	Termination	Pin Contacts	Socket Contact	Contacts
3	PCB	PX0707/P/03	PX0707/S/03	Supplied Fitted
4	PCB	PX0707/P/04	PX0707/S/04	Supplied Fitted
6	PCB	PX0707/P/06	PX0707/S/06	Supplied Fitted
9	PCB	PX0707/P/09	PX0707/S/09	Supplied Fitted
12	PCB	PX0707/P/12	PX0707/S/12	Supplied Fitted
25	PCB	PX0707/P/25	PX0707/S/25	Supplied Fitted

Bulkhead Flange Mounting Connector



PX0756/S

- Mates with Flex Cable Connector
- Screw Fixing Flange
- Pin or Socket Versions
- Poles 2, 3, 4, 6, 7, 9, 12, 25
- Supplied with sealing gasket and screw sealing grommets



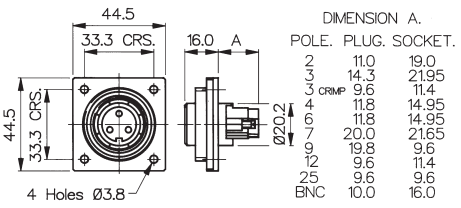
Poles	Termination	Pin Contacts	Socket Contact	Contacts
2	Screw	PX0757/P	PX0757/S	Supplied Fitted
3	Screw	PX0756/P	PX0756/S	Supplied Fitted
3	Crimp	PX0787/P	PX0787/S	Supplied Loose
4	Screw	PX0761/P	PX0761/S	Supplied Fitted
6	Screw	PX0758/P	PX0758/S	Supplied Fitted
7	Screw	PX0760/P	PX0760/S	Supplied Fitted
9	Crimp	PX0762/P	PX0762/S	Supplied Loose
12	Crimp/Solder	PX0798/P	PX0798/S	Order Separately
25	Crimp/Solder	PX0823/P	PX0823/S	Order Separately

Low Profile Flange Mounting Connector



PX0765/S

- Screw Flange Fixing
- Pin or Socket Versions
- Poles 2, 3, 4, 6, 7, 9, 12, 25
- Mates with Flex Cable Connector
- Supplied with sealing gasket and screw sealing grommets



Poles	Termination	Pin Contacts	Socket Contact	Contacts
2	Screw	PX0764/P	PX0764/S	Supplied Fitted
3	Screw	PX0765/P	PX0765/S	Supplied Fitted
3	Crimp	PX0781/P	PX0781/S	Supplied Loose
4	Screw	PX0766/P	PX0766/S	Supplied Fitted
6	Screw	PX0767/P	PX0767/S	Supplied Fitted
7	Screw	PX0768/P	PX0768/S	Supplied Fitted
9	Crimp	PX0769/P	PX0769/S	Supplied Loose
12	Crimp/Solder	PX0797/P	PX0797/S	Order Separately
25	Crimp/Solder	PX0824/P	PX0824/S	Order Separately

Coloured Contact Inserts



Coloured Inserts

- With or without matching gland nut
- Positive visual identification
- Available in; Black, Blue, Green, Grey, Light Grey, Red, White and Yellow

Contact Inserts Colour Options

Part No	Suffix Colour
Blank	Black
BL	Blue
GN	Green
GY	Grey
LG	Light Grey
RD	Red
WH	White
YL	Yellow

Insert/Gland Nut Combinations

1	Insert and Gland Nut Coloured
2	Insert Only Coloured

E.g. PX0731/P/YL1 = Yellow insert and gland nut

Contacts for 12 and 25 Pole Inserts



12 and 25 way contacts

- Crimp or Solder Pins and Sockets
- Gold Plated
- Current ratings:
  12 way: 5A, 50V
  25 way: 1A, 50V

Contacts - Solder & Crimp for 12 and 25 pole

Contacts (for 25 pole) (Supplied in packs of 10)	Solder	Crimp
Pins	SA3180/1	SA3180
Sockets	SA 3179/1	SA3179
Contacts (for 12 pole) (Supplied in packs of 10)	**Solder**	**Crimp**
Pins	SA3348/1	SA3348
Sockets	SA3347/1	SA3347

Assembly Tools



PNo 14025 and 13027

- Crimp Tools for 3, 9,12 and 25 pole crimp contacts
- Insertion/Extraction Tool for 25 pole contacts

Tools

Crimp Tool (25 pole)	PNo. 14025/1AMP
Crimp Tool (12 pole)	PNo. 14025
Positioner (12 pole)	PNo. 14025/5AMP
Crimp Tool (9 pole)	PNo. 13826
Crimp Tool (3 pole)	PNo. 14232
3 pole positioner	PNo. 14232/1
Insertion/Extraction Tool (25 pole)	PNo. 13027
Insertion/Extraction Tool (12 pole)	PNo. 13027/1
Insertion/Extraction Tool (3 pole)	PNo. 13027/3

Cable Glands



SA3253

- Pack of alternative cable glands to suit cables from 3.5 to 9mm dia.

Cable Acceptance - Alternatives

Gland Diameter	Gland Part No.	Gland Colour	Additional Suffix
6-8mm	12023	Black	Standard for 2-12 pole
3.5-5mm	SA3426	Grey	Suffix /04†
5-7mm	12023/1	White	Suffix /05
7-9mm	12023/2	Yellow	Suffix /07*
Gland Pack	SA3253	Pack of 3 glands to suit cables 3.5-5mm, 5-7mm & 7-9mm dia†	

*Note: 7-9mm gland standard for 25 way, no suffix required.
†Includes additional black gland cage for 3.5-5mm dia. cable range.
To order connector with alternative cable gland add suffix to part no. e.g. PX0731/P/07 = PX0731 3 pin connector with cable gland to suit 7-9mm dia. cable.

Cable Acceptance - Standard as supplied

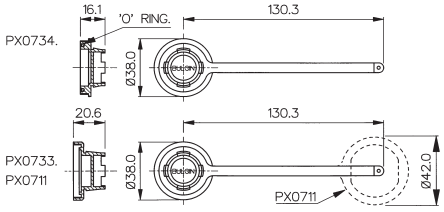
No. Contacts	Cable Diameter or Type
2-12 Pole	6-8mm
25 Pole	7-9mm

Sealing Cap and Assembling Tool



PX0734 PX0733

- Maintains IP68 Rating of Unmated Connectors
- Can be used to remove Inserts
- PX0734 for Flex Cable Connector
- PX0733 for In-line Flex, Front Panel, Bulkhead and Flange mount connectors
- PX0711 for PCB and Rear Panel Mount connectors

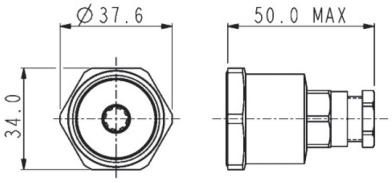


Rear of Panel Back Shell



PX0799

- Provides environmental seal to rear of panel
- Standard cable acceptance 6-8mm, 3.5 to 9mm with alternative glands
- For use on front panel mounting connectors
- Replaces mounting nut in panel connector



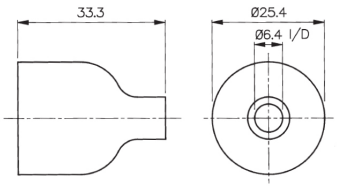
PVC Insulation Boot



PNo. 12855

- Shock protection for rear of connector
- Flammability Rating UL94V-0
- Fits Front Panel Mount Versions only

12855 for panel mounting types only.



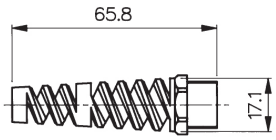
Cable Support Accessory



PNo. 12237

- Gives Extra Support to the Cable
- Suitable for 5-7mm and 7-9mm Cable Diameters

12237 provides additional cable support.
Suitable for 5-7mm and 7-9mm cables.



Part No System

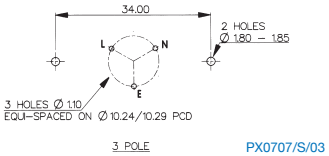
PX0xxx	/ X	/ XX	/ XX	X
Body Styles	**Contacts Type** P = Pin S = Socket	**Cable Acceptance or PCB/Rear Panel Mounting** Flex Cable and In-line Flex Connectors cable acceptance use: Blank = 6-8mm (Black) standard for 2-12 pole 04 = 3.5-5mm (Grey) 05 = 5-7mm (White) 07 = 7-9mm (Yellow) (standard for 25 way, no suffix required) PCB (PX0707) and Rear Panel Mount connectors (PX0708 and PX0709) use: 02 = 2 pole 03 = 3 pole 04 = 4 pole 06 = 6 pole 07 = 7 pole 09 = 9 pole 12 = 12 pole 25 = 25 pole Front Panel, Bulkhead and Flange Mount - not required:	**Insert/Gland Nut Colour** Blank = Black BL = Blue GN = Green GY = Grey LG = Light Grey RD = Red WH = White YL = Yellow	**Insert/Gland Nut Colour Combination** 1 = Insert and Gland Nut Coloured 2 = Insert only Coloured

Examples:

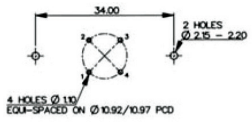
PX0707/P/06= PCB Panel connector, pin contacts, 6 pole
PX0731/S = Flex Cable connector, socket contacts, 3 pole
PX0732/P/07/BL2 = In-Line Flex Cable connector, pin contacts, 3 pole, 7-9mm cable acceptance, blue insert

PCB Layouts

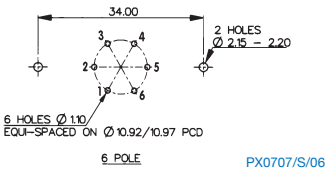
Sockets
Contact Nos viewed from rear of panel



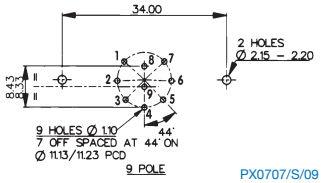
PX0707/S/03



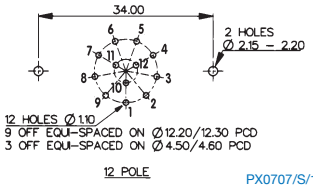
PX0707/S/04



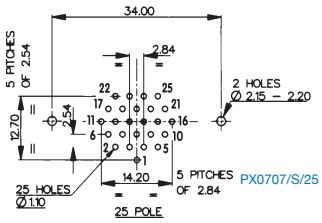
PX0707/S/06



PX0707/S/09

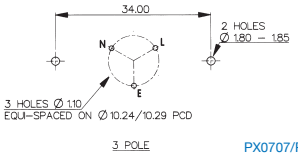


PX0707/S/12

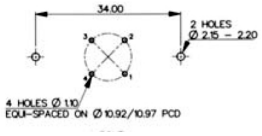


PX0707/S/25

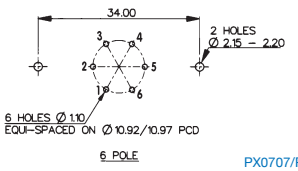
Pins
Contact Nos viewed from rear panel rear of panel



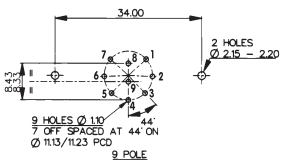
PX0707/P/03



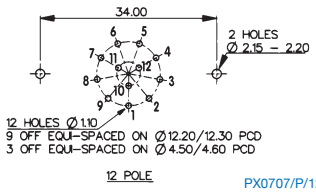
PX0707/P/04



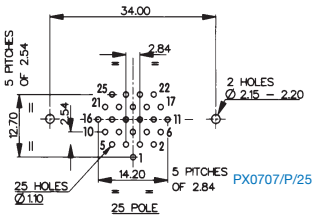
PX0707/P/06



PX0707/P/09



PX0707/P/12



PX0707/P/25

Specifications

Electrical:

No. Poles:	2, 3	4	6, 7	9	12	25
Current Rating:						
VDE	12A	10A	5A	5A	5A	1A
UL, CSA	10A	6A	3A	5A	5A	1A
Voltage Rating (ac/dc):	277V	277V	277V	150V	50V	50V

Contact Resistance: <10mΩ (2-9 Pole)
<5mΩ (12 Pole)
<5mΩ (25 Pole)

Insulation Resistance: $>10^4$MΩ @ 500V d.c. (2-9 Pole)

AC Breakdown voltage: 4kV Pole - Pole (2-9 Pole)
6kV Poles - Panel (Low Profile Flange and Panel Types – 2-9 Pole)
7.5kV Poles - Panel (Other Types – 2-9 Pole)

Operating Temp. Range: –20°C to +70°C

Approvals:

UL	E93288 and E337507
CSA	LR80968-30
VDE	40023148
CCC	2011010203500391 – 1 Amp Rated
	2011010203500393 – 5 Amp Rated
	2011010203500394 – 10 Amp Rated
	2011010203500395 – 12 Amp Rated

Overmoulded cable assemblies approvals to customer requirements.

Material:

Body Mouldings:	Glass Filled Polyamide UL94HB
Inserts (2-25 pole):	Polyamide UL94V-0
PX0707	Polyamide UL94V-0
PX0708	Polyamide UL94V-0
PX0709	Polyamide UL94V-0
Overmoulded types:	
Body Mouldings:	Polyurethane
Flammability Rating:	UL94V-HB
Contacts:	
Screw Terminal:	Brass, Nickel Plated
Crimp (9 pole):	Copper Alloy, Tin Plated
Crimp/Solder (12+25 Pole):	Copper Alloy, Gold Plated (0.1µm on Nickel)
BNC inserts:	Brass, Nickel Plated
BNC contacts:	Brass, Silver Plated
RoHS	Compliant

Mechanical:

Sealing: IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k

IP68, EN 60529:1992+A2:2013 Tested @ 1.054kg/sq.cm. (15lb/sq.in.) 10m depth for 2 weeks.
EN 60529:1992 +A2:2013 Tested @ 9.84kg/sq.cm. (140lb/sq.in.) 100m depth for 12 hours.

Salt Mist: EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Cable Acceptance:	
2-12 Pole - standard gland:	6-8mm dia
2-12 Pole - alternative glands:	3.5-9mm dia
25 Pole - standard gland:	7-9mm dim
25 Pole - alternative glands:	3.5-7mm dim
Contact Accommodation:	
2 and 3 pole screw terminals:	4mm2 (12AWG) max
3 pole crimp:	1.0-1.5mm2 (14-18AWG) max
4, 6 and 7 pole:	1.5mm2 (16AWG) max
9 pole:	0.12-0.21mm2 (24-26AWG)
12 pole:	0.32mm2 (22-26AWG) max
25 pole:	0.12-0.21mm2 (24-26AWG)
Terminations:	
2-7 Pole:	Screw Terminals
3 Pole:	Screw Terminals & Crimp
9 Pole:	Crimp Contacts
12 Pole:	Crimp & Solder Contacts
25 Pole:	Crimp & Solder Contacts
Tightening Torques:	
Flex Mounting/In-Line:	Gland Nut: 1.13Nm (10lbf.in.)
Panel Mounting:	Rear Fixing Nut: 1.7Nm (15lbf.in.)
	Front Fixing Nut: 1.7Nm (15lbf.in.)
Surface/Bulkhead and Low Profile Flange Mounting:	4 Fixing Screws (using washers supplied) 0.34Nm (3lbf.in.)
Sealings Caps/Locking Ring:	1.13Nm (10lbf.in.)
Rear thread, Front Panel Connector:	M27 x 1.0-6H
Thread, Front Panel Connector:	M35 x 1.0-6H

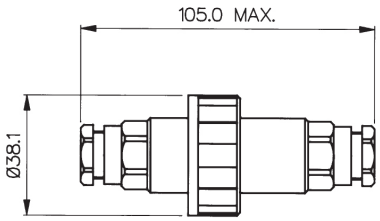
Sealed Inline Cable Joiner

Cable Joiner



PX0777

- IP68 & IP69k Rating
- For Sealed In-Line Connections
- Standard Cable Acceptance 6-8mm
- Cable Range 3.5-9mm (using alternative glands)
- Supplied with 4, 6 or 8 way Terminal Block
- Available Moulded in Black or Orange



Specifications	PX0777	PX0777/4POLE, 6POLE, 8POLE
Rating:	16A, 250V a.c.	10A, 250V a.c.
Wire Termination:	3 way Terminal Block	4, 6, 8 way Terminal Block
Conductor Accommodation:	2.5mm² max (14AWG)	1.5mm² max (16AWG)
Cable Acceptance:	6-8mm dia alternative glands available on request	6-8mm dia alternative glands available on request
Material:	Glass Filled Polyamide UL94-HB	Glass Filled Polyamide UL94-V0
Sealing:	IP68 to BSEN 60529 : 1992 1.054kg/sq.cm. (15lbs/sq.in.) 10m depth for 2 weeks	IP68 to BSEN 60529 : 1992 1.054kg/sq.cm. (15lbs/sq.in.) 10m depth for 2 weeks
	IP69k to DIN 40050-9	IP69k to DIN 40050-9
Salt Mist	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Operating Temp. Range:	–20°C to +70°C	–20°C to +70°C
Colour:	Black Orange (Add /OR to PNo.)	Black Orange (Add /OR to PNo.)
RoHS	Compliant	Compliant

POLE Configurations







Examples

PX0777 – 3 Pole 6-8mm Black.
PX0777/04 – 3 Pole 3.5-5.0mm Black.
PX0777/04/OR –3 Pole 3.5-5.0mm Orange.

PX0777/4POLE – 4 Pole 6-8mm Black.
PX0777/6POLE/04 – 6 Pole 3.5-5.0mm Black.
PX0777/8POLE/04/OR – 8 Pole 3.5-5.0mm Orange.

PX0777 /	XPOLE /	XX /	XX
Part No	Blank = 3 Pole 4POLE = 4 Pole 6POLE = 6 Pole 8POLE = 8 Pole	Blank = 6-8mm 04 = 3.5-5mm 05 = 5-7mm 07 = 7-9mm	Blank = Black OR = Orange

Mini Buccaneer



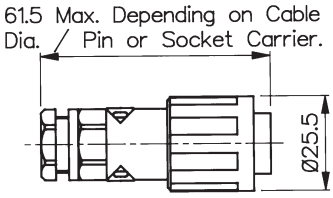
- Water and dustproof to IP68 when mated
- IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- 2, 3, 4 or 6 pole screw terminal inserts
- 3 or 8 pole solder or crimp inserts
- 5 body styles, Flex, Flex In-Line, Panel (2 styles), Panel Side Entry
- 50Ω or 75Ω BNC inserts
- 5A, 380V a.c. 3 & 8 way solder/crimp terminals
- 10A, 250V a.c. 2 & 3 way screw terminals
- 6A, 250V a.c. 4 way screw terminal
- 3A, 250V a.c. 6 way screw terminals
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
- Plug or socket connection in each body style
- Cable range from 3.5mm - 9mm
- Diameter over coupling ring 26mm
- Positive locating keyways - cannot be mis-mated
- Sealing caps available to maintain IP68 rating of unmated connectors
- Flammability rating UL94V-0 material
- Leading earth pin is on 3, 4 & 6 pole screw terminal versions only
- Compact design
- Easy assembly - no special tools required on screw terminal versions
- UL approval

Flex Cable Connector



PX0800 - shown with insert

- PX0800 Connector body
- Mates with Flex In-line or Panel Mounting versions
- Screw locking ring
- Suitable for Pin or Socket inserts
- Cable Acceptance 3.5-9mm (Standard 5-7mm)
- Contact inserts supplied separately

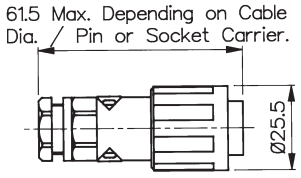


Inline Flex Cable Connector



PX0801 - shown with insert

- PX0801 Connector body
- Mates with PX0800 - Flex Cable connector
- Suitable for Pin or Socket inserts
- Cable Acceptance 3.5-9mm (Standard 5-7mm)
- Contact inserts supplied separately

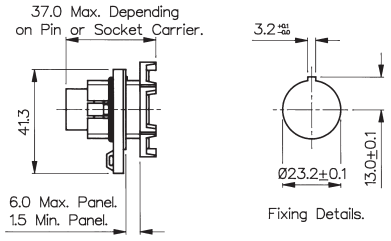


Panel Mounting



PX0802 - shown with insert

- PX0802 Connector body
- Mates with PX0800 - Flex Cable connector
- Single hole fixing
- Suitable for Pin or Socket inserts
- Contact inserts supplied separately

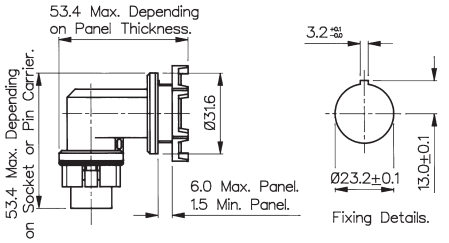


Panel Mounting



PX0803 - shown with insert

- PX0803 Connector body
- Mates with PX0800 - Flex Cable connector
- Right angle cable entry
- Single hole fixing
- Suitable for Pin or Socket inserts
- Contact inserts supplied separately

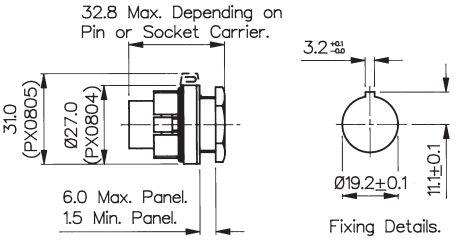


Panel Mounting



PX0805 - shown with insert

- PX0804 and PX0805 Connector bodies
- Mates with PX0800 - Flex Cable connector
- PX0804 without sealing cap retaining clip, PX0805 with sealing cap retaining clip
- Single hole fixing
- Suitable for Pin or Socket inserts
- Contact inserts supplied separately



Screw Terminal Inserts



- 2, 3, 4 and 6 Poles
- Fits all Body Styles
- Leading Earth Pin on 3, 4 and 6 pole inserts
- Nickel Plated contacts

Screw Terminal Inserts - fits all body styles

No. poles	Sockets	Pins
2	SA3319	SA3320
3	SA3229	SA3230
4	SA3242	SA3241
6	SA3244	SA3243

Contact Carrier Inserts



Inserts shown with contacts fitted

- For Solder or Crimp Contacts
- 3 or 8 Pin
- Fits all Body Styles
- Contacts Supplied Separately

Solder & Crimp Contact Carrier Inserts - fit all body styles.

No. poles	Solder	Colour	Crimp	Colour
8 Pin	12734/1	Black	12734	Grey
8 Socket	12735/1	Black	12735	Grey
3 Pin	12734/3/1	Black	12734/3	Grey
3 Socket	12735/3/1	Black	12735/3	Grey

Contacts, Polarising/Blanking Pins



- Gold Plated contacts
- Solder or Crimp
- Polarising/Blanking pins

Contacts - Solder & Crimp - for contact carrier inserts

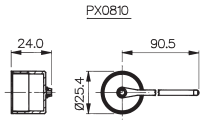
Contacts (Supplied in packs of 10)	Solder	Crimp
Pins	SA3148/1	SA3148
Sockets	SA3149/1	SA3149
Polarising/Blanking Pins	SA3147	
Contact Insertion Tool: Must be used to load contacts into inserts.	SA3150	
Crimping Tool	SA2800	

Sealing Caps



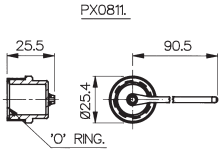
To maintain IP rating

PX0810



PX0810
Fits PX0801, PX0802, PX0803, PX0804 & PX0805. Ensure “O” Ring is in place on main body.

PX0811



PX0811
Fits PX0800. Ensure “O” Ring is in place in cap.

Mini Buccaneer Contact Inserts and Accessories

Specifications

Electrical	Solder/Crimp Terminals	Screw Terminals			BNC
No Poles:	3, 8	2, 3	4	6	
Current Rating:	5A	10A	6A	3A	
Voltage Rating:	380V ac	250V ac	250V ac	250V ac	
Contact Resistance:	<5mΩ				
Insulation Resistance:	>10^6MΩ @ 500V d.c.				
Voltage Proof:	2kV @ 50Hz				
Operating Temp. Range:	–20°C to +70°C				

Approvals:
E214972

Materials	Solder/Crimp Terminals	Screw Terminals	BNC
Body Mouldings:	Polyamide UL94V-0	Polyamide UL94V-0	
Inserts:	Polyamide UL94V-0	Polyamide UL94V-0	
Contacts:	Copper Alloy, Gold Plated (0.1µm) on Nickel	Brass, Nickel Plated	Brass, Silver Plated.
O Rings:	Nitrile		
RoHS	Compliant	Compliant	Compliant

Mechanical	Solder/Crimp Terminals	Screw Terminals	BNC
Sealing:	Protection Classification IP68, EN 60529:1992+A2:2013 Tested @ 1.054kg/sq.cm. (15lb/sq.in.) 10m depth for 2 weeks.		
Salt Mist:	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1		
Cable Acceptance	5-7.00mm dia - standard gland 3.5-9.00mm dia - alternative glands		
Contact Accommodation:	0.2 - 0.5mm2 (20 - 24 AWG)	1mm² max (18 AWG)	50Ω: RG58/CU, URM43, URM76 75Ω: URM70
Insertion Force (typical):	3 way: 5N (1.1lbf) 8 way: 14N (3.1lbf)	3 way: 45N (10lbf) 4 way: 50N (11lbf) 6 way: 140N (31lbf)	
Withdrawal Force (typical):	3 way: 3N (0.66lbf) 8 way: 12N (2.6lbf)	3 way: 32N (7lbf) 4 way: 40N (9lbf) 6 way: 150N (34lbf)	

Tightening Torques	
Gland Nut, PX0800, 801:	1.13Nm (10lbf in)
Rear Nut, PX0802, 803, 804, 805:	0.7Nm min, 1.7Nm max (6.2lbf in min, 15lbf in max)
Sealing Cap, PX0810, 811:	0.23Nm min, 1.13Nm max (2lbf in min, 10lbf in max)

How to order

- Choose body type, check cable diameter and sealing gland size.
- Determine contact carrier inserts. Choose number of poles, and type of contacts (solder, crimp, screw terminal or BNC).
- Choose pins or sockets. Solder and crimp contacts are supplied separately in packs of ten.
- Choose polarising/blanking pins. If required for solder/crimp contact inserts. Supplied in packs of ten.
- Is an insertion tool required (for solder or crimp contacts)?
- Is a crimp tool required?
- Is a sealing cap required?

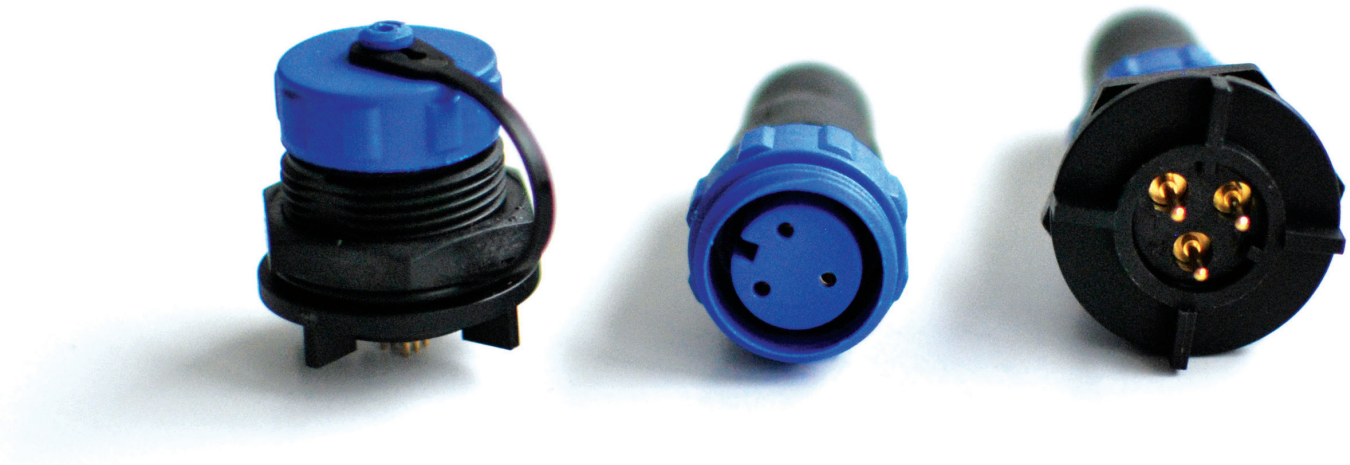
Cable Glands

Cable gland for 5-7mm fitted as standard.
BNC Insert Kit includes gland & washer to fit coax cable.

Cable Diameter	Gland Part No.	Gland Colour	Additional Suffix
5-7mm	12023/1	White	Fitted as standard
3.5-5mm	SA3426	Grey	Suffix /04†
6-8mm	12023	Black	Suffix /06
7-9mm	12023/2	Yellow	Suffix /07
Gland Pack	PX0812	Pack of 3 glands to suit cables 3.5-5mm, 6-8mm, 7-9mm dia†	

To order body with alternative cable gland add suffix to part no. e.g. PX0800/06 = PX0800 body with cable gland to suit 6-8mm dia. cable.
†Includes additional black gland cage for 3.5-5mm dia. cable range.

400 Series Buccaneer



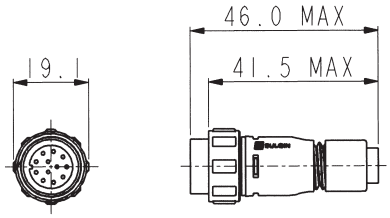
- IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
- 2 and 3 pole - 8A, 250V rating
- 4, 6 and 8 pole - 5A, 125V rating
- 10 and 12 pole - 1A, 50V rating
- 2.5mm contact engagement for electrical integrity ‘Scoop proof’ contacts
- Contact inserts are part of body moulding
- Cable range from 3 to 7mm
- Overall length (flex + flex in-line) 80mm
- Gold plated contacts
- Diameter over coupling ring 19.1mm
- Pre-wired, overmoulded cable assemblies
- Flex, Flex In-Line, Front Panel, Rear Panel and PCB mounting body styles
- Plug and Socket versions in all body styles
- Flame Retardant moulding material - Polyamide UL94-V0
- Contacts supplied separately (except PCB versions)
- Sealing caps available to maintain IP68 rating
- Secure sealing system
- Crimp and solder contacts
- PCB mounting connector supplied with contacts pre-loaded
- Front and rear panel mounting panel connectors
- CCC, UL, CSA and VDE approvals
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Flex Cable Connector



PX0410

- Mates with Flex In-line or Panel mounting versions PX0401, PX0411, PX0412 & PX0413
- Pin or socket
- 2, 3, 4, 6, 8, 10 or 12 pole
- Screw locking ring
- Contacts supplied separately

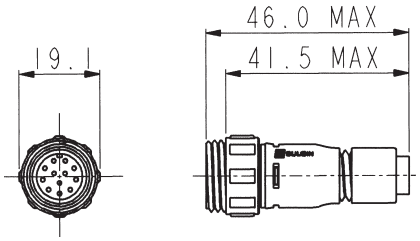


Inline Flex Cable Connector



PX0411

- Mates with Flex Cable connectors PX0400, PX0402 & PX0410
- Pin or socket
- 2, 3, 4, 6, 8, 10 or 12 pole
- For in-line cable connection
- Contacts supplied separately

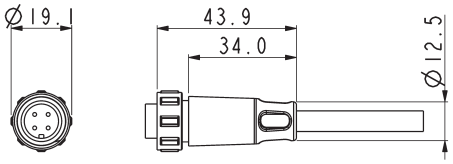


Pre Wired Flex Cable Connector



PX0400

- Overmoulded Flex connector for pre-wired cable assemblies
- Pin or socket
- Cable range 2.5 -9.0mm o/d
- 2, 3, 4, 6, 8, 10 or 12 pole
- Mates with PX0401 & PX0411 Flex In-Line connectors and PX0412 & PX0413 panel mounting connectors

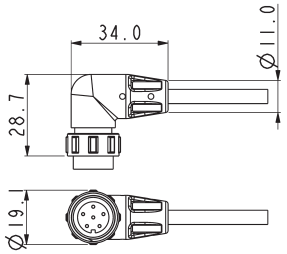


Pre Wired Flex Cable Connector



PX0402

- Right-angled overmoulded
- Flex connector for pre-wired cable assemblies
- Pin or socket
- Cable range 2.5 -9.0mm o/d
- 2, 3, 4, 6, 8, 10 or 12 pole
- Mates with PX0401 & PX0411 Flex In-Line connectors and PX0412 & PX0413 panel mounting connectors

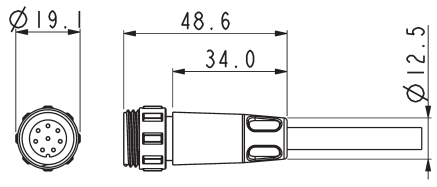


Pre Wired Inline Flex Connector



PX0401

- Overmoulded Flex connector for pre-wired cable assemblies
- Pin or socket
- Cable range 2.5 -9.0mm o/d
- 2, 3, 4, 6, 8, 10 or 12 pole
- Mates with PX0400, PX0402 & PX0410 Flex connectors

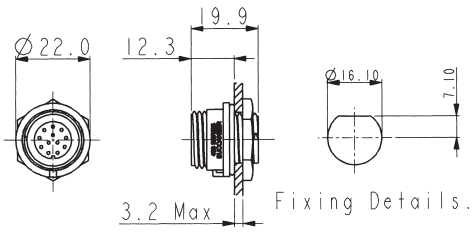


Front Panel Mounting Connector



PX0412

- Mates with Flex Cable connectors PX0410, PX0400 & PX0402
- Front Panel mounting
- Single hole fixing
- Contacts supplied separately
- 2, 3, 4, 6, 8, 10 or 12 pole

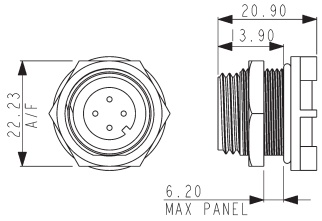


Rear Panel Mounting Connector



PX0413

- Mates with Flex Cable connector PX0410, PX0400 & PX0402
- Rear Panel mounting
- Single hole fixing
- Contacts supplied separately
- 2, 3, 4, 6, 8, 10 or 12 pole

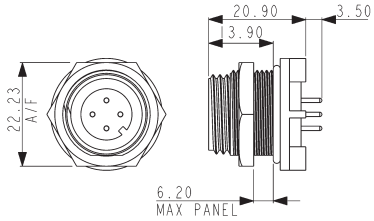


PCB Mounting Connector



PX0413

- Mates with Flex Cable connector PX0410, PX0400 & PX0402
- PCB Rear Panel mounting
- Straight PC spills
- Supplied with pre-loaded gold plated contacts
- 2, 3, 4, 6, 8, 10 or 12 pole



Sealing Caps and Accessories



PX0480 PX0480/1 PX0481 PX0484

- Maintains IP68 Rating of Unmated Connectors
- PX0480: Fits PX0412 (panel mounting)
- PX0480/1: Fits PX0401 & PX0411 (flex in-line)
- PX0481: Fits PX0400, PX0402 & PX0410 (flex connector)
- PX0484: Fits PX0413 (PCB and rear panel mount)

Gland Packs

Part No	Description
PX0482	Pack of 4 pairs cable glands and collets to suit cables from 3.0 to 5.0mm diameter.
PX0483	Pack of 4 pairs cable glands and collets to suit cables from 5.0 to 7.0mm diameter.

Crimp Contacts

Pole	Current Rating	Pin	Socket	Pack Qty	Cable Acceptance (dia)
2, 3	8A	SA3350	SA3349	10	20 - 24 AWG
4, 6, 8	5A	SA3348	SA3347	10	22 - 26 AWG
10, 12	1A	SA3180	SA3179	10	24 - 28 AWG

Solder Contacts

Pole	Current Rating	Pin	Socket	Pack Qty	Cable Acceptance (dia)
2, 3	8A	SA3350/1	SA3349/1	10	20 - 24 AWG
4, 6, 8	5A	SA3348/1	SA3347/1	10	22 - 26 AWG
10, 12	1A	SA3180/1	SA3179/1	10	24 - 28 AWG

Insertion / Extraction

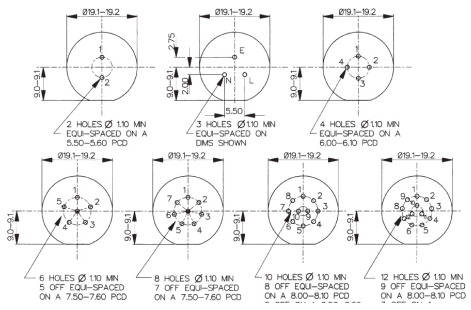
	Poles	Contact Rating	Colour	Part No
Insertion/Extraction Tool	2,3	8A	Blue	13027/2
Insertion/Extraction Tool	4,6,8	5A	Red	13027/1
Insertion/Extraction Tool	10,12	1A	Green	13027

Crimp tools

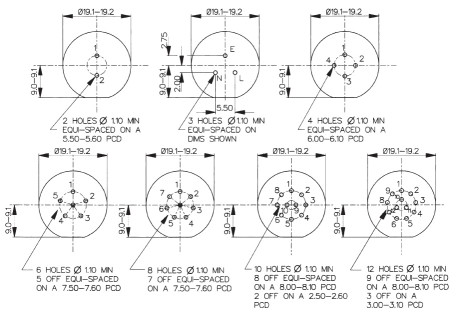
	Poles	Contact Rating	Colour	Part No
Positioner	2,3	8A	Blue	14025/8AMP
Positioner	4,6,8	5A	Red	14025/5AMP
Positioner	10,12	1A	Green	14025/1AMP
8 Indent Crimp Tool for use with positioners				14025

PX0413 PCB Contact Layout

Sockets
Contact numbers viewed from rear of panel



Plugs
Contact numbers viewed from rear of panel





2 pole (8 Amp) | 3 pole (8 Amp) | 4 pole (5 Amp) | 6 pole (5 Amp) | 8 pole (5 Amp) | 10 pole (1 Amp) | 12 pole (1 Amp)

Electrical:

No. Poles:	2, 3	4, 6, 8	10, 12
Current Rating:	8A	5A	1A
Voltage Rating (ac/dc):	250Vac/dc	125Vac/dc	50Vacdc
Contact Resistance:	<5mΩ		
Insulation Resistance:	>10^6MΩ (@ 500V d.c.)		
AC Breakdown voltage:	2.5kV		

Operating Temperature:
Flex and panel types –40°C to +80°C
Overmoulded –20°C to +60°C

Approvals:

UL	E214972
CSA	1273303
VDE	40002226
CCC	2011010203500398 – 1 Amp Rated 2011010203500399 – 5 Amp Rated 2011010203500400 – 8 Amp Rated
	Overmoulded cable assemblies approvals to customer requirements.

Material:

Flex and panel types:
Body Mouldings: Polyamide
Flammability Rating: UL94V-0
UV Resistance: To EN 50021:1999

Overmoulded types:
Body Mouldings: Polyurethane
Flammability Rating: UL94V-HB

Contacts: Copper alloy, Gold plated

O Rings: Nitrile

Panel Sealing O Ring: Nitrile

RoHS Compliant

Mechanical:

Sealing: IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k

IP68, EN60529:1992+A2:2013 tested @ 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks

Salt Mist: EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Cable Acceptance: 3.0 - 7.0mm

Contact Accommodation:
2, 3 pole, 20 - 24 AWG
4, 6, 8 pole, 22 - 26 AWG
10, 12 pole, 24 - 28 AWG

Termination: Crimp, solder and PCB

Insertion/Withdrawal Force:

No. poles:	2	3	4	6	8	10	12
Insertion Force (typ):	19N	25N	27N	27N	28N	55N	62N
Withdrawal Force (typ):	12N	17N	17N	21N	22N	25N	29N

Tightening Torques:
Panel mount (PX0412)
Rear fixing nut: 1.0-1.1Nm (9lbf.in.)
Panel mount (PX0413)
Front fixing nut: 1.0-1.1Nm (9lbf.in.)

Cable Retention force:
3.0mm dia 60N
4.0 to 7.0mm dia 80N

Rear panel thread PX0412: M16x1.5

Panel thread PX0413: 18.97x26TPI Whitworth form to BS84 med fit

Dimensions:

Overall dimensions of connectors when mated together

Flex + Flex In-Line 80mm

Dia. over coupling ring 19.1mm

Dia. over coupling ring

PX04 xx	/	XX	X	/	XXXX

Body Styles

PX0410 = Flex body
PX0411 = Flex in-line body
PX0412 = Front panel mounting body
PX0413 = Rear panel/PCB mounting body

Number Contacts

02 = 2 pole,
03 = 3 pole,
04 = 4 pole,
06 = 6 pole
08 = 8 pole,
10 = 10 pole,
12 = 12 pole

Contact Type

P = Pin,
S = Socket

For PX0410 and PX0411 cable connectors - Cable Entry Size:

3035 = 3.0 - 3.5mm (Light Grey)
3540 = 3.5 - 4.0mm (Grey)
4045 = 4.0 - 4.5mm (Green)
4550 = 4.5 - 5.0mm (Red)

5055 = 5.0 - 5.5mm (Yellow)
5560 = 5.5 - 6.0mm (Blue)
6065 = 6.0 - 6.5mm (White)
6570 = 6.5 - 7.0mm (Black)

Cable gland and collet supplied in colour coded pairs.

For PX0413 PCB/Rear Panel Mount:
PC = Pre-loaded PC pins
Blank = no pins supplied

For PX0412 Front Panel Mount:
Suffix not required - leave blank

Examples:

PX0410/10S/4045 = Flex cable connector, 10 socket contacts with gland and collet for cables between 4.0 and 4.5mm diameter (supplied less contacts).
PX0412/08P = Front panel mounting connector, 8 pin contacts (supplied less contacts.)
PX0413/06P = Rear panel mounting connector, for 6 pin contacts (supplied less contacts).
PX0413/04P/PC = Rear panel/PCB connector, 4 pin contacts, PCB mounting (supplied with contacts loaded).

4000 Series Buccaneer



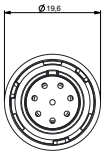
- Sealed to IP66 IP68 and IP69K when mated
- IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- 3, 8 & 12 pole configuration
- Power ratings up to 13A, 600V
- Cable range from 3 to 7mm
- Diameter over coupling ring 19.7mm
- Flex, Flex In-Line, Rear Panel and PCB mounting body styles
- Colour coded O-rings & washers for easy identificaiton purposes
- Plug and Socket versions in all body styles
- Flame Retardant moulding material - Polyamide UL94-V0
- Contacts supplied separately (except PCB versions)
- Sealing caps available to maintain IP68 rating
- Crimp and solder contacts
- UL, CSA and VDE approvals (pending)
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
- EN60068-2-64 Vibration Resistance

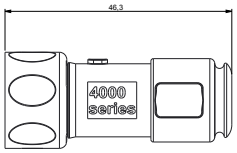
Flex Cable Connector



PXP4010

- Mates with Flex In-line or Panel mounting versions PXP4011, PXP4013
- Pin or socket
- 3, 8, or 12 pole
- ¼ turn locking ring
- Contacts supplied separately





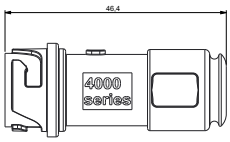
Inline Flex Cable Connector



PXP4011

- Mates with Flex Cable connector PXP4010
- Pin or socket
- 3, 8, or 12 pole
- For in-line cable connection
- Contacts supplied separately



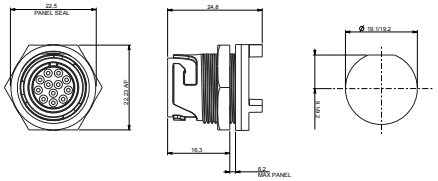


Rear Panel Mounting Connector



PXP4013

- Mates with Flex Cable connector PXP4010, PXP4011
- Rear Panel mounting
- Pin or socket
- Single hole fixing
- Contacts supplied separately
- 3, 8 or 12 pole

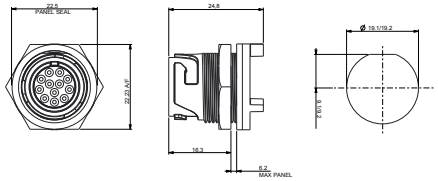


PCB Mounting Connector



PXP4013/XXX/PC

- Mates with Flex Cable connector PXP4010, PXP4011
- Pin or socket
- PCB Rear Panel mounting
- Straight PC spills
- Supplied with pre-loaded gold plated contacts
- 3, 8, or 12 pole



Sealing Caps and Accessories



PXP4081 PXP4082 PXP4083

- Maintains IP-sealed rating of unmated connectors

Part no.	Description
PXP4081	Sealing cap for use with PXP4010 & PXP4040
PXP4082	Sealing cap for use with PXP4011
PXP4083	Sealing cap for use with PXP4013 & PXP4043

Gland Packs



Part no.	Description
PXP4088/0305	Pack of 4 pairs cable glands and collets to suit cables from 3.0 to 5.0mm diameter.
PXP4088/0507	Pack of 4 pairs cable glands and collets to suit cables from 5.0 to 7.0mm diameter.

O-ring & washer pack



Part no.	Description
PXP4089/WH	White coloured O-ring and washer pack
PXP4089/RD	Red coloured O-ring and washer pack
PXP4089/BL	Blue coloured O-ring and washer pack
PXP4089/YL	Yellow coloured O-ring and washer pack
PXP4089/GN	Green coloured O-ring and washer pack

Crimp Contacts

Pole	Current Rating	Pin	Socket	Pack Qty	Cable Acceptance (dia)
3	13A /*10A	SA3350	SA3349	10	16 - 18 AWG
8	8A /*4A	SA3348	SA3347	10	18 - 20 AWG
12	3A /*2A	SA3180	SA3179	10	22 - 24 AWG

Solder Contacts

Pole	Current Rating	Pin	Socket	Pack Qty	Cable Acceptance (dia)
3	13A /*10A	SA3350/1	SA3349/1	10	16 - 18 AWG
8	8A /*4A	SA3348/1	SA3347/1	10	18 - 20 AWG
12	3A /*2A	SA3180/1	SA3179/1	10	22 - 24 AWG

Insertion / Extraction

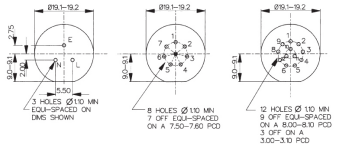
	Poles	Contact Rating	Colour	Part No
Insertion/Extraction Tool	3	13A /*10A	Blue	13027/2
Insertion/Extraction Tool	8	8A /*4A	Red	13027/1
Insertion/Extraction Tool	12	3A /*2A	Green	13027

Crimp tools

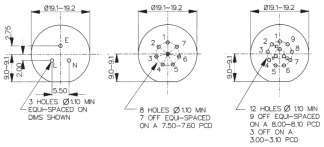
	Poles	Contact Rating	Colour	Part No
Positioner	3	13A/*10A	Orange	14025/1618
Positioner	8	8A /*4A	Grey	14025/1820
Positioner	12	3A /*2A	Yellow	14025/2224
8 Indent Crimp Tool for use with positioners				14025

PXP4013 PCB Contact Layout

Sockets
Contact numbers viewed from rear of panel



Plugs
Contact numbers viewed from rear of panel





3 pole
(13 Amp)



8 pole
(8 Amp)



12 pole
(3 Amp)

*Current rating for CSA standards

Electrical:

No. Poles:	3	8	12
Current Rating UL / VDE:	13A	8A	3A
Current Rating CSA:	10A	5A	3A
Voltage Rating (ac/dc):	600Vac/dc	600Vac/dc	600Vac/dc
Contact Resistance:	<5mΩ		
Insulation Resistance:	>10^6MΩ (@ 500V d.c.)		
AC Breakdown voltage:	2.5kV		

Operating Temperature:
Flex and panel types –40°C to +120°C

Approvals:
UL
CSA
VDE

Material:

Flex and panel types:	
Body Mouldings:	Polyamide
Flammability Rating:	UL94V-0
UV Resistance:	To EN 50021:1999
Contacts:	Copper alloy, Gold plated
O Rings:	Silicone
Panel Sealing O Ring:	Silicone
RoHS	Compliant

Mechanical:

Sealing:	IP66 to En60529:1992+A2:2013 IP68 to En60529:1992+A2:2013 (10m depth for 2 weeks) IP69k to DIN 40050-9 IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
Salt Mist:	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Vibration:	BS EN 60068-2-64:2008 Test Fh BS EN 60068-2-27:2009 Test Ea
Cable Acceptance:	3.0 - 7.0mm
Contact Accommodation:	3 pole, 16 - 18 AWG 8 pole, 18 - 20 AWG 12 pole, 22 - 24 AWG
Termination:	Crimp, solder and PCB

Insertion/Withdrawal Force:

No. poles:	3	8	12
Insertion Force (typ):	25N	28N	62N
Withdrawal Force (typ):	17N	22N	29N

Panel mount (PXP4013) Front fixing nut:	1.0-1.1Nm (9lbf.in.)
Cable Retention force: 3.0mm dia 4.0 to 7.0mm dia	 60N 80N
Panel thread PXP4013:	18.97x26TPI Whitworth form to BS84 med fit

Dimensions:

Overall dimensions of connectors when mated together

Flex + Flex In-Line	80mm
Dia. over coupling ring	19.7mm

PXP40 xx	/	XX	X	/	XXXX

Body Styles

PXP4010 = Flex body
PXP4011 = Flex in-line body
PXP4013 = Rear panel/PCB mounting body

Number Contacts

03 = 3 pole,
08 = 8 pole,
12 = 12 pole,

Contact Type

P = Pin,
S = Socket

For PXP4010 and PXP4011 cable connectors - Cable Entry Size:

3035 = 3.0 - 3.5mm (Light Grey)
3540 = 3.5 - 4.0mm (Grey)
4045 = 4.0 - 4.5mm (Green)
4550 = 4.5 - 5.0mm (Red)

5055 = 5.0 - 5.5mm (Yellow)
5560 = 5.5 - 6.0mm (Blue)
6065 = 6.0 - 6.5mm (White)
6570 = 6.5 - 7.0mm (Black)

Cable gland and collet supplied in colour coded pairs.

For PXP4013 PCB/Rear Panel Mount:
PC = Pre-loaded PC pins
Blank = no pins supplied

Examples:

PXP4010/03S/4045 = Flex cable connector, 3 socket contacts with gland and collet for cables between 4.0 and 4.5mm diameter (supplied less contacts).
PXP4013/08P = Rear panel mounting connector, for 8 pin contacts (supplied less contacts).
PXP4013/03P/PC = Rear panel/PCB connector, 3 pin contacts, PCB mounting (supplied with contacts loaded).

6000 Series Buccaneer – circular connectors that combine the ease of use of a push/pull coupling mechanism with proven environmental sealing. Available with metal or plastic bodies, the range supports both data (USB and Ethernet), signal and mains power. Designed and independently tested to IP66, IP68 & IP69K standards, they are ideal for applications where ingress of dust and water must be avoided and where ease of connection, space and appearance are important considerations.

- Secure, quick connector mating and release
- 30° twist locking
  Tamperproof lock prevents accidental un-mating
- IP66, IP68 and IP69K when mated
  Suitable for a wide range of dust and water borne environments
- All plastic body version; UL94-V0 rated, UV stable, halogen free
  Light-weight, self-extinguishing material suitable for long-term outdoor use
- Flex, flex in-line & panel mount body styles,with sealing caps
  Complete family of products maintain sealing integrity in all styles
- Polarisation and visual alignment features
  Aids the correct mating of connectors
- 2 to 22 poles – up to 16A, 277V rated
  Suitable for mains power to signal applications
- 'Scoop proof' contacts
  Prevents damage through mis-mating – ideal for 'blind mating' applications
- cULus, UL, VDE
  Internationally recognised certification
- Screw, Crimp and Solder terminations available

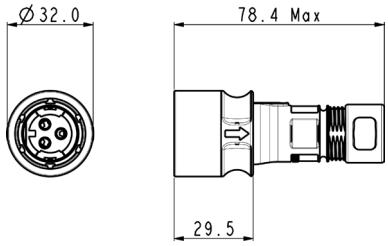


Flex Cable Connector



PXP6010

- Mates with In-Line Flex or Panel Mounting versions PXP6011 & PXP6012
- Push/pull locking ring with 30° twist locking
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 & 22 pole
- Screw, solder and crimp termination



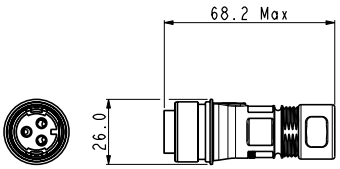
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP6010/02P/ST	PXP6010/02S/ST	Supplied Fitted
2	Crimp / Solder	PXP6010/02P/CR	PXP6010/02S/CR	Contacts Required
3	Screw	PXP6010/03P/ST	PXP6010/03S/ST	Supplied Fitted
3	Crimp / Solder	PXP6010/03P/CR	PXP6010/03S/CR	Contacts Required
8	Crimp / Solder	PXP6010/08P/CR	PXP6010/08S/CR	Contacts Required
16	Crimp / Solder	PXP6010/16P/CR	PXP6010/16S/CR	Contacts Required
22	Crimp / Solder	PXP6010/22P/CR	PXP6010/22S/CR	Contacts Required

In-line Flex Cable Connector



PXP6011

- Mates with Flex Cable connector PXP6010
- For in-line cable connection
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 and 22 pole
- Screw, solder and crimp termination



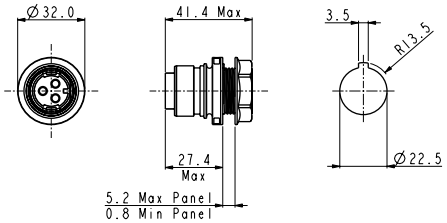
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP6011/02P/ST	PXP6011/02S/ST	Supplied Fitted
2	Crimp / Solder	PXP6011/02P/CR	PXP6011/02S/CR	Contacts Required
3	Screw	PXP6011/03P/ST	PXP6011/03S/ST	Supplied Fitted
3	Crimp / Solder	PXP6011/03P/CR	PXP6011/03S/CR	Contacts Required
8	Crimp / Solder	PXP6011/08P/CR	PXP6011/08S/CR	Contacts Required
16	Crimp / Solder	PXP6011/16P/CR	PXP6011/16S/CR	Contacts Required
22	Crimp / Solder	PXP6011/22P/CR	PXP6011/22S/CR	Contacts Required

Front Panel Mounting Connector



PXP6012

- Mates with Flex Cable connectors PXP6010
- Front panel mounting
- Single hole fixing
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 and 22 pole
- Screw, solder and crimp termination



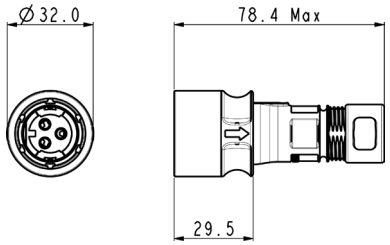
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP6012/02P/ST	PXP6012/02S/ST	Supplied Fitted
2	Crimp / Solder	PXP6012/02P/CR	PXP6012/02S/CR	Contacts Required
3	Screw	PXP6012/03P/ST	PXP6012/03S/ST	Supplied Fitted
3	Crimp / Solder	PXP6012/03P/CR	PXP6012/03S/CR	Contacts Required
8	Crimp / Solder	PXP6012/08P/CR	PXP6012/08S/CR	Contacts Required
16	Crimp / Solder	PXP6012/16P/CR	PXP6012/16S/CR	Contacts Required
22	Crimp / Solder	PXP6012/22P/CR	PXP6012/22S/CR	Contacts Required

Flex Cable Connector



PXM6010

- Mates with In-Line Flex or Panel Mounting versions PXM6011 and PXM6012
- Push/pull locking ring with 30° twist locking
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 and 22 pole
- Screw, solder and crimp termination
- Cable braid termination accessory option, add /SNsuffix



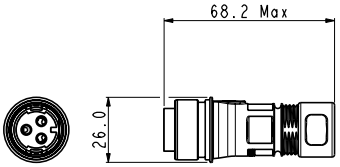
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXM6010/02P/ST	PXM6010/02S/ST	Supplied Fitted
2	Crimp / Solder	PXM6010/02P/CR	PXM6010/02S/CR	Contacts Required
3	Screw	PXM6010/03P/ST	PXM6010/03S/ST	Supplied Fitted
3	Crimp / Solder	PXM6010/03P/CR	PXM6010/03S/CR	Contacts Required
8	Crimp / Solder	PXM6010/08P/CR	PXM6010/08S/CR	Contacts Required
16	Crimp / Solder	PXM6010/16P/CR	PXM6010/16S/CR	Contacts Required
22	Crimp / Solder	PXM6010/22P/CR	PXM6010/22S/CR	Contacts Required

In-line Flex Cable Connector



PXM6011

- Mates with Flex Cable connector PXM6010
- For in-line cable connection
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 and 22 pole
- Screw, solder and crimp termination
- Cable braid termination accessory option, add /SNsuffix



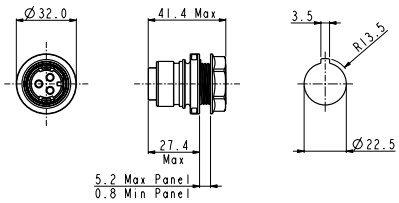
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXM6011/02P/ST	PXM6011/02S/ST	Supplied Fitted
2	Crimp / Solder	PXM6011/02P/CR	PXM6011/02S/CR	Contacts Required
3	Screw	PXM6011/03P/ST	PXM6011/03S/ST	Supplied Fitted
3	Crimp / Solder	PXM6011/03P/CR	PXM6011/03S/CR	Contacts Required
8	Crimp / Solder	PXM6011/08P/CR	PXM6011/08S/CR	Contacts Required
16	Crimp / Solder	PXM6011/16P/CR	PXM6011/16S/CR	Contacts Required
22	Crimp / Solder	PXM6011/22P/CR	PXM6011/22S/CR	Contacts Required

Front Panel Mounting Connector



PXM6012

- Mates with Flex Cable connectors PXM6010
- Front panel mounting
- Single hole fixing
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 and 22 pole
- Screw, solder and crimp termination



Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXM6012/02P/ST	PXM6012/02S/ST	Supplied Fitted
2	Crimp / Solder	PXM6012/02P/CR	PXM6012/02S/CR	Contacts Required
3	Screw	PXM6012/03P/ST	PXM6012/03S/ST	Supplied Fitted
3	Crimp / Solder	PXM6012/03P/CR	PXM6012/03S/CR	Contacts Required
8	Crimp / Solder	PXM6012/08P/CR	PXM6012/08S/CR	Contacts Required
16	Crimp / Solder	PXM6012/16P/CR	PXM6012/16S/CR	Contacts Required
22	Crimp / Solder	PXM6012/22P/CR	PXM6012/22S/CR	Contacts Required

Crimp / Solder Contacts



2, 3, 8, 16 & 22 pole contacts

- Gold Plated
- Current ratings:
  2 & 3 pole : 16A
  8 pole : 10A
  16 pole : 3A
  22 pole : 2A

Contacts (for 2 & 3 pole) (Supplied in packs of 10)	Crimp	Solder
Pins	SA3545/P	SA3624/P
Sockets	SA3545/S	SA3624/S
Contacts (for 8 pole) (Supplied in packs of 10)	**Crimp**	**Solder**
Pins	SA3544/P	SA3623/P
Sockets	SA3544/S	SA3623/S
Contacts (for 16 & 22 pole) (Supplied in packs of 10)	**Crimp**	**Solder**
Pins	SA3542/P	SA3622/P
Sockets	SA3542/S	SA3622/S

Crimp Tooling



PNo 14232

- Crimp Tools for 2, 3, 8, 16 and 22 pole crimp contacts

Crimp Tooling	
Crimp Tool (2 & 3 pole)	PNo.14232
Positioner (2 & 3 pole)	PNo.14232/2/SP
Crimp Tool (8, 16 & 22 pole)	PNo.14025
Positioner (8 pole)	PNo.15021/SP
Positioner (16 & 22 pole)	PNo.15019/SP

Extraction Tool



- Extraction Tool for 2, 3, 8, 16 and 22 pole contacts

Extraction Tools	
Extraction Tool (2 & 3 pole)	PNo.14946/SP
Extraction Tool (8 pole)	PNo.14945/SP
Extraction Tool (16 & 22 pole)	PNo.14944/SP

Contact Carrier Removal Tool



PNo 14917

- For removal of all contact carriers

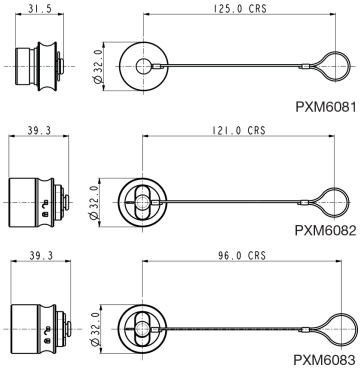
Tools	
Contact carrier removal tool (all poles)	PNo. 14917/SP

Sealing Caps



PXM6083 PXM6082 PXM6081

- Maintains IP Rating of Unmated Connectors
- PXM6081: Fits PXM6010 (Flex Connector)
- PXM6082: Fits PXM6011 (Flex In-Line Connector)
- PXM6083: Fits PXM6012 (Panel Connector)

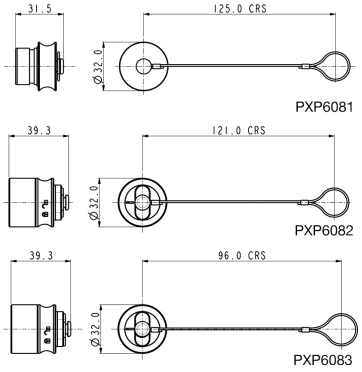


Plastic Sealing Caps



PXP6083 PXP6082 PXP6081

- Maintains IP Rating of Unmated Connectors
- PXP6081: Fits PXP6010 (Flex Connector)
- PXP6082: Fits PXP6011 (Flex In-Line Connector)
- PXP6083: Fits PXP6012 (Panel Connector)



Cable Gland Pack



PXP6088

- Pack of all cable glands to suit cable ranges from 4.0 to 10.0mm diameter

Cable Braid Termination Option



PXM6090

- For cable braid termination
- Supplied with ty-rap

6000 Series Buccaneer

Part No System

PXX	6XXX	/ XX	X	/ XX	/ XXXX	/ XX
Series Designation	**Series / Body Style**	**No. of Contacts**	**Contacts Type**	**Terminations**	**Cable Entry Size**	**Cable Brand Termination Accessory**
PXM= Metal Series PXP= Plastic Series	Body Styles 6010 = Flex 6011 = Flex In-Line 6012 = Panel	No. of Contacts 02 = 2 Pole 03 = 3 Pole 08 = 8 Pole 16 = 16 Pole 22 = 22 Pole	Contacts Type P = Pin S = Socket	Contacts Termination CR = Contacts Required ST = Screw (2 and 3 pole only)	Cable Entry Size (for Flex and Flex In-Line connectors only) 0405 = 4-5mm (Dark Grey) 0507 = 5-7mm (White) 0709 = 7-9mm (Yellow) 0910 = 9-10mm (Light Grey)	Cable Braid Termination Accessory (for Flex and Flex In-Line connectors only) SN if required Blank if not required

Examples

PXM6010/03P/CR/0507= Flex cable connector, 3 pole, pin contacts with 5 to 7mm cable glands
PXM6012/03/S/ST= Front panel mounting connector, 3 pole, socket with screw termination

Electrical:

No. Poles:	2	3	8	16	22
Current Rating: See de-rating curves for further information					
VDE	16A	16A	10A	3A	2A
UL	16A	16A	7A	3A	3A
cUL	11A	11A	4A	1.5A	1.5A
CCC					
Voltage	277V	277V	277V	60V	60V
Rated cable	18 AWG	18 AWG	18 AWG	22 AWG	26 AWG

Contact Resistance:	<10mΩ
Insulation Resistance:	>10^6MΩ @500V dc
AC Breakdown voltage:	
2 pole	>10kV
3 pole	>8kV
8 to 22 pole	>5kV
Operating Temp. Range:	–40°C to +120°C
Approvals:	
UL (E214972)	UL1977
cULus (E214972)	C22.2 No.182.3-M1987 (R2009)
VDE (40039281)	IEC 61984:2009
CCC (Pending)	

Mechanical:

Locking mechanism	Push/pull with 30° locking Patent applied for
Sealing:	IP66 to En60529:1992+A2:2013 IP68 to En60529:1992+A2:2013 (10m depth for 2 weeks) IP69k to DIN 40050-9
Salt Mist (plastic) :	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Salt Mist (metal) :	EN60068-2-11 Test Ka Salt Mist
Contact Accommodation:	
2 & 3 pole crimp / solder	14 to 18AWG
2 & 3 pole screw terminals	1.5mm² max
8 pole crimp / solder	18 to 20AWG
16 pole crimp / solder	22 to 26AWG
22 pole crimp / solder	22 to 26AWG
Cable Acceptance:	4-10mm dia.
Cable retention force (to BS EN61984):	
4 - 9mm dia cable	80N
9 - 10mm dia cable	100N
Terminations:	
2 Pole:	Screw Terminals
3 Pole:	Screw, crimp or solder terminals
8 Pole:	Crimp / Solder Contacts
16 Pole:	Crimp / Solder Contacts
22 Pole:	Crimp / Solder Contacts
Tightening Torques:	
Gland Nut:	1.13Nm (10lb.in)
Panel Nut:	1.7Nm (15lbf.in.)
Panel Nut Thread:	M22 x 1.5-6g
Dimensions:	
Diameter: (over coupling ring)	32mm
Diameter: (panel hole cut-out)	22.5mm

Materials:	Plastic	Metal
Body:	PC/ PBT	Brass
Colour:	Grey	Matt silver
Contacts:	Brass, Nickel Plate (Screw and Crimp) Brass, (3A – Gold plated)	Brass, Nickel Plate (Screw and Crimp) Brass, (3A – Gold plated)
O Rings & Gaskets:	Silicone	Silicone
Flammability Rating:	UL94 V-0	-
Halogen free	Yes	-
UV Resistance:	ISO 4892 part 3 cycle 1 (QUV)	-
RoHS	Compliant	Compliant

The thermal properties of the materials used in the construction of a connector limit the current carrying capacity. There are a number of factors that determine the amount of current that can be handled: contact spacing, size of cable, ambient temperature and the heat that is generated by the current passing through the connector.

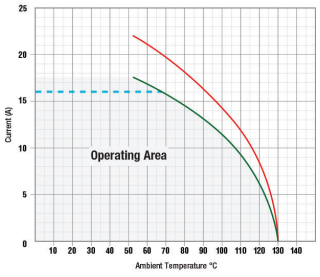
The maximum current varies with different contact layouts, and because of these factors it is necessary to produce de-rating curves for each pole variant. This de-rating curve is specified in the standard IEC 60512 part 3. De-rating curves are plotted for each contact carrier combination with the current being carried simultaneously by all contacts. These graphs show the heat rise generated as the current is increased.

The red line indicates the direct correlation between current applied and the measured temperature rise within the connector. The dotted blue line shows rated current and the green line is derived by applying a factor of 0.8 to the original plot data to give a de-rating curve. The dashed blue line shows the rated current.

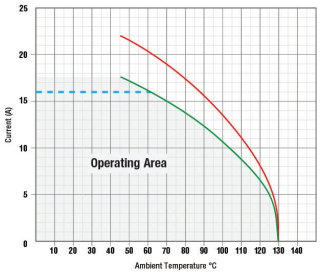
The shaded area under the 0.8 curve shows the permitted operating area, and allows safe current vs ambient temperature characteristics to be determined.

= tested operating limits
= de-rated operating limits
= rated current

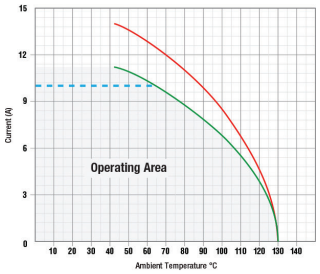
2 Pole, Metal Body, Crimp Terminal, 18 AWG wire
current applied through all pins simultaneously



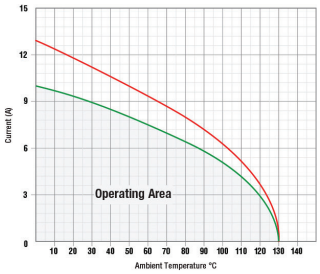
3 Pole, Metal Body, Screw Terminal, 18 AWG wire
current applied through all pins simultaneously



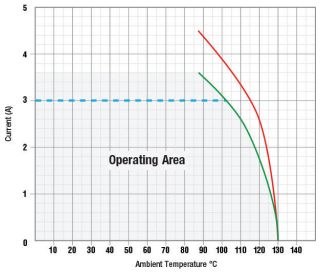
8 Pole, Metal Body, Crimp Terminal, 18 AWG wire
current applied through all pins simultaneously



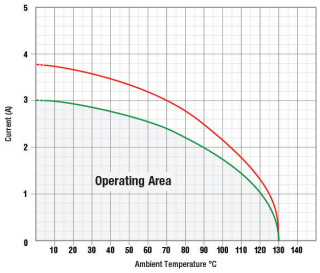
8 Pole, Metal Body, Crimp Terminal, 20 AWG wire
current applied through all pins simultaneously



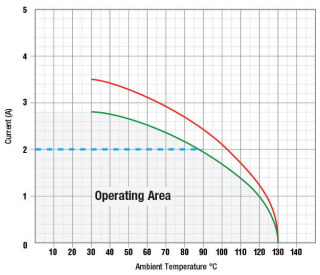
16 Pole, Metal Body, Crimp Terminal, 22 AWG wire
current applied through all pins simultaneously



16 Pole, Metal Body, Crimp Terminal, 26 AWG wire
current applied through all pins simultaneously



22 Pole, Metal Body, Crimp Terminal, 26 AWG wire
current applied through all pins simultaneously



The all plastic and metal construction of the 7000 Series Buccaneer - circular connectors that combine the ease of use of a quick coupling mechanism with proven environmental sealing for signal and mains power.

Designed and independently tested to IP66, IP68 & IP69K standards, they are ideal for applications where ingress of dust and water must be avoided and where ease of connection, space and appearance are important considerations.

- Less than 1/4 Turn locking mechanism
  Secure, quick connector mating and release
- Positive feedback on locking mechanism
  Confidence that connector is correctly mated and sealed
- IP66, IP68 and IP69K when mated
  Suitable for a wide range of dust and water borne environments
- All plastic body version; UL94-V0 rated, UV stable, halogen free
  Light-weight, self-extinguishing material suitable for long-term outdoor use
- Flex, flex in-line & panel mount body styles,with sealing caps
  Complete family of products maintain sealing integrity in all styles
- Polarisation and visual alignment features
  Aids the correct mating of connectors
- 2 to 32 poles – up to 25A, 600V rated
  Suitable for mains power to signal applications
- 'Scoop proof' contacts
  Prevents damage through mis-mating – ideal for 'blind mating' applications
- cULs, UL, VDE
  approvals Internationally recognised certification (pending)
- Screw, Crimp and Solder terminations available
- EN60068-2-52 Test Kb Salt Mist (Cyclic)
  Marine Severity Level 1

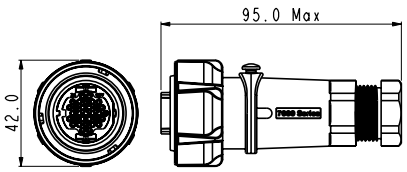


Flex Cable Connector



PXP7010

- Mates with In-Line Flex or Panel Mounting versions PXP7011 & PXP7012
- Quick turn locking ring
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 6, 10 & 32 pole
- Screw solder and crimp termination



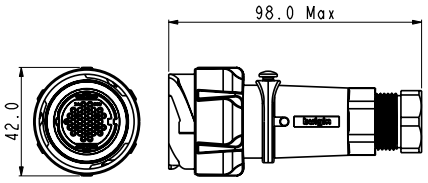
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7010/02P/ST	PXP7010/02S/ST	Supplied Fitted
3	Screw	PXP7010/03P/ST	PXP7010/03S/ST	Supplied Fitted
6	Screw	PXP7010/06P/ST	PXP7010/06S/ST	Supplied Fitted
10	Crimp / Solder	PXP7010/10P/CR	PXP7010/10S/CR	Contact Required
32	Crimp / Solder	PXP7010/32P/CR	PXP7010/32S/CR	Contact Required

In-line Flex Cable Connector



PXP7011

- Mates with Flex Cable connector PXP7010
- For in-line cable connection
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 6, 10 and 32 pole
- Screw solder and crimp termination



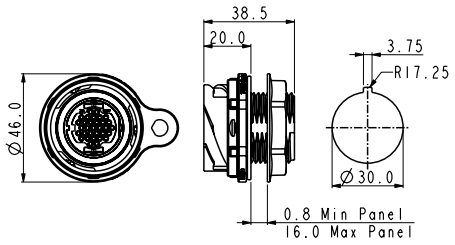
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7011/02P/ST	PXP7011/02S/ST	Supplied Fitted
3	Screw	PXP7011/03P/ST	PXP7011/03S/ST	Supplied Fitted
6	Screw	PXP7011/06P/ST	PXP7011/06S/ST	Supplied Fitted
10	Crimp / Solder	PXP7011/10P/CR	PXP7011/10S/CR	Contact Required
32	Crimp / Solder	PXP7011/32P/CR	PXP7011/32S/CR	Contact Required

Front Panel Mounting Connector



PXP7012

- Mates with Flex Cable connectors PXP7010
- Front panel mounting
- Single hole fixing
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 6, 10 and 32 pole
- Screw solder and crimp termination



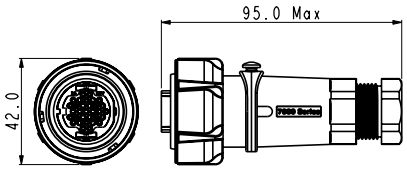
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7012/02P/ST	PXP7012/02S/ST	Supplied Fitted
3	Screw	PXP7012/03P/ST	PXP7012/03S/ST	Supplied Fitted
6	Screw	PXP7012/06P/ST	PXP7012/06S/ST	Supplied Fitted
10	Crimp / Solder	PXP7012/10P/CR	PXP7012/10S/CR	Contact Required
32	Crimp / Solder	PXP7012/32P/CR	PXP7012/32S/CR	Contact Required

Flex Cable Connector



PXM7010

- Mates with In-Line Flex or Panel Mounting versions PXM7011 & PXM7012
- Quick turn locking ring
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 6, 10 & 32 pole
- Screw solder and crimp termination
- Cable braid termination accessory option, add /SNsuffix



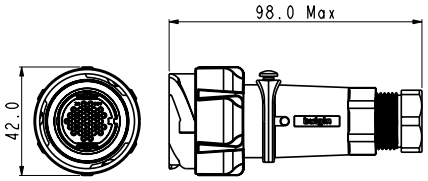
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXM7010/02P/ST	PXM7010/02S/ST	Supplied Fitted
3	Screw	PXM7010/03P/ST	PXM7010/03S/ST	Supplied Fitted
6	Screw	PXM7010/06P/ST	PXM7010/06S/ST	Supplied Fitted
10	Crimp / Solder	PXM7010/10P/CR	PXM7010/10S/CR	Contact Required
32	Crimp / Solder	PXM7010/32P/CR	PXM7010/32S/CR	Contact Required

In-line Flex Cable Connector



PXM7011

- Mates with Flex Cable connector PXM7010
- For in-line cable connection
- Pin or socket versions
- Leading earth on 3 pole connectors
  2, 3, 6, 10 and 32 pole
- Screw solder and crimp termination
- Cable braid termination accessory option, add /SNsuffix



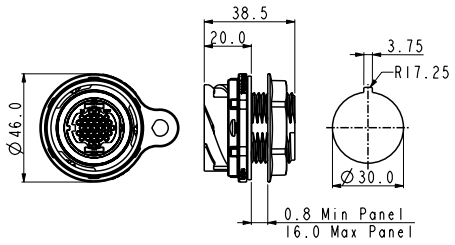
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXM7011/02P/ST	PXM7011/02S/ST	Supplied Fitted
3	Screw	PXM7011/03P/ST	PXM7011/03S/ST	Supplied Fitted
6	Screw	PXM7011/06P/ST	PXM7011/06S/ST	Supplied Fitted
10	Crimp / Solder	PXM7011/10P/CR	PXM7011/10S/CR	Contact Required
32	Crimp / Solder	PXM7011/32P/CR	PXM7011/32S/CR	Contact Required

Front Panel Mounting Connector



PXM7012

- Mates with Flex Cable connectors PXM7010
- Front panel mounting
- Single hole fixing
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 6, 10 and 32 pole
- Screw solder and crimp termination



Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXM7012/02P/ST	PXM7012/02S/ST	Supplied Fitted
3	Screw	PXM7012/03P/ST	PXM7012/03S/ST	Supplied Fitted
6	Screw	PXM7012/06P/ST	PXM7012/06S/ST	Supplied Fitted
10	Crimp / Solder	PXM7012/10P/CR	PXM7012/10S/CR	Contact Required
32	Crimp / Solder	PXM7012/32P/CR	PXM7012/32S/CR	Contact Required

Crimp / Solder Contacts



10 & 32 pole contacts

- Gold Plated
- Current ratings:
  10 pole: 10A
  32 pole: 2A

Contacts (for 10 pole) (Supplied in packs of 10)	Crimp	Solder
Pins	SA3544/P	SA3623/P
Sockets	SA3544/S	SA3623/S

Contacts (for 32 pole) (Supplied in packs of 10)	Crimp	Solder
Pins	SA3542/P	SA3622/P
Sockets	SA3542/S	SA3622/S

Crimp Tooling



PNo 14025

- Crimp Tools for 10 and 32 pole crimp contacts

Crimp Tooling

Crimp Tool (10 & 32 pole)	PNo. 14025
Positioner (10 pole)	PNo. 15021/SP
Positioner (32 pole)	PNo. 15019/SP

Extraction Tools



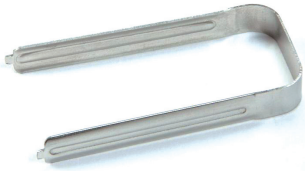
PNo 14944/SP PNo 14945/SP

- Extraction tool for 10 and 32 pole contacts

Extraction Tools

Extraction tool (10 pole)	PNo. 14945/SP
Extraction tool (32 pole)	PNo. 14944/SP

Contact Carrier Removal Tool



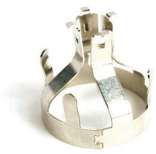
PNo 15065/SP

- For removal of all contact carriers

Contact Carrier Removal Tool

Contact carrier removal tool (all poles)	PNo. 15065/SP

Cable Braid Termination Option



PXM7090

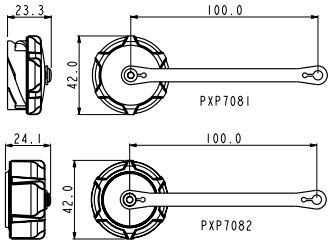
- For cable braid termination
- Supplied with ty-rap

Sealing Caps



PXP7082 PXP7081

- Maintains IP rating of unmated connectors
- PXP7081: Fits PXP7010 (Flex Connector)
- PXP7082: Fits PXP7011 (FlexIn-Line Connector) and PXP7012: (Panel Connector)

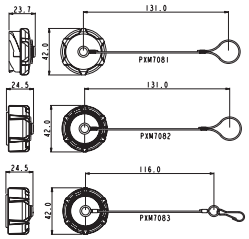


Sealing Caps



PXM7082 PXM7081 PXM7083

- Maintains IP rating of unmated connectors
- PXM7081: Fits PXM7010 (FlexConnector)
- PXM7082: Fits PXM7011 (Flex In-Line Connector) and PXP7012: (Panel Connector)
- PXM7083: Fits PXM7012 (Panel Mounting Connector)



Cable Gland Packs



PXP7088/ *

- Packs of cable glands, cages and gland nuts to suit cables ranges from 5.0 to 15.0mm diameter
- PXP7088/0507: for cable ranges between 5.0 and 7.0mm
- PXP7088/0713: for cable ranges between 7.0 and 13.0mm
- PXP7088/1315: for cable ranges between 13.0 and 15.0mm

PXX	7XXX	/ XX	X	/ XX	/ XXXX	/ XX

Series Designation

PXM= Metal Series
PXP= Plastic Series

Series / Body Style

7010 = Flex
7011 = Flex In-Line
7012 = Panel

No. of Contacts

02 = 2 Pole
03 = 3 Pole
06 = 6 Pole
10 = 10 Pole
32 = 32 Pole

Contacts Type

P = Pin
S = Socket

Terminations

ST = Screw Terminal (2, 3, & 6 pole only)
CR = Contacts Required (10 & 32 pole only)

Cable Entry Size

(for Flex and Flex In-Line connectors only)
0507 = 5-7mm (grey)

0709 = 7-9mm (white)

0911 = 9-11mm (black)

1113 = 11 to 13 mm (yellow)

1315 = 13 to 15 mm (light grey)

Cable Brand Termination Accessory

(for Flex and Flex In-Line connectors only)

SN - If requires
Blank - If not required

Examples

PXM7010/10/P/CR/0911/SN= Flex cable connector, 10 pole, pin contacts with 9 to 11mm cable glands and braid termination accessory

PXM7012/03/S/ST= Front panel mounting connector, 3 pole, socket with screw termination

Electrical:

No Poles:		2	3	6	10	32
Current Rating:						
CCC, UL and VDE		25A	25A	10A	10A	3A
cUL (pending)		25A	25A	8A	6A	2A
Voltage Rating (ac/dc):						
CCC, VDE (pending)		600V	600V	500V	277V	200V
UL, cUL (pending)		600V	600V	600V	600V	600V
Contact Resistance:		<10mΩ				
Insulation Resistance:		>10^6MΩ @500V dc				
AC Breakdown voltage:						
2 pole		>10kV				
3 pole		>8kV				
6 to 32 pole		>5kV				
Operating Temp. Range:		–40°C to +120°C				
Approvals (pending):						
	UL (Pending)	UL1977				
	cULus (Pending)	C22.2 No.182.3-M1987 (R2009)				
	VDE (Pending)	IEC 61984:2009				
	CCC (Pending)	GB/T11918 and GB/T11919				

Mechanical:

Locking mechanism	Quarter turn, rapid locking
Sealing:	IP66 to EN60529:1992+A2:2013 IP68 to EN60529:1992+A2:2013 (10m depth for 2 weeks) IP69k to DIN 40050-9
Salt Mist (plastic):	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Salt Mist (metal):	EN60068-2-11 Test Ka Salt Mist
Contact Accommodation:	
2 & 3 pole screw terminals	6.0mm² max
6 pole screw	1.00mm² max
10 pole crimp / solder	18 to 20AWG
32 pole crimp / solder	22 to 26AWG
Cable Acceptance:	5-15mm dia.
Cable retention force (to BS EN61984):	
5 - 9mm dia cable	80N
9 - 15mm dia cable	100N
Terminations	
2 Pole:	Screw Terminals
3 Pole:	Screw Terminals
6 Pole:	Screw Terminals
10 Pole:	Crimp / Solder Contacts
32 Pole:	Crimp / Solder Contacts
Tightening Torques:	
Gland Nut:	TBA
Panel Nut:	1.7Nm (15lbf.in.)
Panel Nut Thread	M30 x 2-6g
Dimensions:	
Diameter: (over coupling ring)	42mm
Diameter: (panel hole cut-out)	30mm

Materials:	Plastic	Metal
Body:	PC/ PBT	Cast zinc alloy, nickel plated
Colour:	Grey	Matt silver
Contacts:	Brass, Nickel Plate (Screw and Crimp) Brass, (3A – Gold plated)	Brass, Nickel Plate (Screw and Crimp) Brass, (3A – Gold plated)
O Rings & Gaskets:	Silicone	Silicone
Flammability Rating:	UL94 V-0	-
Halogen free	Yes	-
UV Resistance:	ISO 4892 part 3 cycle 1 (QUV)	-
RoHS	Compliant	Compliant

The thermal properties of the materials used in the construction of a connector limit the current carrying capacity. There are a number of factors that determine the amount of current that can be handled: contact spacing, size of cable, ambient temperature and the heat that is generated by the current passing through the connector.

The maximum current varies with different contact layouts, and because of these factors it is necessary to produce de-rating curves for each pole variant. This de-rating curve is specified in the standard IEC 60512 part 3. De-rating curves are plotted for each contact carrier combination with the current being carried simultaneously by all contacts. These graphs show the heat rise generated as the current is increased.

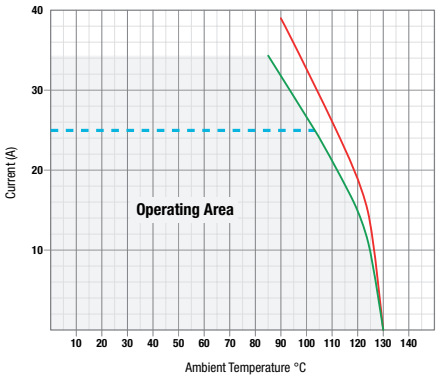
The red line indicates the direct correlation between current applied and the measured temperature rise within the connector. The dotted blue line shows rated current and the green line is derived by applying a factor of 0.8 to the original plot data to give a de-rating curve. The dashed blue line shows the rated current.

The shaded area under the 0.8 curve shows the permitted operating area, and allows safe current vs ambient temperature characteristics to be determined.

— = tested operating limits
— = de-rated operating limits
– – = rated current

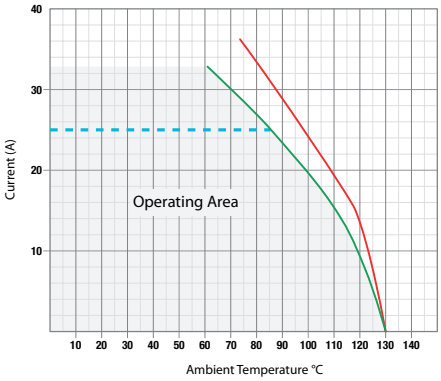
7000 Series Current vs. Temperature Characteristics

2 Pole, Plastic Body, Screw Terminal, 6.0mm² wire
current applied through all pins simultaneously



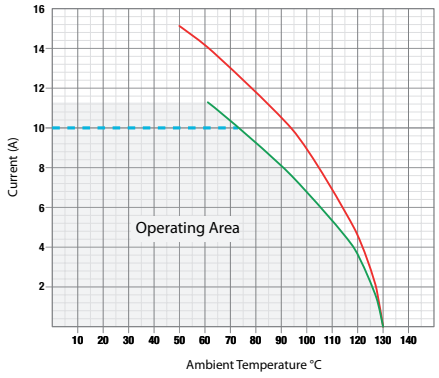
7000 Series Current vs. Temperature Characteristics

3 Pole, Plastic Body, Screw Terminal, 4.0mm² wire
current applied through all pins simultaneously



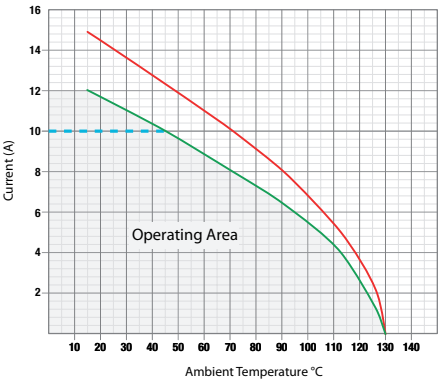
7000 Series Current vs. Temperature Characteristics

6 Pole, Plastic Body, Screw Terminal, 1.0mm² wire
current applied through all pins simultaneously



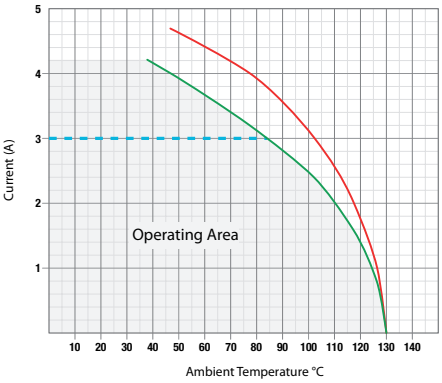
7000 Series Current vs. Temperature Characteristics

10 Pole, Plastic Body, Crimp Terminal, 18 AWG wire
current applied through all pins simultaneously



7000 Series Current vs. Temperature Characteristics

32 Pole, Plastic Body, Crimp Terminal, 22 AWG wire
current applied through all pins simultaneously



A full range of IP68 rated environmentally sealed circular connectors designed to provide secure and safe connections in harsh or hostile conditions.

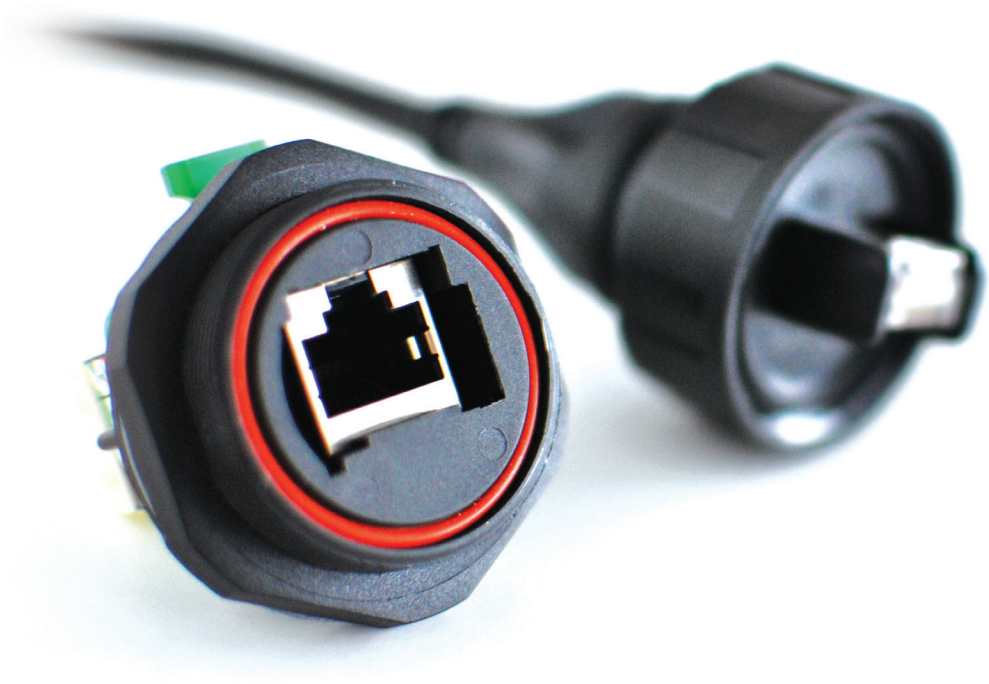
The Data Buccaneer range now includes designs specifically for Ethernet, USB and SMB applications. Ethernet Buccaneer meets Cat 5e requirements for data rates up to 100Mbs, USB Buccaneer is designed to meet USB version 2.0 specification for data rates up to 480Mbs, SMB Buccaneer has a frequency response up to 4GHz.

The Buccaneer series finds numerous applications either in external or internal environments where protection against the ingress of dust and moisture is a system requirement.



Standard Buccaneer - Ethernet 63-68
Standard Buccaneer - USB 69-74
400 Series - Mini USB Buccaneer 75-79
400 Series - SMB Buccaneer 80-82
400 Series - Wireless Buccaneer 83-89
4000 Series - Micro USB 90-92
6000 Series Buccaneer - USB 93-98
6000 Series Buccaneer - Ethernet 99-103

Standard Buccaneer - Ethernet



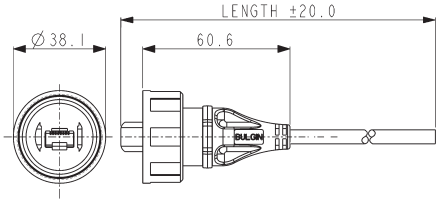
- IP68 rated
- IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
- Cat 5e compliant
- PUR jacket on cable
- Shielded system
- Cat 5e shielded coupler
- Shroud on RJ45
- Screw coupling
- Rewireable flex connector
- PCB mounted panel connector
- IDC termination panel connector
- Earth lead version of panel adaptor
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
- Dust and waterproof sealing when mated
- Data rate up to 100MHz
- Good chemical resistance, flame retardant
- High noise immunity and EMI protection
- Maintains shielding
- Protection from abuse and mis-mating
- Secure, proven locking system
- Ability to ‘field’ terminate
- Direct PCB mount panel connector
- Simple termination
- Continuous screening of panel mount connector

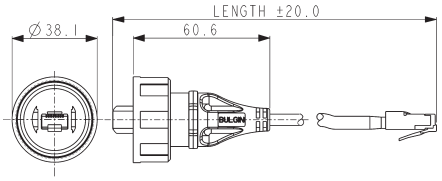
Patch Cord Flex Connector - PUR Jacket

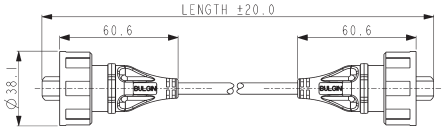


PX0836

- Mates with all panel mounting connectors
- Patchcords with IP68 connector
- Supplied with shielded RJ45 plug
- Single or double end terminated
- Standard lengths: 2m, 3m & 5m
- S-FTP cable construction
- PUR jacket cable
- Wiring configuration to 568-B
- Exceeds EIA/TIA Cat 5e







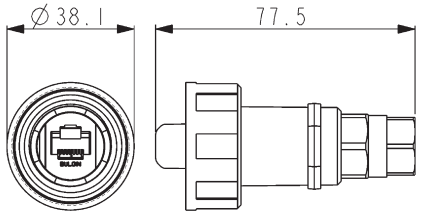
Part no.	Type	Length	Description
PX0836/2M00	Wire end	2m	IP68 RJ45 Buccaneer to bare end
PX0836/3M00	Wire end	3m	IP68 RJ45 Buccaneer to bare end
PX0836/5M00	Wire end	5m	IP68 RJ45 Buccaneer to bare end
PX0837/2M00	Single ended	2m	IP68 RJ45 Buccaneer to Shielded RJ45
PX0837/3M00	Single ended	3m	IP68 RJ45 Buccaneer to Shielded RJ45
PX0837/5M00	Single ended	5m	IP68 RJ45 Buccaneer to Shielded RJ45
PX0838/2M00	Double ended	2m	IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer
PX0838/3M00	Double ended	3m	IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer
PX0838/5M00	Double ended	5m	IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer

Re wireable Flex Connector



PX0834

- Mates with all panel mounting connectors
- Supplied with shielded RJ45 plug
- Two versions:
  for PUR jacket cable (Cat 5e)
  for other cable sizes from 3.5 to 8mm dia.



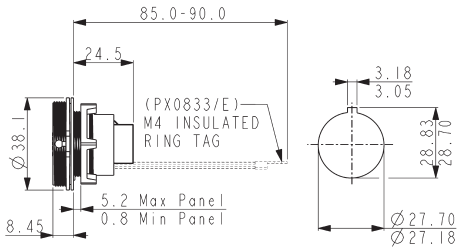
Part no.	Description
PX0834/A	Cable glands optimised for PUR jacket cable to maintain Cat 5e performance
PX0834/B	Suitable for use with cables from 3.5 to 8mm diameter

Panel Mounting Connector



PX0833

- Cat 5e shielded coupler
- Mates with PX0836, PX0837, PX0838 and PX0834 flex connectors
- Standard RJ45 patchcord can be plugged into rear
- Version with earth wire available
- Single hole fixing
- Complete with panel sealing gasket



Part no.	Description	Fixing
PX0833	Cat 5e coupler	Front panel mounted
PX0833/E	Cat 5e coupler + earth wire	Front panel mounted

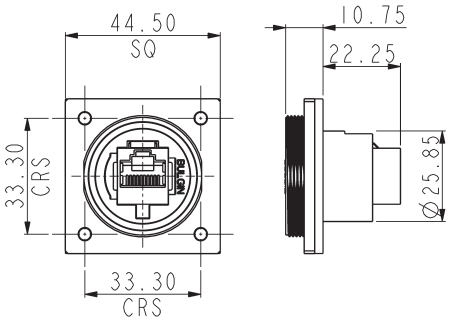
Standard Buccaneer - Ethernet

Flanged Mounting Connector



PX0870

- Cat 5e shielded coupler
- Mates with PX0836, PX0837, PX0838 and PX0834 flex connectors
- Standard RJ45 patchcord can be plugged into rear
- Version with earth wire available
- Flange fixing
- Complete with panel sealing gasket & screw sealing washers



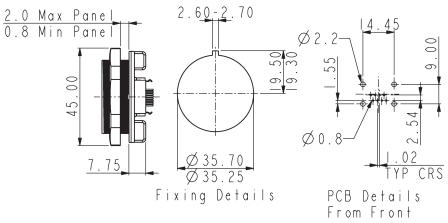
Part no.	Description	Fixing
PX0870	Cat 5e coupler	Flange mounting
PX0870/E	Cat 5e coupler + earth wire	Flange mounting

PCB Mounting Connector



PX0839/PC

- Cat 5e shielded RJ45 interface
- Rear of panel mounted
- Mates with PX0836, PX0837, PX0838 and PX0834 flex connectors
- For direct vertical mounting to PCB, straight pins
- Complete with panel sealing
- PX0839/PC gasket



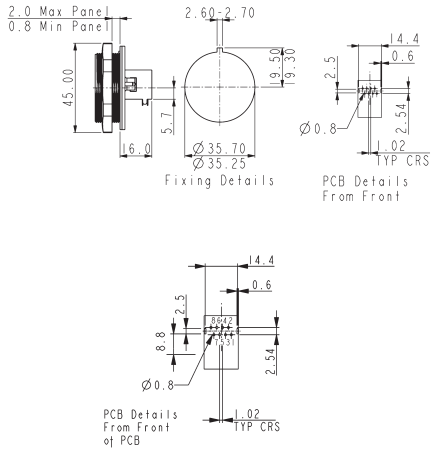
Part no.	Description	Fixing
PX0839/PC	Cat 5e connector - PC	Rear panel mounted

PCB Mounting Connector



PX0839/90

- Cat 5e shielded RJ45 interface
- Rear of panel mounted
- Mates with PX0836, PX0837, PX0838 and PX0834 flex connectors
- For direct horizontal mounting to PCB, 90° pins
- Complete with panel sealing PX0839/90 gasket



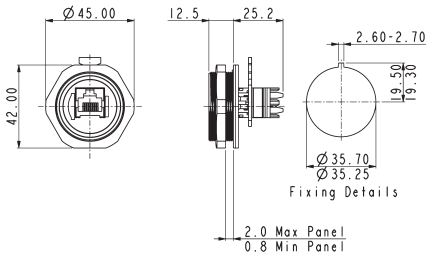
Part no.	Description	Fixing
PX0839/90	Cat 5e connector - PC	Rear panel mounted

Panel Mounting Connector



PX0839/IDC

- Cat 5e shielded RJ45 interface
- Rear of panel mounted
- Mates with PX0836, PX0837, PX0838 and PX0834 flex connectors
- Two IDC blocks for discrete termination
- Complete with panel sealing



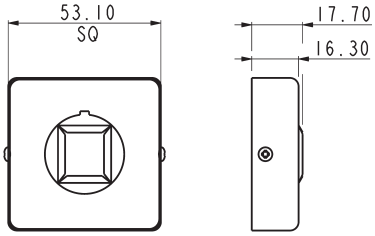
Part no.	Description	Fixing
PX0839/IDC	Cat 5e coupler	Rear panel mounted

Shield Back Shell Accessory



PX0888

- Maintains RJ45 coupler screening directly to panel
- Shielding can is fixed to rear of panel mount connector
- For use on PX0833



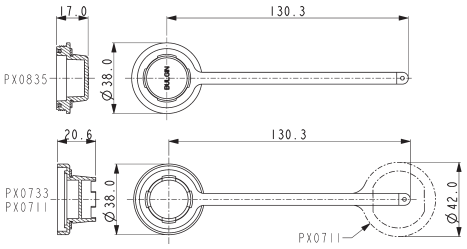
Part no.	Description
PX0888	Shielding backshell accessory

Accessories



Sealing Caps

- Sealing caps to maintain IP68 rating when connectors are not in use
- Replacement shielded RJ45s
- Hand crimp tool for shielded RJ45
- Patch cord cable available in 50m reels



Part no.	Description
PX0835	Sealing Cap for flex connectors (PX0834, PX0836-838)
PX0733	Sealing Cap for panel mounting connector (PX0833, PX0870)
PX0711	Sealing Cap for rear panel mounting connector (PX0839)
14151	Hand crimp tooling + die set
14199	PUR Jacket Cable - 50m reel
14150	Replacement shielded RJ45

Connectors

Sealing	IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
	IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks)
Operating Temperature	–20°C to +70°C
Materials - Overmoulded	
Overmould material	PVC (black)
Flammability rating	UL94V-0
Salt Mist	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Materials - Re-wireable and Panel Connectors

Connector body & locking ring	Polyester
Panel connector	Nylon 6
Flammability rating	UL94V-0
'O' rings	Silicone
Panel Gasket - round	Silicone
Panel Gasket - flange	Neoprene
RoHS	Compliant

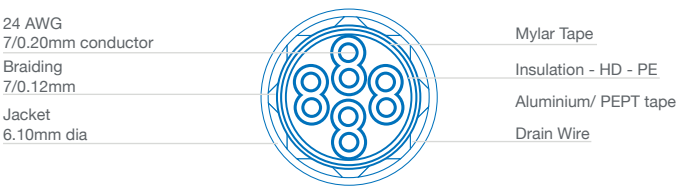
Stranded S-FTP Patch cord cable - PUR Jacket

Polyurethane (PUR) jacket cable with internal construction exceeding Cat 5e performance levels. The PUR jacket has excellent abrasion, chemical and ozone resistance, low smoke, low halogen flame retardant construction suitable for internal and external industrial environments.

Cable

Conductors	24AWG (7/0.2mm) bare copper
Insulation	HD-PE
Pair	2 of the above cores twisted
Core	4 of the above cores
Tape	1 lap mylar tape
Screen	1 layer mylar and aluminium tape, 0.12mm
Sheath	tinned copper braid
Op Temperature	PUR Jacket Black
Min. bend radius	–25°C to +85°C
Min. bend radius	10 x o/d (installation)
Diameter	6 x o/d (installed)
	6.1mm nominal
Electrical @ 20°C	
Characteristic Impedance	100 Ω ±15 Ω @ 100MHz
Capacitance	330pF/km
Conductor Loop resistance	29/Ω100m maximum
Skew	45 nsec/100m @ 100MHz
TIA/EIA Rating	Cat 5e

Cable construction - PX0836, PX0837, PX0838 and 14199



Polyurethane (PUR) Jacket

RJ45 Plug

Materials

Moulding	Polycarbonate
Flammability	UL94V-0
Contact material	Phosphor Bronze
Contact plating	50 micron gold
Operating Temperature	–40°C to +70°C
Mating cycles	1,000 cycles
RoHS	Compliant

Electrical

No. Conductors	8
Conductor types	24-28AWG, solid or multistranded
Current rating	1.5A
Voltage rating	30V ac, 42V dc
Contact resistance	10mΩ max.
Performance	Cat 5e

RJ45 Coupler

Materials

Coupler Shell	Copper Alloy
Coupler Plating	Nickel
Moulding	ABS
Flammability	UL94V-0
Contact material	Phosphor Bronze
Contact plating	50 micron gold
Operating Temperature	–40°C to +70°C
Mating cycles	1,000 cycles
RoHS	Compliant

Electrical

No. Conductors	8
Current rating	1.5A
Voltage rating	30V ac, 42V dc
Contact resistance	10mV max.
Performance	Cat 5e

RJ45 PCB Connector

Materials

Coupler Shell	Copper Alloy
Coupler Plating	Nickel
Moulding	ABS
Flammability	UL94V-0
Contact material	Phosphor Bronze
Contact plating	50 micron gold
PC Pins	Tin plated
Operating Temperature	–40°C to +70°C
Mating cycles	1,000 cycles
RoHS	Compliant

Electrical

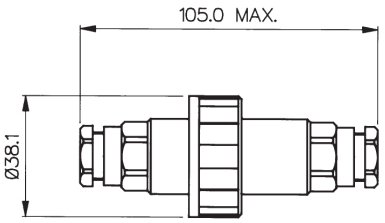
No. Conductors	8
Current rating	1.5A
Voltage rating	30V ac, 42V dc
Contact resistance	10mΩ max.
Performance	Cat 5e

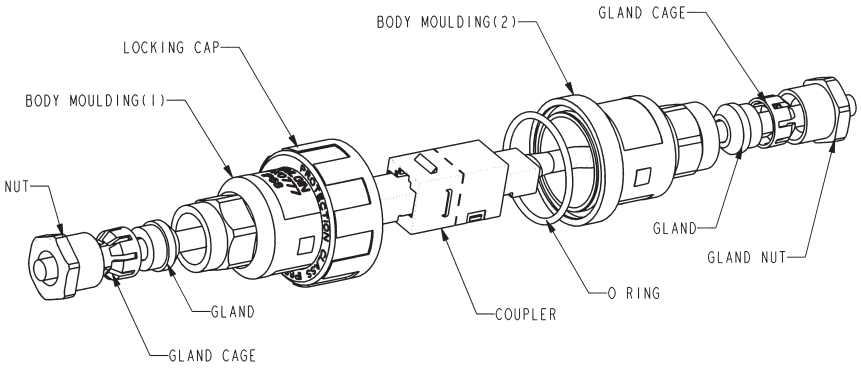
Cable Joiner



PX0777

- IP68 Rating
- For Sealed In-Line RJ45 Connections
- Supplied Complete with Coupler
- Shielded (STP) & Unshielded (UTP) versions
- Cat5e Shielded Coupler also available
- Cable Range 3.5 - 8mm (with glands supplied)





Specifications	PX0777/UTP	PX0777/STP	PX0777/CAT5ESTP
Rating:	1.5A, 30V a.c., 42V d.c.	1.5A, 30V a.c., 42V d.c.	1.5A, 30V a.c., 42V d.c.
No. of Conductors:	8	8	8
Coupler Type:	Unshielded	Shielded	Shielded CAT5e performance
Cable Range:	3.5 - 8mm With glands supplied: 3.5 - 5mm (Blue) 5 - 7mm (Green) 6 - 8mm (Red)	3.5 - 8mm With glands supplied: 3.5 - 5mm (Blue) 5 - 7mm (Green) 6 - 8mm (Red)	3.5 - 8mm With glands supplied: 3.5 - 5mm (Blue) 5 - 7mm (Green) 6 - 8mm (Red)
Material:	Glass Filled Polyamide UL94V-0	Glass Filled Polyamide UL94V0	Glass Filled Polyamide UL94V0
Sealing:	IP68 to BSEN 60529:1992+A2:2013 (10m depth for 2 weeks)	IP68 to BSEN 60529:1992+A2:2013 (10m depth for 2 weeks)	IP68 to BSEN 60529:1992+A2:2013 (10m depth for 2 weeks)
Salt Mist	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Operating Temp Range:	–20°C to +70°C	–20°C to +70°C	–20°C to +70°C
Colour:	Black	Black	Black
RoHS	Compliant	Compliant	Compliant

Standard Buccaneer - USB



- IP68 rated
- IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
- USB version 2.0 performance
- Plug and play capability
- Visual mating indication
- Shielded system
- Single and double ended cables
- Screw coupling
- PCB versions
- Dust and waterproof sealing when mated
- Low and high speed bus connection, 1.5Mbs to 480Mbs
- Hot pluggable, standard 4 pole interface
- Alignment indicator reduces risk of damage during mating
- High noise immunity and EMI protection
- Suitable for PC and peripheral configuration
- Secure, proven locking system
- Direct mounting or via adaptor leads
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Sealed USB Cables - Single Ended



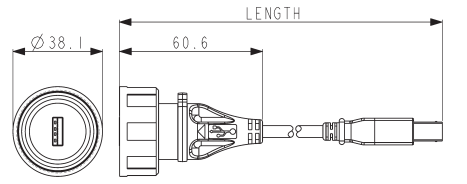
PX0840/A



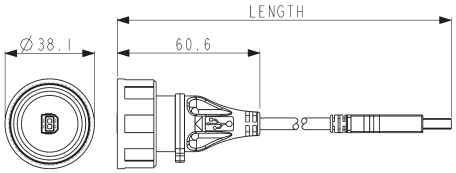
PX0840/B

Single ended sealed cable assembly

- IP68 'A' type USB connector to standard 'B' type USB connector, mates with all panel mount connectors
- IP68 'B' type USB connector to standard 'A' type USB connector, mates with all panel mount connectors
- Available in 2m, 3m and 5m lengths



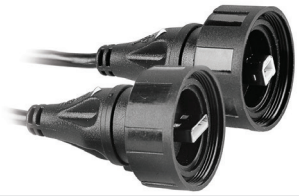
PX0840/A/xMxx



PX0840/B/xMxx

Part no.	Length	Description
PX0840/A/2M00	2m	IP68 A type USB to standard B type USB
PX0840/A/3M00	3m	IP68 A type USB to standard B type USB
PX0840/A/5M00	5m	IP68 A type USB to standard B type USB
PX0840/B/2M00	2m	IP68 B type USB to standard A type USB
PX0840/B/3M00	3m	IP68 B type USB to standard A type USB
PX0840/B/5M00	5m	IP68 B type USB to standard A type USB

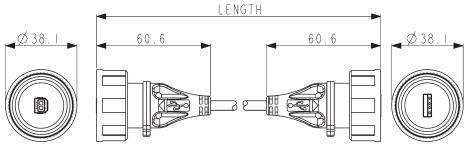
Sealed USB Cables Double Ended



PX0841/AB

Double ended sealed cable assembly

- IP68 'A' type USB connector to
- IP68 'B' type USB connector
- Mates with all panel mount connectors
- Available in 2m, 3m and 5m lengths



PX0841/AB/xMxx

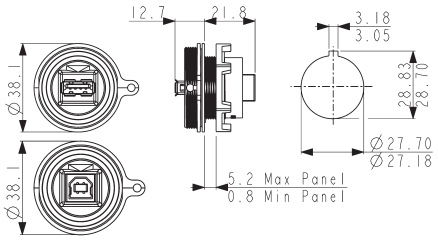
Part no.	Length	Description
PX0841/AB/2M00	2m	IP68 A type USB to IP68 B type USB
PX0841/AB/3M00	3m	IP68 A type USB to IP68 B type USB
PX0841/AB/5M00	5m	IP68 A type USB to IP68 B type USB

Front Panel Mounting Connector



PX0842/A PX0842/B

- PX0842/A - USB 'A' type IP68 connector
- PX0842/B - USB 'B' type IP68 connector
- Opposite connector to rear of panel
- Mates with PX0840 and PX0841 cable connectors



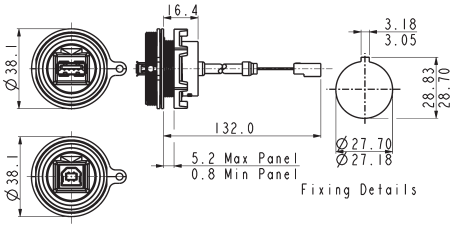
Part no.	Description
PX0842/A	IP68 A type USB, front panel mounted. Sealed A type at front of panel, standard B type at rear
PX0842/B	IP68 B type USB, front panel mounted. Sealed B type at front of panel, standard A type at rear.

Front Panel Mounting Connector



PX0843/A PX0843/B

- PX0843/A - USB 'A' type IP68 connector
- PX0843/B - USB 'B' type IP68 connector
- Leaded with 5 way crimp connector
- Mates with PX0840 and PX0841 cable connectors



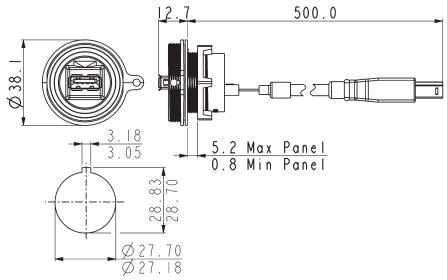
Part no.	Description
PX0843/A	IP68 A type USB, front panel mounted. Sealed A type at front of panel, 5 way crimp connector at rear.
PX0843/B	IP68 B type USB, front panel mounted. Sealed B type at front of panel, 5 way crimp connector at rear.
PX0460/A	As PX0843/A with exposed braid for use with PX0465 screening can
PX0460/B	As PX0843/B with exposed braid for use with PX0465 screening can

Front Panel Mounting Connector



PX0844/A PX0844/B

- IP68 Sealed through panel
- PX0844/A - USB 'A' type IP68 connector
- PX0844/B - USB 'B' type IP68 connector
- Standard USB interface plug options to rear of panel
- 500mm standard cable length, other lengths available
- Mates with PX0840 and PX0841 cable connectors



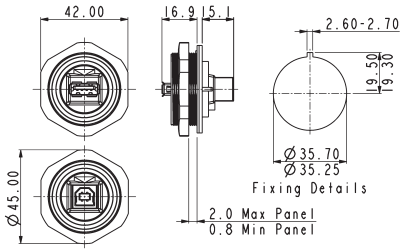
Part no.	Description
PX0844/A/0M50/A	IP68 A type USB, sealed through panel, Sealed 'A' type at front of panel, standard 'A' type at rear
PX0844/A/0M50/B	IP68 A type USB, sealed through panel, Sealed 'A' type at front of panel, standard 'B' type at rear
PX0844/B/0M50/A	IP68 B type USB, sealed through panel, Sealed 'B' type at front of panel, standard 'B' type at rear
PX0844/B/0M50/B	IP68 B type USB, sealed through panel, Sealed 'B' type at front of panel, standard 'B' type at rear

Rear Panel Mounting Connector



PX0848/A PX0848/B

- PX0848/A - USB 'A' type IP68 connector
- PX0848/B - USB 'B' type IP68 connector
- Opposite connector to rear of panel
- Mates with PX0840 and PX0841 cable connectors



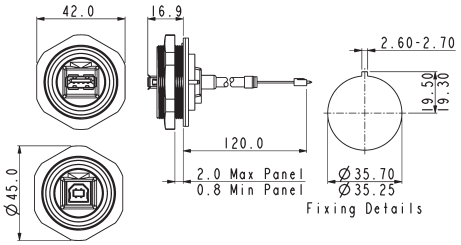
Part no.	Description
PX0848/A	IP68 A type USB, rear panel mounted. Sealed A type at front of panel, standard B type at rear.
PX0848/B	IP68 B type USB, rear panel mounted. Sealed B type at front of panel, standard A type at rear.

Rear Panel Mounting Connector



PX0849/A PX0849/B

- PX0849/A - USB 'A' type IP68 connector
- PX0849/B - USB 'B' type IP68 connector
- Leaded with 5 way header
- Mates with PX0840 and PX0841 cable connectors



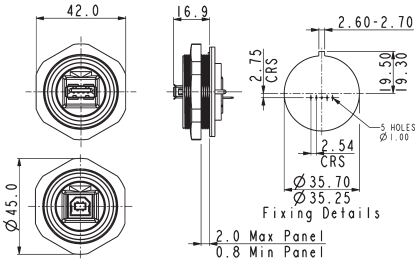
Part no.	Description
PX0849/A	IP68 A type USB, rear panel mounted. Sealed A type at front of panel, 5 way header at rear.
PX0849/B	IP68 B type USB, rear panel mounted. Sealed B type at front of panel, 5 way header at rear.

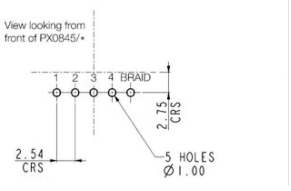
PCB Panel Mounting Connector- PCB DIrect Mount



PX0845/A PX0845/B

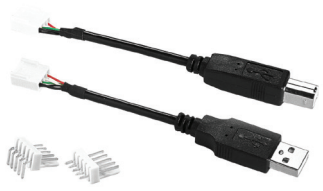
- PX0845/A - USB 'A' type IP68 connector
- PX0845/B - USB 'B' type IP68 connector
- PCB contacts at rear
- Direct PCB mount
- Mates with PX0840 and PX0841 cable connectors



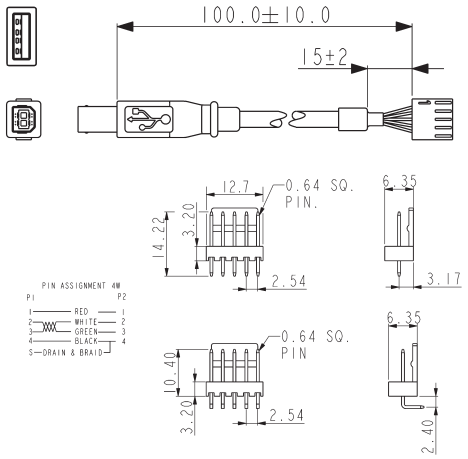


Part no.	Description
PX0845/A	IP68 A type USB, rear panel mounted. Sealed A type at front of panel, direct mount PCB contacts at rear.
PX0845/B	IP68 B type USB, rear panel mounted. Sealed B type at front of panel, direct mount PCB contacts at rear.

PCB Adaptor Leads



- Standard A and B type USB connectors to 5 way crimp adaptor leads
- 5 way headers, 2.54mm pitch, horizontal or vertical mounting

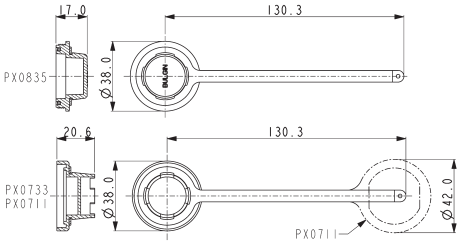


Part no.	Description
14193	USB 'A' type to 5 way crimp connector
14194	USB 'B' type to 5 way crimp connector
14191	5 way PCB header straight
14192	5 way PCB header right angle

Accessories



- Sealing caps to maintain IP68 rating when connectors are not in use
- PX0835 for cable connectors PX0840 & PX0841
- PX0733 for front panel mount connectors PX0842, PX0843 & PX0844
- PX0711 for rear panel mount connectors PX0848, PX0849 & PX0845



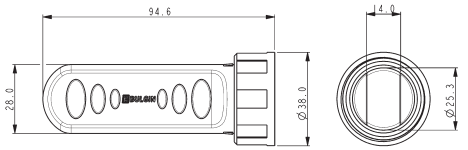
Part no.	Description
PX0835	Sealing Cap for cable connectors (PX0840, PX0841)
PX0733	Sealing Cap for front panel mounting connector (PX0842, PX0843)
PX0711	Sealing Cap for rear panel mounting connector (PX0848, PX0849, PX0845)

USB Flash Drive Cover

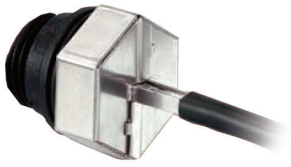


PX0852

- For use with USB Flash Drives
- Maintains IP68 rating when mated with panel connector
- For use with 'A' type connectors: PX0842, PX0843, PX0845, PX0848 & PX0849
- Internal accommodation 17.5 x 14.0 x 83mm approx.

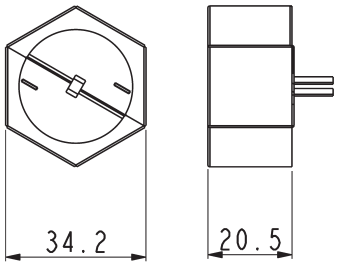


Screening Can



PX0464

- Maintains cable screening directly to panel
- Screening can clips around the panel fixing nut
- For use on PX0460/A and PX0460/B



Standard Buccaneer - USB

Specifications

Cables & connectors

Mechanical

Sealing	IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
	IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks)
Operating temperature	0°C to +70°C
Salt Mist	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Electrical

No. of poles	4
Current rating	1A
Voltage rating	30Vac (RMS)
Contact resistance	30m Ω max.
Performance	USB version 2.0

Materials - Overmoulded

Overmould material	PVC (black)
Flammability rating	UL94V-0

Materials - Re-wireable and Panel Connectors

Shell material	Steel
Shell plating	Nickel
Contact material	Copper Alloy
Contact plating	30 micro inch Gold
Connector body & locking ring	Glass Loaded Polyester
Panel connector	Nylon 6
Flammability rating	UL94V-0
'O' rings	Silicone
Panel Gasket - round	Silicone
Panel Gasket - square	Neoprene
Mating cycles	1,000
RoHS	Compliant

Materials - cable

Cable Jacket	PVC (black)
Screen	Tinned copper braid
Flammability	UL94V-0
RoHS	Compliant

Length:	Dia	Conductors Signal	Conductors Power
2m	4.8mm	2 x 28AWG	2 x 24AWG
3m	5.0mm	2 x 28AWG	2 x 22AWG
5m	5.2mm	2 x 25AWG	2 x 20AWG

PCB adaptor leads

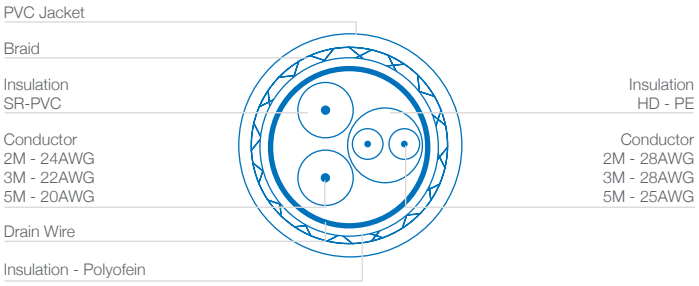
Electrical

No. of conductors	4
Current rating	1A
Voltage rating	30Vac (RMS)
Contact resistance	<10m Ω max.
PCB pitch	2.54mm

Materials

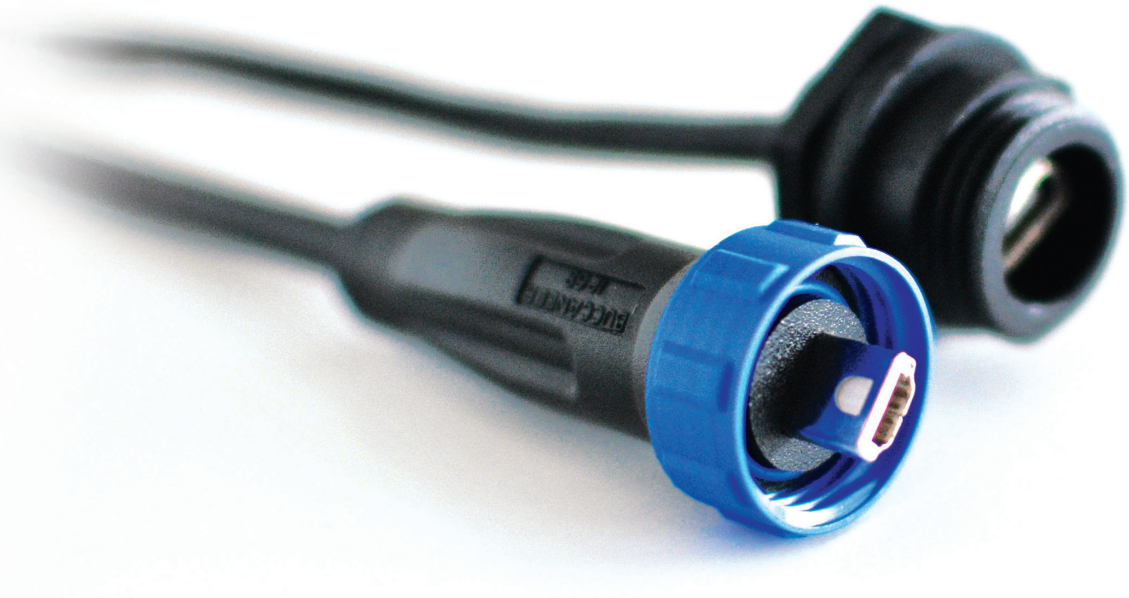
Moulding	Polycarbonate
Flammability	UL94V-0
Contact material	Copper Alloy
Contact plating	30 micro inch Gold
Wire insulation	PVC (black)
Flammability	UL94-V0
Conductors	4 x 28AWG
Operating temperature	0°C to +70°C
Mating cycles	1,000
RoHS	Compliant

Cable construction - PX0840, PX0841



400 Series - Mini USB Buccaneer

IP68 Sealed



- IP68 rated
- IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
- USB V2.0 performance
- Plug and play capability
- Shielded system
- Overmoulded cables
- Screw coupling
- PCB versions
- Dust and waterproof to EN60529
- Data rates up to 480Mbs
- Hot pluggable, standard 4 pole interface
- High noise immunity
- Tamperproof construction
- Secure, proven locking system
- Direct mounting or via adaptor leads
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

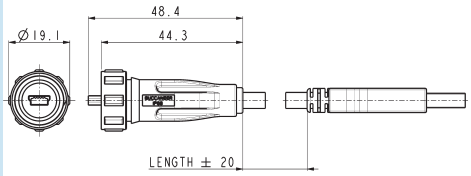
400 Series - Mini USB Buccaneer

Sealed Mini USB Cables - Single Ended



PX0441

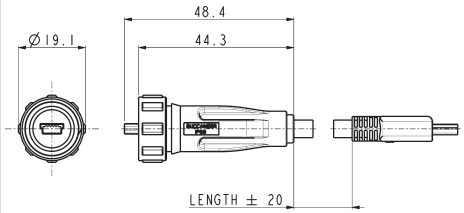
- Standard ‘A’ type to sealed Mini ‘B’ type
- Fully overmoulded construction
- Available in 2, 3 & 4.5m lengths
- Mates with PX0443, PX0446, PX0447, PX0456, PX0457 & PX0458





PX0442

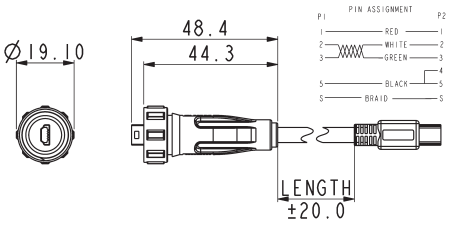
- Mini ‘A’ type to sealed mini ‘B’ type
- Fully overmoulded construction
- Available in 2, 3 & 4.5m lengths
- Mates with PX0443, PX0446, PX0447, PX0456, PX0457 & PX0458





PX0444

- Mini ‘B’ type to Sealed Mini ‘A’ type
- Fully overmoulded construction
- Available in 2, 3 & 4.5m lengths
- Mates with PX0456, PX0457 & PX0458



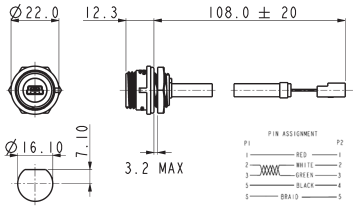
Part No.	Length	Description
PX0441/2M00	2.0m	IP68 mini ‘B’ to Std ‘A’ type USB
PX0441/3M00	3.0m	IP68 mini ‘B’ to Std ‘A’ type USB
PX0441/4M50	4.5m	IP68 mini ‘B’ to Std ‘A’ type USB
PX0442/2M00	2.0m	IP68 mini ‘B’ to Mini ‘A’ type USB
PX0442/3M00	3.0m	IP68 mini ‘B’ to Mini ‘A’ type USB
PX0442/4M50	4.5m	IP68 mini ‘B’ to Mini ‘A’ type USB
PX0444/2M00	2.0m	IP68 mini ‘A’ to Mini ‘B’ type USB
PX0444/3M00	3.0m	IP68 mini ‘A’ to Mini ‘B’ type USB
PX0444/4M50	4.5m	IP68 mini ‘A’ to Mini ‘B’ type USB

Front Panel Mounting Connector



PX0443

- Mini ‘B’ type
- Leaded with 5 way crimp, for use with PC header
- Mates with PX0441 & PX0442 type cables



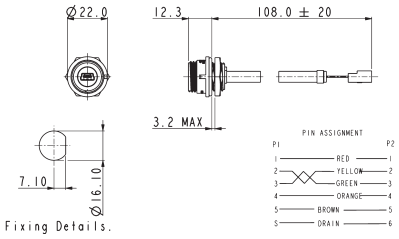
Part no.	Description
PX0443	IP68 B type Mini USB, front panel mounted. 5 way crimp connector at rear.
PX0459	As PX0443 with exposed braid for use with PX0464 screening can

Front Panel Mounting Connector



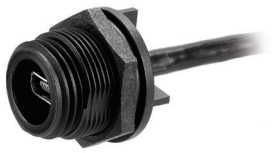
PX0456

- Mini ‘AB’ type
- Leaded with 6 way crimp, for use with PC header
- Mates with PX0441, PX0442 & PX0444 type cables



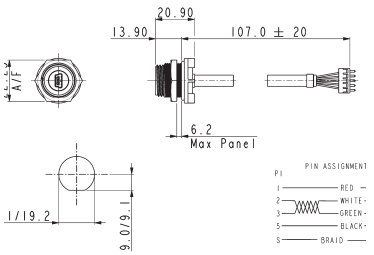
Part no.	Description
PX0456	IP68 AB type Mini USB, front panel mounted. 6 way crimp connector at rear.

Rear Panel Mounting Connector



PX0446

- Mini ‘B’ type
- Leaded with 5 way header
- Mates with PX0441 & PX0442 type cables

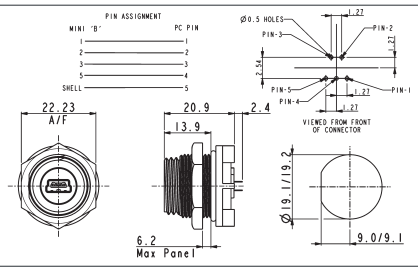


Rear Panel Mounting Connector



PX0447

- Mini ‘B’ type
- With pins for direct PC mounting
- Mates with PX0441 & PX0442 type cables



Part no.	Description
PX0446	IP68 B type Mini USB, rear panel mounted. 5 way header connector at rear.
PX0447	IP68 B type Mini USB, rear panel mounted. PC terminals at rear.

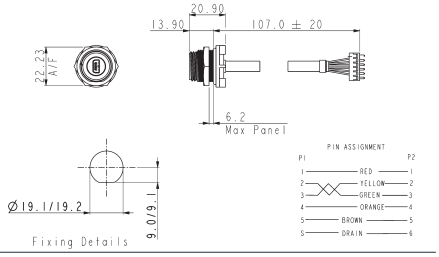
400 Series - Mini USB Buccaneer

Rear Panel Mounting Connector



PX0457

- Mini ‘AB’ type
- Leaded with 6 way header
- Mates with PX0441, PX0442 & PX0444 type cables

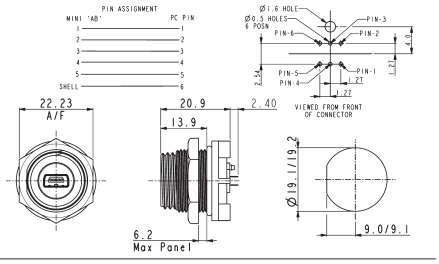


Rear Panel Mounting Connector



PX0458

- Mini ‘AB’ type
- With pins for direct PC mounting
- Mates with PX0441, PX0442 & PX0444 type cables



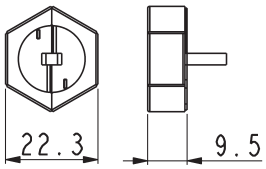
Part no.	Description
PX0457	IP68 AB type Mini USB, rear panel mounted. 6 way header connector at rear.
PX0458	IP68 AB type Mini USB, rear panel mounted. PC terminals at rear.

Screening Can



PX0464

- Maintains cable screening directly to panel
- Shielding can clips around the panel fixing nut
- For use on PX0459



Accessories



- Sealing caps to maintain IP rating when connectors are not in use
- PCB headers for use with PX0443 & PX0456

Part no.	Description
PX0485	Sealing cap for use with PX0441, PX0442 & PX0444
PX0480	Sealing cap for use with PX0443 & PX0456
PX0484	Sealing cap for use with PX0446, PX0447, PX0457 & PX0458
14191	5 way straight header
14192	5 way right angle header
14563	6 way straight header
14564	6 way right angle header

Cables & connectors

Mechanical

Sealing	IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks) IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
Operating temperature	0°C to +70°C
Salt Mist	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Electrical

No. of poles	4 and 5
Current rating	1A
Voltage rating	30Vac, 42Vdc
Contact resistance	50m Ω max.
Performance	USB version 2.0

Materials - Overmoulded

Overmould material	PVC (black)
Flammability rating	UL94V-0

Materials - Re-wireable and Panel Connectors

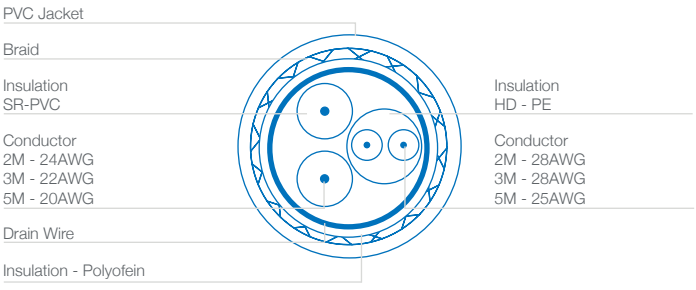
Shell material	Steel
Shell plating	Nickel
Contact material	Copper Alloy
Contact plating	50 micro inch Gold
Connector body & locking ring	Polyester
Panel connector	Nylon 6
Flammability rating	UL94V-0
'O' rings	Nitrile
Mating cycles	5,000
RoHS	Compliant

Materials - cable

Cable Jacket	PVC (black)
Screen	Tinned copper braid
Flammability	UL94V-0
RoHS	Compliant

Length:	Dia	Conductors Signal	Conductors Power
2m	4.8mm	2 x 28AWG	2 x 24AWG
3m	5.0mm	2 x 28AWG	2 x 22AWG
5m	5.2mm	2 x 25AWG	2 x 20AWG

Cable construction - PX0441, PX0442, PX0444



400 Series - SMB Buccaneer



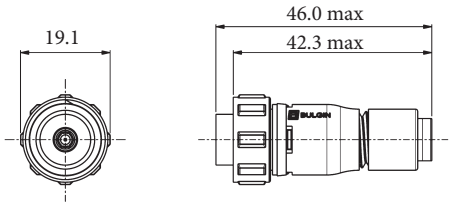
- Sealed to IP68 when mated
- IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
- 50Ω Impedance SMB connector
- Frequency range 0-4GHz
- Contact resistance
  - centre - 6mΩ max.
  - outer - 2.5mΩ max.
- Gold plated contacts
- Diameter over coupling ring 19mm
- Body moulding, Nylon UL94-V0 rated
- Two versions of Flex Connector
  - re-wireable
  - pre-wired - lengths 1m, 3m & 5m
- Panel connector
  - pre-wired - lengths 0.5m,1m & 1.5m
- Cable accommodation (flex re-wireable), RG-174
- Cable type (pre-wired connectors), RG-174

Re- Wireable Flex Connector



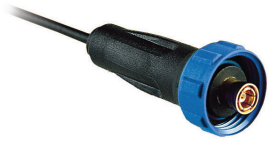
PX0415/1

- Mates with Panel connector (PX0414)
- Re-wireable connector
- For RG-174 cable
- Supplied with SMB plug



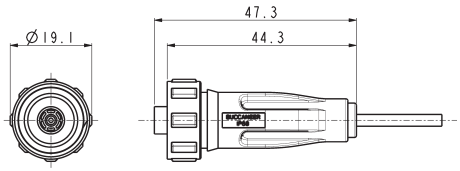
Part no.	Description
PX0415/1	Re-wireable connector with SMB Plug - for RG-174 cable

Pre- Wireable Flex Connector



PX0416/xMxx

- Mates with Panel connector (PX0414)
- Pre-wired
- Overmoulded construction
- Supplied with SMB plug terminated with RG-174 cable
- 1m, 3m & 5m cable lengths



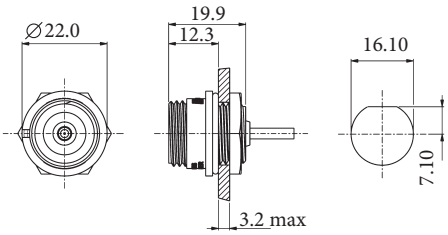
Part no.	Description
PX0416/1M00	Overmoulded connector with SMB plug - cable length 1m
PX0416/3M00	Overmoulded connector with SMB plug - cable length 3m
PX0416/5M00	Overmoulded connector with SMB plug - cable length 5m

Panel Mounting Connector



PX0414/xMxx

- Mates with Flex connectors (PX0415, PX0416)
- Single hole fixing
- Supplied with SMB jack
- terminated with RG-174 cable
- U.FL cable version also available



Part no.	Description
PX0414/0M50	Panel connector with SMB jack - cable length 0.5m
PX0414/1M00	Panel connector with SMB jack - cable length 1m
PX0414/1M50	Panel connector with SMB jack - cable length 1.5m

Sealing Cap and Accessories



PX0480 PX0481 PX0485

- Sealing caps maintain IP rating when connectors are not in use

Part no.	Description
PX0480	Sealing cap for PX0414 chassis connector
PX0481	Sealing cap for PX0415 re-wireable flex connectors
PX0485	Sealing cap for PX0416 overmoulded flex connector
14319	Hand crimp tool for SMB

Electrical

Impedance:	50Ω
Frequency Range:	0-4GHz
Contact Resistance:	
Centre:	6mΩ (max.)
Outer:	2.5mΩ (max.)
Insulator Resistance:	1000MΩ (max.)

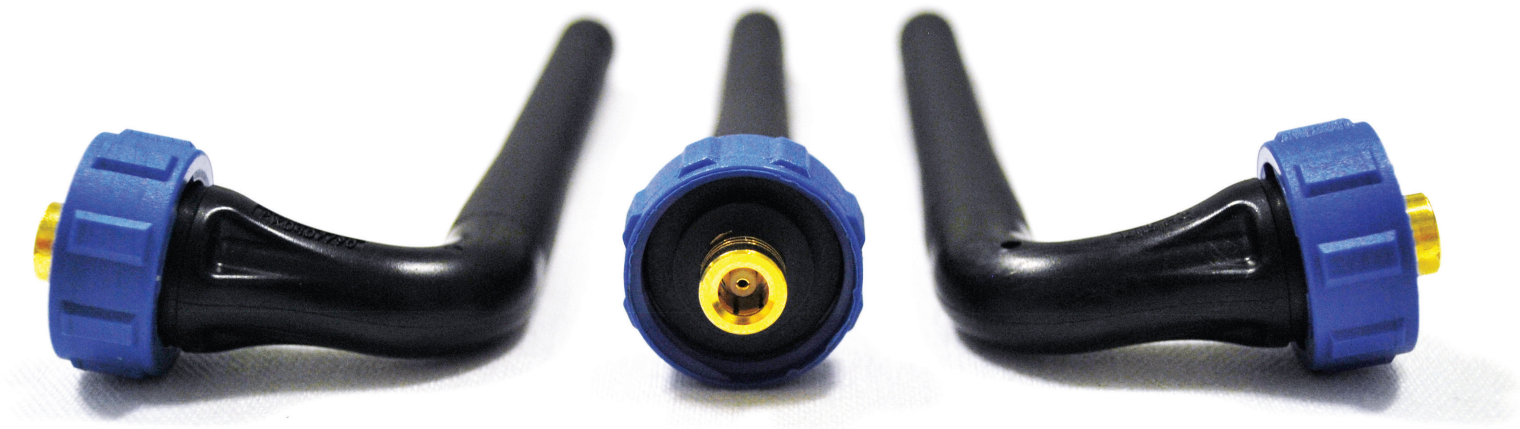
Mechanical:

Sealing:	IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
	IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks)
Salt Mist	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Cable Acceptance:	RG-174
Insertion/Withdrawal Force:	
Insertion Force:	36N
Withdrawal Force:	36N
Cable Retention Force:	18N
Mating Cycles:	500
Operating Temperature:	–20°C to +80°C

Material:

PX0415/1 and PX0414	
Body Mouldings:	Polyamide
Flammability Rating:	UL94V-0
UV Resistance:	To EN 50021:1999
PX0416	
Body Mouldings:	PVC (black)
Flammability Rating:	UL94V-0
O Rings:	Nitrile
Panel Sealing O Ring:	Nitrile
SMB Connector	
Body:	Brass to QQ-B-626, Gold Plated
Centre Contact:	
Plug:	Brass to QQ-B-626, Gold Plated
Jack:	Beryllium Copper to QQ-B-530, Gold Plated
Insulator:	Teflon
Crimp Ferrules:	Annealed Copper
RoHS	Compliant

400 Series - Wireless Buccaneer



SMB Antenna

- IP68 Sealing
- IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k
- SMB 50 ohm interface
- For use with SMB Buccaneer
- Three frequency bands:
  440 to 470MHz
  900/1800/1900MHz
  2.4 to 2.5GHz
- Maintains sealing integrity of equipment

Bluetooth Cable Replacement

- IP68 Sealing
- RS485/RS232 serial interfaces
- Serial data to Bluetooth
- Wireless transparent data connection
- Up to 100m range (class 1)
- Maintains sealing integrity of equipment

SMB Antenna

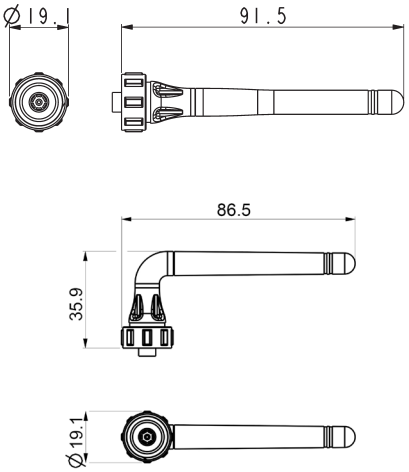


PX0407



PX0407/90

- Dust & waterproof to IP68 EN60529 when mated
- Secure screw thread locking
- Built-in sealed antenna
- Mates with SMB Buccaneer PX0414
- Frequency bands:
  2.4 to 2.5GHz
  440 to 470MHz
  900/1800/1900MHz



Part no.	Description
PX0407	IP68 rated, Buccaneer Antenna, 2.4 to 2.5GHz frequency band
PX0408	IP68 rated, Buccaneer Antenna, 440 to 470MHz frequency band
PX0409	IP68 rated, Buccaneer Antenna, 900/1800/1900MHz frequency band
PX0407/90	IP68 rated, Buccaneer Antenna, 2.4 to 2.5GHz frequency band
PX0408/90	IP68 rated, Buccaneer Antenna, 440 to 470MHz frequency band
PX0409/90	IP68 rated, Buccaneer Antenna, 900/1800/1900MHz frequency band

Specification

Electrical

Frequency	
PX0407	2.4 to 2.5GHz
PX0408	440 to 470MHz
PX0409	850-900/1800/1900MHz
Configuration	
PX0407	¼ Wavelength
PX0408	½ Wavelength
PX0409	½ Wavelength
Radiation	Omnidirectional
Polarization	Vertical
Impedance	50Ω nominal
VSWR	<2

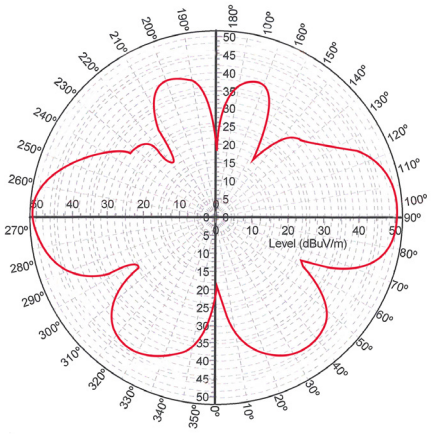
Mechanical

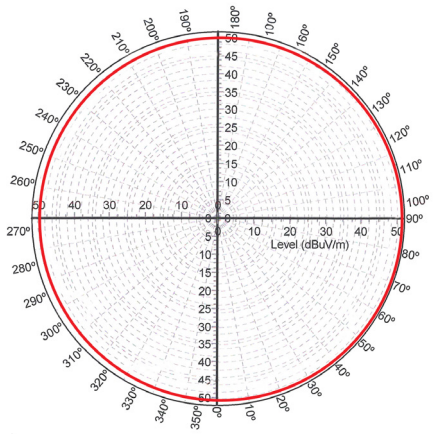
Sealing	IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k IP68, EN60529:1992+A2:2013, when mated (10m depth for 2 weeks)
Operating Temperature:	–20°C to +65°C
Salt Mist	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Material

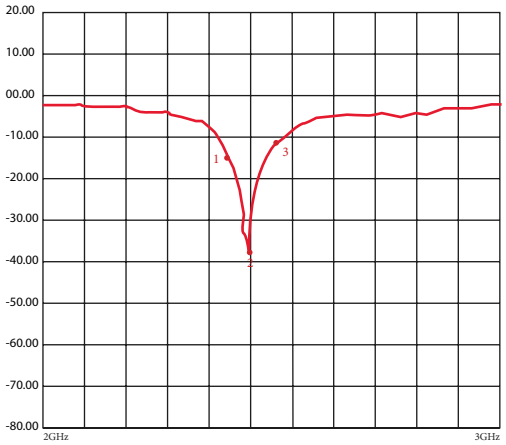
Body Mouldings	PVC
Flammability Rating	UL94V-0
UV Resistance	EN50021:1999
RoHS	Compliant

PX0407 Polar plots

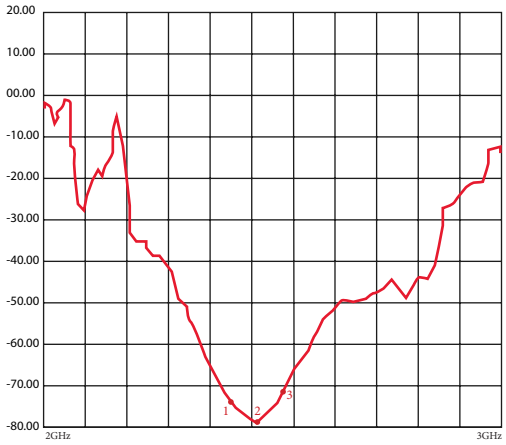




PX0407 Radiation Pattern plots

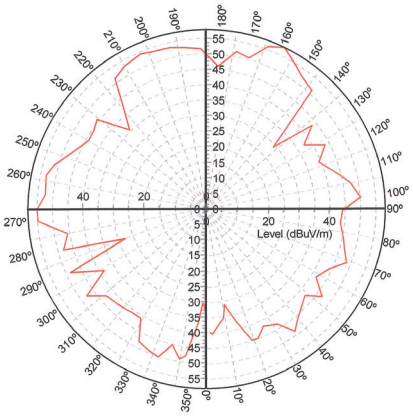


1 -12624 dB 2.v0 GHz
2 -34951 dB 2.45000 GHz
3 -12.777 dB 2500.000 000 MHz

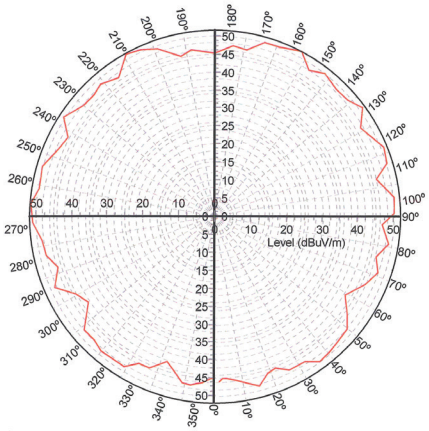


1 1.5659 dB 2.40000 GHz
2 1.6514 dB 2.45000 GHz
3 1.6032 dB 2500.000 000 MHz

PX0408 Polar plots

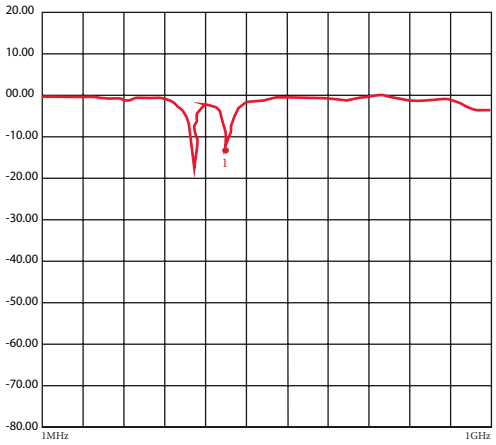


Pattern Field E

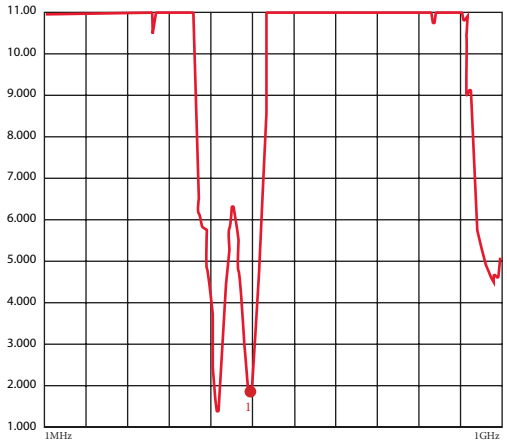


Pattern Field H

PX0408 Radiation Pattern plots

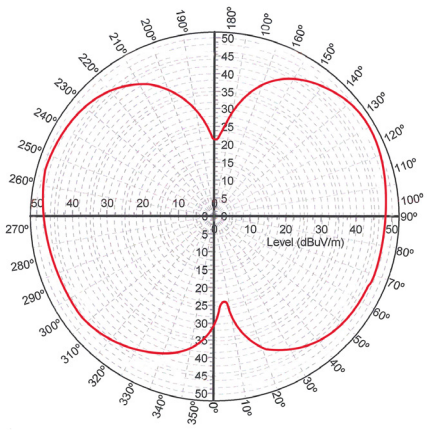


1 450.00000 MHz -13.300 dB

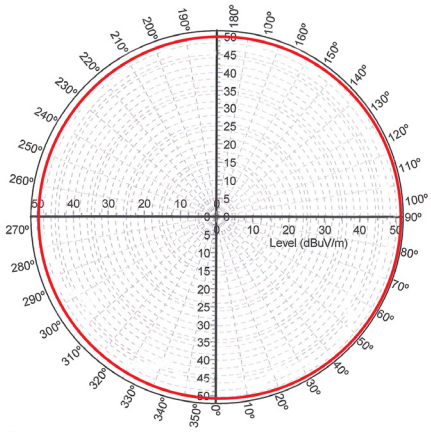


1 450.00000 MHz -13.300 dB

PX0409 / 900MHz Polar plots

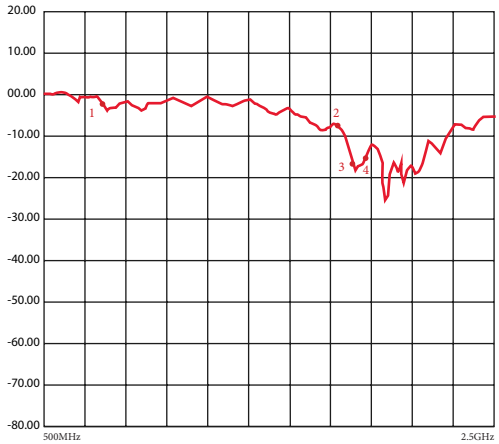


Pattern Field E

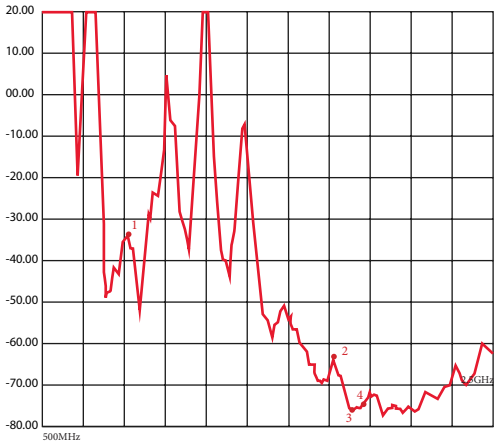


Pattern Field H

PX0409 / 900MHz Radiation Pattern plots

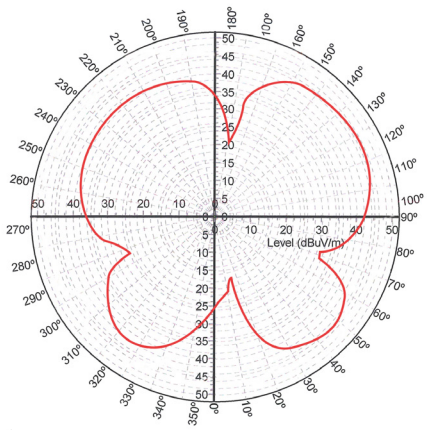


1 900.00000 MHz -3.4307 dB
2 1.8000000 GHz -9.0130 dB
3 1.8800000 GHz -19.516 dB
4 1.9000000 GHz -20.297 dB

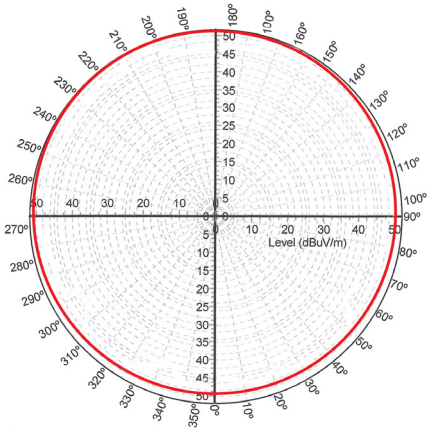


1 900.00000 MHz 5.1694 dB
2 1.8000000 GHz 2.2481 dB
3 1.8800000 GHz 1.2377 dB
4 1.9000000 GHz 1.2052 dB

PX0409 / 1800MHz Polar plots

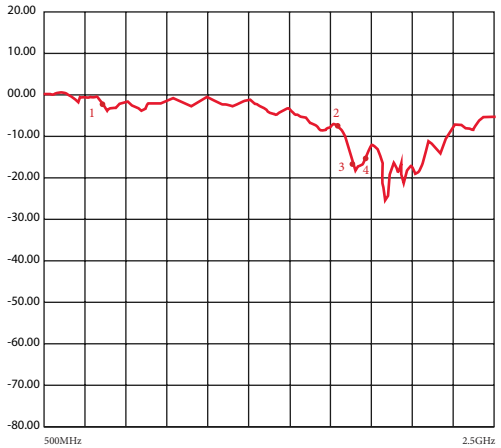


Pattern Field E

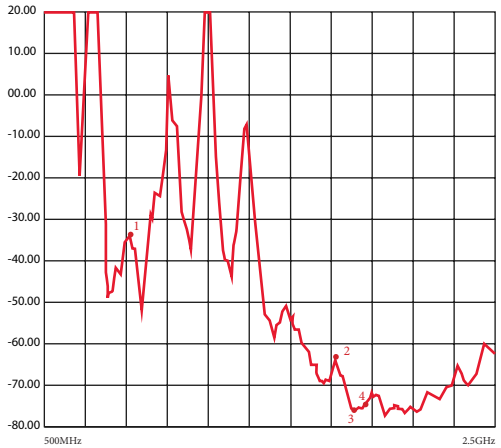


Pattern Field H

PX0409 / 1800MHz Radiation Pattern plots

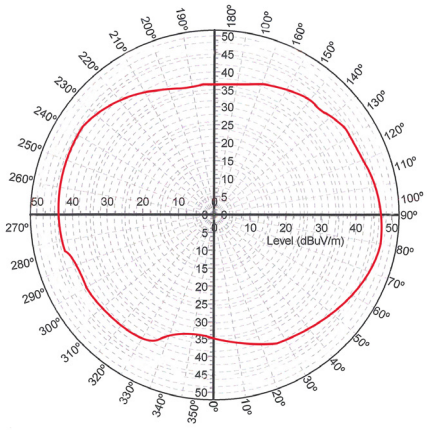


1 900.00000 MHz -3.4307 dB
2 1.8000000 GHz -9.0130 dB
3 1.8800000 GHz -19.516 dB
4 1.9000000 GHz -20.297 dB

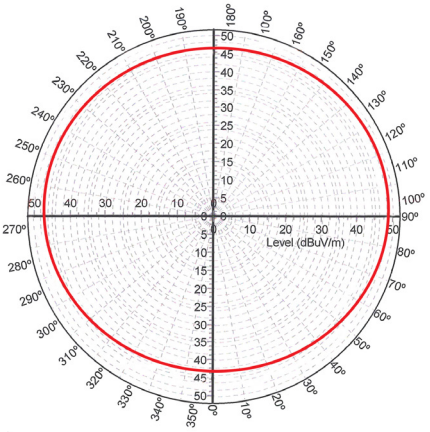


1 900.00000 MHz 5.1694 dB
2 1.8000000 GHz 2.2481 dB
3 1.8800000 GHz 1.2377 dB
4 1.9000000 GHz 1.2052 dB

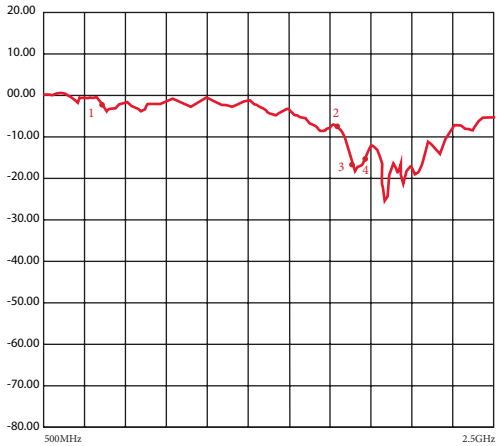
PX0409 / 1900MHz Polar plots



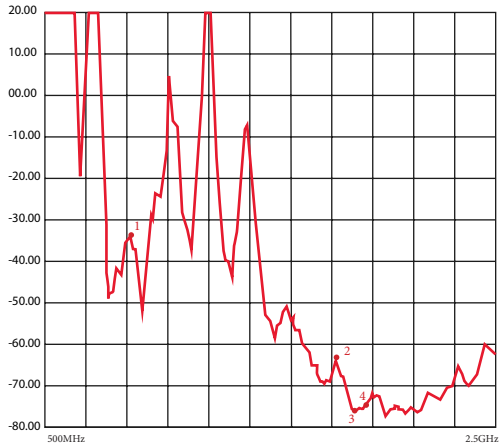
Pattern Field E



Pattern Field H



1 900.00000 MHz -3.4307 dB
2 1.8000000 GHz -9.0130 dB
3 1.8800000 GHz -19.516 dB
4 1.9000000 GHz -20.297 dB



1 900.00000 MHz 5.1694 dB
2 1.8000000 GHz 2.2481 dB
3 1.8800000 GHz 1.2377 dB
4 1.9000000 GHz 1.2052 dB

4000 Series - Micro USB Buccaneer



- IP66, IP68 and IP69K rated
- USB V2.0 performance
- Plug and play capability
- Shielded system
- Overmoulded cables
- EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
- Data rates up to 480Mbs
- Secure, proven locking system
- Tamperproof Construction
- Colour coded O-rings & washers for easy identificaiton purposes

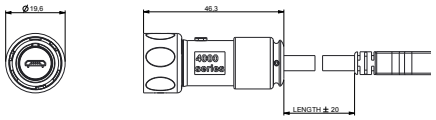
4000 Series - Micro USB Buccaneer

Sealed Micro USB Cables - Single Ended



PXP4040

- Standard ‘A’ type to sealed Micro ‘B’ type
- Available in 2, 3 & 5m lengths
- Plug variant mates with PXP4043



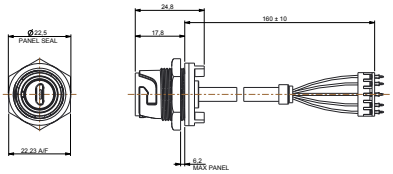
Part No.	Length	Description
PXP4040/B/2M00	2.0m	IP-sealed micro ‘B’ to Std ‘A’ type USB
PXP4040/B/3M00	3.0m	IP-sealed micro ‘B’ to Std ‘A’ type USB
PXP4040/B/5M00	5.0m	IP-sealed micro ‘B’ to Std ‘A’ type USB

Rear Panel Mounting Connector



PXP4043

- Micro ‘B’ type
- Leaded with 5 way header
- Socket variant mates with PXP4040 type cables



Part no.	Description
PXP4043	IP-sealed B type Micro USB, rear panel mounted. 5 way header connector at rear.

Accessories



- Sealing caps to maintain IP rating when connectors are not in use

Part no.	Description
PXP4081	Sealing cap for use with PXP4010 & PXP4040
PXP4082	Sealing cap for use with PXP4011
PXP4083	Sealing cap for use with PXP4013 & PXP4043

Gland Packs



Part no.	Description
PXP4088/0305	Pack of 4 pairs cable glands and collets to suit cables from 3.0 to 5.0mm diameter.
PXP4088/0507	Pack of 4 pairs cable glands and collets to suit cables from 5.0 to 7.0mm diameter.

O-ring & washer pack



Part no.	Description
PXP4089/WH	White coloured O-ring and washer pack
PXP4089/RD	Red coloured O-ring and washer pack
PXP4089/BL	Blue coloured O-ring and washer pack
PXP4089/YL	Yellow coloured O-ring and washer pack
PXP4089/GN	Green coloured O-ring and washer pack

Cables & connectors

Mechanical

Sealing	IP69K, DIN40050-9 IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks) IP66, EN60529:1992+A2:2013
Panel Mount Nut	1.0 - 1.1NM (91lb.in)
Operating temperature	-40°C to +70°C
Salt Mist	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1

Electrical

No. of poles	4 and 5
Current rating	1A
Voltage rating	30Vac, 42Vdc
Contact resistance	50m Ω max.
Performance	USB version 2.0

Materials - Re-wireable and Panel Connectors

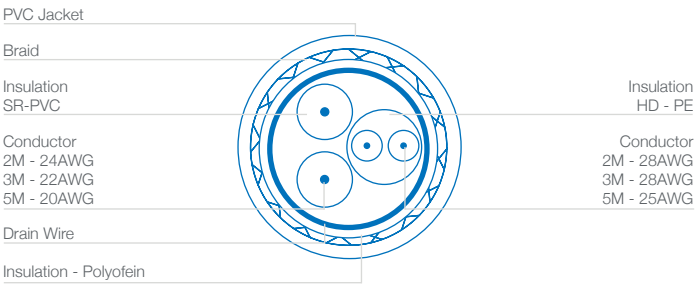
Shell material	Steel
Shell plating	Nickel
Contact material	Copper Alloy
Contact plating	50 micro inch Gold
Connector body & locking ring	PC/PBT
Panel connector	PC/PBT
Flammability rating	UL94V-0
'O' rings	Silicone
Mating cycles	1,000
RoHS	Compliant

Materials - cable

Cable Jacket	PVC (black)
Screen	Tinned copper braid
Flammability	UL94V-0
RoHS	Compliant

Length:	Dia	Conductors Signal	Conductors Power
2m	4.8mm	2 x 28AWG	2 x 24AWG
3m	5.0mm	2 x 28AWG	2 x 22AWG
5m	5.2mm	2 x 25AWG	2 x 20AWG

Cable construction - PXP4040 & PXP4043



6000 Series Buccaneer – circular connectors that combine the ease of use of a push/pull coupling mechanism with proven environmental sealing. Available with metal or plastic bodies, the range supports both data (USB and Ethernet), signal and mains power. Designed and independently tested to IP66, IP68 & IP69K standards, they are ideal for applications where ingress of dust and water must be avoided and where ease of connection, space and appearance are important considerations.

- 30° twist locking
  Tamperproof lock prevents accidental un-mating
- IP66, IP68 and IP69K when mated
  Suitable for a wide range of dust and water borne environments
- Independent sealing tests
  IP Ratings independently verified
- USB version 2.0 performance
  Low and high speed bus connection, 1.5Mbs to 480Mbs
- Plug and play capability
  Hot pluggable, standard 4 pole interface
- Shielded system
  High noise immunity and EMI protection
- Single and double ended cables
  Suitable for PC and peripheral configuration
- Push-pull latching system*
  Secure, instant latching. Quick connector mating and release
- Cat 5e compliant
  Data rate up to 100MHz
- PUR jacket on cable
  Good chemical resistance, flame retardant
- Cat 5e shielded coupler
  Maintains shielding
- Visual mating indication
  Alignment indicator reduces risk of damage during mating
- Earth lead version of panel adaptor on plastic connector
  Continuous screening of panel mount connector
- Metal connector grounded to cable screen
  Continuous screening of panel mount connector
- Sealed through panel Ethernet
  Prevent water ingress into equipment
- EN60068-2-52 Test Kb Salt Mist (Cyclic)
  Marine Severity Level 1



Sealed USB Cables - Single Ended

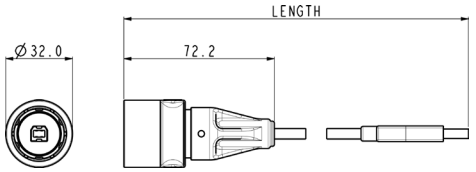


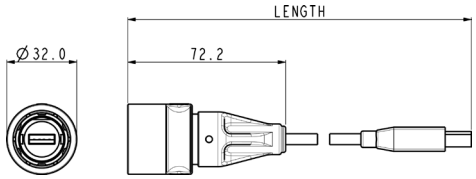
PXP6040/A



PXP6040/B

- Single ended sealed cable assembly
- Mates with all panel mounting connectors
- 30° twist locking
- IP rated ‘A’ type USB connector to standard ‘B’ type USB connector, mates with all panel mount connectors
- IP rated ‘B’ type USB connector to standard ‘A’ type USB connector, mates with all panel mount connectors
- Available in 2m, 3m and 5m lengths





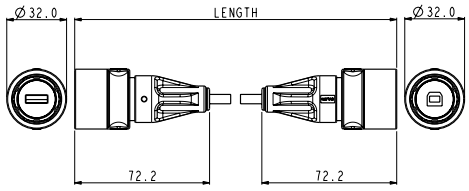
Part no	Length	Description
PXP6040/A/2M00	2m	IP rated A type USB to standard B type USB
PXP6040/A/3M00	3m	IP rated A type USB to standard B type USB
PXP6040/A/5M00	5m	IP rated A type USB to standard B type USB
PXP6040/B/2M00	2m	IP rated B type USB to standard A type USB
PXP6040/B/3M00	3m	IP rated B type USB to standard A type USB
PXP6040/B/5M00	5m	IP rated B type USB to standard A type USB

Sealed USB Cables - Double Ended



PXP6041/AB

- Double ended sealed cable assembly
- Mates with all panel mount connectors
- 30° twist locking
- IP rated ‘A’ type USB connector to ‘B’ type USB connector
- Available in 2m, 3m and 5m lengths



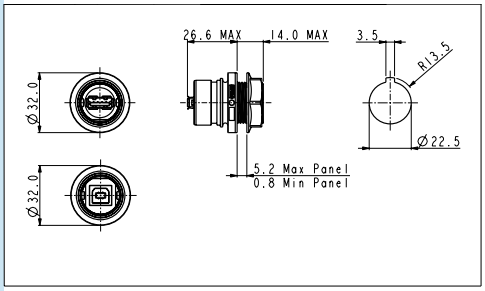
Part no	Length	Description
PXP6041/AB/2M00	2m	IP rated A type USB to standard B type USB
PXP6041/AB/3M00	3m	IP rated A type USB to standard B type USB
PXP6041/AB/5M00	5m	IP rated A type USB to standard B type USB

Front Panel Mounting Connector



PXP6042/B PXP6042/A

- PXP6042/A - USB 'A' type IP rated connector
- PXP6042/B - USB 'B' type IP rated connector
- Opposite USB type connector to rear of panel
- Mates with PXP6040 and PXP6041 cable connectors



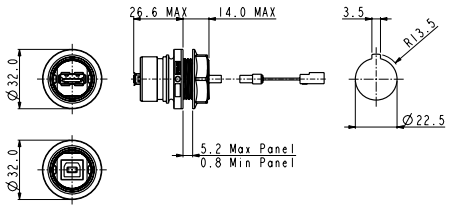
Part No.	Description
PXP6042/A	IP rated A type USB, front panel mounted. Sealed A type at front of panel, standard B type at rear.
PXP6042/B	IP rated B type USB, front panel mounted. Sealed B type at front of panel, standard A type at rear.

Front Panel Mounting Connector



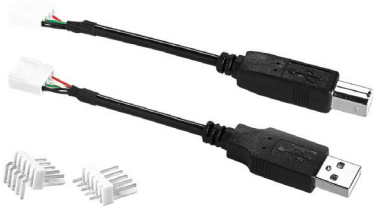
PXP6043/B PXP6043/A

- PXP6043/A - USB 'A' type IP rated connector
- PXP6043/B - USB 'B' type IP rated connector
- Leaded with 5 way crimp connector
- Mates with PXP6040 and PXP6041 cable connectors

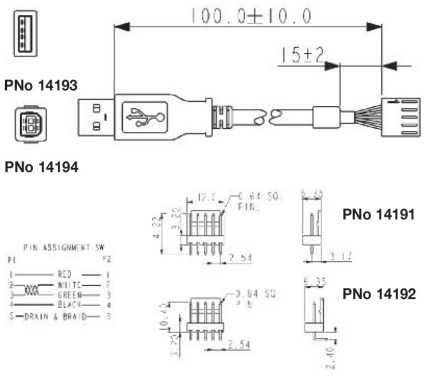


Part No.	Description
PXP6043/A	IP rated A type USB, front panel mounted. Sealed A type at front of panel, 5 way crimp connector at rear.
PXP6043/B	IP rated B type USB, front panel mounted. Sealed B type at front of panel, 5 way crimp connector at rear.

PCB Adaptor Leads



- Standard A and B type USB connectors to 5 way crimp adaptor leads
- 5 way headers, 2.54mm pitch, horizontal or vertical mounting

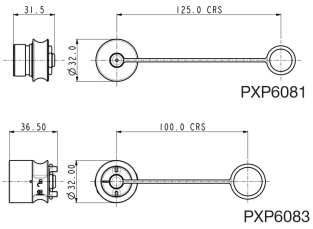


Part No.	Description
14193	USB ‘A’ type to 5 way crimp connector
14194	USB ‘B’ type to 5 way crimp connector
14191	5 way PCB header straight
14192	5 way PCB header right angle

Sealing Caps



- Sealing caps to maintain IP rating when connectors are not in use
- PXP6081 for cable connectors PXP6040 & PXP6041
- PXP6083 for front panel mount connectors PXP6042 & PXP6043, with 30° twist lock



Part No.	Description
PXP6081	Sealing Cap for Flex cable connectors (PXP6040, PXP6041)
PXP6083	Sealing Cap for front panel mounting connector (PXP6042, PXP6043)

PXP	/	6XXX	/	X	/	XXXX

Series Designation

Series / Body Style

040 = Single ended cable
041 = Double ended cable
042 = Panel with adaptor
043 = Panel with lead

Characteristics

A = 'A' type sealed interface
B = 'B' type sealed interface
AB = 'A' & 'B ' type sealed interface
(for use with 6041 only)

Cable length

2M00 = 2 metre cable length (for use with 6040 and 6041 cables only)
3M00 = 3 metre cable length (for use with 6040 and 6041 cables only)
5M00 = 5 metre cable length (for use with 6040 and 6041 cables only)
Blank for 6042 & 6043 panel bodies

Examples

PXP6040/A/2M00 = Cable assembly with sealed 'A' type connector to unsealed 'B' type connector, 2 metres long

PXP6042/A = Panel mounted adapter with sealed 'A' type to unsealed 'B' type at rear

Cables & connectors

Mechanical

Sealing	IP69K, DIN40050-9 IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks) IP66, EN60529:1992+A2:2013
Salt Mist	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Operating temperature	0°C to +70°C

Electrical

No. of poles	4
Current rating	1A
Voltage rating	30Vac (RMS)
Contact resistance	30mΩ max.
Performance	USB version 2.0

Materials - Overmoulded

Overmould material	PVC (black)
Flammability rating	UL94V-0

Materials - Re-wireable and Panel Connectors

Plastic	PC/PBT
Metal	Machined Brass, Nickel Plated
Flammability rating	UL94V-0
'O' rings	Silicone
Panel Gasket - round	Silicone
Panel Gasket - flange	Silicone

Materials - cable

Cable Jacket	PVC (black)
Screen	Tinned copper braid
Flammability	UL94V-0
RoHS	Compliant

Length:	Dia	Conductors Signal	Conductors Power
2m	4.8mm	2 x 28AWG	2 x 24AWG
3m	5.0mm	2 x 28AWG	2 x 22AWG
5m	5.2mm	2 x 28AWG	2 x 20AWG

PCB adaptor leads

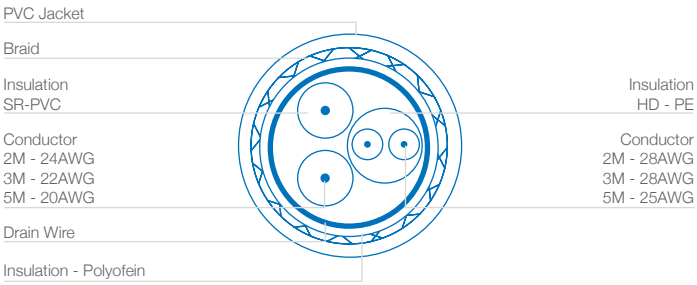
Electrical

No. of conductors	4
Current rating	1A
Voltage rating	30Vac (RMS)
Contact resistance	<10mΩ max.
PCB pitch	2.54mm

Materials

Moulding	Polycarbonate
Flammability	UL94V-0
Contact material	Copper Alloy
Contact plating	30 micro inch Gold
Wire insulation	PVC (black)
Flammability	UL94-V0
Conductors	4 x 28AWG
Operating temperature	0°C to +70°C
Mating cycles	1,000
RoHS	Compliant

Cable construction - PXP6040, PXP6041

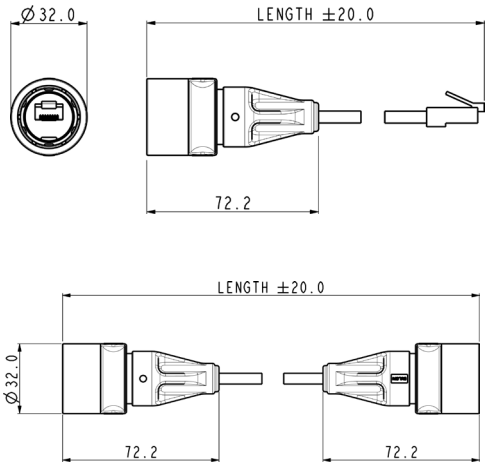


Patch Cord Flex Connector - Pur Jacket Cable



PXP6037

- Mates with PXP6033TP type panel mounting connectors
- 30° twist locking
- Overmoulded patchcords with IP rated connector
- Supplied with shielded RJ45 plug
- Single or double end terminated
- Standard lengths: 2m, 3m&5m
- S-FTP cable construction
- PUR jacket cable
- Wiring configuration to 568-B
- Exceeds EIA/TIA Cat 5e



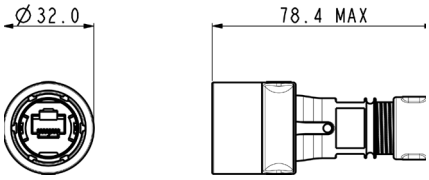
Part no	Type	Length	Description
PXP6037/2M00	Single ended	2m	IP RJ Buccaneer to Shielded RJ45
PXP6037/3M00	Single ended	3m	IP RJ Buccaneer to Shielded RJ45
PXP6037/5M00	Single ended	5m	IP RJ Buccaneer to Shielded RJ45
PXP6038/2M00	Double ended	2m	IP RJ Buccaneer to IP68 RJ Buccaneer
PXP6038/3M00	Double ended	3m	IP RJ Buccaneer to IP68 RJ Buccaneer
PXP6038/5M00	Double ended	5m	IP RJ Buccaneer to IP68 RJ Buccaneer

Rewireable Flex Connector



PXP6034

- Mates with PXP6033TP type panel mounting connectors
- 30° twist locking
- Supplied with shielded RJ45 plug
- Two versions:
  for PUR jacket cable (Cat 5e)
  for other cable sizes from 4.0 to 10.0mm dia.



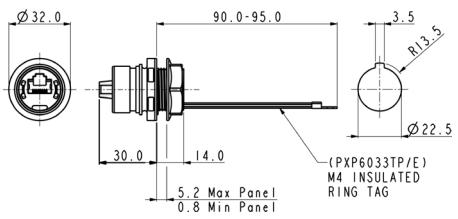
Part no	Description
PXP6034/A	Cable glands optimised for PUR jacket cable to maintain Cat 5e performance
PXP6034/B	Suitable for use with cables from 4.0 to 10.0mm diameter

Front Panel Mounting Connector



PXP6033TP

- Sealed through panel
- Cat 5e shielded coupler
- Mates with all plastic flex connectors
- Standard RJ45 patchcord can be plugged into rear
- Version with earth wire available
- Single hole fixing
- Complete with panel sealing gasket



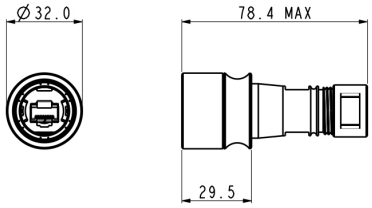
Part no	Description	Fixing
PXP6033TP	Cat 5e coupler	Front panel mounted - sealed through panel
PXP6033TP/E	Cat 5e coupler + earth wire	Front panel mounted - sealed through panel

Re-wireable Flex Connector



PXM6034

- Mates with PXM6033TP type panel mounting connectors
- 30° twist locking
- Supplied with shielded RJ45 plug
- Two versions:
  for PUR jacket cable (Cat 5e)
  for other cable sizes from 4.0 to 10.0mm dia.



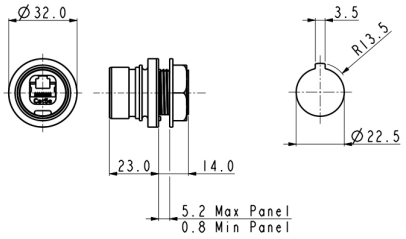
Part no	Description
PXM6034/A	Cable glands optimised for PUR jacket cable to maintain Cat 5e performance
PXM6034/B	Suitable for use with cables from 4.0 to 10.0mm diameter

Front Panel Mounting Connector



PXM6033

- Sealed through panel
- Cat 5e shielded coupler
- Mates with PXM6034 type flex connectors
- Standard RJ45 patchcord can be plugged into rear
- Connector shell ground to cable screen
- Single hole fixing
- Complete with panel sealing gasket



Part no	Description	Fixing
PXM6033TP	Cat 5e coupler	Front panel mounted - sealed through panel

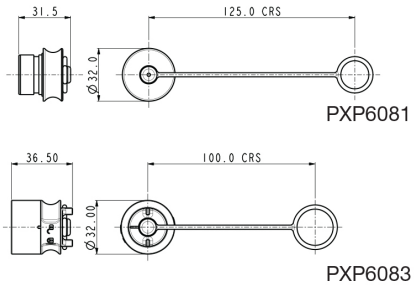
Accessories For Ethernet Connectors



PXM6034

- Plastic connectors
- PXP6081 for cable connectors PXP6034, PXP6037 & PXP6038
- PXP6083 for front panel mount connectors PXP6033, with 30° twist lock

Sealing caps to maintain IP rating when connectors are not in use



PXP6081

PXP6083

Part no	Description
PXP6081	Sealing Cap for plastic Flex cable connectors
PXP6083	Sealing Cap for plastic front panel mounting connector

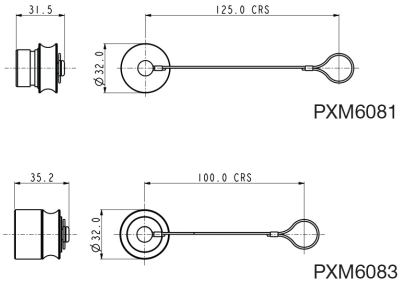
Accessories For Ethernet Connectors



PXM6033

- Metal connectors
- PXM6081 for cable connectors PXM6034
- PXM6083 for front panel mount connectors

Sealing caps to maintain IP rating when connectors are not in use



PXM6081

PXM6083

Part no	Description
PXM6081	Sealing Cap for metal Flex cable connectors
PXM6083	Sealing Cap for metal front panel mounting connector
14151	Hand crimp tooling + die set
14199	PUR Jacket cable - 50m reel
14150	Replacement shielded RJ45

6000 Series Ethernet Buccaneer

Part No System

PX X	/	6XXX	/	XX	/	X

Series Designation

PXP - Plastic
PXM - Metal

Series / Body Style

033 = Panel
034 = Re-wireable Flex
037 = Patchcord (Single Ended)
038 = Patchcord (Double Ended)

Panel Sealing

TP = through panel sealing (for use with PXP6033 panel body only)

Blank = not applicable

Characteristics

E = Earth lead (for use with PXP6033 plastic panel body only)
A = Glanding for PUR cable (for use with PXP6034 re-wireable flex only)
B = Glanding for 3.5 to 8mm cables (for use with PXP6034 re-wireable flex only)
2M00 = 2 metre cable length (for use with PXP6037 and PXP6038 patchcords only)
3M00 = 3 metre cable length (for use with PXP6037 and PXP6038 patchcords only)
5M00 = 5 metre cable length (for use with PXP6037 and PXP6038 patchcords only)

Examples

PXP6033TP/E= Panel mounted coupler, sealed through panel with earth lead

PXP6037/2M00= Patchcord with one sealed end, 2 metres long

PXM6034/A = Flex re-wireable connector for use with PUR cable

PXM6033TP = Panel mounted coupler, through panel sealed

Ethernet – Metal and Thermo-plastic versions

Connectors

Mechanical

Sealing	IP69K, DIN40050-9 IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks) IP66, EN60529:1992+A2:2013
Salt Mist:	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Operating Temperature	
Re-wireable and Metal	–20°C to +70°C
Overmoulded patchcords	0°C to +70°C

Materials - Overmoulded

Overmould material	PVC (black)
Flammability rating	UL94V-0

Materials - Re-wireable and Panel Connectors

Plastic	PC/PBT
Metal	Machined Brass, Nickel Plated
Flammability rating	UL94V-0
'O' rings	Silicone
Panel Gasket - round	Silicone
Panel Gasket - flange	Silicone
Approvals	
RoHS	Compliant

Stranded S-FTP Patch cord cable - PUR Jacket

Polyurethane (PUR) jacket cable with internal construction exceeding Cat 5e performance levels. The PUR jacket has excellent abrasion, chemical and ozone resistance, low smoke, low halogen flame retardant construction suitable for internal and external industrial environments.

Cable

Conductors	24AWG (7/0.2mm) bare copper
Insulation	HD-PE
Pair	2 of the above cores twisted
Core	4 of the above cores
Tape	1 lap mylar tape
Screen	1 layer mylar and aluminium tape, 0.12mm tinned copper braid
Sheath	PUR Jacket Black
Op Temperature	–25°C to +85°C
Min. bend radius	10 x o/d (installation)
Min. bend radius	6 x o/d (installed)
Diameter	6.1mm nominal

Electrical @ 20°C

Characteristic Impedance	100Ω ±15Ω @ 100MHz
Capacitance	330pF/km
Conductor Loop resistance	29Ω/100m maximum
Skew	45 nsec/100m @ 100MHz
TIA/EIA Rating	Cat 5e

Cable construction - PXP6037, PXP6038 and 14199

PCB adaptor leads

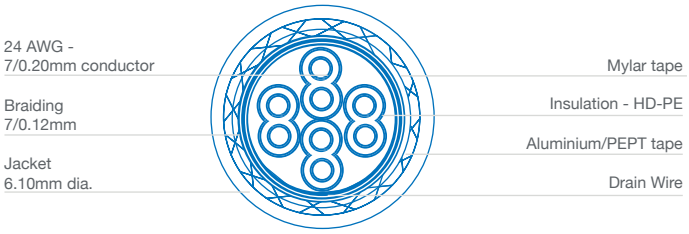
Electrical

No. of conductors	4
Current rating	1A
Voltage rating	30Vac (RMS)
Contact resistance	<10mΩ max.
PCB pitch	2.54mm

Materials

Moulding	Polycarbonate
Flammability	UL94V-0
Contact material	Copper Alloy
Contact plating	30 micro inch Gold
Wire insulation	PVC (black)
Flammability	UL94-V0
Conductors	4 x 28AWG
Operating temperature	0°C to +70°C
Mating cycles	1,000
RoHS	Compliant

Cable construction - PXP6040, PXP6041



The M-Series Buccaneer range has been designed to offer flexible connectivity solutions for a variety of industrial automation applications. With metal and plastic variants, these rugged and robust interconnects are ideal for industries requiring secure and reliable connections.



- Available types: M5, M8, M12, M16 & M23
- Reliable sensor, actuator and data connectivity solutions
- Straight and right angled configurations
- Quick and secure screw coupling mechanism
- Backwards compatible versions
- Available as field attachable connectors, receptacles or with overmolded cables
- Plastic and Metal Variants
- Ratings from 1A, 30V ac/dc up to 8A, 250V ac/dc
- Overmolded cables PVC & PUR
- IP67 Rating
- Cable lengths from 1m - 15m
- A, B and D Coding Options
- Power Distribution Units Available

M5 Series 106-110
M8 Series 111-119
M12 Series 120-131
M16 Series 132-135
M23 Series 136-138
M-Series Distribution Units 139-142

Bulgin's M-Series connector range is the ideal connectivity solution for industrial automation technologies that require fast, secure and reliable connections with a high degree of environmental protection.

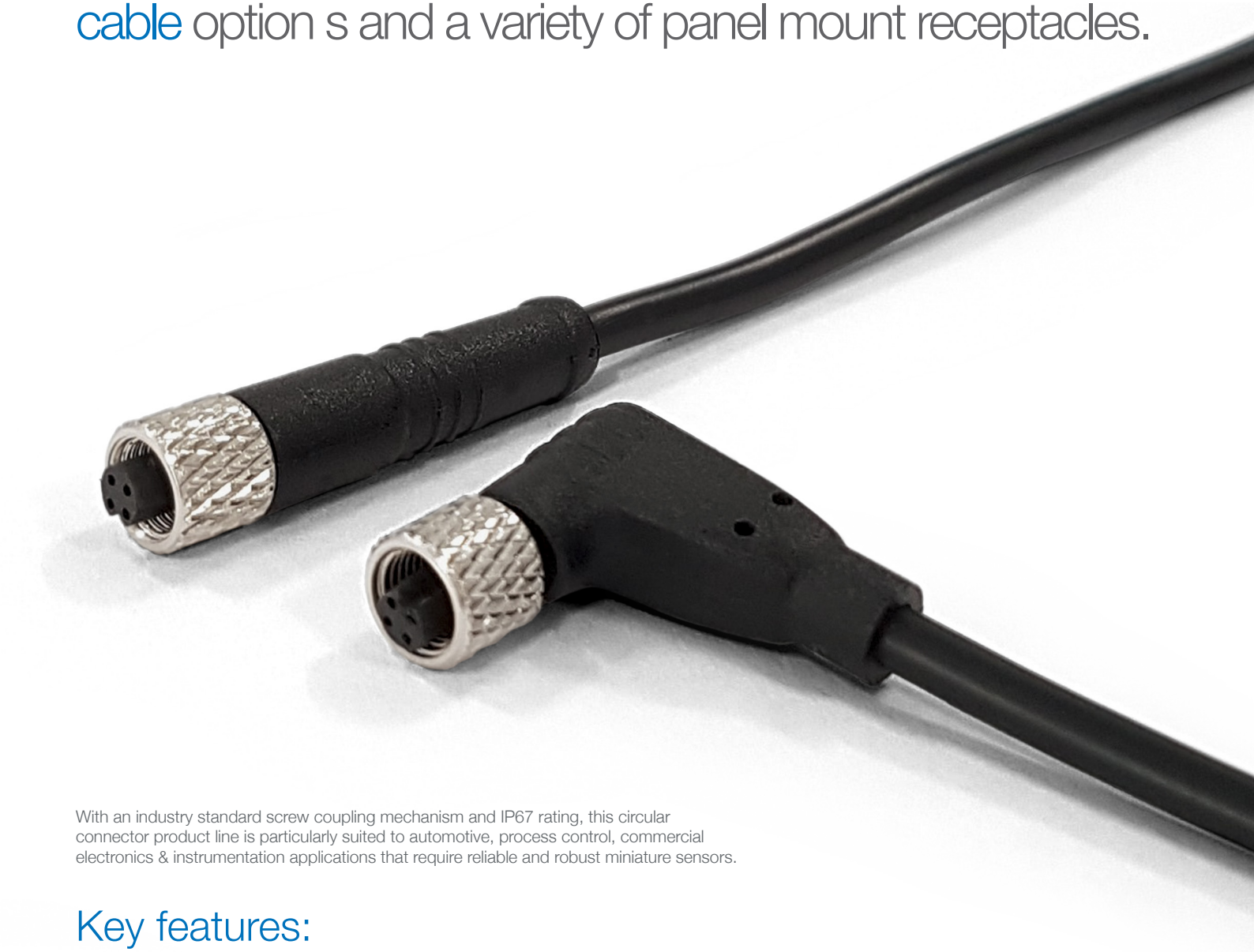


Bulgin's automation interconnect range includes circular metric connectors with industry standard M5, M8, M12, M16 & M23 threads in addition to panel mount receptacles, overmolded cable variants and power/signal distributor units. This comprehen sive product portfolio offers a large degree of flexibility with chemically and mechanically robust connectors that are easy to install, help decrease downtime and increase production efficiency in a wide range of markets.

Applications include:

- Factory Automation
- Robotics
- Measurement & Instrumentation
- Manufacturing & Machine Tools
- Process Control Systems
- Medical
- Food & Beverage Processing
- Industrial Network

The most compact connector type in the M-Series range, Bulgin's waterproof M5 sensor connectors come in straight and angled forms with PVC or PUR overmolded cable option s and a variety of panel mount receptacles.



With an industry standard screw coupling mechanism and IP67 rating, this circular connector product line is particularly suited to automotive, process control, commercial electronics & instrumentation applications that require reliable and robust miniature sensors.

Key features:

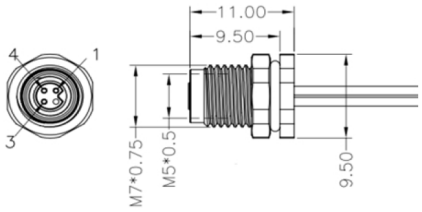
- Secure & reliable screw locking mechanism
- Robust PVC & PUR overmolded cables
- Cable length from 1m - 15m
- High degree of environmental protection - IP67 rated
- Straight & right angled cable connectors
- Rear & front panel mount receptacles
- Available with 3 or 4 poles

M5 Rear Panel Mounting Female



PXMBNI05RPF

- Available in 3 and 4 poles
- PCB or flying lead termination
- Rear panel mounting M7 nut
- Available in 3 and 4 poles
- PCB or flying lead termination
- Mates with Flex Inline Body connectors



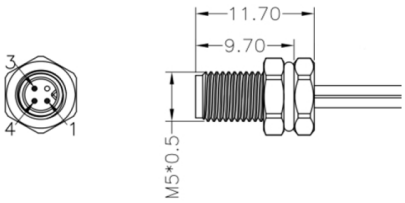
Part Number	Poles	Code	Termination	Lead Length
PXMBNI05RPF03AFL001	03	A	Flying Lead	100 mm
PXMBNI05RPF03AFL002	03	A	Flying Lead	200 mm
PXMBNI05RPF03AFL003	03	A	Flying Lead	300 mm
PXMBNI05RPF04AFL001	04	A	Flying Lead	100 mm
PXMBNI05RPF04AFL002	04	A	Flying Lead	200 mm
PXMBNI05RPF04AFL003	04	A	Flying Lead	300 mm
PXMBNI05RPF03APC	03	A	PCB Terminal	-
PXMBNI05RPF04APC	04	A	PCB Terminal	-

M5 Rear Panel Mounting Male



PXMBNI05RPM

- Available in 3 and 4 poles
- PCB or flying lead termination
- Rear panel mounting M5 nut
- Mates with Flex Body connectors



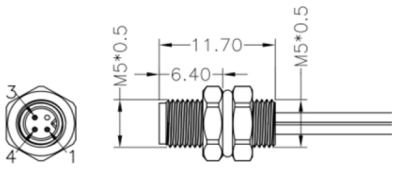
Part Number	Poles	Code	Termination	Lead Length
PXMBNI05RPM03AFL001	03	A	Flying Lead	100 mm
PXMBNI05RPM03AFL002	03	A	Flying Lead	200 mm
PXMBNI05RPM03AFL003	03	A	Flying Lead	300 mm
PXMBNI05RPM04AFL001	04	A	Flying Lead	100 mm
PXMBNI05RPM04AFL002	04	A	Flying Lead	200 mm
PXMBNI05RPM04AFL003	04	A	Flying Lead	300 mm
PXMBNI05RPM03APC	03	A	PCB Terminal	-
PXMBNI05RPM04APC	04	A	PCB Terminal	-

M5 Front Panel Mounting Male



PXMBNI05FPM

- Available in 3 and 4 poles
- PCB or flying lead termination
- Rear panel mouting M5
- Mates with Flex Body connectors



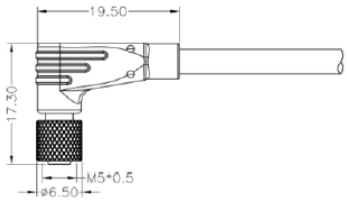
Part Number	Poles	Code	Termination	Lead Length
PXMBNI05FPM03AFL001	03	A	Flying Lead	100 mm
PXMBNI05FPM03AFL002	03	A	Flying Lead	200 mm
PXMBNI05FPM03AFL003	03	A	Flying Lead	300 mm
PXMBNI05FPM04AFL001	04	A	Flying Lead	100 mm
PXMBNI05FPM04AFL002	04	A	Flying Lead	200 mm
PXMBNI05FPM04AFL003	04	A	Flying Lead	300 mm
PXMBNI05FPM03APC	03	A	PCB Terminal	-
PXMBNI05FPM04APC	04	A	PCB Terminal	-

M5 Right Angled Female



PXPTPU05RAF
PXPPVC05RAF

- Available in 3 and 4 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Body
- Mates with Flex Inline Body & panel mount connectors



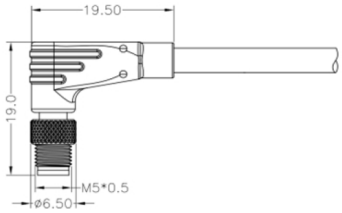
Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC05RAF03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU05RAF03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC05RAF03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU05RAF03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC05RAF03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU05RAF03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC05RAF03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU05RAF03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC05RAF03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU05RAF03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC05RAF03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU05RAF03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC05RAF04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU05RAF04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC05RAF04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU05RAF04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC05RAF04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU05RAF04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC05RAF04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU05RAF04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC05RAF04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU05RAF04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC05RAF04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU05RAF04ACL150PUR	04	A	Overmold Cable	15m	PUR

M5 Right Angled Male



PXPTPU05RAM
PXPPVC05RAM

- Available in 3 and 4 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Inline Body
- Mates with Flex Body & panel mount connectors



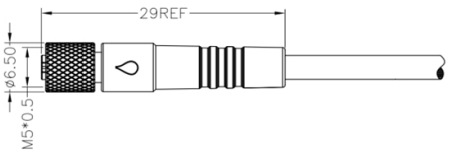
Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC05RAM03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU05RAM03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC05RAM03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU05RAM03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC05RAM03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU05RAM03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC05RAM03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU05RAM03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC05RAM03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU05RAM03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC05RAM03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU05RAM03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC05RAM04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU05RAM04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC05RAM04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU05RAM04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC05RAM04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU05RAM04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC05RAM04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU05RAM04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC05RAM04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU05RAM04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC05RAM04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU05RAM04ACL150PUR	04	A	Overmold Cable	15m	PUR

M5 Flex Body Female



PXPTPU05FBF
PXPPVC05FBF

- Available in 3 and 4 poles
- Overmold Flex Body
- 1,2,3,5,10 & 15M cable options
- Mates with Flex Inline Body & panel mount connectors



Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC05FBF03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU05FBF03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC05FBF03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU05FBF03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC05FBF03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU05FBF03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC05FBF03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU05FBF03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC05FBF03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU05FBF03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC05FBF03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU05FBF03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC05FBF04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU05FBF04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC05FBF04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU05FBF04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC05FBF04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU05FBF04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC05FBF04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU05FBF04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC05FBF04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU05FBF04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC05FBF04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU05FBF04ACL150PUR	04	A	Overmold Cable	15m	PUR

M5 Flex Inline Body Male



PXPTPU05FIM
PXPPVC05FIM

- Available in 3 and 4 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Inline Body
- Mates with Flex Body & panel mount connectors



Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC05FIM03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU05FIM03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC05FIM03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU05FIM03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC05FIM03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU05FIM03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC05FIM03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU05FIM03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC05FIM03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU05FIM03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC05FIM03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU05FIM03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC05FIM04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU05FIM04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC05FIM04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU05FIM04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC05FIM04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU05FIM04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC05FIM04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU05FIM04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC05FIM04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU05FIM04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC05FIM04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU05FIM04ACL150PUR	04	A	Overmold Cable	15m	PUR

Electrical

No. Poles:	3	4
Current Rating:	1A	1A
Voltage Rating (ac/dc) :	60V	60V
Contact Resistance:	<10mΩ	
Insulation Resistance:	>100MΩ	
AC Breakdown Voltage:		
3 Pole	1.5KV	
4 Pole	1.5KV	
Operating Temp Range:	-25°C to 80°C	

Mechanical:

Locking Mechanism:	Screw coupling
Sealing:	IP67
Terminations:	
3 Pole	Single wire / PCB / Cable
4 Pole	Single wire / PCB / Cable
Mechanical Operation:	500 mating cycles
Diameter over coupling ring:	6.5mm

Materials:

Body:	Nickel Plated Brass
Coupling Nut:	Nickel Plated Brass
Colour:	Grey
Pin Contacts:	Brass, Gold plating
Socket Contacts:	Phosphor Bronze, Gold plating
O Rings & Gaskets:	Viton
RoHS:	Compliant

Panel Mount:

TPU / PVC
Nickel Plated Brass
Black
Brass, Gold plating
Phosphor Bronze, Gold plating
Viton
Compliant

Cable Connectors:

MX XXX XX XX X XXX X XX

Series	Material	Series Size	Body Style	Orientation	NO. Contacts	Code	Termination
PXM	BNI = Brass Nickel	05	FB = Flex Body	M	03	A	PC = PCB
PXP	TPU = overmold for PUR		FI = Flex Inline Body	F	04		FL = Flying Lead
	PVC = overmold for PVC		FP = Front Panel Mounting				CL = Cable
			RP = Rear Panel Mounting				
			RA = Right Angle				

XXX XXX

Lead Length	Cable Material
001	PUR
002	PVC
003	
010	
030	
050	
100	
150	

Bulgin's M8 circular connectors and overmolded cables are designed to fulfil the ever growing demand for sensor, actuator and data connections in process control, industrial machinery and factory automation applications.



These compact sensor and automation connectors with screw lock coupling are mechanically and chemically robust, easy to install, minimise downtime and help to increase production efficiency. Rated to the IP67 standard, Bulgin's M8 Series ensure safe, secure and reliable protection from liquids, dust, moisture and dirt whilst also providing great resistance against vibrations to ensure that connections are not disrupted.

Key features:

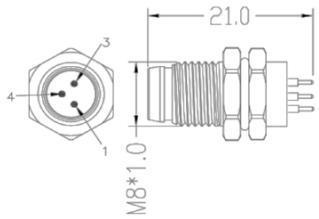
- Straight & right angled configurations
- 3, 4 or 5 contacts
- Metal & plastic shell options
- A & B coded
- Environmental protection class IP67
- Field installable connectors, panel mounts & overmolded cable options
- PVC or PUR jacketed cable variants with many lengths from 1m – 15m

M8 Rear Panel Mounting Male



PXMBNI08RPM

- Available in 3, 4 and 5 poles
- PCB or flying lead termination
- Rear panel mounting M8
- Mates with Flex Body connectors



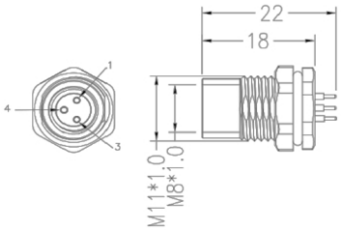
Part Number	Poles	Code	Termination	Lead Length
PXMBNI08RPM03APC	03	A	PCB Terminal	-
PXMBNI08RPM04APC	04	A	PCB Terminal	-
PXMBNI08RPM05BPC	05	B	PCB Terminal	-
PXMBNI08RPM03AFL001	03	A	Flying Lead	100mm
PXMBNI08RPM03AFL002	03	A	Flying Lead	200mm
PXMBNI08RPM03AFL003	03	A	Flying Lead	300mm
PXMBNI08RPM04AFL001	04	A	Flying Lead	100mm
PXMBNI08RPM04AFL002	04	A	Flying Lead	200mm
PXMBNI08RPM04AFL003	04	A	Flying Lead	300mm
PXMBNI08RPM05BFL001	05	B	Flying Lead	100mm
PXMBNI08RPM05BFL002	05	B	Flying Lead	200mm
PXMBNI08RPM05BFL003	05	B	Flying Lead	300mm

M8 Rear Panel Mounting Female



PXMBNI08RPF

- Available in 3, 4 and 5 poles
- PCB or flying lead termination
- Rear panel mounting M11 nut Mates with Flex Inline Body connectors



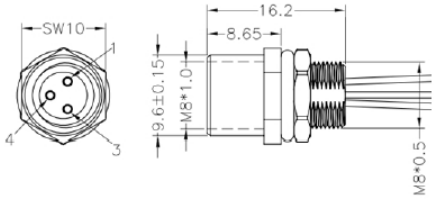
Part Number	Poles	Code	Termination	Lead Length
PXMBNI08RPF03APC	03	A	PCB Terminal	-
PXMBNI08RPF04APC	04	A	PCB Terminal	-
PXMBNI08RPF05BPC	05	B	PCB Terminal	-
PXMBNI08RPF03AFL001	03	A	Flying Lead	100mm
PXMBNI08RPF03AFL002	03	A	Flying Lead	200mm
PXMBNI08RPF03AFL003	03	A	Flying Lead	300mm
PXMBNI08RPF04AFL001	04	A	Flying Lead	100mm
PXMBNI08RPF04AFL002	04	A	Flying Lead	200mm
PXMBNI08RPF04AFL003	04	A	Flying Lead	300mm
PXMBNI08RPF05BFL001	05	B	Flying Lead	100mm
PXMBNI08RPF05BFL002	05	B	Flying Lead	200mm
PXMBNI08RPF05BFL003	05	B	Flying Lead	300mm

M8 Front Panel Mounting Female



PXMBNI08FPF

- Available in 3, 4 and 5 poles
- Flying lead termination
- Front panel mounting M8
- Mates with Flex Inline Body connectors



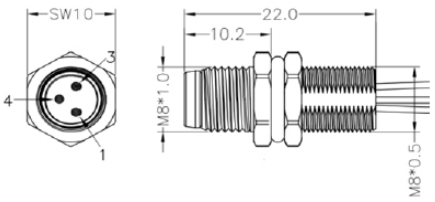
Part Number	Poles	Code	Termination	Lead Length
PXMBNI08FPF03AFL001	03	A	Flying Lead	100mm
PXMBNI08FPF03AFL002	03	A	Flying Lead	200mm
PXMBNI08FPF03AFL003	03	B	Flying Lead	300mm
PXMBNI08FPF04AFL001	04	A	Flying Lead	100mm
PXMBNI08FPF04AFL002	04	A	Flying Lead	200mm
PXMBNI08FPF04AFL003	04	A	Flying Lead	300mm
PXMBNI08FPF05BFL001	05	B	Flying Lead	100mm
PXMBNI08FPF05BFL002	05	B	Flying Lead	200mm
PXMBNI08FPF05BFL003	05	B	Flying Lead	300mm

M8 Front Panel Mounting Male



PXMBNI08FPM

- Available in 3, 4 and 5 poles
- Flying lead termination
- Front panel mounting M8
- Mates with Flex Body connectors



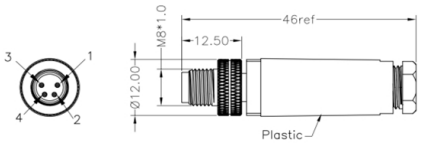
Part Number	Poles	Code	Termination	Lead Length
PXMBNI08FPM03AFL001	03	A	Flying Lead	100mm
PXMBNI08FPM03AFL002	03	A	Flying Lead	200mm
PXMBNI08FPM03AFL003	03	A	Flying Lead	300mm
PXMBNI08FPM04AFL001	04	A	Flying Lead	100mm
PXMBNI08FPM04AFL002	04	A	Flying Lead	200mm
PXMBNI08FPM04AFL003	04	A	Flying Lead	300mm
PXMBNI08FPM05BFL001	05	B	Flying Lead	100mm
PXMBNI08FPM05BFL002	05	B	Flying Lead	200mm
PXMBNI08FPM05BFL003	05	B	Flying Lead	300mm

M8 Flex Inline Body Male



PXPPAM08FIM

- Available in 3 and 4 poles
- Screw termination
- Plastic Flex Inline Body
- Mates with Flex Body and panel mount connectors



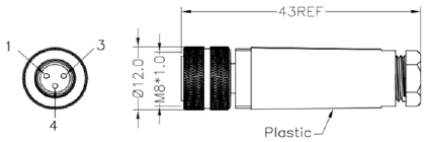
Part Number	Poles	Code	Termination
PXPPAM08FIM03AST	03	A	Screw Terminal
PXPPAM08FIM04AST	04	A	Screw Terminal

M8 Flex Body Female



PXPPAM08FBF

- Available in 3 and 4 poles
- Screw termination
- Plastic Flex Body
- Mates with Flex Inline Body and panel mount connectors



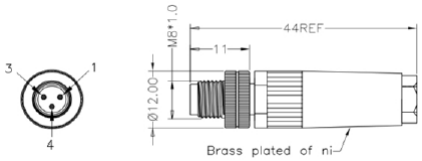
Part Number	Poles	Code	Termination
PXPPAM08FBF03AST	03	A	Screw Terminal
PXPPAM08FBF04AST	04	A	Screw Terminal

Brass - Nickel Plating M8 Flex Inline Body Male



PXMBNI08FIM

- Available in 3, 4 and 5 poles
- Solder termination
- Metal Flex Inline Body
- Mates with Flex Body and panel mount connectors



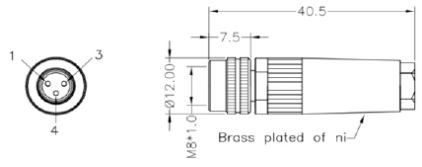
Part Number	Poles	Code	Termination
PXMBNI08FIM03ASC	03	A	Solder Terminal
PXMBNI08FIM04ASC	04	A	Solder Terminal
PXMBNI08FIM05BSC	05	B	Solder Terminal

Brass - Nickel Plating M8 Flex Body Female



PXMBNI08FBF

- Available in 3, 4 and 5 poles
- Solder termination
- Metal Flex Body
- Mates with Flex Inline Body and panel mount connectors



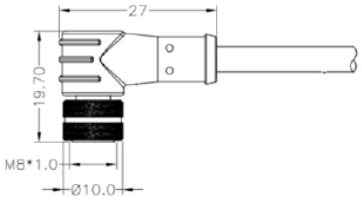
Part Number	Poles	Code	Termination
PXMBNI08FBF03ASC	03	A	Solder Terminal
PXMBNI08FBF04ASC	04	A	Solder Terminal
PXMBNI08FBF05BSC	05	B	Solder Terminal

M8 Right Angled Female



PXPTPU08RAF
PXPPVC08RAF

- Available in 3, 4 and 5 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Body
- Mates with Flex Inline Body & panel mount connectors



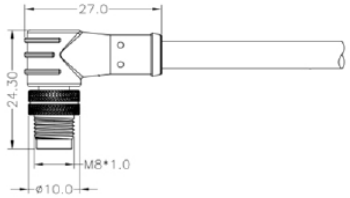
Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC08RAF03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU08RAF03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC08RAF03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU08RAF03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC08RAF03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU08RAF03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC08RAF03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU08RAF03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC08RAF03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU08RAF03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC08RAF03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU08RAF03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC08RAF04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU08RAF04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC08RAF04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU08RAF04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC08RAF04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU08RAF04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC08RAF04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU08RAF04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC08RAF04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU08RAF04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC08RAF04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU08RAF04ACL150PUR	04	A	Overmold Cable	15m	PUR
PXPPVC08RAF05BCL010PVC	05	B	Overmold Cable	1m	PVC
PXPTPU08RAF05BCL010PUR	05	B	Overmold Cable	1m	PUR
PXPPVC08RAF05BCL020PVC	05	B	Overmold Cable	2m	PVC
PXPTPU08RAF05BCL020PUR	05	B	Overmold Cable	2m	PUR
PXPPVC08RAF05BCL030PVC	05	B	Overmold Cable	3m	PVC
PXPTPU08RAF05BCL030PUR	05	B	Overmold Cable	3m	PUR
PXPPVC08RAF05BCL050PVC	05	B	Overmold Cable	5m	PVC
PXPTPU08RAF05BCL050PUR	05	B	Overmold Cable	5m	PUR
PXPPVC08RAF05BCL100PVC	05	B	Overmold Cable	10m	PVC
PXPTPU08RAF05BCL100PUR	05	B	Overmold Cable	10m	PUR
PXPPVC08RAF05BCL150PVC	05	B	Overmold Cable	15m	PVC
PXPTPU08RAF05BCL150PUR	05	B	Overmold Cable	15m	PUR

M8 Right Angled Male



PXPTPU08RAM
PXPPVC08RAM

- Available in 3, 4 and 5 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Inline Body
- Mates with Flex Body & panel mount connectors



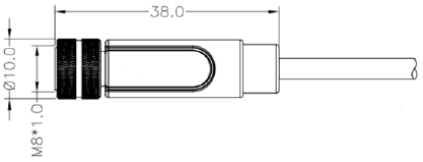
Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC08RAM03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU08RAM03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC08RAM03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU08RAM03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC08RAM03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU08RAM03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC08RAM03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU08RAM03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC08RAM03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU08RAM03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC08RAM03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU08RAM03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC08RAM04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU08RAM04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC08RAM04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU08RAM04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC08RAM04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU08RAM04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC08RAM04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU08RAM04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC08RAM04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU08RAM04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC08RAM04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU08RAM04ACL150PUR	04	A	Overmold Cable	15m	PUR
PXPPVC08RAM05BCL010PVC	05	B	Overmold Cable	1m	PVC
PXPTPU08RAM05BCL010PUR	05	B	Overmold Cable	1m	PUR
PXPPVC08RAM05BCL020PVC	05	B	Overmold Cable	2m	PVC
PXPTPU08RAM05BCL020PUR	05	B	Overmold Cable	2m	PUR
PXPPVC08RAM05BCL030PVC	05	B	Overmold Cable	3m	PVC
PXPTPU08RAM05BCL030PUR	05	B	Overmold Cable	3m	PUR
PXPPVC08RAM05BCL050PVC	05	B	Overmold Cable	5m	PVC
PXPTPU08RAM05BCL050PUR	05	B	Overmold Cable	5m	PUR
PXPPVC08RAM05BCL100PVC	05	B	Overmold Cable	10m	PVC
PXPTPU08RAM05BCL100PUR	05	B	Overmold Cable	10m	PUR
PXPPVC08RAM05BCL150PVC	05	B	Overmold Cable	15m	PVC
PXPTPU08RAM05BCL150PUR	05	B	Overmold Cable	15m	PUR

M8 Flex Body Female



PXPTPU08FBF
PXPPVC08FBF

- Available in 3, 4 and 5 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Body
- Mates with Flex Inline Body & panel mount connectors



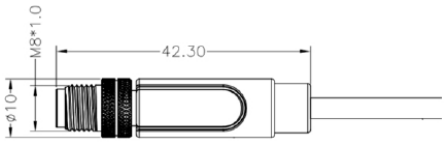
Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC08FBF03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU08FBF03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC08FBF03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU08FBF03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC08FBF03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU08FBF03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC08FBF03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU08FBF03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC08FBF03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU08FBF03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC08FBF03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU08FBF03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC08FBF04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU08FBF04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC08FBF04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU08FBF04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC08FBF04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU08FBF04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC08FBF04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU08FBF04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC08FBF04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU08FBF04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC08FBF04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU08FBF04ACL150PUR	04	A	Overmold Cable	15m	PUR
PXPPVC08FBF05BCL010PVC	05	B	Overmold Cable	1m	PVC
PXPTPU08FBF05BCL010PUR	05	B	Overmold Cable	1m	PUR
PXPPVC08FBF05BCL020PVC	05	B	Overmold Cable	2m	PVC
PXPTPU08FBF05BCL020PUR	05	B	Overmold Cable	2m	PUR
PXPPVC08FBF05BCL030PVC	05	B	Overmold Cable	3m	PVC
PXPTPU08FBF05BCL030PUR	05	B	Overmold Cable	3m	PUR
PXPPVC08FBF05BCL050PVC	05	B	Overmold Cable	5m	PVC
PXPTPU08FBF05BCL050PUR	05	B	Overmold Cable	5m	PUR
PXPPVC08FBF05BCL100PVC	05	B	Overmold Cable	10m	PVC
PXPTPU08FBF05BCL100PUR	05	B	Overmold Cable	10m	PUR
PXPPVC08FBF05BCL150PVC	05	B	Overmold Cable	15m	PVC
PXPTPU08FBF05BCL150PUR	05	B	Overmold Cable	15m	PUR

M8 Flex Inline Body Male



PXPTPU08FIM
PXPPVC08FIM

- Available in 3, 4 and 5 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Inline Body
- Mates with Flex Body & panel mount connectors



Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC08FIM03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU08FIM03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC08FIM03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU08FIM03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC08FIM03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU08FIM03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC08FIM03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU08FIM03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC08FIM03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU08FIM03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC08FIM03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU08FIM03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC08FIM04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU08FIM04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC08FIM04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU08FIM04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC08FIM04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU08FIM04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC08FIM04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU08FIM04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC08FIM04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU08FIM04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC08FIM04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU08FIM04ACL150PUR	04	A	Overmold Cable	15m	PUR
PXPPVC08FIM05BCL010PVC	05	B	Overmold Cable	1m	PVC
PXPTPU08FIM05BCL010PUR	05	B	Overmold Cable	1m	PUR
PXPPVC08FIM05BCL020PVC	05	B	Overmold Cable	2m	PVC
PXPTPU08FIM05BCL020PUR	05	B	Overmold Cable	2m	PUR
PXPPVC08FIM05BCL030PVC	05	B	Overmold Cable	3m	PVC
PXPTPU08FIM05BCL030PUR	05	B	Overmold Cable	3m	PUR
PXPPVC08FIM05BCL050PVC	05	B	Overmold Cable	5m	PVC
PXPTPU08FIM05BCL050PUR	05	B	Overmold Cable	5m	PUR
PXPPVC08FIM05BCL100PVC	05	B	Overmold Cable	10m	PVC
PXPTPU08FIM05BCL100PUR	05	B	Overmold Cable	10m	PUR
PXPPVC08FIM05BCL150PVC	05	B	Overmold Cable	15m	PVC
PXPTPU08FIM05BCL150PUR	05	B	Overmold Cable	15m	PUR

Electrical

No. Poles:	3	4	5
Current Rating:	3A	3A	1.5A
Voltage Rating (ac/dc) :	60V	30V	30V
Contact Resistance:	<10mΩ		
Insulation Resistance:	>100MΩ		
AC Breakdown Voltage:			
3 Pole	1.5KV		
4 Pole	0.8KV		
5 Pole	0.8KV		
Operating Temp Range:	-25°C to 80°C		

Mechanical:

Locking Mechanism:	Screw coupling
Sealing:	IP67
Contact Accomodation:	
3, 4 & 5 Pole	28AWG-22AWG
Cable Acceptance:	3.0 - 3.5 mm Dia
Terminations:	
3 Pole	Single wire / PCB / Cable Screw / Solder
4 Polre	Single wire / PCB / Cable Screw / Solder
5 Pole	Single wire / PCB / Cable Screw / Solder
Mechanical Operation:	500 mating cycles
Diameter over coupling ring:	12.5mm

Materials:	Panel Mount:	Cable Connectors:	Flex & Inline Connectors:
Body:	Nickel Plated Brass	TPU / PVC	Nickel Plated Brass / PA66
Coupling Nut:	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
Colour:	Grey	Black	Black or Grey
Pin Contacts:	Brass, Gold plating	Brass, Gold plating	Brass, Gold plating
Socket Contacts:	Phosphor Bronze, Gold plating	Phosphor Bronze, Gold plating	Phosphor Bronze, Gold plating
O Rings & Gaskets:	Viton	Viton	Viton
RoHS:	Compliant	Compliant	Compliant

MX XXX XX XX X XX X XX

Series	Material	Series Size	Body Style	Orientation	NO. Contacts	Code	Termination
PXM	BNI = Brass Nickel PAM = Polyamide	08	FB = Flex Body	M	03	A	ST = Screw Terminal
PXP	TPU = overmold for PUR PVC = overmold for PVC		FI = Flex Inline Body	F	04	B	PC = PCB
			FP = Front Panel Mounting		05		FL = Flying Lead
			RP = Rear Panel Mounting				CL = Cable
			RA = Right Angle				SC = Solder

XXX XXX

Lead Length	Cable Material
001	PUR
002	PVC
003	
010	
020	
030	
050	
100	
150	

With a high degree of mechanical and electrical stability, Bulgin's M12 connectors provide a cost effective and flexible connectivity solution for onsite installations, helping to decrease downtime in process control, manufacturing automation and industrial instrumentation applications.



Key features:

- Reliable industry standard screw locking mechanism
- IP67 degree of protection
- A, B and D Coded versions
- Field installable, cable and panel mount options
- Plastic and metal options variants
- Straight and right angled forms
- Overmolded PVC or PUR cable connectors
- Shielded options
- Pole variants from 3 – 12

M12 connectors are established as one of the most reliable and efficient connection standards for Industrial Machinery and Factory Automation applications. With a small footprint, extremely low failure rate and high performance capabilities, this range is ideal not only for sensor connections but also for a variety of fieldbus systems.

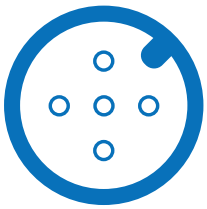
These M12 Series circular connectors are rugged, easy to use and extremely reliable solutions for sensor/actuator connectivity in industrial automation and control applications. With an IP67 rating, they are also extremely effective in harsh environments outside of industrial automation applications where compact and dependable connections with environmental protection are required.

Bulgin's field attachable M12 connectors feature a robust aluminium coupling nut, making them a lightweight and durable alternative to the more common nickel-plated M12 nut variants and an ideal plug and play solution for upgrading sensor systems with M12 connectivity.



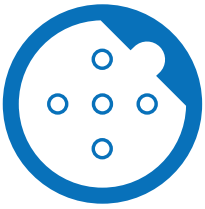
Bulgin's M12 Series connectors are available in a variety of industry standard keying/coding options to further minimize wiring errors and serve a large variety of customer needs.

M12 Series coding options:



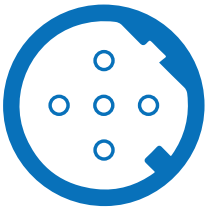
A-Coding

Primarily for general sensor-actuator connections



B-Coding

For fieldbus and signal connections (PROFIBUS & INTERBUS systems)



D-Coding

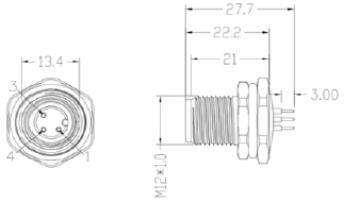
For industrial Ethernets and PROFINET

M12 Rear Panel Mounting Male



PXMBNI12RPM

- 3, 4, 5, 8 and 12 poles
- PCB termination
- Different panel mounting options available
- Mates with Flex Body connectors



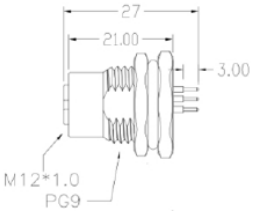
Part Number	Poles	Code	Termination	Mounting Nut
PXMBNI12RPM03APCPG9	03	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPM04APCPG9	04	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPM05APCPG9	05	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPM08APCPG9	08	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPM12APCPG9	12	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPM05BPCPG9	05	B	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPM04DPCPG9	04	D	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPM03APCM16	03	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPM04APCM16	04	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPM05APCM16	05	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPM08APCM16	08	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPM12APCM16	12	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPM05BPCM16	05	B	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPM04DPCM16	04	D	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPM03APCM12	03	A	PCB Terminal	M12 Mounting / Gland Nut Thread
PXMBNI12RPM04APCM12	04	A	PCB Terminal	M12 Mounting / Gland Nut Thread
PXMBNI12RPM05APCM12	05	A	PCB Terminal	M12 Mounting / Gland Nut Thread
PXMBNI12RPM08APCM12	08	A	PCB Terminal	M12 Mounting / Gland Nut Thread
PXMBNI12RPM12APCM12	12	A	PCB Terminal	M12 Mounting / Gland Nut Thread
PXMBNI12RPM05BPCM12	05	B	PCB Terminal	M12 Mounting / Gland Nut Thread
PXMBNI12RPM04DPCM12	04	D	PCB Terminal	M12 Mounting / Gland Nut Thread

M12 Rear Panel Mounting Female



PXMBNI12RPF

- 3, 4, 5, 8 and 12 poles
- PCB termination
- Different panel mounting options available
- Mates with Flex Inline Body connectors



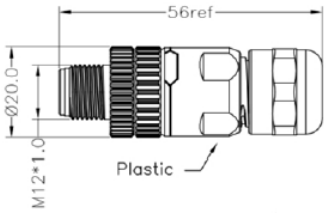
Part Number	Poles	Code	Termination	Mounting Nut
PXMBNI12RPF03APCPG9	03	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPF04APCPG9	04	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPF05APCPG9	05	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPF08APCPG9	08	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPF12APCPG9	12	A	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPF05BPCPG9	05	B	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPF04DPCPG9	04	D	PCB Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12RPF03APCM16	03	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPF04APCM16	04	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPF05APCM16	05	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPF08APCM16	08	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPF12APCM16	12	A	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPF05BPCM16	05	B	PCB Terminal	M16 Mounting / Gland Nut Thread
PXMBNI12RPF04DPCM16	04	D	PCB Terminal	M16 Mounting / Gland Nut Thread

M12 Flex Inline Body Male



PXPPAM12FIM

- 3, 4, 5 and 8 poles
- Screw termination
- Plastic Flex Inline Body
- Mates with Flex body and panel mount connectors



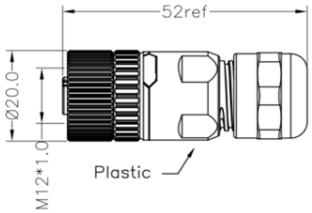
Part Number	Poles	Code	Termination
PXPPAM12FIM03ASTPG9	03	A	Screw Terminal
PXPPAM12FIM04ASTPG9	04	A	Screw Terminal
PXPPAM12FIM05ASTPG9	05	A	Screw Terminal
PXPPAM12FIM08ASTPG9	08	A	Screw Terminal

M12 Flex Body Female



PXPPAM12FBF

- 3, 4, 5 and 8 poles
- Screw termination
- Plastic Flex Body
- Mates with Flex Inline Body and panel mount connectors



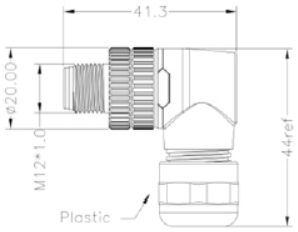
Part Number	Poles	Code	Termination
PXPPAM12FBF03ASTPG9	03	A	Screw Terminal
PXPPAM12FBF04ASTPG9	04	A	Screw Terminal
PXPPAM12FBF05ASTPG9	05	A	Screw Terminal
PXPPAM12FBF08ASTPG9	08	A	Screw Terminal

M12 Right Angled Male



PXPPAM12RAM

- 3, 4, 5 and 8 poles
- Screw termination
- Plastic Flex Inline Body
- Mates with Flex Body and panel mount connectors



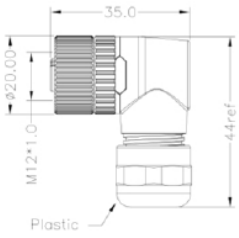
Part Number	Poles	Code	Termination
PXPPAM12RAM03ASTPG9	03	A	Screw Terminal
PXPPAM12RAM04ASTPG9	04	A	Screw Terminal
PXPPAM12RAM05ASTPG9	05	A	Screw Terminal
PXPPAM12RAM08ASTPG9	08	A	Screw Terminal

M12 Right Angled Female



PXPPAM12RAF

- 3, 4, 5 and 8 poles
- Screw termination
- Plastic Flex Body
- Mates with Flex Inline Body and panel mount connectors



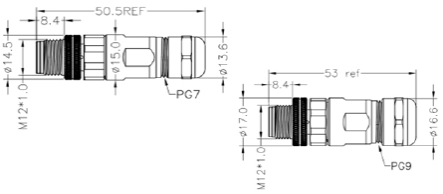
Part Number	Poles	Code	Termination
PXPPAM12RAF03ASTPG9	03	A	Screw Terminal
PXPPAM12RAF04ASTPG9	04	A	Screw Terminal
PXPPAM12RAF05ASTPG9	05	A	Screw Terminal
PXPPAM12RAF08ASTPG9	08	A	Screw Terminal

Nickel Plating M12 Flex Inline Body Male



PXMBNI12FIM

- 3, 4, 5, 8 and 12 poles
- Solder termination
- Metal Flex Inline Body
- Mates with Flex body and panel mount connectors



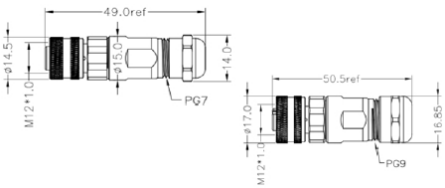
Part Number	Poles	Code	Termination	Mounting Nut
PXMBNI12FIM03ASCPG7	03	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FIM04ASCPG7	04	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FIM05ASCPG7	05	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FIM08ASCPG7	08	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FIM12ASCPG7	12	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FIM05BSCPG7	05	B	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FIM04DSCPG7	04	D	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FIM03ASCPG9	03	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FIM04ASCPG9	04	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FIM05ASCPG9	05	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FIM08ASCPG9	08	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FIM12ASCPG9	12	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FIM05BSCPG9	05	B	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FIM04DSCPG9	04	D	Solder Terminal	PG9 Mounting / Gland Nut Thread

Nickel Plating M12 Flex Body Female



PXMBNI12FBF

- 3, 4, 5, 8 and 12 poles
- Solder termination
- Metal Flex Body
- Mates with Flex Inline Body and panel mount connectors



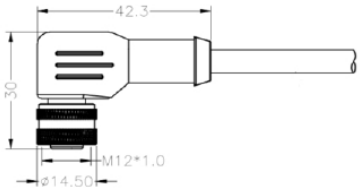
Part Number	Poles	Code	Termination	Mounting Nut
PXMBNI12FBF03ASCPG7	03	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FBF04ASCPG7	04	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FBF05ASCPG7	05	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FBF08ASCPG7	08	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FBF12ASCPG7	12	A	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FBF05BSCPG7	05	B	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FBF04DSCPG7	04	D	Solder Terminal	PG7 Mounting / Gland Nut Thread
PXMBNI12FBF03ASCPG9	03	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FBF04ASCPG9	04	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FBF05ASCPG9	05	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FBF08ASCPG9	08	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FBF12ASCPG9	12	A	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FBF05BSCPG9	05	B	Solder Terminal	PG9 Mounting / Gland Nut Thread
PXMBNI12FBF04DSCPG9	04	D	Solder Terminal	PG9 Mounting / Gland Nut Thread

M12 Right Angled Female



PXPTPU12RAF
PXPPVC12RAF

- 3, 4, 5, 8 and 12 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Body
- Mates with Flex Inline Body & panel mount connectors



Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC12RAF03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU12RAF03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC12RAF03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU12RAF03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC12RAF03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU12RAF03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC12RAF03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU12RAF03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC12RAF03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU12RAF03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC12RAF03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU12RAF03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC12RAF04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU12RAF04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC12RAF04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU12RAF04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC12RAF04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU12RAF04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC12RAF04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU12RAF04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC12RAF04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU12RAF04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC12RAF04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU12RAF04ACL150PUR	04	A	Overmold Cable	15m	PUR
PXPPVC12RAF05ACL010PVC	05	A	Overmold Cable	1m	PVC
PXPTPU12RAF05ACL010PUR	05	A	Overmold Cable	1m	PUR
PXPPVC12RAF05ACL020PVC	05	A	Overmold Cable	2m	PVC
PXPTPU12RAF05ACL020PUR	05	A	Overmold Cable	2m	PUR
PXPPVC12RAF05ACL030PVC	05	A	Overmold Cable	3m	PVC
PXPTPU12RAF05ACL030PUR	05	A	Overmold Cable	3m	PUR
PXPPVC12RAF05ACL050PVC	05	A	Overmold Cable	5m	PVC
PXPTPU12RAF05ACL050PUR	05	A	Overmold Cable	5m	PUR
PXPPVC12RAF05ACL100PVC	05	A	Overmold Cable	10m	PVC
PXPTPU12RAF05ACL100PUR	05	A	Overmold Cable	10m	PUR
PXPPVC12RAF05ACL150PVC	05	A	Overmold Cable	15m	PVC
PXPTPU12RAF05ACL150PUR	05	A	Overmold Cable	15m	PUR
PXPPVC12RAF08ACL010PVC	08	A	Overmold Cable	1m	PVC
PXPTPU12RAF08ACL010PUR	08	A	Overmold Cable	1m	PUR
PXPPVC12RAF08ACL020PVC	08	A	Overmold Cable	2m	PVC
PXPTPU12RAF08ACL020PUR	08	A	Overmold Cable	2m	PUR
PXPPVC12RAF08ACL030PVC	08	A	Overmold Cable	3m	PVC
PXPTPU12RAF08ACL030PUR	08	A	Overmold Cable	3m	PUR
PXPPVC12RAF08ACL050PVC	08	A	Overmold Cable	5m	PVC
PXPTPU12RAF08ACL050PUR	08	A	Overmold Cable	5m	PUR
PXPPVC12RAF08ACL100PVC	08	A	Overmold Cable	10m	PVC
PXPTPU12RAF08ACL100PUR	08	A	Overmold Cable	10m	PUR
PXPPVC12RAF08ACL150PVC	08	A	Overmold Cable	15m	PVC
PXPTPU12RAF08ACL150PUR	08	A	Overmold Cable	15m	PUR
PXPPVC12RAF12ACL010PVC	12	A	Overmold Cable	1m	PVC
PXPTPU12RAF12ACL010PUR	12	A	Overmold Cable	1m	PUR
PXPPVC12RAF12ACL020PVC	12	A	Overmold Cable	2m	PVC
PXPTPU12RAF12ACL020PUR	12	A	Overmold Cable	2m	PUR
PXPPVC12RAF12ACL030PVC	12	A	Overmold Cable	3m	PVC
PXPTPU12RAF12ACL030PUR	12	A	Overmold Cable	3m	PUR
PXPPVC12RAF12ACL050PVC	12	A	Overmold Cable	5m	PVC
PXPTPU12RAF12ACL050PUR	12	A	Overmold Cable	5m	PUR
PXPPVC12RAF12ACL100PVC	12	A	Overmold Cable	10m	PVC
PXPTPU12RAF12ACL100PUR	12	A	Overmold Cable	10m	PUR
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PXPTPU12RAF12ACL150PUR	12	A	Overmold Cable	15m	PUR

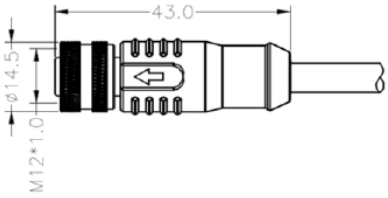
PXPPVC12RAF05BCL010PVC	05	B	Overmold Cable	1m	PVC
PXPTPU12RAF05BCL010PUR	05	B	Overmold Cable	1m	PUR
PXPPVC12RAF05BCL020PVC	05	B	Overmold Cable	2m	PVC
PXPTPU12RAF05BCL020PUR	05	B	Overmold Cable	2m	PUR
PXPPVC12RAF05BCL030PVC	05	B	Overmold Cable	3m	PVC
PXPTPU12RAF05BCL030PUR	05	B	Overmold Cable	3m	PUR
PXPPVC12RAF05BCL050PVC	05	B	Overmold Cable	5m	PVC
PXPTPU12RAF05BCL050PUR	05	B	Overmold Cable	5m	PUR
PXPPVC12RAF05BCL100PVC	05	B	Overmold Cable	10m	PVC
PXPTPU12RAF05BCL100PUR	05	B	Overmold Cable	10m	PUR
PXPPVC12RAF05BCL150PVC	05	B	Overmold Cable	15m	PVC
PXPTPU12RAF05BCL150PUR	05	B	Overmold Cable	15m	PUR
PXPPVC12RAF04DCL010PVC	04	D	Overmold Cable	1m	PVC
PXPTPU12RAF04DCL010PUR	04	D	Overmold Cable	1m	PUR
PXPPVC12RAF04DCL020PVC	04	D	Overmold Cable	2m	PVC
PXPTPU12RAF04DCL020PUR	04	D	Overmold Cable	2m	PUR
PXPPVC12RAF04DCL030PVC	04	D	Overmold Cable	3m	PVC
PXPTPU12RAF04DCL030PUR	04	D	Overmold Cable	3m	PUR
PXPPVC12RAF04DCL050PVC	04	D	Overmold Cable	5m	PVC
PXPTPU12RAF04DCL050PUR	04	D	Overmold Cable	5m	PUR
PXPPVC12RAF04DCL100PVC	04	D	Overmold Cable	10m	PVC
PXPTPU12RAF04DCL100PUR	04	D	Overmold Cable	10m	PUR
PXPPVC12RAF04DCL150PVC	04	D	Overmold Cable	15m	PVC
PXPTPU12RAF04DCL150PUR	04	D	Overmold Cable	15m	PUR

M12 Flex Body Female



PXPTPU12FBF
PXPPVC12FBF

- 3, 4, 5, 8 and 12 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Body
- Mates with Flex Inline Body & panel mount connectors



Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC12FBF03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU12FBF03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC12FBF03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU12FBF03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC12FBF03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU12FBF03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC12FBF03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU12FBF03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC12FBF03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU12FBF03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC12FBF03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU12FBF03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC12FBF04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU12FBF04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC12FBF04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU12FBF04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC12FBF04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU12FBF04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC12FBF04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU12FBF04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC12FBF04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU12FBF04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC12FBF04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU12FBF04ACL150PUR	04	A	Overmold Cable	15m	PUR
PXPPVC12FBF05ACL010PVC	05	A	Overmold Cable	1m	PVC
PXPTPU12FBF05ACL010PUR	05	A	Overmold Cable	1m	PUR
PXPPVC12FBF05ACL020PVC	05	A	Overmold Cable	2m	PVC
PXPTPU12FBF05ACL020PUR	05	A	Overmold Cable	2m	PUR
PXPPVC12FBF05ACL030PVC	05	A	Overmold Cable	3m	PVC
PXPTPU12FBF05ACL030PUR	05	A	Overmold Cable	3m	PUR
PXPPVC12FBF05ACL050PVC	05	A	Overmold Cable	5m	PVC
PXPTPU12FBF05ACL050PUR	05	A	Overmold Cable	5m	PUR
PXPPVC12FBF05ACL100PVC	05	A	Overmold Cable	10m	PVC
PXPTPU12FBF05ACL100PUR	05	A	Overmold Cable	10m	PUR
PXPPVC12FBF05ACL150PVC	05	A	Overmold Cable	15m	PVC
PXPTPU12FBF05ACL150PUR	05	A	Overmold Cable	15m	PUR

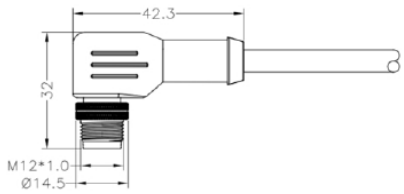
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PXPTPU12FBF08ACL020PUR	08	A	Overmold Cable	2m	PUR
PXPPVC12FBF08ACL030PVC	08	A	Overmold Cable	3m	PVC
PXPTPU12FBF08ACL030PUR	08	A	Overmold Cable	3m	PUR
PXPPVC12FBF08ACL050PVC	08	A	Overmold Cable	5m	PVC
PXPTPU12FBF08ACL050PUR	08	A	Overmold Cable	5m	PUR
PXPPVC12FBF08ACL100PVC	08	A	Overmold Cable	10m	PVC
PXPTPU12FBF08ACL100PUR	08	A	Overmold Cable	10m	PUR
PXPPVC12FBF08ACL150PVC	08	A	Overmold Cable	15m	PVC
PXPTPU12FBF08ACL150PUR	08	A	Overmold Cable	15m	PUR
PXPPVC12FBF12ACL010PVC	12	A	Overmold Cable	1m	PVC
PXPTPU12FBF12ACL010PUR	12	A	Overmold Cable	1m	PUR
PXPPVC12FBF12ACL020PVC	12	A	Overmold Cable	2m	PVC
PXPTPU12FBF12ACL020PUR	12	A	Overmold Cable	2m	PUR
PXPPVC12FBF12ACL030PVC	12	A	Overmold Cable	3m	PVC
PXPTPU12FBF12ACL030PUR	12	A	Overmold Cable	3m	PUR
PXPPVC12FBF12ACL050PVC	12	A	Overmold Cable	5m	PVC
PXPTPU12FBF12ACL050PUR	12	A	Overmold Cable	5m	PUR
PXPPVC12FBF12ACL100PVC	12	A	Overmold Cable	10m	PVC
PXPTPU12FBF12ACL100PUR	12	A	Overmold Cable	10m	PUR
PXPPVC12FBF12ACL150PVC	12	A	Overmold Cable	15m	PVC
PXPTPU12FBF12ACL150PUR	12	A	Overmold Cable	15m	PUR
PXPPVC12FBF05BCL010PVC	05	B	Overmold Cable	1m	PVC
PXPTPU12FBF05BCL010PUR	05	B	Overmold Cable	1m	PUR
PXPPVC12FBF05BCL020PVC	05	B	Overmold Cable	2m	PVC
PXPTPU12FBF05BCL020PUR	05	B	Overmold Cable	2m	PUR
PXPPVC12FBF05BCL030PVC	05	B	Overmold Cable	3m	PVC
PXPTPU12FBF05BCL030PUR	05	B	Overmold Cable	3m	PUR
PXPPVC12FBF05BCL050PVC	05	B	Overmold Cable	5m	PVC
PXPTPU12FBF05BCL050PUR	05	B	Overmold Cable	5m	PUR
PXPPVC12FBF05BCL100PVC	05	B	Overmold Cable	10m	PVC
PXPTPU12FBF05BCL100PUR	05	B	Overmold Cable	10m	PUR
PXPPVC12FBF05BCL150PVC	05	B	Overmold Cable	15m	PVC
PXPTPU12FBF05BCL150PUR	05	B	Overmold Cable	15m	PUR
PXPPVC12FBF04DCL010PVC	04	D	Overmold Cable	1m	PVC
PXPTPU12FBF04DCL010PUR	04	D	Overmold Cable	1m	PUR
PXPPVC12FBF04DCL020PVC	04	D	Overmold Cable	2m	PVC
PXPTPU12FBF04DCL020PUR	04	D	Overmold Cable	2m	PUR
PXPPVC12FBF04DCL030PVC	04	D	Overmold Cable	3m	PVC
PXPTPU12FBF04DCL030PUR	04	D	Overmold Cable	3m	PUR
PXPPVC12FBF04DCL050PVC	04	D	Overmold Cable	5m	PVC
PXPTPU12FBF04DCL050PUR	04	D	Overmold Cable	5m	PUR
PXPPVC12FBF04DCL100PVC	04	D	Overmold Cable	10m	PVC
PXPTPU12FBF04DCL100PUR	04	D	Overmold Cable	10m	PUR
PXPPVC12FBF04DCL150PVC	04	D	Overmold Cable	15m	PVC
PXPTPU12FBF04DCL150PUR	04	D	Overmold Cable	15m	PUR

M12 Right Angled Male



PXPTPU12RAM
PXPPVC12RAM

- 3, 4, 5, 8 and 12 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Inline Body
- Mates with Flex Body & panel mount connectors



Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC12RAM03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU12RAM03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC12RAM03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU12RAM03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC12RAM03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU12RAM03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC12RAM03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU12RAM03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC12RAM03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU12RAM03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC12RAM03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU12RAM03ACL150PUR	03	A	Overmold Cable	15m	PUR

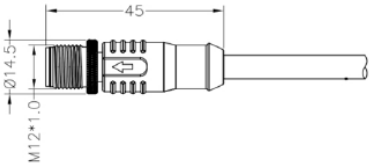
PXPPVC12RAM04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU12RAM04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC12RAM04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU12RAM04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC12RAM04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU12RAM04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC12RAM04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU12RAM04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC12RAM04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU12RAM04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC12RAM04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU12RAM04ACL150PUR	04	A	Overmold Cable	15m	PUR
PXPPVC12RAM05ACL010PVC	05	A	Overmold Cable	1m	PVC
PXPTPU12RAM05ACL010PUR	05	A	Overmold Cable	1m	PUR
PXPPVC12RAM05ACL020PVC	05	A	Overmold Cable	2m	PVC
PXPTPU12RAM05ACL020PUR	05	A	Overmold Cable	2m	PUR
PXPPVC12RAM05ACL030PVC	05	A	Overmold Cable	3m	PVC
PXPTPU12RAM05ACL030PUR	05	A	Overmold Cable	3m	PUR
PXPPVC12RAM05ACL050PVC	05	A	Overmold Cable	5m	PVC
PXPTPU12RAM05ACL050PUR	05	A	Overmold Cable	5m	PUR
PXPPVC12RAM05ACL100PVC	05	A	Overmold Cable	10m	PVC
PXPTPU12RAM05ACL100PUR	05	A	Overmold Cable	10m	PUR
PXPPVC12RAM05ACL150PVC	05	A	Overmold Cable	15m	PVC
PXPTPU12RAM05ACL150PUR	05	A	Overmold Cable	15m	PUR
PXPPVC12RAM08ACL010PVC	08	A	Overmold Cable	1m	PVC
PXPTPU12RAM08ACL010PUR	08	A	Overmold Cable	1m	PUR
PXPPVC12RAM08ACL020PVC	08	A	Overmold Cable	2m	PVC
PXPTPU12RAM08ACL020PUR	08	A	Overmold Cable	2m	PUR
PXPPVC12RAM08ACL030PVC	08	A	Overmold Cable	3m	PVC
PXPTPU12RAM08ACL030PUR	08	A	Overmold Cable	3m	PUR
PXPPVC12RAM08ACL050PVC	08	A	Overmold Cable	5m	PVC
PXPTPU12RAM08ACL050PUR	08	A	Overmold Cable	5m	PUR
PXPPVC12RAM08ACL100PVC	08	A	Overmold Cable	10m	PVC
PXPTPU12RAM08ACL100PUR	08	A	Overmold Cable	10m	PUR
PXPPVC12RAM08ACL150PVC	08	A	Overmold Cable	15m	PVC
PXPTPU12RAM08ACL150PUR	08	A	Overmold Cable	15m	PUR
PXPPVC12RAM12ACL010PVC	12	A	Overmold Cable	1m	PVC
PXPTPU12RAM12ACL010PUR	12	A	Overmold Cable	1m	PUR
PXPPVC12RAM12ACL020PVC	12	A	Overmold Cable	2m	PVC
PXPTPU12RAM12ACL020PUR	12	A	Overmold Cable	2m	PUR
PXPPVC12RAM12ACL030PVC	12	A	Overmold Cable	3m	PVC
PXPTPU12RAM12ACL030PUR	12	A	Overmold Cable	3m	PUR
PXPPVC12RAM12ACL050PVC	12	A	Overmold Cable	5m	PVC
PXPTPU12RAM12ACL050PUR	12	A	Overmold Cable	5m	PUR
PXPPVC12RAM12ACL100PVC	12	A	Overmold Cable	10m	PVC
PXPTPU12RAM12ACL100PUR	12	A	Overmold Cable	10m	PUR
PXPPVC12RAM12ACL150PVC	12	A	Overmold Cable	15m	PVC
PXPTPU12RAM12ACL150PUR	12	A	Overmold Cable	15m	PUR
PXPPVC12RAM05BCL010PVC	05	B	Overmold Cable	1m	PVC
PXPTPU12RAM05BCL010PUR	05	B	Overmold Cable	1m	PUR
PXPPVC12RAM05BCL020PVC	05	B	Overmold Cable	2m	PVC
PXPTPU12RAM05BCL020PUR	05	B	Overmold Cable	2m	PUR
PXPPVC12RAM05BCL030PVC	05	B	Overmold Cable	3m	PVC
PXPTPU12RAM05BCL030PUR	05	B	Overmold Cable	3m	PUR
PXPPVC12RAM05BCL050PVC	05	B	Overmold Cable	5m	PVC
PXPTPU12RAM05BCL050PUR	05	B	Overmold Cable	5m	PUR
PXPPVC12RAM05BCL100PVC	05	B	Overmold Cable	10m	PVC
PXPTPU12RAM05BCL100PUR	05	B	Overmold Cable	10m	PUR
PXPPVC12RAM05BCL150PVC	05	B	Overmold Cable	15m	PVC
PXPTPU12RAM05BCL150PUR	05	B	Overmold Cable	15m	PUR
PXPPVC12RAM04DCL010PVC	04	D	Overmold Cable	1m	PVC
PXPTPU12RAM04DCL010PUR	04	D	Overmold Cable	1m	PUR
PXPPVC12RAM04DCL020PVC	04	D	Overmold Cable	2m	PVC
PXPTPU12RAM04DCL020PUR	04	D	Overmold Cable	2m	PUR
PXPPVC12RAM04DCL030PVC	04	D	Overmold Cable	3m	PVC
PXPTPU12RAM04DCL030PUR	04	D	Overmold Cable	3m	PUR
PXPPVC12RAM04DCL050PVC	04	D	Overmold Cable	5m	PVC
PXPTPU12RAM04DCL050PUR	04	D	Overmold Cable	5m	PUR
PXPPVC12RAM04DCL100PVC	04	D	Overmold Cable	10m	PVC
PXPTPU12RAM04DCL100PUR	04	D	Overmold Cable	10m	PUR
PXPPVC12RAM04DCL150PVC	04	D	Overmold Cable	15m	PVC
PXPTPU12RAM04DCL150PUR	04	D	Overmold Cable	15m	PUR

M12 Flex Inline Body Male



PXPTPU12FIM
PXPPVC12FIM

- 3, 4, 5, 8 and 12 poles
- 1,2,3,5,10 & 15M cable options
- Overmold Flex Inline Body
- Mates with Flex Body & panel mount connectors



Part Number	Poles	Code	Termination	Lead Length	Cable Material
PXPPVC12FIM03ACL010PVC	03	A	Overmold Cable	1m	PVC
PXPTPU12FIM03ACL010PUR	03	A	Overmold Cable	1m	PUR
PXPPVC12FIM03ACL020PVC	03	A	Overmold Cable	2m	PVC
PXPTPU12FIM03ACL020PUR	03	A	Overmold Cable	2m	PUR
PXPPVC12FIM03ACL030PVC	03	A	Overmold Cable	3m	PVC
PXPTPU12FIM03ACL030PUR	03	A	Overmold Cable	3m	PUR
PXPPVC12FIM03ACL050PVC	03	A	Overmold Cable	5m	PVC
PXPTPU12FIM03ACL050PUR	03	A	Overmold Cable	5m	PUR
PXPPVC12FIM03ACL100PVC	03	A	Overmold Cable	10m	PVC
PXPTPU12FIM03ACL100PUR	03	A	Overmold Cable	10m	PUR
PXPPVC12FIM03ACL150PVC	03	A	Overmold Cable	15m	PVC
PXPTPU12FIM03ACL150PUR	03	A	Overmold Cable	15m	PUR
PXPPVC12FIM04ACL010PVC	04	A	Overmold Cable	1m	PVC
PXPTPU12FIM04ACL010PUR	04	A	Overmold Cable	1m	PUR
PXPPVC12FIM04ACL020PVC	04	A	Overmold Cable	2m	PVC
PXPTPU12FIM04ACL020PUR	04	A	Overmold Cable	2m	PUR
PXPPVC12FIM04ACL030PVC	04	A	Overmold Cable	3m	PVC
PXPTPU12FIM04ACL030PUR	04	A	Overmold Cable	3m	PUR
PXPPVC12FIM04ACL050PVC	04	A	Overmold Cable	5m	PVC
PXPTPU12FIM04ACL050PUR	04	A	Overmold Cable	5m	PUR
PXPPVC12FIM04ACL100PVC	04	A	Overmold Cable	10m	PVC
PXPTPU12FIM04ACL100PUR	04	A	Overmold Cable	10m	PUR
PXPPVC12FIM04ACL150PVC	04	A	Overmold Cable	15m	PVC
PXPTPU12FIM04ACL150PUR	04	A	Overmold Cable	15m	PUR
PXPPVC12FIM05ACL010PVC	05	A	Overmold Cable	1m	PVC
PXPTPU12FIM05ACL010PUR	05	A	Overmold Cable	1m	PUR
PXPPVC12FIM05ACL020PVC	05	A	Overmold Cable	2m	PVC
PXPTPU12FIM05ACL020PUR	05	A	Overmold Cable	2m	PUR
PXPPVC12FIM05ACL030PVC	05	A	Overmold Cable	3m	PVC
PXPTPU12FIM05ACL030PUR	05	A	Overmold Cable	3m	PUR
PXPPVC12FIM05ACL050PVC	05	A	Overmold Cable	5m	PVC
PXPTPU12FIM05ACL050PUR	05	A	Overmold Cable	5m	PUR
PXPPVC12FIM05ACL100PVC	05	A	Overmold Cable	10m	PVC
PXPTPU12FIM05ACL100PUR	05	A	Overmold Cable	10m	PUR
PXPPVC12FIM05ACL150PVC	05	A	Overmold Cable	15m	PVC
PXPTPU12FIM05ACL150PUR	05	A	Overmold Cable	15m	PUR
PXPPVC12FIM08ACL010PVC	08	A	Overmold Cable	1m	PVC
PXPTPU12FIM08ACL010PUR	08	A	Overmold Cable	1m	PUR
PXPPVC12FIM08ACL020PVC	08	A	Overmold Cable	2m	PVC
PXPTPU12FIM08ACL020PUR	08	A	Overmold Cable	2m	PUR
PXPPVC12FIM08ACL030PVC	08	A	Overmold Cable	3m	PVC
PXPTPU12FIM08ACL030PUR	08	A	Overmold Cable	3m	PUR
PXPPVC12FIM08ACL050PVC	08	A	Overmold Cable	5m	PVC
PXPTPU12FIM08ACL050PUR	08	A	Overmold Cable	5m	PUR
PXPPVC12FIM08ACL100PVC	08	A	Overmold Cable	10m	PVC
PXPTPU12FIM08ACL100PUR	08	A	Overmold Cable	10m	PUR
PXPPVC12FIM08ACL150PVC	08	A	Overmold Cable	15m	PVC
PXPTPU12FIM08ACL150PUR	08	A	Overmold Cable	15m	PUR
PXPPVC12FIM12ACL010PVC	12	A	Overmold Cable	1m	PVC
PXPTPU12FIM12ACL010PUR	12	A	Overmold Cable	1m	PUR
PXPPVC12FIM12ACL020PVC	12	A	Overmold Cable	2m	PVC
PXPTPU12FIM12ACL020PUR	12	A	Overmold Cable	2m	PUR
PXPPVC12FIM12ACL030PVC	12	A	Overmold Cable	3m	PVC
PXPTPU12FIM12ACL030PUR	12	A	Overmold Cable	3m	PUR
PXPPVC12FIM12ACL050PVC	12	A	Overmold Cable	5m	PVC
PXPTPU12FIM12ACL050PUR	12	A	Overmold Cable	5m	PUR
PXPPVC12FIM12ACL100PVC	12	A	Overmold Cable	10m	PVC
PXPTPU12FIM12ACL100PUR	12	A	Overmold Cable	10m	PUR
PXPPVC12FIM12ACL150PVC	12	A	Overmold Cable	15m	PVC
PXPTPU12FIM12ACL150PUR	12	A	Overmold Cable	15m	PUR

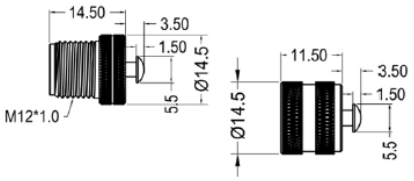
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PXPPVC12FIM05BCL020PVC	05	B	Overmold Cable	2m	PVC
PXPTPU12FIM05BCL020PUR	05	B	Overmold Cable	2m	PUR
PXPPVC12FIM05BCL030PVC	05	B	Overmold Cable	3m	PVC
PXPTPU12FIM05BCL030PUR	05	B	Overmold Cable	3m	PUR
PXPPVC12FIM05BCL050PVC	05	B	Overmold Cable	5m	PVC
PXPTPU12FIM05BCL050PUR	05	B	Overmold Cable	5m	PUR
PXPPVC12FIM05BCL100PVC	05	B	Overmold Cable	10m	PVC
PXPTPU12FIM05BCL100PUR	05	B	Overmold Cable	10m	PUR
PXPPVC12FIM05BCL150PVC	05	B	Overmold Cable	15m	PVC
PXPTPU12FIM05BCL150PUR	05	B	Overmold Cable	15m	PUR
PXPPVC12FIM04DCL010PVC	04	D	Overmold Cable	1m	PVC
PXPTPU12FIM04DCL010PUR	04	D	Overmold Cable	1m	PUR
PXPPVC12FIM04DCL020PVC	04	D	Overmold Cable	2m	PVC
PXPTPU12FIM04DCL020PUR	04	D	Overmold Cable	2m	PUR
PXPPVC12FIM04DCL030PVC	04	D	Overmold Cable	3m	PVC
PXPTPU12FIM04DCL030PUR	04	D	Overmold Cable	3m	PUR
PXPPVC12FIM04DCL050PVC	04	D	Overmold Cable	5m	PVC
PXPTPU12FIM04DCL050PUR	04	D	Overmold Cable	5m	PUR
PXPPVC12FIM04DCL100PVC	04	D	Overmold Cable	10m	PVC
PXPTPU12FIM04DCL100PUR	04	D	Overmold Cable	10m	PUR
PXPPVC12FIM04DCL150PVC	04	D	Overmold Cable	15m	PVC
PXPTPU12FIM04DCL150PUR	04	D	Overmold Cable	15m	PUR

PA66 M12 Sealing Cap



PXPPAM12

- Sealing caps to maintain IP rating
- Male & Female versions



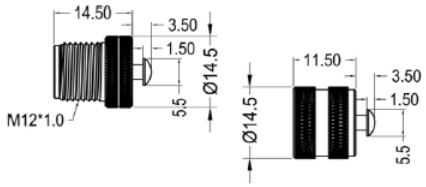
Part Number	Series	Type	Material
PXPPAM12CAM	M12	Male	PA66
PXPPAM12CAF	M12	Female	PA66

Brass - Nickel Plating M12 Sealing Cap



PXMBNI12

- Sealing caps to maintain IP rating
- Male & Female versions



Part Number	Series	Type	Material
PXMBNI12CAM	M12	Male	Brass - Nickel Plating
PXMBNI12CAF	M12	Female	Brass - Nickel Plating

Electrical

No. Poles:	3	4	5	8	12
Current Rating:	4A	4A	4A	2A	1.5A
Voltage Rating (ac/dc) :	250V	250V	60V	30V	30V

Contact Resistance: <10mΩ

Insulation Resistance: >100MΩ

AC Breakdown Voltage:

3 Pole	1.5KV
4 Pole	1.5KV
5 Pole	1.5KV
8 Pole	0.8KV
12 Pole	0.8KV

Operating Temp Range: -25°C to 80°C

Mechanical:

Locking Mechanism:	Screw coupling
Sealing:	IP67
Contact Accomodation:	
3, 4, 5, 8 & 12 Pole	28AWG-22AWG
Cable Acceptance:	4.6 - 8.0mm Dia
Terminations:	
3, 4, 5, 8	PCB / Screw / Solder / Cable
12	PCB / Solder / Cable
Mechanical Operation:	500 mating cycles
Largest diameter over coupling ring:	20.0mm

Materials:	Panel Mount:	Cable Connectors:	Flex & Inline Connectors:
Body:	Nickel Plated Brass	TPU / PVC	Nickel Plated Brass / PA66
Coupling Nut:	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass
Colour:	Grey	Black	Black or Grey
Pin Contacts:	Brass, Gold plating	Brass, Gold plating	Brass, Gold plating
Socket Contacts:	Phosphor Bronze, Gold plating	Phosphor Bronze, Gold plating	Phosphor Bronze, Gold plating
O Rings & Gaskets:	Viton	Viton	Viton
RoHS:	Compliant	Compliant	Compliant

MX	XXX	XX	XX	X	XX	X	XX
Series	**Material**	**Series Size**	**Body Style**	**Orientation**	**NO. Contacts**	**Code**	**Termination**
PXM	BNI = Brass Nickel PAM = Polyamide	12	FB = Flex Body	M	03	A	ST = Screw Terminal
PXP	TPU = overmold for PUR PVC = overmold for PVC		FI = Flex Inline Body	F	04	B	PC = PCB
			RP = Rear Panel Mounting		05	D	CL = Cable
			RA = Right Angle		08		SC = Solder
			SC = Sealing Cap		12		

XXX	XXX	XXX
Mounting / Gland Nut Thread	**Lead Length**	**Cable Material**
PG9	001	PUR
PG7	002	PVC
M16	003	
M12	010	
	020	
	030	
	050	
	100	
	150	

With a rugged metal housing and environmental protection rating of IP67 when mated, Bulgin's robust M16 circular DIN connector range is an ideal solution for ensuring that power and signal connections are not compromised in harsh environments and industrial applications.



Key features:

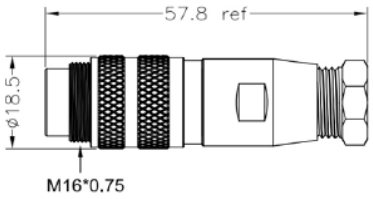
- Screw locking compliant with DIN EN 61076-2-106
- IP67 degree of protection
- Robust metal connector
- Excellent EMI shielding
- Pole variants from 3 - 12

M16 Flex Inline Body Male



PXMBNI16FIM

- 3, 4, 5, 6, 8 and 12 poles
- Solder termination
- Metal Flex Inline Body
- Mates with Flex Body and panel mount connectors



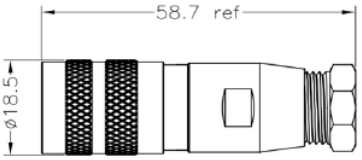
Part Number	Poles	Code	Termination
PXMBNI16FIM03ASC	03	A	Solder Terminal
PXMBNI16FIM04ASC	04	A	Solder Terminal
PXMBNI16FIM05ASC	05	A	Solder Terminal
PXMBNI16FIM06ASC	06	A	Solder Terminal
PXMBNI16FIM08ASC	08	A	Solder Terminal
PXMBNI16FIM12ASC	12	A	Solder Terminal

M16 Flex Body Female



PXMBNI16FBF

- 3, 4, 5, 6, 8 and 12 poles
- Solder termination
- Metal Flex Body
- Mates with Flex Inline Body and panel mount connectors



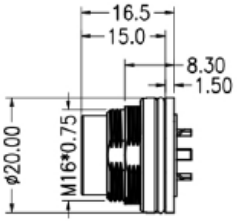
Part Number	Poles	Code	Termination
PXMBNI16FBF03ASC	03	A	Solder Terminal
PXMBNI16FBF04ASC	04	A	Solder Terminal
PXMBNI16FBF05ASC	05	A	Solder Terminal
PXMBNI16FBF06ASC	06	A	Solder Terminal
PXMBNI16FBF08ASC	08	A	Solder Terminal
PXMBNI16FBF12ASC	12	A	Solder Terminal

M16 Rear Panel Mounting Male



PXMBNI16RPM

- 3, 4, 5, 6, 8 and 12 poles
- Solder termination
- Rear panel mount M16
- Mates with Flex body connectors



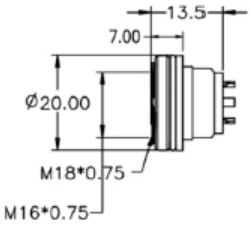
Part Number	Poles	Code	Termination
PXMBNI16RPM03ASC	03	A	Solder Terminal
PXMBNI16RPM04ASC	04	A	Solder Terminal
PXMBNI16RPM05ASC	05	A	Solder Terminal
PXMBNI16RPM06ASC	06	A	Solder Terminal
PXMBNI16RPM08ASC	08	A	Solder Terminal
PXMBNI16RPM12ASC	12	A	Solder Terminal

M16 Rear Panel Mounting Female



PXMBNI16RPF

- 3, 4, 5, 6, 8 and 12 poles
- Solder termination
- Rear panel mount M16
- Mates with Flex Inline Body connectors



Part Number	Poles	Code	Termination
PXMBNI16RPF03ASC	03	A	Solder Terminal
PXMBNI16RPF04ASC	04	A	Solder Terminal
PXMBNI16RPF05ASC	05	A	Solder Terminal
PXMBNI16RPF06ASC	06	A	Solder Terminal
PXMBNI16RPF08ASC	08	A	Solder Terminal
PXMBNI16RPF12ASC	12	A	Solder Terminal

Electrical

No. Poles:	3	4	5	6	8	12
Current Rating:	7A	7A	6A	5A	5A	3A
Voltage Rating (ac/dc) :	250V	250V	250V	125V	60V	60V

Contact Resistance: <5mΩ 3, 4, 5, 6 and 8 Pole
<3mΩ 12 Pole

Insulation Resistance: >100^{3}MΩ

AC Breakdown Voltage:

3 Pole	2.0KV
4 Pole	2.0KV
5 Pole	2.0KV
6 Pole	1.5KV
8 Pole	1.5KV
12 Pole	1.5KV

Operating Temp Range: -25°C to 80°C

Mechanical:

Locking Mechanism:	Screw coupling
Sealing:	IP67
Contact Accomodation:	
3, 4, 5, 6 and 8 Pole	20AWG
12 Pole	24 AWG
Cable Acceptance:	5.0 - 7.5mm Dia
Terminations:	Solder
Mechanical Operation:	500 mating cycles
Diameter over coupling ring:	18.5mm

Materials:

Body:	Nickel Plated Brass
Coupling Nut:	Nickel Plated Brass
Colour:	Grey
Pin Contacts:	Brass, Gold plating
Socket Contacts:	Phosphor Bronze, Gold plating
O Rings & Gaskets:	Viton
RoHS:	Compliant

Panel Mount:

Nickel Plated Brass
Nickel Plated Brass
Grey
Brass, Gold plating
Phosphor Bronze, Gold plating
Viton
Compliant

Flex & Inline Connectors:

Nickel Plated Brass
Nickel Plated Brass
Grey
Brass, Gold plating
Phosphor Bronze, Gold plating
Viton
Compliant

MX	XXX	XX	XX	X	XX	X	XX
Series	**Material**	**Series Size**	**Body Style**	**Orientation**	**NO. Contacts**	**Code**	**Termination**
PXM	BNI = Brass Nickel	16	FB = Flex Body	M	03	A	SC = Solder
			FI = Flex Inline Body	F	04		
			RP = Rear Panel Mounting		05		
					06		
					08		
					12		

Typically used for providing high performance, reliable and robust connections in commercial and industrial automation applications, these IP67 rated signal and power connectors offer a high degree of protection against environmental factors such as water, dirt and moisture.

Bulgin's range of M23 Connectors includes field installable male and female connectors as well as front panel mount options from 12- to 19-pole in straight and right angled versions.



Key features:

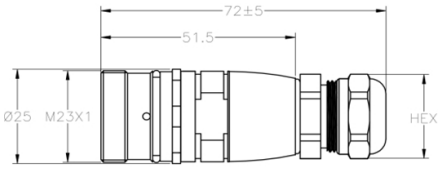
- A-Coded
- Male and female variants, 12 or 19 poles
- Straight and angled configurations
- Robust metal housing
- IP67 protection rating (when mated)
- Voltages up to 250 V and currents up to 8 A

M23 Flex Inline Body



PXMBNI23FIM

- Available in 12 and 19 poles
- Solder termination
- Metal Flex Inline Body
- Mates with panel mount connectors



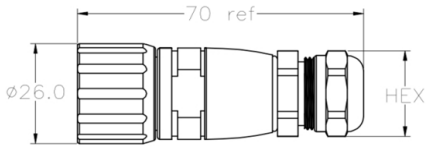
Part Number	Poles	Code	Termination
PXMBNI23FIM12ASC	12	A	Screw Terminal
PXMBNI23FIM19ASC	19	A	Screw Terminal

M23 Flex Body Female



PXMBNI23FBF

- Available in 12 and 19 poles
- Solder termination
- Metal Flex Body
- Mates with panel mount connectors



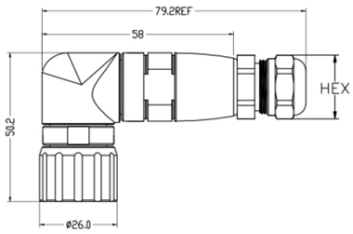
Part Number	Poles	Code	Termination
PXMBNI23FBF12ASC	12	A	Screw Terminal
PXMBNI23FBF19ASC	19	A	Screw Terminal

M23 Right Angled Female



PXMBNI23RAF

- Available in 12 and 19 poles
- Solder termination
- Metal Right Angle Flex Body
- Mates with panel mount connectors



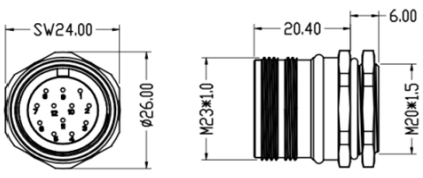
Part Number	Poles	Code	Termination
PXMBNI23RAF12ASC	12	A	Screw Terminal
PXMBNI23RAF19ASC	19	A	Screw Terminal

M23 Front Panel Mounting Male



PXMBNI23FPM

- Available in 12 and 19 poles
- Solder termination
- Front panel M20
- Mates with Flex Body connectors



Part Number	Poles	Code	Termination
PXMBNI23FPM12ASC	12	A	Screw Terminal
PXMBNI23FPM19ASC	19	A	Screw Terminal

Electrical

No. Poles:	12	19
Current Rating:	8A	8A
Voltage Rating (ac/dc) :	200V	200V
Contact Resistance:		<3mΩ
Insulation Resistance:		>100^{3}MΩ
AC Breakdown Voltage:		
12 Pole		1.5KV
19 Pole		1.5KV
Operating Temp Range:		-25°C to 80°C

Mechanical:

Locking Mechanism:	Screw coupling
Sealing:	IP67
Contact Accomodation:	
12 Pole	18 AWG
19 Pole	17 AWG
Cable Acceptance:	6.0 - 8.0mm Dia
Terminations:	Solder
Mechanical Operation:	500 mating cycles
Diameter over coupling ring:	26.0mm

Materials:

Body:	Nickel Plated Brass
Coupling Nut:	Nickel Plated Brass
Colour:	Grey
Pin Contacts:	Brass, Gold plating
Socket Contacts:	Phosphor Bronze, Gold plating
O Rings & Gaskets:	Viton
RoHS:	Compliant

Panel Mount:

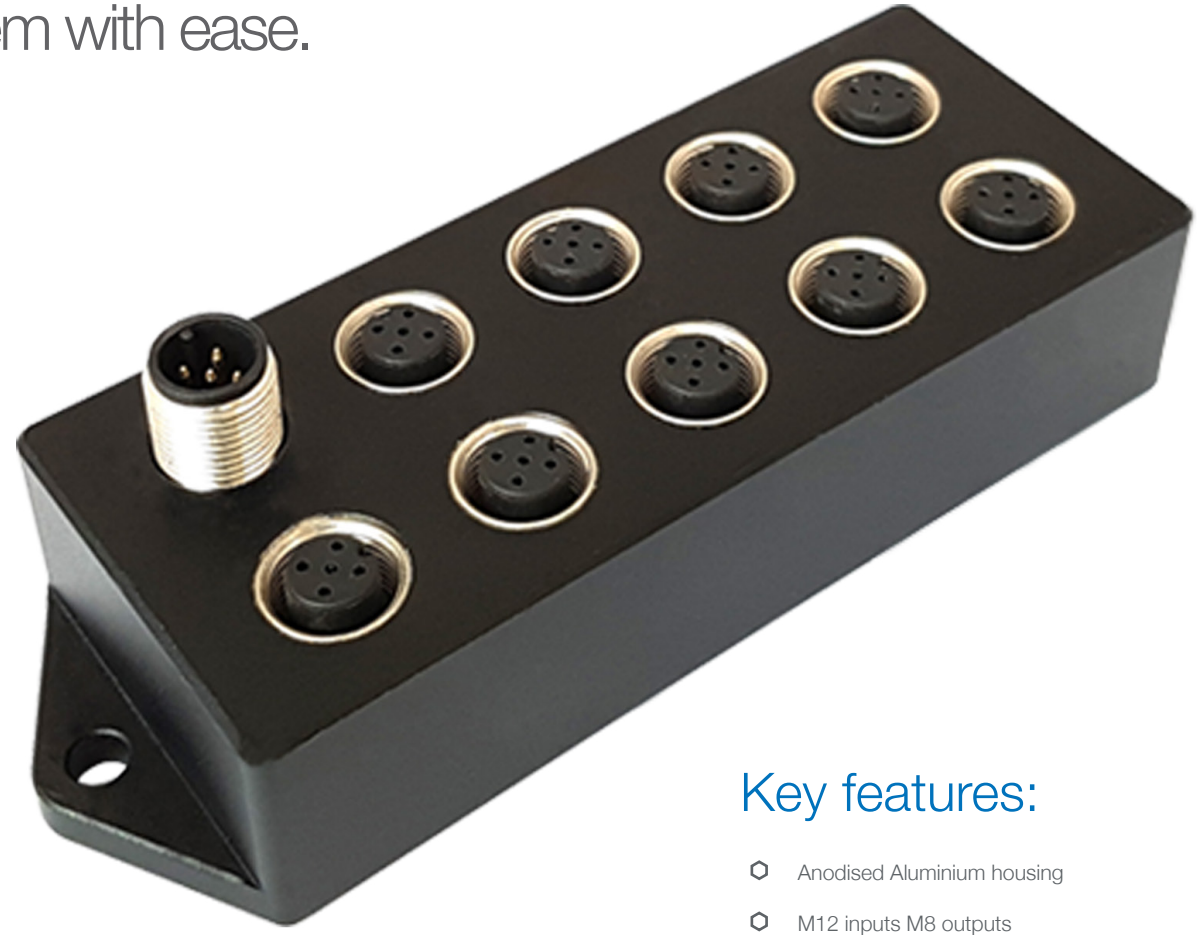
Body:	Nickel Plated Brass
Coupling Nut:	Nickel Plated Brass
Colour:	Grey
Pin Contacts:	Brass, Gold plating
Socket Contacts:	Phosphor Bronze, Gold plating
O Rings & Gaskets:	Viton
RoHS:	Compliant

Flex & Inline Connectors:

Body:	Nickel Plated Brass
Coupling Nut:	Nickel Plated Brass
Colour:	Grey
Pin Contacts:	Brass, Gold plating
Socket Contacts:	Phosphor Bronze, Gold plating
O Rings & Gaskets:	Viton
RoHS:	Compliant

MX	XXX	XX	XX	X	XX	X	XX
Series	**Material**	**Series Size**	**Body Style**	**Orientation**	**NO. Contacts**	**Code**	**Termination**
PXM	BNI = Brass Nickel	23	FB = Flex Body	M	12	A	SC = Solder
PXP			FI = Flex Inline Body	F	19		
			FP = Front Panel Mounting				
			RA = Right Angle				

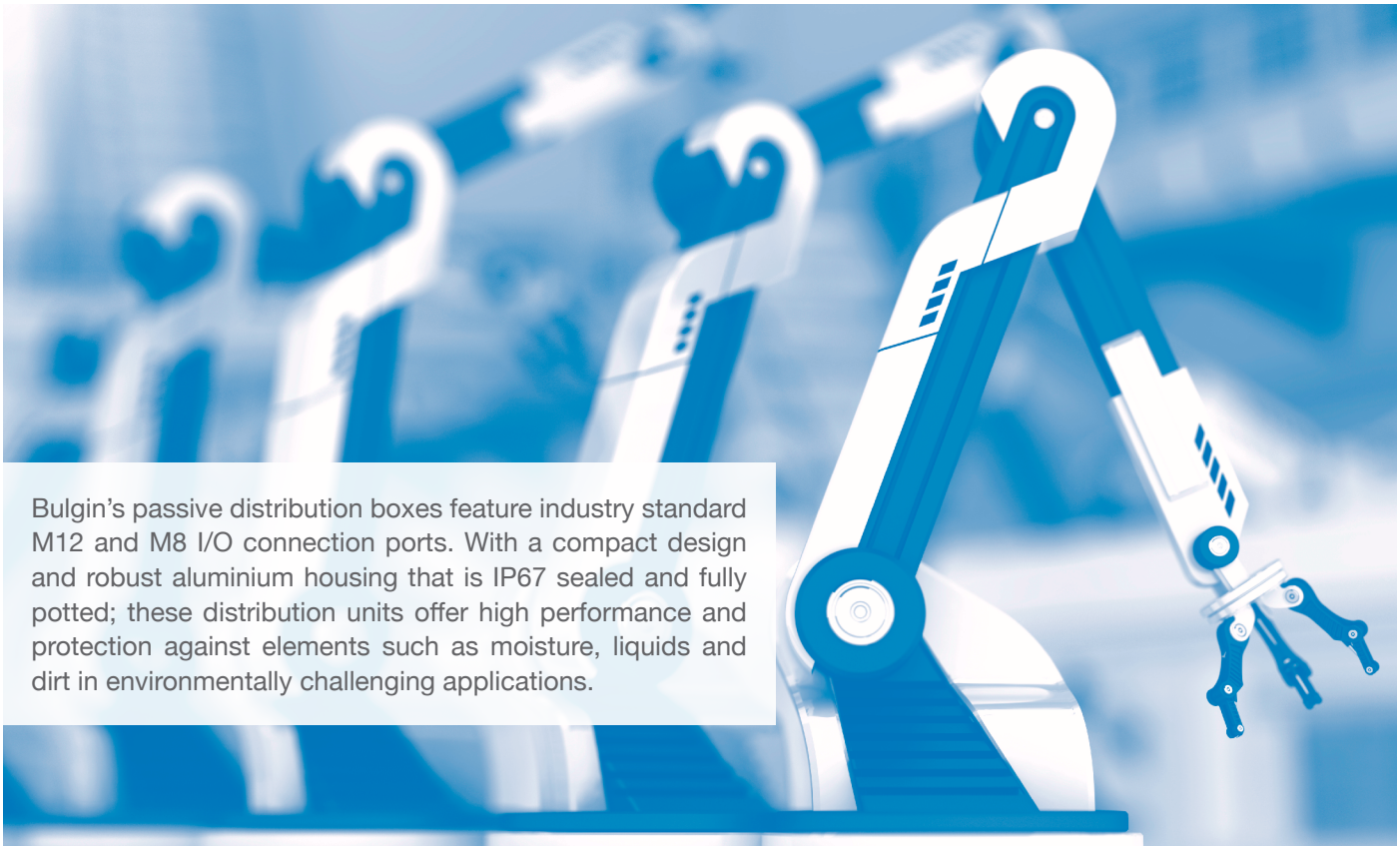
Passive distribution boxes provide a convenient and compact connectivity solution that can be installed quickly and easily in the field. They offer considerable cost saving benefits when compared to hard-wiring I/O connections due to their pre-wired connector slot configurations which enables numerous sensor and actuator signals to be transmitted back to a control system with ease.



Key features:

- Anodised Aluminium housing
- M12 inputs M8 outputs
- Available with or without LED indicators
- IP67 rated
- 5, 8, and 9 port configurations
- Operating Temp Range -25°C to 80°C

M-Series - Distribution Unit



Bulgin's passive distribution boxes feature industry standard M12 and M8 I/O connection ports. With a compact design and robust aluminium housing that is IP67 sealed and fully potted; these distribution units offer high performance and protection against elements such as moisture, liquids and dirt in environmentally challenging applications.

The Benefits:

Save Time

With the need to hard wire I/O connections removed and variants coming equipped with identification labels and integrated LEDs, Bulgin's distribution boxes help to save on costs associated with installation, maintenance and repair time by making it easy and quick to troubleshoot connection faults.

Save Space

Distribution boxes save space in the field as they require less space than more conventional distribution systems due to their compact design. They take up far less space than loose wires and require fewer terminal blocks/boxes, making them the ideal solution for many machine requirements or automation systems.

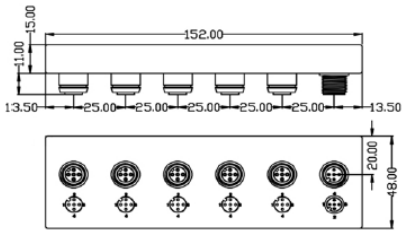
Save Money

By simplifying the wiring control system and eliminating the need for additional enclosures, distributor boxes can be installed quickly which saves time and costs. Their ability to reduce troubleshooting time also means that downtime can be significantly minimised in manufacturing, food-processing and industrial automation applications.



BOX1M1205MA05

- 5 outputs
- Sealed using sealing caps
- Anodised aluminium body
- Mates with Flex Body and Flex Inline connectors

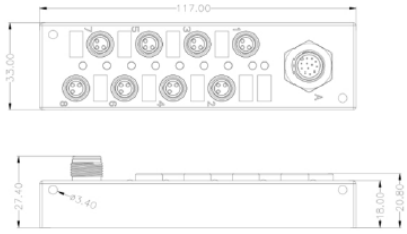


Part Number	Input Type	Input Pole Count	Output Type	Output Pole Count	Output Ports
BOX1M1205MA05M805F	M12	5 Contacts	M8	5 Contacts	5 Ports



BOX1M1212MA08

- 8 outputs
- Sealed using sealing caps
- Anodised aluminium body
- Mates with Flex Body and Flex Inline connectors

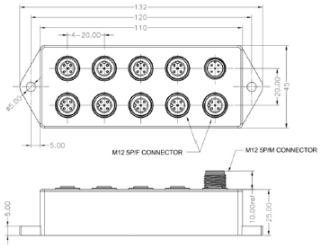


Part Number	Input Type	Input Pole Count	Output Type	Output Pole Count	Output Ports
BOX1M1212MA08M803F	M12	12 Contacts	M8	3 Contacts	8 Ports



BOX1M1205MA09

- 9 outputs
- Sealed using sealing caps
- Anodised aluminium body
- Mates with Flex Body and Flex Inline connectors



Part Number	Input Type	Input Pole Count	Output Type	Output Pole Count	Output Ports
BOX1M1205MA09M805F	M12	5 Contacts	M8	5 Contacts	9 Ports

Specifications:

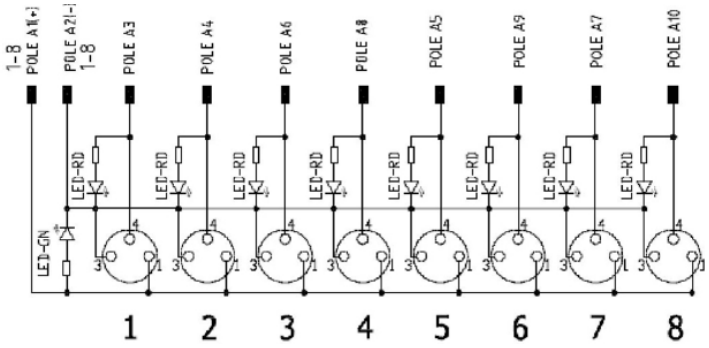
Locking mechanism:	Screw coupling
Sealing:	IP67
Operating Temp Range:	-25°C to 80°C

Materials:

Body:	Anodised Aluminium
Colour:	Black
Pin Contacts:	Brass, Gold plating
Socket Contacts:	Phosphor Bronze, Gold plating
RoHS:	Compliant

Box & Panel Mount:

Wiring diagram for BOX1M1212MA08M803F



BOX	X	XX	XX	X	X	XX	XX	XX	X
Series	Inputs	Input Series	Input Poles	Orientation	Code	Outputs	Output Series	Output Poles	Orientation
Box	1	M12	05	M	A	05	M8	03	F
			12			08		05	
						09			

Manufactured from Stainless Steel, Bulgin's extensive range of vandal resistant security switches are designed with a high resistance to wear and tear, corrosion and harsh use in potentially hostile environments such as access control applications.

The front and rear panel mounted versions have three profiles –prominent, domed and low profile – with a choice of switching and IP66 & IP68 front panel sealing which combined together to meet the ergonomic, electrical and environmental demands of switch panel design.
And where the ultimate strength of steel is not needed, there is a brass, chrome plated alternative. The low profile style switches are now also available with a latching, push on - push off, action.

The illuminated versions are available in dot and ring LED indication and a variety of illumination colours including bi-colour LED's. Newer versions also feature LED illumination driven by 6V, 12V & 24V together with rear of panel sealing, these options will add that extra dimension to control panel layouts and functionality.

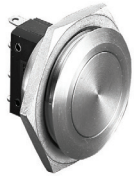
Vandal Resistant	144-162
Push Button	163-173
Voltage Selectors	174
Piezo	175-180
12mm Switches	181-186
Rocker Switches	187-213
Toggle Switches	214-218
Refrigerator Switches	219-224
Slide Switches	225-229



Stainless Steel Low Profile Vandal Resistant

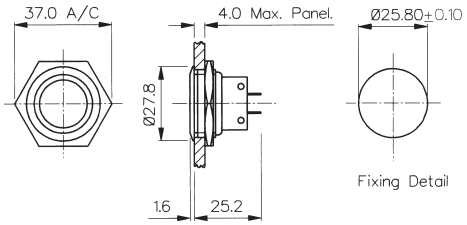
Momentary

Front Panel Mounting



MP0027

- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac

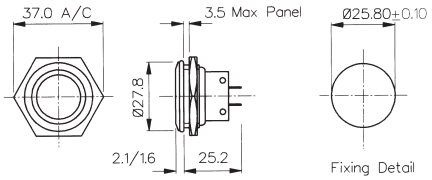


Front Panel Mounting



MP0038
Sealed to IP66

- Front Panel Sealed to IP66
- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



Specifications	MP0027	MP0038
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac 2A, 28Vdc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):		Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations Mechanical: Electrical:	 1,000,000 (min) 35,000 (min)	 1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Glass Filled Nylon Brass, Tin Plated Stainless Steel	 Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Fine Silver	Fine Silver
Thread size:	1.0” x 26TPI	1.0” x 26TPI
RoHS	Compliant	Compliant

Stainless Steel Low Profile Vandal Resistant

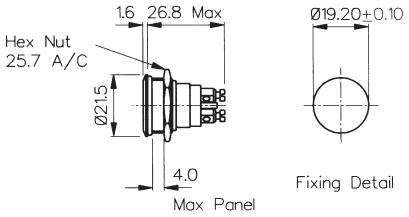
Momentary

Front Panel Mounting



MP0037
Sealed to IP68

- Front Panel Sealed to IP68
- 21.5mm diameter
- S.P. Push to Make
- 1A, 50Vac/dc
- Industry Standard Size

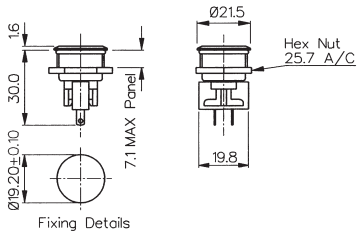


Front Panel Mounting



MP0031
Sealed to IP66

- Front Panel Sealed to IP66
- 21.5mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



Specifications	MP0037	MP0031
Terminations:	Screw Terminals	Solder Tags
Switching:	S.P. Push to make Momentary action	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	1A, 50Vac/dc	5A, 250Vac 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	$>10^5$ MΩ	$>10^3$ MΩ
Dielectric Strength:	>1.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only): IP68 rating 10M for 2 weeks test:	Protection Classification: IP68 EN 60529:1992+A2:2013 (Micro switch not sealed) Passed	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations Mechanical: Electrical:	 1,000,000 (min) 30,000 (min)	 1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	4.7N (typ)
Rear Nut Fixing Torque:	0.57Nm	0.57Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Glass Filled Nylon Brass, Silver Plated Stainless Steel	 Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Brass, Silver Plated, Silver	Fine Silver
Thread size:	0.747” x 26TPI	0.747” x 26TPI
RoHS	Compliant	Compliant

Stainless Steel Illuminated Vandal Resistant

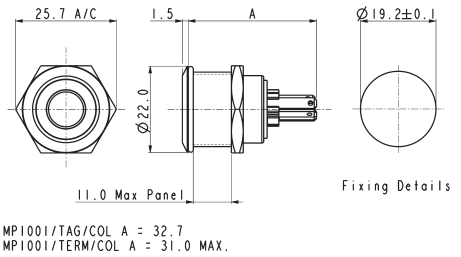
LED

Front Panel Mounting



MPI001- front panel seal to IP66

- Dot illumination
- 22mm diameter
- Single pole push to make
- 50mA, 24Vdc contact rating
- Red, Green, Amber, Blue, White or dual colour illumination
- Bright daylight LEDs
- Independent LED terminals
- Front panel seal to IP66
- Integral supply resistors
- TVS protection



Specifications — MPI001/Termination/Colour/Voltage

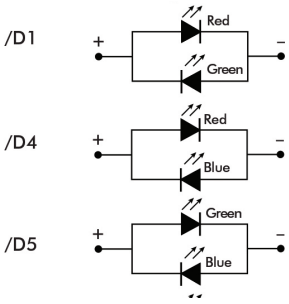
Illumination style:	Dot
Terminations:	/28 (2.8mm tabs), /TERM or /TE (screw terminals)
Switching:	Single pole, push to make, tactile (momentary action)
Max. Switch Rating:	50mA, 24Vdc

LEDs (ratings @ 20mA)

Part No.	/RD	/GN	/AM	/BL	/WH	/D1	/D4	/D5
Colours	Red	Green	Amber	Blue	White	Red/Green	Red/Blue	Green/Blue
Luminous Intensity	900mcd	2500mcd	900mcd	1500mcd	900mcd	2500mcd/5000mcd	2000mcd/850mcd	4000mcd/2000mcd
Forward Voltage	1.85V	3.5V	2.3V	3.5V	3.6V	2.05V/3.6V	2.0V/3.6V	3.6V/3.6V
Forward Current	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA
Moulding Colour	Red	Green	Amber	Blue	White	Black	Black	Black

Illumination Voltage:	/no suffix	No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above.
	/6	6Vdc
	/12	12Vdc
	/24	24Vdc
Contact Resistance:	<100mΩ	
Insulation Resistance:	>10³ MΩ	
Dielectric Strength:	Contact to Panel >2.0kV Contact to Contact 1500	
Operating Temp. Range:	–30°C to +70°C	
Sealing (Front of panel only):	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)	
Operations		
Mechanical:	750,000 (min)	
Electrical:	35,000 (min)	
Operating Pressure:	12N	
Rear Nut Fixing Torque:	0.57Nm	
Screw Terminal Torque	0.2Nm Max	

Dual Colour LED Configuration



Materials	
Switch assembly:	UL94V-0 rated Polyamide (Nylon)
Tags:	Copper Alloy
Terminals:	Copper Alloy
Switch Body & Button:	Stainless Steel
Lens and Lens Body:	Polycarbonate
O ring:	Nitrile
Internal seal:	Silicone
Contact Plate:	Gold Plated
Thread size:	18.97mm x 26TPI
	ESD Handling precautions must be taken
RoHS	Compliant

Stainless Steel Illuminated Vandal Resistant

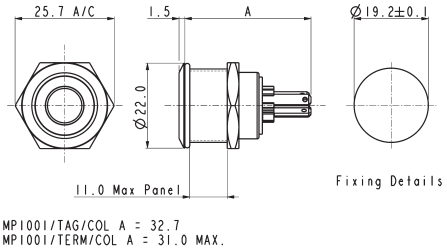
LED

Front Panel Mounting



MPI002- front panel seal to IP66

- Ring illumination
- 22mm diameter
- Single pole push to make
- 50mA, 24Vdc contact rating
- Red, Green, Amber, Blue, White or dual colour illumination
- Bright daylight LEDs
- Independent LED terminals
- Front panel seal to IP66
- Integral supply resistors
- TVS protection



Specifications — MPI002/Termination/Colour/Voltage

Illumination style:	Ring
Terminations:	/28 (2.8mm tabs), /TERM or /TE (screw terminals)
Switching:	Single pole, push to make, tactile (momentary action)
Max. Switch Rating:	50mA, 24Vdc

LEDs (ratings @ 20mA)

Part No.	/RD	/GN	/AM	/BL	/WH	/D1	/D4	/D5	/D6
Colours	Red	Green	Amber	Blue	White	Red/Green	Red/Blue	Green/Blue	Green/White
Luminous Intensity	900mcd	2500mcd	900mcd	1500mcd	900mcd	2500mcd/5000mcd	2000mcd/850mcd	4000mcd/2000mcd	178mcd/450mcd
Forward Voltage	1.85V	3.5V	2.3V	3.5V	3.6V	2.05V/3.6V	2.0V/3.6V	3.6V/3.6V	3.4V/3.2V
Forward Current	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA
Moulding Colour	Red	Green	Amber	Blue	White	Black	Black	Black	Black

Illumination Voltage:	/no suffix No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above. /6 6Vdc /12 12Vdc /24 24Vdc
Contact Resistance:	<100mΩ
Insulation Resistance:	>10³ MΩ
Dielectric Strength:	Contact to Panel >2.0kV Contact to Contact 1500
Operating Temp. Range:	–30°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations Mechanical:	750,000 (min)
Electrical:	35,000 (min)
Operating Pressure:	12N
Rear Nut Fixing Torque:	0.57Nm
Screw Terminal Torque	0.2Nm Max

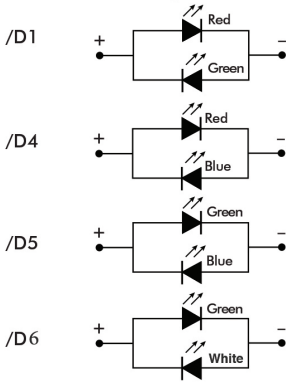
Materials

Switch assembly:	UL94V-0 rated Polyamide (Nylon)
Tags:	Copper Alloy
Terminals:	Copper Alloy
Switch Body & Button:	Stainless Steel
Lens and Lens Body:	Polycarbonate
O ring:	Nitrile
Internal seal:	Silicone
Contact Plate:	Gold Plated
Thread size:	18.97mm x 26TPI

RoHS

ESD Handling precautions must be taken
Compliant

Dual Colour LED Configuration



Stainless Steel Illuminated Vandal Resistant

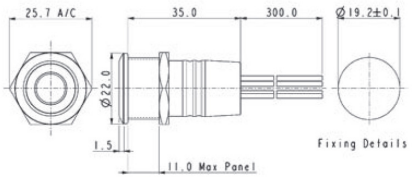
Rear of panel IP66 seal

Rear Panel Sealed - Flying Leads



MPI002/FL/xx/x

- Ring illumination
- 22mm diameter
- Single pole push to make
- 50mA, 24Vdc contact rating
- Red, Green, Amber, Blue, White or dual colour illumination
- Bright daylight LEDs
- Independent LED terminals
- Front panel seal to IP66
- Integral supply resistors
- TVS protection



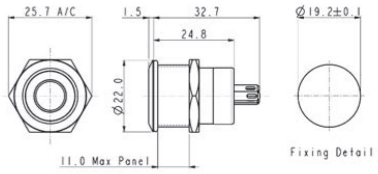
Flying lead colours: LED: red + and black –. Switch contacts: white.

Rear Panel Sealed - Solder Tags



MPI001/RP/xx/x

- Dot or ring illumination
- 22mm diameter
- Single pole push to make
- 50mA, 24Vdc contact rating
- Red, Green, Amber, Blue & White illumination
- Bright daylight LEDs
- Independent LED terminals
- Front and rear panel seal to IP66
- Solder tag termination
- TVS protection



LED terminals marked + and –. Switch terminals unmarked.

Specifications	**MPI001/Termination/Colour/Voltage**					**MPI002/Termination/Colour/Voltage**				
Illumination style:	Dot					Ring				
Terminations:	/FL (Flying leads) /RP (Solder tags)					/FL (Flying leads) /RP (Solder tags)				
Switching:	Single pole, push to make, tactile (momentary action)					Single pole, push to make, tactile (momentary action)				
Max. Switch Rating:	50mA, 24Vdc					50mA, 24Vdc				
LEDs (ratings @ 20mA)										
Part No.	/RD	/GN	/AM	/BL	/WH	/RD	/GN	/AM	/BL	/WH
Colours	Red	Green	Amber	Blue	White	Red	Green	Amber	Blue	White
Luminous Intensity	900mcd	2500mcd	900mcd	1500mcd	900mcd	900mcd	2500mcd	900mcd	1500mcd	900mcd
Forward Voltage	1.85V	3.5V	2.3V	3.5V	3.6V	1.85V	3.5V	2.3V	3.5V	3.6V
Forward Current	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA	20mA
Moulding Colour	Red	Green	Amber	Blue	White	Red	Green	Amber	Blue	White
Illumination Voltage:	/no suffix No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above. /6 6Vdc /12 12Vdc /24 24Vdc					/no suffix No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above. /6 6Vdc /12 12Vdc /24 24Vdc				
Contact Resistance:	<100mΩ					<100mΩ				
Insulation Resistance:	>10³ MΩ					>10³ MΩ				
Dielectric Strength:	Contact to Panel >2.0kV Contact to Contact 1500					Contact to Panel >2.0kV Contact to Contact 1500				
Operating Temp. Range:	–30°C to +70°C					–30°C to +70°C				
Sealing (Front of panel only):	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)					Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)				
Operations										
Mechanical:	750,000 (min)					750,000 (min)				
Electrical:	35,000 (min)					35,000 (min)				
Operating Pressure:	12N					12N				
Rear Nut Fixing Torque:	0.57Nm					0.57Nm				
Materials										
Switch assembly:	UL94V-0 rated Polyamide (Nylon)					UL94V-0 rated Polyamide (Nylon)				
Tags:	Copper Alloy					Copper Alloy				
Terminals:	Copper Alloy					Copper Alloy				
Switch Body & Button:	Stainless Steel					Stainless Steel				
Lens and Lens Body:	Polycarbonate					Polycarbonate				
O ring:	Nitrile					Nitrile				
Internal seal:	Silicone					Silicone				
Contact Plate:	Gold Plated					Gold Plated				
Thread size:	18.97mm x 26TPI					18.97mm x 26TPI				
	ESD Handling precautions must be taken					ESD Handling precautions must be taken				
RoHS	Compliant					Compliant				

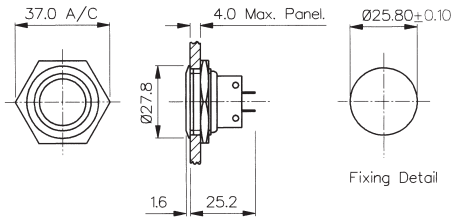
Low Profile Brass Chrome Plated Vandal Resistant

Front Panel Mounting



MPB038
Sealed to IP66

- Front Panel Sealed to IP66
- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac

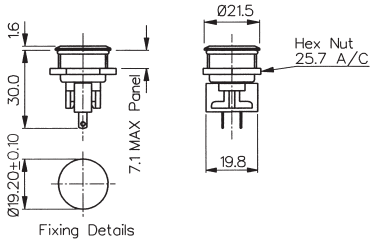


Front Panel Mounting



MPB031
Sealed to IP66

- Front Panel Sealed to IP66
- 21mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac

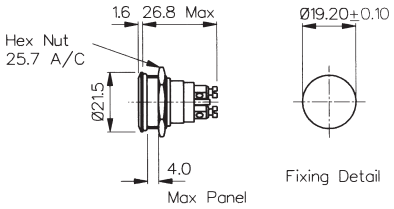


Front Panel Mounting



MPB037
Sealed to IP68

- Front Panel Sealed to IP68
- 21.5mm diameter
- S.P. Push to Make
- 1A, 50Vac/dc



Specifications	MPB038	MPB031	MPB037
Terminations:	Solder Tags	Solder Tags	Screw Terminals
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)	S.P. Push to make Momentary action
Max. Rating:	5A, 250Vac. 2A, 28Vdc	5A, 250Vac. 2A, 28Vdc	1A, 50Vac/dc
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10^3 MΩ	>10^3 MΩ	>10^5 MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac	>1.0kVac
Operating Temp. Range:	–20°C to +70°C	–20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)	Protection Classification: IP68 EN60529-1:1992 + A2:2013. (Micro switch not sealed) (10m for 2 weeks)
Operations			
Mechanical:	1,000,000 (min)	1,000,000 (min)	1,000,000 (min)
Electrical:	35,000 (min)	35,000 (min)	30,000 (min)
Operating Pressure:	12.5N (typ)	4.7N (typ)	7.5N (typ)
Rear Nut Fixing Torque:	1.13Nm	0.57Nm	0.57Nm
Materials			
Mouldings:	Glass Filled Nylon	Glass Filled Nylon	Glass Filled Nylon
Tags/Terminations:	Brass, Tin Plated	Brass, Tin Plated	Brass, Tin Plated
Switch Body & Button:	Brass	Brass	Brass
Contacts:	Fine Silver	Fine Silver	Brass, Silver Plated, Silver
Thread size:	1.0” x 26TPI	0.747” x 26TPI	0.747” x 26TPI
RoHS	Compliant	Compliant	Compliant

Stainless Steel Large Diameter Vandal Resistant

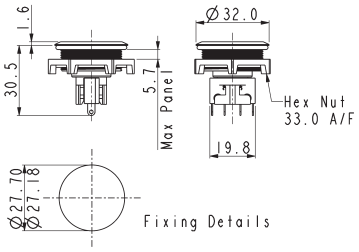
Momentary

Front Panel Mounting - Low Profile



MP0050

- Front Panel Sealed to IP68
- Flush button
- 32.0mm diameter
- S.P.C.O. switching
- Momentary action
- 5A, 250Vac

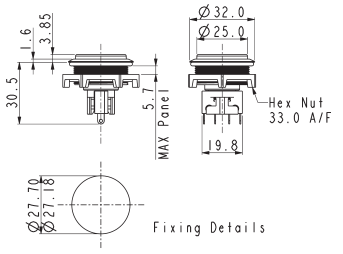


Front Panel Mounting - Protruding Profile



MP0050/2

- Front Panel Sealed to IP68
- Protruding button
- 32.0mm diameter
- S.P.C.O. switching
- Momentary action
- 5A, 250Vac



Specifications	MP0050	MP0050/2
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac. 2A, 28Vdc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations Mechanical: Electrical:	 1,000,000 (min) 35,000 (min)	 1,000,000 (min) 35,000 (min)
Operating Pressure:	4.7Nm	4.7N (typ)
Rear Nut Fixing Torque:	0.57Nm	0.57Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Glass Filled Nylon Brass, Tin Plated Stainless Steel	 Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Fine Silver	Fine Silver
Thread size:	M27 x 1.0-6H	M27 x 1.0-6H
RoHS	Compliant	Compliant

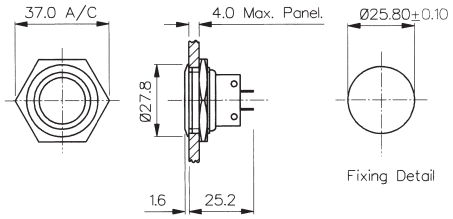
Stainless Steel Domed Vandal Resistant

Front Panel Mounting



MP0027/3

- 28mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250Vac

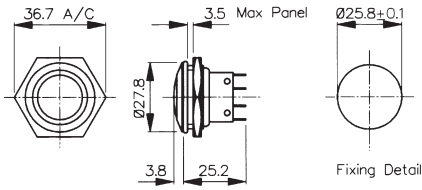


Front Panel Mounting



MP0038/3
Sealed to IP66

- Front Panel Sealed to IP66
- 28mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250Vac



Specifications	MP0027/3	MP0038/3
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac. 2A, 28Vdc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):		Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations Mechanical: Electrical:	 1,000,000 (min) 35,000 (min)	 1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Glass Filled Nylon Brass, Tin Plated Stainless Steel	 Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Fine Silver	Fine Silver
Thread size:	1.0” x 26TPI	0.747” x 26TPI
RoHS	Compliant	Compliant

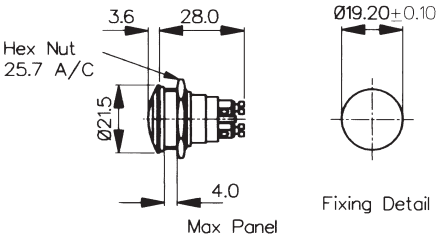
Stainless Steel Domed Vandal Resistant

Front Panel Mounting



MP0037/3
Sealed to IP68

- Front Panel Sealed to IP68
- 21.5mm diameter
- Domed Profile
- S.P. Push to Make
- 1A, 50Vac/dc

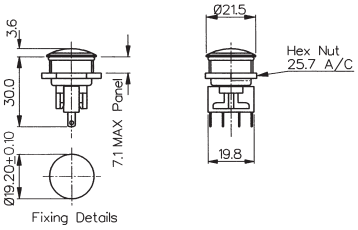


Front Panel Mounting



MP0031/3
Sealed to IP66

- Front Panel Sealed to IP66
- 21.5mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250Vac



Specifications	MP0037/3	MP0031/3
Terminations:	Screw Terminals	Solder Tags
Switching:	S.P. Push to make Momentary action	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	1A, 50Vac/dc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	$>10^5$ MΩ	$>10^3$ MΩ
Dielectric Strength:	>1.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP68 EN60529-1:1992 + A2:2013. (Micro switch not sealed) (10m for 2 weeks)	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations Mechanical: Electrical:	 1,000,000 (min) 35,000 (min)	 1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	4.7N (typ)
Rear Nut Fixing Torque:	2.5Nm	0.57Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Glass Filled Nylon Brass, Tin Plated Stainless Steel	 Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Brass, Silver Plated, Silver	Fine Silver
Thread size:	0.747” x 26TPI	0.747” x 26TPI
RoHS	Compliant	Compliant

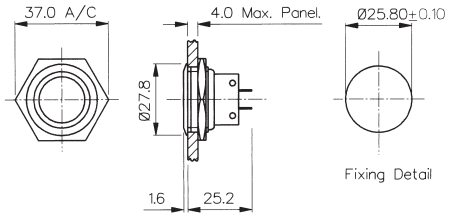
Stainless Steel Prominent Button Vandal Resistant

Front Panel Mounting



MP0027/2

- 28mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250Vac

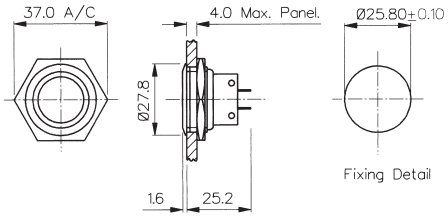


Front Panel Mounting



MP0038/2
Sealed to IP66

- Front Panel Sealed to IP66
- 28mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250Vac



Specifications	MP0027/2	MP0038/2
Terminations:	Solder Tags	Solder Tags
Switching:	S.P.C.O. Momentary Action (Microswitch)	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	5A, 250Vac 2A, 28Vdc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):		Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations Mechanical: Electrical:	 1,000,000 (min) 35,000 (min)	 1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	12.5N (typ)
Rear Nut Fixing Torque:	2.5Nm	1.13Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Glass Filled Nylon Brass, Tin Plated Stainless Steel	 Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Fine Silver	Fine Silver
Thread size:	1.0” x 26TPI	1.0” x 26TPI
RoHS	Compliant	Compliant

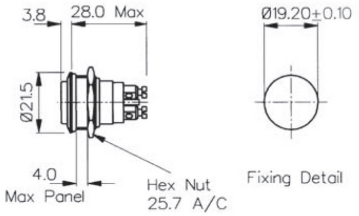
Stainless Steel Prominent Button Vandal Resistant

Front Panel Mounting



MP0037/2
Sealed to IP68

- Front Panel Sealed to IP68
- 21.5mm diameter
- Prominent Button
- S.P. Push to Make
- 1A, 50Vac/dc

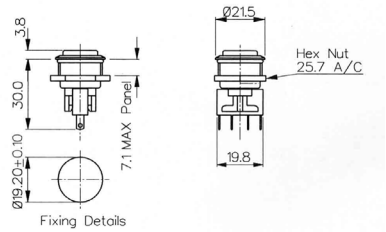


Front Panel Mounting



MP0031/2
Sealed to IP66

- Front Panel Sealed to IP66
- 21.5mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250Vac



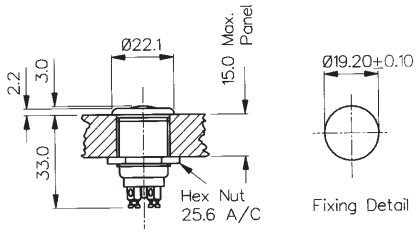
Specifications	MP0037/2	MP0031/2
Terminations:	Screw Terminals	Solder Tags
Switching:	S.P. Push to make Slow momentary action	S.P.C.O. Momentary Action (Microswitch)
Max. Rating:	1A, 50Vac/dc	5A, 250Vac. 2A, 28Vdc
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	$>10^5$ MΩ	$>10^3$ MΩ
Dielectric Strength:	>1.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +70°C	–20°C to +70°C
Sealing (Front of panel only):	Protection Classification: IP68 EN60529-1:1992 + A2:2013. (Micro switch not sealed) (10m for 2 weeks)	Protection Classification: IP66 EN60529-1:1992 + A2:2013. (Micro switch not sealed)
Operations Mechanical: Electrical:	 1,000,000 (min) 35,000 (min)	 1,000,000 (min) 35,000 (min)
Operating Pressure:	7.5N (typ)	4.7N (typ)
Rear Nut Fixing Torque:	0.57Nm	0.57Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Glass Filled Nylon Brass, Tin Plated Stainless Steel	 Glass Filled Nylon Brass, Tin Plated Stainless Steel
Contacts:	Brass, Silver Plated, Silver	Fine Silver
Thread size:	0.747” x 26TPI	0.747” x 26TPI
RoHS	Compliant	Compliant

Front Panel Mounting



MP0013
MP0033

- Proud Fitting
- 22mm diameter
- S.P. Push to Make
- 1A, 50V
- Brass, Chrome Plated Body, Stainless Steel Button
- MP0033 Internally Sealed

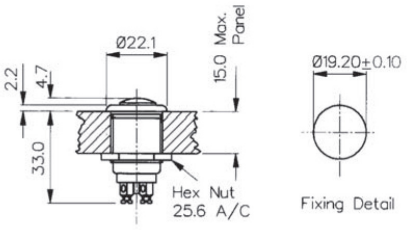


Front Panel Mounting



MP0013/2
MP0033/2

- Prominent Button
- 22mm diameter
- S.P. Push to Make
- 1A, 50V
- Brass, Chrome Plated Body, Stainless Steel Button
- MP0033/2 Internally Sealed



Specifications	MP0013, MP0033	MP0013/2, MP0033/2
Terminations:	Screw Terminals	Screw Terminals
Switching:	S.P. Push to make Slow momentary action	S.P. Push to make Slow momentary action
Max. Rating:	1A, 50Vac/dc	1A, 50Vac/dc
Contact Resistance:	<15mΩ	<15mΩ
Insulation Resistance:	>10^4 MΩ	>10^4 MΩ
Dielectric Strength:	>2.5kVac	>2.5kVac
Operating Temp. Range:	–20°C to +85°C	–20°C to +85°C
Sealing (Front of panel only):	MP0033 only - internally sealed against ingress of water and dust	MP0033/2 only - internally sealed against ingress of water and dust
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Glass Filled Nylon Brass, Silver Plated Body: Brass, Chrome Plated Button: Stainless Steel	 Glass Filled Nylon Brass, Silver Plated Body: Brass, Chrome Plated Button: Stainless Steel
Contacts:	Copper, Silver Plated	Copper, Silver Plated
Thread Size:	0.747” x 26TPI	0.747” x 26TPI
RoHS	Compliant	Compliant

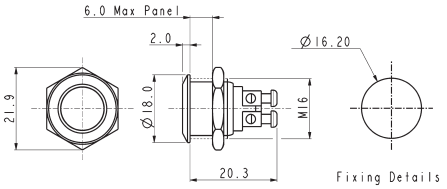
Stainless Steel - Momentary

Flush Profile



MP0042/1

- 18mm bezel diameter
- 16mm panel hole
- S.P. Push to make
- Polished finish
- 2A, 48Vdc

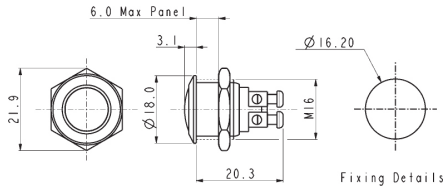


Domed Profile



MP0042/2

- 18mm bezel diameter
- 16mm panel hole
- S.P. Push to make
- Polished finish
- 2A, 48Vdc

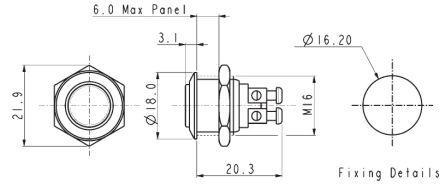


Prominent Button



MP0042/3

- 18mm bezel diameter
- 16mm panel hole
- S.P. Push to make
- Polished finish
- 2A, 48Vdc



Specifications	MP0042/1	MP0042/2	MP0042/3
Terminations:	Screw Terminals	Screw Terminals	Screw Terminals
Switching:	S.P. Push to make	S.P. Push to make	S.P. Push to make
Max. Rating:	2A, 48Vdc	2A, 48Vdc	2A, 48Vdc
Contact Resistance:	50mΩ at 1A, 2V	50mΩ at 1A, 2V	50mΩ at 1A, 2V
Insulation Resistance:	>10³ MΩ @ 500Vdc	>10³ MΩ @ 500Vdc	>10³ MΩ @ 500Vdc
Dielectric Strength:	>2.0kVac	>2.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +55°C	–20°C to +55°C	–20°C to +55°C
Operations Mechanical: Electrical:	 1,000,000 (min) 100,000 (min)	 1,000,000 (min) 100,000 (min)	 1,000,000 (min) 100,000 (min)
Rear Nut Fixing Torque:	12Nm	12Nm	12Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Nylon Brass, Silver Plated Stainless Steel (Polished)	 Nylon Brass, Silver Plated Stainless Steel (Polished)	 Nylon Brass, Silver Plated Stainless Steel (Polished)
Contacts:	Silver	Silver	Silver
Thread size:	Gold Plated Brass version available	Gold Plated Brass version available	Gold Plated Brass version available
Sealing:	IP65	IP65	IP65
Impact Rating:	IK08	IK08	IK08
RoHS	Compliant	Compliant	Compliant

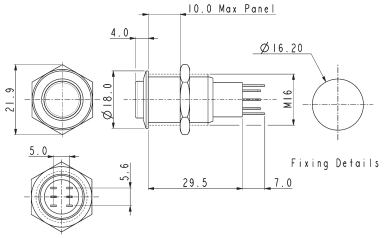
Stainless Steel - Momentary

Low Profile



MP0045/1D

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O
- 250V ac

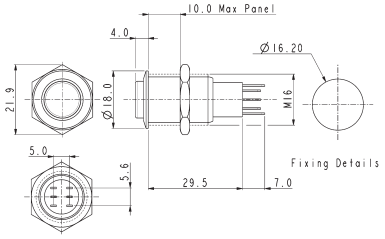


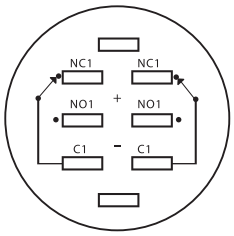
Prominent Button



MP0045/3D

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O
- 250V ac





Contact Layout

Specifications	MP0045/1D0NN000	MP0045/3D0NN000
Terminations:	Solder tags	Solder tags
Switching:	D.P.C.O Momentary Action	D.P.C.O Momentary Action
Max. Rating:	250V ac	250V ac
Contact Resistance:	50mΩ max. @ 1A, 2V	50mΩ max. @ 1A, 2V
Insulation Resistance:	>10³ MΩ @ 500Vdc	>10³ MΩ @ 500Vdc
Dielectric Strength:	> 2.0kVac	> 2.0kVac
Operating Temp. Range:	–20°C to +55°C	–20°C to +55°C
Operations Mechanical: Electrical:	 200,000 (min) 30,000 (min)	 200,000 (min) 30,000 (min)
Rear Nut Fixing Torque:	12Nm	12Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Nylon Brass, Silver Plated Stainless Steel	 Nylon Brass, Silver Plated Stainless Steel
Contacts:	Silver	Silver
Variants:	Nickel Plated Brass version available Details on request	Nickel Plated Brass version available Details on request
RoHS	Compliant	Compliant

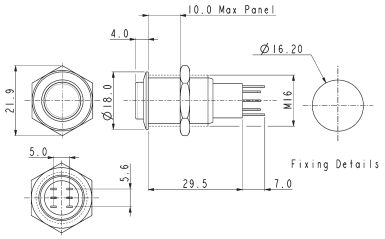
Stainless Steel - Latching

Low Profile



MP0045/1E

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O.
- 250V ac

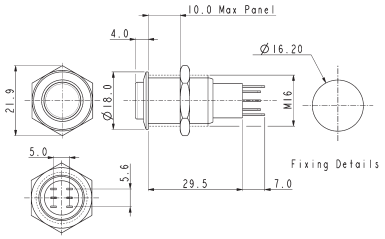


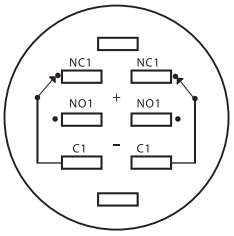
Prominent Button



MP0045/3E

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O.
- 250V ac





Contact Layout

Specifications	MP0045/1E0NN000	MP0045/3E0NN000
Terminations:	Solder Tags	Solder Tags
Switching:	D.P.C.O. - Latching Action	D.P.C.O. - Latching Action
Max. Rating:	250V ac	250V ac
Contact Resistance:	50mΩ max. @ 1A, 2V	50mΩ max. @ 1A, 2V
Insulation Resistance:	>10³ MΩ @ 500Vdc	>10³ MΩ @ 500Vdc
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +55°C	–20°C to +55°C
Operations Mechanical: Electrical:	 200,000 (min) 30,000 (min)	 200,000 (min) 30,000 (min)
Rear Nut Fixing Torque:	12Nm	12Nm
Materials Mouldings: Tags/Terminations: Switch Body & Button:	 Nylon Brass, Tin Plated Stainless Steel (Polished)	 Nylon Brass, Tin Plated Stainless Steel (Polished)
Contacts:	Silver	Silver
Thread size:	Nickel Plated Brass version Details on request	Nickel Plated Brass version Details on request
RoHS	Compliant	Compliant

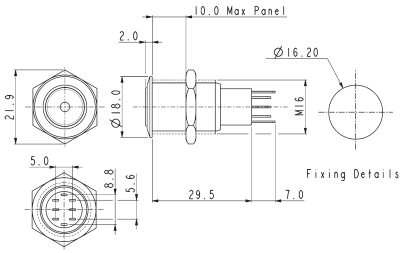
Stainless Steel Illuminated Momentary

Front Panel Mounting



MP0045/1D1

- Dot Illuminated
- 18mm bezel diameter
- D.P.C.O.
- 3A, 250V ac
- Red, Green, Amber or Blue Illumination
- Separate LED Terminals

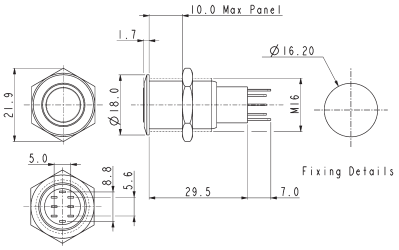


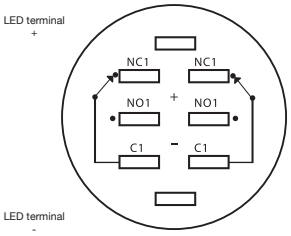
Front Panel Mounting



MP0045/1D2

- Ring Illuminated
- 18mm bezel diameter
- D.P.C.O.
- 3A, 250V ac
- Red, Green, Amber or Blue Illumination
- Separate LED Terminals





Contact Layout

Specifications	MP0045/1D1/Colour/Voltage	MP0045/1D2/Colour/Voltage
Terminations:	Solder Tags	Solder Tags
Illumination:	Dot	Ring
Switching:	D.P.C.O. Momentary Action	D.P.C.O. Momentary Action
Max. Switch Rating:	3A, 250Vac	3A, 250Vac
LEDs Colours Part No.	 Red Green Amber Blue /RD /GN /AM /BL	 Red Green Amber Blue /RD /GN /AM /BL
Voltage Part No.	12Vdc 220Vdc /012 /220	12Vdc 220Vdc /012 /220
Contact Resistance:	50mΩ max. @ 1A, 2Vdc	50mΩ max. @ 1A, 2Vdc
Insulation Resistance:	>10³ MΩ @ 500Vac	>10³ MΩ @ 500Vac
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +55°C	–20°C to +55°C
Operations Mechanical: Electrical:	 200,000 (min) 30,000 (min)	 200,000 (min) 30,000 (min)
Rear Nut Fixing Torque:	12Nm	12Nm
Materials Mouldings: Tags: Switch Body & Button: Variants	 Nylon Brass, Silver Plated Stainless Steel (Polished) Prominent Button, details on request	 Nylon Brass, Silver Plated Stainless Steel (Polished) Prominent Button, details on request
RoHS	Compliant	Compliant

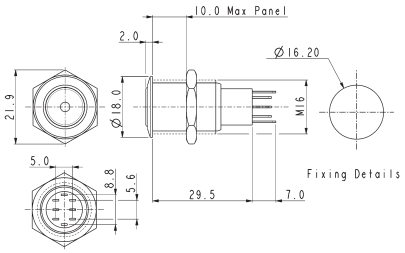
Stainless Steel Illuminated Latching

Front Panel Mounting



MP0045/1E1

- Dot Illuminated
- 18mm bezel diameter
- D.P.C.O.
- 3A, 250V ac
- Red, Green, Amber or Blue Illumination
- Separate LED Terminals

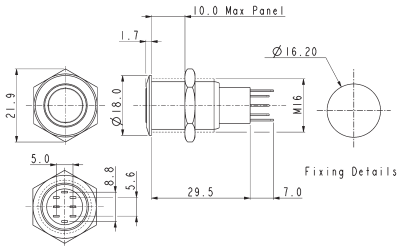


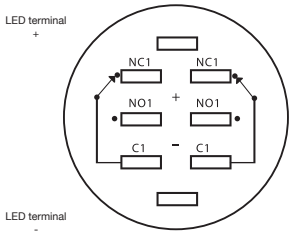
Front Panel Mounting



MP0045/1E2

- Ring Illuminated
- 18mm bezel diameter
- D.P.C.O.
- 3A, 250V ac
- Red, Green, Amber or Blue Illumination
- Separate LED Terminals





Contact Layout

Specifications	MP0045/1E1/Colour/Voltage	MP0045/1E2/Colour/Voltage
Terminations:	Solder Tags	Solder Tags
Illumination:	Ring	Ring
Switching:	D.P.C.O. Momentary Action	D.P.C.O. Momentary Action
Max. Switch Rating:	3A, 250Vac	3A, 250Vac
LEDs Colours Part No.	 Red Green Amber Blue /RD /GN /AM /BL	 Red Green Amber Blue /RD /GN /AM /BL
Voltage Part No.	12Vdc 220Vdc /012 /220	12Vdc 220Vdc /012 /220
Contact Resistance:	50mΩ max. @ 1A, 2Vdc	50mΩ max. @ 1A, 2Vdc
Insulation Resistance:	>10³ MΩ @ 500Vac	>10³ MΩ @ 500Vac
Dielectric Strength:	>2.0kVac	>2.0kVac
Operating Temp. Range:	–20°C to +55°C	–20°C to +55°C
Operations Mechanical: Electrical:	 200,000 (min) 30,000 (min)	 200,000 (min) 30,000 (min)
Rear Nut Fixing Torque:	12Nm	12Nm
Materials Mouldings: Tags: Switch Body & Button: Variants	 Nylon Brass, Silver Plated Stainless Steel (Polished) Prominent Button, details on request	 Nylon Brass, Silver Plated Stainless Steel (Polished) Prominent Button, details on request
RoHS	Compliant	Compliant

8300 Vandal Resistant Switches

Designed to IP66



H8300RP - - -

Key Features

- Momentary or latching action
- Ratings up to 12(12) @ 250Vac
- Single and double pole
- Stainless steel button & bezel
- Vandal resistant construction
- Choice of body styles
- 19.2mm or 22.5mm mounting holes
- Front panel sealed to IP66
- Raised, flat or domed actuator options

Approvals and specifications

16(4)A 250Vac T85, 1E4 (10,000 Operations)
12(12)A 250Vac T105, 1E4 (10,000 Operations)
8(8)A 250Vac T105, 5E4 (50,000 Operations)
6(6)A 250Vac T125, 5E4 (50,000 Operations)

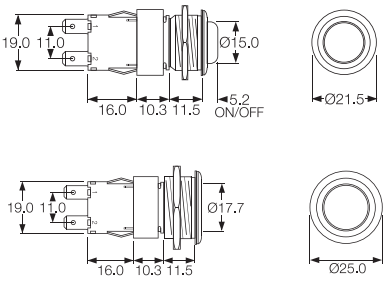
12A 250Vac DP, 13A 250Vac SP
250Vac 1hp, 125Vac 1/2hp
UL 85°C, file E45221, CSA file LR10990

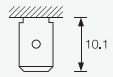
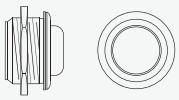
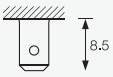
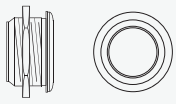
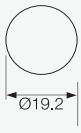
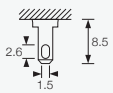
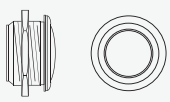
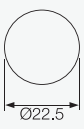
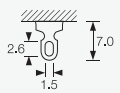
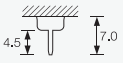
In house test:
10(10)A 250Vac—Indicative rating only

3mm contact gap.
Technical data on pages 4 & 5 (switches), 6 (indicators).

Dimensions

8300RP (H terminals shown)



Terminal	Function	Actuator	Body Code
C 	**8300** (alternate) Single pole ON - OFF 	**R** (for P body only) Raised top (stainless steel) 	
H 	**8301** (momentary ON) Single pole ON - OFF 	**V** Flat top (stainless steel) 	**P** (for R actuator only) Stainless steel, Soft profile bezel 
K 	**8350** (alternate) Double pole ON - OFF 	**P** Domed top (stainless steel) 	**M** Stainless steel 
T 	**8301** (momentary ON) Single pole ON - OFF 		
V 			
X 			

0911 Vandal Resistant Switches

Designed to IP66



C0911VA - - -

Key Features

- Snap action switches
- Ratings up to 16A, 250Vac
- Round and rectangular buttons
- Single Pole C/O Switch

Approvals and specifications

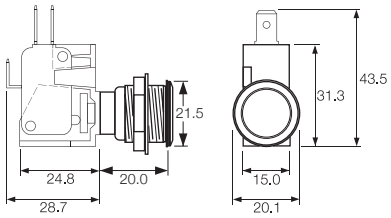
16(4)A 250Vac 5E4 T85

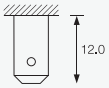
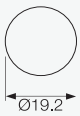
16A 125/250Vac 3/4hp T85 50E3
125V 1/2 HP, 250V 3/4 HP, 0.4A 125Vdc, 0.2A 250Vdc

Approvals apply to switch mechanism only.
µ contact gap.

Dimensions

C0911VA



Terminal	Function	Actuator	Body Code
	**0911** (momentary) ON - ON 	**V** Flat top (stainless steel) 	**A** Stainless steel Chamfer profile bezel  Panel cut-out Panel thickness up to 8.0mm

Bulgin's broad line of pushbutton switches are available in various sizes and configurations. This includes a variety of illumination and terminal options as well as several with high inductive power ratings suitable for motor driven applications. These switches can be found in many markets including home appliances, commercial, medical, audio and security.

- Miniature, round and rectangular push button switches available
- Ratings up to 16A, 250V ac
  12(12)A 250V ac rating also available
- Latching and momentary actions
- Choice of actuators
  (custom option also available)
- Square and Round Mounting Styles

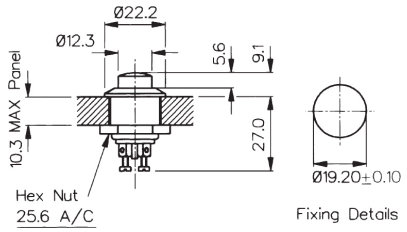


Front Panel Mounting



MP0012/Col

- 22mm diameter
- Prominent Button
- S.P. Push to Make
- Screw Terminals
- Brass, Chrome Plated Body, Glass Filled Nylon Button

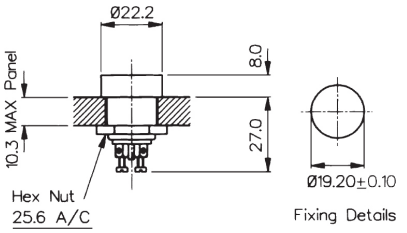


Front Panel Mounting



MP0012/1/Col

- 22mm diameter
- Recessed Button
- S.P. Push to Make
- Screw Terminals
- Brass, Chrome Plated Body, Glass Filled Nylon Button

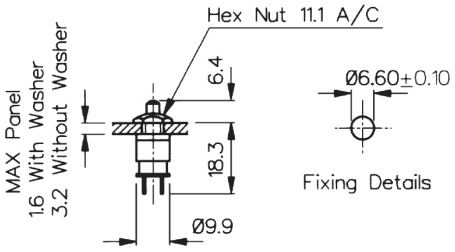


Rear Panel Mounting



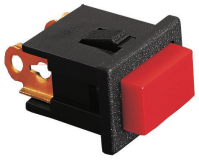
MP0016

- S.P. Push to Make
- Solder Tags
- 1A, 28Vac/dc
- Brass Nickel Plated Body, Glass Filled Nylon Button



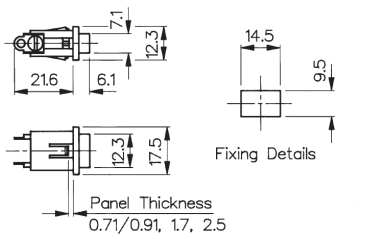
Specifications	MP0012/Colour	MP0012/1/Colour	MP0016/Colour
Terminations:	Screw Terminals	Screw Terminals	Solder Tags
Switching:	S.P. Push to Make Slow Momentary Action	S.P. Push to Make Slow Momentary Action	S.P. Push to Make Slow Momentary Action
Max. Rating:	0.25A. 250Vac, 1A. 110Vac, 2A. 12Vac/dc	0.25A. 250Vac, 1A. 110Vac, 2A. 12Vac/dc	1A 28Vac/dc (non-inductive)
Contact Resistance:	<15mΩ	<15mΩ	<15mΩ
Insulation Resistance:	$>10^4$ MΩ	$>10^4$ MΩ	$>10^4$ MΩ
Dielectric Strength:	>2.5kVac	>2.5kVac	>2.0kVac
Operating Temp. Range:	–20°C to +85°C	–20°C to +85°C	–20°C to +85°C
Operation Pressure (typ):	9.18 newtons	9.18 newtons	6.22 newtons
Materials Moulding: Body:	 Glass Filled Nylon Brass, Brass, Chrome Plated	 Glass Filled Nylon Brass, Brass, Chrome Plated	 Glass Filled Nylon Brass, Brass, Chrome Plated
Contacts/Terms:	Brass, Silver Plated	Brass, Silver Plated	Brass, Silver Plated
Variant	Button Colour: Standard - Black, /RD (Red)	Button Colour: Standard - Black, /RD (Red)	Button Colour: Standard - Black, /RD (Red)
RoHS	Compliant	Compliant	Compliant

Front Panel Mounting



MP0022/Col

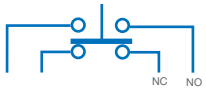
- S.P. Push to Make
- Solder Tags
- Nylon Body & Button



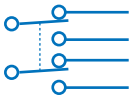
Switch Contact Operation



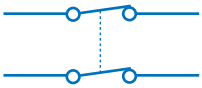
S.P. Push to Make S.P.M.B



S.P.C.O.



D.P.C.O.



D.P.M.B.

Specifications	MP0022/Colour
Terminations:	Solder Tags
Switching:	S.P. Push to Make Slow Momentary Action
Max. Rating:	0.25A. 250Vac, 0.5A. 110Vac, 1A. 0.1 to 28Vac/dc
Contact Resistance:	<15mΩ
Insulation Resistance:	$>10^4$ MΩ
Dielectric Strength:	>2.5kVac
Operating Temp. Range:	–20°C to +70°C
Sealing:	
Materials Moulding: Tags: Body:	 Nylon Brass, Silver Plated Nylon
Contacts/Terms:	Brass, Silver Plated
Variant	Button Colours: Standard - Black, /WH (White) and /RD (Red). /TERM - (Screw terminals)
RoHS	Compliant

8300 Series Push Button

8(8)A 250Vac & 12(12)A 250Vac



Key Features

- Miniature push button
- 8A Inductive current rating
- Ratings up to 12(12)A, 250V ac (H suffix)
- Illuminated and nonillumi-nated
- Single and double pole
- Latching and momentary
- Slotted actuator for custom buttons
- Industry standard panel cutout
- BioCote antimicrobial option
- Panel cut out: 19.3 x 12.9

Approvals and specifications

16(4)A 250Vac T85, 1E4 (10,000 Operations)
12(12)A 250Vac T105, 1E4 (10,000 Operations)
8(8)A 250Vac T105, 5E4 (50,000 Operations)
6(6)A 250Vac T125, 5E4 (50,000 Operations)

8350, 8351, 8353, 8354
12A 250Vac DP, 250Vac 1hp, 125Vac 1/2hp

8300, 8301, 8303, 8304
13A 250Vac SP, 250Vac 1hp, 125Vac 1/2hp

UL 85°C, file E45221, CSA file LR10990

In house test:
10(10)A 250Vac—Indicative rating only

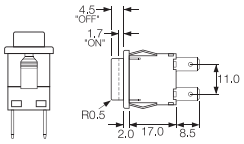
BioCote antimicrobial additive. Independently verified to ISO22196:2007.

3mm contact gap.

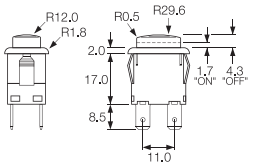
Terminal	Function	Actuator	Body Code	Body Colour
C 6.3 x 0.8 **H** 4.8 x 0.8 **A** As "H" but right angle 4.8 x 0.8 **K** 2.8 x 0.8 **T** Solder **X** PCB 0.8 Sq **V** Dual pin PCB (Call sales for mounting dims)	Approvals & ratings vary with function Single pole switches use terminals 1 & 2 (& 3) **8300** Single Pole ON - OFF **8301** Single Pole ON - OFF (momentary ON) **8303** Single Pole ON - OFF With Light **8304** Single Pole ON - OFF (momentary ON) with light **8350** Double pole ON - OFF **8351** Double pole ON - OFF (momentary ON) **8353** Double pole ON - OFF With light **8354** Double pole ON - OFF (momentary ON) with light **8355** Single pole ON - OFF Isolated light - switched C, E & M actuators only **8356** Single pole ON - OFF Isolated light - unswitched C, E & M actuators only	**A** Standard actuator **H** Slotted for custom caps **C** Square actuator **E** Radiused actuator **F** Small round actuator **J** Smooth curved actuator **M** **D** Large round actuator All actuators except H available lit	Panel cut-out ** Bezel **B** Standard body **E** Softline style body with radiused bezel Cut-outs must be punched in the direction of insertion **Dimensions for snap-in fixing** Panel thickness: 0.75-1.24, 1.25-1.99, 2.00-3.00 Dimension X: 19.1/19.2, 19.3/19.4, 19.7/19.8 X and V PCB terminals. Additional dummy terminals may be supplied for extra support.	**B** Black **W** White

Dimensions

Actuator A
Body B



Actuator J
Body E



Examples



H8350AB - - -
T8350AB - - -



H8353JE - - -
T8353JE - - -



H8353EB - - -
T8353EB - - -



H8353CB - - -
T8353CB - - -

Actuator Colour	Lamp Voltage	Legend	Legend Colour	Options	Biocote
LIT					
A Amber	_ None			H 12(12)A 250Vac switch rating Finish Matt finish standard except on J and D actuators which are gloss Colour Call sales for custom colours A full range is available for large orders Legend printing Select from the examples or call sales for custom legends. Special buttons Some of the many options are shown Call sales for the full range L167 Protective cover	**B** Biocote
C Clear	**2** 125V Neon				
G Green	**3** 250V Neon				
R Red	**7** 12V Filament				
	8 24V Filament				
UNLIT					
B Black					
R Red					
W White					



Snaps on to switch bodies fitted with “A” or “J” style actuators, this reduces panel thickness by 0.8mm

BioCote Antimicrobial Additive
Moulded components have antimicrobial properties using BioCote silver ion technology.

8200 Series Push Button

8(8)A 250Vac & 12(12)A 250Vac



Key Features

- Miniature push button
- 8A Inductive current rating
- Ratings up to 12(12)A, 250V ac (H suffix)
- Without button
- Sub panel mount
- Push on, solder or PCB terminals
- Latching and momentary

Approvals and specifications

16(4)A 250Vac T85, 1E4 (10,000 Operations)
12(12)A 250Vac T105, 1E4 (10,000 Operations)
8(8)A 250Vac T105, 5E4 (50,000 Operations)
6(6)A 250Vac T125, 5E4 (50,000 Operations)

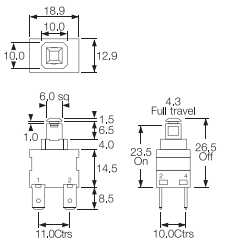
12A 250Vac
250Vac 1hp, 125Vac 1/2hp
UL 85°C, file E45221, CSA file LR10990

3mm contact gap.

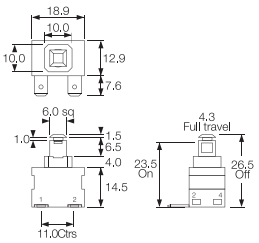
Terminal	Function	Actuator	Body Code
C 6.3 x 0.8	1 2 3 4 Approvals & ratings vary with function. Single pole switches use terminals 1 & 2 (& 3)	**A** Standard actuator for snap-on custom adaptors	**A** Standard body
H 4.8 x 0.8	**8200** Single Pole ON - OFF	**B** Flat top actuator	See dimensioned drawings for details
A As "H" but right angle 4.8 x 0.8	**8201** Single Pole ON - OFF (momentary ON)	**C** Curved top actuator	**C** As standard body but with side support peg for use with M PCB terminals
K 2.8 x 0.8		**Examples of possible actuation methods** Using a Snap on adaptor	
T Solder	**8250** Double Pole ON - OFF	Using a Hinged Actuator	
V Dual pin PCB (Call sales for mounting dims)			X and V PCB terminals. Additional dummy terminals may be supplied for extra support.
X PCB 0.8 Sq	**8251** Double Pole ON - OFF (momentary ON)		

Dimensions

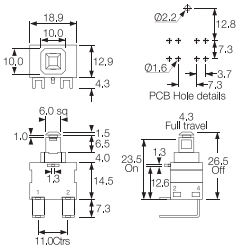
'A' body with 'H' 4.8 terminals



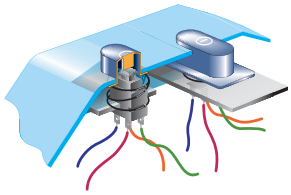
'A' body with 'A' right angle 4.8 terminals



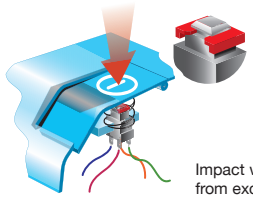
'C' body with 'M' right angle PCB terminals



Example of possible mounting styles



Alternative Actuator



Impact washer resists damage from excessive operator force

Examples



C8250AA - - - with impact washer M1226



X8201AA - - -



K8200AA - - -



A8200AA - - -



M8200AC - - -



Example of M8200AC

7000 Series Push Button

16A 250Vac



Key Features

- Round and rectangular push button switches
- Ratings up to 16A, 250V ac
- Latching and momentary
- Illuminated & non-illuminated
- Matching indicators
- Low profile version
- Panel cut outs: 25.0 dia 27.2 x 22.3

Approvals and specifications

16(4)A 250Vac T125
8(8)A 250Vac T85

UL CSA 16A Non Ind, 250Vac 1hp, 125Vac 1/2hp
UL 65°C, file no. E45221, CSA file no. LR10990

3mm contact gap.

Terminal	Function	Actuator	Body Code

Terminal

C



H



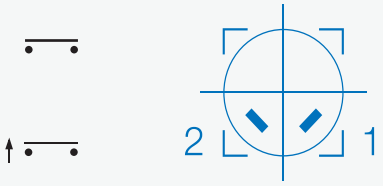
Function



Approvals & ratings vary with function
Single pole switches use terminals 1 & 2 (& 3)

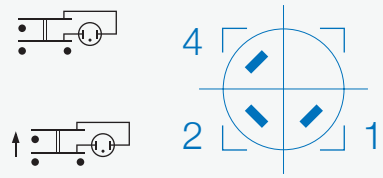
7000
Single Pole
ON - OFF

7001
Single Pole (momentary)
ON - OFF



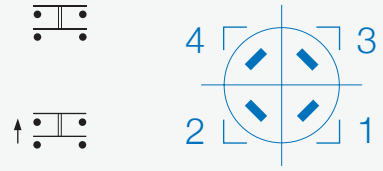
7003
Single Pole (with light)
ON - OFF

7004
Single Pole (momentary) with light
ON - OFF



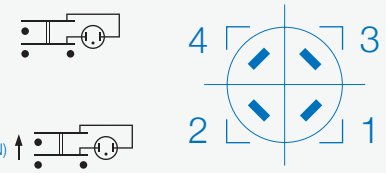
7050
Double Pole
ON - OFF

7051
Double Pole with light
ON - OFF

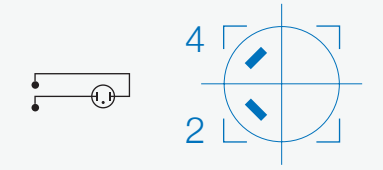


7053
Double pole with light
ON - OFF

7054
Double pole (momentary ON) with light
ON - OFF

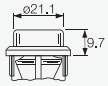


7030
Indicator
UL E63363
CSA LR29381



Actuator

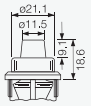
A Round actuator shown in F body



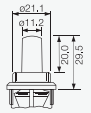
A Round actuator shown in G body



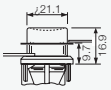
B Round actuator - medium shown in F body



C Round actuator - long shown in F body



D Round actuator - sub panel mount



S Rectangular actuator Shown in "A" body N/A for 7030

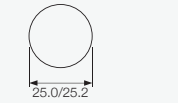


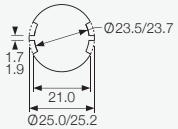
Body Code

Panel cut-outs

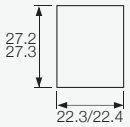
F H G

Body types fit either cut-out





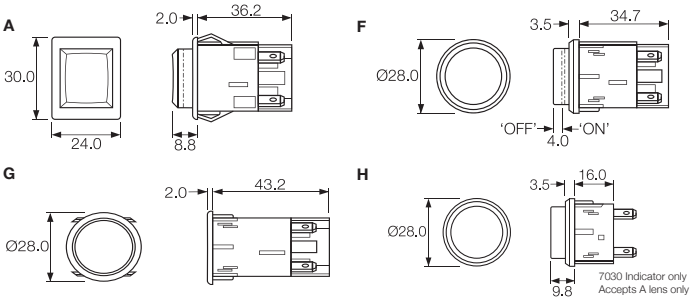
A



Cut-outs must be punched in the direction of insertion

Dimensions

Panel thickness:
A - 0.8 - 2.5mm
F, G, H - 0.8 - 5.0mm



Examples



C7000AF - - -



C7003AF - - -



C7050SA - - -



C7053AG - - -

Body Colour	Actuator Colour	Lamp Voltage	Legend	Legend Colour	Options
	LIT				
B Black	**A** Amber	**_** None			
W White	**C** Clear	**2** 125V Neon			
	G Green	**3** 250V Neon			
	R Red	**7** 12V Filament			
		8 24V Filament			
	UNLIT				
	B Black				
	R Red				
	W White				

Finish
Matt finish is standard on bodies.
Gloss finish is standard on actuators.

Colour
Call sales for custom colours.
A full range is available for large orders.

Legend printing
A wide range is available or call sales for custom legends.

Lamp voltage
Call sales for details of available voltages.

Weatherproof housing (E)
Additional housing which fits round body switches with an oversize housing with a clear silicone cover designed to IP65.
Mounting hole dia: 38.0mm

0911 Push Button Switches

0.5A 250Vac



C0911RB - - -



C0911PB - - -



C0911KB - - -

Key Features

- Snap action switches
- Ratings up to 16A, 250Vac
- Round and rectangular buttons

Approvals and specifications

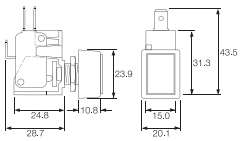
16(4)A 250Vac 5E4 T85

16A 125/250Vac 3/4hp T85 50E3
125V 1/2 HP, 250V 3/4 HP, 0.4A 125Vdc, 0.2A 250Vdc

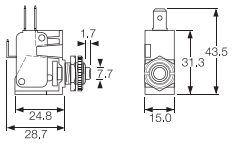
Approvals apply to switch mechanism only.
μ contact gap.

Dimensions

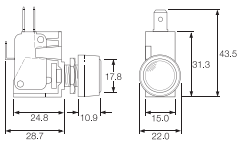
R

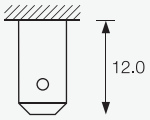
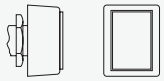
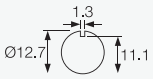


P



K & N



Terminal	Function	Actuator	Body Code	Options
	**0911** (momentary) ON - ON 	**R** Rectangular bezel  **P** Short  **K** with satin chrome bezel  **N** with nylon bezel 	 Panel Cut-out Panel thickness Both nuts 2.5mm No backnut 4.0mm	Call factory for custom colours

0916 - 0920 Push Button Switches

0.5A 250Vac







Key Features

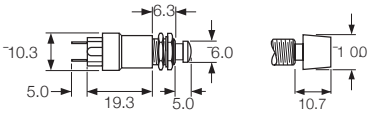
- Self wiping contacts
- Slow make & break
- Momentary action
- Choice of switch circuits
- Choice of actuators

Approvals and specifications

In house test:
0.5A 250Vac T85 — Indicative rating only

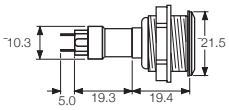
Dimensions

Dimensions (mm) Nylon S and L actuators

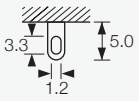
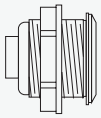
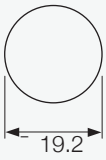


Neck thread - 40 TPI Whit. Actuator travel - 2.5 max

Stainless steel V actuator (IP66)



Neck thread - 26 TPI Whit. Actuator travel - 2.5 max

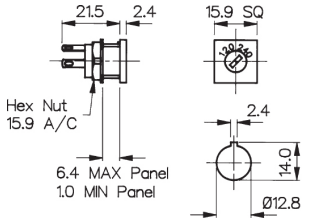
Terminal	Function	Actuator	Body Code	Options
T  Solder	**0916**  Black base SP ON - OFF (momentary) **0917** 50V only  Brown base SP ON - OFF (momentary 1 side) **0918**  White base SP ON - OFF (momentary OFF) **0919**  Black base DP ON - OFF (momentary 1 side) **0920**  White base DP ON - OFF (momentary ON)	**S** Small Actuator  **L** Large Actuator  **V** Vandal Resistant IP66 Flattop Stainless Steel 	 Panel Cut-out (L & S Actuators) Panel thickness Both nuts - 2.5mm No Backnut - 4.0  Panel Cut-out (Stainles Steel V Actuator) Panel thickness - 8.0mm	Finish Gloss finish for L and S actuators. Colour Call sales for custom colours. A full range is available for large orders.

120/140V Voltage Selector



VS0001

- 2.8 series tabs/solder tags
- Square Front Bezel
- 6.3A
- CSA & VDE approvals



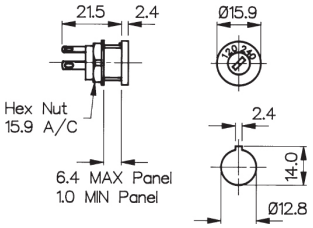
Fixing Details

120/140V Voltage Selector



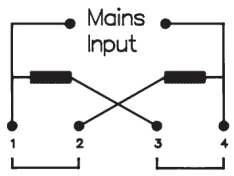
VS0002

- 2.8 series tabs/Solder tags
- Round Front Bezel
- 6.3A
- CSA & VDE approvals

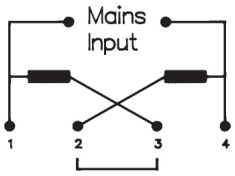


Fixing Details

Connection Parallel 120V



Connection Series 240V



Specifications	VS0001	VS0002
Max. Rating:	6.3A, 120 / 240	6.3A, 120 / 240
Insulation Resistance:	>106 MΩ	>106 MΩ
Termination:	2.8 series tabs/solder tags	2.8 series tabs/solder tags
Temperature Range:	–20°C to +85°C	–20°C to +85°C
Materials:		
Mouldings:	Glass Filled Nylon UL94V-1	Glass Filled Nylon UL94V-1
Tags:	Brass, Silver Plated	Brass, Silver Plated
Contacts:	Copper Silver Alloy	Copper Silver Alloy
Approvals:		
Variants:	Other markings, details on request	Other markings, details on request
RoHS		Compliant

Unlike traditional switches Piezo switches have no moving mechanical parts making them extremely durable, withstanding millions of actuations and requiring little to no maintenance.



16mm Stainless Steel

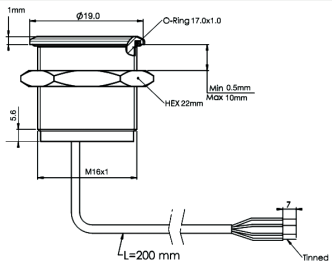
Non Illuminated

16MM Stainless Steel Non Illuminated



MPZ016

- Non Illuminated
- 20 cm lead
- Flathead or Guided profile



Specification — MPZ016

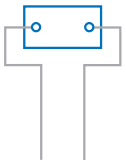
Type	Momentary
Material	Stainless Steel (Aluminium upon request)
Maximum Voltage	24V AC/DC
Switch Resistance “ON“	<1Ω
Switch Resistance “OFF“	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching current (prolonged)	300 mA
Switching pulse time (momentary)	up to 0.3 sec
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental Specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85C°
Vibration resistance	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

Circuit Specification

16MM Stainless Steel Non Illuminated



Switch voltage	24V AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

19mm Stainless Steel

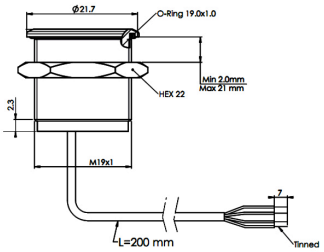
Illuminated and Non Illuminated

19MM Stainless Steel Illuminated

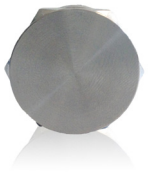


MPZI019

- Blue Illumination
- 20 cm lead
- Flathead

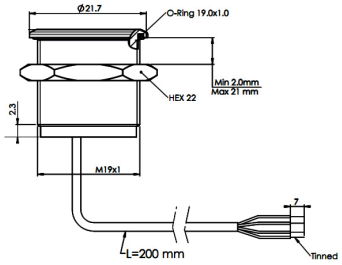


19MM Stainless Steel Non Illuminated



MPZ019

- Non Illumination
- 20 cm lead
- Flathead



Specification — MPZ019, MPZI019

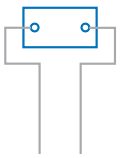
Type	Momentary
Material	Stainless Steel (Aluminium upon request)
Maximum Voltage	24V AC/DC
Switch Resistance “ON“	<1Ω
Switch Resistance “OFF“	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching current (prolonged)	300 mA
Switching pulse time (momentary)	up to 0.3 sec
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental Specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85C°
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

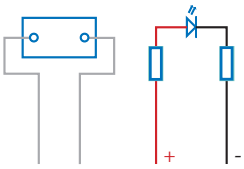
Circuit Specification

19MM Stainless Steel Non Illuminated



Switch voltage	24V AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

19MM Stainless Steel Illuminated



Switch voltage	24 V AC/DC
Switch Current	1A Max
Colour* Illuminated	24V AC/DC
Power Supply	24V AC/DC

22mm Stainless Steel

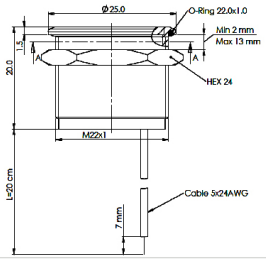
Illuminated and Non Illuminated

22MM Stainless Steel Non Illuminated



MPZ022

- Non Illumination
- 20 cm lead
- Flathead

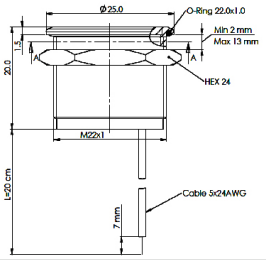


22MM Stainless Steel Illuminated



MPZI022

- Red or Green Illumination
- 1 colour
- 20 cm lead
- Flathead

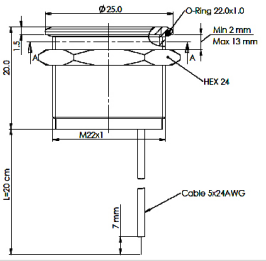


22MM Stainless Steel Illuminated



MPZI022

- Red and Green Illumination
- (2 colour)
- 20 cm lead
- Flathead



Specification — MPZ022, MPZI022

Type	Momentary
Material	Stainless Steel (Aluminium upon request)
Maximum Voltage	24V AC/DC
Switch Resistance “ON“	<1Ω
Switch Resistance “OFF“	5MΩ
Capacitance	100pF
Switching current (momentary)	1A Max
Switching current (prolonged)	300 mA
Switching pulse time (momentary)	up to 0.3 sec
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental Specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85C°
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

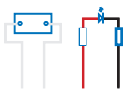
Circuit Specification

22MM Stainless Steel Non Illuminated



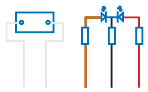
Switch Voltage	24 AC/DC
Switch Current	1A Max
Power Supply	24V AC/DC

22MM Stainless Steel Illuminated 1 colour



Switch Voltage	24V AC/DC
Switch Current	1A Max
Color* Illuminated	24V AC/DC
Power Supply	24 AC/DC

22MM Stainless Steel Illuminated 2 colour



Switch Voltage	24V AC/DC
Switch Current	1A Max
Color* Illuminated	24V AC/DC
Power Supply	24 AC/DC

22mm Stainless Steel Flathead

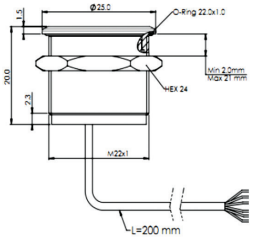
Illuminated

22MM Stainless Steel Illuminated



MPZI022/L

- Blue Illumination
- 1 colour
- 20 cm lead



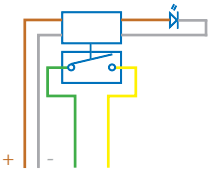
Specification	MPZI022/L
Type	Latching Toggle
Material	Stainless Steel (Aluminium upon request)
Power Supply	24V AC/DC
Switching voltage	48V AC peak/DC
Switch Resistance “ON“	<0.7Ω
Switch Resistance “OFF“	>1000MΩ
Capacitance	<90pF
Switching current	1A Max
LED Illumination	24V AC/DC
Actuating force, typically	3-5 N
Life cycle	>10 Million

Environmental specification

Sealing	IP68; IP69K
Operating temperature	-40°C to +85C°
Vibration Resistances	5-500Hz/9.4m
Shock resistance	75g (g-force)
RoHS	Compliant

Circuit Specification

22MM Stainless Steel Latching Toggle Illuminated



Power Supply	24V AC/DC
Switch Voltage	48V AC peak/ DC
Switch Current Max	1A Max
Colour* Illuminated	24V AC/DC

Part No System

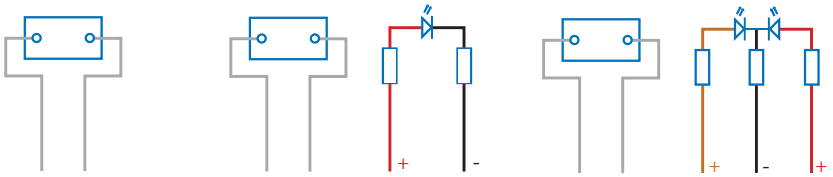
MPZ	/	016	/	X	/	XX	/	X	/	X

Series	Body Diameter	Profile	Colour	Led Voltage	Type
MPZ - Non Illuminated MPZI- Illuminated	016 = 16mm 019 = 19mm 022 = 22mm	F = Flat Head G = Guided Profile	BL = Blue RD = Red GN = Green D1 = Red and green	24v	L = Latching Toggle (No Suffix= Momentary)

Examples:

MPZ022/F = Non Illuminated Piezo, 22mm, Flathead
MPZI022/F/RD/24 = Illuminated Piezo, 22mm, Flathead, Red Illumination, 24 volt
MPZI022/G/BL/24/L = Illuminated Piezo, 22mm, Guided Profile, Blue Illumination, 24 volt, Latching Toggle

Circuit Specifications

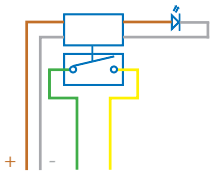


Non Illuminated | One colour Illuminated | Two colour Illuminated

Switch voltage 24V AC/DC
Switch Current 1A Max

+

Colour* Illuminated 24V AC/DC
Power Supply 24V AC/DC



One colour Illuminated (Latching Toggle)

Power Supply	24V AC/DC
Switch Voltage	48V AC peak/ DC
Switch Current	1A Max
Colour* Illuminated	24V AC/DC

Other switches are available upon request*

Miniature Stainless Steel Vandal Resistant

Prominent Button / Flush Profile

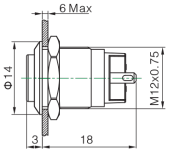
MAV0120

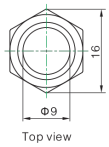


MAV0120

- Prominent and Flush Profile
- 12mm Diameter
- 2A, 36 dc
- IP67 (Front of Panel Only)

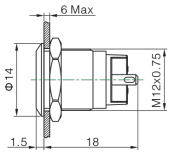
Prominent Profile





Top view

Flush Profile

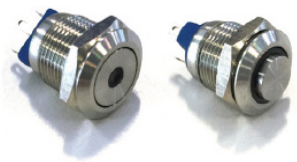


Specification	MAV0120/3	MAV0120/1
Terminations:	P - Solder Tabs	P - Solder Tabs
Switching:	S.P. Push to make	S.P. Push to make
Max Rating:	2A, 36Vdc	2A, 36Vdc
Contact Resistance:	≥50MΩ	≥50MΩ
Insulation Resistance:	≥1000MΩ	≥1000MΩ
Dielectric Strength:	1500V, AC 50Hz, 5 Secs	1500V, AC 50Hz, 5 Secs
Operating Temp Range:	*-25°C ~ +55°C	*-25°C ~ +55°C
Operations		
Mechanical:	500,000 (min)	500,000 (min)
Electrical:	200,000 (min)	200,000 (min)
Sealing (Front of Panel Only)	IP67	IP67
Shock Resistance	IK08	IK08
Rear Nut Fixing Torque:	0.6Nm	0.6Nm
Materials		
Mouldings:	PA	PA
Tags/Terminations:	Copper, Gold Plated	Copper, Gold Plated
Switch Body & Button:	Stainless Steel	Stainless Steel
Contacts:	Silver Alloy	Silver Alloy
Thread size:	M12x0.75	M12x0.75
RoHS	Compliant	Compliant

Miniature Stainless Steel Illuminated Vandal Resistant

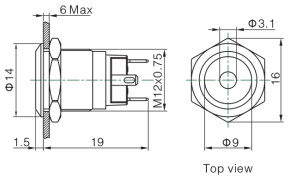
Illuminated traditional

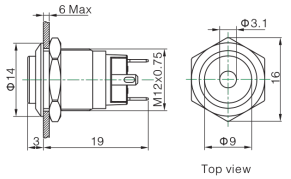
MAV0120

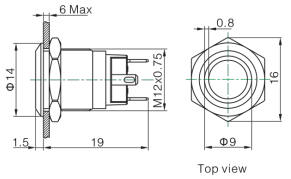


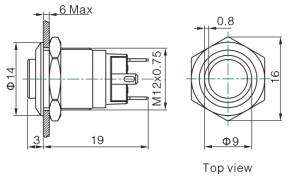
MAV0120

- Dot and Ring Illumination
- Prominent and Flush Profile
- 12mm Diameter
- 2A, 36 dc
- Bright daylight LEDs
- IP67 (Front of Panel Only)









Specification — MAV0120

Terminations:	P - Solder Tabs
Switching:	S.P. Push to make
Max Rating:	2A, 36Vdc
Profile:	Prominent /3 Flush /1
Illumination Type	/1 Dot /2 Ring

LED Ratings

Part No.	/RD	/GN	/BL	/OR	/AM
Colours	Red	Green	Blue	Orange	Yellow
Luminous Intensity					
Forward Voltage	1.8V	2.8V	2.8V	1.8V	1.8V
Forward Current					
Moulding Current	15mA	15mA	15mA	15mA	15mA

Illumination Voltage	/no suffix - No resistor fitted. An Appropriate resistor must be series connected by the user. Voltages as above /12 12V /24 24V
Contact Resistance:	≥50MΩ
Insulation Resistance:	≥1000MΩ
Dielectric Strength:	1500V, AC 50Hz, 5 Secs
Operating Temp. Range:	*-25°C ~ +55°C
Operations	
Mechanical:	500,000 (min)
Electrical:	200,000 (min)
Sealing (Front of Panel Only)	IP67
Shock Resistance	IK08
Rear Nut Fixing Torque:	0.6Nm
Materials	
Mouldings:	PA
Tags/Terminations:	Copper, Gold Plated
Switch Body & Button:	Stainless Steel
Contacts:	Silver Alloy
Thread size:	M12x0.75
RoHS	Compliant

Miniature Domed Metal Vandal Resistant

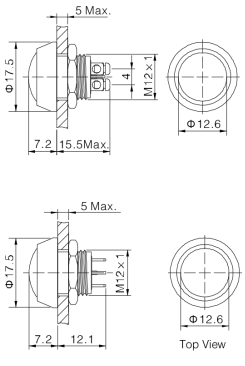
None Illuminated - Metal Dome

MMP0120



MMP0120

- Raised Domed Profile
- 12mm Diameter
- 2A, 36Vac
- IP65 or IP67 (Front of Panel Only)



Specification	MMP0120/S	MMP0120/N
Terminations:	P - Solder Tabs S - Screw Terminal	P - Solder Tabs S - Screw Terminal
Switching:	S.P. Push to make	S.P. Push to make
Max Rating:	2A, 36Vdc	2A, 36Vdc
Contact Resistance:	≥50MΩ	≥50MΩ
Insulation Resistance:	≥1000MΩ	≥1000MΩ
Dielectric Strength:	1500V, AC 50Hz, 5 Secs	1500V, AC 50Hz, 5 Secs
Operating Temp Range:	*-25°C ~ +55°C	*-25°C ~ +55°C
Operations		
Mechanical:	500,000 (min)	500,000 (min)
Electrical:	200,000 (min)	200,000 (min)
Sealing (Front of Panel Only)	IP65 or IP67	IP65 or IP67
Shock Resistance	IK08	IK08
Rear Nut Fixing Torque:	0.3Nm	0.3Nm
Materials		
Mouldings:	PBT	PBT
Tags/Terminations:	Brass, Silver Plated	Brass, Silver Plated
Switch Body & Button:	/SS Stainless Steel	/N - Nickel Plated Brass
Contacts:	Silver Alloy	Silver Alloy
Thread size:	M12x1	M12x1
RoHS	Compliant	Compliant

Miniature Domed PBT Pushbutton

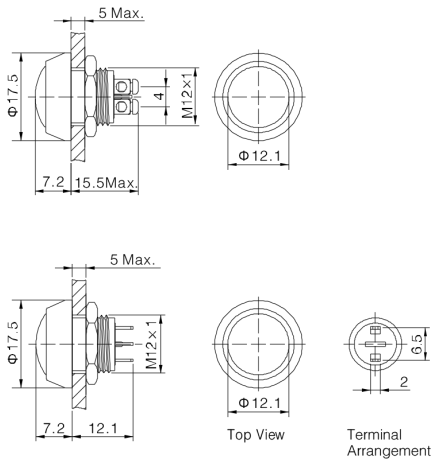
Non Illuminated - PBT

MMP0120/A



MMP0120/A

- Raised Domed Profile
- PBT Material
- 12mm Diameter
- 2A, 36Vac
- IP65 or IP67 (Front of Panel Only)



Specification	MMP0120/A
Terminations:	P - Solder Tabs
Switching:	S.P. Push to make
Max Rating:	2A, 36Vdc
Contact Resistance:	≥50MΩ
Insulation Resistance:	≥1000MΩ
Dielectric Strength:	1500V, AC 50Hz, 5 Secs
Operating Temp Range:	*-25°C ~ +55°C
Operations	
Mechanical:	1,000,000 (min)
Electrical:	200,000 (min)
Sealing (Front of Panel Only)	IP65 or IP67
Shock Resistance	IK08
Rear Nut Fixing Torque:	0.3Nm
Materials	
Mouldings:	PBT
Tags/Terminations:	Brass, Silver Plated
Switch Body	/A Black Anodised
Switch Button:	/NB Nickel Plated Brass /RD RED PBT /GN GREEN PBT /BL BLUE PBT /BK BLACK PBT
Contacts:	Silver Alloy
Thread size:	M12x1
RoHS	Compliant

Miniature Domed Illuminated Pushbutton

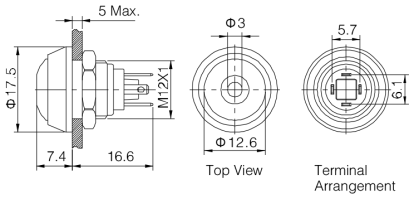
Stainless Steel and PBT

MMPI0120



MMPI0120

- Raised Domed Profile
- Dot Illumination
- Bright daylight LEDs
- 12mm Diameter
- 2A, 36Vac
- IP65 (Front of Panel Only)



Specification	MMPI0120				
Terminations:	P - Solder Tabs				
Switching:	S.P. Push to make				
Max Rating:	2A, 36Vdc				
LED Ratings					
Part No.	SS-RD	SS-GN	NN-RD	ABK-RD	AG-RD
Colours	Red	Green	Red	Red	Red
Luminous Intensity					
Forward Voltage	1.8V	2.8V	1.8V	1.8V	1.8V
Forward Current					
Moulding Current	15mA	15mA	15mA	15mA	15mA
Illumination Voltage	/no suffix - No resistor fitted. An Appropriate resistor must be series connected by the user. Voltages as above				
	/12				
Contact Resistance:	≥50MΩ				
Insulation Resistance:	≥1000MΩ				
Dielectric Strength:	1500V, AC 50Hz, 5 Secs				
Operating Temp. Range:	*-25°C ~ +55°C				
Operations					
Mechanical:	1,000,000 (min)				
Electrical:	200,000 (min)				
Sealing (Front of Panel Only)	IP65				
Shock Resistance	IK08				
Rear Nut Fixing Torque:	0.3Nm				
Materials					
Mouldings:	PBT				
Tags/Terminations:	Brass, Silver Plated				
Switch Body & Button:	Stainless Steel	Stainless Steel	Nickel Plated Brass	Black Anodized Body, Black PBT Button	Black Anodized Body, Green PBT Button
Contacts:	Silver Alloy				
Thread size:	M12x1				
RoHS	Compliant				

12mm Miniature Vandal Resistant Stainless Steel Switch

MAV0120 /	X /	X /	X /	X /	X
Series	**Button**	**Switching Type**	**Type of Illumination**	**Illumination Colour**	**Lamp Voltage**
MAV0120	1 = Flush 3 = Prominent	D = Momentary	Blank = None 1 = Dot 2 = Ring	Blank = None RD = RED GN = GREEN BL = BLUE AM = AMBER/YELLOW OR = ORANGE	Blank = None 012 = 12V 024 = 24V

Examples:

MAV0120/3D = 12mm Prominent Actuator, Momentary, Non Illuminated
MAV0120/3D1BL024 = 12mm Prominent Actuator, Momentary, Blue Dot Illuminated, 24V
MAV0120/3D2GN012 = 12mm Prominent Actuator, Momentary, Green Ring Illuminated, 12V

12mm Miniature Metal/Plastic Domed Pushbutton Switch

MMPXXX /	X /	X /	X /	X /	X /	X
Series	**Body Material**	**Button Material & Colour**	**Sealing**	**Illumination Colour**	**Lamp Voltage**	**Termination**
MMP0120 = Non Illuminated MMPI0120 = Illuminated	S = Stainless Steel N = Nickel Plated Brass A = Black Anodized	SS = Nickel Plated Brass RD = RED PBT GN = GREEN PBT BL = BLUE PBT BK = BLACK PBT	Blank = IP65 67 = IP67 IP67 (non-illuminated only)	Blank = None RD = RED GN = GREEN BL = BLUE AM = AMBER/YELLOW OR = ORANGE	Blank = None 012 = 12V 024 = 24V Other voltages require external resistor	S = Screw Terminals P= Solder Terminals (2.0mm x 0.5mm)

Examples:

MMP0120/SSSS = 12mm, Non Illuminated, All Stainless Steel, IP65, Screw Terminals
MMP0120/ARD67/S = 12mm, Non Illuminated, Black anodized body, Red PBT button, IP67, screw terminals
MMPI0120/NNBRD012P = 12mm, Illuminated , All Nickel Plated Brass with 12V Red Dot illumination, IP65, Pin Terminals

This range of panel mounting indicators consists of many different LED and Neon types, bezel styles and colours. The range has developed to meet the many different needs of panel design including IP66 environmentally sealed versions for use where a front panel seal is needed.

- Available types: Ultra-thin, Miniature, Twin unit, Miniature round and Standard
- Rating from 10A, 250V ac up to 20A, 277V ac
- Single & double pole variants available
- Push-on, solder & PCB terminals
- Illuminated and non-illuminated options
- High in-rush (ON-OFF types)
- Matching Indicators
- Splash resistant options
- Choice of bezel styles and sizes, panel cut-outs and actuators
- Choice of switching circuits including 3 position



8800 Thinline Rocker Switches

10A 250Vac



Key Features

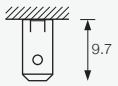
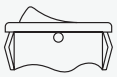
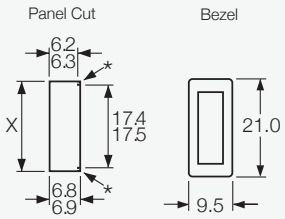
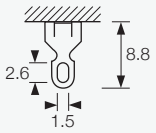
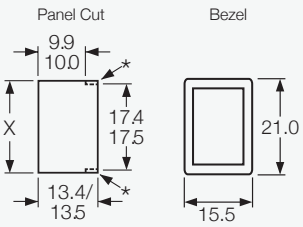
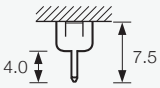
- Ultra thin rocker switch
- Ratings up to 15A, 250Vac
- Single and twin gang
- Panel cut out:
  Single 19.3 x 6.8
  Twin 19.3 x 13.4

Approvals and specifications

10(6)A 250Vac T100 1E4 (10,000 Operations)
6(2)A 250Vac T100 5E4 (50,000 Operations)
Inrush rating 10/50A 1E4 (10,000 Operations)

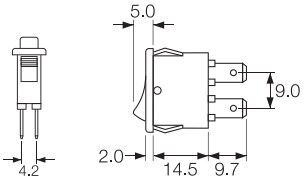
UL CSA 15A 250Vac (Twin unit is 10A 250Vac)
UL CSA 125Vac 1/2hp
UL 100°C, file E45221, CSA file LR10990

3mm contact gap.

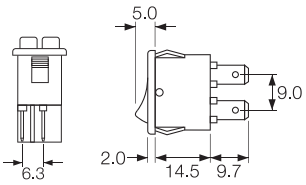
Terminal	Function	Rocker	Body	Body Colour	Rocker Colour
H  	 Switches are ON when pressed over terminal 1 **8800** ON - OFF Single pole		A. Single pole  *Optional profile for orientation	**B** Black **R** Red **W** White	**B** Black **R** Red **W** White
T  	 Switches are ON when pressed over terminal 1 or 3 **8800**  ON - OFF Twin pole		B. Single pole - Twin  *Optional profile for orientation Panel thickness / Dim X 0.75-1.2 / 19.1/19.2 1.25-1.99 / 19.3/19.4 2.00-3.00 / 19.7/19.8 Cut-outs must be punched in the direction of insertion		
X  					

Dimensions

8800VA (H terminals shown)



8800V/8800VA (H terminals shown)



Legend	Legend Colour	Options
— Blank	— Blank	Finish Matt finish only.
132	**B** Black	Colour Call sales for custom colours. A full range is available for large orders.
	W White	Legend printing Select from the examples or call sales for custom legends.

Examples



X8800VA



X8800VA
T8800VA - - -



X8800VA
T8800VA - - -



H8800V/H8800VA
T8800V/T8800VA



H8800V/H8800VA
T8800V/T8800VA

8500 Rocker Switches - Miniature

10A 250Vac Single & Double Pole



Key Features

- Miniature rocker switch
- Ratings up to 15A, 250Vac
- Single & double pole in same body size
- Illuminated & non-illuminated
- Matching indicators
- Industry standard panel cut-out
- Rotary and push button actuator options
- BioCote antimicrobial option
- Panel cut out: 19.3 x 12.9

Approvals and specifications

10(6)A 250Vac T125 IE4 (non lit types)
6(4)A 250Vac T125 5E4 (50,000 Operations)
10(6)A 250Vac T100 (lit types)

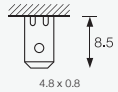
UL CSA 15A Non Ind 250Vac, 14A Ind 250Vac, 10A 277Vac
UL CSA 250Vac 1/2hp, 125Vac 1/4hp
UL 105°C, (non lit) file E45221, CSA file LR10990

BioCote antimicrobial additive. Independently verified to ISO22196:2007.

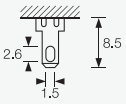
3mm contact gap.

Terminal

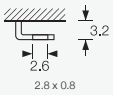
H



K

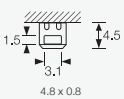


L

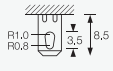


Right angle version of K terminal available on 8500 only

R



T



Solder

Function



ON OFF Switches are ON when pressed over terminal 1

8500

ON - OFF
Single pole
(Uses terminals 1a & 2a)

8503



ON (lit) - OFF
Single pole

8550



ON - OFF
Double pole

8553



ON (lit) - OFF
Double pole

8580
Available with H terminals only

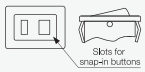


Indicator

UL/CSA E63363

Rocker

H Slotted for custom caps



R Semi-rotary (not lit)



D Paddle lever (not lit)



V Curved (not lit)



V Curved (lit)



X Two colour (not lit)



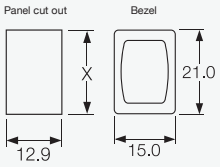
A Softline lens



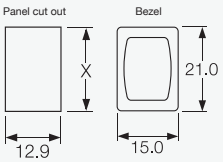
P Push button operation (8500 only)
See drawing opposite

Body

B Standard body with terminal barrier



BC Body without terminal barrier



Dimensions for snap-in fixing

Panel thickness	Dim X
0.75-1.25	19.1/19.2
1.25-2.00	19.3/19.4
2.00-3.00	19.7/19.8

Cut-outs must be punched in the direction of insertion

Body Colour

B Black

R Red

W White

Rocker Colour

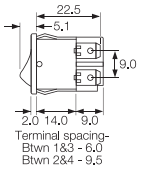
B Black

R Red

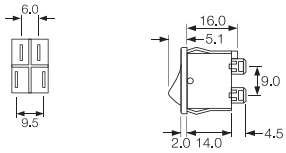
W White

Dimensions

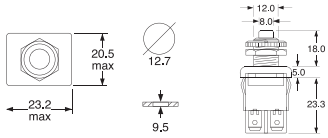
"B" body with barrier for H, T and K terminals



"BC" body w/o barrier primarily for L or R terminals (can be used for all terminals)



'PO' Actuator and body - push button function (8500 only)



Insert Colour	Lamp Voltage	Legend	Legend Colour	Options	Biocote
X Rocker Only	**_** Blank	**_** Blank	**_** Blank	Finish Matt finish only. Colour Call sales for custom colours. A full range is available for large orders.	**B** Biocote
R Red	**2** 125V Neon	**076**	**B** Black	Legend printing Select from the examples or call sales for custom legends. Lamp voltage Call sales for details of available voltages.	
W White	**3** 250V Neon		**W** White	Protective cover L167 Snaps on to bodies with V or X style rockers and A lens. This reduces panel thickness by 0.8mm.	
_ Leave blank for other Rocker types	**7** 12V Filament			 BioCote Antimicrobial Additive Moulded components have antimicrobial properties using BioCote silver ion technology.	
	8 24V Filament				

Examples



H8500VB - - -
T8500VB - - -



H8550VB - - -
T8550VB - - -



H8550HB - - -
T8550HB - - -



H8550XB - - -
T8550XB - - -



H8550RB Semi-rotary
A splash proofing option



H8500PO - - -
Pushbutton option



H8553VB - - -
T8553VB - - -



H8580AB - - -

8600 Rocker Switches - Miniature

10A 250Vac Single & Double Pole



Key Features

- Miniature rocker switch
- Ratings up to 16A, 250Vac
- Single & double pole
- ON/OFF, C/O, biased and centre off switching
- Push on, solder and PCB terminals
- Illuminated and non illuminated
- Matching indicators
- Panel cut out
  single: 19.3 x 12.9
  double: 19.3 x 21.9

Approvals and specifications

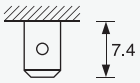
10(4)A 250Vac T90 (unless noted below)

UL CSA See ratings below
UL 65°C, file E45221, CSA file LR10990

3mm contact gap except where marked µ.

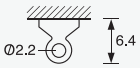
Terminal

H



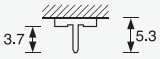
4.8 x 0.8

T



3.5 x 0.8
Solder

X



PCB
0.8Sq

Double Pole switches with "X" terminals are supplied without terminal barriers

Function

Approvals & ratings vary with function



ON OFF Switches are ON when pressed over terminal 3



8600
10(4)A
16A 250V, 10A 277V
1/2HP 277V,1/4HP 125V
ON - OFF

8650
10(4)A
10A 277V
1/2HP 277V,1/4HP 125V
ON - OFF

8601
6(1)A
16A 250V, 6A 277V
ON - OFF
(momentary ON)

8651
6(1)A
6A 277V
ON - OFF
(momentary ON)

8602
10A
6A 277V
ON - OFF
(momentary OFF)

8652
10(4)A
6A 277V
ON - OFF
(momentary OFF)

N/A

ON - OFF
Lit

8653
10(4)A
6A 277V
ON - OFF
Lit

8610
6(1)A
10A 277V
1/2HP 277V,1/4HP 125V
ON - ON

8660
6(1)A
10A 277V
1/2HP 277V,1/4HP 125V
ON - ON

8611
6A 277V
ON - ON
(momentary 1 side)

8661
6A 277V
ON - ON
(momentary 1 side)

8620 µ
ON - OFF - ON

8670 µ
ON - OFF - ON

8630
6(1)A
UL E63363
CSA LR29381
KEMA-KUER

Indicators

N/A

Rocker

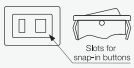
V Curved



V Curved (lit)



H Slotted for actuator (8600 and 8610 only)



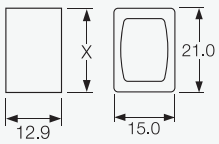
F Flat Indicator only (Single pole)



Body

B Single pole

Panel cut out / Bezel



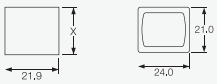
Single Pole dimensions for snap-in fixing

Panel thickness	Dim X
0.75-1.25	19.1/19.2
1.25-1.99	19.3/19.4
2.00-3.00	19.7/19.8

B (Double Pole) with terminal barrier

BC (Double Pole) w/o terminal barrier

Panel cut out / Bezel



Double Pole dimensions for snap-in fixing

Panel thickness	Dim X
0.75-1.24	19.1/19.2
1.25-1.99	19.3/19.4
2.00-3.00	19.7/19.8

Cut-outs must be punched in the direction of insertion

Body Colour

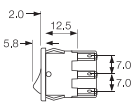
B Black

R Red

W White

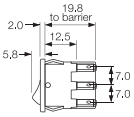
Dimensions

Single pole



Terminals shown
are "H" 4.8 push on type

Double pole



Terminal spacing
10.2 between pole centres

Rocker Colour	Lamp Voltage	Legend	Legend Colour	Options
Lit (DP)	— Blank	— Blank	— Blank	Finish Matt finish only. Colour Call sales for custom colours. A full range is available for large orders. Legend printing Select from the examples or call sales for custom legend. Lamp voltage Call sales for details of available voltages. Blanking plate A8634FB Dummy unit to fill unused panel holes. Single pole size only. Protective covers L167 for SP L180 for DP Snap on to bodies with V rocker or F lens. This reduces panel thickness by 2.2mm.  Single Pole options Most switches shown can have single pole switching in double pole bodies.
A Amber	**2** 125V Neon	**076**	**B** Black	
C Clear	**3** 250V Neon		**W** White	
G Green	**7** 12V Filament			
R Red	**8** 24V Filament			
Lit (DP)				
B Black				
R Red				
W White				

Examples



H8600VB - - -
T8600VB - - -



H8600VB - - -
T8600VB - - -



H8630FB - - -
T8630FB - - -



H8650VB - - -
T8650VB - - -



H8660VB - - -
T8660VB - - -



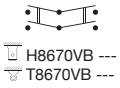
H8653VB - - -
T8653VB - - -

8620 & 8670 Rocker Switches

3 Positions - 10A 250Vac









Key Features

- 3 position miniature rocker switch
- Ratings up to 15A, 250Vac
- Single & double pole
- Centre off switching
- Push on, solder and PCB terminals
- Matching indicators
- Panel cut out: single: 19.3 x 12.9 double: 19.3 x 21.9

Approvals and specifications

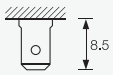
10(4)A 250Vac T90

UL CSA 15A 277Vac (Single pole)
UL CSA 250Vac 1/2hp (Single pole)
UL CSA 125Vac 1/4hp (Single pole)
UL CSA 10A 277Vac (Double pole)
UL CSA 277Vac 1/2hp (Single & Double pole)
UL 90°C, file E45221, CSA file LR10990

µ contact gap.

Terminal

H



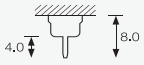
4.8 x 0.8

T



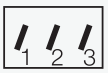
Solder

X



PCB 0.8sq
Double pole switch-es with X terminals are supplied without terminal barriers

Function



8620

ON - OFF - ON
Single pole



8670



ON - OFF - ON
Double pole

Rocker

V



Curved

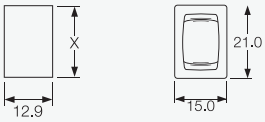
H



Slotted for actuator (8620 only)

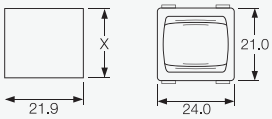
Body

B Single pole



Panel thickness	Dim X
0.75-1.24	19.1/19.2
1.25-1.99	19.3/19.4
2.00-3.00	19.7/19.8

B Single pole - Twin



Panel thickness	Dim X
0.75-1.24	19.1/19.2
1.25-1.99	19.3/19.4
2.00-3.00	19.7/19.8

Cut-outs must be punched in the direction of insertion

Body Colour

B Black

R Red

W White

Rocker Colour

Lit (DP)

A Amber

C Clear

G Green

R Red

Lit (DP)

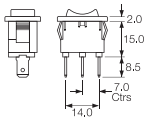
B Black

R Red

W White

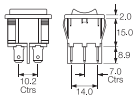
Dimensions

Single pole



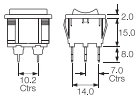
Terminals shown
are "H" 4.8 push on type

Double pole



Terminal spacing
10.2 between pole centres

Double pole



Terminal spacing
10.2 between pole centres

Lamp Voltage	Legend	Legend Colour	Options
— Blank	— Blank	— Blank	Finish Matt finish only. Colour Call sales for custom colours. A full range is available for large orders. Legend printing Select from the examples or call sales for custom legend. Lamp voltage Call sales for details of available voltages. Blanking plate A8634FB Dummy unit to fill unused panel holes. Single pole size only. Protective covers L167 for SP L180 for DP Snap on to bodies with V rocker or F lens. This reduces panel thickness by 2.2mm.
2 125V Neon	**076**	**B** Black	
3 250V Neon		**W** White	
7 12V Filament			
8 24V Filament			

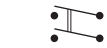


Single Pole options
Most switches shown can have single pole switching in double pole bodies.

1250 Rocker Switches

10A 250Vac

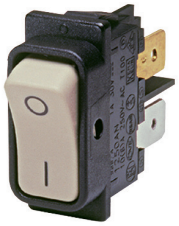




C1250AP ---

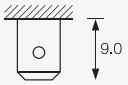
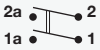
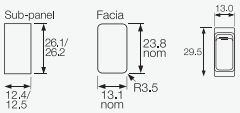
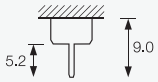
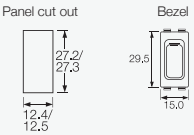


C1250AN ---



Key Features

- Standard rocker switch
- Double pole in single pole body
- Snap in or sub panel mount
- Integral terminal barrier
- Push on or PCB terminals
- Panel cut out:
  27.2 x 12.4 (snap in)
  26.3 x 12.4 (sub panel mount)

Terminal	Function	Rocker	Body	Body Colour	Rocker Colour
C  6.3 x 0.8	 On when pressed over terminal 1 **1250**  ON - OFF Double pole Poles are 9.0mm between centres.	**A** Curved  Shown in N body	**N** Panel cut-out / Bezel  Panel thickness / Dim X 0.75-1.24 / 26.1/26.2 1.25-1.99 / 26.3/26.4 2.00-3.00 / 26.7/26.8	**B** Black **W** White	**B** Black **W** White
X  PCB 0.8sq (N body only)	 On when pressed over terminal 1 **1250SP**  ON - OFF Single pole	 Shown in P body	**P** Panel cut out / Bezel  Panel thickness 0.75-3.00 Cut-outs must be punched in the direction of insertion		**G** Grey

Approvals and specifications

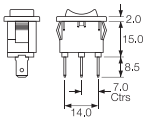
10(6)A 250Vac T100
6A 400Vac T100
1A 30Vdc

UL CSA 10A 250Vac
UL CSA 16A 250Vac Resistive
UL CSA 125Vac 1/2hp
UL CSA 1A 30Vdc
UL 100°C, file E45221, CSA file LR10990

3mm contact gap

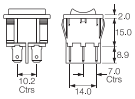
Dimensions

1250AN
(C terminals shown)



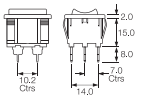
Terminals shown
are "H" 4.8 push on type

1250AN
(X terminals shown)



Terminal spacing
10.2 between pole centres

1250AP
(C terminals shown)



Terminal spacing
10.2 between pole centres

Legend	Legend Colour	Options
— Blank	— Blank	Finish Matt finish only. Colour Call sales for custom colours. A full range is available for large orders. Legend printing Select from the examples or call sales for custom legend.
085	**B** Black	
	W White	

6000 SP Splash Resistant Rocker Switches

16A 250Vac



Key Features

- Ratings up to 20A, 277Vac
- Positive switch action
- Distinctive styling
- Illuminated & nonilluminated
- Single pole
- Panel cut out: 30.1 x 11.1mm

Approvals and specifications

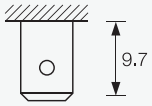
European 16(4)A 250Vac T125, 10A 400Vac T125

UL = 20A 277Vac, 1 1/2HP 250Vac 1HP 125Vac
CSA = 20A 277Vac, 1HP 125Vac, 1/2HP 125Vac

3mm contact gap with Positive Break switching.
Call factory for IP details.

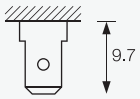
Terminal

C



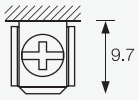
6.3 x 0.8

H



4.8 x 0.8

S



Screw & Clamp
N/A for assemblies with 3 terminals

Function

6000
ON - OFF

6001
ON - OFF
(momentary ON)

6002
ON - OFF
(momentary OFF)

6003
ON - OFF Lit

6008
ON - OFF Lit
(Unswitched neutral)

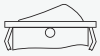
6009
ON - OFF
(momentary ON) Lit
(Unswitched neutral)

6010
ON - ON

6011
ON - ON
(momentary 1 side)

Rocker

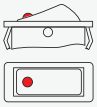
A
Softline Matt



A
Softline Matt



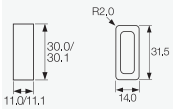
P
Lit window Matt



Body

L

Panel cut-out ** Bezel



Cut-outs must be punched in the direction of insertion

Body Colour

B
Black

W
White

Rocker Colour

Lit (DP)

A
Amber

C
Clear

G
Green

R
Red

Lit (DP)

B
Black

R
Red

W
White

Lamp Voltage

—
Blank

2
125V Neon

3
250V Neon

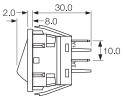
5
12Vdc LED (P Rocker)

6
24Vdc LED (P Rocker)

7
12V Filament

8
24Vdc Filament

Dimensions



Panel thickness
L 0.75 to 2.5mm
** For cut-out details on momentary switches call sales

Integral Splash Resistance



Current carrying parts are protected from moisture.
Droplets which may enter the switch are channelled out through ports in the switch body.
For IP65 see options below

Legend	Legend Colour	Options
— Blank	— Blank	**G74** Protective Cover
1223	**B** Black	Finish Matt is standard. Colour Call sales for custom colours. A full range is available for large orders. Legend printing Select from the examples or call sales for custom legends. Lamp voltage Call sales for details. Protective cover A snap on cover is available (add G after body code), this reduces panel thickness by 2mm.
	W White	



Panel sealing washer W46 is available, this reduces panel thickness by 1.2mm.

Covers are not suitable for momentary types. For all options call the factory

Examples


C6000AL - - -


C6000AL - - -


C6010AL - - -


C6003AL - - -


C6003PL - - -


C6030AL - - -

6050 DP Splash Resistant Switches

& Twin Switches - 16A 250Vac



Key Features

- Ratings up to 20A, 277V ac
- Positive switch action
- Distinctive styling
- Illuminated & non-illuminated
- Double pole
- BioCote antimicrobial option (Double pole only)
- DC LED Illumination Avaliable
- Panel cut out: 30.1 x 22.2mm

Approvals and specifications

European 16(4)A 250Vac T125, 10A 400Vac T125

UL CSA (except 6054 & 6055 Swtiches) 20A 277Vac, 250Vac 11/2hp, 125Vac 1hp

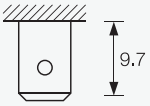
UL 100°C, file E45221, CSA file LR10990

BioCote antimicrobial additive. Independently verified to ISO22196:2007.

3mm contact gap with Positive Break switching.

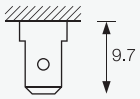
Terminal

C



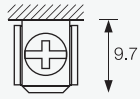
6.3 x 0.8

H



4.8 x 0.8

S



Screw & Clamp
N/A for assemblies with 3 terminals

Function

6050

ON - OFF

6051

ON - OFF
(momentary ON)

6052

ON - OFF
(momentary OFF)

6053

ON - OFF Lit

6054

ON - OFF
(momentary ON)
Lit

6055

ON - OFF (Single pole)
(momentary ON)
Lit

6056

ON - OFF (Single pole)
Isolated light

6057

ON - OFF
Isolated light

6058

ON - OFF (Single pole)
Lit

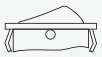
6059

ON - OFF (Single pole)
(momentary ON)
Isolated light

Rocker

A

Softline Matt



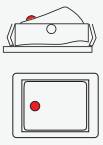
A

Softline Matt



P

Lit window Matt



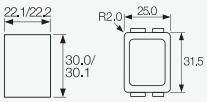
Lit window

Body

L

Double Pole

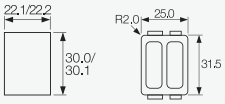
Panel cut-out ** Bezel



L

Twin units

Contact sales for information on splash resistance and IP ratings



Body Colour

Lit (DP)

A
Amber

C
Clear

G
Green

R
Red

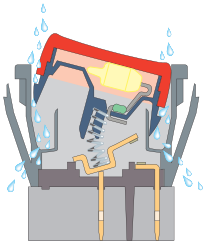
Un-Lit (DP)

B
Black

R
Red

W
White

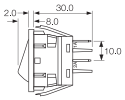
Integral Splash Resistance



Current carrying parts are protected from moisture. Droplets which may enter the switch are channelled out through ports in the switch body.

For IP65 see options below

Dimensions



Panel thickness
L 0.75 to 2.5mm
** For cut-out details on momentary switches call sales

Terminal spacing - Poles 10.5 between centres

Rocker Colour

B Black

R Red

W White

Lamp Voltage

— Blank

2 125V Neon

3 250V Neon

5 12Vdc LED (P Rocker)

6 24Vdc LED (P Rocker)

7 12V Filament

8 24Vdc Filament

Legend

— Blank

1223

Legend Colour

— Blank

B Black

W White

Options

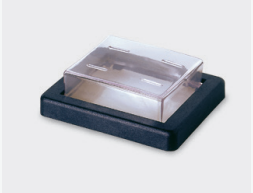
G74
Protective Cover

Finish
Matt is standard.

Colour
Call sales for custom colours.
A full range is available for large orders.

Legend printing
Select from the examples or call sales for custom legends.

Protective cover
The 6050 series is a water through design. For a higher level of sealing, a snap on cover is available (add G after body code).
This reduces panel thickness by 1mm.



Panel sealing washer W42 is available. This reduces panel thickness by 1.00mm. Covers are not suitable for momentary types.

IP Ratings
Call the sales for details.

Terminal Link P1067
connects the poles of a double pole switch or twin unit.

Mounting orientation may affect IP rating.

BioCote Antimicrobial Additive

Moulded components have antimicrobial properties using BioCote silver ion technology.
For all options call sales.

BioCote

B BioCote

Examples


C6050AL - - -


C6053AL - - -


C6053PL - - -


C6000A/C6000AL


C6003P/C6003PL


C6003P/C6030AL

1500 Standard & 1300 High Inrush Switches

150A to EN61058-1 and 16A 250Vac



Key Features

- Standard rocker switch
- Non-illuminated
- 150A inrush
- Choice of switching circuits including 3 position
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Single pole
- Splash resistant option
- BioCote antimicrobial option
- DC LED Illumination Avaliable for "P" Rocker
- Panel cut out 'A' style: 27.3 x 12.3mm

Approvals and specifications

1500 Series 16(4)A 250Vac T125

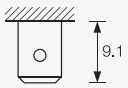
UL CSA 16A Non Ind 250Vac, (2 posn) 250Vac 1hp, 125Vac 1/2hp, (3 posn) 250Vac 1/2hp, 125Vac 1/4hp
1330 36Vdc 14A
1350 72 Vdc 7A
1500 & 1510 14 Vdc 10A
UL 85°C, file E45221, CSA file LR10990

In house test:
10A 24Vdc—Indicative rating only

1300 series 16(6)A 250Vac T125 5E4 (50,000 Ops.)
150A Inrush to EN61058-1

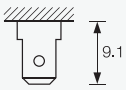
Terminal

C



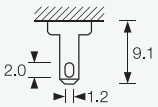
6.3 x 0.8

H



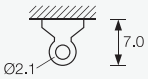
4.8 x 0.8*

K



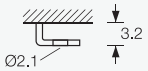
2.8 x 0.8*

T



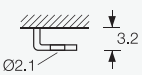
Solder

U



Right angle "T" solder terminal

X



PCB 0.8Sq*
*N/A for 1300 series

Function

Standard 1500
ON - OFF

1501
HP rating N/A
ON - OFF
(momentary ON)

1502
HP rating N/A
ON - OFF
(momentary OFF)

1510 µ
HP rating N/A
ON - ON

1511 µ
HP rating N/A
ON - ON
(momentary 1 side)

1520 µ
125V & 250V 1/2 HP
H terminal rated
T100 only
ON - OFF - ON

1521 µ
HP rating N/A
H terminal rated
T100 only
ON - OFF - ON
(momentary 1 side)

1522 µ
HP rating N/A
H terminal rated
T100 only
ON - OFF - ON
(momentary 2 sides)

0430
HP rating N/A
H terminal rated
T100 only

High Inrush 1300
ON - OFF

Rocker

A Softline Matt

B Splash resistant (with Arcshield) Matt

H Slotted (for custom Adaptors) not momentary

V Curved Matt or gloss

W Splash resistant (with Arcshield) Matt

X Two colour Matt ON - OFF only (not momentary)

F Flat lens Gloss (0430 only)

A Softline lens Matt (0430 only) as F but with raised profile

Body

Panel cut-out Bezel

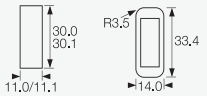
Cut-outs must be punched in the direction of insertion

A



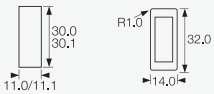
Gloss or Matt

B



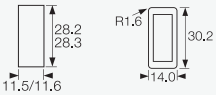
Matt only

L



Matt only

Q



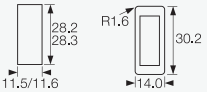
Gloss or matt

R



Matt only

T



Matt only

Finish

M Matt

G Gloss

Applies to both Rocker & Body

Body Colour

B Black

R Red

W White

Rocker Colour

Un-Lit

B Black

R Red

W White

Lit

A Amber

C Clear

G Green

R Red

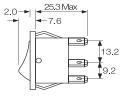
UL CSA 20A 250Vac 1hp, 125Vac 1/2hp
UL 85°C, file E45221, CSA file LR10990

In house test:
20A 24Vdc—Indicative rating only

BioCote antimicrobial additive. Independently verified to ISO22196:2007.

3mm contact gap except if marked µ.

Dimensions

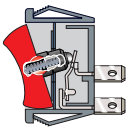


Panel thickness
A,Q 0.75 to 3.3mm
L,B,T 0.75 to 2.5mm
R 0.75 to 3.0mm

* For cut-out details on momentary switches call sales

Splash Resistance

1500 W and B splash resistant options
Feather edge seals and a close fitting collar protect current carrying parts from moisture.
B option has Hytrel collar/seals for enhanced protection.



1300 High inrush, positive break switching
The 1300 series mechanism ensures contact welds formed at switch-on are positively separated by the plunger tube acting directly on the step in the moving contact.

Lamp Voltage

— Blank

2 125V Neon

3 250V Neon

7 12V Filament

8 24Vdc Filament

Insert Colour

— Blank

R Red

W White

Legend

— Blank

602A

Legend Colour

— Blank

B Black

W White

Options

Finish
Matt is standard.

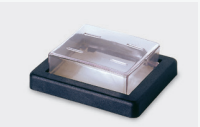
Colour
Call sales for custom colours.
A full range is available for large orders.

Legend printing
Select from the examples or call sales for custom legends.

Lamp voltage
Call sales for details.

Blanking plates A0434 - -
Dummy units to fill unused panel holes.

Protective cover
Snaps on to A, L, Q or T bodies (add G after body code in cat no.), this reduces panel thickness by 1mm.



Panel sealing washer W46 is available for the same body sizes, this reduces panel thickness by a further 0.8mm.
Covers are not suitable for momentary types.

BioCote Antimicrobial Additive

Moulded components have antimicrobial properties using BioCote silver ion technology.

For all options call sales.

Biocote

B BioCote

Examples



C1500AR - - -
T1500AR - - -



C1500AL - - -
T1500AL - - -



C1500XL - - -
T1500XL - - -



C1510AL - - -
T1510AL - - -



C1520AL - - -
T1520AL - - -



C0430AL - - -
T0430AL - - -

5500 Lit Rocker Series

10A 250Vac



Key Features

- Standard rocker switch
- Illuminated
- Choice of switching circuits
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Single pole
- Splash resistant option
- Panel cut out 'A' style:

Approvals and specifications

16(4)A 250Vac T85
10(3)A 250Vac T100, (12A 250Vac T125 for P rocker only)

UL CSA 15A 250Vac, CSA 16A Non Ind 250Vac
UL CSA 250Vac 1hp, 125Vac 1/2hp
UL 85°C, file E45221, CSA file LR10990

μ contact gap.

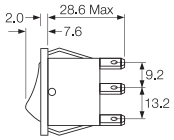
For Twin units repeat the order details for both the left and right sides.

Terminal	Function	Rocker	Body	Body Colour	Rocker Colour
C 9.1 6.3 x 0.8 **H** 9.1 4.8 x 0.8 **T** 7.0 Ø2.1 Solder	Approvals & ratings vary with function ON OFF Switches - ON when pressed over terminal 3 1 2 3 **5500 μ** ON - OFF Single pole **5503 μ** ON - OFF Lit Switched neutral **5508 μ** ON - OFF Lit Unswitched neutral	**A** Softline (Matt only) **P** Lit window (Matt only)	**A** Panel Cut - outs 27.2 27.3 12.2/12.3 Bezel 30.2 14.0 **B** 30.0 30.1 11.0/11.1 R3.5 33 14.0 **L** 30.0 30.1 11.0/11.1 R1.0 31.9 14.0 **Q** 28.2 28.3 11.5/11.6 R1.6 30.2 14.0 **R** 28.5 28.6 14.0/14.1 31.5 17.0 **T** 28.2 28.3 11.5/11.6 R1.6 30.2 14.0	**B** Black **W** White	Un-Lit **B** Black **R** Red **W** White Lit **A** Amber **C** Clear **G** Green **R** Red

Dimensions

Panel thickness

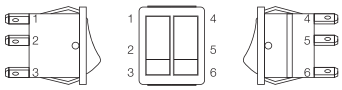
A,Q	0.75 to 3.3mm
L,B,T	0.75 to 2.5mm
R	0.75 to 3.0mm



Terminal spacing -
Poles 10.8 between centres (twin units)

Twin units

Two single switches or a switch and an indicator light can be assembled side by side in one double pole body.
For 5500 range panel cut-out details (L, B and T) call sales.



For twin units the first set of order format details refer to the left hand unit, when looking at the front of the assembly. (This has terminal numbers 1, 2 & 3)

Lamp Voltage

— Blank

2 125V Neon

3 250V Neon

5 12Vdc LED (P Rocker)

6 24Vdc LED (P Rocker)

7 12V Filament

8 24Vdc Filament

Legend

— Blank

602A

Legend Colour

— Blank

B Black

W White

Options

Finish
Matt is standard.

Colour
Call factory for custom colours.
A full range is available for large orders.

Legend printing
Select from the examples or call factory for custom legends.

Lamp voltage
Call factory for details.

Blanking plate A0434 - - (SP) A0494 - - (DP)
Dummy units to fill unused panel holes.

Protective cover
Snaps on to A, L, Q or T bodies (add G after body in cat no.), this reduces panel thickness by 1.00mm.



Panel sealing washers W46 (Single Pole) and W42 (Double Pole) are available for these body types, this reduces panel thickness by 2mm.

For all options call the factory.

Examples


C5503AL - - -


C5500AL - - -


C5503PL - - -


C5503A/ C5430AL


C5503A/C5503AL


C5503P/C5503PL

1500 Twin Units Switches and Indicators

16A 250Vac



Key Features

- Twin unit rocker switch
- Choice of switching circuits including 3 position
- Push-on, solder and PCB terminals
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Single pole switches
- Splash resistant option
- Panel cut out 'A' style: 27.2 x 22.3mm

Approvals and Specifications

16(4)A 250Vac T125

UL CSA 16A 250Vac
UL CSA (2 posn) 250Vac 1hp, 125Vac 1/2hp, (3 posn) 250 Vac 1/2hp, 125Vac 1/4hp
UL 85°C, file E45221, CSA file LR10990

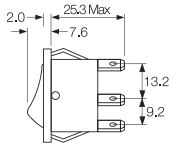
For versions with High Inrush or for 50,000 operations,
3mm contact gap except where marked µ.

Terminal	Function	Rocker	Body	Finish	Body Colour	Rocker Colour
C 6.3 x 0.8	Approvals & ratings vary with function ON OFF Switches - ON when pressed over terminal 1 or 4	**A** Softline (Matt only)	Panel Cut - outs / Bezel **A** 27.2 27.3 / 22.3/22.4 Gloss or Matt / 30.2 / 25.0	**M** Matt	**B** Black	Un-Lit
H 4.8 x 0.8	**1500** ON - OFF	**B** Softline (Matt only)	**B** 30.0 30.1 / 22.1/22.2 Matt only / R3.5 / 33.4 / 25.0	**G** Gloss	**W** White	**B** Black
T Ø2.1 Solder	**1510 µ** ON - ON	**W** Softline (Matt only)	**L** 30.0 30.1 / 22.1/22.2 Matt only / R1.0 / 32.0 / 25.0	Applies to both Rocker & Body		**R** Red
K 2.0 1.2	**1520 µ** ON - OFF - ON	**X** Softline (Matt only)	**Q** 28.2 28.3 / 22.3/22.4 Gloss or matt / R1.6 / 30.2 / 25.0			**W** White
X 4.0	**0430** Indicator	**A** Softline (Matt only)	**R** 28.4 28.5 / 23.0/25.4 Matt only / 33.2 / 28.9			Lit **A** Amber
			T 28.2 28.3 / 22.3/22.4 Matt only / R1.6 / 30.2 / 25.0			**C** Clear
						G Green
						R Red

Dimensions

Panel thickness

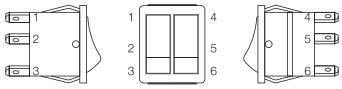
A,Q	0.75 to 3.3mm
L,B,T	0.75 to 2.5mm
R	0.75 to 3.0mm



Call sales for terminal spacing details

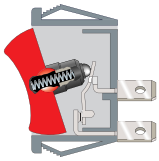
Twin units

Two single switches or a switch and an indicator light can be assembled side by side in one double pole body.



For twin units the first set of order format details refer to the left hand unit, when looking at the front of the assembly.
(This has terminal numbers 1, 2 & 3)

Splash Resistant



Feather edge seals and a close fitting collar protect current carrying parts from moisture.

B option has Hytrel collar/ seals for enhanced protection.

Insert Colour

— Blank

R Red

W White

Lamp Voltage

— Blank

2 125V Neon

3 250V Neon

5 12Vdc LED (P Rocker)

6 24Vdc LED (P Rocker)

7 12V Filament

8 24Vdc Filament

Legend

— Blank

602A

Legend Colour

— Blank

B Black

W White

Options

Finish
Matt is standard.

Colour
Call factory for custom colours. A full range is available for large orders.

Legend printing
Select from the examples or call factory for custom legends.

Lamp voltage
Call factory for details.

Biocote

B Biocote

Examples


C1500A/C1500AL


C1500A/C0430AL


C1500X/C1500XL


C1520A/C1510AL


C1500A/C1520AL


C0430A/C0430AL

1550 Standard and 1350 High Inrush

150A to EN61058-1 and 16A 250Vac



Key Features

- Standard rocker switch
- 1350/53 high inrush
- Choice of switching circuits including 3 position
- Push-on, solder and PCB terminals
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Double pole
- Splash resistant option
- BioCote antimicrobial option
- Panel cut out 'A' style: 27.2 x 22.3mm

Approvals and specifications

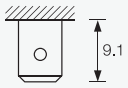
- 1550 Series 16(4)A 250Vac T125
- UL CSA 16A 250Vac, (2 posn) 250Vac 1hp, 125Vac 1/2hp, 1350 72 Vdc 7A
  (3 posn) 250 Vac 1/2hp, 125Vac 1/4hp.
  UL 85°C, file E45221, CSA file LR10990.

In house test:
10A 24Vdc—Indicative rating only

- 1350 series 16(4)A 250Vac T85 1E4 (10,000 Ops.)
  1330 series 16(6)A 250Vac T125 5E4 (50,000 Ops.)
  150A Inrush to EN61058-1.

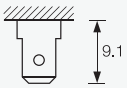
Terminal

C



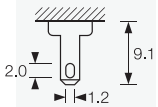
6.3 x 0.8

H



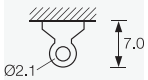
4.8 x 0.8*

K



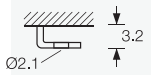
2.8 x 0.8*

T



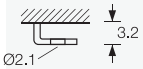
Solder

U



Right angle "T" solder terminal

X



PCB 0.8Sq*

Function

Standard 1550
ON - OFF

1551
HP rating N/A
ON - OFF (momentary ON)

1552
HP rating N/A
ON - OFF (momentary OFF)

1553
Not W, X or B rocker
ON - OFF Lit

1560 µ
ON - ON

1561 µ
HP rating N/A
ON - ON (Momentary 1 Side)

1562 µ
In house tests only
2 Circuit ON - ON

1570 µ
125V & 250V 1/2 HP
H terminal rated T100 only H terminal rated T100 only
ON - OFF - ON

1571 µ
HP rating N/A
H terminal rated T100 only
ON - OFF - ON (momentary 1 side)

1572 µ
HP rating N/A
H terminal rated T100 only
ON - OFF - ON (momentary 2 sides)

0480
X terminal N/A

High Inrush 1350
Not W, X or B rocker
ON - OFF

1353
Not W, X or B rocker
ON - OFF Lit

Rocker

A
Softline Matt

B
Splash resistant Softline

V Curved
Matt or Gloss
Gloss only Lit (not momentary)

W Splash resistant Curved

P Lit window Matt
Lit (not momentary)

X Two colour Matt
(ON OFF only - not momentary)

R Round

F Flat Lens Gloss (0480)
Top View

A Softline lens Matt (0480 only) as F but with raised profile

Body

Panel cut-out Bezel

Cut-outs must be punched in the direction of insertion

A
27.2 27.3 22.3/22.4 Gloss or Matt 25.0 30.2

B
30.0 30.1 22.1/22.2 Matt only R3.5 25.0 33.4

L
30.0 30.1 22.1/22.2 Matt only R1.0 25.0 32.0

Q
28.2 28.3 22.3/22.4 Gloss or matt R1.6 25.0 30.2

R
28.4 28.5 23.0/25.4 Matt only 28.9 33.2

T
28.2 28.3 22.3/22.4 Matt only R1.6 25.0 30.2

Approvals and specifications (continued)

UL CSA 20A 250Vac 1hp, 125Vac 1/2hp.
UL 72Vdc 7A, 36Vdc 14A.
UL 85°C, file E45221, CSA file LR10990.

In house test:
20A 24Vdc—Indicative rating only

BioCote antimicrobial additive. Independently verified to ISO22196:2007.

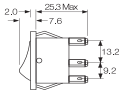
3mm contact gap except if marked µ.

Splash Resistance



1300 High inrush, positive break switching
The 1300 series mechanism ensures contact welds formed at switch-on are positively separated by the plunger tube acting directly on the step in the moving contact.

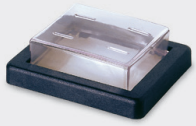
Dimensions



Panel thickness
A,Q 0.75 to 3.3mm
L,B,T 0.75 to 2.5mm
R 0.75 to 3.0mm

* For cut-out details on momentary switches call sales

Finish	Body Colour	Rocker Colour	Insert Colour	Lamp Voltage	Legend	Legend Colour	Options
M Matt	**B** Black	Un-Lit **B** Black	— Blank	— Blank	— Blank	— Blank	Finish Matt is standard.
G Gloss	**W** White	**R** Red	**R** Red	**2** 125V Neon	**602A**	**B** Black	Colour Call sales for custom colours. A full range is available for large orders.
Applies to both Rocker & Body		**W** White	**W** White	**3** 250V Neon		**W** White	Legend printing Select from the examples or call sales for custom legends.
		Lit **A** Amber		**5** 12Vdc LED (P Rocker)			Lamp voltage Call sales for details.
		G Green		**6** 24Vdc LED (P Rocker)			Blanking plates A0494 Dummy units to fill unused panel holes.
		C Clear		**7** 12V Filament			Protective cover Snaps on to A, L, Q or T bodies (add G after body in cat no). This reduces panel thickness by 1mm.
		R Red		**8** 24Vdc Filament			



Panel sealing washer W42 is available for the above body sizes. This reduces panel thickness by a further 1.00mm.
Covers are not suitable for momentary types.

BioCote Antimicrobial Additive

Moulded components have antimicrobial properties using BioCote silver ion technology.

For all options call sales.

Examples



C1350AL - - -



C1550XL - - -



C1553PL - - -



C1553RA ---
Shown with M614 bezel cover



Optional snap-in M441 barrier



C1553AA with M616 guard Cut-out 22.0/22.1 x 29.4/29.5 Guard accepts "A" body only



C0480RA ---
Shown with M614 bezel cover



C0480AL - - -

1550 Standard & 1350 High Inrush Switches

150A to EN61058-1 and 16A 250Vac250Vac



Key Features

- Standard rocker switch
- 1350/53 high inrush
- Choice of switching circuits including 3 position
- Push-on, solder and PCB terminals
- Choice of bezel styles
- Choice of panel cut outs
- Matching indicator
- Double pole
- Option with guard & cover
- DC LED Illumination Available for “P“ Rocker
- Bezel size ‘G’ style 32.0 x 25.0

Approvals and specifications

1550 Series 16(4)A 250Vac T125

UL CSA 16A 250Vac, (2 posn) 250Vac 1hp, 125Vac 1/2hp,
(3 posn) 250 Vac 1/2hp, 125Vac 1/4hp.
UL 85°C, file E45221, CSA file LR10990.

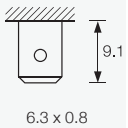
In house test:
10A 24Vdc—Indicative rating only

1350 Series

UL CSA 20A 250Vac 1hp, 125Vac 1/2hp.
UL 72Vdc 7A, 36Vdc 14A, UL 85°C, file E45221,
CSA file LR10990.

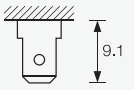
Terminal

C



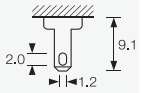
6.3 x 0.8

H



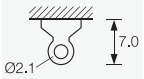
4.8 x 0.8*

K



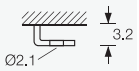
2.8 x 0.8*

T



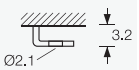
Solder

U



Right angle T Solder (Not DP)

X



PCB 0.8Sq*
*Contact sales for details on 1350 series

Function

Standard 1550



ON - OFF

1551
HP rating N/A



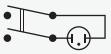
ON - OFF
(momentary ON)

1552
HP rating N/A



ON - OFF
(momentary OFF)

1553
Not W, X or B rocker



ON - OFF
Lit

1560 µ



ON - ON

1561 µ
HP rating N/A



ON - ON
(Momentary 1 Side)

1562 µ
In house tests only



ON - ON
2 Circuit

1570 µ
125V & 250V 1/2 HP
H terminal rated T100 onlyH terminal rated T100 only



ON - OFF - ON

1571 µ
HP rating N/A
H terminal rated T100 only



ON - OFF - ON
(momentary 1 side)

1572 µ
HP rating N/A
H terminal rated T100 only



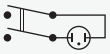
ON - OFF - ON
(momentary 2 sides)

High Inrush 1350
Not W, X or B rocker



ON - OFF

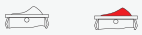
1353
Not W, X or B rocker



ON - OFF
Lit

Rocker

A Softline Matt



V Curved



Matt or Gloss — Gloss only Lit (not momentary)

P Lit window Matt



Lit (not momentary)

Body

Panel cut-out — Bezel

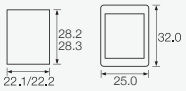
Cut-outs must be punched in the direction of insertion

B



Matt only

L



Matt only

Finish

M
Matt

G
Gloss

Applies to both Rocker & Body

Body Colour

B
Black

W
White

Rocker Colour

Un-Lit

B
Black

R
Red

W
White

Lit

A
Amber

G
Green

C
Clear

R
Red

In house test:
20A 24Vdc—Indicative rating only

BioCote antimicrobial additive. Independently verified to ISO22196:2007.

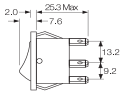
3mm contact gap except if marked µ.

Splash Resistance



1350 High inrush, positive break switching
The 1350 series mechanism ensures contact welds formed at
switch-on are positively separated by the plunger tube acting directly on the step in the moving contact.

Dimensions



Panel thickness
G, H 0.75 to 2.5mm

Terminal spacing - Poles 10.2 between centres

* For cut-out details on momentary switches call sales

Insert Colour	Lamp Voltage	Legend	Legend Colour	Options	Biocote
— Blank	— Blank	— Blank	— Blank	Finish Matt is standard.	**B** Biocote
R Red	**2** 125V Neon	**602A**	**B** Black	Colour Call sales for custom colours. A full range is available for large orders.	
W White	**3** 250V Neon		**W** White	Legend printing Select from the examples or call sales for custom legends.	
	5 12Vdc LED (P Rocker)			Lamp voltage Call sales for details.	
	6 24Vdc LED (P Rocker)			BioCote Antimicrobial Additive Moulded components have antimicrobial properties using BioCote silver ion technology.	
	7 12V Filament				
	8 24Vdc Filament				

Examples



C1553AH - - -



C1550AH - - -

R13 Round Rocker Switches

10A 250Vac



Key Features

- Miniature round rocker switch
- Ratings up to 10A, 250Vac
- Single & double pole
- Illuminated & nonilluminated, neon andLED
- Choice of actuators
- Matching indicator
- Panel cut out: 20.2 dia.

Approvals and specifications

SP 10(4)A 250Vac T85 1E4

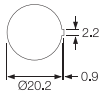
DP 10(4)A 250Vac T85 1E4

UL CSA SP 16A 125Vac & 10A 250Vac
UL CSA DP 16A 125Vac, 10A 250Vac, 10A 28Vdc
UL 85°C, file E67774(S), CSA file LR45128

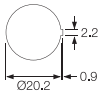
RoHS compliant
Single pole has µ contact gap.

Special products
Are made to order and can be supplied with a range of body and rocker / lens colours, print & lamp voltage.

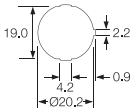
Dimensions



Snap fixing into panel thickness up to 3.0

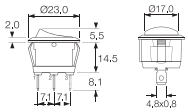


Snap fixing into 2.0 to 3.0mm panels

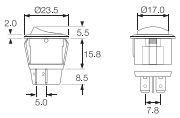


Snap fixing into 0.7 to 3.0mm panels

Single Pole



Double Pole



Protective cover L188



Snaps on to bodies (not R13 211 or R13 112LP), this reduces maximum acceptable panel thickness to 2.4mm.

Examples



R13 112B NAA



R13 112A AAA



R13 112A2 ---

R13	/112	/ A	/ B	/ B	/ 3	/ 2	/ 602A	/ W	/L188
Series	Type	Function	Body Colour	Rocker Colour	Insert Colour	Lamp Voltage	Legend	Legend Colour	Legend Colour

Product details











1 2
SP ON - OFF µ
Cat no.
R13 112A AAA











1 2 3
SP ON - OFF µ
Lit 230V
Cat no.
R13 112B NAC

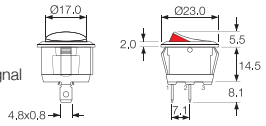






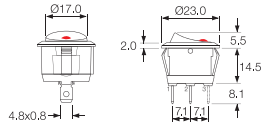


1 2
SP ON - OFF µ
Bright colour ON signal
Cat no.
R13 112A2 - -



1 2 3
SP ON - ON µ
Cat no.
R13 112C AAA

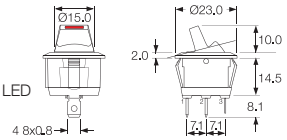
1 2 3
SP ON - OFF µ
Lit Window
Cat no.
R13 112B2 - -



1 2 3
SP ON - OFF µ
Lit 230V
Cat no.
R13 112B NAA

1 2 3
SP ON - OFF - ON µ
Cat no.
R13 112D AAA

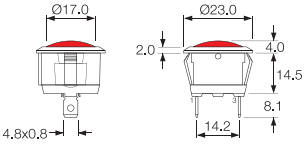
12 3- 3+
SP ON - OFF µ
Paddle tip has red LED
Cat no.
R13 112LP - -



1 2 3
SP ON - OFF µ
Lit 230V
Cat no.
R13 112B NAB

SP ON - OFF µ
(Momentary ON)
Cat no.
R13 208F AAA*

1 3
Indicator light
Cat no.
R9 92B - - -

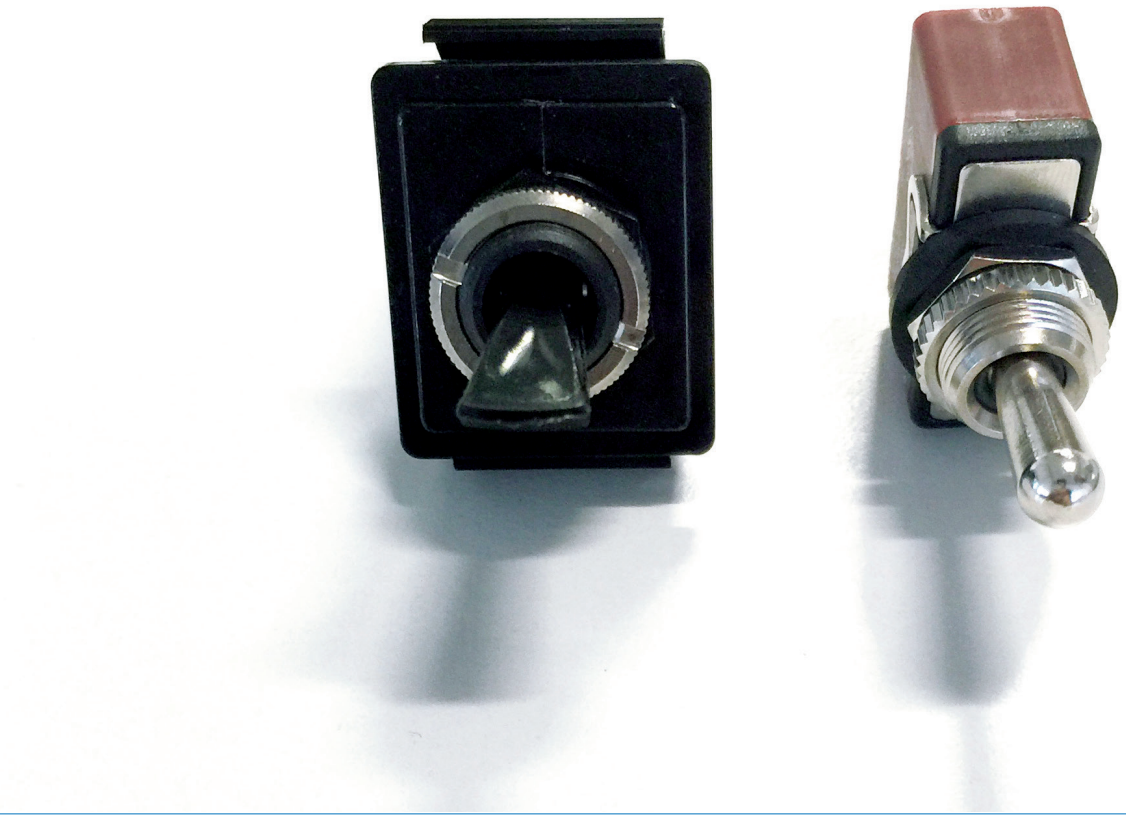


DP ON - OFF
Cat no.
R13 244A AAA

DP ON - OFF
Lit 230V
Cat no.
R13 244B NAA

Well known for their quality and reliability, Bulgin's toggle switches are cost effective solutions to many existing applications. These switches offer features at an attractive price point often well below that of the existing competition.

- Nylon and Metal switch variants
- Multiple Lever Options
- Ratings up to 20A, 250V ac - 277V ac
- IP67 panel seal versions, supplied complete with gaskets (3900 Series – All Variants)
- Single and double pole
- Choice of circuit options including 3 position and momentary
- Mounting hole: 12.7mm diameter.
- Sealing accessories available
- Quick Connect, Solder, Screw and PCB Termination Options



3900 Metal Toggle Switches

16A 250Vac - IP67 Sealed Versions

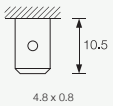


Key Features

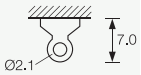
- Metal toggle switches
- Ratings up to 20A, 277V ac
- Single and double pole
- Choice of circuits including 3 position and momentary
- Sealed version supplied complete with gaskets
- Panel seal version to IP67
- 6.3mm terminals
- Guard option

Terminal

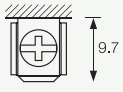
C



T



S



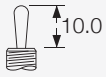
Screw & Clamp
N/A for assemblies with 3 terminals

Function

Single Pole	Double Pole
3900 ON - OFF	**3950** ON - OFF
3901 ON - OFF (momentary ON)	**3951** ON - OFF (momentary ON)
3902 ON - OFF (momentary OFF)	**3952** ON - OFF (momentary OFF)
3910 ON - ON	**3960** ON - ON
3911 ON - ON (momentary 1 side)	**3961** ON - ON (momentary 1 side)
3920 ON - OFF - ON μ	**3970** ON - OFF - ON μ
3921 ON - OFF - ON μ (momentary 1 side)	**3971** ON - OFF - ON μ (momentary 1 side)
3922 ON - OFF - ON μ (momentary 2 sides)	**3972** ON - OFF - ON μ (momentary 2 sides)

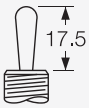
Actuator

A



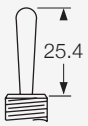
Metal
Metal toggle finish is nickel plate

B

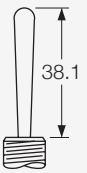


Metal
Metal toggle finish is nickel plate

D



E



Metal toggle finish is nickel plate

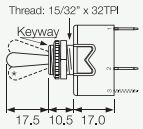
F



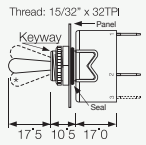
Metal toggle finish is nickel plate

Body

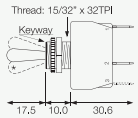
A Single pole



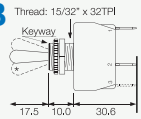
E Panel sealed, single pole



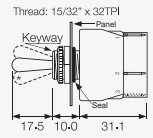
A Double pole



B

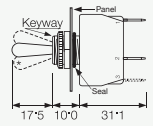


F



Switches with F toggles have double pole bodies, regardless of circuit

G Panel sealed, double pole



Options

Neck Seal M539
Actuator is visible



Cover M1080



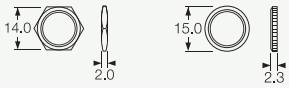
Covers have internal nylon nuts

M1080-2



Covers have internal metal hex nuts

Fixing nuts
Nickel plated brass are supplied



Knurled Front nut
Panel thickness 4.0 with backnut

Plate P236
Plate SP or DP



Approvals and specifications

UL/CSA Ratings 3901, 3902, 3920, 3921, 3922
16A, 277Vac
1 HP, 250Vac

7A, 72Vdc
14A, 36Vdc

3910, 3901, 3952, 3960, 3961, 3970, 3971, 3972
16A, 277Vac
1 HP, 250Vac
1/2 HP, 125Vac
7A, 72Vdc
14A, 36Vdc

3900, 3950
20A, 277Vac
1 HP, 250Vac
1/2 HP, 125Vac
7A, 72Vdc
14A, 36Vdc

ENEC Ratings
3900, 3901, 3902, 3950, 3952, 3960, 3961
16(4)A 250Vac

3910, 3911, 3920, 3921, 3922, 3951, 3970, 3972
10 4)A 250Vac

Approvals and ratings vary with function.
3mm contact gap except where marked µ.

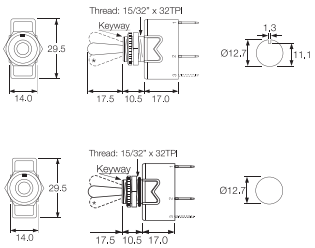
* CSA approval for A and B bodies only

Dimensions

mm) * Indicates ON position (for ON - OFF switches)

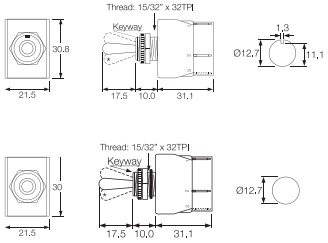
Single pole

(C terminals shown)



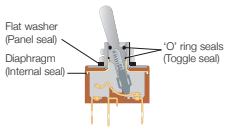
Double pole

(C terminals shown with barrier)



Toggle Switch - sealed version

BE and BF types



Guard TG1-RED



Examples

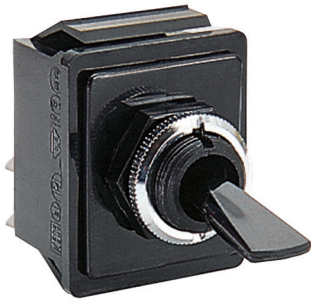


C3900BE - - -

C3920BA - - -

C3950BF - - -

C3972BB - - -



Key Features

- Nylon toggle switches
- Ratings up to 20A, 250V ac
- Single and double pole
- Wide choice of terminals
- Choice of circuit options including 3 position
- Flat & round actuator options

Approvals and specifications

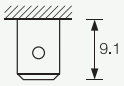
16(4)A 250Vac T85

UL 20A 250Vac Non Ind (Single pole)
UL 16A 250Vac Non Ind (Double pole)
UL CSA (2 pos types) 250Vac 1hp, 125Vac 1/2hp
UL CSA (3 pos types) 250Vac 1/2hp, 125Vac 1/4hp
CSA 16A 250Vac Non Ind
UL 85°C, file E45221, CSA file LR10990
UL and CSA N/A on momentary types

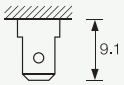
Selective “A, B, C” and “OFF, A, A+B” circuits at 5 amp also available.
3mm contact gap except where marked µ.

Terminal

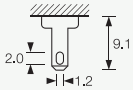
C



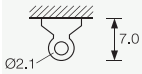
H



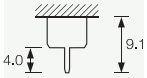
K



T



X



Function



Single Pole



Double Pole

1700
ON - OFF

1750
ON - OFF



1710 µ
ON - ON

1760 µ
ON - ON



1720 µ
ON - OFF - ON

1770 µ
ON - OFF - ON

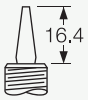


1721 µ
ON - OFF - ON µ
(momentary 1 side)

1722
ON - OFF - ON µ
(momentary 2 sides)

Actuator

H



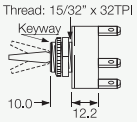
R



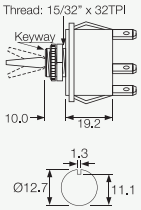
The switch is on between centre terminals (2 & 5) and the terminals over which the lever is positioned.

Body

O Single pole



O Double Pole



Panel hole (all types)

Panel thickness (Max)
Both nuts - 3.5mm
Less backnut - 6.5mm

Options

Neck Seal M539

Material - Nitrile
(H & R Actuators)
Actuator visible



Cover M1080

Material - EPDM
(R Actuator only)



Cover M531

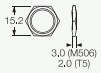
Material - PVC
(R Actuator only)



Covers have internal nylon nuts

Fixing nuts
(Standard is M506 & T92)

T5 Hex brass
M506 Hex nylon



T92 Knurled brass - slotted



M279 Knurled nylon



Plate P236
Plate SP or DP

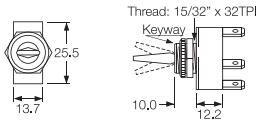


Dimensions

mm) * Indicates ON position (for ON - OFF switches)

Single pole

(C terminals shown)

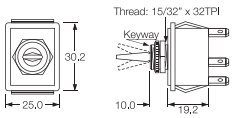




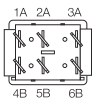
Optional
F00232PAAA
plate SP or DP

Double pole

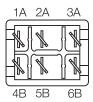
(C terminals shown)



Without barrier



With barrier



Examples



C1700R - -



C1700H - -



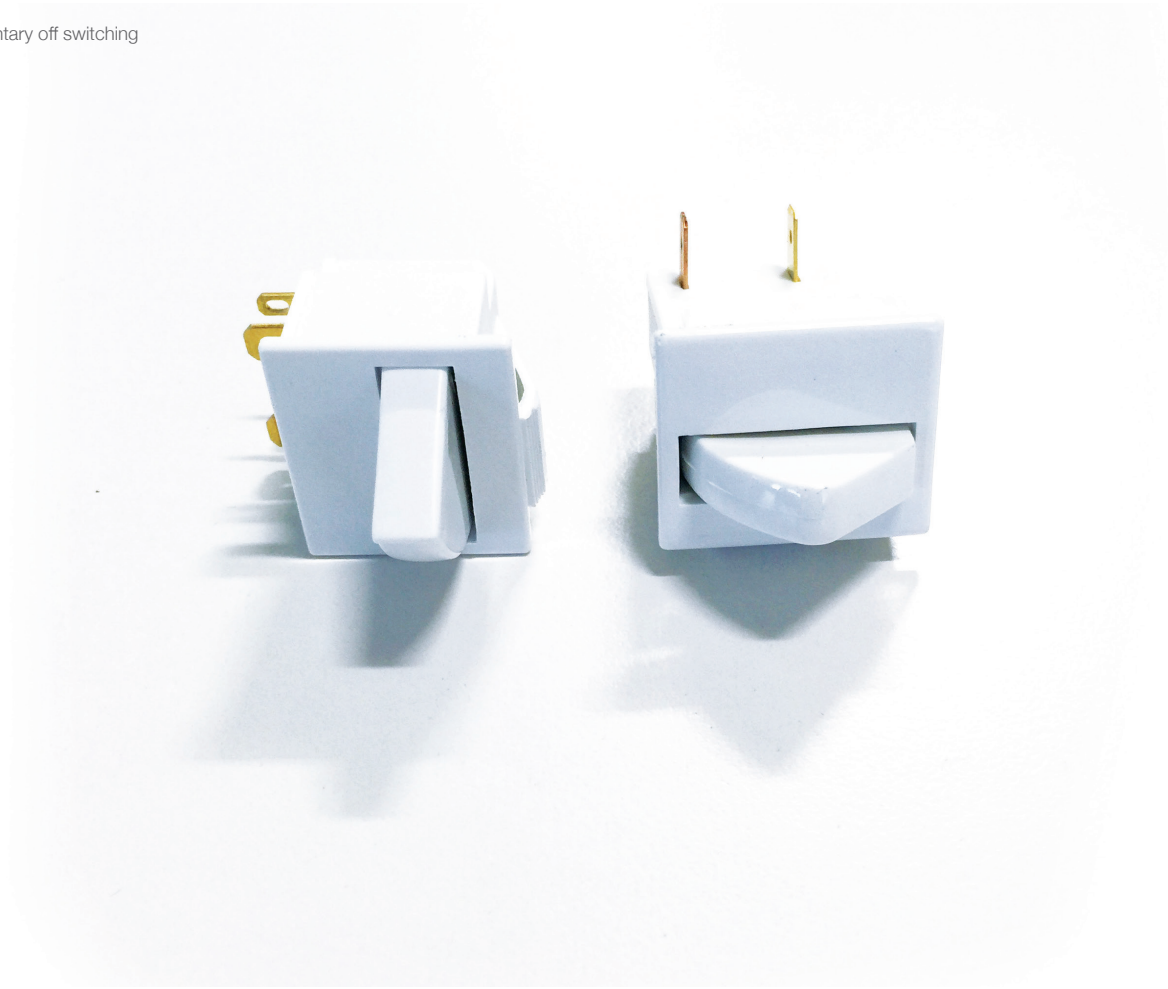
C1760R - -



C1750H - -

Long recognised as a leader in refrigerator door switches, Bulgin's wide range of types and configurations will suit almost any need. With both double pole and single pole options, our switches are not only ideal for traditional refrigerator and freezer applications but can and have been used in a variety of door applications as well.

- Door switches
- Switch rating from 0.2A, 250V ac up to 5A, 250Vac
- Splash resistant variants
- Choice of actuators
- Momentary on and momentary off switching



0055 Door Switches



C0056RB ---



C0055RB ---



C0056RB ---



C0055RB ---

Key Features

- Ratings up to 0.2A, 250V ac
- High temperature rating up to 125°C
- Long overtravel
- Choice of terminal orientation

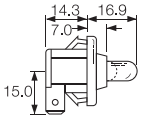
Approvals and specifications

0055 & 0056
0.2(0.2)A 250Vac 25T125 5E4
(50,000 operations)

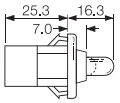
µ contact gap

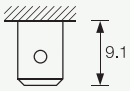
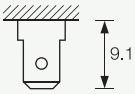
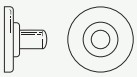
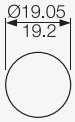
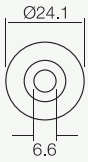
Dimensions and Properties

C0055RB



C0056RB



Terminal	Function	Actuator	Body	Options
C  9.1 6.3x0.8 **H**  9.1 4.8x0.8	**0055** ON - OFF (momentary OFF) 90° terminals **0056** ON - OFF (momentary OFF) straight terminals	**R** 	**B** Panel cut - out  Ø19.05 19.2 Panel thickness 0055 1.0 - 1.6 0056 1.0 - 2.6 Flange  Ø24.1 6.6	Finish Gloss finish only Colour White or black Call sales for custom colours.

3005 Refrigerator Door Switches

Splash Resistant



C3005BL - - -

C3005CB - - -

Key Features

- Door switches
- Momentary on and momentary off switching
- Splash resistant
- Choice of terminal orientation
- Choice of actuators

Approvals and specifications

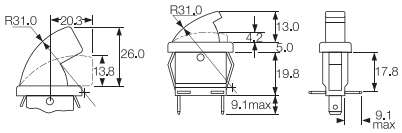
3005 25W 25T85 5E4 (50,000 Operations) 250Vac
3006 65W 25T85 5E4 (50,000 Operations) 250Vac

UL 0.3A 250Vac (Black Versions Only)
UL 0.2A 125Vac (Black Versions Only)

μ contact gap

Dimensions and Properties

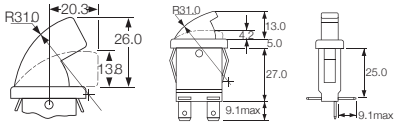
3005



Panel thickness 1.0 - 2.5mm

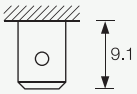
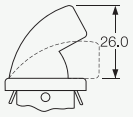
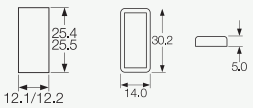
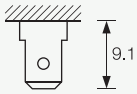
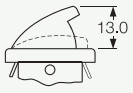
B Actuator C Actuator R, L & B terminals

3006



Panel thickness 1.0 - 2.5mm

B Actuator C Actuator R, L & B terminals

Terminal	Function	Actuator	Body	Options
C  9.1 6.3x0.8	**3005** ON - OFF (momentary OFF) 1mm max travel to OFF position	**B**  26.0	**R** **L** **B**  Terminal direction (viewed from hinge end) Panel cut - out Bezel Bezel Profile  25.4 25.5 12.1/12.2 30.2 14.0 5.0	Finish Gloss finish only Colour White or black Call sales for custom colours. A full range is available for large orders.
H  9.1 4.8x0.8	**3006** ON - OFF (momentary ON) 3mm min travel to ON position	**C**  13.0		

3100 Refrigerator Door Switches

Splash resistant



E3111BA - - -



E3102AA - - -

Key Features

- Door switches
- Ratings up to 5A, 250V ac
- Splash resistant
- Changeover, momentary ON and momentary OFF
- Choice of actuators

Approvals and specifications

5A 250Vac 25T85 5E4 (50,000 Operations)

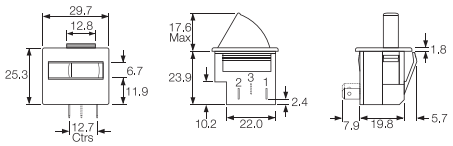
UL CSA 5A 250Vac
UL 85°C, file E45221, CSA file LR10990

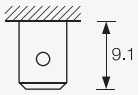
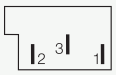
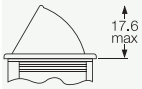
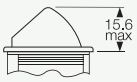
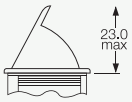
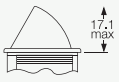
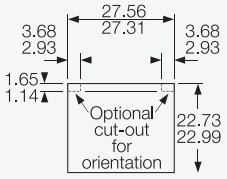
µ contact gap.
Sealed terminals option available.

Dimensions and Properties

3101 uses terminals 1,2
3102 uses terminals 1,2
3111 uses terminals 1,2,3

For details of actuator travel and switching angles call sales.



Terminal	Function	Actuator	Body	Colour	Options
C  6.3x0.8	 **3101**  ON - OFF (momentary OFF) **3102**  ON - OFF (momentary OFF) **3111**  ON - ON (momentary 1 side)	**A**  **B**  **C**  **D** 	**A** 	**W** White **B** Black **PW** Polar White	Finish Gloss finish only Colour White or black Call sales for custom colours. A full range is available for large orders.

3140 Refrigerator Door Switches

Splash resistant



HK3141AA - - -



H3145AA - - -

Key Features

- Door switches
- Ratings up to 5A, 250V ac
- Splash resistant
- Momentary action
- Choice of actuators
- 2 circuit switch

Approvals and specifications

5A 250Vac 25T85 5E4 (50,000 Operations)

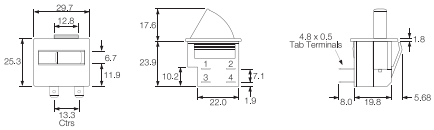
UL CSA 5A 250Vac
UL 85°C, file E45221, CSA file LR10990

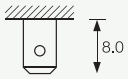
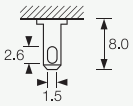
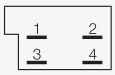
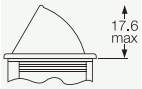
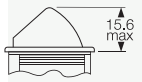
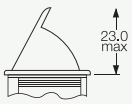
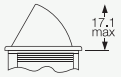
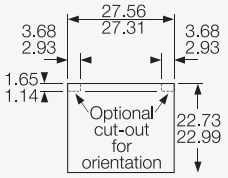
3141, μ contact gap.
3145 and 3146, 3mm contact gap.

Sealed terminals option available.

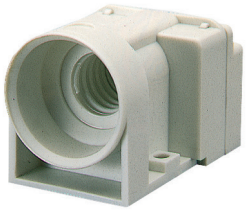
Dimensions and Properties

3141 uses terminals 1,2,3,4
3145 uses terminals 3,4
3146 uses terminals 1,2



Terminal	Function	Actuator	Body	Colour	Options
H  4.8x0.8 **K**  2.8x0.8 Standard format is H terminals in positions 1 & 2 and K terminals in positions 3 & 4 For sealed terminals call sales	 **3141**  ON - OFF (momentary) **3145**  ON - OFF (momentary OFF) **3146**  ON - ON (momentary ON)	**A**  **B**  **C**  **D** 	**A** 	**W** White **B** Black **PW** Polar White	Finish Gloss finish only Colour White or black Call sales for custom colours. A full range is available for large orders. Order as: 3151 (3141 type) 3155 (3145 type) 3156 (3146 type)

0305 Combined Switch / Lampholder for Freezers



C0305RT - - -
C0305LT - - -

Key Features

- E12 and E14 lamps
- Switch rating up to 0.06A, 250V ac
- Auto switching
- Mercury free
- Available with right or left hand orientation
- Available as lampholder only

Approvals and specifications

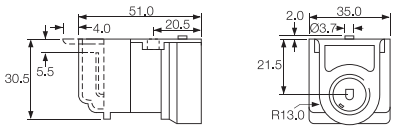
0.06A 250Vac 25 T 85 (0305 only)

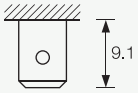
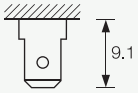
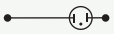
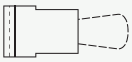
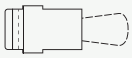
UL 15W 125/250Vac (0305 only)
UL 65°C, file E116391 (0305 only)

Switched units have μ contact gap.

Dimensions and Properties

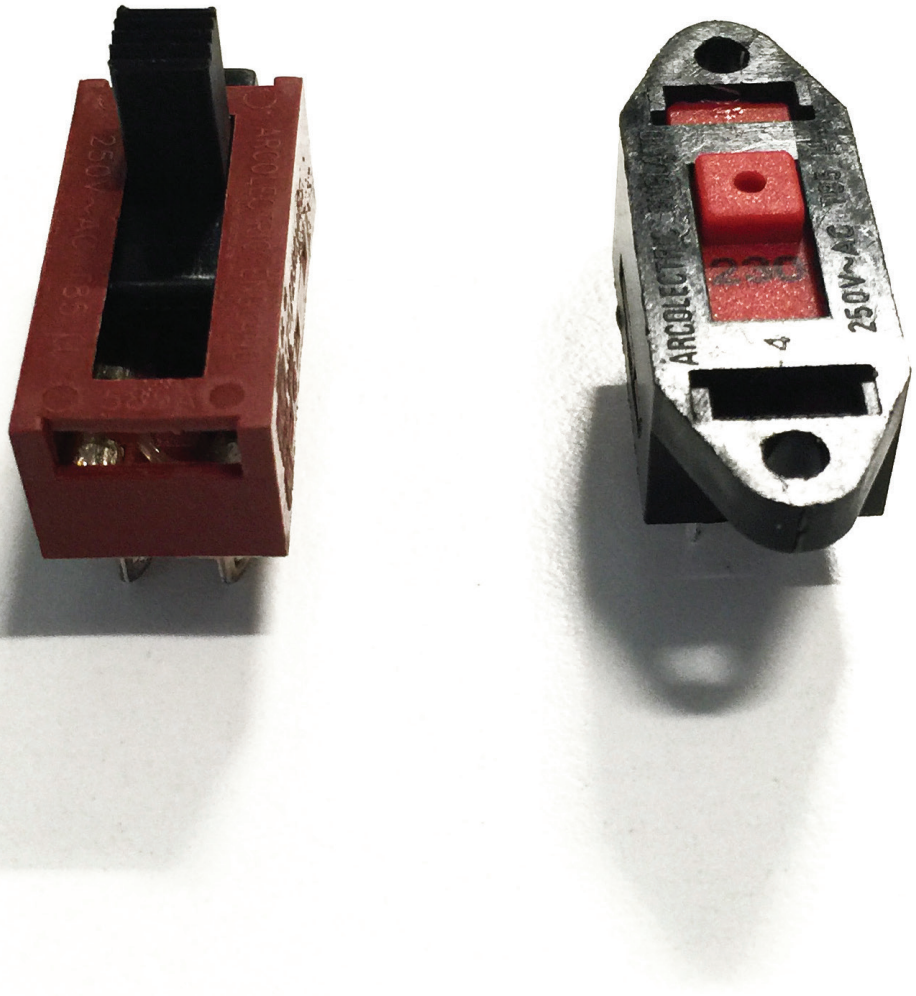
The mechanism of this switch/lampholder does not contain mercury and may be safely used in food storage equipment. When fitted to the lid of a freezer storage cabinet, the switch will operate the lamp when the lid is opened to the angle of tilt shown in the drawing.



Terminal	Function	Mounting	Body	Options
C  6.3x0.8 **H**  4.8x0.8	**0305 (E14)**  ON - OFF Switch and Lampholder **0306 (E12)** Lampholder only (No Switch) **0307 (E14)**  ON - OFF Switch and Lampholder	**L** (View from the bulb end) For Left hinged lid for 0305/0306 switches, not for 0307 lampholder  **R** (View from the bulb end) For Right hinged lid for 0307 lampholder or 0305/0306 switches  	**T** Body without flange for 0305/0306 switches  **S** Body with rear flange for 0307 lampholder and for 0305/0306 switches 	Colour Call sales for colours. A full range is available for large orders.

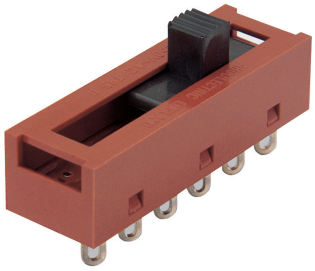
With up to 5 switching positions as well as multiple terminal, circuit and slider options, Bulgin's board mounted power slide switches can be configured to suit your needs. We also offer a wide range of voltage selector types that can be either snapped into a panel or flange mounted.

- Ratings up to 16A, 250V ac
- PCB and solder terminals
- Voltage Selector Models
- Snap in and flange mounting
- 2, 3, 4 and 5 position
- Choice of circuits
- Choice of actuators



2000 Slide Switches - up to 5 position

10A 250Vac



Key Features

- Slide switches
- Ratings up to 16A, 250V ac
- PCB and solder terminals
- 2, 3, 4 and 5 position
- Choice of circuits
- Choice of actuators

Approvals and specifications

10A 250Vac T85
6(3)A 250Vac T85

UL CSA 16A 250Vac Non Inductive
UL CSA 4A 300Vac
UL 65°C, file no. E45221, CSA file no. LR10990

μ contact gap
Please specify: Standard action (SP116) or Light action (SP118).
2000 series lubrication is inorganic and does not degrade plastics.

Terminal	Series	Position	Circuit	Slider
K 2.8 x 0.8 **R** 2.8 x 0.8 **T** Solder **X** PCB 0.8 Sq. **Y** PCB 0.8 Sq. For mounting stability switches have extra "support" terminals * Nominal - Dimension varies with body type. For exact figure call sales	**2**	**2** Switching positions **3** Switching positions **4** Switching positions **5** Switching positions	**10** 5 3 1 / 6 4 2 **20** 5 3 1 / 6 4 2 **30** 5 3 1 / 6 4 2 **40** 5 3 1 / 6 4 2 **10** 7 5 3 1 / 8 6 4 2 **20** 7 5 3 1 / 8 6 4 2 **30** 7 5 3 1 / 8 6 4 2 **40** 7 5 3 1 / 8 6 4 2 **10** 9 7 5 3 1 / 10 8 6 4 2 **20** 9 7 5 3 1 / 10 8 6 4 2 **30** 9 7 5 3 1 / 10 8 6 4 2 **40** 9 7 5 3 1 / 10 8 6 4 2 **10** 11 9 7 5 3 1 / 12 10 8 6 4 2 **20** 11 9 7 5 3 1 / 12 10 8 6 4 2 **30** 11 9 7 5 3 1 / 12 10 8 6 4 2 **40** 11 9 7 5 3 1 / 12 10 8 6 4 2	**0** 5.8Sq, 6.0, 21.0 **1** 7.9, 6.0, 36.8, 5.8 **2** 5.8Sq, 1.7, 21.0, Ø2.0 Hole **3** 5.8Sq, 5.5, 2.4 Slot, 11.0, 15.5 **4** Ø2.5, 3.0, 15.5, 5.8Sq **5** 5.8Sq, 1.0, 21.0, Ø2.0 Hole **6** 5.8Sq, 6.0, 15.5 **7** 5.8Sq, 4.0, 15.5 **9** 5.8Sq, 3.5, 15.5 **A** 5.8Sq, 9.5, 21.0 **B** Ø2.9, 3.0, 36.8, 5.8Sq **C** 5.8Sq, 2.3, 13.5, Ø2.0 Hole **D** 5.8Sq, 9.5, 15.5 **E** 7.0, 8.2, 9.2, 2.0 Blade, 21.0, 5.8 **G** 7.9, 6.0, 1.4 Slot, 36.8, 5.9 **H** 5.7Sq, 4.7, 21.0 **J** 5.7Sq, 4.7, 36.5 **K** 8.0, 5.4, 2.3 Blade, 15.5, 5.8 **L** 8.0, 7.9, 2.3 Blade, 15.5, 5.8 **N** 4.2, 7.5, 21.0, 5.8 **P** 7.7, 4.0, 15.5, 5.6 **R** Ø5.0, 2.4, 15.5, 5.8 **S** 8.0, 9.0, 2.2 Blade, 15.5, 5.8 **T** 5.8Sq, 4.6, 15.5

Examples


X22205C - - -


T2220EC - - -


T23206A - - -

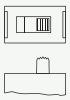

T24306A - - -


T25302A - - -


T25100A - - -

Body

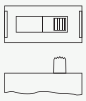
C 2 positions



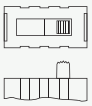
H 2 positions



A 3 positions



H 3 positions



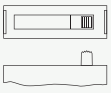
A 4 positions



H 4 positions



A 5 positions



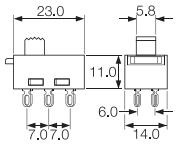
Options

Colour
Call sales for custom colours.
A full range is available for large orders.

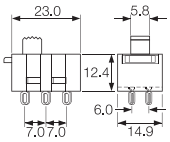
Legend printing
A wide range is available
For all options call sales

Dimensions

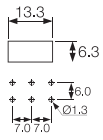
C 2 positions



H 2 positions

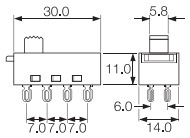


Cut-out /PCB Matrix

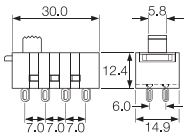


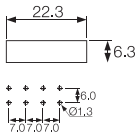
for PCB

A 3 positions



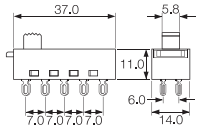
H 3 positions



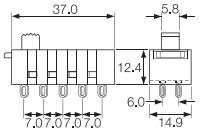


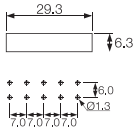
for PCB

A 4 positions



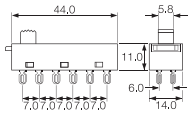
H 4 positions

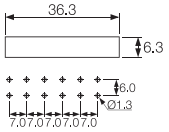




for PCB

A 5 positions

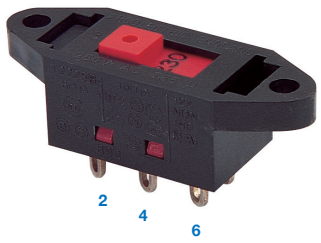




for PCB

2000 Slide Switches - Snap fit and panel mount

10A 250Vac



115/230 is preferred legend

Key Features

- 2 way 'voltage selector'
- Ratings up to 16A, 250V ac
- Snap fit and panel mount
- PCB & solder terminals
- 2 and 3 position
- Choice of circuits
- Choice of actuators

Approvals and specifications

10A 250Vac T85
6(3)A 250Vac T85

UL CSA 16A 250Vac Non Inductive
UL CSA 4A 300Vac
UL 65°C, file no. E45221, CSA file no. LR10990

μ contact gap
Please specify: Standard action (SP116) or Light action (SP118).
2000 series lubrication is inorganic and does not degrade plastics.

Terminal	Series	Position	Circuit	Slider
K 2.8 x 0.8 **R** 2.8 x 0.8 **T** Solder **X** PCB 0.8 Sq. For mounting stability switches have extra "support" terminals. * Nominal - Dimension varies with body type. For exact figure call sales	**2**	**2** Switching positions	**10** 5 3 1 / 6 4 2 **20** 5 3 1 / 6 4 2 **30** 5 3 1 / 6 4 2 **40** 5 3 1 / 6 4 2	**0** 5.8Sq, 6.0, 21.0 **2** 5.8Sq, 1.7, 21.0, Ø2.0 Hole **3** 5.8Sq, 2.4 Slot, 5.5, 11.0, 15.5 **4** Ø2.5, 3.0, 15.5, 5.8Sq **5** 5.8Sq, 1.0, 21.0, Ø2.0 Hole **6** 5.8Sq, 6.0, 15.5 **7** 5.8Sq, 4.0, 15.5 **8** 4.0, 18.4, 8.0 **9** 5.8Sq, 3.5, 15.5 **A** 5.8Sq, 9.5, 21.0 **C** 5.8Sq, 2.3, 13.5, Ø2.0 Hole **D** 5.8Sq, 9.5, 15.5 **E** 7.0, 8.2, 9.2, 2.0 Blade, 21.0, 5.8 **H** 5.7Sq, 4.7, 21.0 **K** 8.0, 5.4, 2.3 Blade, 15.5, 5.8 **L** 8.0, 7.9, 2.3 Blade, 15.5, 5.8 **M** 4.1, 4.8, 18.4 **N** 4.2, 7.5, 5.8, 21.0 **P** 7.7, 4.0, 5.6, 15.5 **R** Ø5.0, 2.4, 15.5, 5.8 **S** 8.0, 9.0, 2.2 Blade, 15.5, 5.8 **T** 5.8Sq, 4.6, 15.5
		3 Switching positions	**10** 7 5 3 1 / 8 6 4 2 **20** 7 5 3 1 / 8 6 4 2 **30** 7 5 3 1 / 8 6 4 2 **40** 7 5 3 1 / 8 6 4 2	

Examples


T22208E - - -


T22308E - - -


T2230MF - - -

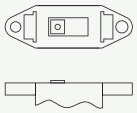

T22205B - - -


T22305B - - -

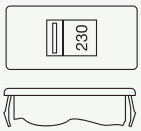

T23204B - - -

Body

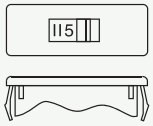
B
With mounting holes



E
Snap fit



F
Snap fit
(single pole ON OFF only)

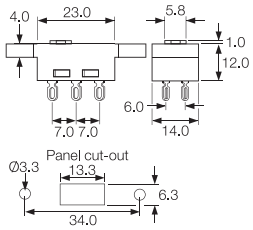


Options

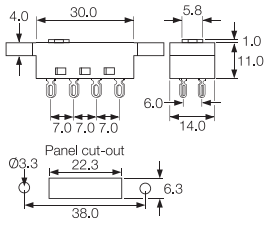
Colour
Call sales for custom colours.
A full range is available for large orders.
Standard body colour is black.

Dimensions

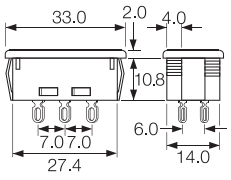
2 Pos B

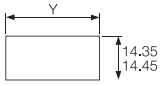


3 Pos B



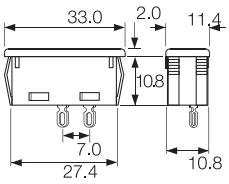
2 Pos E

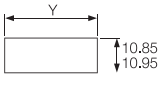




Panel thickness	Dim. Y
0.8-1.2	29.75/29.85
1.63	30.15/30.25
2.0	30.35/30.45
2.5	30.55/30.65

2 Pos F





Panel thickness	Dim. Y
0.8-1.2	29.75/29.85
1.63	30.15/30.25
2.0	30.35/30.45
2.5	30.55/30.65

Manufactured from quality moulding and metal components to ensure a secure and reliable connection, Bulgin's battery holder range caters for battery sizes AAA(R03), AA(R6), C(R14), D(R20) and PP3(6R61), accommodating 1, 2, 3 or 4 cells.



There's a choice of fixing styles including screw and flange panel fixing, PCB and base mounting versions.

The panel mounting versions are now available in two styles; standard fixing and front panel sealed to IP67, extending the applications into harsher external environments where dust or water would inhibit equipment operation.

The open frame styles are designed to be either PCB or base mounted and most have an interlocking facility to join adjacent holders together.

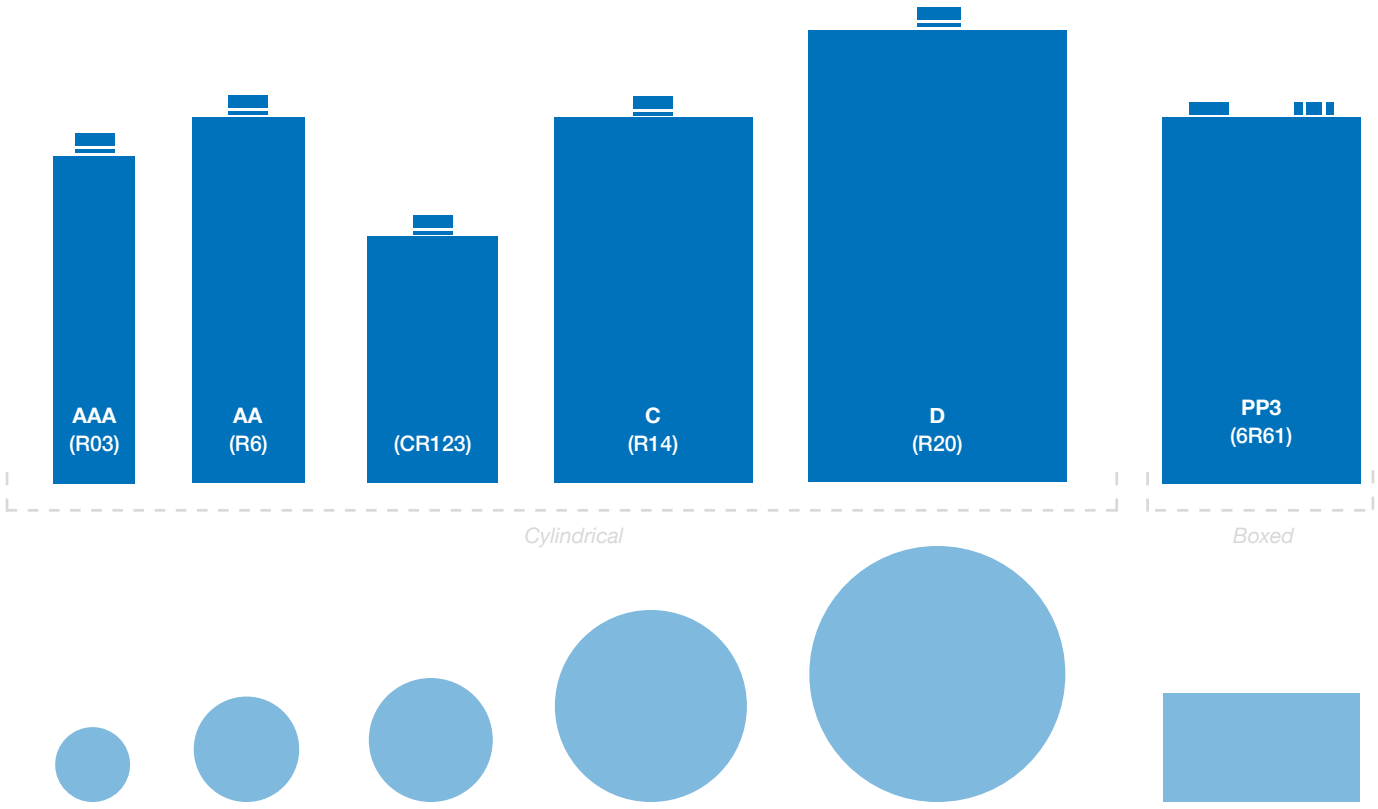
Principle applications include portable equipment and memory back-up.

IP67 Sealed 232
Panel Mounting 233-234
PCB/Base Mounting 235-236

Battery Holder Selector

Maximum Battery Size to BSEN 60086-1 and -2

Battery size	Battery Dimensions	No. of Cells	Mounting	Part No.
AAA (R03)	Ø10.5 x 44.5	1	PCB/Base	BX0034
AA (R6)	Ø14.5 x 50.5	1	PCB/Base	BX0035
		1	Panel	BX0011/1
		2	Panel	BX0012/1
		3	Panel	BX0013/1
		4	Panel	BX0027
		1	Panel Sealed	BXS011/1
		2	Panel Sealed Panel	BXS012/1
		3	Sealed	BXS013/1
CR123	Ø17.0 x 34.5	1	PCB/Base	BX0123
C (R14)	Ø26.2 x 50	1	PCB/Base	BX0036
		1	Panel	BX0001/1
		2	Panel	BX0002/1
		3	Panel	BX0003/1
		1	Panel Sealed	BXS001/1
		2	Panel Sealed	BXS002/1
		3	Panel Sealed	BXS003/1
D (R20)	Ø34.2 x 61.5	1	PCB/Base	BX0037
		1	Panel	BX0016
		2	Panel	BX0017
		3	Panel	BX0018
		1	Panel Sealed	BXS016
		2	Panel Sealed	BXS017
		3	Panel Sealed	BXS018
PP3 (6R61)	W26.5 x D17.5 x H48.5	1	PCB/Base	BX0033
		1	Panel	BX0023
		2	Panel	BX0026



As batteries from different manufacturers may vary slightly in size, Dimensions & Drawings are approximate only.
All Bulgin Battery Holders have polarity clearly marked.

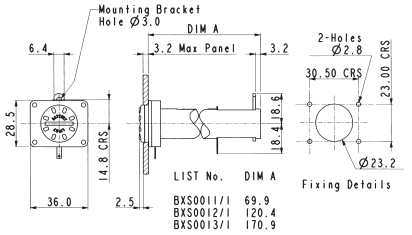
Front panel sealed to IP67

AA SIZE BATTERY HOLDER



BXS011/1

- 1, 2 or 3 Cells
- Flanged Panel Mount
- Bayonet with finger/coin slot release
- Supplied with gasket and sealing grommets for screws

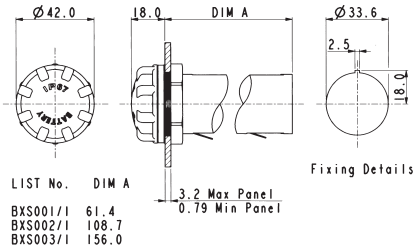


C SIZE BATTERY HOLDER



BXS001/1

- 1, 2 or 3 Cells
- Panel Mount
- Screw Cap/Hand release
- Supplied with gasket

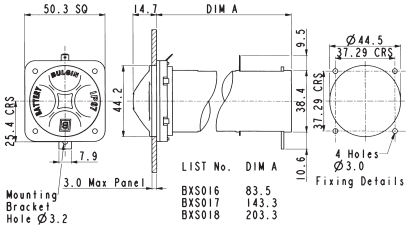


D SIZE BATTERY HOLDER



BXS016

- 1, 2 or 3 Cells
- Flanged Panel Mount
- Bayonet/finger release
- Supplied with flange gasket and sealing grommets for screws



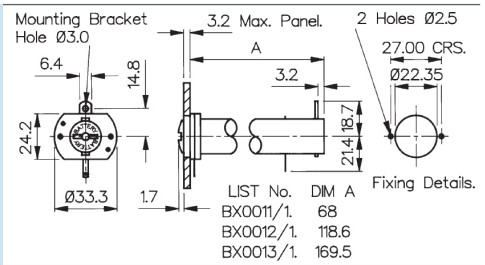
Specification	BXS011/1, BXS012/1, BXS013/1	BXS001/1, BXS002/1, BXS003/1	BXS016, BXS017, BXS018
Battery/Cell Type:	AA (R6)	C (R14)	D (R20)
No. Cells:	BXS011/1 - 1 cell BXS012/1 - 2 cells BXS013/1 - 3 cells	BXS001/1 - 1 cell BXS002/1 - 2 cells BXS003/1 - 3 cells	BXS016 -1 cell BXS017 - 2 cells BXS018 - 3 cells
Terminations:	2.8 series tabs/solder tags	2.8 series tabs/solder tags	4.8 series tabs/solder tags
Operating Temperature:	–30°C to +70°C	–30°C to +70°C	–30°C to +70°C
Mouldings:	Nylon Glass filled Polyester Polycarbonate	Nylon Glass filled Polyester	Nylon Glass filled Polyester
Flammability Rating:	UL94V-0	UL94V-0	UL94V-0
Contacts:	Brass,Tin Plated - rear contact Nickel Silver, clean - front contact and cap contact plate	Brass, Tin Plated - front and rear contacts Nickel Silver, clean - cap contact plate	Brass, Nickel Plated - front and rear contacts and cap contact plate
Features:	Bayonet cap with finger grip and coin slot Rear support bracket	Screw on cap with finger grip Recommended torque for panel ring 1.13-1.7Nm (10-15lbf.in)	Bayonet cap with finger grip Rear support bracket
Sealing (front of panel):	Protection classification IP67, EN60529:1992+A2:2013	Protection classification IP67, EN60529:1992+A2:2013	Protection classification IP67, EN60529:1992+A2:2013
Notes:	Recommend 2 & 3 cell versions are supported by rear bracket		Recommend 2 & 3 cell versions are supported by rear bracket
RoHS	Compliant	Compliant	Compliant

AA SIZE BATTERY HOLDER

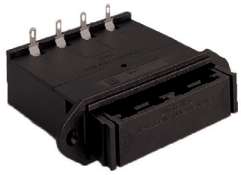


BX0011/1

- 1, 2 or 3 Cells
- Flanged Panel Mount
- Bayonet/Screwdriver release

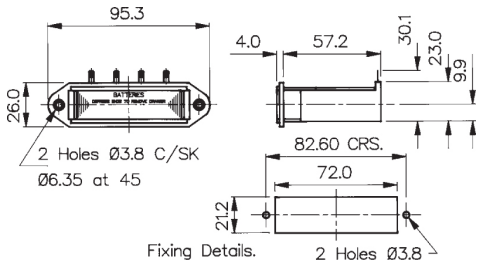


AA SIZE BATTERY HOLDER



BX0027

- 4 Cells
- Flanged Panel Mount
- Drawer function

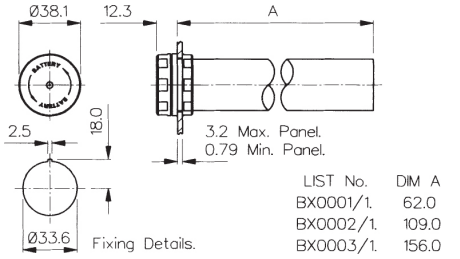


C SIZE BATTERY HOLDER



BX0001/1

- 1, 2 or 3 Cells
- Panel Mount
- Screw Cap/Hand release



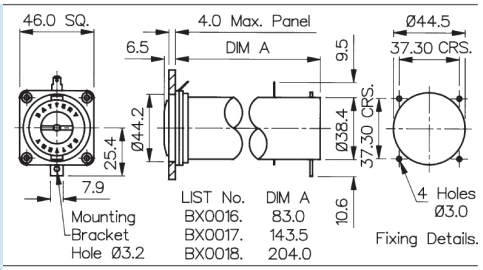
Specification	BX0011/1, BX0012/1, BX0013/1	BX0027	BX0001/1, BX0002/1,BX0003/1
Battery/Cell Type:	AA (R6)	AA (R6)	C (R14)
No. Cells:	BX0011/1 - 1 cell BX0012/1 - 2 cells BX0013/1 - 3 cells	4 cells	BX0001/1 - 1 cell BX0002/1 - 2 cells BX0003/1 - 3 cells
Terminations:	2.8 series tabs/solder tags	4 solder tags (can be wired in series or in pairs)	2.8 series tabs/solder tags
Operating Temperature:	–30°C to +70°C	–30°C to +70°C	–30°C to +70°C
Flammability Rating:	UL94V-0	UL94HB	UL94V-0
Mouldings:	Glass Filled Nylon & Polyester	Glass Filled Nylon	Nylon & Glass Filled Nylon
Contacts:	Brass, Tin Plated Nickel Silver, clean	Phosphor Bronze, Tin Plated Nickel Silver, clean	Nickel Silver, clean Brass, Tin Plated
Features:	Bayonet cap with coin slot Rear support bracket	Removable loading/latching drawer	Screw on cap. Recommended torque for panel ring 1.13-1.7Nm (10-15lbf.in)
Notes:	Recommend 2 & 3 cell versions are supported by rear bracket		
RoHS	Compliant	Compliant	Compliant

D SIZE BATTERY HOLDER



BX0016

- 1, 2 or 3 Cells
- Flanged Panel Mount
- Bayonet/Screwdriver release

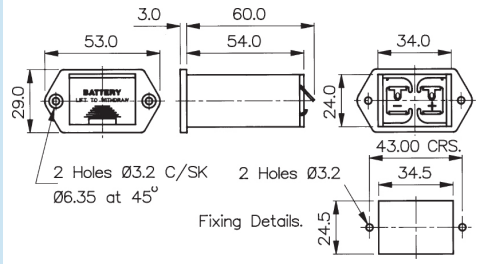


PP3 SIZE BATTERY HOLDER



BX0023

- 1 Cell
- Flanged Panel Mount
- Drawer function

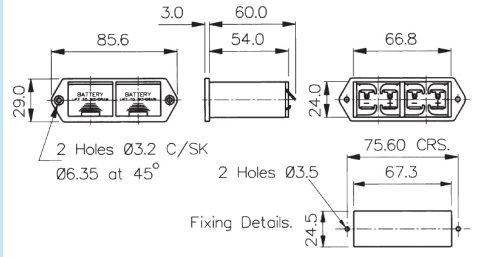


PP3 SIZE BATTERY HOLDER



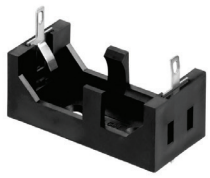
BX0026

- 2 Cell
- Panel Mount
- Screw Cap/Hand release



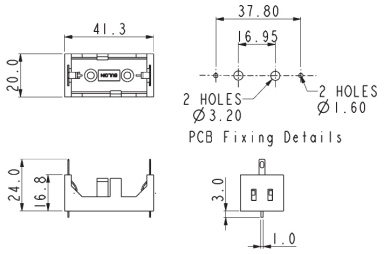
Specification	BXS011/1, BXS012/1, BXS013/1	BX0023	BX0026
Battery/Cell Type:	D (R20)	PP3 (6R61)	PP3 (6R61)
No. Cells:	BX0016 -1 cell BX0017 - 2 cells BX0018 - 3 cells	1 cell	2 cells
Terminations:	4.8 series tabs/solder tags	Solder tag	Solder tags
Operating Temperature:	–30°C to +70°C	–30°C to +70°C	–30°C to +70°C
Flammability Rating:	UL94V-0	UL94HB	UL94HB
Mouldings:	Nylon & Polycarbonate	Glass Filled Nylon	Glass Filled Nylon
Contacts:	Brass, Nickel Plated	Phosphor Bronze, Tin Plated	Phosphor Bronze, Tin Plated
Features:	Bayonet cap with coin slot Rear support bracket	Removable loading drawer	Removable loading drawer
Notes:	Recommend 2 & 3 cell versions are supported by rear bracket		
RoHS	Compliant	Compliant	Compliant

CR123 SIZE BATTERY HOLDER



BX0123

- 1 Cell
- PC/Base Mount
- Open style

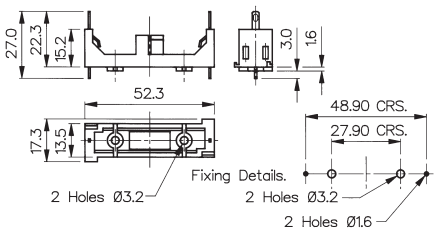


AAA SIZE BATTERY HOLDER

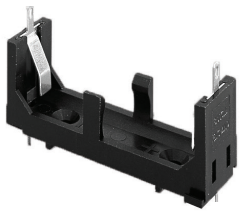


BX0034

- 1 Cell
- PC/Base Mount
- Open style

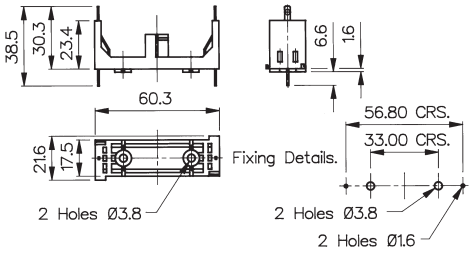


AA SIZE BATTERY HOLDER



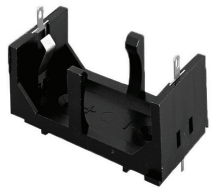
BX0035

- 1 Cell
- PC/Base Mount
- Open style



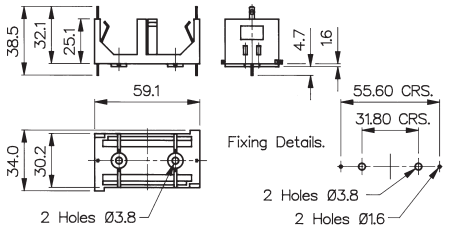
Specification	BX0123	BX0034	BX0035
Battery/Cell Type:	CR123	AAA (R03)	AA (R6)
No. Cells:	1 cell	1 cell	1 cell
Terminations:	Dual connections, P.C. spills & 2.8 series tabs/solder tags. (P.C. spills may be removed if required)	Dual connections, P.C. spills & 2.8 series tabs/solder tags. (P.C. spills may be removed if required)	Dual connections, P.C. spills & 2.8 series tabs/solder tags. (P.C. spills may be removed if required)
Operating Temperature:	–30°C to +70°C	–30°C to +70°C	–30°C to +70°C
Flammability Rating:	UL94HB	UL94HB	UL94HB
Mouldings:	Glass Filled Nylon	Glass Filled Nylon	Nylon & Glass Filled Nylon
Contacts:	Nickel Silver, clean	Nickel Silver, clean	Nickel Silver, clean
Features:		Interlocking for multiple assemblies	Interlocking for multiple assemblies
RoHS	Compliant	Compliant	Compliant

C SIZE BATTERY HOLDER



BX0036

- 1 Cell
- PC/Base Mount
- Open style

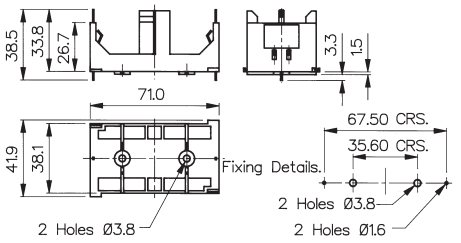


D SIZE BATTERY HOLDER



BX0037

- 1 Cell
- PC/Base Mount
- Open style

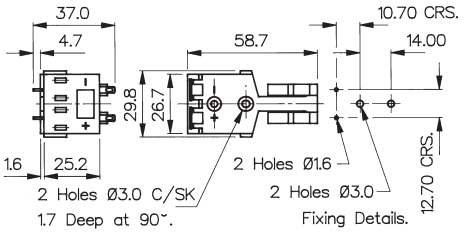


PP3 SIZE BATTERY HOLDER



BX0033

- 1 Cell
- PC/Base Mount
- Open style



Specification	BX0036	BX0037	BX0033
Battery/Cell Type:	C (R14)	D (R20)	PP3 (6R61)
No. Cells:	1 cell	1 cell	1 cell
Terminations:	Dual connections, P.C. spills & 2.8 series tabs/solder tags. (P.C. spills may be removed if required)	Dual connections, P.C. spills & 2.8 series tabs/solder tags. (P.C. spills may be removed if required)	Dual connections, P.C. spills & 2.8 series tabs/solder tags. (P.C. spills may be removed if required)
Operating Temperature:	–30°C to +70°C	–30°C to +70°C	–30°C to +70°C
Flammability Rating:	UL94HB	UL94HB	UL94HB
Mouldings:	Glass Filled Nylon	Glass Filled Nylon	Nylon & Glass Filled Nylon
Contacts:	Nickel Silver, clean	Nickel Silver, clean	Nickel Silver, clean
Features:	Interlocking for multiple assemblies	Interlocking for multiple assemblies	
RoHS	Compliant	Compliant	Compliant

A full range of quality mains rated inlets, outlets and connectors conforming to IEC and EN 60320 specifications carrying UL, CSA, VDE and other approvals.

With electrical ratings up to 20A, 250V (UL) these connector ranges offer solutions to most mains powered equipment and cable applications.

The combinations of mounting styles and terminations include: flange fixing, snap to panel and PCB mounting versions together with 2.8/ solder tabs, 4.8 and 6.3 fast on tabs, screw terminal and PC spill versions.

Completing the range are insulating boots, retaining and safety covers

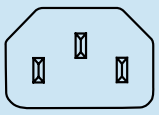
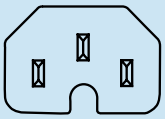
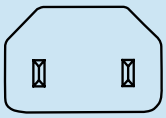
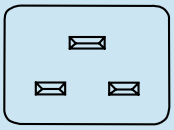
In addition to the standard black moulding, most styles are also available in either white or grey and special colours to match OEM equipment can also be supplied. (Subject to product approval requirements)

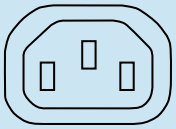
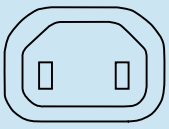
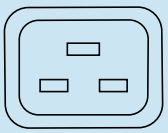


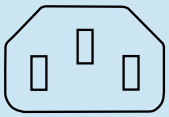
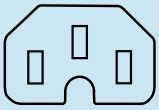
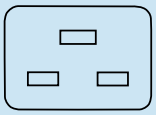
Inlets and Outlet Connectors 238-262
Distribution Units 263-267
Power Entry Modules 268-290
EMI Mains Filters 291-299

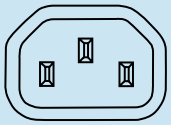
IEC60320 Main Inlets and Outlets

Panel Mounting

IEC60 320-1	Sheet No:	No Pins	Current Rating	Flange Fixing	Snap fit	Fused Flange	Fused Snap fit	Filtered	Fuse Filtered
	C14	3	10A, 250V a.c.	PX0579 PX0580 PX0580/PC PX0580/PC/12132 PX0580/PC/7 PX0580/PC/7LC	PX0575 PX0575/PC	PF0001 PF0001/PC PF0002 PF0030 PF0030/PC	PF0011 PF0011/PC	PS00 PS01	PS20 PS21 PS25 PS26
	C16	3	10A, 250V a.c.	PX0590	PX0595				
	C18	2	10A, 250V a.c.	PX0690	PX0691 PX0691/PC	PF0006 PF0007	PF0016		
	C20	3	3 16A, 250V a.c.	PX0596	PX0598				

IEC60 320-2-2	Sheet No:	No Pins	Current Rating	Flange Fixing	Snap fit	Fused Flange	Fused Snap fit	Filtered	Fuse Filtered
	F	3	10A, 250V a.c.	PX0675 PX0675/PC PX0675/PC/12599 PX0793 (Shuttered) PX0793/1(Shuttered)	PX0695 PX0695/PC PX0783 (Shuttered) PX0716 PX0717 PX0718				
	H	2	10A, 250V a.c.	PX0705	PX0725				
	J	3	16A, 250V a.c.	PX0591	PX0592				

IEC60 320-1	Sheet No:	No Pins	Current Rating	Rewirable	Side Entry Rewirable
	C13	3	10A, 250V a.c.	PX0587 PX0588	PX0587/SE
	C15	3	10A, 250V a.c.	PX0597	
	C19	3	16A, 250V a.c.	PX0599	

IEC60 320-2-2	Sheet No:	No Pins	Current Rating	Rewirable	Side Entry Rewirable
	E	3	10A, 250V a.c.	PX0686	PX0685 PX0686/SE

EN60 320-1 Standard Sheet C13 Class I

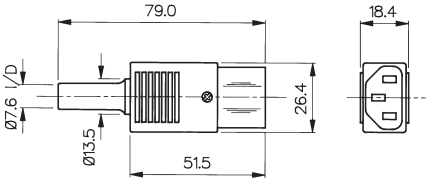
Rewirable Cold Condition

Straight Female Connector



PX0587

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.

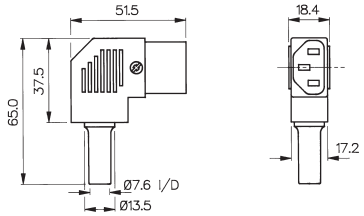


Side Entry Female Connector



PX0587/SE

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.

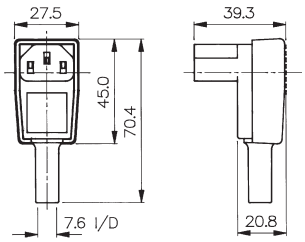


Angled Female Connector



PX0588

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.



Specifications	PX0587/CoI	PX0587/SE/CoI	PX0588
Terminations:	Screw Terminals	Screw Terminals	Screw Terminals
Colours:	No suffix (Black), /WH (White), /GY (Grey	No suffix (Black), /WH (White), /GY (Grey)	-
Max. Rating:	10A, 250V a.c.	10A, 250V a.c.	10A, 250V a.c.
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ	>10³ MΩ
A.C. Breakdown:	Pole-Pole 4.5kV. (Poles-Accessible) Parts 4kV	Pole-Pole 4.5kV. (Poles-Accessible) Parts 4kV	Pole-Pole 5kV. (Poles-Accessible) Parts 3.5kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C	–40°C to +70°C
Withdrawal Force:	10N (Min.) 50N (Max.)	10N (Min.) 50N (Max.)	10N (Min.) 50N (Max.)
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts	Brass, Clean	Brass, Clean	Brass, Clean
Approvals:			
Accessories / Notes:	VDE and ENEC approval for black and white versions only.	VDE and ENEC approval for black and white versions only.	
Mating Inlets:	PX0575, PX0579, PX0580, PF0001, PF0011, PF0030, PF0033	PX0575, PX0579, PX0580, PF0001, PF0011, PF0030, PF0033	PX0575, PX0579, PX0580, PF0001,PF0011, PF0030, PF0033
RoHS	Compliant	Compliant	Compliant

EN60 320-1 Standard Sheet C14 Class I

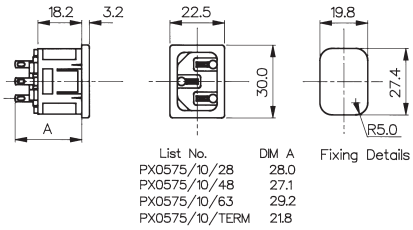
Rewirable Cold Condition

Snap Fit to Panel Inlet



PX0575/10/28

- Fits Panel Sizes 1, 1.5, 2.0 or 3.0mm
- 2.8, 4.8, 6.3mm Tabs or Screw Terminals
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)

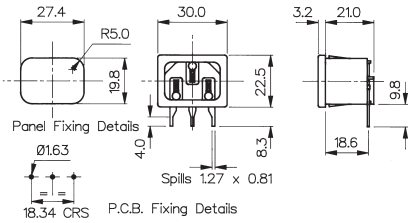


PC Snap Fit to Panel Inlet



PX0575/10/PC

- Fits Panel Sizes 1, 1.5, 2.0 or 3.0mm
- PC Spills
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)



Specifications	PX0575/Panel/Term/Col	PX0575/Panel/PC/Col
Fixing(Panel):	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab)	P.C. Spills
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ
A.C. Breakdown:	Pole-Pole 5kV. Poles-Panel 5.4kV	Pole-Pole 5kV. Poles-Panel 5.4kV
Operating Temp. Range:	–40°C to +70°C	–40°C to +70°C
Max. Pin Temp.:	+70°C	+70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass: Pins, Nickel Plated. Tabs, Tin Plated, Screw Terms, Nickel Plated	Brass: Pins, Nickel Plated. Spills, Tin Plated
Approvals:		
Accessories / Notes:	P.No. 11328 (See Page 152) VDE and ENEC approval for black versions only.	Standard without cover. With cover add /C to P.No. PX0587, PX0587/SE, PX0588 VDE and ENEC approval for black versions only.
Mating Connectors:	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588
RoHS	Compliant	Compliant

EN60 320-1 Standard Sheet C14 Class I

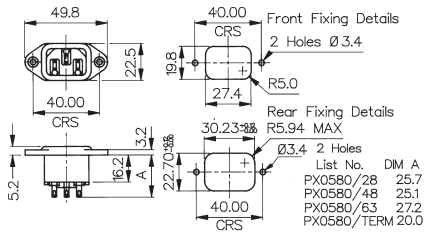
Rewirable Cold Condition

Flange Mount Inlet



PX0580/28

- 2.8, 4.8, 6.3mm Tabs or Screw Terminals
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)

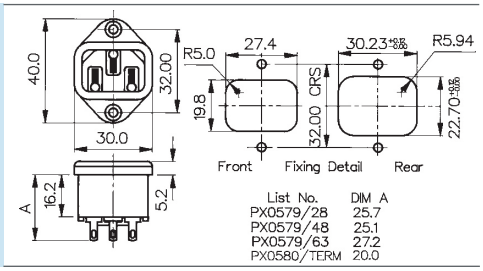


Vertical Flange Mount Inlet



PX0579/28

- 2.8, 4.8, 6.3mm Tabs or Screw Terminals
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)



Specifications	PX0580/Term/Col	PX0579/Term/Col
Fixing:	Flange	Flange
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab), /TERM (screw)	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ
A.C. Breakdown:	Pole-Pole 5kV. Poles-Panel 10kV	Pole-Pole 5kV. Poles-Panel 10kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C
Max. Pin Temp.:	+70°C	+70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass: Pins, Nickel Plated. Tabs, Tin Plated, Screw Terms, Nickel Plated	Brass: Pins, Nickel Plated. Tabs, Tin Plated
Approvals:		pending
Accessories / Notes:	P.No. 11328, KT0006 (PX0587 only) (See Pages 150 and 152) VDE and ENEC approval for black versions only.	P.No. 11328 (See Page 152)
Mating Connectors:	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588
RoHS	Compliant	Compliant

EN60 320-1 Standard Sheet C14 Class I

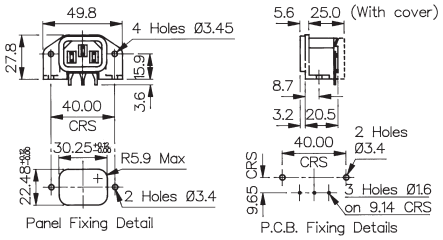
Cold Condition

PC Flange Rear Mount Inlet



PX0580/PC

- With or Without Rear Cover
- PC Spills
- 10A, 250V a.c.
  (15A, 250V a.c. UL & CSA)

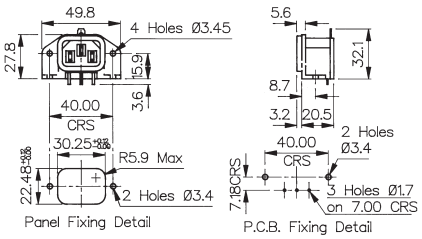


PC Flange Rear Mount Inlet



PX0580/PC/7

- With or Without Cover
- PC Spills
- 4.8mm Top Tab (earth)
- 10A, 250V a.c.
  (15A, 250V a.c. UL & CSA)



Specifications	PX0580/PC/Col	PX0580/PC/7/Col
Fixing:	P.C.B./Flange	P.C.B./Flange
Terminations:	P.C. Spills	P.C. Spills
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ
A.C. Breakdown:	Pole-Pole 5.4kV. Poles-Panel 10kV	Pole-Pole 5.4kV. Poles-Panel 10kV
Operating Temp. Range:		
Max. Pin Temp :	–40°C to +70°C +70°C	–40°C to +70°C +70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass: Pins, Nickel Plated. Spills, Tin Plated	Brass: Pins, Nickel Plated. Spills, Tin Plated
Approvals:		
Accessories / Notes:	Standard without cover. With cover add /12132 to P.No VDE approvals for black version only	Standard without cover. With cover add /12132 to P.No. VDE approvals for black version only
Mating Connectors:	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588
RoHS	Compliant	Compliant

EN60 320-1 Standard Sheet C14 Class I

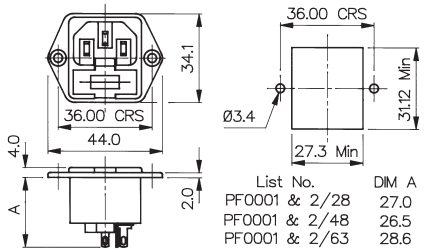
Rewirable Cold Condition (Fused)

Flanged Mount Fused Inlet



PF0001/28 PF0002/28

- Single Fuse 5 x 20mm
- Spare Fuse Facility
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.
- Fuse Contacts Isolated (PF0002)

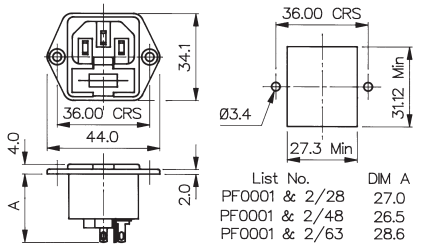


PC Flanged Mount Fused Inlet



PF0001/PC

- Single Fuse 5 x 20mm
- Spare Fuse Facility
- PC Spills - Horizontal
- 10A, 250V a.c.



Specifications	PF0001/Term/Col	PF0001/PC/Col	PF0002/Term/Col
Fixing(Panel):	Flange	P.C.B./Flange	Flange
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)	P.C. Spills	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c.	10A, 250V a.c.	10A, 250V a.c.
Max. Fuse Rating:	2.5W/10A, 250V a.c.	2.5W/10A, 250V a.c	2.5W/10A, 250V a.c
Contact Resistance:	<10mΩ (<15mΩ including Fuseholder)	<10mΩ (<15mΩ including Fuseholder)	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ	>10³ MΩ
A.C. Breakdown:	Pole-Pole 5.5kV. Poles-Panel 4kV	Pole-Pole 5.5kV. Poles-Panel 4kV	Pole-Pole 5.5kV. Poles-Panel 4kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C	–40°C to +70°C
Max. Pin Temp.:	+70°C	+70°C	+70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass: Pins, Nickel Plated. Tabs, Tin Plated	Brass: Pins, Nickel Plated. Tabs, Tin Plated	Brass: Pins, Nickel Plated. Tabs, Tin Plated
Approvals:			
Accessories / Notes:	P.No. 11987, KT0009 See Pages 150 & 152) VDE and ENEC approval for black versions only.	KT0009 (front of panel mounting only) (See Page 150) VDE and ENEC approval for black versions only.	P.No. 11987, KT0009 (See Pages 150 & 152) (Note: Fuse contact isolated) VDE and ENEC approval for black versions only.
Mating Connectors:	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588
RoHS	Compliant	Compliant	Compliant

EN60 320-1 Standard Sheet C14 Class I

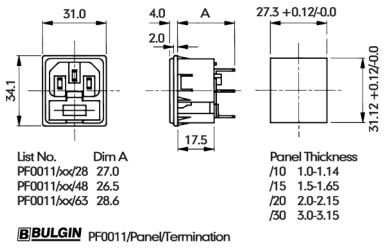
Rewirable Cold Condition (Fused)

Snap Fit to Panel Fused Inlet



PF0011/10/28

- Single Fuse 5 x 20mm
- Spare Fuse Facility
- Panel Sizes 1, 1.5, 2.0 or 3.0mm
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.

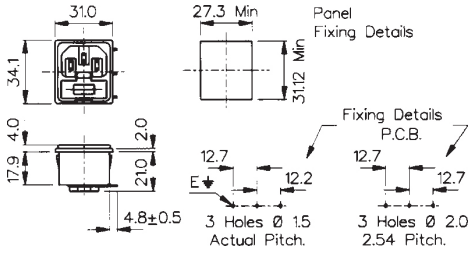


PC Snap Fit to Panel Fused Inlet



PF0011/10/PC

- Single Fuse 5 x 20mm
- Spare Fuse Facility
- Panel Sizes 1, 1.5, 2.0 or 3.0mm
- PC Spills
- 10A, 250V a.c.



Specifications	PF0011/Panel/Term/Col	PF0011/Panel/PC/Col
Fixing:	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)	P.C. Spills
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c.	10A, 250V a.c.
Max. Fuse Rating	2.5W/10A, 250V a.c	2.5W/10A, 250V a.c
Contact Resistance:	<10mΩ (<15mΩ including Fuseholder)	<10mΩ (<15mΩ including Fuseholder)
Insulation Resistance:	>10³ MΩ	>10³ MΩ
A.C. Breakdown:	Pole-Pole 5.5kV. Poles-Panel 4kV	Pole-Pole 5.5kV. Poles-Panel 4kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C
Max. Pin Temp.:	+70°C	+70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass: Pins, Nickel Plated. Tabs, Tin Plated	Brass: Pins, Nickel Plated. Spills, Tin Plated
Approvals:		
Accessories / Notes:	P.No. 11987 (See Page 152) VDE and ENEC approval for black versions only.	VDE and ENEC approval for black versions only.
Mating Connectors:	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588
RoHS	Compliant	Compliant

EN60 320-1 Standard Sheet C14 Class I

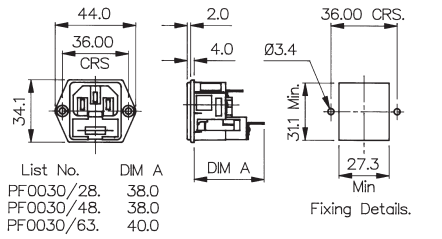
Rewirable Cold Condition (Fused Twin)

Flanged Mount Fused Inlet



PF0030/28

- Twin Fused 5 x 20mm
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.

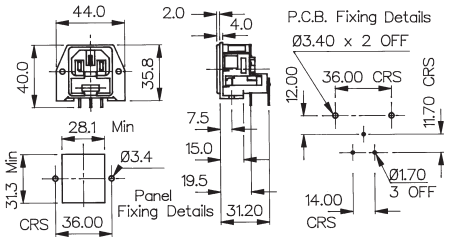


PC Flanged Mount Fused Inlet



PF0030/PC

- Twin Fused 5 x 20mm
- PC Spills
- 10A, 250V a.c.

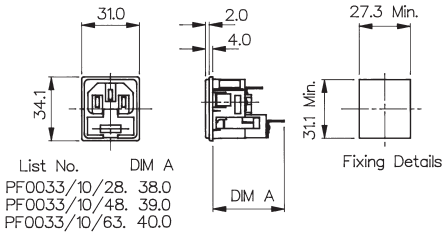


Snap Fit to Panel Fused Inlet



PF0033/10/28

- Twin Fused 5 x 20mm
- Fits Panel Sizes 1.0, 1.5, 2.0 or 3.0mm
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.



Specifications	PF0030/Termination	PF0030/PC	PF0033/Panel/Termination
Fixing(Panel):	Flange	P.C.B/Flange	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)	P.C. Spills	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)
Max. Rating:	10A, 250V a.c.	10A, 250V a.c.	10A, 250V a.c.
Contact Resistance:	<15mΩ (per pole)	<15mΩ (per pole)	<15mΩ (per pole)
Insulation Resistance:	$>10^4$ MΩ	$>10^4$ MΩ	$>10^4$ MΩ
A.C. Breakdown:	Pole-Pole 6kV. Poles-Panel 5kV	Pole-Pole 6kV. Poles-Panel 5kV	Pole-Pole 6kV. Poles-Panel 5kV
Max. Dissipation Per Fuse:	2.5W	2.5W	2.5W
Operating Temp.	–20°C to +70°C	–20°C to +70°C	–20°C to +70°C
Max. Pin Temp.:	+70°C	+70°C	+70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass: Pins, Nickel Plated. Tabs, Tin Plated	Brass: Pins, Nickel Plated. Tabs, Tin Plated	Brass: Pins, Nickel Plated. Tabs, Tin Plated
Approvals:			
Accessories / Notes:	KT0009 (See Page 150)		
Mating Connectors:	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588
RoHS	Compliant	Compliant	Compliant

EN60 320-1 Standard Sheet C15 & C16 Class I

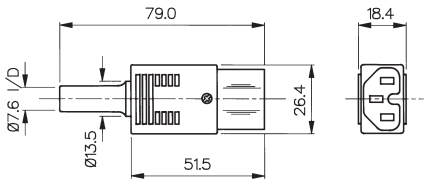
Class 1 Hot Condition

Straight Female Connector



PX0597

- Cable Mounting
- Hot Condition
- Mates with PX0590 and PX0595
- Screw Terminals
- 10A, 250V a.c.

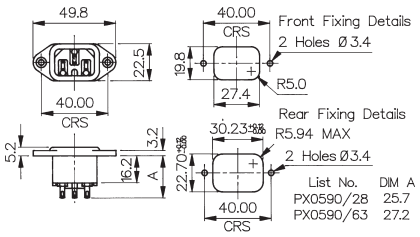


Flange Mount Inlet



PX0590/28

- Hot Condition
- 2.8 or 6.3mm Tabs
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)

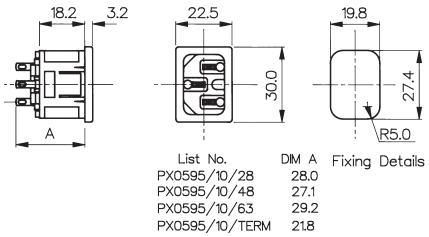


Snap Fit to Panel Inlet



PX0595/10/28

- Hot Condition
- Panel Sizes 1, 1.5, 2.0 or 3.0mm
- 2.8, 4.8, 6.3mm Tabs or Screw Terminals
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)



Specifications	PX0597/Col	PX0590/Term/Col	PX0595/Panel/Term/Col
Fixing(Panel):		Flange	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)
Terminations:	Screw Terminals	/28 (2.8mm solder), /63 (6.3mm tab)	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab), /TERM (screw)
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c.	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ	>10³ MΩ
A.C. Breakdown:	Pole-Pole 4.5kV. Poles-Accessible Parts 4kV	Pole-Pole 5kV. Poles-Panel 10kV	Pole-Pole 5kV. Poles-Panel 5.4kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C	–40°C to +70°C
Max. Pin Temp:		+120°C	+120°C
Withdrawal Force:	10N (Min.) 50N (Max.)		
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass, Clean	Brass, Pins Nickel Plated. Tabs, Tin Plated	Brass, Pins Nickel Plated. Tabs, Tin Plated
Approvals:			
Accessories / Notes:	VDE and ENEC approval for black and white versions only.	P.No. 11328, KT0006 (See Pages 150 & 152) VDE and ENEC approval for black versions only.	P.No. 11328 (See Page 152) VDE and ENEC approval for black versions only.
Mating Connectors:	PX0590, PX0595	PX0597	PX0597
RoHS	Compliant	Compliant	Compliant

EN60 320-1 Standard Sheet C18 Class II

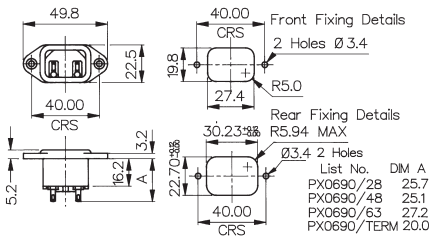
Cold Condition

Flanged Mount Inlet



PX0690/28

- Two Pin Class II (No Earth Pin)
- 2.8, 4.8, 6.3mm Tabs or Screw Terminals
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)

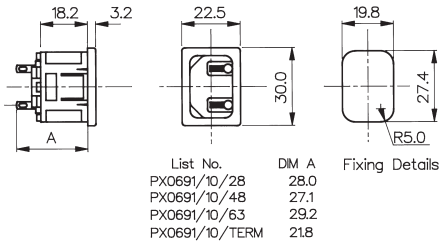


Snap Fit to Panel Inlet



PX0691/10/28

- Two Pin Class II (No Earth Pin)
- Panel Sizes 1, 1.5, 2.0 or 3.0mm
- 2.8, 4.8, 6.3mm Tabs or Screw Terminals
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)

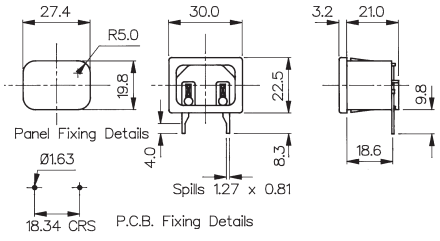


PC Snap Fit to Panel Inlet



PX0691/10/PC

- Two Pin Class II (No Earth Pin)
- Panel Sizes 1, 1.5, 2.0 or 3.0mm
- PC Spills
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)



Specifications	PX0690/Term/Col	PX0691/Panel/Term/Col	PX0691/Panel/PC/Col
Fixing(Panel):	Flange	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab), /TERM (screw)	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab), /TERM (screw)	P.C. Spills
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10³ MΩ	>10³ MΩ	>10³ MΩ
A.C. Breakdown:	Pole-Pole 5kV. Poles-Panel 10kV	Pole-Pole 5kV. Poles-Panel 5.4kV	Pole-Pole 5kV. Poles-Panel 5.4kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C	–40°C to +70°C
Max. Pin Temp.:	+70°C	+70°C	+70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass: Pins, Nickel Plated. Tabs, Tin Plated, Screw Terms, Nickel Plated	Brass: Pins, Nickel Plated. Tabs, Tin Plated, Screw Terms, Nickel Plated	Brass: Pins, Nickel Plated. Spills, Tin Plated
Approvals:			
Accessories / Notes:	P.No. 11328 (See Page 152) VDE and ENEC approval for black versions only.	P.No. 11328 (See Page 152) VDE and ENEC approval for black versions only.	Standard without cover. With cover add /C to P.No. VDE and ENEC approval for black versions only.
Mating Connectors:	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588
RoHS	Compliant	Compliant	Compliant

EN60 320-1 Standard Sheet C18 Class II

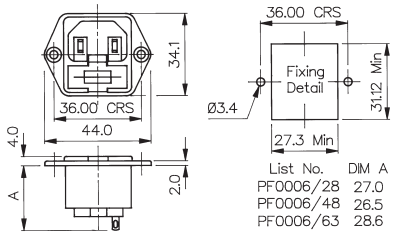
Cold Condition (Fused)

Flanged Mount Fused Inlet



PF0006/28

- Single Fuse 5 x 20mm
- Two Pin Class II (No Earth Pin)
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.

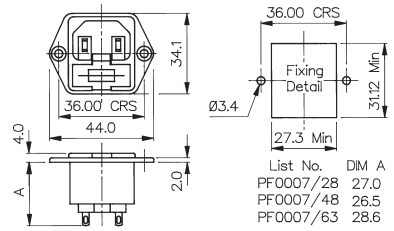


Flanged Mount Fused Inlet



PF0007/28

- Single Fuse 5 x 20mm (Fuse Contacts Isolated)
- Two Pin Class II (No Earth Pin)
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.

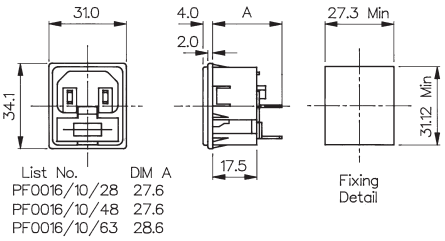


Snap Fit to Panel Fused Inlet



PF0016/10/28

- Single Fuse 5 x 20mm
- Two Pin Class II (No Earth Pin)
- Fits Panel Sizes 1.0, 1.5, 2.0 or 3.0mm
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.



Specifications	PF0006/Term/Col	PF0007/Term/Col	PF0016/Panel/Term/Col
Fixing(Panel):	Flange	Flange	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c.	10A, 250V a.c.	10A, 250V a.c.
Contact Resistance:	<10mΩ (<15mΩ including Fuseholder)	<10mΩ	<10mΩ (<15mΩ includingFuseholder)
Insulation Resistance:	>10³ MΩ	>10³ MΩ	>10³ MΩ
A.C. Breakdown:	Pole-Pole 5.5kV. Poles-Panel 4kV	Pole-Pole 5.5kV. Poles-Panel 4kV	Pole-Pole 5.5kV. Poles-Panel 4kV
Operating Temp. Max. Pin Temp.: Mouldings: Contacts:	–40°C to +70°C +70°C Nylon, Flammability Rating UL94V-0 Brass: Pins, Nickel Plated. Tabs, Tin Plated	–40°C to +70°C +70°C Nylon, Flammability Rating UL94V-0 Brass: Pins, Nickel Plated. Tabs, Tin Plated	–40°C to +70°C +70°C Nylon, Flammability Rating UL94V-0 Brass: Pins, Nickel Plated. Tabs, Tin Plated
Approvals:			
Accessories / Notes:	P.No. 11987 (See Page 152) VDE and ENEC approval for black versions only.	P.No. 11987 (See Page 152) (Note: Fuse contacts isolated) VDE and ENEC approval for black versions only.	P.No. 11987 (See Page 152) VDE and ENEC approval for black versions only.
Mating Connectors:	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588
RoHS	Compliant	Compliant	Compliant

EN60 320-2-2 Standard Sheet E Class I

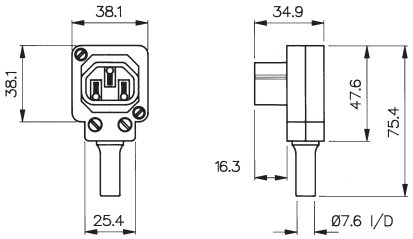
Rewirable

Angled Male Connector



PX0685

- Cable Mounting
- Four Position Cable Entry
- Rewirable
- Screw Terminals
- 10A, 250V a.c.

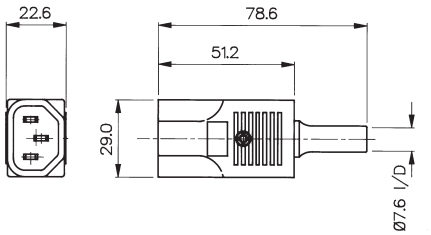


Straight Male Connector



PX0686

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.

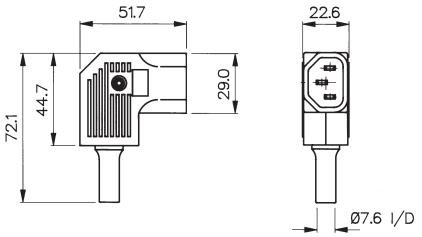


Side Entry Male Connector



PX0686/SE

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.



Specifications	PX0685/CoI	PX0686/CoI	PX0686/SE/CoI
Fixing(Panel):	Screw Terminals	Screw Terminals	Screw Terminals
Max. Rating:	10A, 250V a.c.	10A, 250V a.c.	10A, 250V a.c.
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	>10^4 MΩ	>10^4 MΩ	>10^4 MΩ
A.C. Breakdown:	Pole-Pole 5.2kV. Poles-Accessible Parts 6kV	Pole-Pole 5kV. Poles-Accessible Parts 5kV	Pole-Pole 5kV. Poles-Accessible Parts 5kV
Operating Temp. Withdrawal Force: Mouldings: Contacts:	–40°C to +70°C 10N (Min.) 50N (Max.) Nylon, Flammability Rating UL94V-0 Brass, Nickel Plated.	–40°C to +70°C 10N (Min.) 50N (Max.) Nylon, Flammability Rating UL94V-0 Brass, Nickel Plated.	–40°C to +70°C 10N (Min.) 50N (Max.) Nylon, Flammability Rating UL94V-0 Brass, Nickel Plated.
Approvals:			
Accessories / Notes:	Unique octagon module allows choice of 4 cable positions	VDE and ENEC approval for black and white versions only.	VDE and ENEC approval for black and white versions only.
Mating Outlets:	PX0675, PX0695, PX0578, PX0783, PX0793, PX0793/1	PX0675, PX0695, PX0578, PX0783, PX0793, PX0793/1, PX0716, PX0717 & PX0718	PX0675, PX0695, PX0578, PX0783, PX0793, PX0793/1, PX0716, PX0717 & PX0718
RoHS	Compliant	Compliant	Compliant

EN60 320-2-2 Standard Sheet F Class I

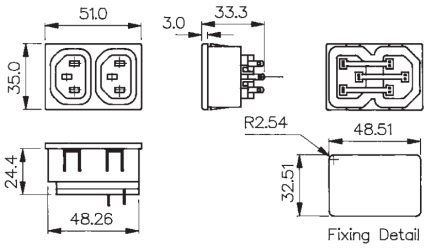
Rewirable

Snap Fit To Panel Two Way Outlet



PX0714/2/15/28

- Panel Size 1.5mm
- 2.8mm Solder Tabs
- 10A, 250V a.c.
  (15A, 250V a.c. UL)
- All Terminals Linked

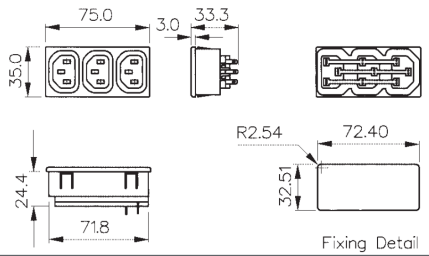


Snap Fit To Panel Three Way Outlet



PX0741/3/15/28

- Panel Size 1.5mm
- 2.8mm Solder Tabs
- 10A, 250V a.c.
  (15A, 250V a.c. UL)
- All Terminals Linked

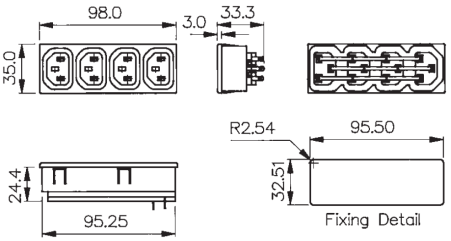


Snap Fit To Panel Four Way Outlet



PX0714/4/15/28

- Panel Size 1.5mm
- 2.8mm Solder Tabs
- 10A, 250V a.c.
  (15A, 250V a.c. UL)
- All Terminals Linked



Specifications	PX0714/2/15/28	PX0714/3/15/28	PX0714/4/15/28
Fixing(Panel):	Snap fit /15 (1.5mm)	Snap fit /15 (1.5mm)	Snap fit /15 (1.5mm)
Max. Rating:	10A, 250V a.c. 15A, 250V a.c UL	10A, 250V a.c. 15A, 250V a.c UL	10A, 250V a.c. 15A, 250V a.c UL
Colours:	No suffix (Black)	No suffix (Black)	No suffix (Black)
Operating Temp. Withdrawal Force: Mouldings: Contacts:	-20°C to +70°C 10N (Min.) 50N (Max.) Glass filled Thermoplastic, UL94V-0 Plated Copper Alloy	-20°C to +70°C 10N (Min.) 50N (Max.) Glass filled Thermoplastic, UL94V-0 Plated Copper Alloy	-20°C to +70°C 10N (Min.) 50N (Max.) Glass filled Thermoplastic, UL94V-0 Plated Copper Alloy
Approvals:			
Mating Outlets:	PX0686, PX0686/SE, PZ0500, PZ0600	PX0686, PX0686/SE, PZ0500, PZ0600	PX0686, PX0686/SE, PZ0500, PZ0600
RoHS	Compliant	Compliant	Compliant

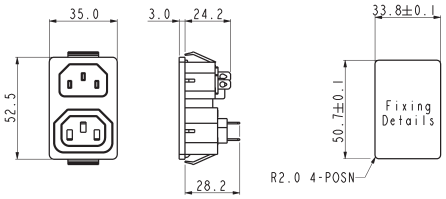
EN60 320-1 Standard Sheet C14 Class I Cold Condition & EN60 320-2-2 Standard Sheet F Class I Cold Condition

Snap Fit to Panel Inlet/ Outlet



PX0716/48

- Inlet/Outlet combination
- Panel Size1.2mm
- 4.8mm tabs
- 10A, 250V a.c.
  (15A, 250V a.c. UL & CSA)

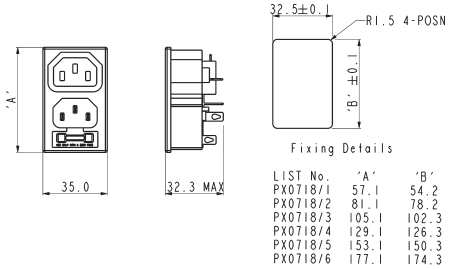


Snap Fit to Fused Inlet/ Outlet



PX0718/x/xx/ST

- Fused Inlet/Outlet combination
- 1-6 outlet versions
  Panel Size 1.5mm
- Terminals:
  inlet: 4.8mm tabs
  outlet: solder tags
- 10A, 250V a.c.
  (15A, 250V a.c. UL)
- All outlet terminals linked, common earth throughout.

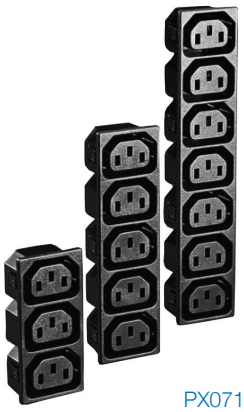


LIST No.	'A'	'B'
PX0718/1	57.1	54.2
PX0718/2	81.1	78.2
PX0718/3	105.1	102.3
PX0718/4	129.1	126.3
PX0718/5	153.1	150.3
PX0718/6	177.1	174.3

Specifications	PX0716/Termination	PX0718/x/15/Termination
Fixing:	Snap fit 1.2mm accommodation	Snap fit 1.5mm accommodation
Terminations:	/48 (4.8mm tab)	/ST (outlet solder tag, inlet 4.8mm tab)
Max. Rating:	10A, 250V a.c. (UL 15A, 125V a.c.)	10A, 250V a.c. (UL 15A, 250V a.c.)
Insulation Resistance:	>100MΩ (500V d.c., 1 min.)	>100MΩ (500V d.c., 1 min.)
Dielectric Strength:	2kV (50Hz, 1 min.)	2kV (50Hz, 1 min.)
Operating Temp.	–20°C to +70°C	–20°C to +70°C
Max. Pin Temp:	+70ºC	+70ºC
Mouldings:	Nylon 66, Flammability Rating UL94V-0	Glass filled Thermoplastic, UL94V-0
Contacts:	Brass, Tin Plated	Brass, Tin Plated
Approvals:	c UL us	c UL us
Accessories / Notes:		
Mating With:	PX0587, PX0587/SE, PX0588, PX0686, PX0686/SE	PX0587, PX0587/SE, PX0588, PX0686, PX0686/SE
RoHS	Compliant	Compliant

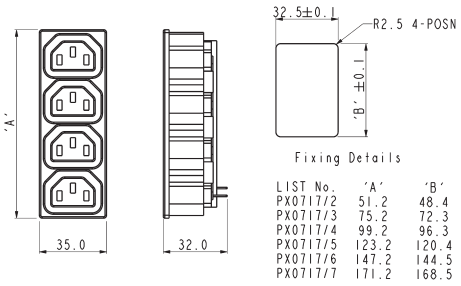
EN60 320-2-2 Standard Sheet F Class I

Snap Fit to Panel Outlet



PX0717/x/xx/ST

- Snap Fit to Panel
- Panel Size 1.5mm
- Solder Tabs
- 10A, 250V a.c.
  (15A, 250V a.c. UL)
- All Terminals Linked



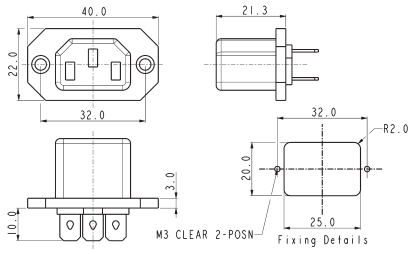
LIST No.	'A'	'B'
PX0717/2	51.2	48.4
PX0717/3	75.2	72.3
PX0717/4	99.2	96.3
PX0717/5	123.2	120.4
PX0717/6	147.2	144.5
PX0717/7	171.2	168.5

Flange Mount Outlet



PX0578/63

- Front of Panel Mount
- 6.3mm tabs
- 10A, 250V a.c.
  (15A, 250V a.c. UL)



Specifications	PX0717/x/15/Termination	PX0578/Termination
Fixing:	Snap fit 1.5mm accommodation	Flange
Terminations:	/ST (solder	/63 (6.3mm tab)
Max. Rating:	10A, 250V a.c. (UL 15A, 250v a.c.)	10A, 250V a.c. (UL 15A, 250v a.c.)
Insulation Resistance:	>100MΩ (500V d.c., 1 min.)	>100MΩ (500V d.c., 1 min.)
Dielectric Strength:	2kV (50Hz, 1 min.)	2kV (50Hz, 1 min.)
Operating Temp.	–20°C to +70°C	–20°C to +70°C
Max. Pin Temp:		
Mouldings:	Glass filled Thermoplastic, UL94V-0	Glass filled Thermoplastic, UL94V-0
Contacts:	Brass, Tin plated	Brass, Tin plated
Approvals:	c UL us	c UL us
Accessories / Notes:		
Mating With:	PX0686, PX0686/SE	PX0686, PX0686/SE
RoHS	Compliant	Compliant

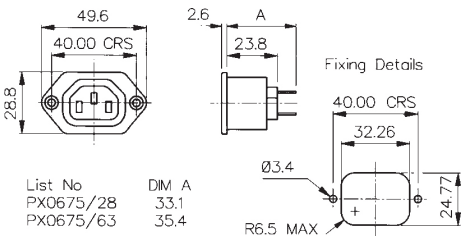
EN60 320-2-2 Standard Sheet F Class I

Flange Mount Outllet



PX0675/28

- 2.8mm or 6.3mm Tabs
- 10A, 250V a.c.
  (15A, 250V a.c. UL & CSA).

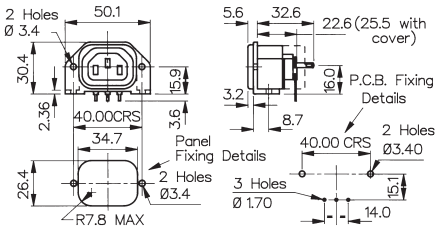


PC Flange Rear Mount Outlet



PX0675/PC

- PC Spills
- 10A, 250V a.c.
  (15A, 250V a.c. UL & CSA)



Specifications	PX0675/Term/Col	PX0675/PC/Col
Fixing:	Flange	P.C.B./Flange
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab), /63 (6.3mm tab)	P.C. Spills
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	$>10^4$ MΩ	$>10^4$ MΩ
A.C. Breakdown:	Pole-Pole 7kV. Poles-Panel 9kV	Pole-Pole 4kV. Poles-Panel 9kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass, Tin Plated	Brass, Tin Plated
Approvals:	UR approvals does not cover 4.8mm tab option	
Accessories / Notes:	P.No. 12075, KT0006, 14228 (See Pages 150-152) VDE and ENEC approval for black versions only.	Standard without cover. With cover add /12599 to P.No., 14228 (see page 151) VDE and ENEC approval for black versions only.
Mates with:	PX0685, PX0686, PX0686/SE	PX0685, PX0686, PX0686/SE
RoHS	Compliant	Compliant

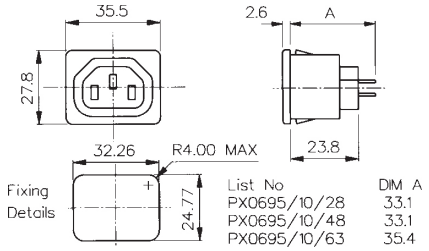
EN60 320-2-2 Standard Sheet F Class I

Snap Fit to Panel Outlet



PX0695/10/28

- Panel Sizes 1, 1.5, 2.0 or 3.0mm
- 2.8 or 6.3mm Tabs
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)

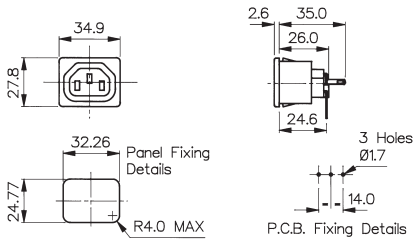


PC Snap Fit to Panel Outlet



PX0695/10/PC

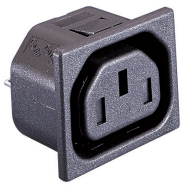
- Panel Sizes 1, 1.5, 2.0 or 3.0mm
- PC Spills
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)



Specifications	PX0695/Panel/Term/Col	PX0695/Panel/PC/Col
Fixing:	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)
Terminations:	/28 (2.8mm solder), /63 (6.3mm tab)	P.C. Spills
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	$>10^4$ MΩ	$>10^4$ MΩ
A.C. Breakdown:	Pole-Pole 7kV. Poles-Panel 9kV	Pole-Pole 4kV. Poles-Panel 9kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass, Tin Plated	Brass, Tin Plated
Approvals:		
Accessories / Notes:	P.No. 12075, 14228 (See Page 151-152) VDE and ENEC approval for black versions only.	P.No. 14228 (see page 151) VDE and ENEC approval for black versions only.
Mates with:	PX0685, PX0686, PX0686/SE,	PX0685, PX0686, PX0686/SE,
RoHS	Compliant	Compliant

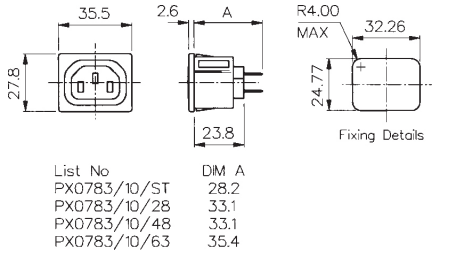
EN60 320-2-2 Standard Sheet F Class I

Snap Fit to Panel Outlet



PX0783/10/28

- Shuttered
- Panel Sizes 1, 1.5, 2.0 or 3.0mm
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)



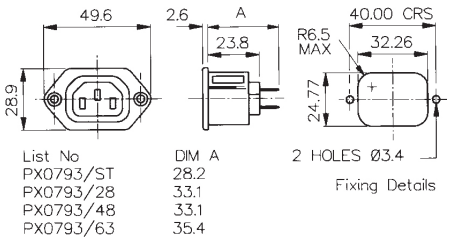
List No	DIM A
PX0783/10/ST	28.2
PX0783/10/28	33.1
PX0783/10/48	33.1
PX0783/10/63	35.4

Flange Mount Outlet



PX0793/28

- Shuttered
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)



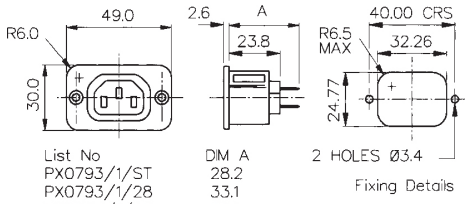
List No	DIM A
PX0793/ST	28.2
PX0793/28	33.1
PX0793/48	33.1
PX0793/63	35.4

PC Snap Fit to Panel Outlet



PX0793/1/Termination

- Shuttered
- Rectangular Flange Mount Outlet
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c. (15A, 250V a.c. UL & CSA)



List No	DIM A
PX0793/1/ST	28.2
PX0793/1/28	33.1
PX0793/1/48	33.1
PX0793/1/63	35.4

Specifications	PX0783/Panel/Term/Col	PX0793/Panel/PC/Col	PX0793/1/Term/Col
Fixing:	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)	Flange	Rectangular Flange
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab), /ST (solder)	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab), /ST (solder)	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab), /ST (solder)
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Insulation Resistance:	$>10^4$ MΩ	$>10^4$ MΩ	$>10^4$ MΩ
A.C. Breakdown:	Pole-Pole 7kV. Poles-Panel 9kV	Pole-Pole 7kV. Poles-Panel 9kV	Pole-Pole 7kV. Poles-Panel 9kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C	–40°C to +70°C
Mouldings:	Nylon, Flammability Rating UL 94V-0	Nylon, Flammability Rating UL 94V-0	Nylon, Flammability Rating UL 94V-0
Contacts:	Brass, Tin Plated	Brass, Tin Plated	Brass, Tin Plated
Approvals:	UR approvals does not cover 4.8mm tab option	UR approvals does not cover 4.8mm tab option	US approvals only covers /ST versions
Accessories / Notes:	P.No. 12075, 14228 (See Page 151-152) VDE and ENEC approval for black versions only.	P.No. 12075, KT0006, 14228 (See Pages 150-152) VDE and ENEC approval for black versions only.	P.No. 12075, KT0006, 14228 (See Pages 150-152) VDE and ENEC approval for black versions only.
Mates with:	PX0685, PX0686, PX0686/SE	PX0685, PX0686, PX0686/SE	PX0685, PX0686, PX0686/SE
RoHS	Compliant	Compliant	Compliant

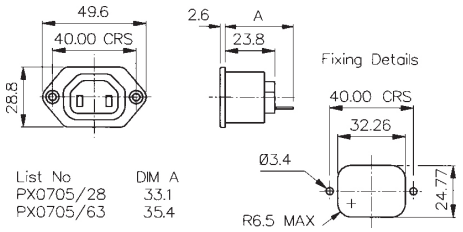
EN60 320-2-2 Standard Sheet H Class II

Flange Mount Outlet



PX0705/28

- Two Pin Class II (No Earth Pin)
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.
  (15A, 250V a.c. UL & CSA)

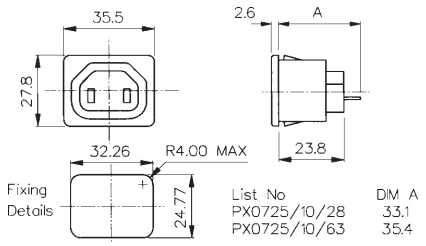


Snap Fit to Panel Outlet



PX0725/10/28

- Two Pin Class II (No Earth Pin)
- Panel Sizes 1, 1.5, 2.0 or 3.0mm
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.
  (15A, 250V a.c. UL & CSA)



Specifications	PX0705/Term/Col	PX0725/Panel/Term/Col
Fixing:	Flange	Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)	/28 (2.8mm solder), /48 (4.8mm tab) /63 (6.3mm tab)
Colours:	No suffix (Black), /WH (White), /GY (Grey)	No suffix (Black), /WH (White), /GY (Grey)
Max. Rating:	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)	10A, 250V a.c. (UL & CSA 15A, 250V a.c.)
Contact Resistance:	<10mΩ	<10mΩ
Insulation Resistance:	$>10^4$ MΩ	$>10^4$ MΩ
A.C. Breakdown:	Pole-Pole 4kV. Poles-Panel 9kV	Pole-Pole 7kV. Poles-Panel 9kV
Operating Temp.	–40°C to +70°C	–40°C to +70°C
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass, Tin Plated	Brass, Tin Plated
Approvals:	UR approvals does not cover 4.8mm tab option	UR approvals does not cover 4.8mm tab option
Accessories / Notes:	P.No. 12075 (See Page 152) VDE and ENEC approval for black versions only.	P.No. 12075 (See Page 152) VDE and ENEC approval for black versions only.
RoHS	Compliant	Compliant

EN60 320-1 Standard Sheet C19 & C20 Class I

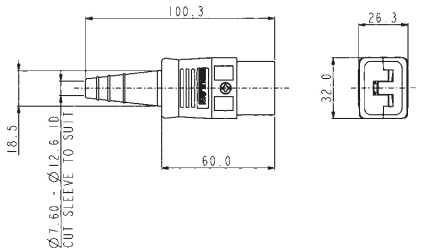
Cold Conditions

C19 Straight Female Cable Connector



PX0599

- Rewirable Screw Terminals
- 16A, 250V a.c.
  (20A, 250V a.c. UL and CSA)
- Wire Sizes (max);
  3 x 2.5mm2, 3 x 12AWG
- Overall cable diameter up to 12mm

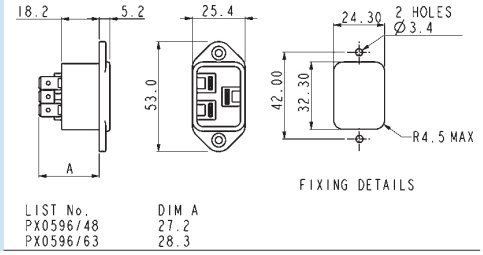


C20 Flange Mount Inlet



PX0596

- 6.3mm or 4.8mm Tabs
- 16A, 250V a.c.
  (20A, 250V a.c. UL and CSA)

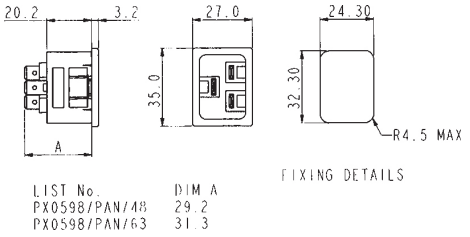


C20 Snap Fit to Panel Inlet



PX0598

- Fits panel sizes 1, 1.5, 2.0 or 3.0mm
- 6.3mm or 4.8mm Tabs
- 16A, 250V a.c.
  (20A, 250V a.c. UL and CSA)



Specifications	PX0599	PX0596/Termination	PX0598/Panel/Termination
Fixing (Panel):		Flange	Snap Fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)
Terminations:	Screw Terminals	/63 (6.3mm tab), /48 (4.8mm tab)	/63 (6.3mm tab), /48 (4.8mm tab)
Max. Rating:	16A, 250V ac 20A, 250V ac UL and CSA	16A, 250V ac 20A, 250V ac UL and CSA	16A, 250V ac 20A, 250V ac UL and CSA
Insulation Resistance:	>5MΩ	$>10^6$ MΩ	$>10^6$ MΩ
Dielectric Strength Between contacts:	1.5kV ac	1.5kV ac	1.5kV ac
Between contacts & accessible surfaces:	3kV ac	3kV ac	3kV ac
Operating Temp. Range:	–40°C to +70°C	–40°C to +70°C	–40°C to +70°C
Max. Pin Temp.:		70°C	70°C
Withdrawal Force:	15N Min, 60N Max.		
Mouldings:	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0	Nylon, Flammability Rating UL 94V-0
Contacts:	Brass, Clean	Pins: Brass, Nickel Plated Tabs: Brass, Tin Plate	Pins: Brass, Nickel Plated Tabs: Brass, Tin Plated
Approvals:			
Mating Connectors:	C20 Inlets; PX0596 Flange and PX0598 Snapfit	PX0599 Rewirable Connector	PX0599 Rewirable Connector
Accessories:		KT0012, P.No. 14064 (see Pages 150 & 152)	P.No. 14064 (see Page 152)
RoHS	Compliant	Compliant	Compliant

EN60 320-2-2 Standard Sheet J & I, Class I

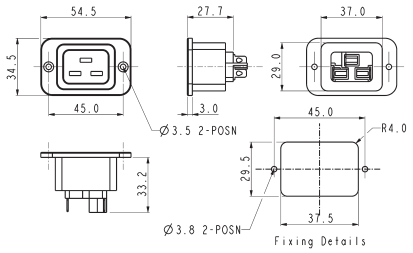
Cold Conditions

Flange Mount Outlet



PX0591/63

- Flange Mounting
- 6.3mm Tabs
- 16A, 250V a.c.
  (20A, 250V a.c., UL & CSA)

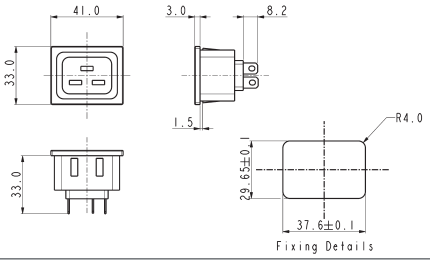


Snap Fit to Panel Outlet



PX0592/15/63

- Snap Fit to Panel
- Panel Size 1.5mm
  6.3mm Tabs
  16A, 250V a.c.
  (20A, 250V a.c., UL & CSA)



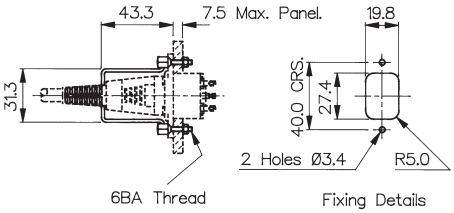
Specifications	PX0591/Termination	PX0592/15/Termination
Fixing (Panel):	Flange	Snap fit, 1.5mm accommodation
Terminations:	/63 (6.3mm tab)	/63 (6.3mm tab)
Max. Rating:	16A, 250V a.c. (UL & CSA 20A, 250V a.c.)	16A, 250V a.c. (UL & CSA 20A, 250V a.c.)
Insulation Resistance:	>100MΩ (250V, 1 min.	>100MΩ (250V, 1 min.)
Dielectric Strength		
Between contacts:	1.5kV ac	1.5kV ac
Between contacts & accessible surfaces:	3kV ac	3kV ac
Operating Temp. Range:	–40°C to +70°C	–40°C to +70°C
Max. Pin Temp.:		
Withdrawal Force:		
Mouldings:	P.B.T., Flammability Rating UL94V-0	Nylon, Flammability Rating UL94V-0
Contacts:	Brass, Tin Plated	Brass, Tin Plated
Approvals:		
Accessories:		
RoHS	Compliant	Compliant

Retaining Clip

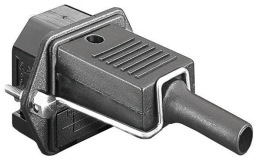


KT0006
(Shown with PX0580 & PX0587)

- Prevents Accidental Removal
- Fits flanged inlets

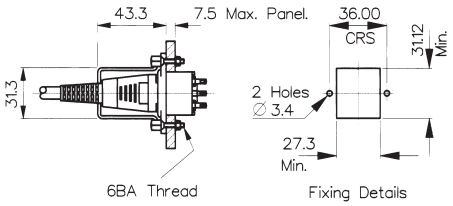


Retaining Clip



KT0009
(Shown with PF0001 & PX0587)

- Prevents Accidental Removal
- Fits fused flanged inlets)

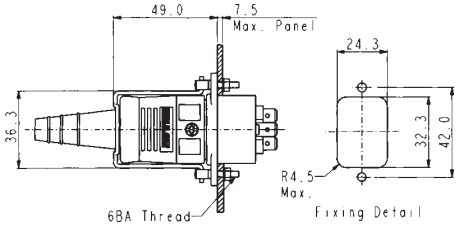


Retaining Clip



KT0012
(Shown with PX0596 & PX0599)

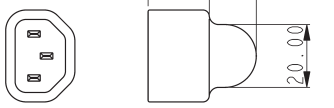
- Prevents Accidental Removal
- For use with PX0596 flanged inlet and PX0599 connector



Specifications	KT0006	KT0009	KT0012
	Retaining Clip to prevent accidental removal of connector. Fits: PX0580 + PX0587 PX0590 + PX0597 PX0690 + PX0587 PX0675 + PX0686 PX0793 + PX0686 PX0793/1 + PX0686	Retaining Clip to prevent accidental removal of connector. Fits: PF0001+ PX0587 PF0001/PC +PX0587 PF0002 + PX0587 PF0030 + PX0587	Retaining Clip to prevent accidental removal of connector. Fits: PX0596 + PX0599
Material:	Clip: Stainless Steel, other parts Brass, Nickel Plated	Clip: Stainless Steel, other parts Brass, Nickel Plated	Clip: Stainless Steel, other parts Brass, Nickel Plated
RoHS	Compliant	Compliant	Compliant

Blanking Cover

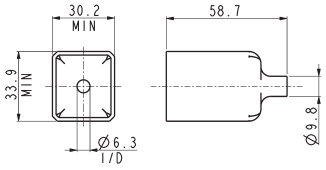




PNo 14228

Insulation Boot

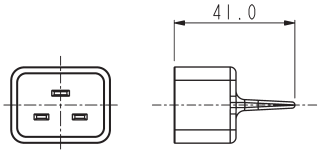




PNo 14340

Blanking Cover

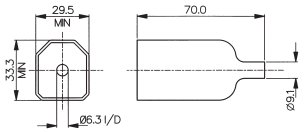




PNo 14277

Insulation Boot





PNo 14317

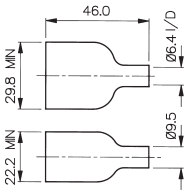
- Blanking covers
- Protects Front of Outlet Connector
- Protects Against Accidental Electric Shock

- PVC Insulation Boots
- Protects Rear of Connector
- Protects Against Accidental Electric Shock

Specifications	P.No. 14228	P.No. 14277	P.No. 14340	P.No. 14317
	Blanking cover for PX0578, PX0675, PX0695, PX0783, PX0793, PX0716, PX0717, PX0718	Blanking cover for PX0591, PX0592,	Insulation boot for PS20, PS21, PS25, PS25,	Insulation boot for PF0030, PF0033 (except /PC versions)
Operating Temp:	–40°C to +70°C	–40°C to +70°C	–20°C to +60°C	–20°C to +60°C
Max. Working Voltage:	250V a.c.	250V a.c.	250V a.c.	250V a.c.
Flash Tested:	2kV a.c.	2kV a.c.	2kV a.c.	2kV a.c.
Material:	Nylon	Nylon	P.V.C.	P.V.C.
Flammability Rating:	UL94V-0	UL94V-0	UL94V-0	UL94V-0
RoHS	Compliant	Compliant	Compliant	Compliant

Insulation Boot

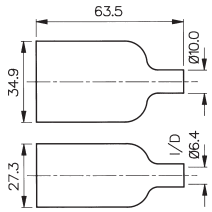




PNo 11328

Insulation Boot

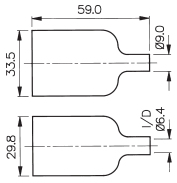




PNo 12075

Insulation Boot

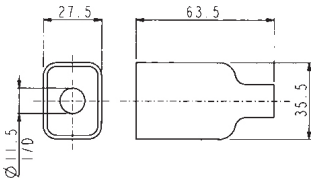




PNo 11987

Insulation Boot





PNo 14064

- PVC Insulation Boots
- Protects Rear of Connector
- Protects Against Accidental Electric Shock

Specifications	P.No. 11328	P.No. 11987	P.No. 12075	P.No. 14064
	Insulation boot for PX0575, PX0579, PX0580 PX0590, PX0595	Insulation boot for PF range PF0001, PF0002, PF0006, PF0007, PF0011, PF0016 (Except /PC versions)	Insulation boot for PX0675, PX0695, PX0705, PX0725, PX0783, PX0793, PX0793/1 (Except /PC versions)	Insulation boot for PX0596, PX0598
Operating Temp:	–20°C to +60°C	–20°C to +60°C	–20°C to +60°C	–20°C to +60°C
Max. Working Voltage:	250V a.c.	250V a.c.	250V a.c.	250V a.c.
Flash Tested:	2kV a.c.	2kV a.c.	2kV a.c.	2kV a.c.
Material:	P.V.C.	P.V.C.	P.V.C.	P.V.C.
Flammability Rating:	UL94V-0	UL94V-0	UL94V-0	UL94V-0
RoHS	Compliant	Compliant	Compliant	Compliant

Distribution Units have combinations of four, five or six outlets together with neon indicator, fuse and switch options. The three sizes are available in various combinations and, other than the compact version, all have shuttered outlets. The larger enclosed versions are also available with EMI filtering.

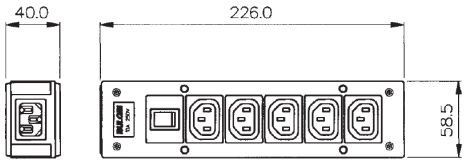


IEC Distribution Units



PXD301/050/01/1

- Five Shuttered Outlets
- 5 x 20mm Fuseholder
- Neon Indicator
- Filtered or Non-filtered
- EN60320 Inlet
- 10A, 250V a.c.

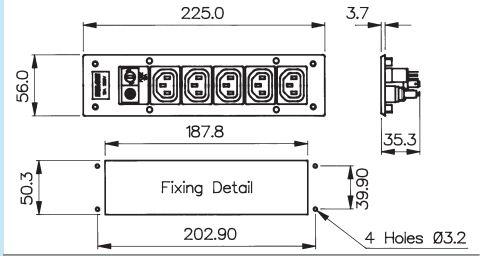


IEC Panel Mount Distribution Unit



PXD100/050/01/1

- Five Shuttered Outlets
- 5 x 20mm Fuseholder
- Neon Indicator
- Screw Fit to Panel
- 10A, 250V a.c.

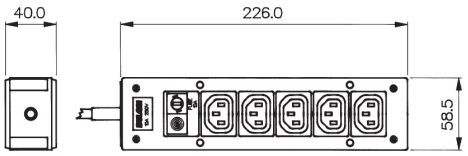


IEC Distribution Unit



PXD303/050/01/1
PXD306/050/01/1

- Five Shuttered Outlets
- 5 x 20mm Fuseholder
- Neon Indicator
- Filtered or Non-filtered
- 2 Metre Cable with BS1363 Plug
- 10A, 250V a.c.



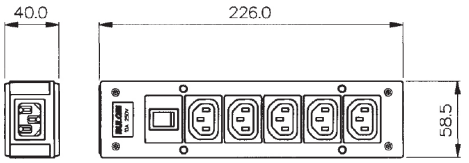
Part No.	Inlet	Outlet	EMI Filter	Neon Indicator	Fuse	Illuminated Switch	Approvals
Panel Style:							
PXD100/050/01/1		5 Shuttered		1	1		Ⓢ
Box Style:							
PXD301/050/01/1	1	5 Shuttered		1	1		Ⓢ
PXD301/050/07/1	1	5 Shuttered				Red	
PXD301/050/08/1	1	5 Shuttered				Green	
PXD301/550/01/1	1	5 Shuttered	⬢	1	1		
PXD301/550/07/1	1	5 Shuttered	⬢			Red	Ⓢ
PXD301/550/08/1	1	5 Shuttered	⬢			Green	
PXD303/050/01/1	2m cable with BS1363 plug	5 Shuttered		1	1		
PXD303/050/07/1	2m cable with BS1363 plug	5 Shuttered				Red	
PXD303/050/08/1	2m cable with BS1363 plug	5 Shuttered				Green	
PXD303/550/01/1	2m cable with BS1363 plug	5 Shuttered	⬢	1	1		
PXD303/550/07/1	2m cable with BS1363 plug	5 Shuttered	⬢			Red	
PXD303/550/08/1	2m cable with BS1363 plug	5 Shuttered	⬢			Green	
PXD306/050/01/1	2m cable with CEE7 Sheet VII plug	5 Shuttered		1	1		Ⓢ

IEC Distribution Unit



PXD301/050/07/1

- Five Shuttered Outlets
- Illuminated Switch
- Filtered or Non-Filtered
- EN60320 Inlet
- 10A, 250V a.c.

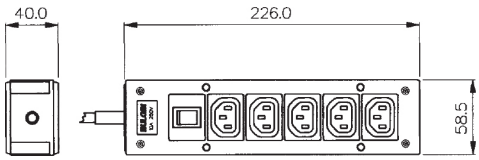


IEC Distribution Unit



PXD303/050/08/1

- Five Shuttered Outlets
- Illuminated Switch
- Filtered or Non-Filtered
- 2m Cable and BS1363 plug
- 10A, 250V a.c.



Specifications

Mouldings:	Thermoplastic
Housing:	ABS
Connectors:	Nylon
Contacts:	Outlets: Brass, Tin Plated Inlets: Brass, Nickel Plated
Voltage Rating:	250V a.c. 50/60Hz
Current Rating:	10A
Proof Voltage:	2kV
Temp. Range:	–5°C to +60°C
Mating Connectors:	PX0686, PX0686/SE
RoHS	Compliant

Filter

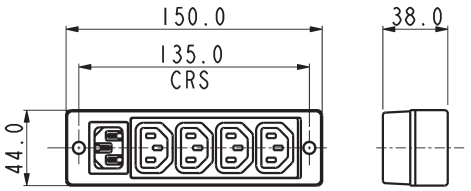
Max. Earth Leakage Current:	<0.35mA (at 250V, 50Hz)
Capacitor	2 x 2.2nF (Y), 1 x 15nF (X)
Inductance:	2 x 0.35mH
Fuse:	5 x 20mm, 10A (ceramic HRC type, IEC 127)

Compact Distribution Unit



PXD200

- Four Outlets
- EN60320 Inlet
- 10A, 250V ac
- cULus Approval

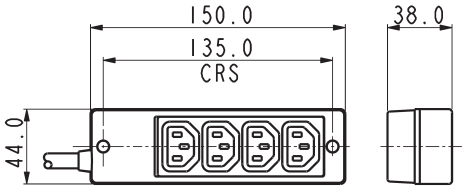


Compact Distribution Unit



PXD201

- Four Outlets
- 2m Cable with BS1363 connector, Schuko connector (CEE7) or NEMA 5/15 connector
- 10A, 250V a.c.



Specifications

Mouldings:	Thermoplastic
Housing:	ABS, UL94V-0
Connectors:	BS1363, CEE7, NEMA 5/15
Contacts:	Outlets: Brass, Tin Plated Inlets: Brass, Nickel Plated
Voltage Rating:	250V a.c. 50/60Hz
Current Rating:	10A
Proof Voltage:	2kV
Temp. Range:	–5°C to +60°C
Approvals	c UL us Listed (PXD200)
RoHS	Compliant

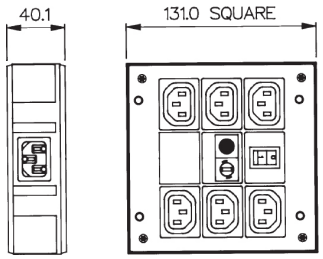
Part No.	Inlet	Outlet
PXD200	1	4
PXD201	2m cable with BS 1363 plug	4
PXD201/1	2m cable with Schuko plug	4
PXD201/2	2m cable with NEMA 5/15	4

Compact Distribution Unit



PXD701/061/10/1

- Six Shuttered Outlets
- 5 x 20mm Fuseholder
- Filtered or Non Filtered
- Switch, Fuse, Neon Indicator
- With IEC Inlet
- 10A, 250V a.c.

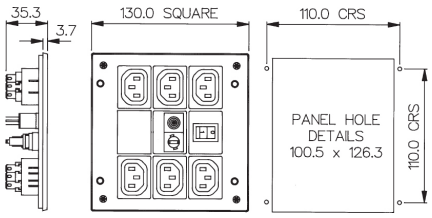


IEC Mount Distribution Unit



PXD500/061/10/1

- Six Shuttered Outlets
- 5 x 20mm Fuseholder
- Switch, Fuse, Neon Indicator
- Screw Fit to Panel
- 10A, 250V

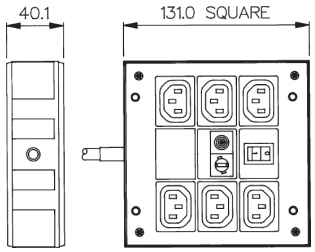


Compact Distribution Unit



PXD703/061/10/1
PXD706/061/10/1

- Six Shuttered Outlets
- 5 x 20mm Fuseholder
- Filtered or Non Filtered
- Switch, Fuse, Neon Indicator
- 2 Metre Cable with BS1363 or CEE7 Plug
- 10A, 250V



Specifications

Mouldings:	Thermoplastic
Housing:	ABS
Connectors:	Nylon
Contacts:	Outlets: Brass, Tin Plated Inlets: Brass, Nickel Plated
Voltage Rating:	250V a.c. 50/60Hz
Current Rating:	10A
Proof Voltage:	2kV
Temp. Range:	–5°C to +60°C
RoHS	Compliant

Part No.	Inlet	Outlet	EMI Filter	Switch	Fuse	Neon Indicator
Panel Style:						
PXD500/061/10/1		6 Shuttered		1	1	1
Box Style:						
PXD701/061/10/1	1	6 Shuttered		1	1	1
PXD701/561/10/1	1	6 Shuttered	⬢	1	1	1
PXD703/061/10/1	2m cable with BS 1363 plug	6 Shuttered		1	1	1
PXD703/561/10/1	2m cable with BS 1363 plug	6 Shuttered	⬢	1	1	1
PXD706/061/10/1	2m cable with CEE7 Sheet VII plug	6 Shuttered		1	1	1

Filter

Max. Earth Leakage Current:	<0.35mA (at 250V, 50Hz)
Capacitor	2 x 2.2nF (Y), 1 x 15nF (X)
Inductance:	2 x 0.35mH
Fuse:	5 x 20mm, 10A (ceramic HRC type, IEC 127)

Power Entry Modules



With over 26,000 combinations Bulgin's mains power entry modules offer a very adaptable and flexible solution to panel design.
Power entry modules allow combinations of mains inlets and outlets, filtered inlets, switches, fuseholders, voltage selectors and indicators mounted in either horizontal or vertical format bezels ready for quick snap-fit assembly. The compact design occupies the minimum of panel area and a single rectangular mounting hole, offering easy installation for this mains power entry module.

Our range offers a flange fixing alternative for designers who prefer the security of screw fixing. All types and variations are available through Bulgin's extensive distribution network.

Components used in Power Entry Modules.

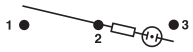
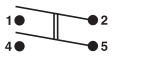
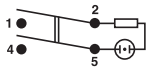
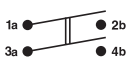
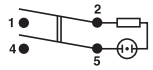
Note: Components are Approved Individually (where applicable). Please see individual component pages for full specifications.

IEC Connectors Fuseholders and Voltage Selectors

Type	Description	Rating	Approvals
DX0928	Neon Indicator	110V or 250V a.c./d.c. working	
FX0359	5 x 20mm Fuseholder	Max. rating 10A. 250V See Page 192	
PF0011	C14 Power Inlet with Integral 5 x 20mm Fuseholder	Max. rating 10A. 250V a.c. See Page 136	
PF0033	C14 Power Inlet with Integral twin 5 x 20mm Fuseholder	Max. rating 10A. 250V a.c. See Page 137	
PX0575	C14 Power Inlet, Cold condition	Max. rating 10A. 250V a.c. See Page 132	
PX0595	C16 Power Inlet, Hot Condition	Max. rating 10A. 250V a.c. See Page 138	
PX0695	Sheet F Power Outlet	Max. rating 10A. 250V a.c. See Page 145	
PX0783	Sheet F Shuttered Power Outlet	Max. rating 10A. 250V a.c. See Page 146	
PX0598	C20 Power Inlet	Max. rating 16A, 250V a.c. See Page 148	
VS0001	Voltage Selector marked 120/240V	Max. rating 6.3A. 120/240V a.c. See Page 114	

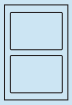
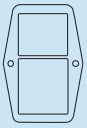
*Filtered options for 6.3mm tag versions only

Switches and Indicators

No Poles	Illumination	Current Ratings	Circuit	Approvals
Single Pole	Non-illuminated	Max. rating 16A Resistive, 4A Inductive, 250Vac.		
	High Inrush	Max. rating 16A Resistive, 4A Inductive, 250Vac. Inrush current, 150A to IEC65.		
	Illuminated	Max. rating 16A Resistive, 4A Inductive, 250Vac.		
Double Pole	Non-illuminated	Max. rating 16A Resistive, 4A Inductive, 250Vac.		
	High Inrush	Max. rating 16A Resistive, 4A Inductive, 250Vac. Inrush current, 150A to IEC65.		
	Illuminated	Max. rating 16A Resistive, 4A Inductive, 250Vac. 250Vac Neon.		
For Mini Bezel: Single Pole	Non-illuminated	Max. rating 10A Resistive, 4A Inductive, 250Vac.		
	Illuminated	Max. rating 10A Resistive, 4A Inductive, 250Vac. 250Vac Neon.		
Double Pole	Non-illuminated	Max. rating 10A Resistive, 4A Inductive, 250Vac.		
	High Inrush	Max. rating 10A Resistive, 4A Inductive, 250Vac. Inrush current, 85A to EN61058-1.		
	Illuminated	Max. rating 10A Resistive, 4A Inductive, 250Vac. 250Vac Neon.		
Indicator		250Vac neon lamp connected internally to terminals.		

RoHS Power Entry Module range and all components are compliant

Overview of Power Entry Modules

	Inlets				Outlets	Inlet/ Outet Combinations	
Style	**C14**	**C14 Fused**	**C16**	**C20**	**Sheet F**	**C14**	**C14 Fused**
Snap to Panel Vertical 	With Single Pole switch Page 163 With other components Pages 164, 165, 166	With Single Pole switch Page 161 With Double Pole Switch Page 162	With Single Pole switch Page 163 With other components Pages 164, 165, 166	With Single Pole switch Page 167	With Single Pole switch Page 169	With other components Page 168	
Snap to Panel Horizontal 	Mini Bezel With Single Pole Switch Page 175 Mini Bezel With Double Pole Switch Page 175	With Single Pole switch Page 170 With Double Pole Switch Page 171				With Single Pole switch Page 177	With Double Pole switch Page 173 No additional components Page 174
Flange Mount - Vertical 		With Single Pole switch Page 176 With Double Pole switch Page 177					

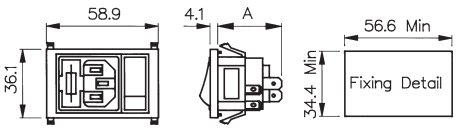
C14 IEC Fused Inlet - Vertical

Vertical Module Arrangement



BZV01/Z0000/01

- Fused Inlet with 2.8mm or 6.3mm tags
- Single Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



BZV01/*****/** } A = 59.7 With Filter
BZV02/*****/** } A = 27.4 Without Filter
BZV15/*****/** } A = 59.7 With Filter
BZV16/*****/** } A = 37.9 Without Filter
Panel Thickness. 1.0, 1.5, 2.0, 3.0mm.

How to order -

BZV XX / XXXXX / XX

Type of Inlet / Outlet

Single Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:
01 = PF0011/63
02 = PF0011/28

Twin Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:
15 = PF0033/63
16 = PF0033/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered
Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179 -180
E.g. BZV01/A0620/01

Filtered or Non Filtered Inlet

Single Pole Switch:
01 = S.P. Switch

Single Pole Neon Switch:
02 = S.P. Red Neon Switch
08 = S.P. Green Neon Switch

Neon Indicator:
03 = Red Neon Indicator

Single Pole High Inrush Switch:
46 = S.P. High Inrush Switch

Single Pole Switch Marked I/O:
69 = S.P. Switch (I/O)

Single Pole Neon Switch Marked (I/O):
71 = S.P. Red Neon Switch (I/O)
74 = S.P. Green Neon Switch (I/O)

Single Pole High Inrush Switch Marked (I/O):
98 = S.P. High Inrush Switch (I/O)

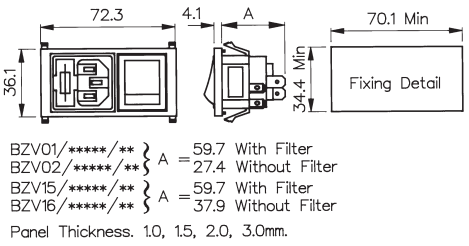
C14 IEC Fused Inlet - Vertical

Vertical Module Arrangement



BZV01/Z0000/10

- Fused Inlet with 2.8mm or 6.3mm tags
- Double Pole Switch or
- Indicator Variations
- Filtered Inlet Option
- Options of I/O marked switches



BZV01/*****/** } A = 59.7 With Filter
BZV02/*****/** } A = 27.4 Without Filter
BZV15/*****/** } A = 59.7 With Filter
BZV16/*****/** } A = 37.9 Without Filter

Panel Thickness. 1.0, 1.5, 2.0, 3.0mm.

How to order -

BZV XX	/	XXXXX	/	XX

Type of Inlet / Outlet

Single Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:
01 = PF0011/63
02 = PF0011/28

Twin Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:
15 = PF0033/63
16 = PF0033/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180
E.g. BZV01/A0620/10

Combination of Other Components

Neon Indicator:
D3 = Red Neon Indicator

Double Pole Switch:
10 = D.P. Switch

Double Pole Neon Switch:
11 = D.P. Red Neon Switch
12 = D.P. Green Neon Switch

Double Pole High Inrush Switch:
13 = D.P. High Inrush Switch

Double Pole Switch Marked I/O:
70 = D.P. Switch (I/O)

Double Pole Neon Switch Marked (I/O):
76 = D.P. Red Neon Switch (I/O)
77 = D.P. Green Neon Switch (I/O)

Double Pole High Inrush Switch Marked (I/O):

78 = D.P. High Inrush Switch (I/O)
B1 = D.P. High Inrush Green Neon Switch (I/O)

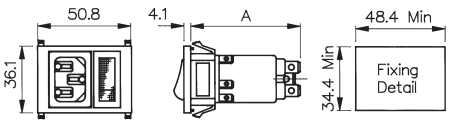
C14 and C16 IEC Inlet - Vertical

Vertical Module Arrangement



BZV03/Z0000/02

- Inlet with 2.8mm or 6.3mm tags
- Single Pole Switch or Neon Indicator Variations
- Filtered Inlet Option
- Options of I/O marked switches
- Non Fused



BZV03, BZV04/*****/** A = 62.5 With Filter
28.1 Without Filter

BZV05, BZV06/*****/** A = 28.1

Panel Thickness. 1.0, 1.5, 2.0, 3.0mm.

How to order -

BZV XX	/	XXXXX	/	XX

Type of Inlet / Outlet

C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:
03 = PX0575/63
04 = PX0575/28
C16 Power Inlet (hot condition), 6.3 or 2.8mm tabs:
05 = PX0595/63
06 = PX0595/28

Please note type 05 and 06 are not available in filtered version

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see page 178
E.g. BZV03/A0120/02

Combination of Other Components

Single Pole Switch:
01 = S.P. Switch

Single Pole Neon Switch:
02 = S.P. Red Neon Switch
08 = S.P. Green Neon Switch

Neon Indicator:
03 = Red Neon Indicator
Single Pole High Inrush Switch:
46 = S.P. High Inrush Switch

Single Pole Switch Marked I/O:
69 = S.P. Switch (I/O)

Single Pole Neon Switch Marked (I/O):
71 = S.P. Red Neon Switch (I/O)
74 = S.P. Green Neon Switch (I/O)

Single Pole High Inrush Switch Marked (I/O):

98 = S.P. High Inrush Switch (I/O)

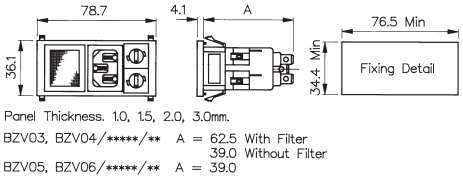
C14 and C16 IEC Inlet - Vertical

Vertical Module Arrangement



BZV03/Z0000/07

- Inlet with 2.8mm or 6.3mm tags
- Double Pole Switch/ Fuseholder/Indicator/ Voltage Selectors/ Blanking Plate
- Filtered Inlet Option
- Options of I/O marked switches



How to order -

BZV XX / XXXXX / XX

Type of Inlet / Outlet

C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:

03 = PX0575/63
04 = PX0575/28

C16 Power Inlet (hot condition), 6.3 or 2.8mm tabs:

05 = PX0595/63
06 = PX0595/28

Please note type 05 and 06 are not available in filtered version

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see page 178
E.g. BZV03/A0120/07

Combination of Other Components

Twin Fuseholder and Double Pole Switch:
05 = 2 x FX0359 + D.P. Switch

Twin Fuseholder and Double Pole Neon Switch:
06 = 2 x FX0359 + D.P. Red Neon Switch
09 = 2 x FX0359 + D.P. Green Neon Switch
19 = 2 x FX0359 + D.P. Red Neon Switch 125V

Twin Fuseholder and Neon Indicator:
07 = 2 x FX0359 + Red Neon Indicator

Voltage Selector, Fuseholder and Double Pole Switch:
15 = 1 x VS0001 + 1 x FX0359 + Double Pole switch

Voltage Selector, Fuseholder and Double Pole Neon Switch:
16 = 1 x VS0001 + 1 x FX0359 + D.P. Red Neon Switch
18 = 1 x VS0001 + 1 x FX0359 + D.P. Green Neon Switch

Voltage Selector, Fuseholder and Neon Indicator:
17 = 1 x VS0001 + 1 x FX0359 + Red Neon Indicator

Twin Fuseholder and Double Pole High Inrush Switch:
20 = 2 x FX0359 + D.P. High Inrush Switch

Twin Fuseholder and Double Pole High Inrush Neon Switch:
21 = 2 x FX0359 + 1 x D.P. High Inrush Green Neon Switch
22 = 2 x FX0359 + 1 x D.P. High Inrush Red Neon Switch

Voltage Selector, Neon Indicator and Double Pole Switch
25 = 1 x VS0001 + 1 x DX0928/110V/Red + D.P. Switch
26 = 1 x VS0001 + 1 x DX0928/110V/Green + D.P. Switch
27 = 1 x VS0001 + 1 x DX0928/250V/Red + D.P. Switch
28 = 1 x VS0001 + 1 x DX0928/250V/Green + D.P. Switch

Voltage Selector, Neon Indicator and Double Pole High Inrush Switch:
29 = 1 x VS0001 + 1 x DX0928/250V/Red + D.P. High Inrush Switch
30 = 1 x VS0001 + 1 x DX0928/250V/Green + D.P. High Inrush Switch

Fuseholder, Neon Indicator and Double Pole Switch
31 = 1 x FX0359 + 1 x DX0928/110V/Red + D.P. Switch
32 = 1 x FX0359 + 1 x DX0928/110V/Green + D.P. Switch
33 = 1 x FX0359 + 1 x DX0928/250V/Red + D.P. Switch
34 = 1 x Fx0359 + 1 x DX0928/250V/Green + D.P. Switch

Fuseholder, Neon Indicator and Double Pole High Inrush Switch:
35 = 1 x FX0359 + 1 x DX0928/250V/Red + D.P. High Inrush Switch
36 = 1 x FX0359 + 1 x DX0928/250V/Green + D.P. High Inrush Switch

Fuseholder, Blanking Plate and Double Pole High Inrush Neon Switch:
47 = 1 x FX0359 + 1 x Blanking Plate (Right) + D.P. High Inrush Green Neon Switch

Fuseholder, Blanking Plate and Double Pole Switch:
48 = 1 x FX0359 + 1 x Blanking Plate (Right) + D.P. Switch

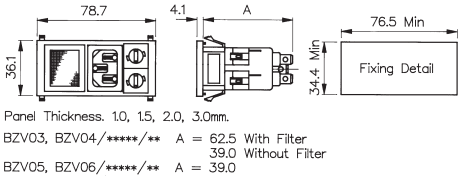
C14 and C16 IEC Inlet - Vertical

Vertical Module Arrangement



BZV03/Z0000/07

- Inlet with 2.8mm or 6.3mm tags
- Double Pole Switch/
- Fuseholder/Indicator/ Voltage Selectors/ Blanking Plate
- Filtered Inlet Option Options of I/O marked switches



How to order -

BZV XX / XXXXX / XX

Type of Inlet / Outlet

C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:

03 = PX0575/63
04 = PX0575/28

C16 Power Inlet (hot condition), 6.3 or 2.8mm tabs:

05 = PX0595/63
06 = PX0595/28

Please note type 05 and 06 are not available in filtered version

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see page 178
E.g. BZV03/A0120/07

Combination of Other Components

Twin Fuseholder and Double Pole Switch Marked (I/O):
72 = 2 x FX0359 + D.P. Switch (I/O)

Twin Fuseholder and Double Pole Neon Switch Marked (I/O):
73 = 2 x FX0359 + D.P. Red Neon Switch (I/O)
75 = 2 x FX0359 + D.P. Green Neon Switch(I/O)
82 = 2 x FX0359 + D.P. Red Neon Switch 125V(I/O)

Voltage Selector, Fuseholder and Double Pole Switch Marked (I/O):
79 = 1 x VS0001 + 1 x FX0359 + Double Pole switch (I/O)

Voltage Selector, Fuseholder and Double Pole Neon Switch Marked (I/O):
80 = 1 x VS0001 + 1 x FX0359 + D.P. Red Neon Switch (I/O)
81 = 1 x VS0001 + 1 x FX0359 + D.P. Green Neon Switch (I/O)

Twin Fuseholder and Double Pole High Inrush Switch Marked (I/O):
83 = 2 x FX0359 + D.P. High Inrush Switch (I/O)

Twin Fuseholder and Double Pole High Inrush Neon Switch Marked (I/O):
84 = 2 x FX0359 + 1 x D.P. High Inrush Green Neon Switch (I/O)
85 = 2 x FX0359 + 1 x D.P. High Inrush Red Neon Switch (I/O)

Voltage Selector, Neon Indicator and Double Pole Switch Marked (I/O):
86 = 1 x VS0001 + 1 x DX0928/110V/Red + D.P. Switch (I/O)
87 = 1 x VS0001 + 1 x DX0928/110V/Green + D.P. Switch (I/O)
88 = 1 x VS0001 + 1 x DX0928/250V/Red + D.P. Switch (I/O)
89 = 1 x VS0001 + 1 x DX0928/250V/Green + D.P. Switch (I/O)

Voltage Selector, Neon Indicator and Double Pole High Inrush Switch Marked (I/O):
90 = 1 x VS0001 + 1 x DX0928/250V/Red + D.P. High Inrush Switch(I/O)
91 = 1 x VS0001 + 1 x DX0928/250V/Green + D.P. High Inrush Switch(I/O)

Fuseholder, Neon Indicator and Double Pole Switch Marked (I/O)
92 = 1 x FX0359 + 1 x DX0928/110V/Red + D.P. Switch (I/O)
93 = 1 x FX0359 + 1 x DX0928/110V/Green + D.P. Switch (I/O)
94 = 1 x FX0359 + 1 x DX0928/250V/Red + D.P. Switch (I/O)
95 = 1 x FX0359 + 1 x DX0928/250V/Green + D.P. Switch (I/O)

Fuseholder, Neon Indicator and Double Pole High Inrush Switch Marked (I/O):
96 = 1 x FX0359 + 1 x DX0928/250V/Red + D.P. High Inrush Switch (I/O)
97 = 1 x FX0359 + 1 x DX0928/250V/Green + D.P. High Inrush Switch (I/O)

Fuseholder, Blanking Plate and Double Pole High Inrush Neon Switch Marked (I/O):
99 = 1 x FX0359 + 1 x Blanking Plate (Right) + D.P. High Inrush Green Neon Switch (I/O)

Fuseholder, Blanking Plate and Double Pole Switch Marked (I/O):
A0 = 1 x FX0359 + 1 x Blanking Plate (Right) + D.P. Switch (I/O)
B2 = 1 x VS0002 + 1 x Blanking Plate
B3 = 1 x FX0359 + 1 x Blanking Plate + D.P. High Inrush Switch (I/O)
B5 = 1 x VS0001 + 1 x Blanking Plate + D.P Switch (I/O)

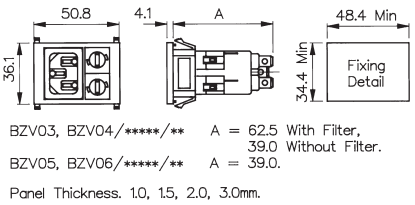
C14 and C16 IEC Inlet - Vertical

Vertical Module Arrangement



BZV04/Z0000/04

- Inlet with 2.8mm or 6.3mm tags
- Fuseholder/Voltage Selector/Indicator options/Blanking plate



How to order -

BZV XX	/	XXXXX	/	XX

Type of Inlet / Outlet

C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:
03 = PX0575/63
04 = PX0575/28

C16 Power Inlet (hot condition), 6.3 or 2.8mm tabs:
05 = PX0595/63
06 = PX0595/28

Please note type 05 and 06 are not available in filtered version

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see page 178
E.g. BZV03/A0120/04

Combination of Other Components

Twin Fuseholder:
04 = 2 x FX0359

Voltage Selector and Fuseholder:
14 = 1 x VS0001 + 1 x FX0359

Voltage selector and Neon:
37 = 1 x VS0001 + DX0928/110V/Red
38 = 1 x VS0001 + DX0928/110V/Green
39 = 1 x VS0001 + DX0928/250V/Red
40 = 1 x VS0001 + DX0928/250V/Green

Fuseholder and Neon:
41 = 1 x FX0359 + DX0928/110V/Red
42 = 1 x FX0359 + DX0928/110V/Green
43 = 1 x FX0359 + DX0928/250V/Red
44 = 1 x FX0359 + DX0928/250V/Green

Fuseholder and Blanking Plate:
45 = 1 x FX0359 + Blanking Plate

Voltage Selector and Blanking Plate:
B2 = 1 x VS0001 + Blanking Plate

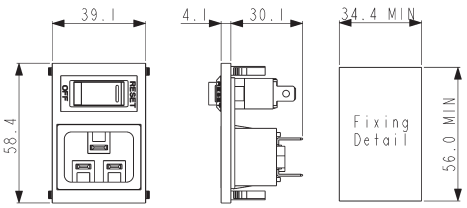
C20 IEC Inlet - Vertical

Vertical Module Arrangement



BZV49/Z0000/69

- Inlet with 4.8mm or 6.3mm tags
- Single Pole Switch marked I/O
- Illuminated, red or green, switches
- High inrush non-illuminated switch



How to order -

BZV XX	/	XXXXX	/	XX

Type of Inlet / Outlet

C20 Power Inlet (cold condition), 4.8 or 6.3mm tabs:

49 = PX0598/63
50 = PX0598/48

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Combination of Other Components

Single Pole Switch:
01 = S.P. Switch

Single Pole Switch Marked (I/O):
69 = S.P. Switch (I/O)

Single Pole Illuminated Switch:
02 = S.P. Illuminated Red
08 = S.P. Illuminated Green

Single Pole Non-illuminated High Inrush Switch Marked I/O:

98 = S.P. High Inrush Switch (I/O)
Single Pole Illuminated (Red or Green 250v Neon) Switch Marked I/O:

71 = S.P. Switch Illuminated Red (I/O)
74 = S.P. Switch Illuminated Green (I/O)

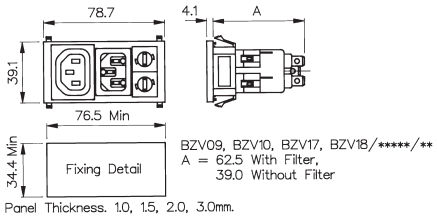
C14 IEC Inlet/Sheet F IEC Outlet - Vertical

Vertical Module Arrangement



BZV09/Z0000/04

- Inlet/Outlet Combination
- 2.8mm or 6.3mm tags
- Filtered Inlet and Blanking Plate options
- Shuttered or Non-shuttered Outlet
- Fused



How to order -

BZV XX / XXXXX / XX

Type of Inlet / Outlet

C14 Power Inlet (cold condition) and Sheet F Non-shuttered Power Outlet, 2.8 or 6.3mm tabs:

09 = PX0575/63 + PX0695/63
10 = PX0575/28 + PX0695/28

C14 Power Inlet (cold condition) and Sheet F Shuttered Power Outlet, 2.8 or 6.3mm tabs:

17 = PX0575/63 + PX0783/63
18 = PX0575/28 + PX0783/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see page 178
E.g. BZV09/A0120/04

Combination of Other Components

Twin Fuseholder:
04 = 2 x FX0359

Voltage Selector and Fuseholder:
14 = 1 x VS0001 + 1 x FX0359

Voltage selector and Neon:
37 = 1 x VS0001 + DX0928/110V/Red
38 = 1 x VS0001 + DX0928/110V/Green
39 = 1 x VS0001 + DX0928/250V/Red
40 = 1 x VS0001 + DX0928/250V/Green

Fuseholder and Neon:
41 = 1 x FX0359 + DX0928/110V/Red
42 = 1 x FX0359 + DX0928/110V/Green
43 = 1 x FX0359 + DX0928/250V/Red
44 = 1 x FX0359 + DX0928/250V/Green

Fuseholder and Blanking Plate:
45 = 1 x FX0359 + Blanking Plate

Voltage Selector and Blanking Plate:
B2 = 1 x VS0001 + Blanking Plate

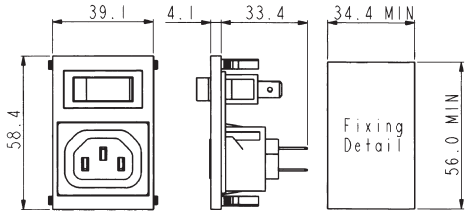
Sheet F IEC Outlet - Vertical

Vertical Module Arrangement



BZV45/Z0000/02

- Outlet with 2.8mm or 6.3mm tags
- Shuttered or Non-Shuttered
- Single Pole Switch or Neon Indicator
- I/O Marking Options



How to order -

BZV XX	/	XXXXX	/	XX

Type of Inlet / Outlet

Sheet F Power Outlet (non shuttered), 6.3 or 2.8mm tabs:

45 = PX0695/63
46 = PX0695/28

Sheet F Power Outlet (shuttered), 6.3 or 2.8mm tabs:

47 = PX0783/63
48 = PX0783/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Combination of Other Components

Single Pole Switch:
01 = S.P. Switch

Single Pole Neon Switch:
02 = S.P. Red Neon Switch
08 = S.P. Green Neon Switch

Neon Indicator:

03 = Red Neon Indicator

Single Pole High Inrush Switch:
46 = S.P. High Inrush Switch

Single Pole Switch Marked I/O:
69 = S.P. Switch (I/O)

Single Pole Neon Switch Marked (I/O):
71 = S.P. Red Neon Switch (I/O)
74 = S.P. Green Neon Switch (I/O)

Single Pole High Inrush Switch Marked (I/O):
98 = S.P. High Inrush Switch (I/O)

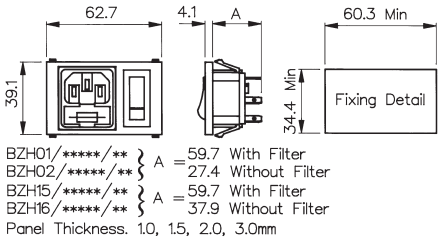
C14 IEC Fused Inlet - Horizontal

Horizontal Module Arrangement



BZH01/Z0000/01

- Fused Inlet with 2.8mm or 6.3mm tags
- Single Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



How to order -

BZH XX	/	XXXXX	/	XX

Type of Inlet / Outlet

Single Fused C14 Power Inlet (cold condition), 2.8 or 6.3mm tabs:

01 = PF0011/63
02 = PF0011/28

Twin Fused C14 Power Inlet (cold condition), 2.8 or 6.3mm tabs:

15 = PF0033/63
16 = PF0033/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180
E.g. BZH01/A0620/01

Combination of Other Components

Single Pole Switch:
01 = S.P. Switch

Single Pole Neon Switch:
02 = S.P. Red Neon Switch
08 = S.P. Green Neon Switch

Neon Indicator:
03 = Red Neon Indicator

Single Pole High Inrush Switch:
46 = S.P. High Inrush Switch

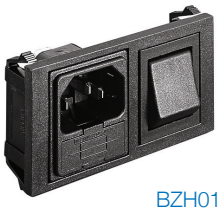
Single Pole Switch Marked I/O:
69 = S.P. Switch (I/O)

Single Pole Neon Switch Marked (I/O):
71 = S.P. Red Neon Switch (I/O)
74 = S.P. Green Neon Switch (I/O)

Single Pole High Inrush Switch Marked (I/O):
98 = S.P. High Inrush Switch (I/O)

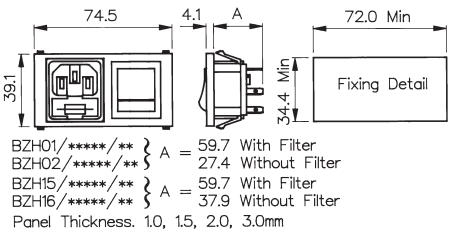
C14 IEC Fused Inlet - Horizontal

Horizontal Module Arrangement



BZH01/Z0000/10

- Fused Inlet with 2.8mm or 6.3mm tags
- Double Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



How to order -

BZH XX	/	XXXXX	/	XX

Type of Inlet / Outlet

Single Fused C14 Power Inlet (cold condition), 2.8 or 6.3mm tabs:

01 = PF0011/63
02 = PF0011/28

Twin Fused C14 Power Inlet (cold condition), 2.8 or 6.3mm tabs:

15 = PF0033/63
16 = PF0033/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180
E.g. BZH01/A0620/10

Combination of Other Components

Neon Indicator:
03 = Red Neon Indicator

Double Pole Switch:
10 = D.P. Switch

Double Pole Neon Switch:
11 = D.P. Red Neon Switch
12 = D.P. Green Neon Switch

Double Pole High Inrush Switch:
13 = D.P. High Inrush Switch

Double Pole Switch marked I/O:
70 = D.P. Switch (I/O)

Double Pole Neon Switch Marked (I/O):
76 = D.P. Red Neon Switch (I/O)
77 = D.P. Green Neon Switch (I/O)

Double Pole High Inrush Switch Marked (I/O):
78 = D.P. High Inrush Switch (I/O)
B1 = D.P. High Inrush Green Neon Switch (I/O)

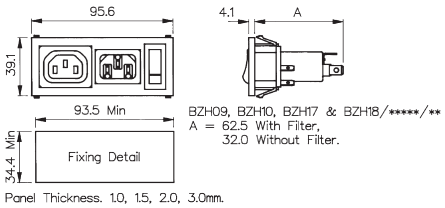
C14 IEC Fused Inlet - Horizontal

Horizontal Module Arrangement



BZH09/Z0000/01

- Inlet/Outlet Combination with 2.8mm or 6.3mm tags
- Shuttered or Non-Shuttered Outlet
- Single Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



How to order -

BZH XX / XXXXX / XX

Type of Inlet / Outlet

C14 Power Inlet (cold condition) and Sheet F Non-shuttered Power Outlet, 2.8 or 6.3mm tabs:

09 = PX0575/63 + PX0695/63
10 = PX0575/28 + PX0695/28

C14 Power Inlet (cold condition) and Sheet F Shuttered Power Outlet , 2.8 or 6.3mm tabs:

17 = PX0575/63 + PX0783/63
18 = PX0575/28 + PX0783/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see page 178
E.g. BZH09/A0120/01

Combination of Other Components

Single Pole Switch:
01 = S.P. Switch

Single Pole Neon Switch:
02 = S.P. Red Neon Switch
08 = S.P. Green Neon Switch

Neon Indicator:
03 = Red Neon Indicator

Single Pole High Inrush Switch:
46 = S.P. High Inrush Switch

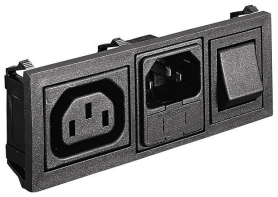
Single Pole Switch Marked I/O:
69 = S.P. Switch (I/O)

Single Pole Neon Switch Marked (I/O):
71 = S.P. Red Neon Switch (I/O)
74 = S.P. Green Neon Switch (I/O)

Single Pole High Inrush Switch Marked (I/O):
98 = S.P. High Inrush Switch (I/O)

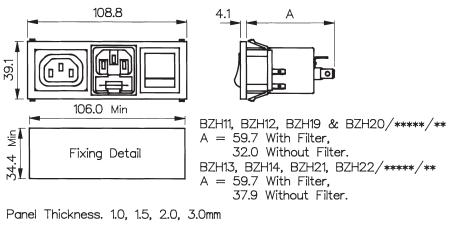
C14 IEC Inlet/Sheet F IEC Outlet - Horizontal

Horizontal Module Arrangement



BZH11/Z0000/10

- Inlet/Outlet Combination with 2.8mm or 6.3mm tags
- Single or Twin Fused Inlet
- Shuttered or Non-Shuttered Outlet
- Double Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



How to order -

BZH XX	/	XXXXX	/	XX

Type of Inlet / Outlet

Single Fused C14 Power Inlet (cold condition) and Sheet F Power Outlet, 2.8 or 6.3mm tabs:

11 = PF0011/63 + PX0695/63
12 = PF0011/28 + PX0695/28

Twin Fused C14 Power Inlet (cold condition) and Sheet F Power Outlet , 2.8 or 6.3mm tabs:

13 = PF0033/63 + PX0695/63
14 = PF0033/28 + PX0695/28

Single Fused C14 Power Inlet (cold condition) and Sheet F Shuttered Power Outlet, 2.8 or 6.3mm tabs:

19 = PF0011/63 + PX0783/63
20 = PF0011/28 + PX0783/28

Twin Fused C14 Power Inlet (cold condition) and Sheet F Shuttered Power Outlet , 2.8 or 6.3mm tabs:

21 = PF0033/63 + PX0783/63
22 = PF0033/28 + PX0783/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180
E.g. BZH11/A0620/10

Combination of Other Components

Neon Indicator:
D3 = Red Neon Indicator

Double Pole Switch:
10 = D.P. Switch

Double Pole Neon Switch:
11 = D.P. Red Neon Switch
12 = D.P. Green Neon Switch

Double Pole High Inrush Switch:
13 = D.P. High Inrush Switch

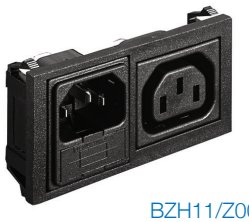
Double Pole Switch Marked I/O:
70 = D.P. Switch (I/O)

Double Pole Neon Switch Marked (I/O):
76 = D.P. Red Neon Switch (I/O)
77 = D.P. Green Neon Switch (I/O)

Double Pole High Inrush Switch Marked (I/O):
78 = D.P. High Inrush Switch (I/O)
B1 = D.P. High Inrush Green Neon Switch (I/O)

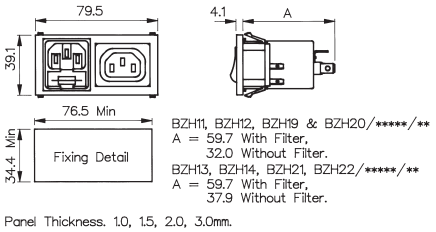
C14 IEC Inlet/Sheet F IEC Outlet - Horizontal

Horizontal Module Arrangement



BZH11/Z0000/00

- Fused Inlet/Outlet
- Combination with 2.8mm or 6.3mm tags
- Filtered Inlet Option
- Single or Twin Fused



How to order -

BZH XX	/	XXXXX	/	XX

Type of Inlet / Outlet

Single Fused C14 Power Inlet (cold condition) and Sheet F Non-shuttered Power Outlet, 2.8 or 6.3mm tabs:

11 = PF0011/63 + PX0695/63
12 = PF0011/28 + PX0695/28

Twin Fused C14 Power Inlet (cold condition) and Sheet F Non-shuttered Power Outlet , 2.8 or 6.3mm tabs:

13 = PF0033/63 + PX0695/63
14 = PF0033/28 + PX0695/28

Single Fused C14 Power Inlet (cold condition) and Sheet F Shuttered Power Outlet, 2.8 or 6.3mm tabs:

19 = PF0011/63 + PX0783/63
20 = PF0011/28 + PX0783/28

Twin Fused C14 Power Inlet (cold condition) and Sheet F Shuttered Power Outlet , 2.8 or 6.3mm tabs:

21 = PF0033/63 + PX0783/63
22 = PF0033/28 + PX0783/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180
E.g. BZH11/A0620/00

Combination of Other Components

None

00 = None

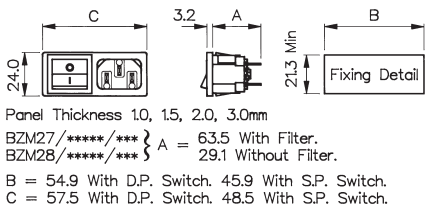
C14 IEC Inlet - Mini Bezel

Minimum Combined Bezel Size



BZM27/Z0000/57B

- Inlet with 2.8, 4.8 or 6.3mm tags
- Horizontal Module Arrangement
- Single and Double Pole Switch Variations
- Filtered Inlet Option



How to order -

BZM XX / XXXXX / XX / X

Type of Inlet / Outlet

C14 Power Inlet (cold condition), 6.3, 4.8 & 2.8mm tabs:

27 = PX0575/63
42 = PX0575/48
28 = PX0575/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see page 178
E.g. BZM27/A0120/57B

Switch Variation

Single Pole Switch, 4.8mm or solder tab, marked I/O:
53 = S.P. Switch, 4.8mm tab (I/O)
54 = S.P. Switch, solder tab (I/O)

Single Pole Illuminated Switch, 4.8mm or solder tab:
55 = S.P. Switch Illum. Red, 4.8mm tab
61 = S.P. Switch Illum. Green, 4.8mm tab
56 = S.P. Switch Illum. Red, solder tab
62 = S.P. Switch Illum. Green, solder tab

Double Pole Switch, 4.8mm or solder tab, marked I/O:
57 = D.P. Switch, 4.8mm tab (I/O)
58 = D.P. Switch, solder tab (I/O)

Double Pole Illuminated Switch, 4.8mm or solder tab:
59 = D.P. Switch Illum. Red, 4.8mm tab
63 = D.P. Switch Illum. Green, 4.8mm tab
60 = D.P. Switch Illum. Red, solder tab
64 = D.P. Switch Illum. Green, solder tab

Double Pole High Inrush, 4.8mm tabs:
65 = D.P. High Inrush Switch, 4.8mm tabs (S.P. format)

Double Pole High Inrush, 4.8mm tabs, marked I/O:
68 = D.P. High Inrush Switch, 4.8mm tabs, I/O (S.P. format)

Single Pole Illuminated Switch, 4.8mm or solder tab, Marked I/O:
A1 = S.P. Switch Illum. Red, 4.8mm tab (I/O)
A5 = S.P. Switch Illum. Green, 4.8mm tab (I/O)
A2 = S.P. Switch Illum. Red, solder tab (I/O)
A6 = S.P. Switch Illum. Green, solder tab (I/O)

Double Pole Illuminated Switch, 4.8mm or solder tab, Marked I/O:
A3 = D.P. Switch Illum. Red, 4.8mm tab
A7 = D.P. Switch Illum. Green, 4.8mm tab
A4 = D.P. Switch Illum. Red, solder tab
A8 = D.P. Switch Illum. Green, solder tab

Panel Thickness

1.0mm = A
1.5mm = B
2.0mm = C
3.0mm = D

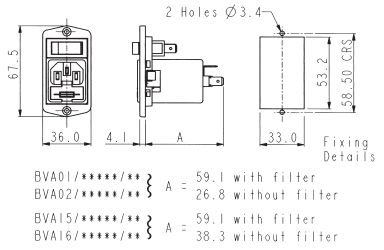
C14 IEC Fused Inlet - Polyflange

Vertical Module Arrangement



BVA01/Z0000/02

- Fused Inlet with 2.8mm or 6.3mm tags
- Screw Fixing to Panel
- Single Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches

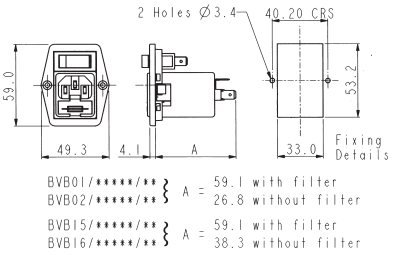


Vertical Module Arrangement



BVB01/Z0000/01

- Fused Inlet with 2.8mm or 6.3mm tags
- Screw Fixing to Panel
- Single Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



How to order -

BV X XX / XXXXX / XX

Flange Type

A = Top fixing

B = Side fixing

Type of Inlet / Outlet

Single Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:

01 = PF0011/63
02 = PF0011/28

Twin Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:

15 = PF0033/63
16 = PF0033/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180
E.g. BVA01/A0620/01

Combination of Other Components

Single Pole Switch:
01 = S.P. Switch

Single Pole Neon Switch:
02 = S.P. Red Neon Switch
08 = S.P. Green Neon Switch

Neon Indicator:
03 = Red Neon Indicator

Single Pole High Inrush Switch:
46 = S.P. High Inrush Switch

Single Pole Switch Marked I/O:
69 = S.P. Switch (I/O)

Single Pole Neon Switch Marked (I/O):
71 = S.P. Red Neon Switch (I/O)
74 = S.P. Green Neon Switch (I/O)

Single Pole High Inrush Switch Marked (I/O):
98 = S.P. High Inrush Switch (I/O)

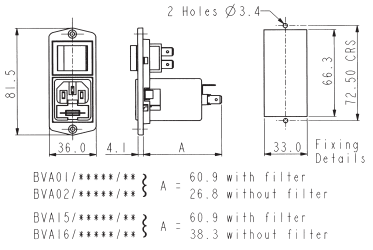
C14 IEC Fused Inlet - Polyflange

Vertical Module Arrangement



BVA01/Z0000/10

- Fused Inlet with 2.8mm or 6.3mm tags
- Screw Fixing to Panel
- Double Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches

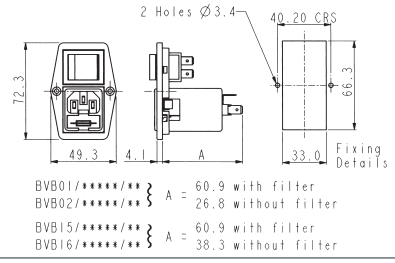


Vertical Module Arrangement



BVB01/Z0000/11

- Fused Inlet with 2.8mm or 6.3mm tags
- Screw Fixing to Panel
- Double Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



How to order -

BV X XX / XXXXX / XX

Flange Type

A = Top fixing

B = Side fixing

Type of Inlet / Outlet

Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:

01 = PF0011/63
02 = PF0011/28

Twin Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:

15 = PF0033/63
16 = PF0033/28

Filtered or Non Filtered Inlet

Z0000 = Non Filtered

Axxxx = Standard

For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180
E.g. BVA01/A0620/10

Combination of Other Components

Neon Indicator:
D3 = Red Neon Indicator

Double Pole Switch:
10 = D.P. Switch

Double Pole Neon Switch:
11 = D.P. Red Neon Switch
12 = D.P. Green Neon Switch

Double Pole High Inrush Switch:
13 = D.P. High Inrush Switch

Double Pole Switch Marked I/O:
70 = D.P. Switch (I/O)

Double Pole Neon Switch Marked (I/O):
76 = D.P. Red Neon Switch (I/O)
77 = D.P. Green Neon Switch (I/O)

Double Pole High Inrush Switch Marked (I/O):
78 = D.P. High Inrush Switch (I/O)
B1 = D.P. High Inrush Green Neon Switch (I/O)

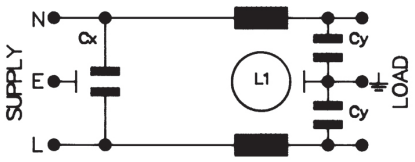
C14 IEC Fused Inlet

EMI Filter Options



BVA01/Z0000/10

- For Polysnap modules BZV03, BZV04, BZV09, BZV10, BZV17, BZV18, BZH09, BZH10, BZH17, BZH18, BZM27, BZM28
- PX0575 style IEC inlet
- Using PS01/A style filter
- Standard Attenuation Filter



How to order -

B XXXX	/	A	XX	X	X	/	XX

Polysnap Part No.
From Polysnap Selection

Filter Type
A = Standard

Rating
01 = 1A
03 = 3A
06 = 6A
10 = 10A

L/C Circuit
1 = Version 1
2 = Version 2
3 = Version 3

Additional Components
0 = None

Polysnap Part No.
From Polysnap Selection

Rating	Version	L1	Cx	Cy
1 AMP	1	2 x 2.8mH	1 x 15nF	2 x 2.2nF
“	2	2 x 10mH	1 x 15nF	2 x 2.2nF
“	3	2 x 10mH	1 x 47nF	2 x 2.2nF
3 AMP	1	2 x 0.75mH	1 x 15nF	2 x 2.2nF
“	2	2 x 1.8mH	1 x 15nF	2 x 2.2nF
“	3	2 x 1.8mH	1 x 47nF	2 x 2.2nF
6 AMP	1	2 x 0.3mH	1 x 15nF	2 x 2.2nF
“	2	2 x 0.7mH	1 x 15nF	2 x 2.2nF
“	3	2 x 0.7mH	1 x 47nF	2 x 2.2nF
10 AMP	1	2 x 0.17mH	1 x 15nF	2 x 2.2nF
“	2	2 x 0.35mH	1 x 15nF	2 x 2.2nF
“	3	2 x 0.17mH	1 x 47nF	2 x 2.2nF

Part No. Example

BZV03/A0120/02

BZV style Polysnap module with PX0575 IEC power inlet, filter rated at 1 amp, L/C circuit version 2 (L1 = 2 x 10mH, Cx = 1 x 15nF, Cy = 2 x 2.2nF) 6.3mm tabs and single pole red neon switch.

Filter Specification

Max. Working Voltage: 250V a.c. 50-400Hz
Earth Leakage Current: <0.35mA (250V. 50Hz)
Temperature Range: –25ºC to +85ºC
Max. Ambient Temp.: (@ Full Load) 40ºC (derate linearly to 0A @ 85ºC)
Test Voltage: 2700V d.c. 2 secs. Lines to Earth
1100V d.c. 2 secs. Live to Neutral

Approvals:

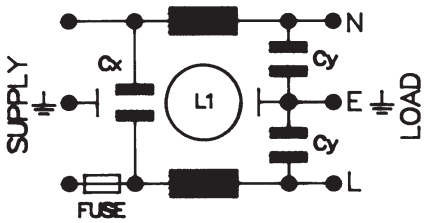
Attenuation Curves: See PS01/A filter, page 183

C14 Inlet Single Fuse - Standard Filter

EMI Filter Options



- For Polysnap modules BZV01, BZV02, BZH01, BZH02, BZH11, BZH12, BZH19, BZH20, BVA01, BVA02, BVB01, BVB02
- PF0011 style single fuse IEC inlet
- Using PS21/A style filter
- Standard Attenuation Filter



How to order -

B XXXX	/	A	XX	X	X	/	XX
Polysnap Part No.		**Filter Type**	**Rating**	**L/C Circuit**	**Additional Components**		**Polysnap Part No.**
From Polysnap Selection		A = Standard	01 = 1A 03 = 3A 06 = 6A	2 = Version 2 3 = Version 3	0 = None		From Polysnap Selection

Rating	Version	L1	Cx	Cy
1 AMP	1			
“	2			
“	3	2 x 12mH	1 x 47nF	2 x 2.2nF
3 AMP	1			
“	2	2 x 1.8mH	1 x 15nF	2 x 2.2nF
“	3	2 x 6.5mH	1 x 47nF	2 x 2.2nF
6 AMP	1			
“	2	2 x 0.7mH	1 x 15nF	2 x 2.2nF
“	3	2 x 2mH	1 x 47nF	2 x 2.2nF
10 AMP	1			
“	2			
“	3			

Part No. Example

BZV01/A0630/01

BZV style Polysnap module with PF0011 single fused (5 x 20mm) IEC power inlet, filter rated at 6 amp, L/C circuit version 3 (L1 = 2 x 2.0mH, Cx = 1 x 47nF, Cy = 2 x 2.2nF), 6.3mm tabs and single pole switch.

Filter Specification

Max. Working Voltage: 250V a.c. 50-400Hz
Earth Leakage Current: <0.35mA (250V. 50Hz)
Temperature Range: –25ºC to +85ºC
Max. Ambient Temp.: (@ Full Load) 40ºC (derate linearly to 0A @ 85ºC)
Test Voltage: 2700V d.c. 2 secs. Lines to Earth
1100V d.c. 2 secs. Live to Neutral

Approvals:

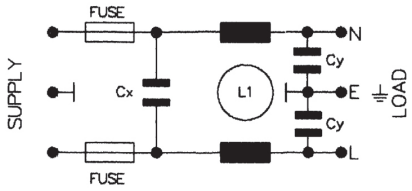
Attenuation Curves: See PS21/A filter, page 187

C14 Inlet Twin Fuse - Standard Filter

EMI Filter Option



- For Polysnap modules BZV15, BZV16, BZH13, BZH14, BZH15, BZH16, BZH21, BZH22, BVA15, BVA16, BVB15, BVB16
- PF0033 style twin fuse IEC inlet
- Using PS26/A filter
- Standard Attenuation Filter



How to order -

B XXXX	/	A	XX	X	X	/	XX
Polysnap Part No.		**Filter Type**	**Rating**	**L/C Circuit**	**Additional Components**		**Polysnap Part No.**
From Polysnap Selection		A = Standard	02 = 2A 04 = 4A	2 = Version 2	0 = None		From Polysnap Selection

Rating	Version	L1	Cx	Cy
1 AMP	1			
“	2			
“	3	2 x 1.8mH	1 x 15nF	2 x 2.2nF
4 AMP	1			
“	2	2 x 0.7mH	1 x 15nF	2 x 2.2nF
“	3			

Part No. Example

BZH13/A0420/00

BZH style Polysnap module with PF0033 twin fused (5 x 20mm) IEC power inlet, filter rated at 4 amps, L/C circuit version 2 (L1 = 2 x 0.7mH, Cx = 1 x 15nF, Cy = 2 x 2.2nF) 6.3mm tabs and no additional components.

Filter Specification

Max. Working Voltage: 250V a.c. 50-400Hz
Earth Leakage Current: <0.35mA (250V. 50Hz)
Temperature Range: –25ºC to +85ºC
Max. Ambient Temp.: (@ Full Load) 40ºC (derate linearly to 0A @ 85ºC)
Test Voltage: 2700V d.c. 2 secs. Lines to Earth
1100V d.c. 2 secs. Live to Neutral

Approvals:

Attenuation Curves: See PS26/A filter, page 189

Mains Filters



Designed to reduce conducted mains borne EMI, this extensive range provides many solutions to EMI problems. To meet individual design requirements the filters are available with two attenuation options – standard and medical. Current ratings are from 1 to 10 amps with single or twin fused types also available.

The choice of mounting options will suit most applications with flange, snap to panel or base/bulkhead.

Flange and Snap Fit
PS00 Series 292-293
PS01 Series 292-293

Base Mounting and Bulkhead
PS02 Series 294-295
PS03 Series 294-295

Fused Inlets
PS20 Series 296-297
PS21 Series 296-297
PS25 Series 298-299
PS26 Series 298-299

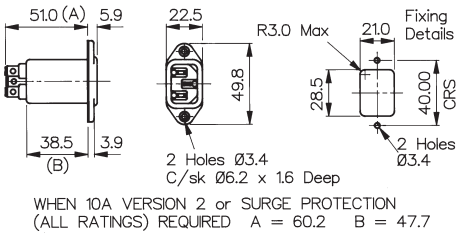
IEC Power Inlets Flange and Snap Fit

Panel Mounting



Flange PS00/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs

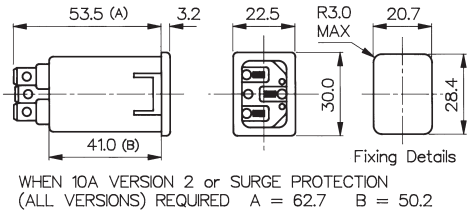


Snap Fit



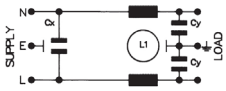
Snap Fit PS01/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs
- 1, 1.5, 2 or 3mm panels



How to order -

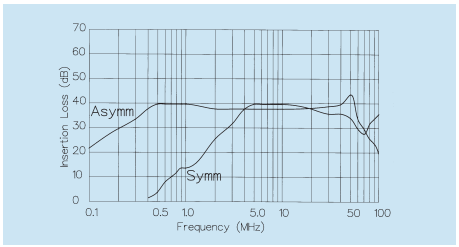
PS00/A or PS01/A	XX	X	0	/	63	XX

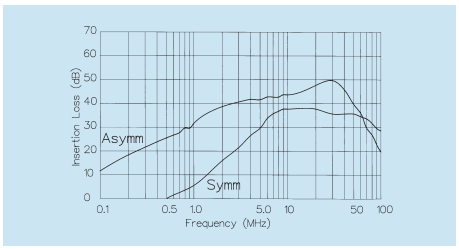
Series	Rating	L/C Circuit	Additional Components	Tag Type and Configuration	Panel Thickness	Circuit Board Diagram
PS00/A	01 = 1A	1 = Version 1	0 = None	63 = 6.3mm tabs	00 = Flange	
PS01/A	03 = 3A	2 = Version 2			10 = 1.0mm	
	06 = 6A	3 = Version 3			15 = 1.5mm	
	10 = 10A				20 = 2.0mm	
					30 = 3.0mm	

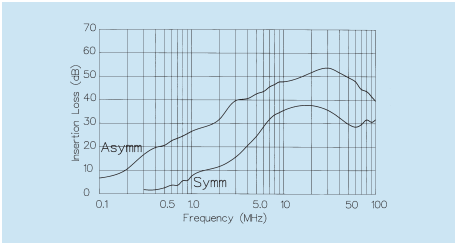
Specification	PS00/Axxxx/xx00	PS01/Axxxx/xxxx	Part No. Example
Max. Working Voltage:	250V a.c. 50-400Hz	250V a.c. 50-400Hz	**PS00/A0120/6300**
Earth Leakage Current:	<0.35mA (250V, 50Hz)	<0.35mA (250V, 50Hz)	PS00 series, flange fitting, standard filtered IEC power inlet, rated at 1 ampere. L/C circuit version 2, i.e. L1 = 2 x 10mH, Cx = 15nF, Cy = 2 x 2.2nF. 6.3mm tabs.
Temperature Range:	–25ºC to +85ºC	–25ºC to +85ºC	
Max. Ambient Temp: (@ Full Load)	40ºC (derate linearly to 0A @ 85ºC)	40ºC (derate linearly to 0A @ 85ºC)	
Test Voltage:	2700V d.c. 2 secs. Lines to Earth 1100V d.c. 2 secs. Live to Neutral	2700V d.c. 2 secs. Lines to Earth 1100V d.c. 2 secs. Live to Neutral	
Approvals:			
Mating Connectors:	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588	
RoHS	Compliant	Compliant	

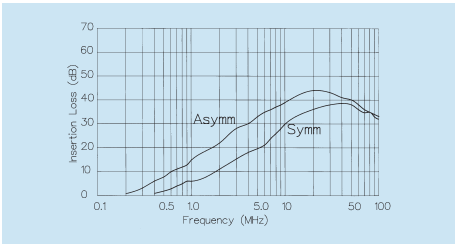
Rating	Version	L1	Cx	Cy
1 AMP	1	2 x 2.8mH	1 x 15nF	2 x 2.2nF
“	2	2 x 10mH	1 x 15nF	2 x 2.2nF
“	3	2 x 10mH	1 x 47nF	2 x 2.2nF
3 AMP	1	2 x 0.75mH	1 x 15nF	2 x 2.2nF
“	2	2 x 1.8mH	1 x 15nF	2 x 2.2nF
“	3	2 x 1.8mH	1 x 47nF	2 x 2.2nF
6 AMP	1	2 x 0.3mH	1 x 15nF	2 x 2.2nF
“	2	2 x 0.7mH	1 x 15nF	2 x 2.2nF
“	3	2 x 0.7mH	1 x 47nF	2 x 2.2nF
10 AMP	1	2 x 0.17mH	1 x 15nF	2 x 2.2nF
“	2	2 x 0.35mH	1 x 15nF	2 x 2.2nF
“	3	2 x 0.17mH	1 x 47nF	2 x 2.2nF

Version 1

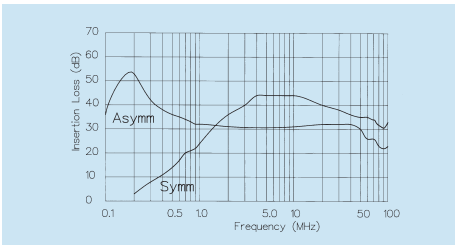


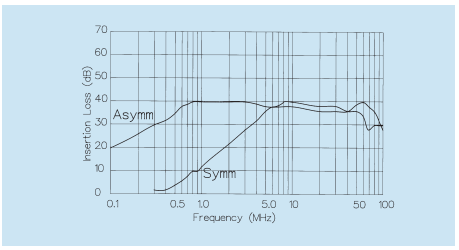


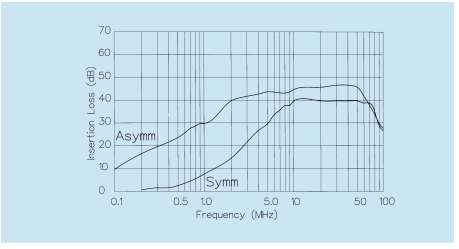


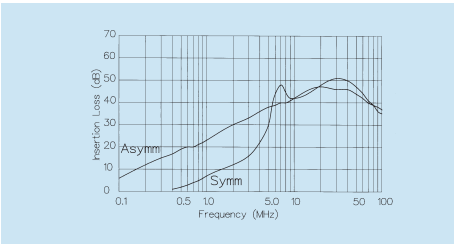


Version 2

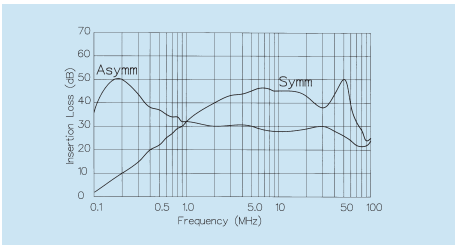


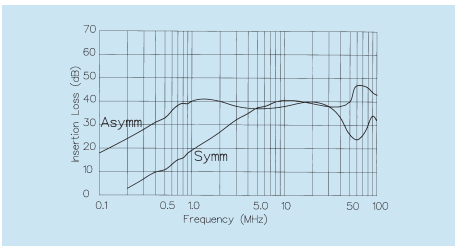


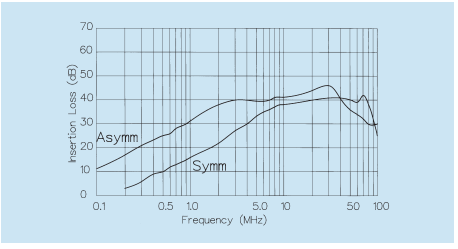


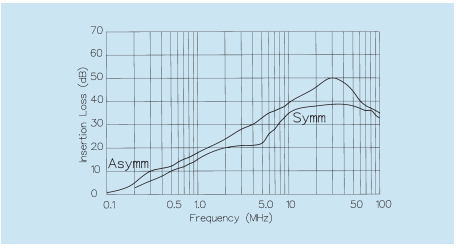


Version 3









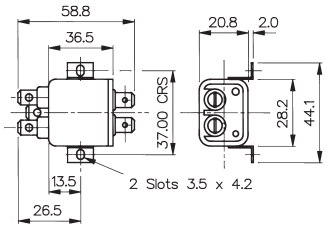
Base Mounting and Bulkhead

Base Mounting



Base Mounting PS02/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs

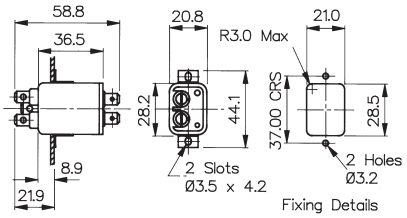


Bulkhead Mounting



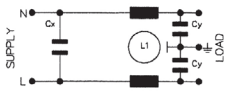
Bulkhead Mounting PS03/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs



How to order -

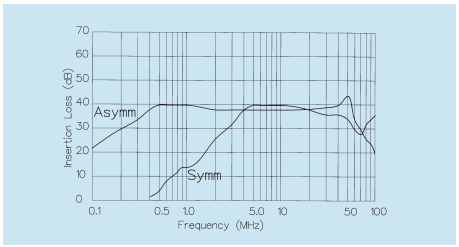
PS02/A or PS03/A	XX	X	0	/	63

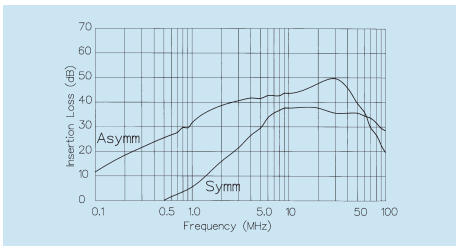
Series	Rating	L/C Circuit	Additional Components	Tag Type and Configuration	Circuit Board Diagram
PS02/A	01 = 1A	1 = Version 1	0 = None	63 = 6.3mm tabs	
PS03/A	03 = 3A	2 = Version 2			
	06 = 6A	3 = Version 3			
	10 = 10A				

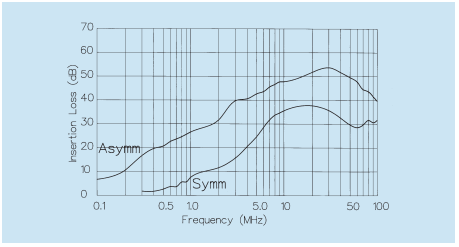
Specification	PS02/Axxxx/xx	PS03/Axxxx/xx	Part No. Example
Max. Working Voltage:	250V a.c. 50-400Hz	250V a.c. 50-400Hz	PS02/A0120/63
Earth Leakage Current:	<0.35mA (250V, 50Hz)	<0.35mA (250V, 50Hz)	PS02 series, standard base mounting filter, rated at 3 amperes. L/C circuit version 1, i.e. L1 = 2 x 0.75mH, Cx = 15nF, Cy = 2 x 2.2nF with 2.8mm tabs.
Temperature Range:	–25ºC to +85ºC	–25ºC to +85ºC	
Max. Ambient Temp: (@ Full Load)	40ºC (derate linearly to 0A @ 85ºC)	40ºC (derate linearly to 0A @ 85ºC)	
Test Voltage:	2700V d.c. 2 secs. Lines to Earth 1100V d.c. 2 secs. Live to Neutral	2700V d.c. 2 secs. Lines to Earth 1100V d.c. 2 secs. Live to Neutral	
Approvals:			
RoHS	Compliant	Compliant	

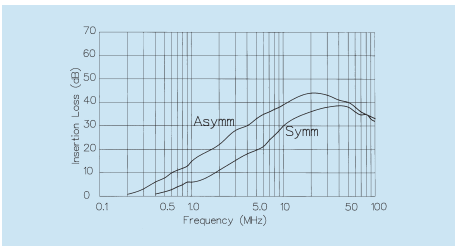
Rating	Version	L1	Cx	Cy
1 AMP	1	2 x 2.8mH	1 x 15nF	2 x 2.2nF
“	2	2 x 10mH	1 x 15nF	2 x 2.2nF
“	3	2 x 10mH	1 x 47nF	2 x 2.2nF
3 AMP	1	2 x 0.75mH	1 x 15nF	2 x 2.2nF
“	2	2 x 1.8mH	1 x 15nF	2 x 2.2nF
“	3	2 x 1.8mH	1 x 47nF	2 x 2.2nF
6 AMP	1	2 x 0.3mH	1 x 15nF	2 x 2.2nF
“	2	2 x 0.7mH	1 x 15nF	2 x 2.2nF
“	3	2 x 0.7mH	1 x 47nF	2 x 2.2nF
10 AMP	1	2 x 0.17mH	1 x 15nF	2 x 2.2nF
“	2	2 x 0.35mH	1 x 15nF	2 x 2.2nF
“	3	2 x 0.17mH	1 x 47nF	2 x 2.2nF

Version 1

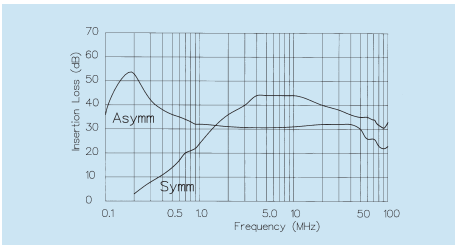


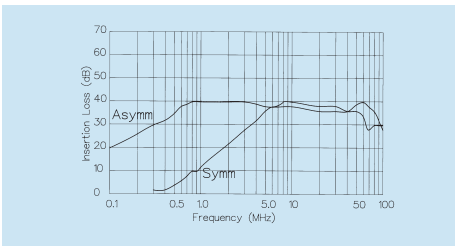


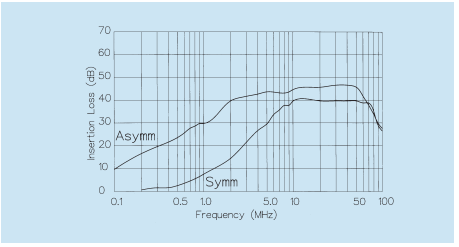


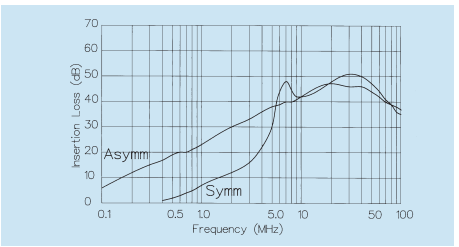


Version 2

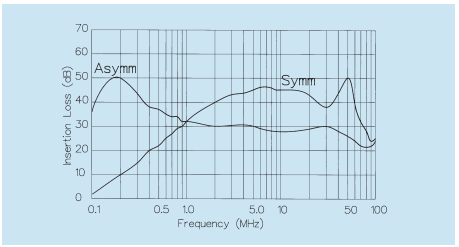


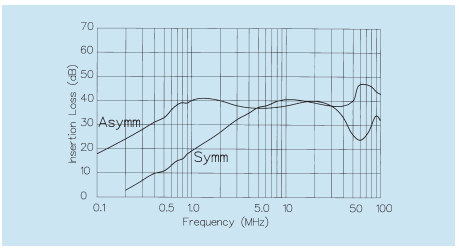


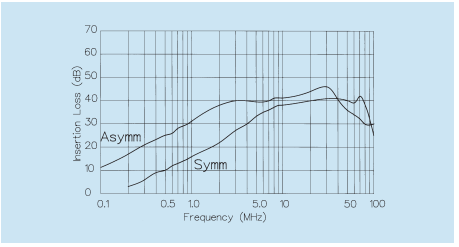


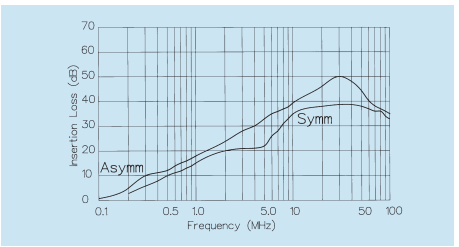


Version 3









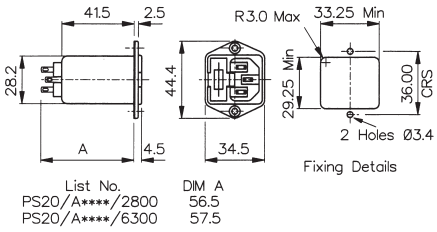
IEC Power Inlets (Single Fused)

Panel Mounting



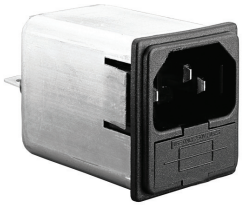
PS20/A

- 1, 3, or 6 Amp Current Rating
- Single Fused
- 2 Alternative Circuits
- 6.3mm tabs



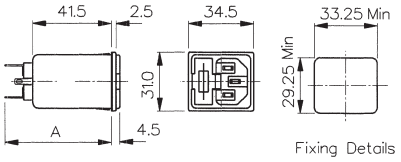
List No.	DIM A
PS20/A****/2800	56.5
PS20/A****/6300	57.5

Snap Fit



PS21/A

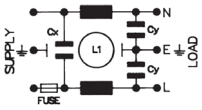
- 1, 3, or 6 Amp Current Rating
- Single Fused
- 2 Alternative Circuits
- 6.3mm tabs
- 1, 1.5, 2 or 3mm panels



List No.	DIM A
PS21/A****/28**	56.5
PS21/A****/63**	57.5

How to order -

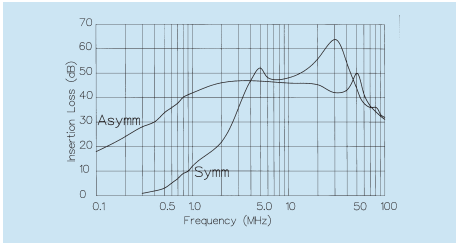
PS02/A or PS03/A	XX	X	0	/	63	/	XX

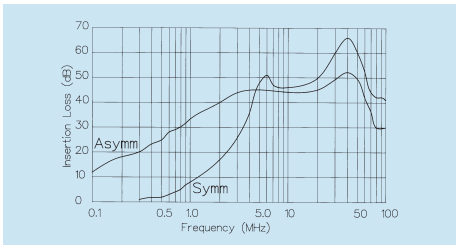
Series	Rating	L/C Circuit	Additional Components	Tag Type and Configuration	Panel Thickness	Circuit Board Diagram
PS00/A	01 = 1A	2 = Version 2	0 = None	63 = 6.3mm tabs	00 = Flange	
PS01/A	03 = 3A	3 = Version 3			10 = 1.0mm	
	06 = 6A				15 = 1.5mm	
					20 = 2.0mm	
					30 = 3.0mm	

Specification	PS20/Axxx0/xx00	PS21/Axxx0/xxxx	Part No. Example
Max. Working Voltage:	250V a.c. 50-400Hz	250V a.c. 50-400Hz	PS20/A0620/63
Earth Leakage Current:	<0.35mA (250V, 50Hz)	<0.35mA (250V, 50Hz)	PS20 series, flange fitting, standard filtered IEC power inlet, single fused, rated at 6 amperes. L/C circuit version 2, i.e L1 = 2 x 0.7mH, Cx = 1 x 15nF, Cy = 2 x 2.2nF. 6.3mm tabs.
Temperature Range:	–25ºC to +85ºC	–25ºC to +85ºC	
Max. Ambient Temp: (@ Full Load)	40ºC (derate linearly to 0A @ 85ºC)	40ºC (derate linearly to 0A @ 85ºC)	
Test Voltage:	2700V d.c. 2 secs. Lines to Earth 1100V d.c. 2 secs. Live to Neutral	2700V d.c. 2 secs. Lines to Earth 1100V d.c. 2 secs. Live to Neutral	
Approvals:			
RoHS	Compliant	Compliant	

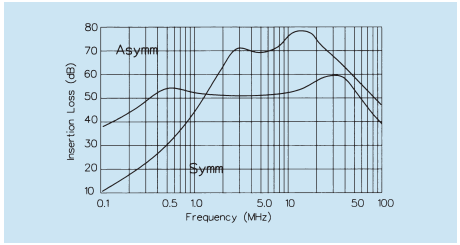
Rating	Version	L1	Cx	Cy
1 AMP	1			
“	2			
“	3	2 x 10mH	1 x 47nF	2 x 2.2nF
3 AMP	1			
“	2	2 x 1.8mH	1 x 15nF	2 x 2.2nF
“	3	2 x 6.5mH	1 x 47nF	2 x 2.2nF
6 AMP	1			
“	2	2 x 0.7mH	1 x 15nF	2 x 2.2nF
“	3	2 x 2mH	1 x 47nF	2 x 2.2nF

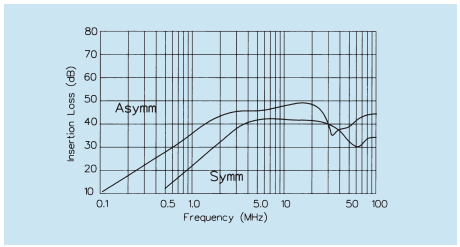
Version 2

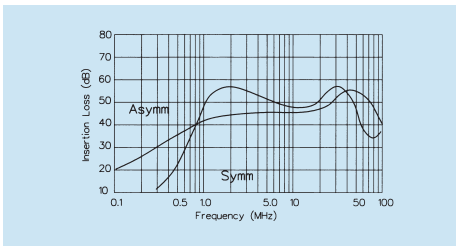




Version 3

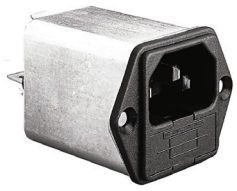






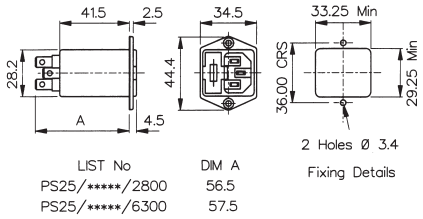
IEC Power Inlets Flange and Snap Fit (Twin Fused)

Base Mounting



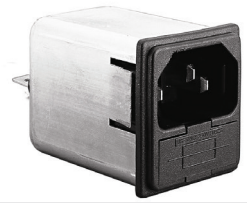
PS25/A

- 2 or 4 Amp Current Rating
- Twin Fused
- No additional components
- 6.3mm tabs



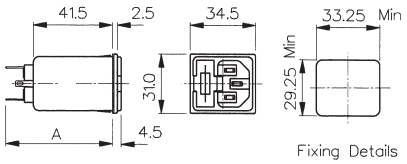
LIST No	DIM A
PS25/*****/2800	56.5
PS25/*****/6300	57.5

Snap Fit



PS26/A

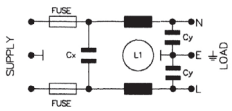
- 2 or 4 Amp Current Rating
- Twin Fused
- No additional components
- 6.3mm tabs
- 1, 1.5, 2 or 3mm panels



List No.	DIM A
PS23/A****/28**	56.5
PS23/A****/63**	57.5

How to order -

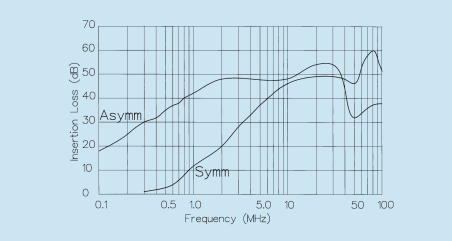
PS25/A or PS26/A	X	2	0	/ 63	/ XX

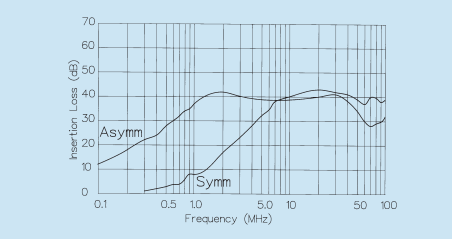
Series	Rating	L/C Circuit	Additional Components	Tag Type and Configuration	Panel Thickness	Circuit Board Diagram
PS25/A	02 = 2A	2 = Version 2	0 = None	63 = 6.3mm tabs	00 = Flange	
PS26/A	04 = 4A				10 = 1.0mm	
					15 = 1.5mm	
					20 = 2.0mm	
					30 = 3.0mm	

Specification	PS25/Axx2x/xx00	PS26/Axx2x/xxxx	Part No. Example
Max. Working Voltage:	250V a.c. 50-400Hz	250V a.c. 50-400Hz	PS20/A0620/63
Earth Leakage Current:	2.5W per fuse	2.5W per fuse	PS20 series, flange fitting, standard filtered IEC power inlet, single fused, rated at 6 amperes. L/C circuit version 2, i.e L1 = 2 x 0.7mH, Cx = 1 x 15nF, Cy = 2 x 2.2nF. 6.3mm tabs.
Temperature Range:	<0.35mA (250V, 50Hz)	<0.35mA (250V, 50Hz)	
Max. Ambient Temp: (@ Full Load)	40ºC (derate linearly to 0A @ 85ºC)	40ºC (derate linearly to 0A @ 85ºC)	
Test Voltage:	2700V d.c. 2 secs. Lines to Earth 1100V d.c. 2 secs. Live to Neutral	2700V d.c. 2 secs. Lines to Earth 1100V d.c. 2 secs. Live to Neutral	
Approvals:			
Mating Connectors	PX0587, PX0587/SE, PX0588	PX0587, PX0587/SE, PX0588	
Accessories	P.No. 14340 (see page 151)	P.No. 14340 (see page 151)	
RoHS	Compliant	Compliant	

Rating	Version	L1	Cx	Cy
1 AMP	1			
“	2	2 x 1.8mH	1 x 15nF	2 x 2.2nF
“	3			
3 AMP	1			
“	2	2 x 0.7mH	1 x 15nF	2 x 2.2nF
“	3			

Version 2





Bulgin's extensive range of fuseholders are designed to give the degree of protection demanded in today's sophisticated electronic equipment. Carrying world-wide safety approvals from UL, VDE, CSA and IMQ, all types are manufactured from high grade flame retardant nylon and polyester materials.

Designed primarily for 5 x 20mm and 6.3 x 32mm size fuses with protection against shock to categories PC1, PC2 and PC3. There's a choice of styles for in-line, PCB mounting and panel mounting (screw or snap fit) with terminal options for solder, 2.8mm, 4.8mm or 6.3mm tabs or PC spills.Dust and waterproof designs provide a front of panel seal to IP68 in both 5 x 20mm and 6.3 x 32mm size fuses.

Fuse carrier styles include captive drawer, screw cap - with screw driver release, bayonet cap - with screw driver release and screw cap - with finger release.

Panel Mounting	302-308
IP68 Panel Mounting	309
IP66 Panel Mounting	310
PC Mounting	311-312
Base Mounting	313
In-line	314-315



Protection Category

Category PC1:

No integral protection against electric shock. If required, Designers/ Manufacturers must provide additional protection against electric shock on equipment.

Category PC2:

With integral protection against electric shock. Fuseholders shall have live parts inaccessible to IEC 60529 Standard Test Finger, when fully assembled, without fuse carrier or fuse in place and when fuse carrier, with fuse is being inserted or withdrawn.

Category PC3:

With integral protection against electric shock. Fuseholders shall have live parts inaccessible to IEC 60529 1mm dia. rigid test wire when fully assembled, without fuse carrier or fuse in place and when fuse carrier, with fuse, is being inserted or withdrawn.



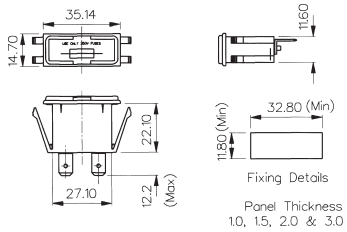
Panel/PC Mounting Captive Carriers Touchproof, PC3

Snap Fit to Panel



FX0430/63

- Protection Category PC3
- Fuse Size 5 x 20mm
- Panel Sizes 1.0, 1.5, 2.0 and 3.0mm
- Captive Drawer
- 10A, 250V (16A, 250V UL)
- 2.8, 4.8 or 6.3 tabs

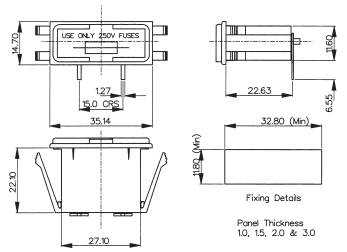


Snap Fit to Panel



FX0430/PC

- Protection Category PC3
- Fuse Size 5 x 20mm
- Panel Sizes 1.0, 1.5, 2.0 and 3.0mm
- Captive Drawer
- 10A, 250V (16A, 250V UL)
- PC spills



Specifications	FX0430/Termination	FX0430/PC
Fuse Size:	5 x 20mm	5 x 20mm
Fuse Carrier:	Captive Drawer	Captive Drawer
Terminations:	/28 (2.8mm solder), /48 (4.8mm tab), /63 (6.3mm tab)	/PC (PC spills)
Max. Rating:	10A, 250V (16A, 250V a.c. UL)	10A, 250V (16A, 250V a.c. UL)
Max. Power Dissipation:	2.5W (@ 23°C)	2.5W (@ 23°C)
Insulation Resistance:	>10MΩ @ 500V d.c.	>10MΩ @ 500V d.c.
A.C. Breakdown:	>2kV	>2kV
Contact Resistance:	<10mΩ	<10mΩ
Operating Temp:	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)
Mouldings: Body/Drawer: Cap: Nut:	Nylon UL94V-0 rated	Nylon UL94V-0 rated
Contacts:	Contact tags: Brass, Tin Plated Fuse Clips: Phosphor Bronze, Nickel Plated	Contact tags: Brass, Tin Plated Fuse Clips: Phosphor Bronze, Nickel Plated
Approvals:		
Accessories:		
Note:		
RoHS	Compliant	Compliant

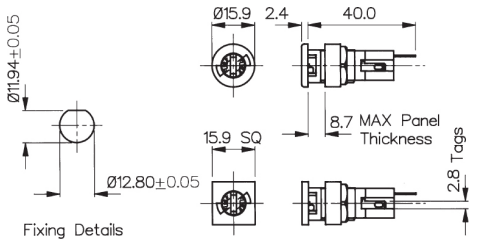
Panel Mounting and Snap Fit Touchproof, PC2

Panel Mount



FX0357 FX0359

- Protection Category PC2
- Fuse Size 5 x 20mm
- Bayonet Cap/Screwdriver Release
- 10A, 250V (16A, 250V UL)

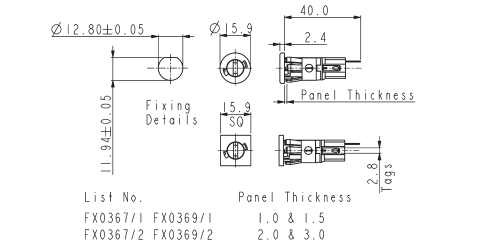


Snap Fit to Panel



FX0367 FX0369

- Protection Category PC2
- Fuse Size 5 x 20mm
- Panel Sizes 1.0 & 1.5 and 2.0 & 3.0mm
- Bayonet Cap/Screwdriver Release
- 10A, 250V (16A, 250V UL)



Specifications	FX0357, FX0359	FX0367/Panel, FX0369/Panel
Fuse Size:	5 x 20mm	5 x 20mm
Panel Size:		/1 (1.0-1.5mm panel, black sleeve) /2 (2.0-3.0mm panel, grey sleeve)
Fuse Carrier:	Bayonet cap/Screwdriver release	Bayonet cap/Screwdriver release
Terminations:	Solder tags	Solder tags
Max. Rating:	10A, 250V (16A, 250V a.c. UL)	10A, 250V (16A, 250V a.c. UL)
Max. Power Dissipation:	2.5W (@ 23°C)	2.5W (@ 23°C)
Insulation Resistance:	>10²MΩ @ 500V d.c.	>10²MΩ @ 500V d.c.
A.C. Breakdown:	7kV @ 50Hz	7kV @ 50Hz
Contact Resistance:	<10mΩ	<10mΩ
Operating Temp:	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)
Mouldings: Body: Cap: Nut:	 Polyester UL94V-0 rated Nylon UL94V-0 rated Glass Filled Nylon UL94V-0 rated	 Polyester UL94V-0 rated Nylon UL94V-0 rated
Contacts:	Brass, Silver Plated	Brass, Silver Plated
Approvals:		
Accessories:	P.No. 11327 (See page 206)	P.No. 11327 (See page 205)
RoHS	Compliant	Compliant

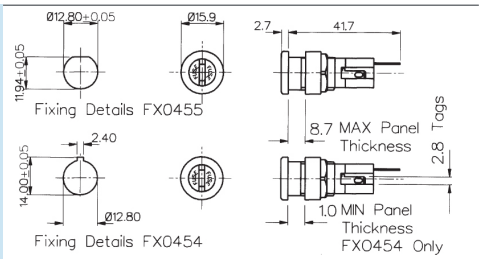
Panel Mounting and Snap Fit Touchproof, PC2

Panel Mount



FX0454, FX0455

- Protection Category PC2
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- Keyway Panel Cutout (FX0454)
- D Panel Cutout (FX0455)
- 10A, 250V (16A, 250V UL)

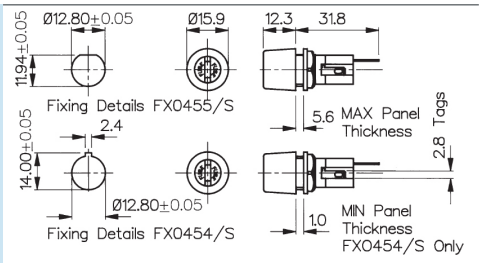


Panel Mount



FX0454/S, FX0455/S

- Protection Category PC2
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- High Profile Bezel
- Keyway Panel Cutout (FX0454/S)
- D Panel Cutout (FX0455/S)
- 10A, 250V (16A, 250V UL)

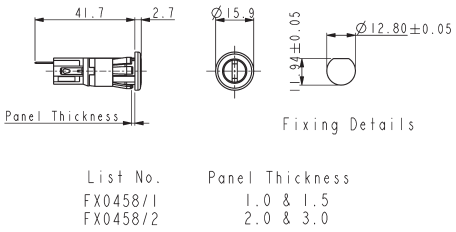


Snap Fit to Panel



FX0458

- Protection Category PC2
- Fuse Size 5 x 20mm
- Panel Sizes 1.0 & 1.5 and 2.0 & 3.0mm
- Screw Cap/Screwdriver Release
- 10A, 250V (16A, 250V UL)



Specifications	FX0454, FX0455	FX0454/S, FX0455/S	FX0458
Fuse Size:	5 x 20mm	5 x 20mm	5 x 20mm
Panel Size:			/1 (1.0-1.5mm panel, black sleeve) /2 (2.0-3.0mm panel, grey sleeve)
Fuse Carrier:	Screw cap/Screwdriver release	Screw cap/Screwdriver release	Screw cap/Screwdriver release
Terminations:	Solder tags	Solder tags	Solder tags
Max. Rating:	10A, 250V (16A, 250V a.c. UL)	10A, 250V (16A, 250V a.c. UL)	10A, 250V (16A, 250V a.c. UL)
Max. Power Dissipation:	2.5W (@ 23°C)	2.5W (@ 23°C)	2.5W (@ 23°C)
Insulation Resistance:	>10²MΩ @ 500V d.c.	>10²MΩ @ 500V d.c.	>10²MΩ @ 500V d.c.
A.C. Breakdown:	7kV @ 50Hz	7kV @ 50Hz	7kV @ 50Hz
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Operating Temp:	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)
Mouldings: Body: Cap: Nut:	 Polyester UL94V-0 rated Nylon UL94V-0 rated Glass Filled Nylon UL94V-0 rated	 Polyester UL94V-0 rated Nylon UL94V-0 rated Glass Filled Nylon UL94V-0 rated	 Polyester UL94V-0 rated Nylon UL94V-0 rated
Contacts:	Brass, Silver Plated	Brass, Silver Plated	Brass, Silver Plated
Approvals:			
Accessories:	P.Nos. 11327, 12297 & 12298 (See page 206)	P.Nos. 11327, 12297 & 12298 (See page 206)	P.Nos. 11327 (See page 205)
RoHS	Compliant	Compliant	Compliant

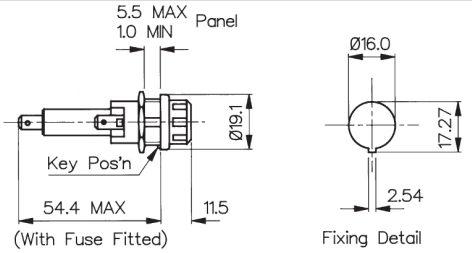
Panel Mounting Touchproof, PC2

Panel Mount



FX0415, FX0416

- Protection Category PC2
- Fuse Sizes:
  6.3 x 32mm (FX0415)
  6.3 x 25mm (FX0416)
- Screw Cap/Hand Release
- 13A, 250V (16A, 250V UL)

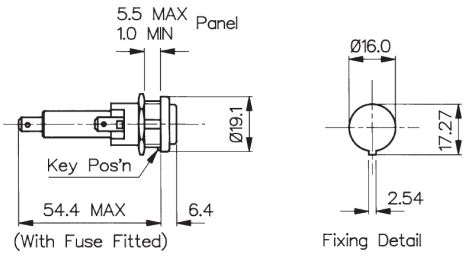


Panel Mount



FX0415/S, FX0416/S

- Protection Category PC2
- Fuse Sizes:
  6.3 x 32mm (FX0415/S)
  6.3 x 25mm (FX0416/S)
- Screw Cap/Screwdriver Release
- 13A, 250V (16A, 250V UL)



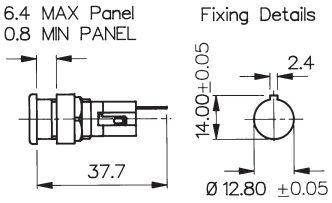
Specifications	FX0415, FX0416	FX0415/S, FX0416/S
Fuse Size:	FX0415 - 6.3 x 32mm FX0416 - 6.3 x 25mm	FX0415/S - 6.3 x 32mm FX0416/S - 6.3 x 25mm
Fuse Carrier:	Screw cap/Hand release	Screw cap/Hand release
Terminations:	4.8 series tabs	4.8 series tabs
Max. Rating:	13A, 250V (16A, 250V UL)	13A, 250V (16A, 250V UL)
Max. Power Dissipation:	4W (@ 23°C)	4W (@ 23°C)
Insulation Resistance:	$>10^5$MΩ @ 500V d.c.	$>10^5$MΩ @ 500V d.c.
A.C. Breakdown:	4kV @ 50Hz	4kV @ 50Hz
Contact Resistance:	<5mΩ	<5mΩ
Operating Temp:	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)
Mouldings: Body: Cap: Nut:	 Glass Filled Nylon UL94V-0 rated Nylon UL94V-0 rated Polyester UL94V-0 rated	 Glass Filled Nylon UL94V-0 rated Nylon UL94V-0 rated Polyester UL94V-0 rated
Contacts:	Brass, Silver Plated	Brass, Silver Plated
Approvals:		
Accessories:	P.No. 12932 (See page 205)	P.No. 12932 (See page 205)
RoHS	Compliant	Compliant

Panel Mount



FX0354

- Protection Category PC2
- Low Profile Bezel
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- Keyway Panel Cutout
- 6.3A, 250V

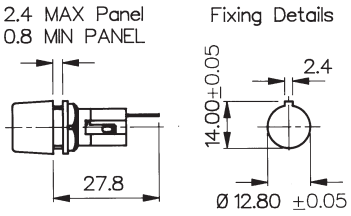


Panel Mount



FX0354/S

- Protection Category PC2
- High Profile Bezel
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- Keyway Panel Cutout
- 6.3A, 250V



Specifications	FX0354	FX0354/S
Fuse Size:	5 x 20mm	5 x 20mm
Fuse Carrier:	Screw cap/Screwdriver release	Screw cap/Screwdriver release
Terminations:	Solder tags	Solder tags
Max. Rating:	6.3A, 250V	6.3A, 250V
Max. Power Dissipation:	2.5W (@ 23°C)	2.5W (@ 23°C)
Insulation Resistance:	>10²MΩ @ 500V d.c.	>10²MΩ @ 500V d.c.
A.C. Breakdown:	5kV @ 50Hz	5kV @ 50Hz
Contact Resistance:	<10mΩ	<10mΩ
Operating Temp:	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)
Mouldings:		
Body:	Polyester UL94V-0 rated	Polyester UL94V-0 rated
Cap:	Nylon UL94V-0 rated	Nylon UL94V-0 rated
Nut:	Glass Filled Nylon UL94V-0 rated	Glass Filled Nylon UL94V-0 rated
Contacts:	Brass, Silver Plated	Brass, Silver Plated
Approvals:		
Accessories:	P.No. 11327 and 12298 (See page 205)	P.No. 11327 and 12298 (See page 205)
RoHS	Compliant	Compliant

Fuseholders 6.3 x 32mm (1¼" x ¼"), PC2



Key Features

- 6.3 x 32mm fuses
- Screwdriver slot knob
- PC2 protection category
- 4.8, 6.3 and solder terminals
- Low profile bezel
- Snap in or threaded bushing mounting options

Approvals and specifications

16A 250Vac (max fuse rating*) T–55 to T+70 (ambient)
Maximum dissipation wattage: 4W

6.3A UL 94V2 UL file E92075 CSA file LR44770

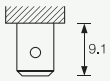
These products comply with safety category PC2.
*Users should be aware of the de-rating factors published by specialist manufacturers of fuses.

Fuseholders with in-line termination have combination (4.8/6.3) terminals. It has not been possible to show both views here. Units with right angle terminals have user specified end terminals and combination mid-body terminals.

T	/	0347	/	RA	/	----
Terminal		Body & Cap		Panel Hole		Options

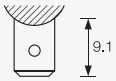
Terminal

C



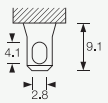
6.3 x 0.8

D



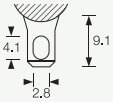
6.3 x 0.8
Right angle

T



4.8 x 0.8
Solder

U



4.8 x 0.8
Solder

Body

0345 (C terminal shown) Screwdriver release



0345 (D terminal shown) Screwdriver release



0347 (T terminal shown) Screwdriver release

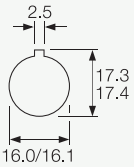


0347 (U terminal shown) Screwdriver release



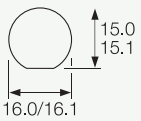
Options

RA



Panel thickness
0.8 - 2.0mm for snap fit
0.8 - 7.0mm for screw to panel fixing

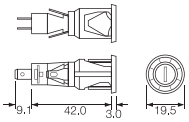
RD



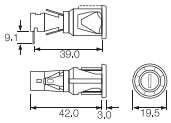
Panel thickness
0.8 - 2.0mm for snap fit
0.8 - 7.0mm for screw to panel fixing

Dimensions

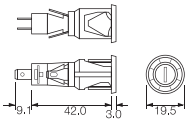
0345 (C terminal shown)



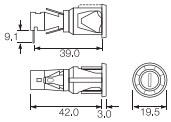
0345 (D terminal shown)



0347 (C terminal shown)



0347 (D terminal shown)



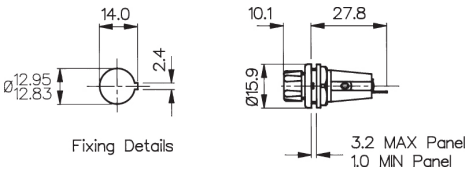
Optional metal fixing nut available for 0347

Panel Mount



FX0296/S FX0296

- Protection Category PC1
- Fuse Size 5 x 20mm
- Screw Cap/Hand Release
- 6.3A, 250V

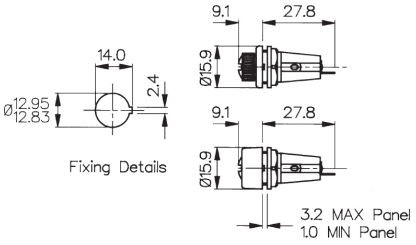


Panel Mount



FX0296/1

- Protection Category PC1
- Fuse Size 5 x 20mm
- Screw Cap/Hand Release
- 6.3A, 250V



Specifications	FX0296, FX0296/S	FX0296/1
Fuse Size:	5 x 20mm	5 x 20mm
Fuse Carrier:	FX0296 Screw cap/Hand release FX0296/S Screw cap/Screwdriver release	Screw cap/Hand release
Terminations:	Solder tags	Solder tags
Max. Rating:	6.3A, 250V	6.3A, 250V
Max. Power Dissipation:	2.5W (@ 23°C)	2.5W (@ 23°C)
Insulation Resistance:	$>10^5$MΩ @ 500V d.c.	$>10^5$MΩ @ 500V d.c.
A.C. Breakdown:	2.5kV @ 50Hz	2.5kV @ 50Hz
Contact Resistance:	<5mΩ	<5mΩ
Operating Temp:	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)
Mouldings: Body: Cap: Nut:	 Glass Filled Nylon UL94V-0 rated Nylon UL94V-0 rated Glass Filled Nylon UL94V-0 rated	 Glass Filled Nylon UL94V-0 rated Nylon UL94V-0 rated Glass Filled Nylon UL94V-0 rated
Contacts:	Brass, Silver or Tin Plated	Brass, Silver or Tin Plated
Accessories	P.No. 9820 (See page 205)	P.No. 9820 (See page 205)
RoHS	Compliant	Compliant

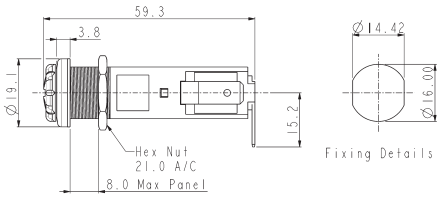
Panel Mounting Touchproof, Sealed to IP68, PC2

Panel Mount



FX0419

- Panel sealed to IP68
- Touchproof Category PC2
- Fuse Size 6.3 x 32mm
- Screw cap/Screwdriver/Hand Release
- 16A. 250V ac

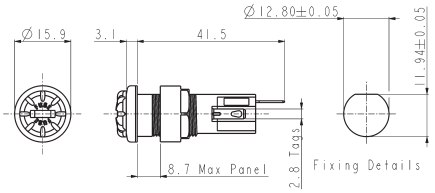


Panel Mount



FX0462

- Panel sealed to IP68
- Touchproof Category PC2
- Fuse Size 5 x 20mm
- Screw cap/Screwdriver/Hand Release
- 10A. 250V ac

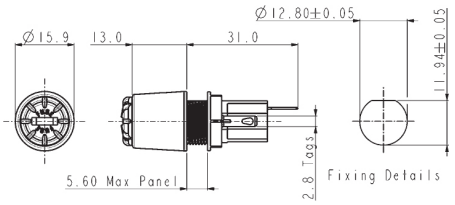


Panel Mount



FX0463

- Panel sealed to IP68
- Touchproof Category PC2
- Fuse Size 5 x 20mm
- High Profile Bezel
- Screw cap/Screwdriver/Hand Release
- 10A. 250V ac



Specifications	FX0419	FX0462	FX0463
Fuse Size:	6.3 x 32mm	5.0 x 20mm	5.0 x 20mm
Fuse Carrier:	Screw cap/Screwdriver/Hand release	Screw cap/Screwdriver/Hand release	Screw cap/Screwdriver/Hand release
Terminations:	6.3 series tabs	Solder tags	Solder tags
Max. Rating:	16A, 250V ac	10A, 250V ac	10A, 250V ac
Max. Power Dissipation:	2.5W (@ 23°C)	2.5W (@ 23°C)	2.5W (@ 23°C)
Insulation Resistance:	$>10^6$MΩ @ 500V d.c.	$>10^2$MΩ @ 500V d.c.	$>10^2$MΩ @ 500V d.c.
A.C. Breakdown:	>2kV @ 50Hz	>7kV @ 50Hz	>7kV @ 50Hz
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Operating Temp:	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)
Mouldings:			
Body:	Polyester UL94V-0 rated	Polyester UL94V-0 rated	Polyester UL94V-0 rated
Cap:	Nylon UL94V-0 rated	Nylon UL94V-0 rated	Nylon UL94V-0 rated
Nut:	Glass Filled Nylon UL94V-0 rated	Glass Filled Nylon UL94V-0 rated	Glass Filled Nylon UL94V-0 rated
Contacts:	Brass, Silver Plated	Brass, Silver Plated	Brass, Silver Plated
Tightening Torque:			
Cap:	0.5 - 0.6Nm (4.43-5.3lbf.in.)	0.4 - 0.6Nm (3.54-5.3lbf.in.)	0.4 - 0.6Nm (3.54-5.3lbf.in.)
Panel Nut:	0.5Nm (4.4lbf.in.)	0.5Nm (4.4lbf.in.)	0.5Nm (4.4lbf.in.)
Sealing:	IP68 to EN60529:1992+A2:2013 (10m for 2weeks)	IP68 to EN60529:1992+A2:2013 (10m for 2weeks)	IP68 to EN60529:1992+A2:2013 (10m for 2weeks)
Accessories:		P.nos. 11327 (see page 205)	P.nos. 11327 (see page 205)
Approvals:			
RoHS	Compliant	Compliant	Compliant

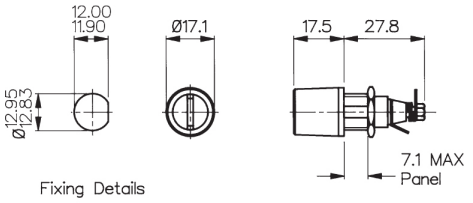
Panel Mounting Touchproof, Sealed to IP66, PC1

High Profile Panel Mount



FX0345

- Sealed to IP66
- Protection Category PC1
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- 6.3A, 250V

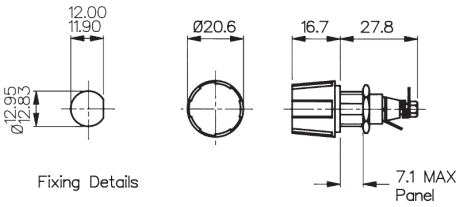


High Profile Panel Mount



FX0365

- Sealed to IP66
- Protection Category PC1
- Fuse Size 5 x 20mm
- Screw Cap/Hand Release
- Large Cap for Easy Grip
- 6.3A, 250V



Specifications	FX0345, FX0345/A	FX0365, FX0365/A
Fuse Size:	5 x 20mm	5 x 20mm
Fuse Carrier:	Screw cap/Screwdriver release	Screw cap/Screwdriver release
Terminations:	Solder tags	Solder tags
Max. Rating:	6.3A, 250V	6.3A, 250V
Max. Power Dissipation:	4W (@ 23°C)	4W (@ 23°C)
Insulation Resistance:	>10³MΩ @ 500V d.c.	>10³MΩ @ 500V d.c.
A.C. Breakdown:	>3.5kV @ 50Hz	>3.5kV @ 50Hz
Contact Resistance:	<10mΩ	<10mΩ
Operating Temp:	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)
Mouldings:		
Body & Cap:	Glass Filled Nylon UL94V-0 rated	Glass Filled Nylon UL94V-0 rated
Spacer:	Glass Filled Nylon UL94HB rated	Glass Filled Nylon UL94HB rated
Insulating Sleeve:	Nylon UL94V-0 rated	Nylon UL94V-0 rated
Contacts:	Brass, Silver Plated	Brass, Silver Plated
Sealing:	Protection Classification IP66 to EN60529:1992+A2:2013 Retains sealing integrity with cap removed since they are both panel and barrier sealed	
Variants:	/A Silicone 'O' ring, Op. Temp. –55°C to +85°C	/A Silicone 'O' ring, Op. Temp. –55°C to +85°C
RoHS	Compliant	Compliant

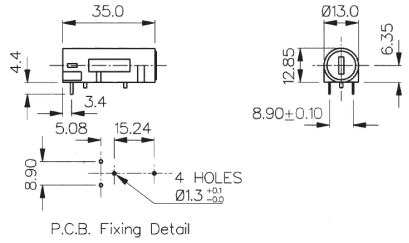
PC Mounting PC1, PC2 and PC3

PC Horizontal Mount



FX0461

- Protection Category PC3
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- Captive Fuse Carrier
- PC Spills
- 10A, 250V (16A, 250V UL)

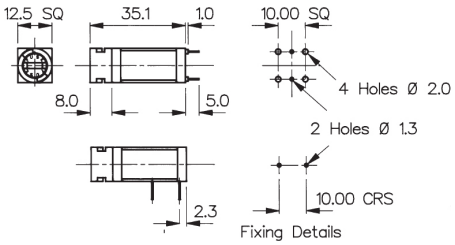


PC Horizontal and Vertical Mount



FX0457 FX0456

- Protection Category PC2
- Fuse Sizes 5 x 20mm
- Bayonet Cap/Screwdriver Release
- 10A, 250V

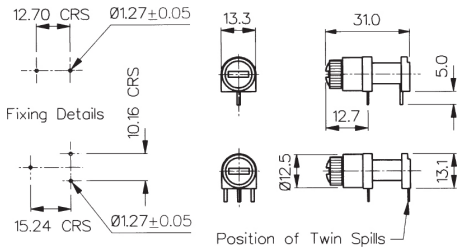


PC Horizontal Mount



FX0330 FX0342

- Protection Category PC1
- Fuse Size 5 x 20mm
- Two or Three PC Spills
- Screw Cap/Hand Release
- 6.3A, 250V



Specifications	FX0461	FX0456 FX0457	FX0330 FX0342
Fuse Size:	5 x 20mm	5 x 20mm	5 x 20mm
Fuse Carrier:	Screw cap/Screwdriver release	Bayonet cap/Screwdriver release	Screw cap/Hand release
Terminations:	PC Spills	PC Spills	FX0330 - 3 PC Spills FX0342 - 2 PC Spills
Max. Rating:	10A, 250V (16A, 250V a.c. UL)	10A, 250V	6.3A, 250V
Max. Power Dissipation:	1.6W (@ 23°C)	2.5W (@ 23°C)	2.5W (@ 23°C)
Insulation Resistance:	>10MΩ @ 500V d.c.	>10^2MΩ @ 500V d.c.	>10^4MΩ @ 500V d.c.
A.C. Breakdown:	>2kV	4kV @ 50Hz	6kV @ 50Hz
Contact Resistance:	<10mΩ	<10mΩ	<5mΩ
Operating Temp:	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)	–20°C to +85°C (ambient air temp + fuse temp rise)
Mouldings: Body: Cap: End Bung:	 Polyester UL94V-0 rated Nylon UL94V-0 rated	 Polyester UL94V-0 rated Nylon UL94V-0 rated Polyester UL94V-0 rated	 Glass Filled Nylon UL94V-0 rated Nylon UL94V-0 rated
Contacts:	Brass, Silver Plated	Brass, Silver Plated	Brass, Tin Plated
Approvals:			
RoHS	Compliant	Compliant	Compliant

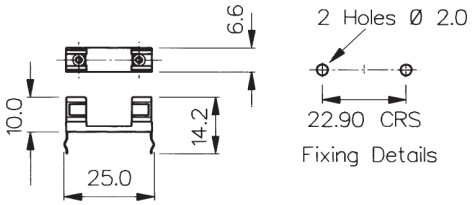
PC and Base Mounting, PC1

PC Mount



FX0321

- Protection Category PC1
- Fuse Size 5 x 20mm
- PC Spills
- 6.3A, 250V

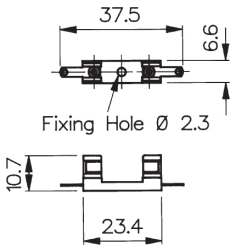


Base Mount



FX0267

- Protection Category PC1
- Fuse Size 5 x 20mm
- Solder Tags
- 6.3A, 250V

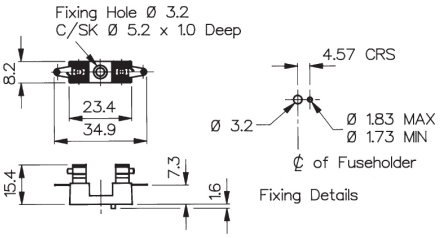


Base Mount



FX0360

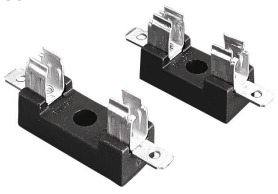
- Protection Category PC1
- Fuse Size 5 x 20mm
- Solder Tags
- 6.3A, 250V



Specifications	FX0321	FX0267	FX0360
Fuse Size:	5 x 20mm	5 x 20mm	5 x 20mm
Terminations:	PC Spills	Solder tags	Solder tags
Max. Rating:	6.3A, 250V	6.3A, 250V	6.3A, 250V
Insulation Resistance:	$>10^5$MΩ @ 500V d.c.	$>10^5$ MΩ @ 500V d.c.	$>10^4$ MΩ @ 500V d.c.
A.C. Breakdown:	7kV @ 50Hz (Clip to clip)	1.5kV @ 50Hz	2kV @ 50Hz
Contact Resistance:	<10mΩ	<10mΩ	<10mΩ
Operating Temp: (ambient air temp + fuse temp rise)	–20°C to +85°C	–20°C to +85°C	–20°C to +85°C
Base Material:	Glass Filled Nylon UL94V-0 rated	Glass Filled Nylon UL94V-0 rated	Glass Filled Nylon UL94HB rated
Contacts:	Phospher Bronze, Tin Plated	Phospher Bronze, Tin Plated	Phospher Bronze, Tin Plated
Accessories:	P.No. 12760 (See page 205)	P.No. 12760 (See page 205)	
RoHS	Compliant	Compliant	Compliant

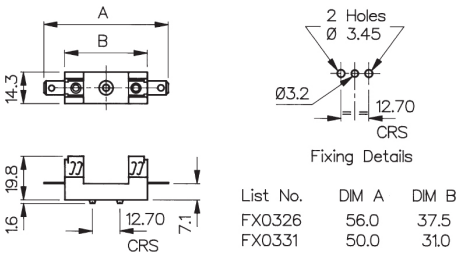
Base Mounting, PC1

Base Mount



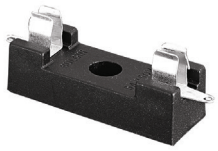
FX0326 FX0331

- Protection Category PC1
- Fuse Sizes:
  6.3 x 32mm (FX0326)
  6.3 x 25mm (FX0331)
- Solder Tags
- 13A, 250V



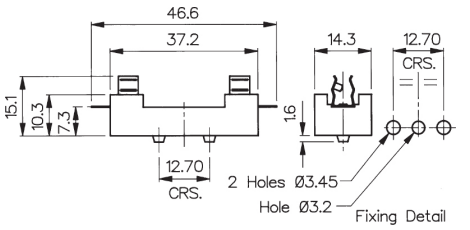
List No.	DIM A	DIM B
FX0326	56.0	37.5
FX0331	50.0	31.0

Base Mount



FX0327

- Protection Category PC1
- Fuse Size 6.3 x 32mm
- Solder Tags
- 5A, 250V



Specifications	FX0326, FX0331	FX0327
Fuse Size:	FX0326 - 6.3 x 32mm FX0331 - 6.3 x 25mm	6.3 x 32mm
Terminations:	6.3 series tabs	Solder tags
Max. Rating:	13A, 250V	5A, 250V
Insulation Resistance:	$>10^4$ MΩ @ 500V d.c.	$>10^5$ MΩ @ 500V d.c.
A.C. Breakdown:	5kV @ 50Hz	5kV @ 50Hz
Contact Resistance:	<5mΩ	<10mΩ
Operating Temp: (ambient air temp + fuse temp rise)	–20°C to +85°C	–20°C to +85°C
Base Material:	Glass Filled Polyester UL94V-0 rated	Glass Filled Polyester UL94V-0 rated
Contacts:	Clips: Phospher Bronze, Tin Plated Tabs: Brass, Tin Plated	Phospher Bronze, Tin Plated
RoHS	Compliant	Compliant

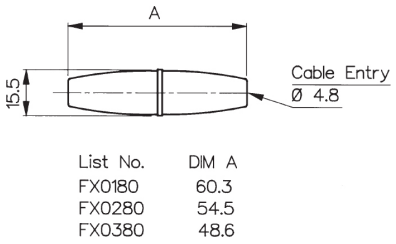
In-Line PC1 and In-Line Sealed to IP66, PC1

In-line



FX0180, FX0280, FX0380

- Protection Category PC1
- Fuse Sizes 5 x 20mm, 6.3 x 25mm and 6.3 x 32mm
- Screw Terminal (Solder to order)
- 10A, 50V (250V Inaccessible)
- UL Approved (Black Only)
- Clear or black



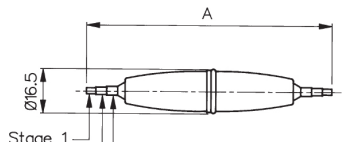
List No.	DIM A
FX0180	60.3
FX0280	54.5
FX0380	48.6

In-line



FX0185, FX0285, FX0385

- Sealed to IP66
- Protection Category PC1
- Fuse Sizes 5 x 20mm, 6.3 x 25mm and 6.3 x 32mm
- Screw Terminal (Solder to order)
- 10A, 50V (250V Inaccessible)
- UL Approved (Black Only)
- Clear or black



List No	DIM A
FX0185	91.0
FX0285	85.2
FX0385	79.2

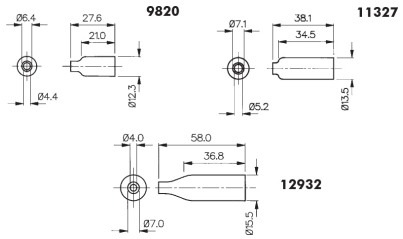
Specifications	**FX0180/colour, FX0280.colour, FX0380/Colour**	**FX0185/Colour, FX0285/colour, FX0385/Colour**
Fuse Size:	5 x 20mm FX0380 6.3 x 25mm FX0280 6.3 x 32mm FX0180	5 x 20mm FX0385 6.3 x 25mm FX0285 6.3 x 32mm FX0185
Cable Acceptance:	1mm² conductor (max.)	1mm2 conductor (max.) 1mm to 2.64mm overall diameter Stepped grommet: Stage 1: 1.00mm to 1.40mm Stage 2: 1.50mm to 1.90mm Stage 3: 2.0mm to 2.64mm
Terminations:	Screw terminal (solder to order)	Screw Terminal (solder to order)
Max. Rating:	10A, 50V (250V where inaccessible inside equipment)	10A, 50V (250V where inaccessible inside equipment)
Insulation Resistance:	$>10^5$ MΩ @ 500V d.c.	$>10^5$ MΩ @ 500V d.c.
High Voltage Proof Test:	2kV (50Hz for 1 minute)	2kV (50Hz for 1 minute)
Contact Resistance:	<10mΩ	<10mΩ
Operating Temp: (ambient air temp + fuse temp rise)	–20°C to +90°C	–20°C to +70°C
Sealing:		Protection Classification IP66 EN60529: 1992+A2:2013
Screw Tightening Torque	0.226Nm (2lb/in)	0.226Nm (2lb/in)
Mouldings:		
Body - Clear:	Polybutene UL94HB rated	Polybutene UL94HB rated
Body - Black:	Nylon 6 UL94V-0 rated	Nylon 6 UL94V-0 rated
Grommet:		PVC
O Ring:		Nitrile
Contacts:		
Terminals:	Brass, Nickel Plated	Brass, Nickel Plated
Grub Screw:	Stainless Steel	Stainless Steel
Approvals:	(Black version only)	(Black version only)
Colour:	Clear - no suffix, /BK - Black	Clear - no suffix, /BK - Black
RoHS	Compliant	Compliant

Insualtion Boots

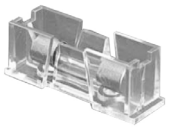


PNo. 11327 PNo. 12932 PNo. 9820

- Provide Insulation against Shock on Rear of Fuseholder
- PVC
- UL94V-0 rated flame retardant material

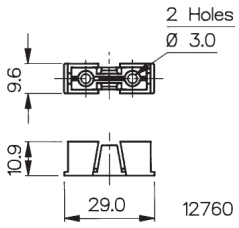


Insualtion Cover



PNo. 12760

- Provide Insulation from Live Parts on Fuseholder
- Clear
- Polycarbonate

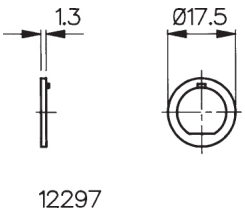


Adaptor



PNo. 12297

- Adaptor to Convert Fixing Holes
- Maintains Anti-Rotation
- Glass Filled Nylon

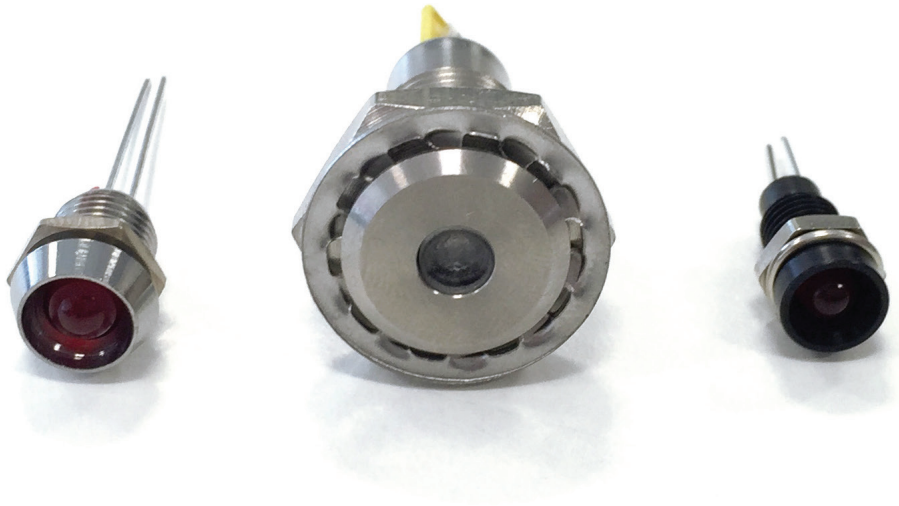


Accessories	For Use With:
P.No. 9820 (Boot)	FX0296, FX0296/1, FX0296/S
P.No. 11327 (Boot)	FX0354, FX0354/S, FX0357, FX0359, FX0454, FX0454/S, FX0455, FX0455/S, FX0460, FX0458, FX0367, FX0369, FX0462, FX0463
P.No. 12932 (Boot)	FX0415, FX0415/S, FX0416, FX0416/S
P.No. 12760 (Cover)	FX0267, FX0321
Max. Working Voltage:	250V a.c.
Flash Tested to:	2kV a.c.
Material:	P.Nos. 9820, 11327, 12932: PVC - UL94V-0 P.No. 12760: Polycarbonate
P.No. 12297 (Adaptor Washer)	Adapts 'D' fixing to anti-rotation Key Fixing FX0455, FX0455/S
Material:	Glass Filled Nylon
RoHS	Compliant

This range of panel mounting LED indicators consists of many different bezel styles, types of LED's and colours. The range has developed to meet the different needs of panel design including IP66 and IP67 environmentally sealed versions for use where a front panel seal is needed.

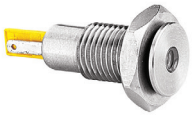
The vandal resistant LED indicators are designed to complement the vandal resistant switches (see the Switch Section), they have similar profiles with stainless steel bodies, sealing to IP66 & 68 and are built to withstand harsh environments.

Vandal Resistant LED	317-318
LED Bezel	319-323
Indicator Lights	324-330
Low Voltage Lampholders	331-332
LED Lampholders	333-334
Indicator Lights IP67	335



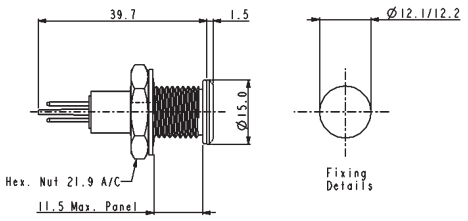
Vandal Resistant LED Indicators

Proud of Panel Profile



DX0505

- Solder Tag/2.8mm Tag Termination
- Sealed to IP67
- Red, Green, Yellow or Blue LED Options
- Wide Viewing Angle
- Shock and Vibration Resistant
- Stainless Steel body

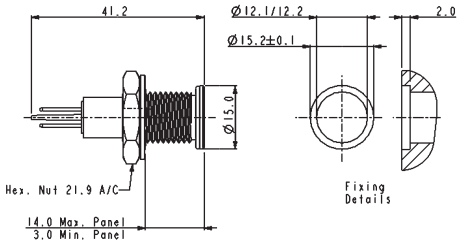


Flush Panel Profile



DX0506

- Solder Tag/2.8mm Tag Termination
- Sealed to IP67
- Red, Green, Yellow or Blue LED Options
- Wide Viewing Angle
- Shock and Vibration Resistant
- Stainless Steel body



Specifications	DX0505/Col/Voltage	DX0506/Col/Voltage
Terminations:	Solder Tab/2.8mm Tab	Solder Tab/2.8mm Tab
Forward Voltage:	Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V	Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V
Cont. Forward Current: (max)	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA
Power Dissipation:	Red 100mW, Green 105mW, Yellow 125mW, Blue 120mW	Red 100mW, Green 105mW, Yellow 125mW, Blue 120mW
Reverse Current: (@Vr = 5V)	Red 10µA max., Green 10µA max., Yellow 10µA max., Blue 50µA max.	Red 10µA max., Green 10µA max., Yellow 10µA max., Blue 50µA max.
LED Luminous Intensity:	Red 2000mcd, Green 100mcd, Yellow 400mcd, Blue 1600mcd (typ)	Red 2000mcd, Green 100mcd, Yellow 400mcd, Blue 1600mcd (typ)
Operating Temp. Range:	–40°C to +80°C	–40°C to +80°C
Storage Temperature:	–40°C to +85°C	–40°C to +85°C
Sealing (Front of panel):	Protection Classification IP67 to EN60529:1992+A2:2013	Protection Classification IP67 to EN60529:1992+A2:2013
Materials		
Body:	Stainless Steel	Stainless Steel
Lens:	Polycarbonate UL94V-0	Polycarbonate UL94V-0
O Ring (external):	Nitrile	Nitrile
(internal):	Silicone	Silicone
Tightening Torque	0.5Nm - 0.9Nm (4.4lbf.in. - 8.0lbf.in.)	0.5Nm - 0.9Nm (4.4lbf.in. - 8.0lbf.in.)
Thread Size:	M12 x 1.25-6g	M12 x 1.25-6g
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow) /BL (Blue), with colour coded insulator	/RD (Red), /GN (Green), /YL (Yellow) /BL (Blue), with colour coded insulator
LED Voltage:	/12 (12V d.c.), /24 (24V d.c.) or /00 (no ballast resistor)	/12 (12V d.c.), /24 (24V d.c.) or /00 (no ballast resistor)
RoHS	Compliant	Compliant

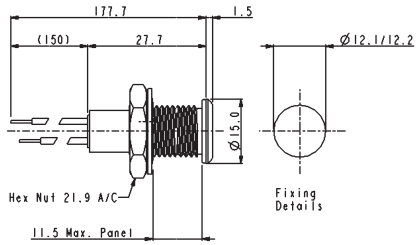
Vandal Resistant LED Indicators

Proud of Panel Profile

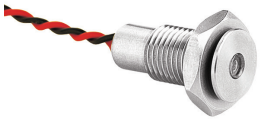


DX0507

- Flying Lead Termination
- Sealed to IP67
- Red, Green, Yellow or Blue LED Options
- Wide Viewing Angle
- Shock and Vibration Resistant
- Stainless Steel body

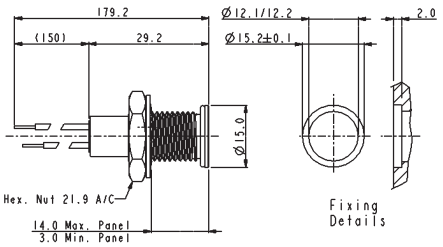


Flush Panel Profile



DX0508

- Flying Lead Termination
- Sealed to IP67
- Red, Green, Yellow or Blue LED Options
- Wide Viewing Angle
- Shock and Vibration Resistant
- Stainless Steel body



Specifications	DX0507/Col/Voltage	DX0508/Col/Voltage
Terminations:	Flying Leads	Flying Leads
Forward Voltage:	Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V	Red 1.85V, Green 2.2V, Yellow 2.0V, Blue 3.8V
Cont. Forward Current: (max)	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA	Red 30mA, Green 25mA, Yellow 30mA, Blue 25mA
Power Dissipation:	Red 100mW, Green 105mW, Yellow 125mW, Blue 120mW	Red 100mW, Green 105mW, Yellow 125mW, Blue 120mW
Reverse Current: (@Vr = 5V)	Red 10µA max., Green 10µA max., Yellow 10µA max., Blue 50µA max.	Red 10µA max., Green 10µA max., Yellow 10µA max., Blue 50µA max.
LED Luminous Intensity:	Red 2000mcd, Green 100mcd, Yellow 400mcd, Blue 1600mcd (typ)	Red 2000mcd, Green 100mcd, Yellow 400mcd, Blue 1600mcd (typ)
Operating Temp. Range:	–40°C to +80°C	–40°C to +80°C
Storage Temperature:	–40°C to +85°C	–40°C to +85°C
Sealing (Front of panel):	Protection Classification IP67 to EN60529:1992+A2:2013	Protection Classification IP67 to EN60529:1992+A2:2013
Materials		
Body:	Stainless Steel	Stainless Steel
Lens:	Polycarbonate UL94V-0	Polycarbonate UL94V-0
O Ring (external):	Nitrile	Nitrile
(internal):	Silicone	Silicone
Tightening Torque	0.5Nm - 0.9Nm (4.4lbf.in. - 8.0lbf.in.)	0.5Nm - 0.9Nm (4.4lbf.in. - 8.0lbf.in.)
Thread Size:	M12 x 1.25-6g	M12 x 1.25-6g
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow) /BL (Blue), with colour coded insulator	/RD (Red), /GN (Green), /YL (Yellow) /BL (Blue), with colour coded insulator
LED Voltage:	/12 (12V d.c.), /24 (24V d.c.) or /00 (no ballast resistor)	/12 (12V d.c.), /24 (24V d.c.) or /00 (no ballast resistor)
RoHS	Compliant	Compliant

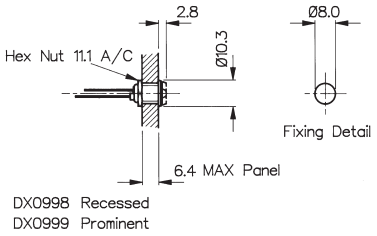
5mm LED Indicators

Chrome Plated Brass Bezel



DX0998 DX0999

- Chrome Plated Brass Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours

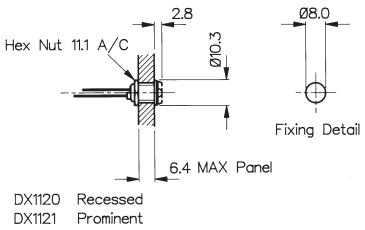


Nylon Bezel



DX1120 DX1121

- Glass Filled Nylon Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours



Specifications	DX0998, DX0999/Colour/Options	DX1120, DX1121/Colour/Options
Bezel Material:	Brass, Chrome Plated	Glass Filled Nylon
Style:	Recessed (DX0998) Prominent (DX0999)	Recessed (DX1120) Prominent (DX1121)
Operating Temp. Range:	Dependent on LED used	Dependent on LED used
Storage Temperature:	Dependent on LED used	Dependent on LED used
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue), /TR (Tri Colour), /D1 (Dual Colour - Red/Green), /D2 (Dual Colour - Red/Amber), /D3 (Dual Colour - Green/Amber)	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue), /TR (Tri Colour), /D1 (Dual Colour - Red/Green), /D2 (Dual Colour - Red/Amber), /D3 (Dual Colour - Green/Amber)
LED Options:	/02 (Flashing, Green or Red only)	/02 (Flashing, Green or Red only)
Thread Size:	0.312” x 32TPI	0.312” x 32TPI
RoHS	Compliant	Compliant

See Page 212 for LED options and specifications*

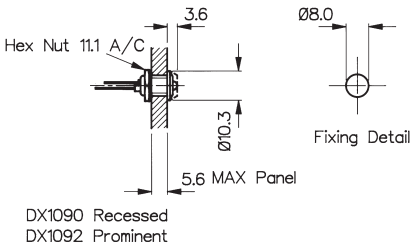
5mm LED Indicators

Aluminium Bezel - IP66 Sealed



DX1090 DX1092

- Aluminium Bezel, Black
- Anodised Finish
- IP66 Front Panel Sealed
- Prominent or Recessed Style
- Choice of LED Types and Colours

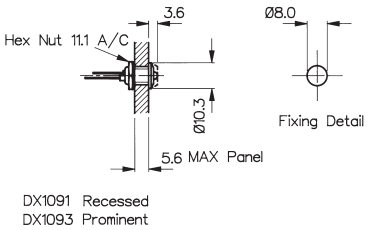


Aluminium Bezel - IP66 Sealed



DX1091 DX1093

- Aluminium Bezel, Clear
- Anodised Finish
- IP66 Front Panel Sealed
- Prominent or Recessed Style
- Choice of LED Types and Colours



Specifications	DX1090, DX1092/Colour/Options	DX1091, DX1093/Colour/Options
Materials:	Aluminium - Black	Aluminium - Clear
Style:	Recessed (DX1090) Prominent (DX1092)	Recessed (DX1091) Prominent (DX1093)
Operating Temp. Range:	Dependent on LED used	Dependent on LED used
Storage Temperature:	Dependent on LED used	Dependent on LED used
Sealing (Front of panel):	Protection Classification IP66 to EN60529:1992+A2:2013	Protection Classification IP66 to EN60529:1992+A2:2013
Tightening Torque:	0.056Nm (8ozf.in.) min	0.056Nm (8ozf.in.) min
Lead Solder Time:	260°C for 5 seconds max.	260°C for 5 seconds max.
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue), /TR (Tri Colour), /D1 (Dual Colour - Red/Green), /D2 (Dual Colour - Red/Amber), /D3 (Dual Colour - Green/Amber)	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue), /TR (Tri Colour), /D1 (Dual Colour - Red/Green), /D2 (Dual Colour - Red/Amber), /D3 (Dual Colour - Green/Amber)
Thread Size:	0.312” x 32TPI	0.312” x 32TPI
RoHS	Compliant	Compliant

See Page 212 for LED options and specifications

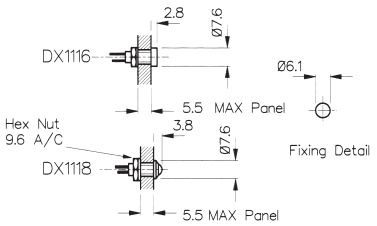
4mm LED Indicators

Chrome Plated Brass Bezel



DX1116 DX1118

- Chrome Plated Brass Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours

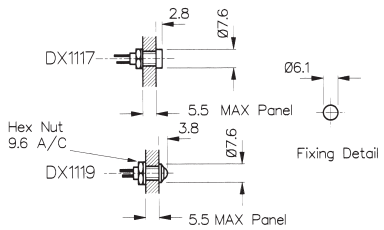


Black Nickel Pated Brass Bezel



DX1117 DX1119

- Aluminium, Black Anodised Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours



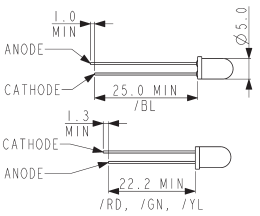
Specifications	DX1116, DX1118/Colour	DX1117, DX1119/Colour
Bezel Materials:	Brass, Chrome Plated	Aluminium, Black Anodised
Style:	Recessed (DX1116) Prominent (DX1118)	Recessed (DX1117) Prominent (DX1119)
Operating Temp. Range:	Dependent on LED used	Dependent on LED used
Storage Temperature:	Dependent on LED used	Dependent on LED used
Lead Solder Time:	260°C for 5 seconds max.	260°C for 5 seconds max.
LED Colours:	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue)	/RD (Red), /GN (Green), /YL (Yellow), /BL (Blue)
RoHS	Compliant	Compliant

See Page 213 for LED specifications*

5mm LED options

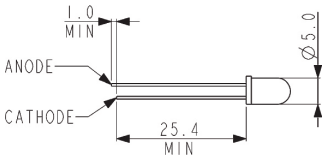
5mm LEDs STANDARD

Specification	Red	Green	Yellow	Blue
Luminous Intensity @20mA:	25mcd	20mcd	20mcd	21mcd
Forward voltage:	2.0V	2.0V	2.1V	3.5V
Cont. Forward Current (max):	30mA	25mA	30mA	30mA
Power Dissipation:	105mW (max) @20°C Ambient			120mW
Reverse Current:	10µA	10µA	10µA	50µA
Reverse Voltage:	5V (max)	5V (max)	5V (max)	5V (max)
Operating Temp:	–40°C to +85°C			–20°C to +80°C
Part No:	/RD	/GN	/YL	/BL



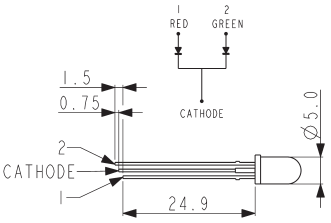
5mm LEDs FLASHING

Specification	Red	Green
Luminous Intensity @20mA:	1.2mcd	20mcd
Forward voltage:	2.0-15.0V	2.0V
Cont. Forward Current (max):	10-30mA	25mA
Power Dissipation:	200mW (max) @ 20°C ambient	
Flash Frequency @ 3V supply:	2.2Hz (typ)	
Operating Temp:	0°C to +70°C	
Part No:	/RD/02	/GN/02



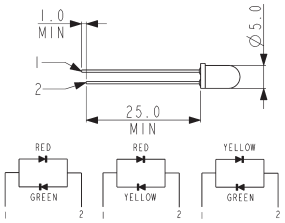
5mm LEDs TRI COLOUR

Specification	Red/Green/Amber
Luminous Intensity @20mA:	2.5mcd
Forward voltage:	2.4V
Cont. Forward Current (max):	30mA (max)
Power Dissipation:	150mW (max) @ 20°C Ambient
Reverse Current:	100µA
Reverse Voltage:	5V (max)
Operating Temp:	–40°C to +70°C
Part No:	/TR



5mm LEDs DUAL COLOUR

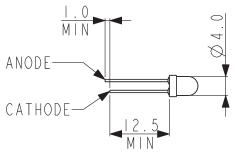
Specifications	Red/Green	Red/Amber	Green/Amber
Luminous Intensity:	4.5/5mcd	4.5/4mcd	4/5mcd
Forward voltage:	2.2V	2.2V	2.2V
Cont. Forward Current:	30mA/30mA	30mA/20mA	30mA/20mA
Power Dissipation:	100mW/100mW	100mW/60mW	100mW/60mW
Reverse Current:	100mA	100mA	100mA
Reverse Voltage:	5V (max)	5V (max)	5V (max)
Operating Temp:		–40°C to +85°C	
Part No:	/D1	/D2	/D3



4mm LED Options

4mm LEDs Standard

Specifications	Red	Green	Yellow	Blue
Luminous Intensity @10mA:	2.5mcd	2.5mcd	2.5mcd	50mcd
Forward voltage:	2.0V	2.1V	2.0V	3.8V
Cont. Forward Current (max):	30mA	30mA	20mA	30mA
Power Dissipation (max) @ 20°C Ambient:	100mW	100mW	85mW	120mW
Reverse Current:	10µA	10µA	10µA	50µA
Reverse Voltage:	5V (max)	5V (max)	5V (max)	5V (max)
Part No:	/RD	/GN	/YL	/BL



Part No Breakdown

DXxxxx	/	XX	/	XX

Bezel Type

LED Colour
RD = Red
GN = Green
YL = Yellow
BL = Blue
D1 = Dual Colour - 5mm (Red/Green)
D2 = Dual Colour - 5mm (Red/Amber)
D3 = Dual Colour - 5mm (Green/Amber)
TR = Tri Colour - 5mm (Red/Green/Amber)

LED Options
Blank = Standard
02 = Flashing - 5mm (Red or Green only)

Example:
DX1092/RD/02 = Black Aluminum IP66 Prominent Bezel, with Red flashing LED

Indicator Lights

Neon, LED and Filament Lamp

Key Features

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green, blue and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

Colours and voltages:

NEON

Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)

DC LED

Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.

AC MAINS LED

Red, Yellow, Green, Blue, White 110-230V ac operation.

FILAMENT

Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Type	Sealed	Illumination	Colour	Voltage	Options
B 2.8 L	(B) 0566 A 	6.0 2.0 max page 6	N L M	Neon & Filament **R** Red **A** Amber **G** Green **B** Blue (Special Order) **C** Clear	**1** LED No Resistor **2** 125V Neon **3** 250V Neon **4** 6Vdc LED **5** 12Vdc LED **6** 24Vdc LED **7** 12/14V Filament **8** 24/ 28V Filament **9** 125/250Vac LED	**C** Chrome Bezel Finish
B 2.8 L	(B) 0566 B 	6.0 2.0 max page 6	N L M			
B 2.8 L	(B) 0566 C 	6.0 2.0max	N L M			
C 6.3	(C) 0145 AA 	5.8 3.0max page 6	N L M F	LED **R** Red **Y** Yellow **G** Green **B** Blue		
L W	(L) 1041 00 	6.3 6.3max page 6	N L F			
L W	(L) 1045 00 	6.3 10.0max page 6	N L M F			

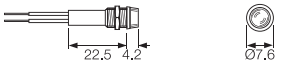
Indicator Lights

Neon, LED and Filament Lamp

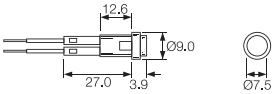
Terminal	Type	Sealed	Illumination	Colour	Voltage	Options
L W	(L) 0245 00 	7.1 6.3 max page 6	N L M F	Neon & Filament **R** Red **A** Amber **G** Green **B** Blue (Special Order) **C** Clear	**1** LED No Resistor **2** 125V Neon **3** 250V Neon **4** 6Vdc LED **5** 12Vdc LED **6** 24Vdc LED **7** 12/14V Filament **8** 24/ 28V Filament **9** 125/250Vac LED	**C** Chrome Bezel Finish
L	L 2950 00 	8.0 0.8-1.6 page 6	N L M F			
L C 6.3	(L) 0195 BB 	8.0 0.8-3.0 page 6	N F			
L	L 2951 00 	8.0 0.8-1.6 page 6	N L M F	LED **R** Red **Y** Yellow **G** Green **B** Blue		
L H 4.8	H) 0568 A(*) 	8.0 0.8-3.5 page 6	N L F			
L H 4.8	(H) 0568 B(*) 	8.0 0.8-3.5 page 6	N L F			

Dimensions

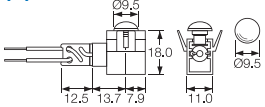
(B) 0566 A



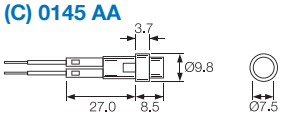
(B) 0566 B



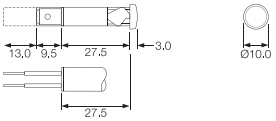
(B) 0566 C



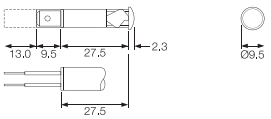
(C) 0145 AA



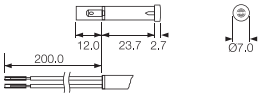
(L) 1041 00



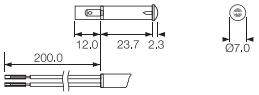
(L) 1045 00



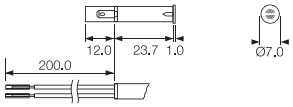
(L) 0245 00



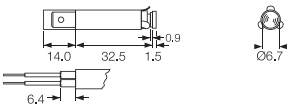
L 2950 00



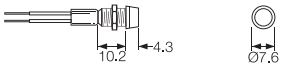
(L) 0195 BB



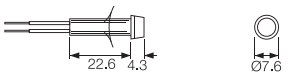
H) 0568 A(*)



L 2951 00



(H) 0568 B(*)



Indicator Lights

Neon, LED and Filament Lamp

Key Features

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
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- Wide choice of styles

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Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)

DC LED

Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.

AC MAINS LED

Red, Yellow, Green, Blue, White 110-230V ac operation.

FILAMENT

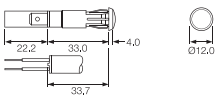
Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
L	(L) 0569 AW 	N L M F	Neon & Filament **R** Red **A** Amber **G** Green **B** Blue (Special Order) **C** Clear	**1** LED No Resistor **2** 125V Neon **3** 250V Neon **4** 6Vdc LED **5** 12Vdc LED **6** 24Vdc LED **7** 12/14V Filament **8** 24/ 28V Filament **9** 125/250Vac LED	**C** Chrome Bezel Finish	∅ 9.0 0.8-2.5 Call sales	
L K 2.8 H 4.8 C 6.3	(C) 0273 00 	N L M F				∅ 9.0 2.0 max page 6	
L K 2.8 H 4.8 C 6.3	(C) 0278 00 	N L M F				∅ 9.0 2.0 max page 6	
L K 2.8 H 4.8 C 6.3	(C) 0276 AA 	N L M F	LED **R** Red **Y** Yellow **G** Green **B** Blue			∅ 9.5 0.8-2.8 page 6	
L K 2.8 H 4.8 C 6.3	(C) 0275 00 	N L M F				∅ 10.0 12.0 page 6	
L K 2.8 H 4.8 C 6.3	(C) 0275 00 	N L M F				∅ 10.0 11.5 max page 6	

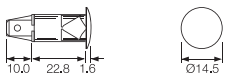
Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
L K 2.8 H 4.8 C 6.3	(C) 0276 00 	N L M F	Neon & Filament **R** Red **A** Amber **G** Green **B** Blue (Special Order) **C** Clear	**1** LED No Resistor **2** 125V Neon **3** 250V Neon **4** 6Vdc LED **5** 12Vdc LED **6** 24Vdc LED **7** 12/14V Filament **8** 24/ 28V Filament **9** 125/250Vac LED	**C** Chrome Bezel Finish	⌀ 10.0 2.8 max page 6	
L K 2.8 H 4.8 C 6.3	(C) 0277 00 	N L M F				⌀ 10.0 12 max page 6	
L K 2.8 H 4.8 C 6.3	(C) 0273 LL 	N L M F				⌀ 10.0 0.6-2.0 page 6	
L K 2.8 H 4.8 C 6.3	(C) 2820 00 	N L M F	LED **R** Red **Y** Yellow **G** Green **B** Blue			⌀ 12.0 0.75-2.0 page 6	
L K 2.8 H 4.8 C 6.3	(C) 2821 00 	N L M F				⌀ 12.0or12.7 ø12.0 = 0.8-2.5 ø12.7 = 1.1-2.5 page 6	
L K 2.8 H 4.8 C 6.3	(C) 0586 00 	N L M F				⌀ 12.5 0.8-1.5 page 6	

Dimensions

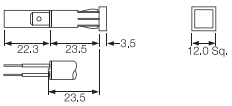
(L) 0569 AW



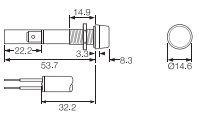
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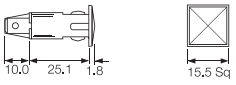
(C) 0273 LL



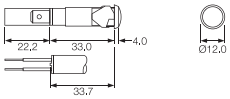
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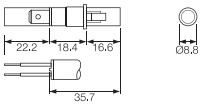
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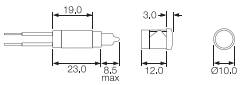
(C) 2820 00



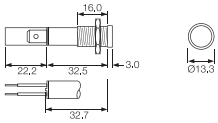
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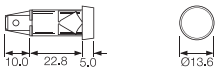
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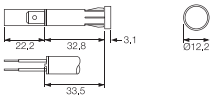
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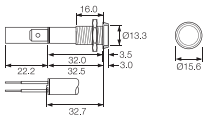
(C) 0276 AA



(C) 0277 00



(C) 0586 00



Indicator Lights

Neon, LED and Filament Lamp

Key Features

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

Colours and voltages:

NEON

Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)

DC LED

Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.

AC MAINS LED

Red, Yellow, Green, Blue, White 110-230V ac operation.

FILAMENT

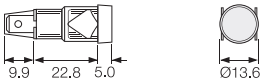
Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
L K 2.8 H 4.8 C 6.3	(C) 2870 00 	N L M F	Neon & Filament **R** Red **A** Amber **G** Green **B** Blue (Special Order) **C** Clear LED **R** Red **Y** Yellow **G** Green **B** Blue	**1** LED No Resistor **2** 125V Neon **3** 250V Neon **4** 6Vdc LED **5** 12Vdc LED **6** 24Vdc LED **7** 12/14V Filament **8** 24/ 28V Filament **9** 125/250Vac LED	**C** Chrome Bezel Finish	12.7 0.75-2.0 Page 6	
L K 2.8 H 4.8 C 6.3	C) 0589 00 	N L M F				12.7 0.8-1.5 page 6	
L	L 0081 00 	N L M F				12.7 9.5 page 6	
L K 2.8 H 4.8 C 6.3	(C) 0177 00 	N L M F				12.7 12.0max page 6	
L K 2.8 H 4.8 C 6.3	(C) 0067 00 	N L M F				12.7 1.14 max page 6	
L C 6.3	(C) 0180AA 	N L F				12.7 19.0 max page 6	

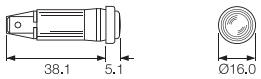
Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
L C 6.3	(C) 0180BB 	N L F	Neon & Filament **R** Red **A** Amber **G** Green **B** Blue (Special Order) **C** Clear	**1** LED No Resistor **2** 125V Neon **3** 250V Neon **4** 6Vdc LED **5** 12Vdc LED **6** 24Vdc LED **7** 12/14V Filament **8** 24/ 28V Filament **9** 125/250Vac LED	**C** Chrome Bezel Finish	∅ 13.5 0.9-1.14 page 6	
L K 2.8 H 4.8 C 6.3	(C) 0579 00 	N L M F	LED **R** Red **Y** Yellow **G** Green **B** Blue			∅ 14.0 2.5 max page 6	
C 6.3	(C) 1092 	N				∅ 19.0 4.0max page 6	

Dimensions

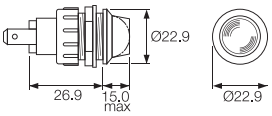
(C) 2870 00



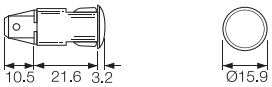
(C) 0067 00



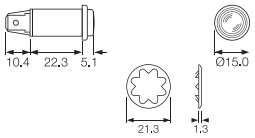
(C) 1092



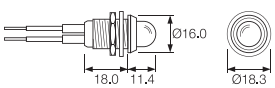
C) 0589 00



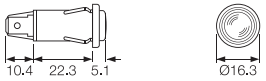
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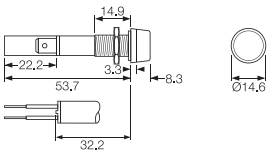
L 0081 00



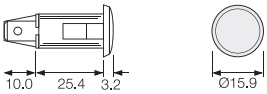
(C) 0180BB



(C) 0177 00



(C) 0579 00



Key Features

- Neon, LED, mains LED or filament lamp
- Bezel sizes from 6.7 to 16.3mm diameter
- Red, amber, green and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

Colours and voltages:

NEON



Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)

DC LED



Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.

AC MAINS LED



Red, Yellow, Green, Blue, White 110-230V ac operation.

FILAMENT

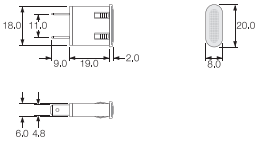


Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

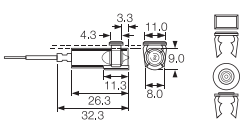
Terminal	Type	Illumination	Colour	Voltage	Options	Panel	Approval
H 4.8	**H 0581 AY** 	**N** **F**	Neon & Filament **R** Red **A** Amber **G** Green **B** Blue (Special Order) **C** Clear LED **R** Red **Y** Yellow **G** Green **B** Blue	**1** LED No Resistor **2** 125V Neon **3** 250V Neon **4** 6Vdc LED **5** 12Vdc LED **6** 24Vdc LED **7** 12/14V Filament **8** 24/ 28V Filament **9** 125/250Vac LED	**C** Chrome Bezel Finish	18.2/18.3 x 6.2/6.3 * 2.0-3.5 Page 6	
L	**L 0234 00** 	**N**				9.27/9.50 x 4.75 * 0.71-1.62 page 6	
L	**L 0233 00** 	**N**				page 6	

Dimensions

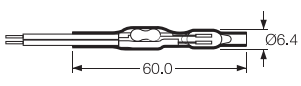
H 0581 AY



L 0234 00



L 0233 00



Neon tube, resistor and flexible lead assembly, protected by “shrunk on” transparent sleeving.

Low Voltage Lampholders

Key Features

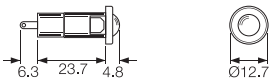
- Up to 50V
- Red, Amber, Green, Blue and Clear
- Linestra/Philinea lamp holder

Colours and voltages:

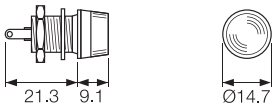
These lampholders are suitable for up to 50V max.
Bulbs will be supplied (dependent on order quantity) if a voltage is specified.
Colours - Red, Amber, Green, (Clear & Blue, check availability).

Terminal	Type	Sealed	Illumination	Colour	Voltage	Options	Panel
T	T0061 00 (LES) 	**S** Sealed	**N** Neon	Neon & Filament	**1** LED No Resistor	**C** Chrome Bezel Finish	∅ 9.5 0.9-1.14 T85
C	(C) 0277 00 		**L** DC LED	**R** Red	**2** 125V Neon		∅ 12.7 1.14max T85
T 6.3	(C) 0273 LL 		**M** Mains AC LED	**A** Amber	**3** 250V Neon		∅ 12.7 9.6max T85
T	(C) 2820 00 		**F** Mains AC LED	**G** Green	**4** 6Vdc LED		∅ 12.7 9.6max T85
S	(C) 2821 00 			**B** Blue (Special Order)	**5** 12Vdc LED		
				C Clear LED	**6** 24Vdc LED		
				R Red	**7** 12/14V Filament		
				Y Yellow	**8** 24/ 28V Filament		
				G Green	**9** 125/250Vac LED		
				B Blue			T85

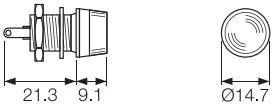
T0061 00 (LES)



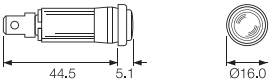
(C) 2820 00



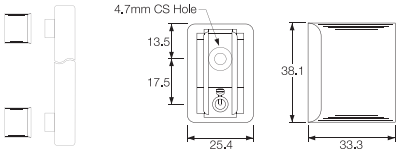
(C) 0273 LL



(C) 0277 00



(C) 2821 00



Large Low Voltage Lampholders



C1090FE - - -



P1090FL - - -

Key Features

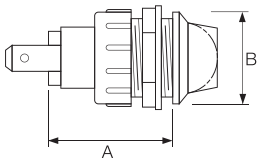
- Up to 50V
- MES or MBC bulb
- Flat and domed lens
- Brass or nylon bodies
- Red, Amber, Green, Blue and Clear lenses

Approvals and specifications

Bulbs will be supplied (dependant on order quantity) if a voltage is specified. These lampholders are suitable for up to 50V max.

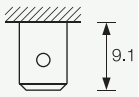
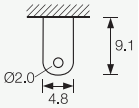
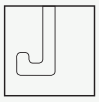
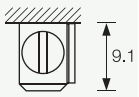
Colours - Red, Amber, Green,
(Clear & Blue, check availability).
Brass bodies have polished chrome finish.

Dimensions and Options



F0445 MO
P.V.C. Insulating terminal cover.



Terminal	Type	Colour	Bulb Voltage	Options	Panel	Lens
C  6.3 x 0.8	**1090** MES (E10) 	**R** Red	**6** 6V	**C** Chrome Bezel Finish	**1090 (MES lamps)** Panel Hole Dia / Body Material / Dim A / Dim B **A** 19.0 Brass 35.0 22.0 **D** 19.0 Brass 30.2 22.0 **E** 19.0 Nylon with chrome bezel 30.2 22.0 / 30.2 22.8 **G** 19.0 Brass 24.6 22.0 **H** 19.0 Nylon with chrome bezel 24.6 22.0 / 24.6 22.8 **L** 25.4 Brass 26.0 31.5	**F** Flat 
T  Solder	**1091** MBC (BA9s) (C and S Terminals only) 	**Y** Yellow	**12** 12V		**1091 (MBC lamps)** Panel Hole Dia / Body Material / Dim A / Dim B **B** 19.0 Brass 36.0 22.0 **C** 19.0 Nylon 36.6 22.0 **Q** 19.0 Nylon (Chrome twin) 36.6 22.8 **M** 25.4 Brass 38.1 31.5	**V** MES (E10) 
S  Screw and Clamp		**G** Green	**24** 24V			**L** No lens
		B Blue	Max of 50V			
		C Clear				

LED Lamps and LED Lampholders

LED Lampholders can be supplied with or without LEDs

Key Features

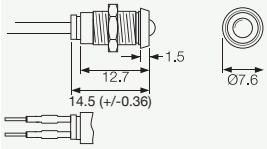
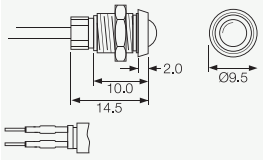
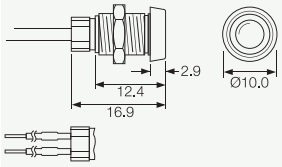
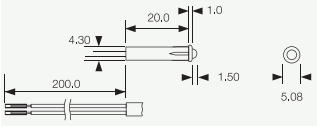
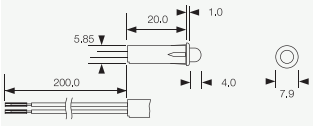
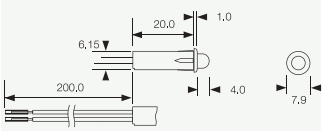
- LED lampholders
- Supplied with or without LEDs
- Black or Chrome finish

Colours and voltages:

Colours: Red, Yellow, Green and Blue LEDs
(High Intensity is standard. Option of extra super bright).

Voltages: LEDs are available for direct connection to 2.0/2.2V or 12Vdc

For other voltages contact sales.

Terminal	Type	Body Colour	LED Colour	Voltage	Panel Cutout	Approval	Dimensions
W LED fitted **A** LED not fitted **L** LED & Wires fitted	**(W) 1048 00**	**B** Black **–** Blank	**R** Red **Y** Red **G** Green **B** Blue	**1** LED No Resistor **4** 6Vdc LED **5** 12Vdc LED **6** 24Vdc LED	∅ 6.3 6.3max T105		
W LED fitted **A** LED not fitted **L** LED & Wires fitted	**(L) 1048 0A**				∅ 8.0 5.5max T105		
W LED fitted **A** LED not fitted **L** LED & Wires fitted	**(W) 1050 0A**				∅ 8.0 7.0max T105	KEMA KEUR	
W LED fitted **L** LED & Wires fitted	**(L) 1035 0A**				∅ 4.5 0.9-1.6 T105	KEMA KEUR RU	
W LED fitted **L** LED & Wires fitted	**(L) 1036 0A**				∅ 6.0 0.9-1.6 T105	KEMA KEUR RU	
W LED fitted **L** LED & Wires fitted	**(L) 1037 0A**				∅ 6.35 0.9-1.6 T105	KEMA KEUR RU	

LED Lamps and LED Lampholders - Sealed to IP67

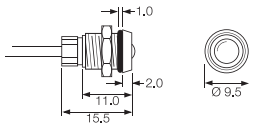
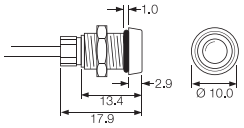
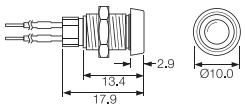
Key Features

- IP67 front bezel sealing
- LED lampholders
- Supplied with or without LEDs
- Black or Chrome finish

Colours and voltages:

Colours:
Red, Yellow Green and Blue LEDs.
(High Intensity is standard. Option of extra super bright).

Voltages:
LEDs are available for direct connection to 2.0/2.2V or 12Vdc.
For other voltages contact sales.

Terminal	Type	LED Colour	Voltage	Panel	Approval	Dimensions
L LED & Wires fitted	**(L) 1048 00** 	**B** Blue	**6** 24Vdc LED	∅ 8.0 5.5max T105	KEMA KEUR	**(L) 1048 00** 
W LED fitted **A** LED not fitted	**(W) 1050 00** 			∅ 8.0 7.0max T105	KEMA KEUR	**(W) 1050 00** 
L LED & Wires fitted	**(W) 1050 00** 			∅ 8.0 7.0max T105	KEMA KEUR	**(W) 1050 00** 

Properties

Sealing
O-ring sealing equivalent to IP67, of both the LED to bezel, and bezel to panel is available where shown.

Polarity
The nylon base mouldings are polarity marked.

Body Material and Finish
Chromed brass or Black oxide coated brass.

Lampholders only
Items prefixed 'A' are supplied without LEDs.

LED wires or PVC covered wire leads
125mm min length wires, 6.3mm standard strip.
Alternative colours, length and strip available.

Indicator Lights - Sealed to IP67

Key Features

- IP67 Panel Sealing
- Supplied complete with gaskets/'O' rings
- Neon, LED, mains LED or filament lamp
- Bezel sizes from 7.6 to 22.9mm diameter
- Red, amber, green, blue and clear lenses
- Red, yellow, green, blue and white LEDs
- Wide choice of styles

Colours and voltages:

NEON



Available with Red, Amber, Green or Clear lenses 100/130V (marked 110V), 200/250V (marked 230V)

DC LED



Red, Yellow, Green, Blue, White 2.0/2.2V Resistors for other voltages available.

AC MAINS LED



Red, Yellow, Green, Blue, White 110-230V ac operation.

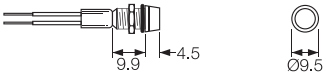
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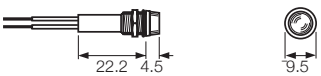
Available with Red, Amber, Green, Clear or Blue lenses 6V, 12/14V, 24/28V.

Terminal	Type	Sealed	Illumination	Colour	Voltage	Option	Panel Cutout	Approval
L	(L) 1041 OS 	S Sealed	N L M F	R Red A Amber G Green B Blue (Special) C Clear LED R Red Y Yellow G Green B Blue W White	1 LED No Resistor 2 125V Neon 3 250V Neon 4 6Vdc LED 5 12Vdc LED 6 24Vdc LED 7 12/14V Filament 8 24/ 28V Filament 9 125/250Vac LED	C Chrome Bezel Finish	Ø 6.3 5.3max	KEMA KEUR
L	(L) 0245 OS 		N L M F				Ø 7.1 4.6max	KEMA KEUR
L C 6.3 K 2.8 H 4.8	(C) 0275 OS 		N L M F				Ø 10.0 11.15max	KEMA KEUR
L C 6.3 K 2.8 H 4.8	(C) 0277 OS 		N L M F				Ø 10.0 11.15max	KEMA KEUR
L 6.3 C 4.8 K 2.8 H	(C) 0177 OS 		N L M F				Ø 12.7 11.15max	KEMA KEUR
L 6.3	(C) 1092 FFS 		N				Ø 19.0 4.0 max	KEMA KEUR

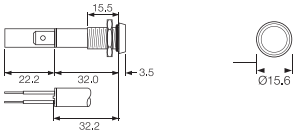
(L) 1041 OS



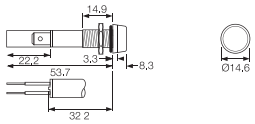
(L) 0245 OS



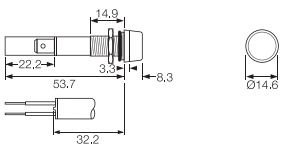
(C) 0275 OS



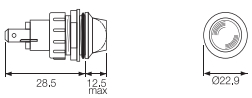
(C) 0277 OS



(C) 0177 OS



(C) 1092 FFS



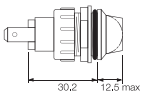
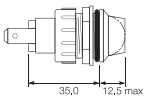
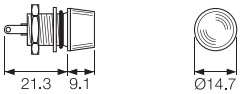
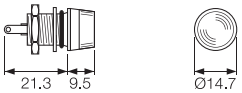
Low Voltage Lamp Holders - Sealed to IP67

Key Features

- IP67 Panel Sealing
- Supplied complete with gaskets/'O' rings
- Neon, LED, mains LED or filament lamp
- Bezel sizes from 7.6 to 22.9mm diameter
- Red, amber, green, blue and clear lenses
- Red, yellow, green, blue and white LEDs

Colours and voltages:

These lampholders are suitable for up to 50V max.
Bulbs will be supplied (dependent on order quantity) if a voltage is specified.
Colours - Red, Amber, Green, (Clear & Blue, check availability).

Terminal	Type	Sealed	Colour	Bulb Voltage	Options	Panel	Approvals	Dimensions
C 6.3	**C1090 FPS (MES)** 	**S** Sealed	**R** Red **A** Amber	**6** 6V **12** 12V	**C** Chrome Bezel Finish	∅ 19.0 4.0max T85	KEMA EUR	
C 6.3	**C1091 FQS (MBC)** 		**G** Green **B** Blue (Special)	**24** 24V		∅ 7.1 4.6max	KEMA EUR	
T	**T0062 AOS (Midget flange) Chrome bezel** **T0063 AOS (LES) Chrome bezel** 		**C** Clear			∅ 10.0 11.15max	KEMA EUR	
T	**T0062 MOS (LES & Midget flange)** **T0063 MOS (LES)** 					∅ 10.0 11.15max	KEMA EUR	

F0445 MO
P.V.C. Insulating terminal cover.
For use with C1090 & C1091



General Information

Terms and Conditions of Sale
All orders are accepted subject to our Standard Terms & Conditions. Copies of these are available:
www.elektron-technology.com/terms/

Health & Safety
Bulgin proprietary components are designed, manufactured, assessed and tested to comply with good commercial quality and engineering standards. They are safe and reliable in use within the vast majority of normal environments. In the interest of safety, application in certain extreme destructive or unsuitable environments must be avoided. The following restrictions are given as guidance:

- External or wet areas (exposed to rain or spray), except where designated “Sealed”.
- Atmospheres designated as “explosive”, except where designated “Gas Tight” or “Explosion Proof”.
- Highly corrosive atmospheres or subject to contamination by corrosive chemicals. (Avoid the use of corrosive acid soldering flux. Use an approved Electrical Grade).
- Atmospheres containing a high density of abrasive dust (mechanically operated components).
- Contamination with Silicone or Silicone Compounds (switches).
- Areas or levels unprotected from severe impact by heavy bodies moving in close proximity - (panel mounted components).
- Extremes of temperatures, beyond the specified limits.
- Electric supply voltage or load current above the published maximum ratings.

General
To ensure electrical safety as far as is reasonably practical, these products should be properly applied, installed and maintained by or under the supervision of competent persons in accordance with good engineering practice.

Dimensions
All dimensions are in millimetres (mm) unless otherwise stated.

The CE Marking Directive
Equipment bearing the CE mark is allowed free circulation throughout Europe. The products in this catalogue, when installed correctly, comply with the CE requirements where it relates to them.

The Low Voltage Directive
The Low Voltage Directive 2006/95/EC seeks to ensure that electrical equipment within certain limits both provides a high level of protection for European citizens and enjoys a single market in the European Union. Where applicable, Bulgin products comply with the requirements of this directive.

RoHS
These European Directives introduced environmental responsibilities for electrical and electronics equipment manufacturers. The RoHS (Restriction of use of certain Hazardous Substances) regulation (Directive 2002/95/EC) came into force July 2006. The WEEE (Waste Electrical and Electronic Equipment) regulation (Directive 2002/96/EC), came into force January 2007. The RoHS directive effectively bans the use of certain chemicals, these are defined as:

- Lead
- Cadmium
- Mercury
- Hexavalent Chromium
- Polybrominated Biphenyl (PBB) – flame retardant
- Polybrominated Diphenyl Ether (PBDE) – flame retardant (including Deca BDE)

Action has been taken to ensure all standard products meet the requirements of this directive. All packing carries RoHS compliance information as conformation.

REACH
REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) is the new system for controlling chemicals in Europe and became law in the UK on 1 June 2007. Elektron Technology as a manufacturer of articles, are reliant on our supply chain to ensure that the substances/articles we use, are in compliance with the EC1907/2006, REACH Regulations.

Our articles and their packaging, based on our knowledge at this point, do not contain any of the 15 substances on the SVHC Candidate List, dated 28th October 2008, nor any of the 14 substances added to the SVHC Candidate List, dated 13th January 2010, nor Acrylamide added to the SVHC Candidate List, dated 30th March 2010, according to article 59 (1, 10) of Regulation (EC) No. 1907/2006 (REACH), in a concentration above 0.1% weight by weight.

If this situation changes we confirm that this information will be passed through the supply chain in a timely manner.

General Information

United Kingdom

B.S.I. Kitemark

Denmark

D.E.M.K.O

South Africa

S.A. Bureau of Standards

BS EN ISO 9001:2000

B.S.I. British Electro-Technical Approvals Board

Europe

E.N.E.C.

Sweden

S.E.M.K.O.

Austria

O.V.E

Finland

F.I.M.K.O

Switzerland

S.E.V.

Australia

State Electricity Commission of Victoria

The Regulatory Compliance Mark (RCM)

Germany

S.E.V.

U.S.A.

U.L. Recognised

U.L. Listed

Belgium

CEBEC

Holland

KEMA-KEUR

Russia

GOST The State Committee for Standards

Canada

C.S.A.

Italy

I.M.Q.

China

C.C.C.

Norway

N.E.M.K.O.

Comparison Chart

Metric to AWG wire sizes

AWG	Cross Sectional Area in mm^2	Closest standard equivalent in mm^2
30	0.0503	0.05
29	0.0646	-
28	0.0804	-
27	0.102	0.1
26	0.128	0.14
25	0.163	-
24	0.205	0.2
23	0.259	0.25
22	0.325	-
21	0.412	-
20	0.519	0.5
19	0.653	-
18	0.823	0.75
17	1.04	1
16	1.31	-
15	1.65	1.5
14	2.08	-
13	2.63	2.5
12	3.13	-
11	4.15	4
10	5.27	-
9	6.62	6
8	8.35	-
7	10.6	10
6	13.3	-
5	16.8	16
4	21.2	-
3	26.7	25
2	33.6	35
1	42.4	-
0	53.4	50
2/0	67.5	70
3/0	85	95
4/0	107.2	120
5/0	135.1	150
6/0	170.3	185

IP Ratings

IP Ratings Guide

The IP classification system designates the degree of protection provide by an enclosure against solid objects or water ingress.
Table I shows degrees of protection against solid objects.
Table II shows degrees of protection against water.



Table 1 (1st characteristic numeral)
Degree of Protection against solid objects

Digit



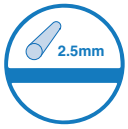
0
Non-protected



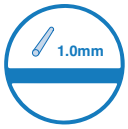
1
Protected against a solid object greater than 50mm, such as a hand.



2
Protected against a solid object greater than 12.5mm, such as a finger.



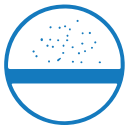
3
Protected against a solid object greater than 2.5mm, such as wire or a tool.



4
Protected against a solid object greater than 1.0mm, such as wire or thin strips.



5
Dust-protected. Prevents ingress of dust sufficient to cause harm.



6
Dust tight.
No ingress of dust.

Degree of protection to - DIN 40050-9

Table 2 (2nd characteristic numeral)
Degree of Protection against water

Digit



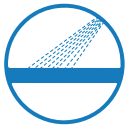
0
Non-protected



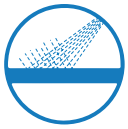
1
Protected against dripping water.



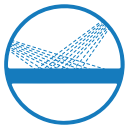
2
Protected against dripping water when tilted up to 15°.



3
Protected against spraying water at an angle of up to 60°.



4
Protected against splashing water from any direction.



5
Protected against jets of water from any direction.



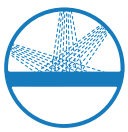
6
Protected against heavy seas or powerful jets of water. Prevents ingress sufficient to cause harm.



7
Protected against the effects of temporary immersion in water.



8
Protected against the effects of continuous immersion in water.



69K
Protected against very high pressure, high temperature wash-down test.

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