



# Bulgins Ethos

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

We'll question you, challenge you and work with you to anticipate the future demands of your markets, making sure that we are creating the right products at the right price. 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.

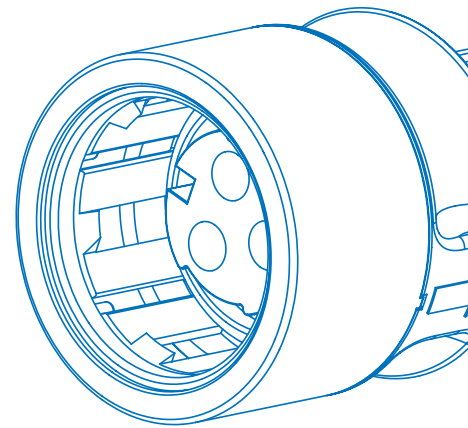
## [Excellence and experience](#)

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

## [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

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 – as well as ISO 13485 compliance for the design and manufacture of medical products – 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
- finite element analysis
- rapid prototyping
- 3D rendered models

## Electronics

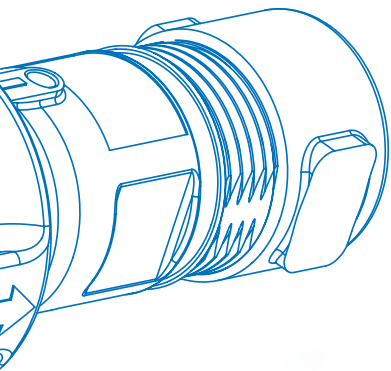
- in-house modelling
- simulation
- rapid prototyping
- optimized printed circuit board layouts
- human-centered design

## 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 ISO9001:2008.

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.

Two ISO9001 approvals cover our design and manufacturing sites: certificate FM544884 covers our design procedures, and certificate FM87532 our manufacture processes.

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.



## Contact Us

### Europe

Elektron Technology,  
Broers Building,  
JJ Thomson Avenue, Cambridge,  
CB3 0FA,

Tel: +44 (0)1223 371 000  
Email: [europe@elektron-technology.com](mailto:europe@elektron-technology.com)

### The Americas

Elektron Technology  
5856 Corporate Suite 220  
Cypress  
CA 906030

Tel: +1 760 343 3650  
Email: [americas@elektron-technology.com](mailto:americas@elektron-technology.com)

### China and Asia

Elektron Technology,  
Room 902, 568 Hengfeng,  
Henhui Int Building,  
Shanghai 200070,

Tel: +86 (21)604 00060  
Email: [asia@elektron-technology.com](mailto:asia@elektron-technology.com)

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 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               | 08-13 |
| 900 Series Buccaneer  | 14-19 |
| Standard Buccaneer    | 20-28 |
| Mini Buccaneer        | 29-32 |
| 400 Series Buccaneer  | 33-38 |
| 6000 Series Buccaneer | 39-46 |
| 7000 Series Buccaneer | 47-54 |

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.



- ⬢ ATEX approval for Zone 2 and Zone 22 applications
- ⬢ Independently tested
- ⬢ ATEX Coding:  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

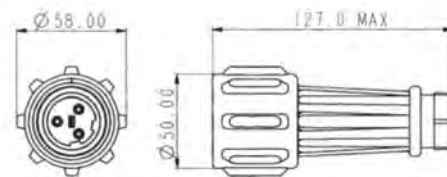
- ⬢ 'Scoop proof' contacts
- ⬢ Field termination - screw terminations
- ⬢ Positive locating keyways - cannot be mis-connected
- ⬢ Sealing caps available to maintain IP68 rating of unmated connectors
- ⬢ Compact design
- ⬢ Easy assembly - no special tools required
- ⬢ Single or 3 phase applications
- ⬢ 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

- 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 Series 13-15mm cable dia. acceptance as standard, 7-13mm with additional gland pack

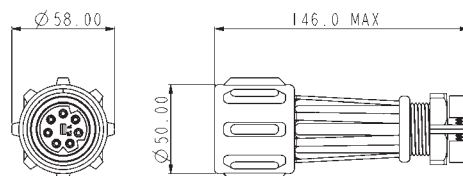


Flex Cable Connector



EXP-A911

- EXP-A Series 20-22mm cable dia. Acceptance as standard, 14-20mm with additional gland pack
- Strain Relief Clamp



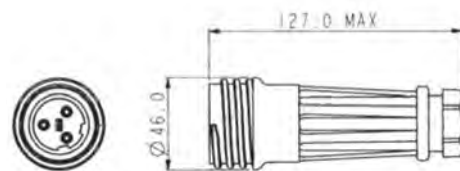
| Standard Cable | Large Cable   | Description  | Standard Cable | Large Cable   | Description    |
|----------------|---------------|--------------|----------------|---------------|----------------|
| EXP-0911/02/P  | EXP-A911/02/P | 2 pole Plug  | EXP-0911/02/S  | EXP-A911/02/S | 2 pole Socket  |
| 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

- Mates with either EXP-0911 or EXP-A911 connectors
- Plug or socket versions
- EXP-0 Series 13-15mm cable dia. acceptance as standard, 7-13mm with additional gland pack

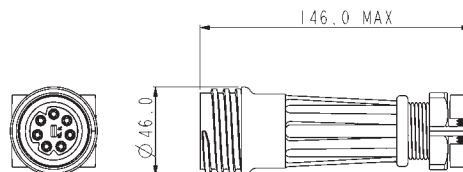


In-Line Flex Cable Connector



EXP-A921

- 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 |

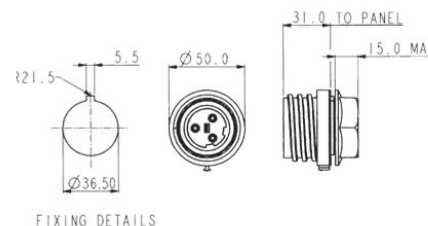


#### Panel Mounting Connector



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-0931/03/P | 3 pole Plug  |
| EXP-0931/04/P | 4 pole Plug  |
| EXP-0931/05/P | 5 pole Plug  |
| EXP-0931/07/P | 7 pole Plug  |
| EXP-0931/10/P | 10 pole Plug |

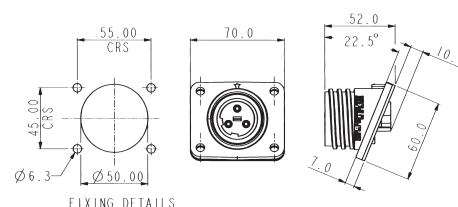
|               |                |
|---------------|----------------|
| EXP-0931/02/S | 2 pole Socket  |
| EXP-0931/03/S | 3 pole Socket  |
| EXP-0931/04/S | 4 pole Socket  |
| EXP-0931/05/S | 5 pole Socket  |
| EXP-0931/07/S | 7 pole Socket  |
| EXP-0931/10/S | 10 pole Socket |

#### 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-0941/03/P | 3 pole Plug  |
| EXP-0941/04/P | 4 pole Plug  |
| EXP-0941/05/P | 5 pole Plug  |
| EXP-0941/07/P | 7 pole Plug  |
| EXP-0941/10/P | 10 pole Plug |

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

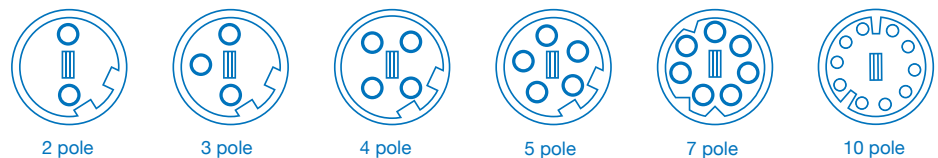
#### Sealing Caps

|          |                                                                     |
|----------|---------------------------------------------------------------------|
| 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           |

#### 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 X9                                                                                                                                                  | X                                                                | X                   | /                                           | XX                                                                                      | / | X                    | / | X                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------|---------------------------------------------|-----------------------------------------------------------------------------------------|---|----------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Series Designation                                                                                                                                      | Body Styles                                                      | Contact Termination |                                             | Number Contacts                                                                         |   | Contact Type         |   | Cable Acceptance                                                                                                                                                                                                                                                                                                                                                                                      |
| 09 = Standard Cable Accommodation (7-13mm)<br><br>A9 = Large Cable Accommodation (14-22mm)                                                              | 1 = Flex,<br>2 = Flex In-line,<br>3 = Panel,<br>4 = Flange Panel | 1 = Screw Terminal  |                                             | 02 = 2 pole<br>03 = 3 pole<br>04 = 4 pole<br>05 = 5 pole<br>07 = 7 pole<br>10 = 10 pole |   | P = Plug, S = Socket |   | <b>EXP-0 version:</b><br>Blank = 13-15mm<br>Yellow cable gland (std)<br><br>3 = 11-13mm<br>Black cable gland<br><br>2 = 9-11mm<br>White cable gland<br><br>1 = 7-9mm<br>Dark Grey cable gland<br><br><b>EXP-A version:</b><br>Blank = 20-22mm<br>Yellow cable gland (std)<br><br>9 = 18-20mm<br>Black cable gland<br><br>8 = 16-18mm<br>White cable gland<br><br>7 = 14-16mm<br>Dark Grey cable gland |
| <b>Example:</b><br>EXP-0911/07/P/3 = Flex cable connector with standard cable accommodation body, seven pin contacts, with gland to suit 11-13mm cable. |                                                                  |                     |                                             |                                                                                         |   |                      |   |                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Contact Layout</b>                                                                                                                                   |                                                                  |                     |                                             |                                                                                         |   |                      |   |                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                        |                                                                  |                     |                                             |                                                                                         |   |                      |   |                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Overall dimensions of connectors when mated together:</b>                                                                                            |                                                                  |                     |                                             |                                                                                         |   |                      |   |                                                                                                                                                                                                                                                                                                                                                                                                       |
| EXP-0911 + EXP-0921                                                                                                                                     | 230 mm max.                                                      | EXP-A911 + EXP-A931 | 175 mm max. (to panel)                      |                                                                                         |   |                      |   |                                                                                                                                                                                                                                                                                                                                                                                                       |
| EXP-A911 + EXP-A921                                                                                                                                     | 270 mm max.                                                      | EXP-0911 + EXP-0941 | 145 mm max. (to panel, mid point on flange) |                                                                                         |   |                      |   |                                                                                                                                                                                                                                                                                                                                                                                                       |
| EXP-0911 + EXP-0931                                                                                                                                     | 135 mm max. (to panel)                                           | EXP-A911 + EXP-A941 | 174 mm max. (to panel, mid point on flange) |                                                                                         |   |                      |   |                                                                                                                                                                                                                                                                                                                                                                                                       |

**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 <sup>6</sup> MΩ (@ 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<br>IEC60079-0:2007<br>IEC60079-15:2005 |
| ATEX Coding:               | Ⓔ II 3 GD                                                      |
| ATEX Certificate No:       | Baseefa09ATEX0232X                                             |
| ATEX Classification:       | Ex nA IIC T6 Gc<br>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                     |
| <b>RoHS</b>          | Compliant                           |

**Mechanical:**

|                                    |                                                                                                                                                                                    |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sealing:                           | IP68, EN60529:2001 tested @<br>1.054kg/sq.cm. (15lb/sq.in.) 10m depth for<br>2 weeks                                                                                               |
| Cable Acceptance:                  | EXP-0911 - EXP-0921 13 - 15mm O/D standard,<br>7-13mm with gland pack<br>EXP-A911 - EXP-A921 20 - 22mm O/D standard,<br>14 - 20mm with gland pack                                  |
| Contact Accommodation:             | 2-7 pole - 2.5 to 4mm <sup>2</sup> (13 to 10AWG)<br>conductor, single or multi stranded<br>10 pole - 0.75 to 2mm <sup>2</sup> (14 to 18AWG)<br>conductor, single or multi stranded |
| Termination:                       | Axial screw terminals<br>22mm dia, 150N<br>15mm dia, 150N<br>7mm dia, 80N                                                                                                          |
| Cable Retention force:             |                                                                                                                                                                                    |
| Gland Nut Torques:                 |                                                                                                                                                                                    |
| EXP-0 range                        | 3.16Nm (28lbf/in)                                                                                                                                                                  |
| 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)                  |                                                                                                                                                                                    |
| 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<br>fixing screws | 0.9 Nm                                                                                                                                                                             |
| Rear thread EXP-0931 series        | M36 x 2-6g                                                                                                                                                                         |



- ⬡ IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- ⬡ 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 accommodation 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



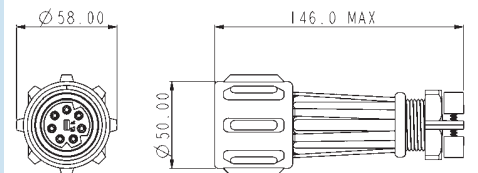
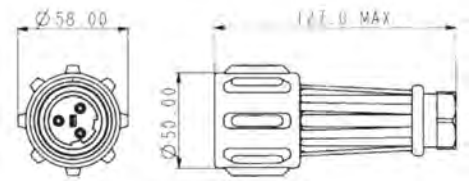
PX0911

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 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    |
|----------------|-------------|--------------|----------------|-------------|----------------|
| 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



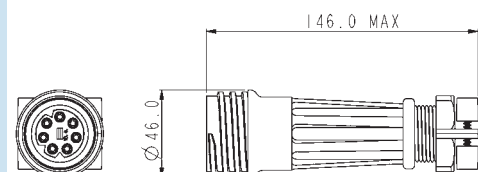
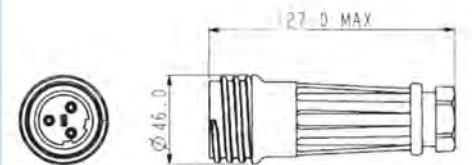
PX0921

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



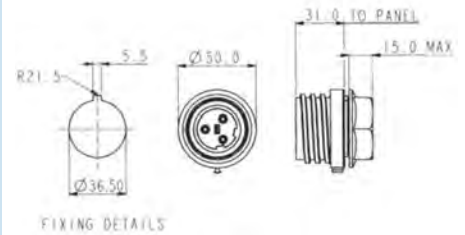
| Standard Cable | Large Cable | Description  | Standard Cable | Large Cable | Description    |
|----------------|-------------|--------------|----------------|-------------|----------------|
| PX0921/02/P    | PXA921/02/P | 2 pole Plug  | PX0921/02/S    | PXA921/02/S | 2 pole Socket  |
| PX0921/03/P    | 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**

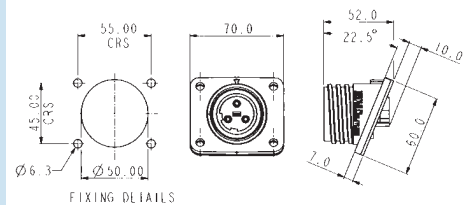
|             |              |             |                |
|-------------|--------------|-------------|----------------|
| PX0931/02/P | 2 pole Plug  | PX0931/02/S | 2 pole Socket  |
| PX0931/03/P | 3 pole Plug  | PX0931/03/S | 3 pole Socket  |
| PX0931/04/P | 4 pole Plug  | PX0931/04/S | 4 pole Socket  |
| 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



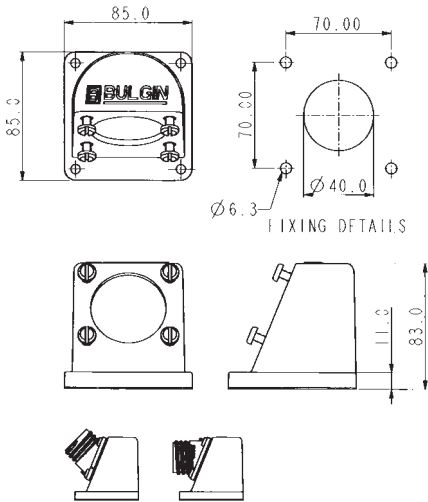
PX0950

Additional Bulkhead Adaptor



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 PX0931W and 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. |

# BUCCANEER FOR POWER

## 900 Series Buccaneer

### Specifications



### Electrical

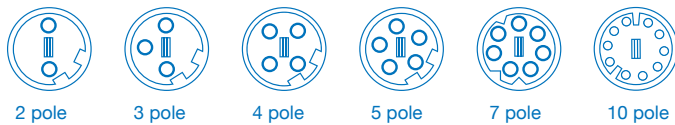
|                              |                                                                                                                                                                                                                                                                                                                                                         |                 |                  |            |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------|------------|
| No Poles:                    | 2, 3                                                                                                                                                                                                                                                                                                                                                    | 4, 5            | 7                | 10†        |
| Current Rating:              | 32A<br>30A, CSA                                                                                                                                                                                                                                                                                                                                         | 32A<br>25A, CSA | 32A<br>25A, CSA* | 10A<br>UL  |
| Voltage Rating:              | 600V ac/dc                                                                                                                                                                                                                                                                                                                                              | 600V ac/dc      | 430V ac/dc       | 250V ac/dc |
| Contact Resistance:          | <10m Ω (initial)                                                                                                                                                                                                                                                                                                                                        |                 |                  |            |
| Insulation Resistance:       | >10 <sup>9</sup> MΩ (@ 500V dc)                                                                                                                                                                                                                                                                                                                         |                 |                  |            |
| Dielectric strength:         | 2.2kV ac min                                                                                                                                                                                                                                                                                                                                            |                 |                  |            |
| AC Breakdown voltage:        | 6kV                                                                                                                                                                                                                                                                                                                                                     |                 |                  |            |
| Operating Temperature Range: | -40°C to +85°C                                                                                                                                                                                                                                                                                                                                          |                 |                  |            |
| Approvals:                   |  E214972<br> 1211899<br> 40003148<br>2011010203500396 – 10 Amp Rated<br>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



### 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:                  | EN60529:1992+A2:2013 tested @<br>1.054kg/sq.cm. (15lb/sq.in.) 10m depth for<br>2 weeks                                                                                                                                                                                                                                        |
| Salt Mist:                | EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine<br>Severity Level 1                                                                                                                                                                                                                                                            |
| Cable Acceptance:         | PX0911-PX0921 13 - 15mm O/D standard,<br>7-13mm with gland pack<br>PXA911-PXA921 20 - 22mm O/D standard,<br>14 - 20mm with gland pack                                                                                                                                                                                         |
| Contact Accommodation:    | 2-7 pole - 2.5 to 4mm <sup>2</sup> (13 to 10AWG)<br>conductor, single or multi stranded<br>10 pole - 0.75 to 2mm <sup>2</sup> (14 to 18AWG)<br>conductor, single or multi stranded                                                                                                                                            |
| Termination:              | Axial screw terminals                                                                                                                                                                                                                                                                                                         |
| Cable Retention force:    | 22mm dia, 150N<br>15mm dia, 150N<br>7mm dia, 80N                                                                                                                                                                                                                                                                              |
| Gland Nut Torques:        | PX0 range<br>13-15mm (Yellow - std.) 3.16Nm (28 lbf.in.)<br>11-13mm (black) 3.16Nm (28 lbf.in.)<br>7-9mm (dark grey) 3.16Nm (28 lbf.in.)<br>PXA range<br>20-22mm (Yellow - std.) 3.16Nm (28 lbf.in.)<br>18-20mm (black) 3.16Nm (28 lbf.in.)<br>16-18mm (white) 3.16Nm (28 lbf.in.)<br>14-16mm (dark grey) 3.16Nm (28 lbf.in.) |
| Tightening Torques:       | Panel mount nut 2.25Nm (20 lbf.in.)<br>Flange & Bulkhead<br>fixing screws 0.9Nm (8 lbf.in.)<br>Inserts into Bodies 1.13Nm (10 lbf.in.) to 1.36Nm (12 lbf.in.)<br>Term screws - 2 to 5 poles 1.0Nm (9 lbf.in.) max<br>Term screws - 7 pole 0.4Nm (3.5 lbf.in.) max<br>Term screws - 10 pole 0.25Nm (2.2 lbf.in.) max           |
| Rear thread PX0931 series | M36 x 2-6g                                                                                                                                                                                                                                                                                                                    |

BUCCANEER FOR POWER  
900 Series Buccaneer

Part No System



| PX X9                                                                                                                                                  | X                                                             | X                   | / | XX                                                                                      | / | X                    | / | XX                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------|---|-----------------------------------------------------------------------------------------|---|----------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Series Designation                                                                                                                                     | Body Styles                                                   | Contact Termination |   | Number Contacts                                                                         |   | Contact Type         |   | Cable Acceptance                                                                                                                                                                                                                                                                                                                                                                                      |
| 09 = Standard Cable Accommodation (7-13mm)<br><br>A9 = Large Cable Accommodation (14-22mm)                                                             | 1 = Flex<br>2 = Flex In-line<br>3 = Panel<br>4 = Flange Panel | 1 = Screw Terminal  |   | 02 = 2 pole<br>03 = 3 pole<br>04 = 4 pole<br>05 = 5 pole<br>07 = 7 pole<br>10 = 10 pole |   | P = Plug, S = Socket |   | <b>EXP-0 version:</b><br>Blank = 13-15mm<br>Yellow cable gland (std)<br><br>3 = 11-13mm<br>Black cable gland<br><br>2 = 9-11mm<br>White cable gland<br><br>1 = 7-9mm<br>Dark Grey cable gland<br><br><b>EXP-A version:</b><br>Blank = 20-22mm<br>Yellow cable gland (std)<br><br>9 = 18-20mm<br>Black cable gland<br><br>8 = 16-18mm<br>White cable gland<br><br>7 = 14-16mm<br>Dark Grey cable gland |
| <b>Example:</b><br>PX0911/07/P/03 = Flex cable connector with standard cable accommodation body, seven pin contacts, with gland to suit 11-13mm cable. |                                                               |                     |   |                                                                                         |   |                      |   |                                                                                                                                                                                                                                                                                                                                                                                                       |



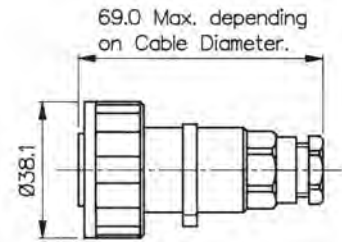
- ⬡ IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks and 9.84kg/sq cm (140lb/sq in) 100m depth for 12 hours
- ⬡ Water and dustproof to IP68 when mated
- ⬡ 2, 3, 4, 6, 7, 9, 12 and 25 pole
- ⬡ 12A, 277V ac/dc 2 pole screw terminal, 3 pole screw terminal and crimp contacts
- ⬡ 10A, 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



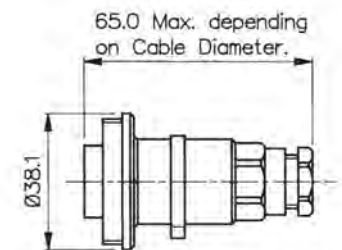
| Poles | Termination  | Pin Contacts | Socket Contact | Contacts         |
|-------|--------------|--------------|----------------|------------------|
| 2     | Screw        | PX0736/P     | PX0736/S       | Supplied Fitted  |
| 3     | Screw        | PX0731/P     | PX0731/S       | Supplied Fitted  |
| 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 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



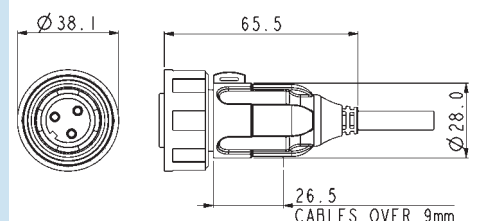
| Poles | Termination  | Pin Contacts | Socket Contact | Contacts         |
|-------|--------------|--------------|----------------|------------------|
| 2     | Screw        | PX0737/P     | PX0737/S       | Supplied Fitted  |
| 3     | Screw        | PX0732/P     | PX0732/S       | Supplied Fitted  |
| 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

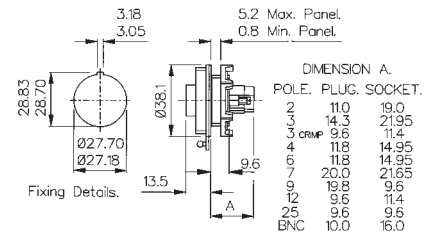


Front Panel Mounting Connector



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



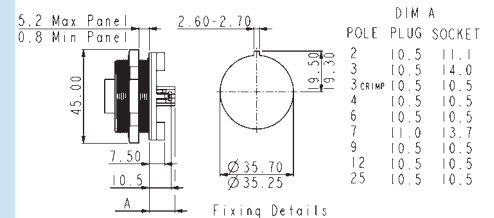
| Poles | Termination  | Pin Contacts | Socket Contact | Contacts         |
|-------|--------------|--------------|----------------|------------------|
| 2     | Screw        | PX0735/P     | PX0735/S       | Supplied Fitted  |
| 3     | Screw        | PX0730/P     | PX0730/S       | Supplied Fitted  |
| 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 |

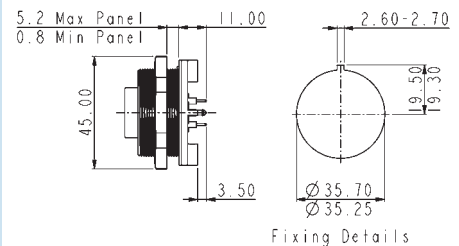


PCB Mounting Connector



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



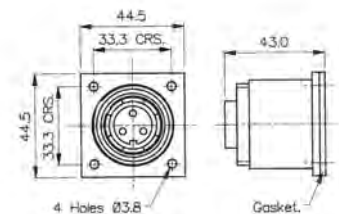
| Poles | Termination | Pin Contacts | Socket Contact | Contacts        |
|-------|-------------|--------------|----------------|-----------------|
| 3     | PCB         | PX0707/P/03  | PX0707/S/03    | Supplied Fitted |
| 4     | PCB         | PX0707/P/04  | PX0707/S/04    | Supplied Fitted |
| 6     | 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



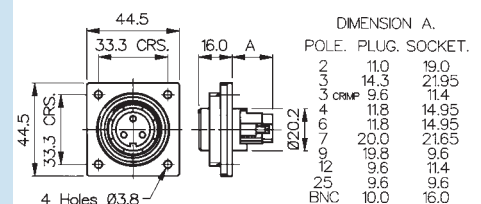
| Poles | Termination  | Pin Contacts | Socket Contact | Contacts         |
|-------|--------------|--------------|----------------|------------------|
| 2     | Screw        | PX0757/P     | PX0757/S       | Supplied Fitted  |
| 3     | Screw        | PX0756/P     | PX0756/S       | Supplied Fitted  |
| 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)<br>(Supplied in packs of 10) | Solder    | Crimp  |
|-----------------------------------------------------|-----------|--------|
| Pins                                                | SA3180/1  | SA3180 |
| Sockets                                             | SA 3179/1 | SA3179 |
| Contacts (for 12 pole)<br>(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      |
| 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

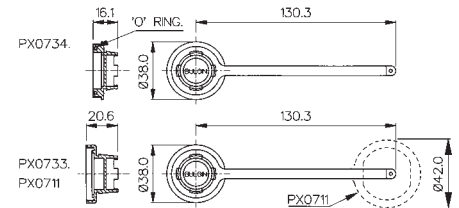
| No. Contacts | Cable Diameter or Type |
|--------------|------------------------|
| 2-12 Pole    | 6-8mm                  |
| 25 Pole      | 7-9mm                  |

#### 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

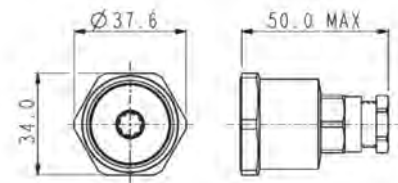


#### Rear of Panel Back Shell



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



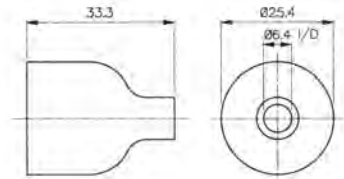
#### PVC Insulation Boot



PNo. 12855

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

12855 for panel mounting types only.



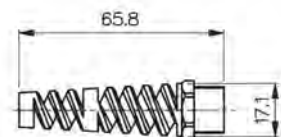
#### Cable Support Accessory



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.



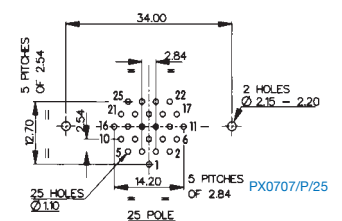
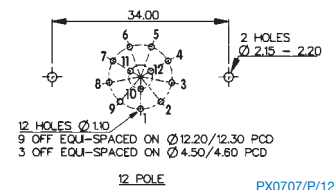
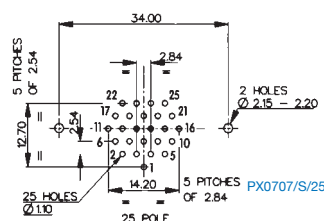
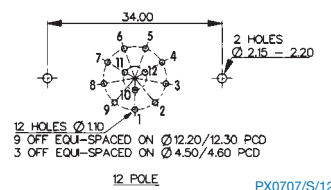
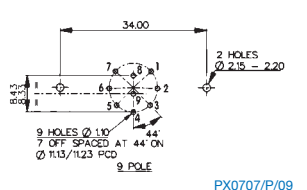
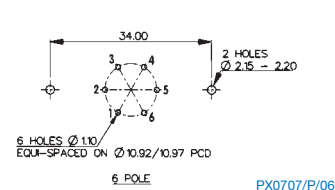
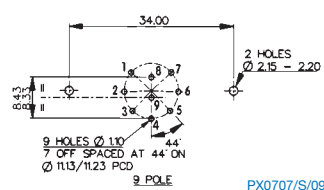
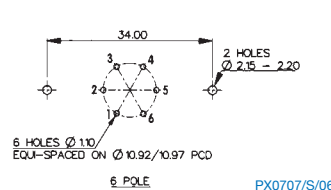
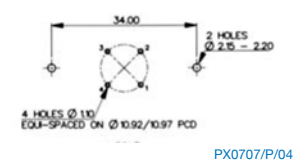
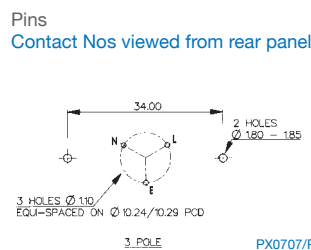
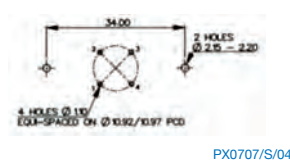
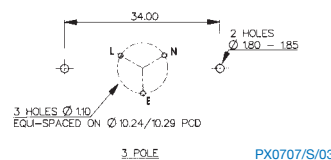
| PX0xxx      | X                     | XX                                                                                                                                                                                                                                                                  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

### 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



## 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)<br><5mΩ (12 Pole)<br><5mΩ (25 Pole) |      |      |      |     |     |

|                        |                                                                                                                                                 |  |  |  |  |  |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Insulation Resistance: | >10 <sup>4</sup> MΩ @ 500V d.c. (2-9 Pole)                                                                                                      |  |  |  |  |  |
| AC Breakdown voltage:  | 4kV Pole - Pole (2-9 Pole)<br>6kV Poles - Panel (Low Profile Flange and Panel Types - 2-9 Pole)<br>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<br>2011010203500393 - 5 Amp Rated<br>2011010203500394 - 10 Amp Rated<br>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: | IP68, EN 60529:1992+A2:2013<br>Tested @ 1.054kg/sq.cm. (15lb/sq.in.)<br>10m depth for 2 weeks.<br>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: | 4mm <sup>2</sup> (12AWG) max          |
| 3 pole crimp:                 | 1.0-1.5mm <sup>2</sup> (14-18AWG) max |
| 4, 6 and 7 pole:              | 1.5mm <sup>2</sup> (16AWG) max        |
| 9 pole:                       | 0.12-0.21mm <sup>2</sup> (24-26AWG)   |
| 12 pole:                      | 0.32mm <sup>2</sup> (22-26AWG) max    |
| 25 pole:                      | 0.12-0.21mm <sup>2</sup> (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.)<br>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.)                                         |

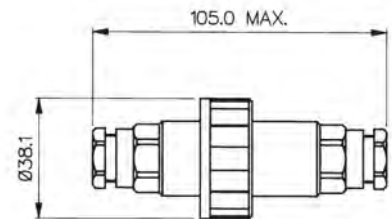
|                                     |              |
|-------------------------------------|--------------|
| Rear thread, Front Panel Connector: | M27 x 1.0-6H |
| Thread, Front Panel Connector:      | M35 x 1.0-6H |

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

#### 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<br>4POLE = 4 Pole<br>6POLE = 6 Pole<br>8POLE = 8 Pole | Blank = 6-8mm<br>04 = 3.5-5mm<br>05 = 5-7mm<br>07 = 7-9mm | Blank = Black<br>OR = Orange |





- ⬡ 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 contact on all types (except 2 pole)
- ⬡ Compact design
- ⬡ Easy assembly - no special tools required on screw terminal versions
- ⬡ UL approval

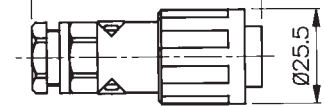
Flex Cable Connector



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

61.5 Max. Depending on Cable Dia. / Pin or Socket Carrier.



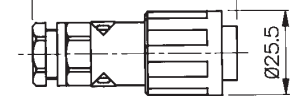
Inline Flex Cable Connector



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

61.5 Max. Depending on Cable Dia. / Pin or Socket Carrier.



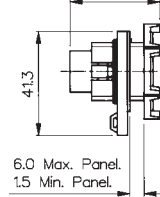
Panel Mounting



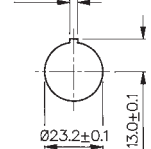
PX0802 - shown with insert

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

37.0 Max. Depending on Pin or Socket Carrier.



3.2 $\frac{+0.1}{-0.1}$



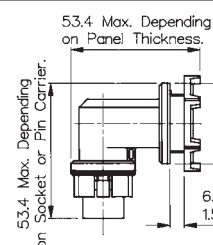
Fixing Details.

Panel Mounting

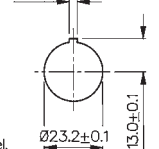


PX0803 - shown with insert

- 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



3.2 $\frac{+0.1}{-0.1}$



Fixing Details.

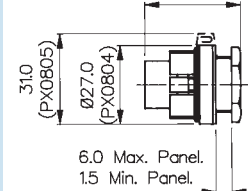
Panel Mounting



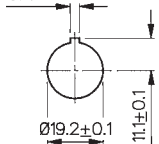
PX0805 - shown with insert

- 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

32.8 Max. Depending on Pin or Socket Carrier.



3.2 $\frac{+0.1}{-0.1}$



Fixing Details.

#### 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:<br>Must be used to load contacts into inserts. | SA3150   |        |
| Crimping Tool                                                          | SA2800   |        |

#### BNC Insert Kit



Inserts shown assembled

- BNC inserts for 50Ω and 75Ω co-ax cables
- Includes gland and washer to suit coax cable
- Fits all Body Styles (except PX0803)

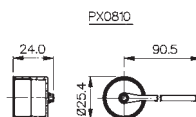
#### BNC Inserts - fit all body styles except PX0803

| Imp | Cable Type            | Contacts | Part No  |
|-----|-----------------------|----------|----------|
| 50Ω | RG58/CU, URM43, URM76 | Plug     | SA3159/1 |
| 50Ω | RG58/CU, URM43, URM76 | Socket   | SA3157/1 |
| 75Ω | URM70                 | Plug     | SA3159   |
| 75Ω | URM70                 | Socket   | SA3157   |

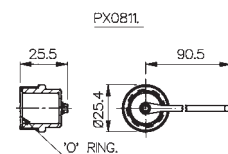
#### Sealing Caps



To maintain IP rating



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



PX0811  
Fits PX0800. Ensure "O" Ring is in place in cap.

| Electrical                                                                               | Solder/Crimp Terminals          | Screw Terminals | BNC     |
|------------------------------------------------------------------------------------------|---------------------------------|-----------------|---------|
| No Poles:                                                                                | 3, 8                            | 2, 3            | 6       |
| Current Rating:                                                                          | 5A                              | 10A             | 3A      |
| Voltage Rating:                                                                          | 380V ac                         | 250V ac         | 250V ac |
| Contact Resistance:                                                                      | <5mΩ                            |                 |         |
| Insulation Resistance:                                                                   | >10 <sup>6</sup> MΩ @ 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                                     |                      |                       |
| <b>RoHS</b>     | 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.)<br>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<br>3.5-9.00mm dia - alternative glands                                                  |                                                                 |                               |
| Contact Accommodation:           | 0.2 - 0.5mm <sup>2</sup> (20 - 24 AWG)                                                                                | 1mm <sup>2</sup> max (18 AWG)                                   | 50Ω: RG58/CU,<br>URM43, URM76 |
| Insertion Force (typical):       | 3 way: 5N (1.1lbf)<br>8 way: 14N (3.1lbf)                                                                             | 3 way: 45N (10lbf)<br>4 way: 50N (11lbf)<br>6 way: 140N (31lbf) | 75Ω: URM70                    |
| Withdrawal Force (typical):      | 3 way: 3N (0.66lbf)<br>8 way: 12N (2.6lbf)                                                                            | 3 way: 32N (7lbf)<br>4 way: 40N (9lbf)<br>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                                                                       |                                                                                                                         | Cable Glands                                                                                                                                                                                                     |                |                                                            |                    |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------|--------------------|
|  | Choose body type, check cable diameter and sealing gland size.                                                          | Cable gland for 5-7mm fitted as standard.<br>BNC Insert Kit includes gland & washer to fit coax cable.                                                                                                           |                |                                                            |                    |
|  | 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.                              | Cable Diameter                                                                                                                                                                                                   | Gland Part No. | Gland Colour                                               | Additional Suffix  |
|  | Choose polarising/blanking pins. If required for solder/crimp contact inserts. Supplied in packs of ten.                | 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         |
|  | Is an insertion tool required (for solder or crimp contacts)?                                                           | Gland Pack                                                                                                                                                                                                       | PX0812         | Pack of 3 glands to suit cables 3.5-5mm, 6-8mm, 7-9mm dia† |                    |
|  | Is a crimp tool required?                                                                                               |                                                                                                                                                                                                                  |                |                                                            |                    |
|  | Is a sealing cap required?                                                                                              | 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.<br>†Includes additional black gland cage for 3.5-5mm dia. cable range. |                |                                                            |                    |



- ⬢ Sealed to IP68 when mated
- ⬢ IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- ⬢ 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

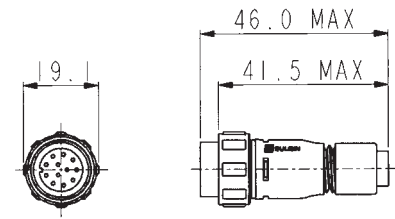


Flex Cable Connector



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

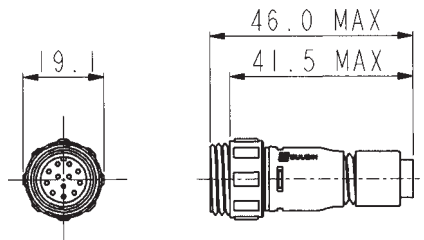


Inline Flex Cable Connector



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

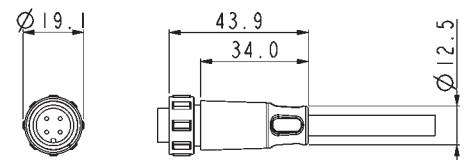


Pre Wired Flex Cable Connector



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

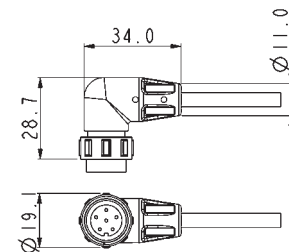


Pre Wired Flex Cable Connector



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

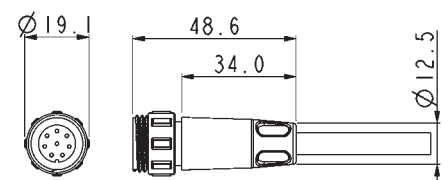


Pre Wired Inline Flex Connector



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



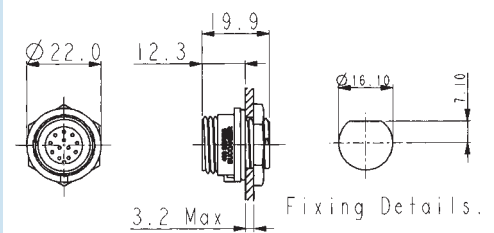


#### Front Panel Mounting Connector



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

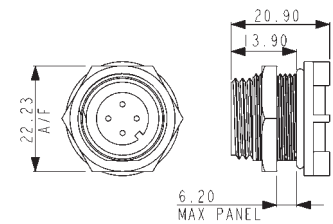


#### Rear Panel Mounting Connector



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

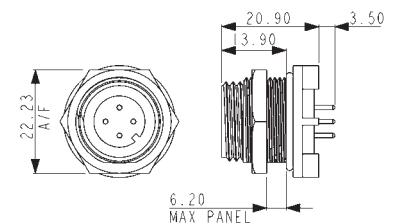


#### PCB Mounting Connector



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   |

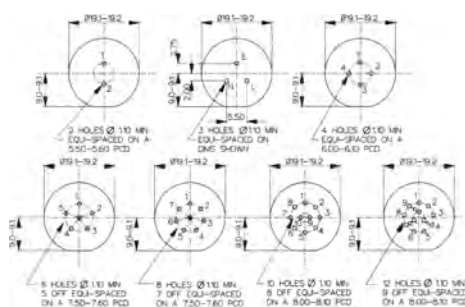
#### Crimp tools

|                                              | 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

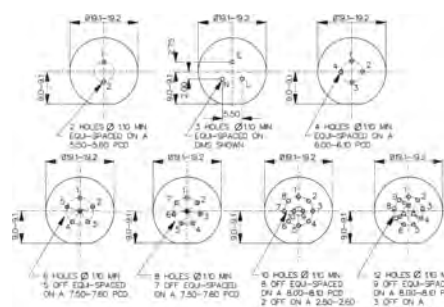
##### Sockets

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 <sup>9</sup> MΩ (@ 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                   |
|  | Compliant                 |

#### Mechanical:

|                             |                                                                                      |
|-----------------------------|--------------------------------------------------------------------------------------|
| Sealing:                    | 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<br>4, 6, 8 pole, 22 - 26 AWG<br>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 |

| PX04 xx                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | / | XX                                                                                                                                         | X                                                               | / | XXXX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Body Styles</b><br><br><b>PX0410</b> = Flex body<br><b>PX0411</b> = Flex in-line body<br><b>PX0412</b> = Front panel mounting body<br><b>PX0413</b> = Rear panel/PCB mounting body                                                                                                                                                                                                                                                                                                                    |   | <b>Number Contacts</b><br><br>02 = 2 pole,<br>03 = 3 pole,<br>04 = 4 pole,<br>06 = 6 pole<br>08 = 8 pole,<br>10 = 10 pole,<br>12 = 12 pole | <b>Contact Type</b><br><br><b>P</b> = Pin,<br><b>S</b> = Socket |   | <b>For PX0410 and PX0411 cable connectors</b><br><b>- Cable Entry Size:</b><br><br><b>3035</b> = 3.0 - 3.5mm (Light Grey)<br><b>3540</b> = 3.5 - 4.0mm (Grey)<br><b>4045</b> = 4.0 - 4.5mm (Green)<br><b>4550</b> = 4.5 - 5.0mm (Red)<br><br><b>5055</b> = 5.0 - 5.5mm (Yellow)<br><b>5560</b> = 5.5 - 6.0mm (Blue)<br><b>6065</b> = 6.0 - 6.5mm (White)<br><b>6570</b> = 6.5 - 7.0mm (Black)<br><br>Cable gland and collet supplied in colour coded pairs.<br><br>For PX0413 PCB/Rear Panel Mount:<br>PC = Pre-loaded PC pins<br>Blank = no pins supplied<br><br>For PX0412 Front Panel Mount:<br>Suffix not required - leave blank |
| <b>Examples:</b><br><br><b>PX0410/10S/4045</b> = Flex cable connector, 10 socket contacts with gland and collet for cables between 4.0 and 4.5mm diameter (supplied less contacts).<br><b>PX0412/08P</b> = Front panel mounting connector, 8 pin contacts (supplied less contacts).<br><b>PX0413/06P</b> = Rear panel mounting connector, for 6 pin contacts (supplied less contacts).<br><b>PX0413/04P/PC</b> = Rear panel/PCB connector, 4 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.

- **Push/Pull mechanism**  
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**



# BUCCANEER FOR POWER

## 6000 Series Buccaneer

Thermo Plastic

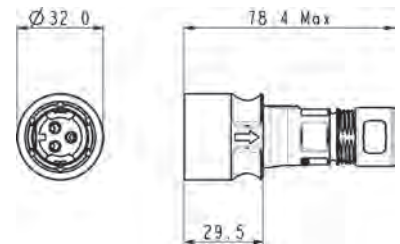


### Flex Cable Connector



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



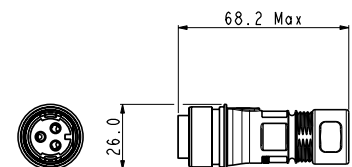
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts          |
|-------|----------------|----------------|-----------------|-------------------|
| 2     | Screw          | PXP6010/02P/ST | PXP6010/02S/ST  | Supplied Fitted   |
| 2     | Crimp / Solder | PXP6010/02P/CR | PXP6010/02S/CR  | 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



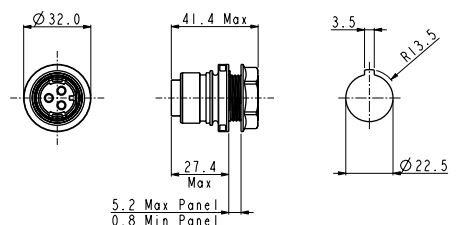
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts          |
|-------|----------------|----------------|-----------------|-------------------|
| 2     | Screw          | PXP6011/02P/ST | PXP6011/02S/ST  | Supplied Fitted   |
| 2     | Crimp / Solder | PXP6011/02P/CR | PXP6011/02S/CR  | 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 |

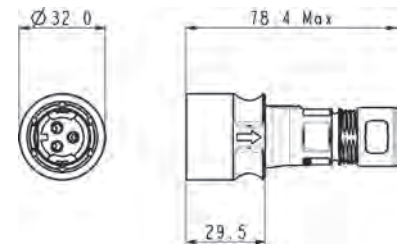


#### Flex Cable Connector



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



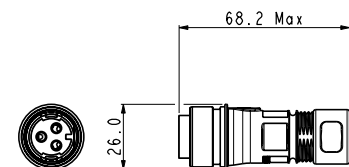
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts          |
|-------|----------------|----------------|-----------------|-------------------|
| 2     | Screw          | PXM6010/02P/ST | PXM6010/02S/ST  | Supplied Fitted   |
| 2     | Crimp / Solder | PXM6010/02P/CR | PXM6010/02S/CR  | 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



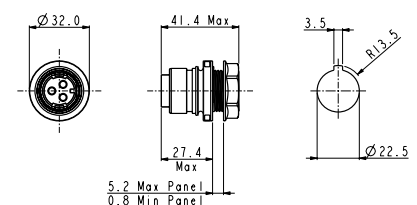
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts          |
|-------|----------------|----------------|-----------------|-------------------|
| 2     | Screw          | PXM6011/02P/ST | PXM6011/02S/ST  | Supplied Fitted   |
| 2     | Crimp / Solder | PXM6011/02P/CR | PXM6011/02S/CR  | 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 |

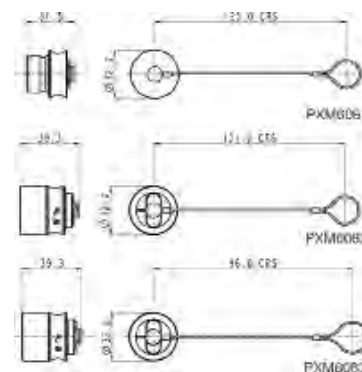
|                                                                                                                                                                               |                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Crimp / Solder Contacts</div> <div></div> <div>2, 3, 8, 16 &amp; 22 pole contacts</div> | <div><div><div>○</div><div>Gold Plated</div></div><div><div>○</div><div>Current ratings:<br/>2 &amp; 3 pole : 16A<br/>8 pole : 10A<br/>16 pole : 3A<br/>22 pole : 2A</div></div></div> | <div><div>Contacts (for 2 &amp; 3 pole)<br/>(Supplied in packs of 10)</div><div><div>Pins</div><div>Sockets</div></div><div><div>Crimp</div><div>Solder</div></div><div><div>SA3545/P</div><div>SA3624/P</div></div><div><div>SA3545/S</div><div>SA3624/S</div></div></div> <div><div>Contacts (for 8 pole)<br/>(Supplied in packs of 10)</div><div><div>Pins</div><div>Sockets</div></div><div><div>Crimp</div><div>Solder</div></div><div><div>SA3544/P</div><div>SA3623/P</div></div><div><div>SA3544/S</div><div>SA3623/S</div></div></div> <div><div>Contacts (for 16 &amp; 22 pole)<br/>(Supplied in packs of 10)</div><div><div>Pins</div><div>Sockets</div></div><div><div>Crimp</div><div>Solder</div></div><div><div>SA3542/P</div><div>SA3622/P</div></div><div><div>SA3542/S</div><div>SA3622/S</div></div></div> |
| <div>Crimp Tooling</div> <div></div> <div>PNo 14232</div>                                    | <div><div><div>○</div><div>Crimp Tools for 2, 3, 8, 16<br/>and 22 pole crimp contacts</div></div></div>                                                                                | <div><div>Crimp Tooling</div><div><div>Crimp Tool (2 &amp; 3 pole)</div><div>Positioner (2 &amp; 3 pole)</div><div>Crimp Tool (8, 16 &amp; 22 pole)</div><div>Positioner (8 pole)</div><div>Positioner (16 &amp; 22 pole)</div></div><div><div>PNo.14232</div><div>PNo.14232/2/SP</div><div>PNo.14025</div><div>PNo.15021/SP</div><div>PNo.15019/SP</div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <div>Extraction Tool</div> <div></div>                                                     | <div><div><div>○</div><div>Extraction Tool for 2, 3, 8, 16<br/>and 22 pole contacts</div></div></div>                                                                                  | <div><div>Extraction Tools</div><div><div>Extraction Tool<br/>(2 &amp; 3 pole)</div><div>Extraction Tool<br/>(8 pole)</div><div>Extraction Tool<br/>(16 &amp; 22 pole)</div></div><div><div>PNo.14946/SP</div><div>PNo.14945/SP</div><div>PNo.14944/SP</div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <div>Contact Carrier Removal Tool</div> <div></div> <div>PNo 14917</div>                   | <div><div><div>○</div><div>For removal of all contact<br/>carriers</div></div></div>                                                                                                   | <div><div>Tools</div><div><div>Contact carrier removal tool<br/>(all poles)</div></div><div><div>PNo. 14917/SP</div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

#### 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)



#### 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

| 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<br>PXP= Plastic Series | Body Styles<br>6010 = Flex<br>6011 = Flex In-Line<br>6012 = Panel | No. of Contacts<br>02 = 2 Pole<br>03 = 3 Pole<br>08 = 8 Pole<br>16 = 16 Pole<br>22 = 22 Pole | Contacts Type<br>P = Pin<br>S = Socket | Contacts Termination<br>CR = Contacts Required<br>ST = Screw<br>(2 and 3 pole only) | Cable Entry Size<br>(for Flex and Flex In-Line connectors only)<br><br>0405 = 4-5mm (Dark Grey)<br><br>0507 = 5-7mm (White)<br><br>0709 = 7-9mm (Yellow)<br><br>0910 = 9-10mm (Light Grey) | Cable Braid Termination Accessory<br>(for Flex and Flex In-Line connectors only)<br>SN if required<br>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:<br>See de-rating curves for<br>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<br>AWG                    | 18<br>AWG | 18<br>AWG | 22<br>AWG | 26<br>AWG |
| Contact Resistance:                                                                              | <10mΩ                        |           |           |           |           |
| Insulation Resistance:                                                                           | >10 <sup>9</sup> MΩ @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<br>Patent applied for                                                                |
| Sealing:                                  | IP66 to En60529:1992+A2:2013<br>IP68 to En60529:1992+A2:2013 (10m depth<br>for 2 weeks)<br>IP69k to DIN 40050-9 |
| Salt Mist (plastic) :                     | EN60068-2-52 Test Kb Salt Mist (Cyclic)<br>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                | 1.5mm <sup>2</sup> 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<br>(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 (15lb.in.)                                                                                                |
| Panel Nut Thread:                         | M22 x 1.5-6g                                                                                                    |
| Dimensions:                               |                                                                                                                 |
| Diameter: (over coupling ring)            | 32mm                                                                                                            |
| Diameter: (panel hole cut-out)            | 22.5mm                                                                                                          |

## Materials:

### Plastic

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

### Metal

|                      |                                                                    |
|----------------------|--------------------------------------------------------------------|
| Body:                | Brass                                                              |
| Colour:              | Matt silver                                                        |
| Contacts:            | Brass, Nickel Plate (Screw and<br>Crimp) Brass, (3A – Gold plated) |
| O Rings & Gaskets:   | Silicone                                                           |
| Flammability Rating: | -                                                                  |
| Halogen free         | -                                                                  |
| UV Resistance:       | -                                                                  |
|                      | Compliant                                                          |

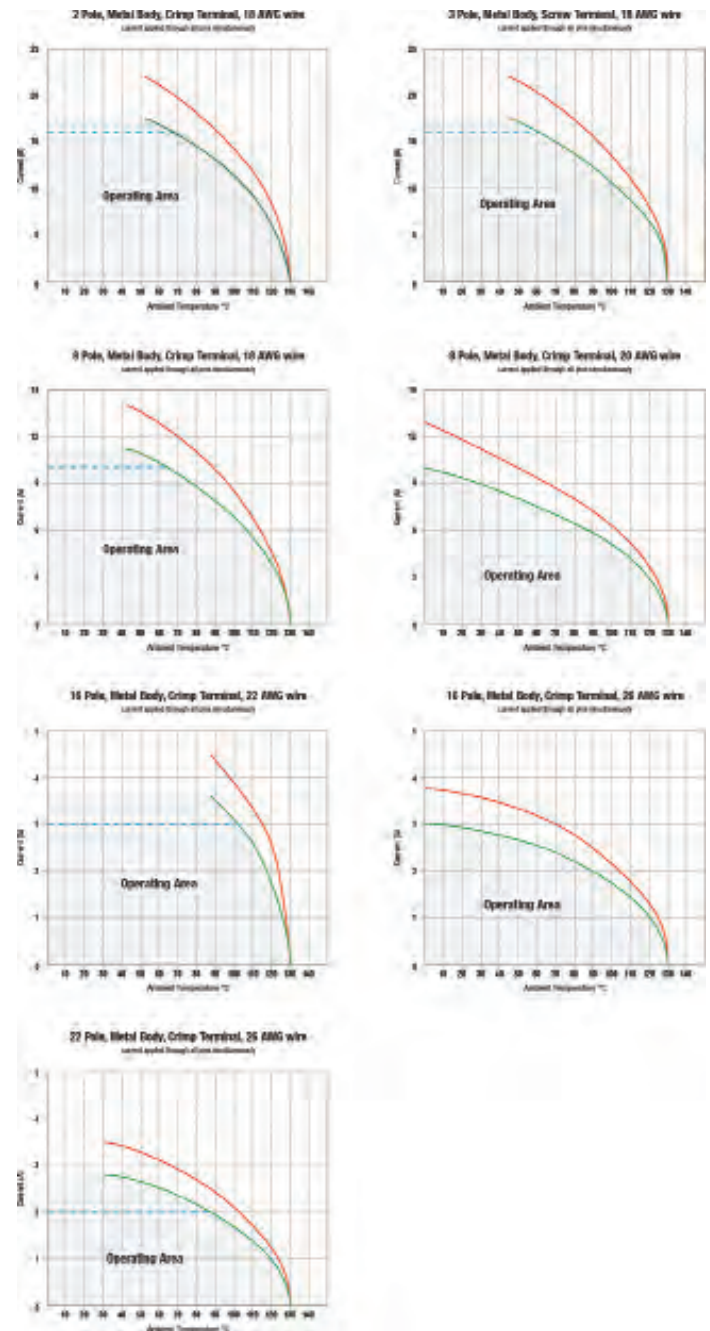
The thermal properties of the materials used in the construction of a connector limit the current carrying capacity. There are a number of factors that determine the amount of current that can be handled: contact spacing, size of cable, ambient temperature and the heat that is generated by the current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





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

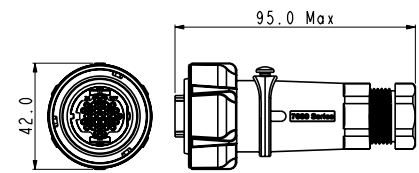


#### Flex Cable Connector



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



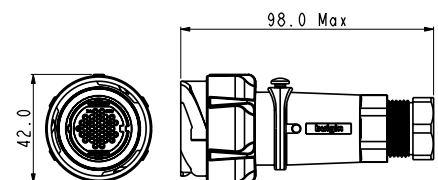
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts         |
|-------|----------------|----------------|-----------------|------------------|
| 2     | Screw          | PXP7010/02P/ST | PXP7010/02S/ST  | Supplied Fitted  |
| 3     | Screw          | PXP7010/03P/ST | PXP7010/03S/ST  | 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



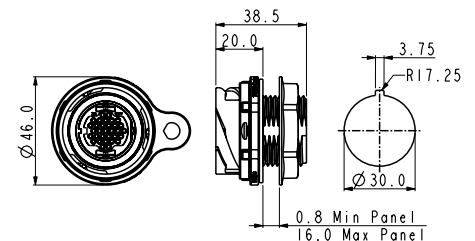
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts         |
|-------|----------------|----------------|-----------------|------------------|
| 2     | Screw          | PXP7011/02P/ST | PXP7011/02S/ST  | Supplied Fitted  |
| 3     | Screw          | PXP7011/03P/ST | PXP7011/03S/ST  | 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



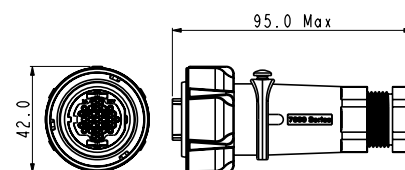
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts         |
|-------|----------------|----------------|-----------------|------------------|
| 2     | Screw          | PXP7012/02P/ST | PXP7012/02S/ST  | Supplied Fitted  |
| 3     | Screw          | PXP7012/03P/ST | PXP7012/03S/ST  | 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



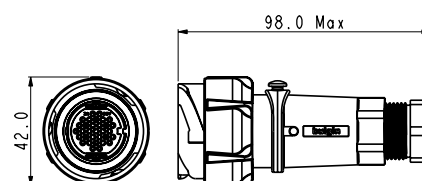
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts         |
|-------|----------------|----------------|-----------------|------------------|
| 2     | Screw          | PXM7010/02P/ST | PXM7010/02S/ST  | Supplied Fitted  |
| 3     | Screw          | PXM7010/03P/ST | PXM7010/03S/ST  | 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



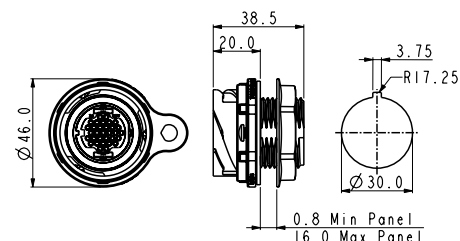
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts         |
|-------|----------------|----------------|-----------------|------------------|
| 2     | Screw          | PXM7011/02P/ST | PXM7011/02S/ST  | Supplied Fitted  |
| 3     | Screw          | PXM7011/03P/ST | PXM7011/03S/ST  | 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 |

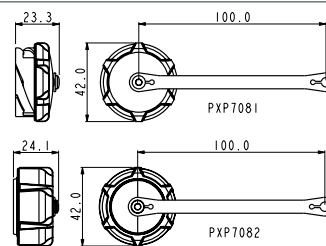
|                                                                                                                                                                      |                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Crimp / Solder Contacts</div> <div></div> <div>10 &amp; 32 pole contacts</div> | <div><div><div></div><div>Gold Plated</div></div><div><div></div><div>Current ratings:<br/>10 pole: 10A<br/>32 pole: 2A</div></div></div> | <div><div>Contacts (for 10 pole)<br/>(Supplied in packs of 10)</div><div><div>Pins</div><div>Sockets</div></div><div><div>Crimp</div><div>SA3544/P<br/>SA3544/S</div><div>Solder</div><div>SA3623/P<br/>SA3623/S</div></div></div> <div><div>Contacts (for 32 pole)<br/>(Supplied in packs of 10)</div><div><div>Pins</div><div>Sockets</div></div><div><div>Crimp</div><div>SA3542/P<br/>SA3542/S</div><div>Solder</div><div>SA3622/P<br/>SA3622/S</div></div></div> |
| <div>Crimp Tooling</div> <div></div> <div>PNo 14025</div>                           | <div><div><div></div><div>Crimp Tools for 10 and 32 pole crimp contacts</div></div></div>                                                 | <div><div>Crimp Tooling</div><div><div>Crimp Tool (10 &amp; 32 pole)<br/>Positioner (10 pole)<br/>Positioner (32 pole)</div><div><div>PNo. 14025<br/>PNo. 15021/SP<br/>PNo. 15019/SP</div></div></div></div>                                                                                                                                                                                                                                                          |
| <div>Extraction Tools</div> <div></div> <div>PNo 14944/SP    PNo 14945/SP</div>   | <div><div><div></div><div>Extraction tool for 10 and 32 pole contacts</div></div></div>                                                   | <div><div>Extraction Tools</div><div><div>Extraction tool (10 pole)<br/>Extraction tool (32 pole)</div><div><div>PNo. 14945/SP<br/>PNo. 14944/SP</div></div></div></div>                                                                                                                                                                                                                                                                                              |
| <div>Contact Carrier Removal Tool</div> <div></div> <div>PNo 15065/SP</div>       | <div><div><div></div><div>For removal of all contact carriers</div></div></div>                                                           | <div><div>Contact Carrier Removal Tool</div><div><div>Contact carrier removal tool (all poles)</div><div><div>PNo. 15065/SP</div></div></div></div>                                                                                                                                                                                                                                                                                                                   |
| <div>Cable Braid Termination Option</div> <div></div> <div>PXM7090</div>          | <div><div><div></div><div>For cable braid termination</div></div><div><div></div><div>Supplied with ty-rap</div></div></div>              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

#### 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)

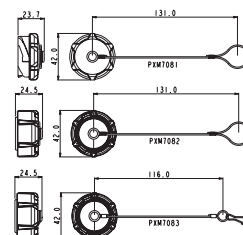


#### Sealing Caps



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                       | Series / Body Style                                | No. of Contacts                                                           | Contacts Type         | Terminations                                                                                  | Cable Entry Size                                                                                                                                                                                      | Cable Brand Termination Accessory                                                              |   |      |   |    |
| PXM= Metal Series<br>PXP= Plastic Series | 7010 = Flex<br>7011 = Flex In-Line<br>7012 = Panel | 02 = 2 Pole<br>03 = 3 Pole<br>06 = 6 Pole<br>10 = 10 Pole<br>32 = 32 Pole | P = Pin<br>S = Socket | ST = Screw Terminal<br>(2, 3, & 6 pole only)<br>CR = Contacts<br>Required (10 & 32 pole only) | (for Flex and Flex In-Line connectors only)<br>0507 = 5-7mm (grey)<br><br>0709 = 7-9mm (white)<br><br>0911 = 9-11mm (black)<br><br>1113 = 11 to 13 mm (yellow)<br><br>1315 = 13 to 15 mm (light grey) | (for Flex and Flex In-Line connectors only)<br><br>SN - If requires<br>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 <sup>6</sup> MΩ @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<br>IP68 to EN60529:1992+A2:2013<br>(10m depth for 2 weeks)<br>IP69k to DIN 40050-9 |
| Salt Mist (plastic):                      | EN60068-2-52 Test Kb Salt Mist (Cyclic)<br>Marine Severity Level 1                                              |
| Salt Mist (metal):                        | EN60068-2-11 Test Ka Salt Mist                                                                                  |
| Contact Accommodation:                    |                                                                                                                 |
| 2 & 3 pole screw terminals                | 6.0mm <sup>2</sup> max                                                                                          |
| 6 pole screw                              | 1.00mm <sup>2</sup> max                                                                                         |
| 10 pole crimp / solder                    | 18 to 20AWG                                                                                                     |
| 32 pole crimp / solder                    | 22 to 26AWG                                                                                                     |
| Cable Acceptance:                         | 5-15mm dia.                                                                                                     |
| Cable retention force<br>(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

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

### Metal

|                                                                 |
|-----------------------------------------------------------------|
| Cast zinc alloy, nickel plated                                  |
| Matt silver                                                     |
| Brass, Nickel Plate (Screw and Crimp) Brass, (3A – Gold plated) |

## 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.

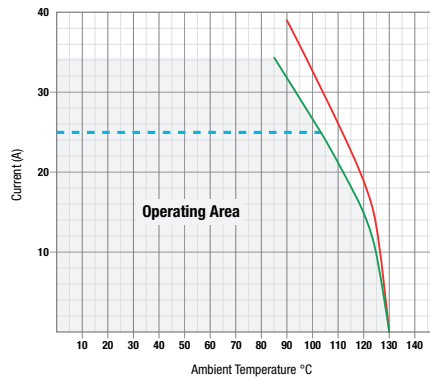
The red line indicates the direct correlation between current applied and the measured temperature rise within the connector. The dotted blue line shows rated current and the green line is derived by applying a factor of 0.8 to the original plot data to give a de-rating curve. The dashed blue line shows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

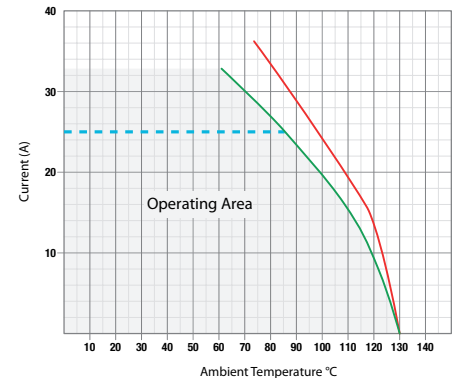
**7000 Series Current vs. Temperature Characteristics**

2 Pole, Plastic Body, Screw Terminal, 6.0mm<sup>2</sup> wire  
 current applied through all pins simultaneously



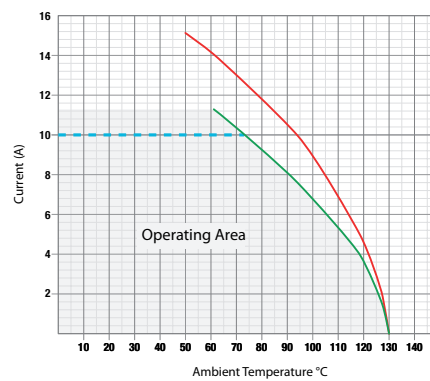
**7000 Series Current vs. Temperature Characteristics**

3 Pole, Plastic Body, Screw Terminal, 4.0mm<sup>2</sup> wire  
 current applied through all pins simultaneously



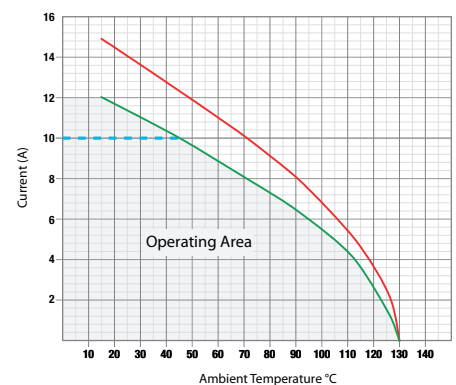
**7000 Series Current vs. Temperature Characteristics**

6 Pole, Plastic Body, Screw Terminal, 1.0mm<sup>2</sup> wire  
 current applied through all pins simultaneously



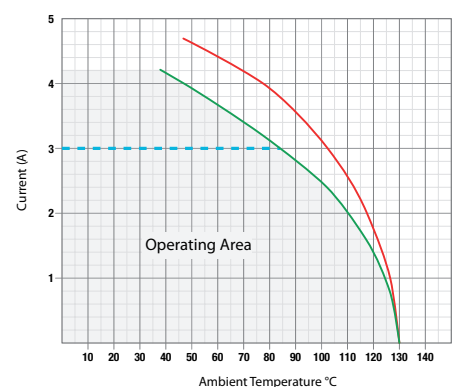
**7000 Series Current vs. Temperature Characteristics**

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



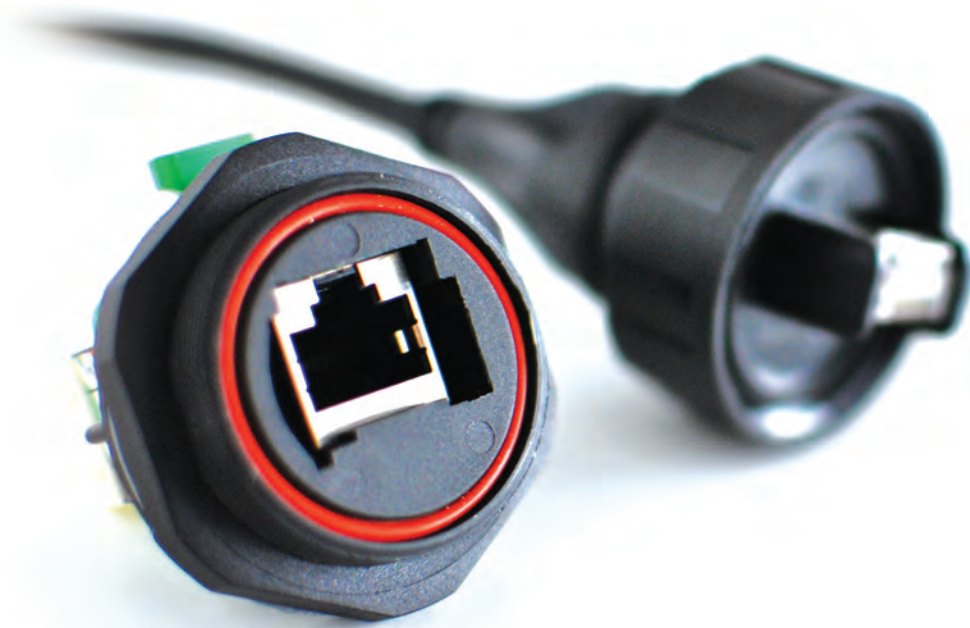
A full range of **IP68** rated environmentally **sealed circular connectors** designed to provide secure and safe connections in harsh or hostile conditions.

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 100Mbps, USB Buccaneer is designed to meet USB version 2.0 specification for data rates up to 480Mbps, 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    | 56-61 |
| Standard Buccaneer - USB         | 62-67 |
| 400 Series - Mini USB Buccaneer  | 68-72 |
| 400 Series - SMB Buccaneer       | 73-75 |
| 400 Series - Wireless Buccaneer  | 76-82 |
| 6000 Series Buccaneer - USB      | 83-88 |
| 6000 Series Buccaneer - Ethernet | 89-93 |



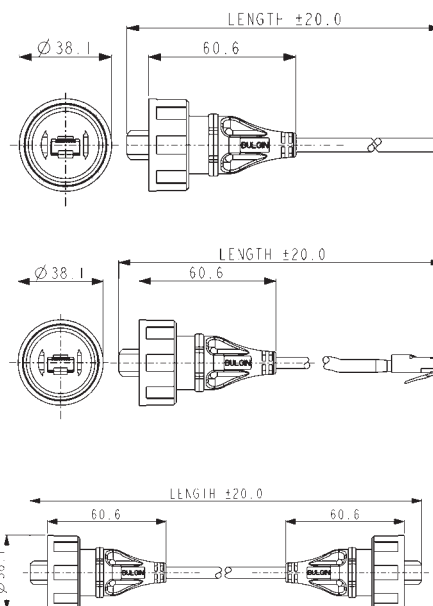
- ⬢ IP68 rated
- ⬢ Cat 5e compliant
- ⬢ PUR jacket on cable
- ⬢ Shielded system
- ⬢ Cat 5e shielded coupler
- ⬢ Shroud on RJ45
- ⬢ Screw coupling
- ⬢ Rewireable flex connector
- ⬢ PCB mounted panel connector
- ⬢ IDC termination panel connector
- ⬢ Earth lead version of panel adaptor
- ⬢ EN60068-2-52 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



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



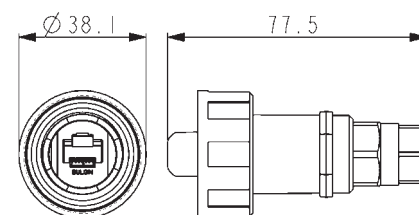
| Part no.    | Type         | Length | Description                                |
|-------------|--------------|--------|--------------------------------------------|
| PX0836/2M00 | Wire end     | 2m     | IP68 RJ45 Buccaneer to bare end            |
| PX0836/3M00 | Wire end     | 3m     | IP68 RJ45 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.



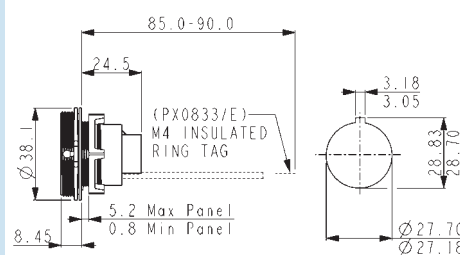
| Part no. | Description                                                                |
|----------|----------------------------------------------------------------------------|
| PX0834/A | Cable glands optimised for PUR jacket cable to maintain Cat 5e performance |
| PX0834/B | Suitable for use with 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



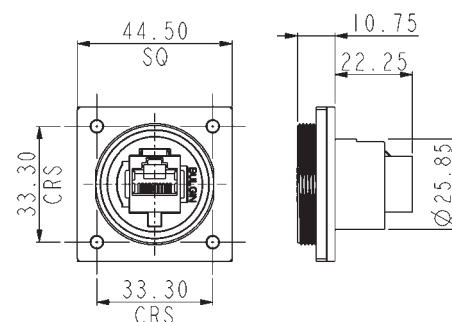
| Part no. | Description                 | Fixing              |
|----------|-----------------------------|---------------------|
| PX0833   | Cat 5e coupler              | Front panel mounted |
| PX0833/E | Cat 5e coupler + earth wire | Front panel mounted |

## 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



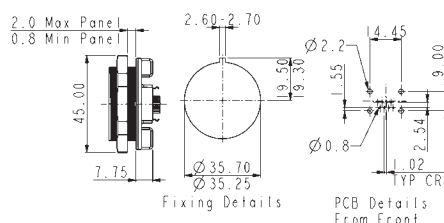
| Part no. | Description                 | Fixing          |
|----------|-----------------------------|-----------------|
| PX0870   | Cat 5e coupler              | Flange mounting |
| PX0870/E | Cat 5e coupler + earth wire | Flange mounting |

## 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



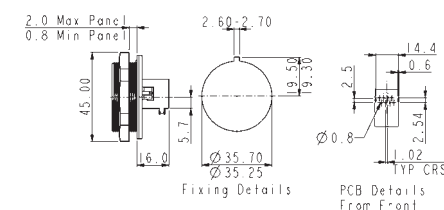
| Part no.  | Description           | Fixing             |
|-----------|-----------------------|--------------------|
| PX0839/PC | Cat 5e connector - PC | Rear panel mounted |

## PCB Mounting Connector

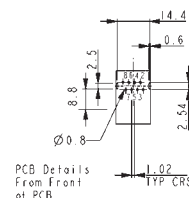


PX0839/90

- 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 |



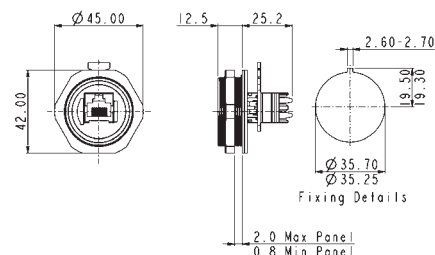


## Panel Mounting Connector



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



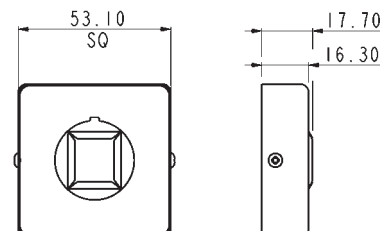
| Part no.   | Description    | Fixing             |
|------------|----------------|--------------------|
| PX0839/IDC | Cat 5e coupler | Rear panel mounted |

## 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



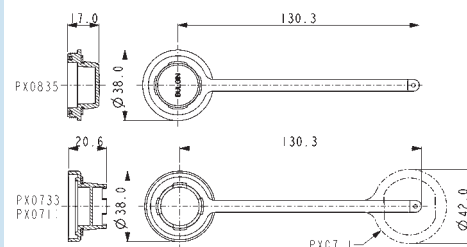
| Part no. | Description                   |
|----------|-------------------------------|
| PX0888   | Shielding backshell accessory |

## 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

|                         |                                                                    |
|-------------------------|--------------------------------------------------------------------|
| Mechanical              | IP68, EN60529:1992+A2:2013<br>(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<br>(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

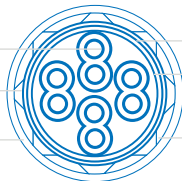
|                  |                                          |
|------------------|------------------------------------------|
| Conductors       | 24AWG (7/0.2mm) bare copper              |
| Insulation       | HD-PE                                    |
| Pair             | 2 of the above cores twisted             |
| 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)<br>6.1mm nominal     |

Electrical @ 20°C

|                           |                                         |
|---------------------------|-----------------------------------------|
| Characteristic            |                                         |
| Impedance                 | 100 $\Omega$ $\pm$ 15 $\Omega$ @ 100MHz |
| Capacitance               | 330pF/km                                |
| Conductor Loop resistance | 29/ $\Omega$ 100m maximum               |
| Skew                      | 45 nsec/100m @ 100MHz                   |
| TIA/EIA Rating            | Cat 5e                                  |

## Cable construction - PX0836, PX0837, PX0838 and 14199

|                              |  |                      |
|------------------------------|--|----------------------|
| 24 AWG<br>7/0.20mm conductor |  | Mylar Tape           |
| Braiding<br>7/0.12mm         |  | Insulation - HD - PE |
| Jacket<br>6.10mm dia         |  | Aluminium/ PEPT tape |
|                              |  | Drain Wire           |



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 | 10m $\Omega$ 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

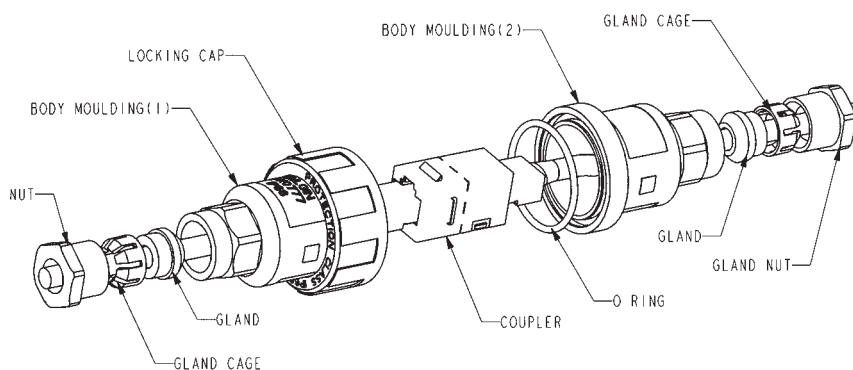
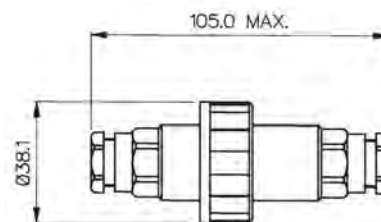
|                    |                   |
|--------------------|-------------------|
| No. Conductors     | 8                 |
| Current rating     | 1.5A              |
| Voltage rating     | 30V ac, 42V dc    |
| Contact resistance | 10m $\Omega$ max. |
| Performance        | Cat 5e            |

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<br>With glands supplied:<br>3.5 - 5mm (Blue)<br>5 - 7mm (Green)<br>6 - 8mm (Red) | 3.5 - 8mm<br>With glands supplied:<br>3.5 - 5mm (Blue)<br>5 - 7mm (Green)<br>6 - 8mm (Red) | 3.5 - 8mm<br>With glands supplied:<br>3.5 - 5mm (Blue)<br>5 - 7mm (Green)<br>6 - 8mm (Red) |
| Material:                | Glass Filled Polyamide<br>UL94V-0                                                          | Glass Filled Polyamide<br>UL94V0                                                           | Glass Filled Polyamide<br>UL94V0                                                           |
| Sealing:                 | IP68 to BSEN<br>60529:1992+A2:2013<br>(10m depth for 2 weeks)                              | IP68 to BSEN<br>60529:1992+A2:2013<br>(10m depth for 2 weeks)                              | IP68 to BSEN<br>60529:1992+A2:2013<br>(10m depth for 2 weeks)                              |
| Salt Mist                | EN60068-2-52 Test Kb Salt Mist<br>(Cyclic)<br>Marine Severity Level 1                      | EN60068-2-52 Test Kb Salt Mist<br>(Cyclic)<br>Marine Severity Level 1                      | EN60068-2-52 Test Kb Salt Mist<br>(Cyclic)<br>Marine Severity Level 1                      |
| Operating Temp<br>Range: | -20°C to +70°C                                                                             | -20°C to +70°C                                                                             | -20°C to +70°C                                                                             |
| Colour:                  | Black                                                                                      | Black                                                                                      | Black                                                                                      |
| <b>RoHS</b>              | Compliant                                                                                  | Compliant                                                                                  | Compliant                                                                                  |



- ⬢ IP68 rated
- ⬢ 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, 1.5Mbps to 480Mbps
- ⬢ 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

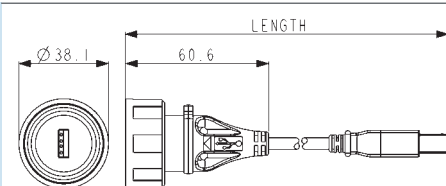


PX0840/A

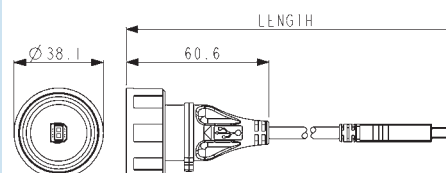
PX0840/B

#### 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 |

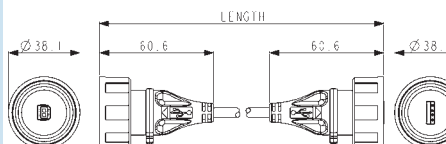
#### Sealed USB Cables Double Ended



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 |

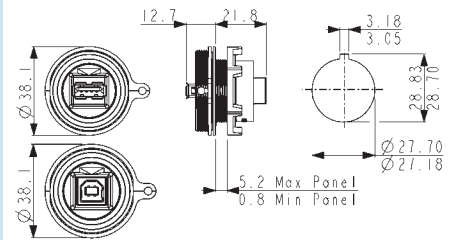
Front Panel Mounting Connector



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  
PX0842/B

IP68 A type USB, front panel mounted. Sealed A type at front of panel, standard B type at rear  
IP68 B type USB, front panel mounted. Sealed B type at front of panel, standard A type at rear.

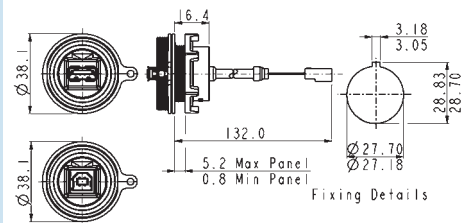
Front Panel Mounting Connector



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  
PX0843/B  
PX0460/A  
PX0460/B

IP68 A type USB, front panel mounted. Sealed A type at front of panel, 5 way crimp connector at rear.  
IP68 B type USB, front panel mounted. Sealed B type at front of panel, 5 way crimp connector at rear.  
As PX0843/A with exposed braid for use with PX0465 screening can  
As PX0843/B with exposed braid for use with PX0465 screening can

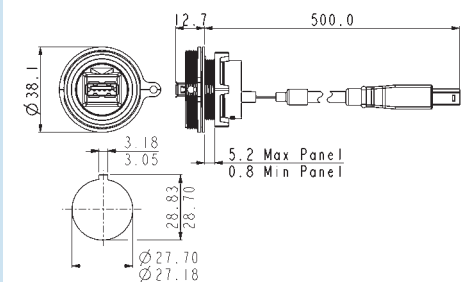
Front Panel Mounting Connector



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  
PX0844/A/0M50/B  
PX0844/B/0M50/A  
PX0844/B/0M50/B

IP68 A type USB, sealed through panel, Sealed 'A' type at front of panel, standard 'A' type at rear  
IP68 A type USB, sealed through panel, Sealed 'A' type at front of panel, standard 'B' type at rear  
IP68 B type USB, sealed through panel, Sealed 'B' type at front of panel, standard 'B' type at rear  
IP68 B type USB, sealed through panel, Sealed 'B' type at front of panel, standard 'B' type at rear



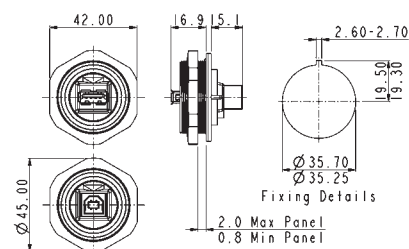
#### Rear Panel Mounting Connector



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  
PX0848/B

IP68 A type USB, rear panel mounted. Sealed A type at front of panel, standard B type at rear.  
IP68 B type USB, rear panel mounted. Sealed B type at front of panel, standard A type at rear.

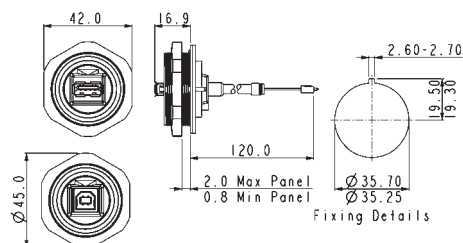
#### Rear Panel Mounting Connector



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  
PX0849/B

IP68 A type USB, rear panel mounted. Sealed A type at front of panel, 5 way header at rear.  
IP68 B type USB, rear panel mounted. Sealed B type at front of panel, 5 way header at rear.

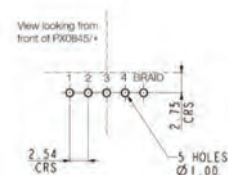
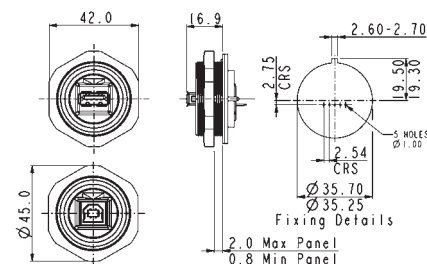
#### PCB Panel Mounting Connector- PCB Direct Mount



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

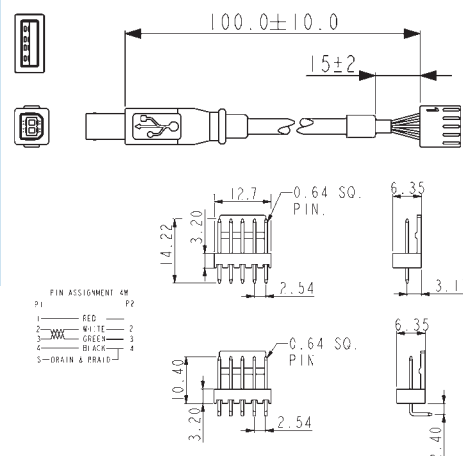
PX0845/A  
PX0845/B

IP68 A type USB, rear panel mounted. Sealed A type at front of panel, direct mount PCB contacts at rear.  
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



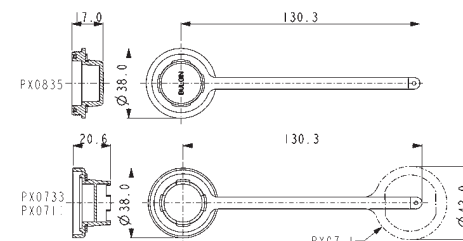
#### Part no. Description

|       |                                       |
|-------|---------------------------------------|
| 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

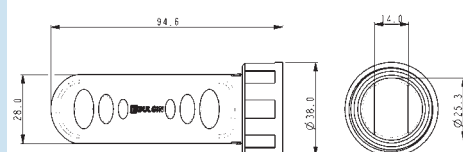
|        |                                                                        |
|--------|------------------------------------------------------------------------|
| PX0835 | Sealing Cap for cable connectors (PX0840, PX0841)                      |
| PX0733 | Sealing Cap for front panel mounting connector (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.

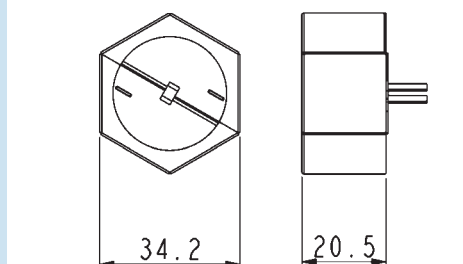


#### Screening Can



PX0464

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



## Cables & connectors

### Mechanical

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

### Electrical

|                    |                   |
|--------------------|-------------------|
| No. of poles       | 4                 |
| Current rating     | 1A                |
| Voltage rating     | 30Vac (RMS)       |
| Contact resistance | 30m $\Omega$ 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             |
| <b>RoHS</b>  | Compliant           |

| Length: | Dia   | Conductors<br>Signal | Conductors<br>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

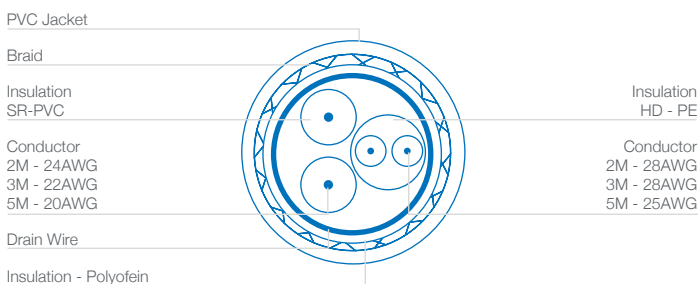
### Electrical

|                    |                    |
|--------------------|--------------------|
| No. of conductors  | 4                  |
| Current rating     | 1A                 |
| Voltage rating     | 30Vac (RMS)        |
| Contact resistance | <10m $\Omega$ 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



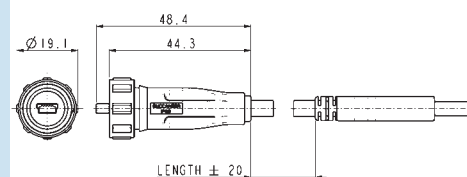


- ⬡ IP68 rated
- ⬡ USB V2.0 performance
- ⬡ Plug and play capability
- ⬡ Shielded system
- ⬡ Overmoulded cables
- ⬡ Screw coupling
- ⬡ PCB versions
- ⬡ EN60068-2-52 Test Kb Salt Mist (Cyclic)  
Marine Severity Level 1
- ⬡ Dust and waterproof to EN60529
- ⬡ Data rates up to 480Mbps
- ⬡ Hot pluggable,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



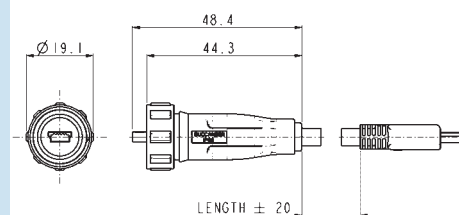
PX0441

- 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



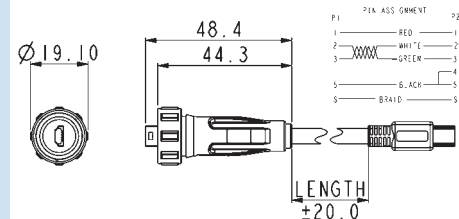
PX0442

- 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



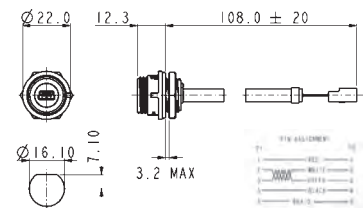
| Part No.    | Length | Description                        |
|-------------|--------|------------------------------------|
| PX0441/2M00 | 2.0m   | IP68 mini 'B' to Std 'A' type USB  |
| PX0441/3M00 | 3.0m   | IP68 mini 'B' to Std 'A' type USB  |
| PX0441/4M50 | 4.5m   | IP68 mini 'B' to Std 'A' type 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

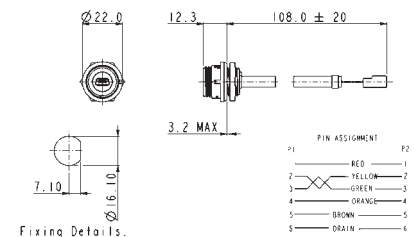
|        |                                                                           |
|--------|---------------------------------------------------------------------------|
| PX0443 | IP68 B type Mini USB, front panel mounted. 5 way crimp connector at rear. |
| PX0459 | As PX0443 with exposed braid 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

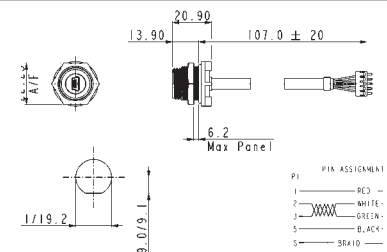
|        |                                                                            |
|--------|----------------------------------------------------------------------------|
| PX0456 | IP68 AB type Mini USB, front panel mounted. 6 way crimp connector at rear. |
|--------|----------------------------------------------------------------------------|

Rear Panel Mounting Connector



PX0446

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

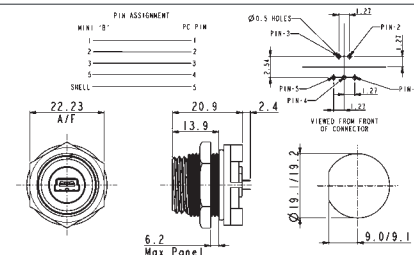


Rear Panel Mounting Connector



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.           |

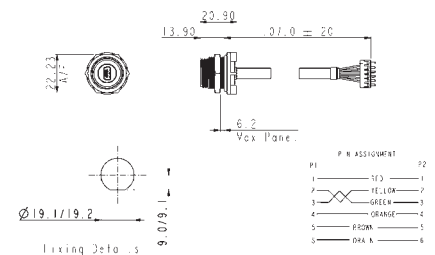


Rear Panel Mounting Connector



PX0457

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

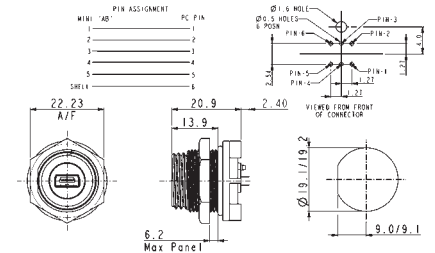


Rear Panel Mounting Connector



PX0458

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



Part no.

Description

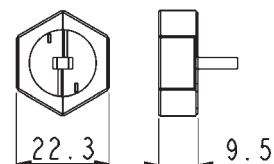
|        |                                                                            |
|--------|----------------------------------------------------------------------------|
| PX0457 | IP68 AB type Mini USB, rear panel mounted. 6 way header connector at rear. |
| PX0458 | IP68 AB type Mini USB, rear 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)                 |
| Operating temperature | 0°C to +70°C                                                       |
| Salt Mist             | EN60068-2-52 Test Kb Salt Mist (Cyclic)<br>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

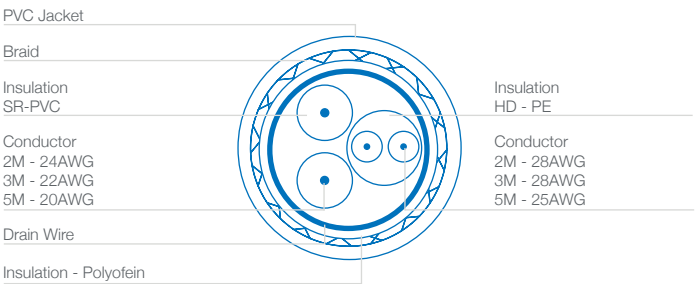
|                               |                    |
|-------------------------------|--------------------|
| Shell material                | Steel              |
| Shell plating                 | Nickel             |
| Contact material              | Copper Alloy       |
| Contact plating               | 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<br>Signal | Conductors<br>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





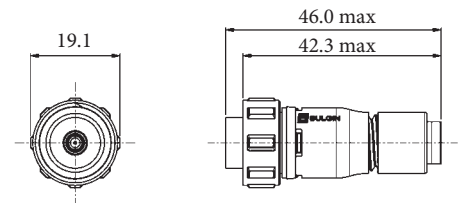
- ⬡ Sealed to IP68 when mated
- ⬡ 50Ω Impedance SMB connector
- ⬡ Frequency range 0-4GHz
- ⬡ Contact resistance
  - centre - 6mΩ max.
  - outer - 2.5mΩ max.
- ⬡ Gold plated contacts
- ⬡ Diameter over coupling ring 19mm
- ⬡ Body moulding, Nylon UL94-V0 rated
- ⬡ Two versions of Flex Connector
  - re-wireable
  - 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



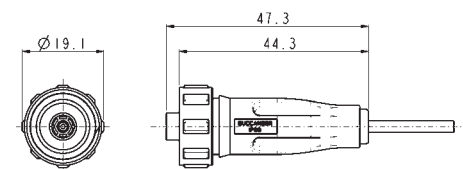
| Part no. | Description                                            |
|----------|--------------------------------------------------------|
| PX0415/1 | Re-wireable connector with SMB Plug - for RG-174 cable |

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



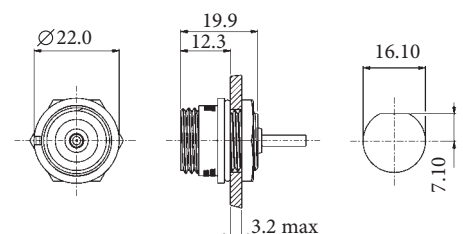
| Part no.    | Description                                           |
|-------------|-------------------------------------------------------|
| PX0416/1M00 | Overmoulded connector with SMB plug - cable length 1m |
| PX0416/3M00 | Overmoulded connector with SMB plug - cable length 3m |
| PX0416/5M00 | 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:                    | IP68, EN60529:1992+A2:2013<br>(10m depth for 2 weeks)              |
| Salt Mist                   | EN60068-2-52 Test Kb Salt Mist<br>(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                                 |



#### SMB Antenna

- ⬡ IP68 Sealing
- ⬡ 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

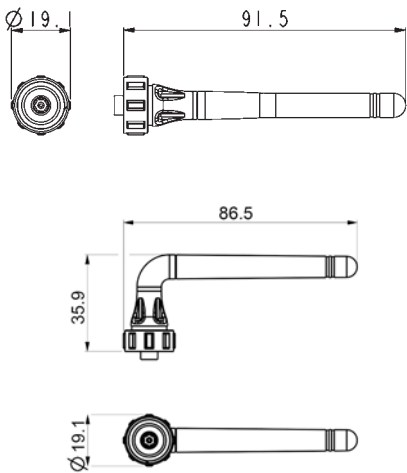
- ⬡ IP68 Sealing
- ⬡ RS485/RS232 serial interfaces
- ⬡ Serial data to Bluetooth
- ⬡ Wireless transparent data connection
- ⬡ Up to 100m range (class 1)
- ⬡ Maintains sealing integrity of equipment



SMB Antenna



- 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                   |

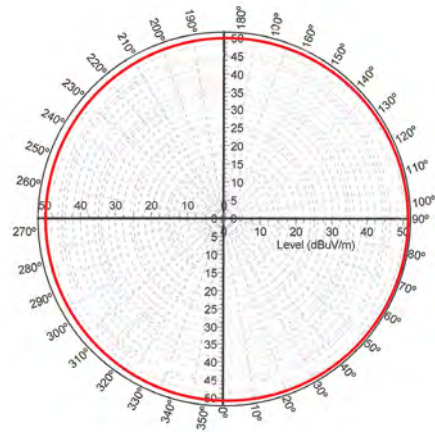
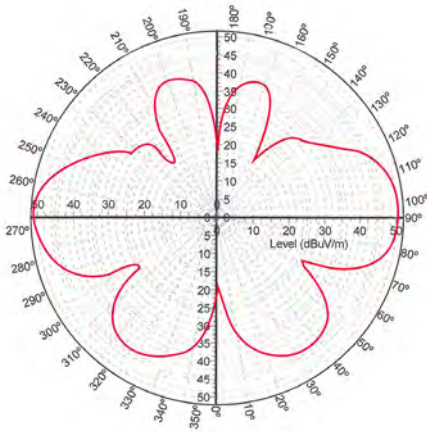
Mechanical

|                        |                                                                    |
|------------------------|--------------------------------------------------------------------|
| Sealing                | 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)<br>Marine Severity Level 1 |

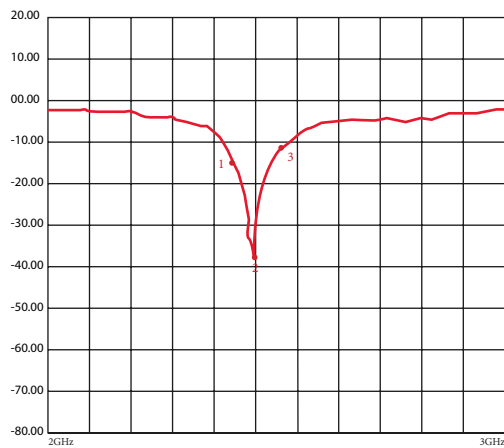
Material

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

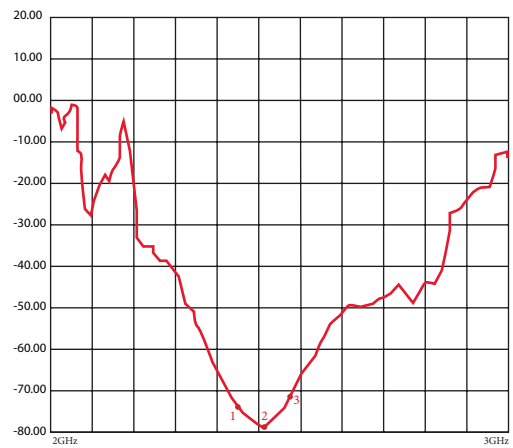
## PX0407 Polar plots



## PX0407 Radiation Pattern plots



- 1 -12624 dB 2.40000 GHz
- 2 -34951 dB 2.45000 GHz
- 3 -12.777 dB 2500.000 000 MHz



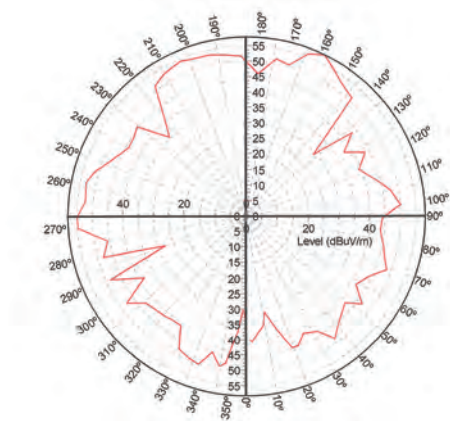
- 1 1.5659 dB 2.40000 GHz
- 2 1.6514 dB 2.45000 GHz
- 3 1.6032 dB 2500.000 000 MHz

# 400 Series - Wireless Buccaneer

Polar/Antenna Plots

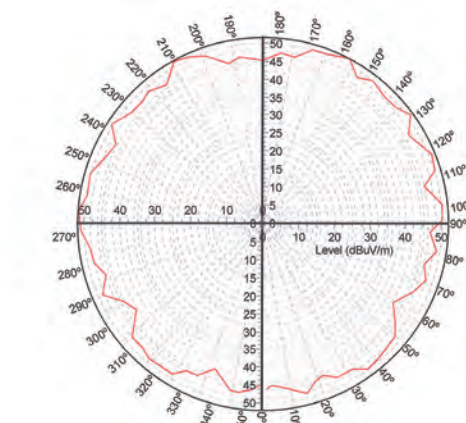


## PX0408 Polar plots



Pattern Field

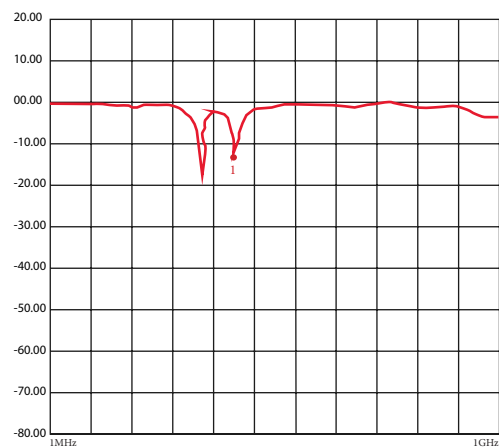
E



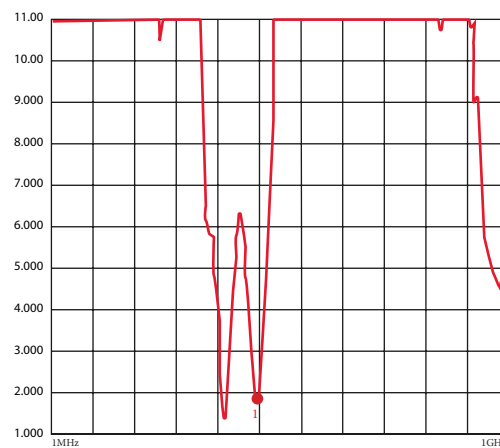
Pattern Field

H

## PX0408 Radiation Pattern plots



1 450.00000 MHz -13.300 dB



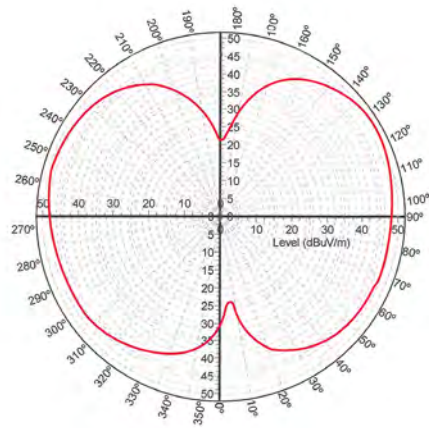
1 450.00000 MHz -13.300 dB

# 400 Series - Wireless Buccaneer

Polar/Antenna Plots

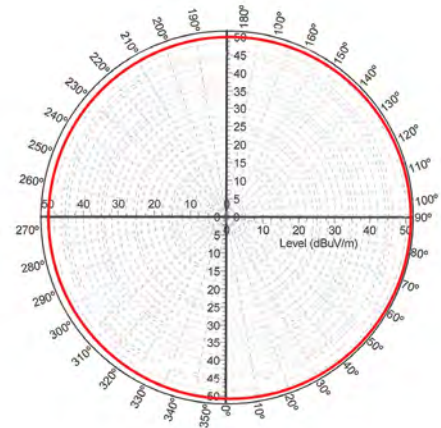


## PX0409 / 900MHz Polar plots



Pattern Field

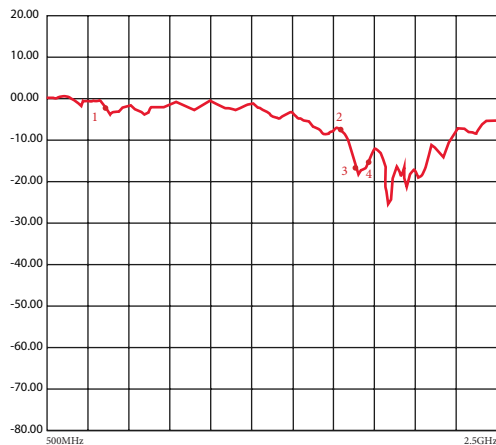
E



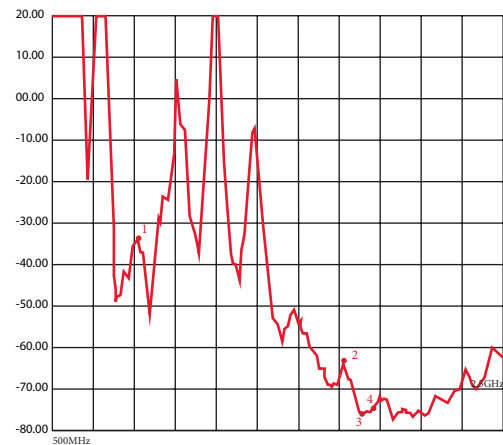
Pattern Field

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



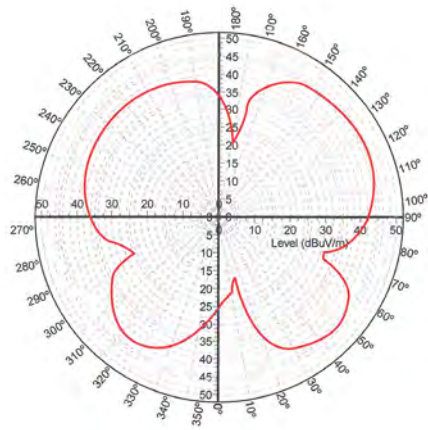
1 900.00000 MHz 5.1694 dB  
2 1.8000000 GHz 2.2481 dB  
3 1.8800000 GHz 1.2377 dB  
4 1.9000000 GHz 1.2052 dB

# 400 Series - Wireless Buccaneer

Polar/Antenna Plots

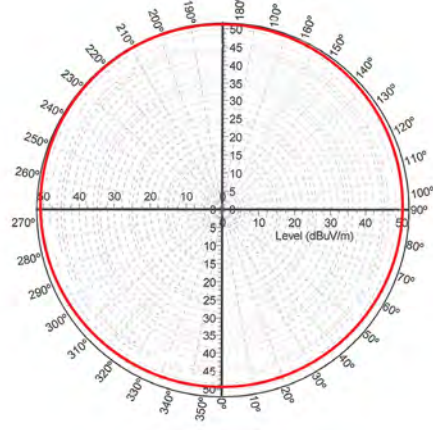


## PX0409 / 1800MHz Polar plots



Pattern Field

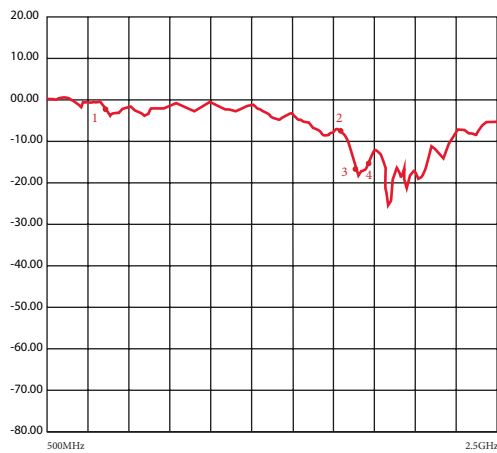
E



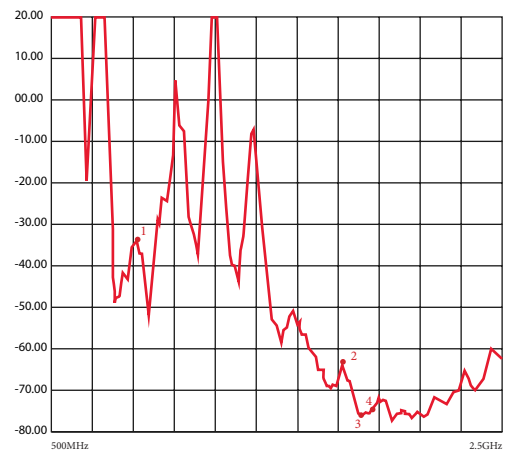
Pattern Field

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



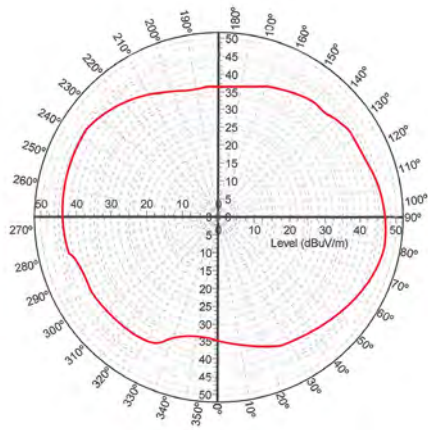
1 900.00000 MHz 5.1694 dB  
2 1.8000000 GHz 2.2481 dB  
3 1.8800000 GHz 1.2377 dB  
4 1.9000000 GHz 1.2052 dB

# 400 Series - Wireless Buccaneer

Polar/Antenna Plots

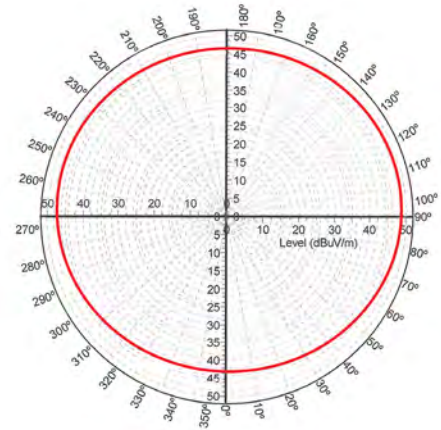


## PX0409 / 1800MHz Polar plots



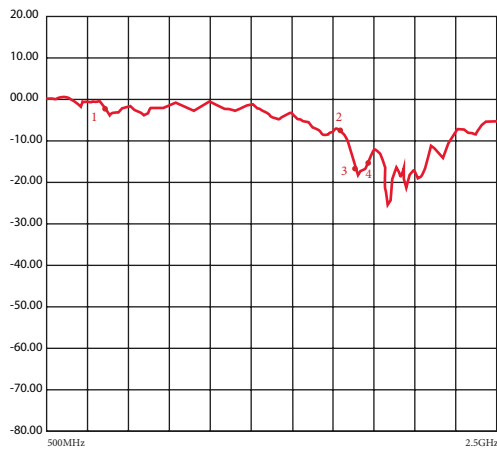
Pattern Field

E

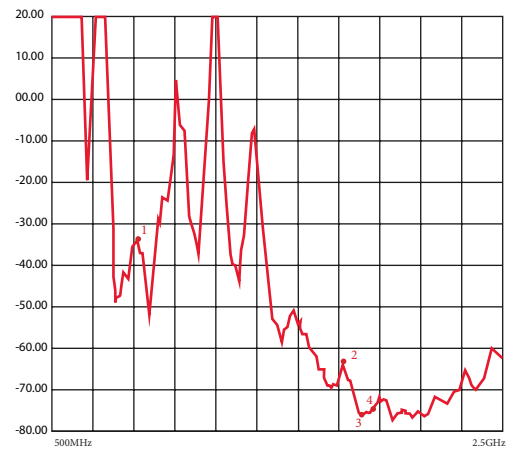


Pattern Field

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



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, 1.5Mbps to 480Mbps
- [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

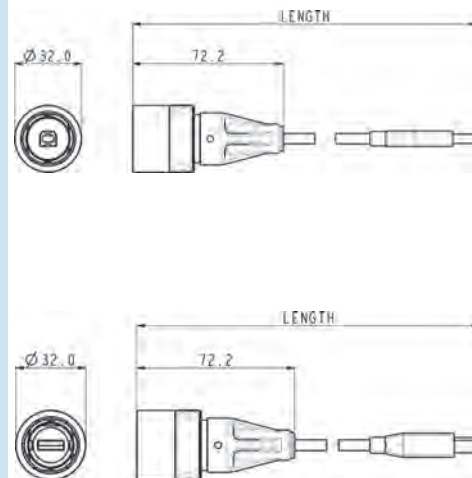


PXP6040/A



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



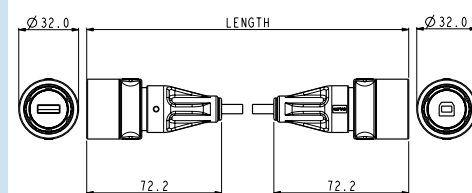
| Part no        | Length | Description                                |
|----------------|--------|--------------------------------------------|
| PXP6040/A/2M00 | 2m     | IP rated A type USB to standard B type USB |
| PXP6040/A/3M00 | 3m     | IP rated A type USB to standard B type USB |
| PXP6040/A/5M00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



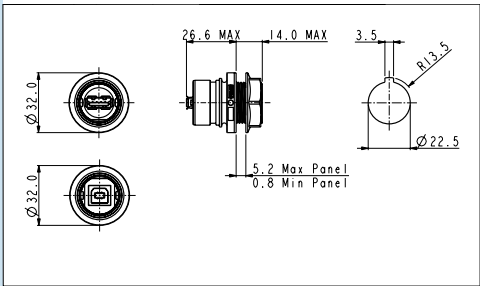
| Part no         | Length | Description                                |
|-----------------|--------|--------------------------------------------|
| PXP6041/AB/2M00 | 2m     | IP rated A type USB to standard B type USB |
| PXP6041/AB/3M00 | 3m     | IP rated A type USB to standard B type USB |
| PXP6041/AB/5M00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



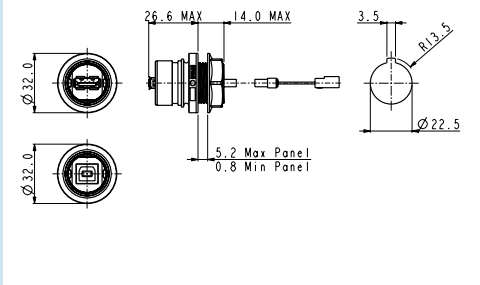
| Part No.  | Description                                                                                         |
|-----------|-----------------------------------------------------------------------------------------------------|
| PXP6042/A | IP rated A type USB, front panel mounted. Sealed A type 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



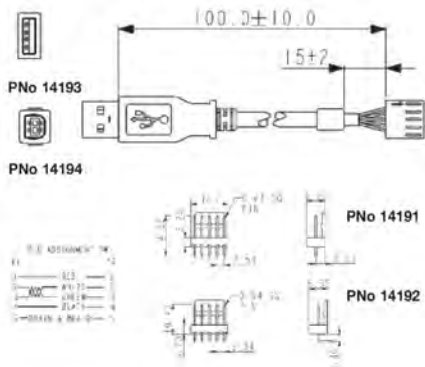
| Part No.  | Description                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------------------|
| PXP6043/A | IP rated A type USB, front panel mounted. Sealed 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

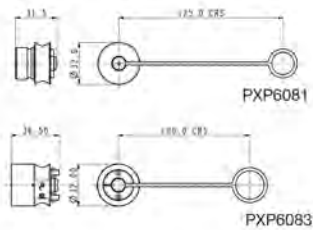
| Part No. | Description                           |
|----------|---------------------------------------|
| 14193    | USB 'A' type to 5 way crimp connector |
| 14194    | USB 'B' type to 5 way crimp connector |
| 14191    | 5 way PCB header straight             |
| 14192    | 5 way PCB header right 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                                                                                                                                                                                                                                                                              |
|---------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Series Designation</b> |   | <b>Series / Body Style</b><br>040 = Single ended cable<br>041 = Double ended cable<br>042 = Panel with adaptor<br>043 = Panel with lead |   | <b>Characteristics</b><br>A = 'A' type sealed interface<br>B = 'B' type sealed interface<br>AB = 'A' & 'B' type sealed interface<br>(for use with 6041 only) |   | <b>Cable length</b><br>2M00 = 2 metre cable length (for use with 6040 and 6041 cables only)<br>3M00 = 3 metre cable length (for use with 6040 and 6041 cables only)<br>5M00 = 5 metre cable length (for use with 6040 and 6041 cables only)<br>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 adaptor with sealed 'A' type to unsealed 'B' type at rear

## Cables & connectors

### Mechanical

|                       |                                                                                                          |
|-----------------------|----------------------------------------------------------------------------------------------------------|
| Sealing               | IP69K, DIN40050-9<br>IP68, EN60529:1992+A2:2013<br>(10m depth for 2 weeks)<br>IP66, EN60529:1992+A2:2013 |
| Salt Mist             | EN60068-2-52 Test Kb Salt Mist<br>(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<br>Signal | Conductors<br>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

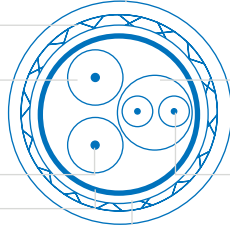
### Electrical

|                    |             |
|--------------------|-------------|
| 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

|                                                     |                                                                                      |                                                     |
|-----------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------|
| PVC Jacket                                          |                                                                                      |                                                     |
| Braid                                               |                                                                                      |                                                     |
| Insulation<br>SR-PVC                                |                                                                                      | Insulation<br>HD - PE                               |
| Conductor<br>2M - 24AWG<br>3M - 22AWG<br>5M - 20AWG |  | Conductor<br>2M - 28AWG<br>3M - 28AWG<br>5M - 25AWG |
| Drain Wire                                          |                                                                                      |                                                     |
| Insulation - Polyofein                              |                                                                                      |                                                     |



# BUCCANEER FOR DATA

## 6000 Series Ethernet Buccaneer

Thermo-plastic version

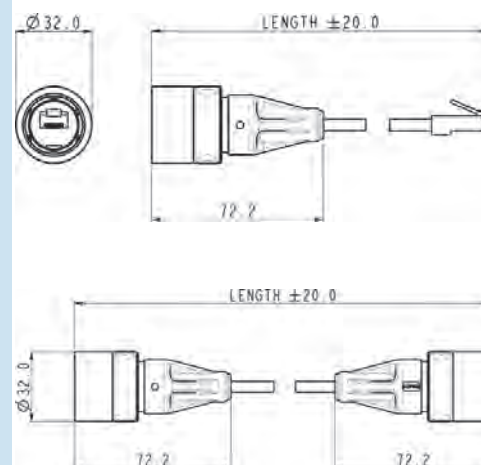


### Patch Cord Flex Connector - Pur Jacket Cable



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/A/2M00 | Single ended | 2m     | IP RJ Buccaneer to Shielded RJ45     |
| PXP6037/A/3M00 | Single ended | 3m     | IP RJ Buccaneer to Shielded RJ45     |
| PXP6037/A/5M00 | Single ended | 5m     | IP RJ Buccaneer to Shielded RJ45     |
| PXP6038/B/2M00 | Double ended | 2m     | IP RJ Buccaneer to IP68 RJ Buccaneer |
| PXP6038/B/3M00 | Double ended | 3m     | IP RJ Buccaneer to IP68 RJ Buccaneer |
| PXP6038/B/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.



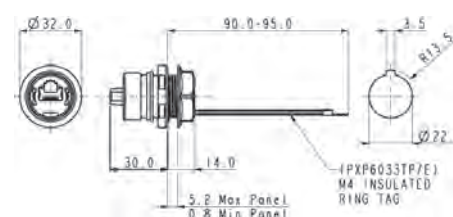
| Part no   | Description                                                                |
|-----------|----------------------------------------------------------------------------|
| PXP6034/A | Cable glands optimised for PUR jacket cable to maintain Cat 5e performance |
| PXP6034/B | Suitable for use 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



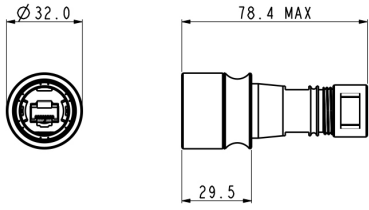
| Part no     | Description                 | Fixing                                     |
|-------------|-----------------------------|--------------------------------------------|
| PXP6033TP   | Cat 5e coupler              | Front panel mounted - sealed through panel |
| PXP6033TP/E | Cat 5e coupler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



Technical drawing showing dimensions:  $\varnothing 32.0$ , 78.4 MAX, 29.5

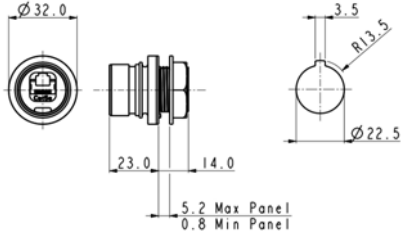
| Part no   | Description                                                                |
|-----------|----------------------------------------------------------------------------|
| PXM6034/A | Cable glands optimised for PUR jacket cable to maintain Cat 5e performance |
| PXM6034/B | Suitable for use 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



Technical drawing showing dimensions:  $\varnothing 32.0$ , 23.0, 14.0, 5.2 Max Panel, 0.8 Min Panel, 3.5, R13.5,  $\varnothing 22.5$

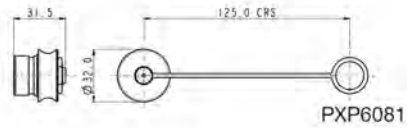
| Part no   | Description    | Fixing                                     |
|-----------|----------------|--------------------------------------------|
| PXM6033TP | Cat 5e coupler | Front panel mounted - sealed through panel |

Accessories For Ethernet Connectors

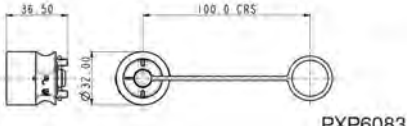


PXM6034

- 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

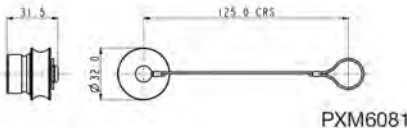
|         |                                                        |
|---------|--------------------------------------------------------|
| PXP6081 | Sealing Cap for plastic Flex cable connectors          |
| PXP6083 | Sealing Cap for plastic front panel mounting connector |

Accessories For Ethernet Connectors

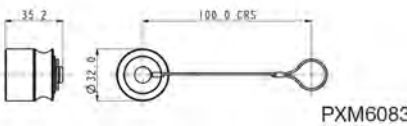


PXM6033

- 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                            |



| PX X                                                      | 6XXX                                                                                                                                    | XX                                                                                                                      | X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Series Designation</b><br>PXP - Plastic<br>PXM - Metal | <b>Series / Body Style</b><br>033 = Panel<br>034 = Re-wireable Flex<br>037 = Patchcord (Single Ended)<br>038 = Patchcord (Double Ended) | <b>Panel Sealing</b><br>TP = through panel sealing (for use with PXP6033 panel body only)<br><br>Blank = not applicable | <b>Characteristics</b><br>E = Earth lead (for use with PXP6033 plastic panel body only)<br>A = Glanding for PUR cable (for use with PXP6034 re-wireable flex only)<br>B = Glanding for 3.5 to 8mm cables (for use with PXP6034 re-wireable flex only)<br>2M00 = 2 metre cable length (for use with PXP6037 and PXP6038 patchcords only)<br>3M00 = 3 metre cable length (for use with PXP6037 and PXP6038 patchcords only)<br>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<br>IP68, EN60529:1992+A2:2013<br>(10m depth for 2 weeks)<br>IP66, EN60529:1992+A2:2013 |
| Salt Mist:             | EN60068-2-52 Test Kb Salt Mist<br>(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,<br>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

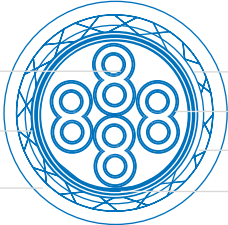
#### Electrical

|                    |             |
|--------------------|-------------|
| 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

|                                |                                                                                      |                     |
|--------------------------------|--------------------------------------------------------------------------------------|---------------------|
| 24 AWG -<br>7/0.20mm conductor |  | Mylar tape          |
| Braiding<br>7/0.12mm           |                                                                                      | Insulation - HD-PE  |
| Jacket                         |                                                                                      | Aluminium/PEPT tape |
| 6.10mm dia.                    |                                                                                      | Drain Wire          |

**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  
Push Button  
Voltage Selectors  
Piezo

94-111  
112-113  
114  
115-120



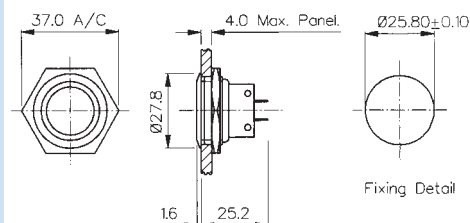


## Front Panel Mounting



MP0027

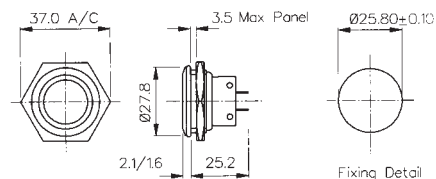
- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



## Front Panel Mounting

MP0038  
Sealed to IP66

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

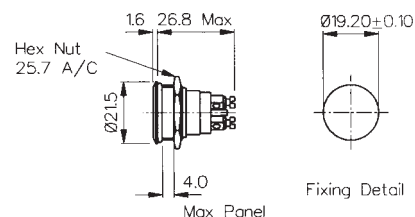


| Specifications                    | MP0027                                  | MP0038                                                                                    |
|-----------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------|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

## Front Panel Mounting


**MP0037**  
 Sealed to IP68

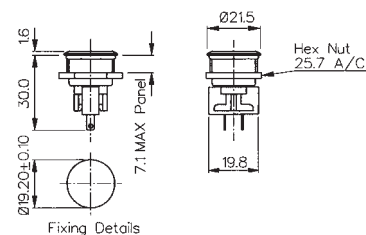
- Front Panel Sealed to IP68
- 21.5mm diameter
- S.P. Push to Make
- 1A, 50Vac/dc
- Industry Standard Size



## Front Panel Mounting


**MP0031**  
 Sealed to IP66

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



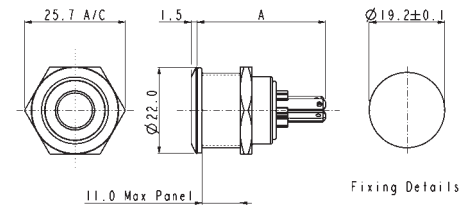
| Specifications                       | MP0037                                                                                | MP0031                                                                                    |
|--------------------------------------|---------------------------------------------------------------------------------------|---------------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

## 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



MPI001/TAG/COL A = 32.7  
 MPI001/TERM/COL A = 31.0 MAX.

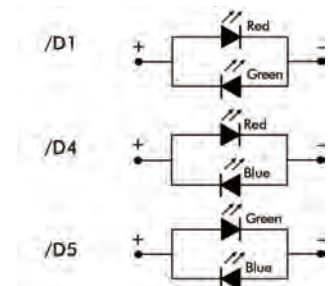
## Specifications

## MPI001/Termination/Colour/Voltage

|                                |                                                                                                                        |         |        |         |        |                 |                |                 |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------|---------|--------|---------|--------|-----------------|----------------|-----------------|
| Illumination style:            | Dot                                                                                                                    |         |        |         |        |                 |                |                 |
| Terminations:                  | /28 (2.8mm tabs),<br>/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. <b>An appropriate resistor must be series connected by the user.</b> Voltages as above. |         |        |         |        |                 |                |                 |
|                                | /6                                                                                                                     | 6Vdc    |        |         |        |                 |                |                 |
|                                | /12                                                                                                                    | 12Vdc   |        |         |        |                 |                |                 |
|                                | /24                                                                                                                    | 24Vdc   |        |         |        |                 |                |                 |
| Contact Resistance:            | <100mΩ                                                                                                                 |         |        |         |        |                 |                |                 |
| Insulation Resistance:         | >10 <sup>9</sup> MΩ                                                                                                    |         |        |         |        |                 |                |                 |
| Dielectric Strength:           | Contact to Panel >2.0kV<br>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                                                                                                        |         |        |         |        |                 |                |                 |

ESD Handling precautions must be taken  
 Compliant

## Dual Colour LED Configuration

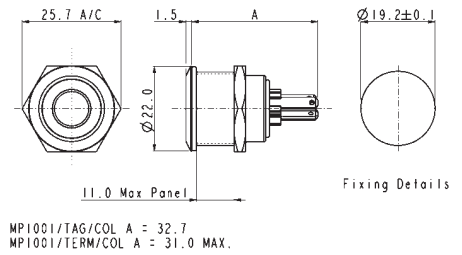


## Front Panel Mounting



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



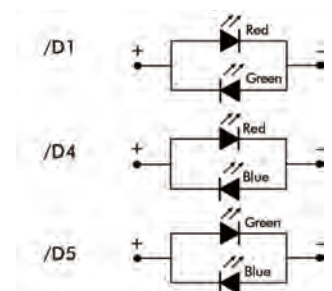
## Specifications

## MPI002/Termination/Colour/Voltage

|                                |                                                                                                                        |         |        |         |        |                 |                |                 |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------|---------|--------|---------|--------|-----------------|----------------|-----------------|
| Illumination style:            | Ring                                                                                                                   |         |        |         |        |                 |                |                 |
| Terminations:                  | /28 (2.8mm tabs),<br>/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. <b>An appropriate resistor must be series connected by the user.</b> Voltages as above. |         |        |         |        |                 |                |                 |
|                                | /6                                                                                                                     | 6Vdc    |        |         |        |                 |                |                 |
|                                | /12                                                                                                                    | 12Vdc   |        |         |        |                 |                |                 |
|                                | /24                                                                                                                    | 24Vdc   |        |         |        |                 |                |                 |
| Contact Resistance:            | <100mΩ                                                                                                                 |         |        |         |        |                 |                |                 |
| Insulation Resistance:         | >10 <sup>3</sup> MΩ                                                                                                    |         |        |         |        |                 |                |                 |
| Dielectric Strength:           | Contact to Panel >2.0kV<br>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                                                                                                        |         |        |         |        |                 |                |                 |

ESD Handling precautions must be taken  
Compliant

## Dual Colour LED Configuration

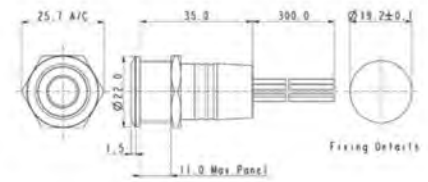


## Rear Panel Sealed - Flying Leads



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



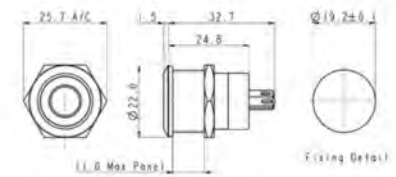
Flying lead colours: LED: red + and black -. Switch contacts: white.

## 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

|                       |                                                       |         |        |         |        |
|-----------------------|-------------------------------------------------------|---------|--------|---------|--------|
| Illumination style:   | Dot                                                   |         |        |         |        |
| Terminations:         | /FL (Flying leads)<br>/RP (Solder tags)               |         |        |         |        |
| Switching:            | Single pole, push to make, tactile (momentary action) |         |        |         |        |
| Max. Switch Rating:   | 50mA, 24Vdc                                           |         |        |         |        |
| LEDs (ratings @ 20mA) |                                                       |         |        |         |        |
| Part No.              | /RD                                                   | /GN     | /AM    | /BL     | /WH    |
| Colours               | Red                                                   | Green   | Amber  | Blue    | White  |
| Luminous Intensity    | 900mcd                                                | 2500mcd | 900mcd | 1500mcd | 900mcd |
| Forward Voltage       | 1.85V                                                 | 3.5V    | 2.3V   | 3.5V    | 3.6V   |
| Forward Current       | 20mA                                                  | 20mA    | 20mA   | 20mA    | 20mA   |
| Moulding Colour       | 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                                                                                                |
| Contact Resistance:    | <100mΩ                                             |                                                                                                      |
| Insulation Resistance: | >10³ MΩ                                            |                                                                                                      |
| Dielectric Strength:   | Contact to Panel >2.0kV<br>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.<br>(Micro switch not sealed) |

|             |               |
|-------------|---------------|
| Operations  |               |
| Mechanical: | 750,000 (min) |
| Electrical: | 35,000 (min)  |

|                         |        |
|-------------------------|--------|
| Operating Pressure:     | 12N    |
| Rear Nut Fixing Torque: | 0.57Nm |

|                       |                                 |
|-----------------------|---------------------------------|
| 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  
Compliant

## MPI002/Termination/Colour/Voltage

|                                                       |         |        |         |        |
|-------------------------------------------------------|---------|--------|---------|--------|
| Ring                                                  |         |        |         |        |
| /FL (Flying leads)                                    |         |        |         |        |
| /RP (Solder tags)                                     |         |        |         |        |
| Single pole, push to make, tactile (momentary action) |         |        |         |        |
| 50mA, 24Vdc                                           |         |        |         |        |
|                                                       |         |        |         |        |
| /RD                                                   | /GN     | /AM    | /BL     | /W     |
| Red                                                   | Green   | Amber  | Blue    | White  |
| 900mcd                                                | 2500mcd | 900mcd | 1500mcd | 900mcd |
| 1.85V                                                 | 3.5V    | 2.3V   | 3.5V    | 3.6V   |
| 20mA                                                  | 20mA    | 20mA   | 20mA    | 20mA   |
| Red                                                   | Green   | Amber  | Blue    | White  |

|                     |                                                                                                      |
|---------------------|------------------------------------------------------------------------------------------------------|
| /no suffix          | No resistor fitted. An appropriate resistor must be series connected by the user. Voltages as above. |
| /6                  | 6Vdc                                                                                                 |
| /12                 | 12Vdc                                                                                                |
| /24                 | 24Vdc                                                                                                |
| <100mΩ              |                                                                                                      |
| >10 <sup>3</sup> MΩ |                                                                                                      |
| 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.<br>(Micro switch not sealed) |

|             |               |
|-------------|---------------|
| Operations  |               |
| Mechanical: | 750,000 (min) |
| Electrical: | 35,000 (min)  |

|                         |        |
|-------------------------|--------|
| Operating Pressure:     | 12N    |
| Rear Nut Fixing Torque: | 0.57Nm |

|                       |                                 |
|-----------------------|---------------------------------|
| 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                 |

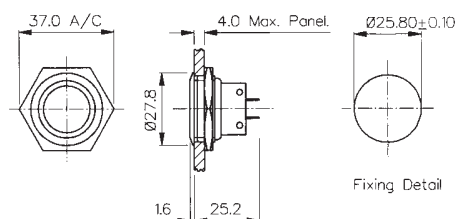
ESD Handling precautions must be taken

Compliant

## Front Panel Mounting


**MPB038**  
 Sealed to IP66

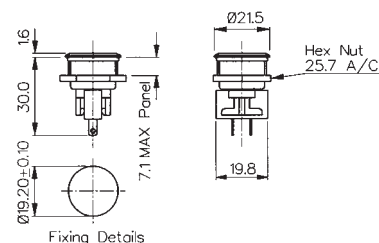
- Front Panel Sealed to IP66
- 28mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



## Front Panel Mounting


**MPB031**  
 Sealed to IP66

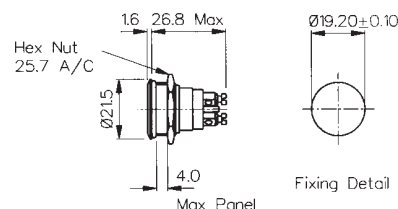
- Front Panel Sealed to IP66
- 21mm diameter
- S.P.C.O. Microswitch
- 5A, 250Vac



## 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.<br>2A, 28Vdc                                                                  | 5A, 250Vac.<br>2A, 28Vdc                                                                  | 1A, 50Vac/dc                                                                                                |
| Contact Resistance:               | <10mΩ                                                                                     | <10mΩ                                                                                     | <10mΩ                                                                                                       |
| Insulation Resistance:            | >10 <sup>3</sup> MΩ                                                                       | >10 <sup>3</sup> MΩ                                                                       | >10 <sup>5</sup> 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<br>(Front of panel only): | Protection Classification:<br>IP66 EN60529-1:1992 + A2:2013.<br>(Micro switch not sealed) | Protection Classification:<br>IP66 EN60529-1:1992 + A2:2013.<br>(Micro switch not sealed) | Protection Classification:<br>IP68 EN60529-1:1992 + A2:2013.<br>(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                                                                                              |
| <b>RoHS</b>                       | Compliant                                                                                 | Compliant                                                                                 | Compliant                                                                                                   |

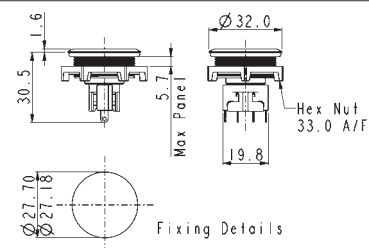


## Front Panel Mounting - Low Profile



MP0050

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

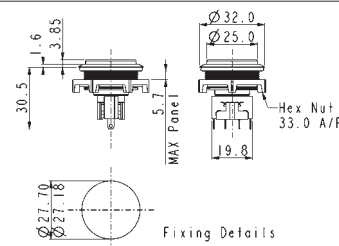


## Front Panel Mounting - Protruding Profile



MP0050/2

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



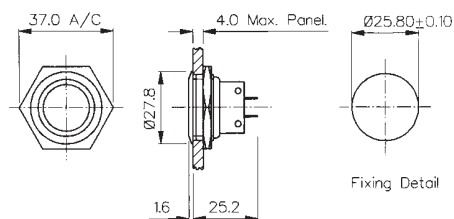
| Specifications                    | MP0050                                                                                    | MP0050/2                                                                                  |
|-----------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Terminations:                     | Solder Tags                                                                               | Solder Tags                                                                               |
| Switching:                        | S.P.C.O. Momentary Action (Microswitch)                                                   | S.P.C.O. Momentary Action (Microswitch)                                                   |
| Max. Rating:                      | 5A, 250Vac.<br>2A, 28Vdc                                                                  | 5A, 250Vac.<br>2A, 28Vdc                                                                  |
| Contact Resistance:               | <10mΩ                                                                                     | <10mΩ                                                                                     |
| Insulation Resistance:            | >10 <sup>9</sup> MΩ                                                                       | >10 <sup>9</sup> MΩ                                                                       |
| Dielectric Strength:              | >2.0kVac                                                                                  | >2.0kVac                                                                                  |
| Operating Temp. Range:            | -20°C to +70°C                                                                            | -20°C to +70°C                                                                            |
| Sealing<br>(Front of panel only): | Protection Classification:<br>IP66 EN60529-1:1992 + A2:2013.<br>(Micro switch not sealed) | Protection Classification:<br>IP66 EN60529-1:1992 + A2:2013.<br>(Micro switch not sealed) |
| Operations                        |                                                                                           |                                                                                           |
| Mechanical:                       | 1,000,000 (min)                                                                           | 1,000,000 (min)                                                                           |
| Electrical:                       | 35,000 (min)                                                                              | 35,000 (min)                                                                              |
| Operating Pressure:               | 4.7Nm                                                                                     | 4.7N (typ)                                                                                |
| Rear Nut Fixing Torque:           | 0.57Nm                                                                                    | 0.57Nm                                                                                    |
| Materials                         |                                                                                           |                                                                                           |
| Mouldings:                        | Glass Filled Nylon                                                                        | Glass Filled Nylon                                                                        |
| Tags/Terminations:                | Brass, Tin Plated                                                                         | Brass, Tin Plated                                                                         |
| Switch Body & Button:             | Stainless Steel                                                                           | Stainless Steel                                                                           |
| Contacts:                         | Fine Silver                                                                               | Fine Silver                                                                               |
| Thread size:                      | M27 x 1.0-6H                                                                              | M27 x 1.0-6H                                                                              |
| RoHS                              | Compliant                                                                                 | Compliant                                                                                 |

Front Panel Mounting



MP0027/3

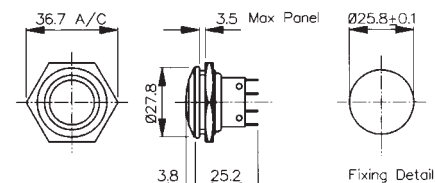
- 28mm diameter
- Domed Profile
- S.P.C.O. Microswitch
- 5A, 250Vac



Front Panel Mounting

MP0038/3  
Sealed to IP66

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

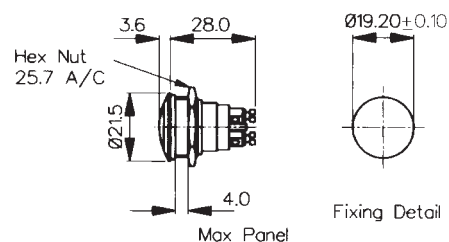
**Specifications****MP0027/3****MP0038/3**

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

Front Panel Mounting

MP0037/3  
Sealed to IP68

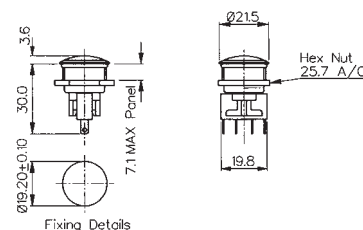
- Front Panel Sealed to IP68
- 21.5mm diameter
- Domed Profile
- S.P. Push to Make
- 1A, 50Vac/dc



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



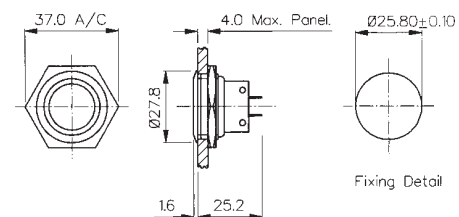
| Specifications                    | MP0037/3                                                                                                    | MP0031/3                                                                                  |
|-----------------------------------|---------------------------------------------------------------------------------------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



MP0027/2

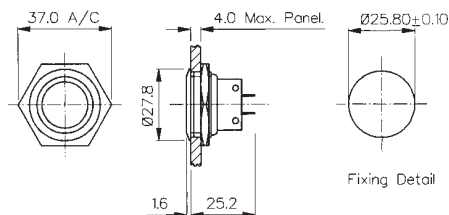
- 28mm diameter
- Prominent Button
- S.P.C.O. Microswitch
- 5A, 250Vac



Front Panel Mounting

MP0038/2  
Sealed to IP66

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



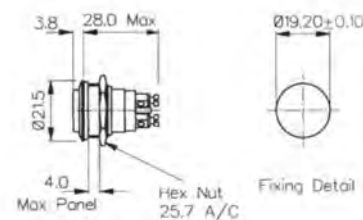
| Specifications                    | MP0027/2                                | MP0038/2                                                                                  |
|-----------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------|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

## 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

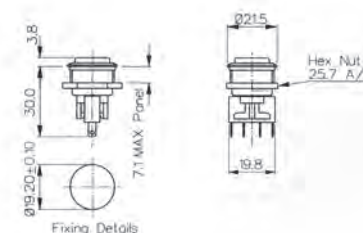


## Front Panel Mounting



MP0031/2  
Sealed to IP66

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



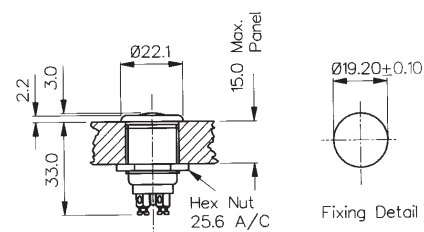
| Specifications                    | MP0037/2                                                                                                    | MP0031/2                                                                                  |
|-----------------------------------|---------------------------------------------------------------------------------------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

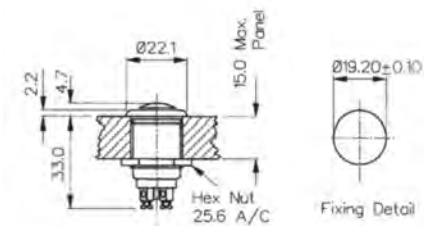


Front Panel Mounting



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



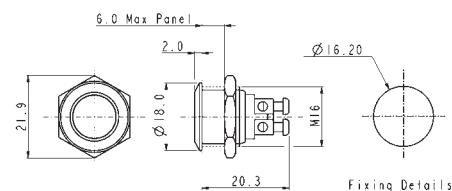
| Specifications                    | MP0013, MP0033                                                       | MP0013/2, MP0033/2                                                     |
|-----------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------|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

#### Flush Profile



MP0042/1

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

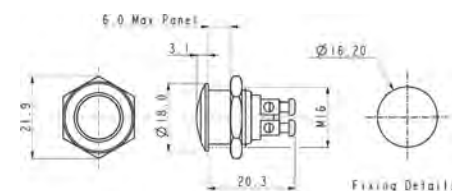


#### Domed Profile



MP0042/2

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

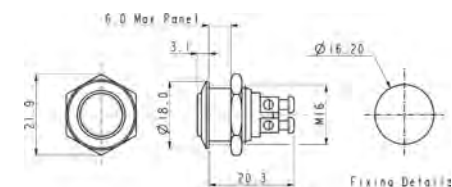


#### Prominent Button



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:  | >10 <sup>3</sup> MΩ @ 500Vdc        | >10 <sup>3</sup> MΩ @ 500Vdc        | >10 <sup>3</sup> 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:             | 1,000,000 (min)                     | 1,000,000 (min)                     | 1,000,000 (min)                     |
| Electrical:             | 100,000 (min)                       | 100,000 (min)                       | 100,000 (min)                       |
| Rear Nut Fixing Torque: | 12Nm                                | 12Nm                                | 12Nm                                |
| Materials               |                                     |                                     |                                     |
| Mouldings:              | Nylon                               | Nylon                               | Nylon                               |
| Tags/Terminations:      | Brass, Silver Plated                | Brass, Silver Plated                | Brass, Silver Plated                |
| Switch Body & Button:   | Stainless Steel (Polished)          | Stainless Steel (Polished)          | Stainless Steel (Polished)          |
| Contacts:               | Silver                              | Silver                              | Silver                              |
| Thread size:            | Gold Plated Brass version available | Gold Plated Brass version available | Gold Plated Brass version available |
| RoHS                    | Compliant                           | Compliant                           | Compliant                           |

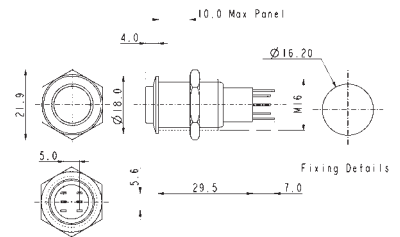


Low Profile



MP0045/1D

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O
- 3A, 250V

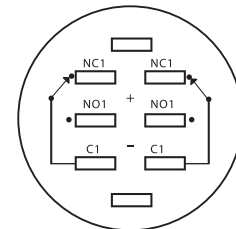
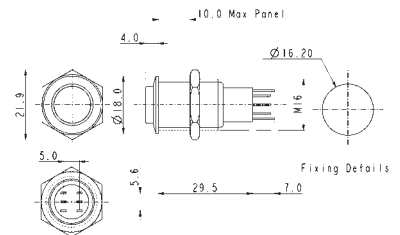


Prominent Button



MP0045/3D

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O
- 3A, 250V



Contact Layout

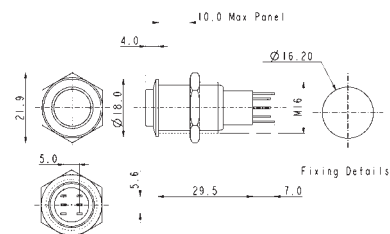
| Specifications          | MP0045/1D0NN000                                             | MP0045/3D0NN000                                             |
|-------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
| Terminations:           | Solder tags                                                 | Solder tags                                                 |
| Switching:              | D.P.C.O Momentary Action                                    | D.P.C.O Momentary Action                                    |
| Max. Rating:            | 3A, 250V                                                    | 3A, 250V                                                    |
| Contact Resistance:     | 50mΩ max. @ 1A, 2V                                          | 50mΩ max. @ 1A, 2V                                          |
| Insulation Resistance:  | >10 <sup>3</sup> MΩ @ 500Vdc                                | >10 <sup>3</sup> MΩ @ 500Vdc                                |
| Dielectric Strength:    | > 2.0kVac                                                   | > 2.0kVac                                                   |
| Operating Temp. Range:  | -20°C to +55°C                                              | -20°C to +55°C                                              |
| Operations              |                                                             |                                                             |
| Mechanical:             | 200,000 (min)                                               | 200,000 (min)                                               |
| Electrical:             | 30,000 (min)                                                | 30,000 (min)                                                |
| Rear Nut Fixing Torque: | 12Nm                                                        | 12Nm                                                        |
| Materials               |                                                             |                                                             |
| Mouldings:              | Nylon                                                       | Nylon                                                       |
| Tags/Terminations:      | Brass, Silver Plated                                        | Brass, Silver Plated                                        |
| Switch Body & Button:   | Stainless Steel                                             | Stainless Steel                                             |
| Contacts:               | Silver                                                      | Silver                                                      |
| Variants:               | Nickel Plated Brass version available<br>Details on request | Nickel Plated Brass version available<br>Details on request |
| RoHS                    | Compliant                                                   | Compliant                                                   |

## Low Profile



MP0045/1E

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O.
- 3A, 250Vac

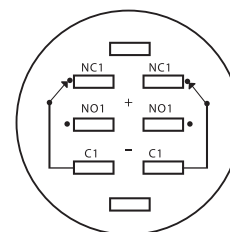
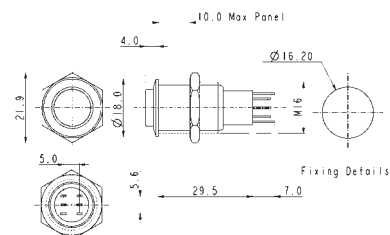


## Prominent Button



MP0045/3E

- 18mm bezel diameter
- 16mm fixing hole diameter
- D.P.C.O.
- 3A, 250Vac



Contact Layout

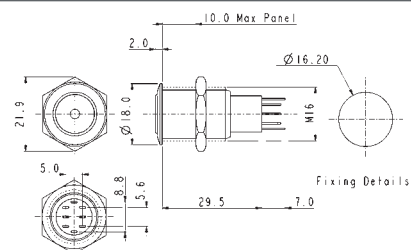
| Specifications          | MP0045/1E0NN000                                   | MP0045/3E0NN000                                   |
|-------------------------|---------------------------------------------------|---------------------------------------------------|
| Terminations:           | Solder Tags                                       | Solder Tags                                       |
| Switching:              | D.P.C.O. - Latching Action                        | D.P.C.O. - Latching Action                        |
| Max. Rating:            | 3A, 250V                                          | 3A, 250V                                          |
| Contact Resistance:     | 50mΩ max. @ 1A, 2V                                | 50mΩ max. @ 1A, 2V                                |
| Insulation Resistance:  | >10 <sup>3</sup> MΩ @ 500Vdc                      | >10 <sup>3</sup> MΩ @ 500Vdc                      |
| Dielectric Strength:    | >2.0kVac                                          | >2.0kVac                                          |
| Operating Temp. Range:  | -20°C to +55°C                                    | -20°C to +55°C                                    |
| Operations              |                                                   |                                                   |
| Mechanical:             | 200,000 (min)                                     | 200,000 (min)                                     |
| Electrical:             | 30,000 (min)                                      | 30,000 (min)                                      |
| Rear Nut Fixing Torque: | 12Nm                                              | 12Nm                                              |
| Materials               |                                                   |                                                   |
| Mouldings:              | Nylon                                             | Nylon                                             |
| Tags/Terminations:      | Brass, Tin Plated                                 | Brass, Tin Plated                                 |
| Switch Body & Button:   | Stainless Steel (Polished)                        | Stainless Steel (Polished)                        |
| Contacts:               | Silver                                            | Silver                                            |
| Thread size:            | Nickel Plated Brass version<br>Details on request | Nickel Plated Brass version<br>Details on request |
| RoHS                    | Compliant                                         | Compliant                                         |

## 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

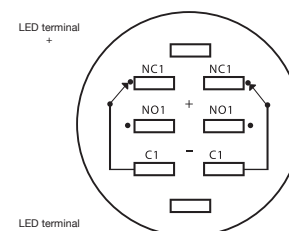
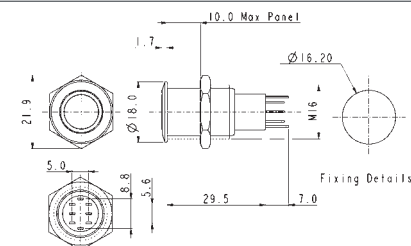


## Front Panel Mounting



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

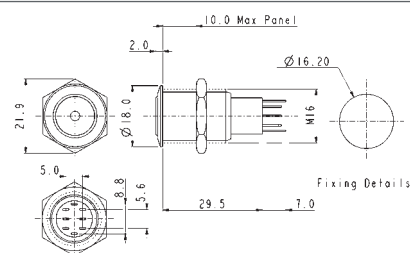
| Specifications          | MP0045/1D1/Colour/Voltage            |        |       |      | MP0045/1D2/Colour/Voltage            |        |       |      |
|-------------------------|--------------------------------------|--------|-------|------|--------------------------------------|--------|-------|------|
| 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                 | Red                                  | Green  | Amber | Blue | Red                                  | Green  | Amber | Blue |
| Part No.                | /RD                                  | /GN    | /AM   | /BL  | /RD                                  | /GN    | /AM   | /BL  |
| Voltage                 | 12Vdc                                | 220Vdc |       |      | 12Vdc                                | 220Vdc |       |      |
| Part No.                | /012                                 | /220   |       |      | /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:             | 200,000 (min)                        |        |       |      | 200,000 (min)                        |        |       |      |
| Electrical:             | 30,000 (min)                         |        |       |      | 30,000 (min)                         |        |       |      |
| Rear Nut Fixing Torque: | 12Nm                                 |        |       |      | 12Nm                                 |        |       |      |
| Materials               |                                      |        |       |      |                                      |        |       |      |
| Mouldings:              | Nylon                                |        |       |      | Nylon                                |        |       |      |
| Tags:                   | Brass, Silver Plated                 |        |       |      | Brass, Silver Plated                 |        |       |      |
| Switch Body & Button:   | Stainless Steel (Polished)           |        |       |      | Stainless Steel (Polished)           |        |       |      |
| Variants                | Prominent Button, details on request |        |       |      | Prominent Button, details on request |        |       |      |
| RoHS                    | Compliant                            |        |       |      | Compliant                            |        |       |      |

## 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

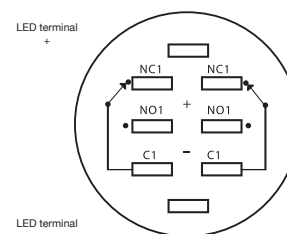
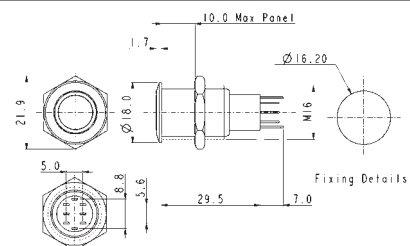


## Front Panel Mounting



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

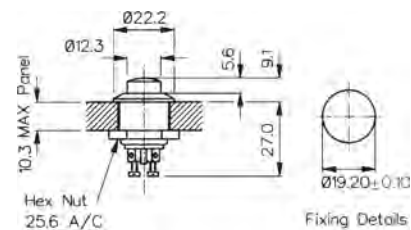
| Specifications          | MP0045/1E1/Colour/Voltage            |        |       |      | MP0045/1E2/Colour/Voltage            |        |       |      |
|-------------------------|--------------------------------------|--------|-------|------|--------------------------------------|--------|-------|------|
| 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                 | Red                                  | Green  | Amber | Blue | Red                                  | Green  | Amber | Blue |
| Part No.                | /RD                                  | /GN    | /AM   | /BL  | /RD                                  | /GN    | /AM   | /BL  |
| Voltage                 | 12Vdc                                | 220Vdc |       |      | 12Vdc                                | 220Vdc |       |      |
| Part No.                | /012                                 | /220   |       |      | /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:             | 200,000 (min)                        |        |       |      | 200,000 (min)                        |        |       |      |
| Electrical:             | 30,000 (min)                         |        |       |      | 30,000 (min)                         |        |       |      |
| Rear Nut Fixing Torque: | 12Nm                                 |        |       |      | 12Nm                                 |        |       |      |
| Materials               |                                      |        |       |      |                                      |        |       |      |
| Mouldings:              | Nylon                                |        |       |      | Nylon                                |        |       |      |
| Tags:                   | Brass, Silver Plated                 |        |       |      | Brass, Silver Plated                 |        |       |      |
| Switch Body & Button:   | Stainless Steel (Polished)           |        |       |      | Stainless Steel (Polished)           |        |       |      |
| Variants                | Prominent Button, details on request |        |       |      | Prominent Button, details on request |        |       |      |
| RoHS                    | Compliant                            |        |       |      | Compliant                            |        |       |      |

Front Panel Mounting



MP0012/Col

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

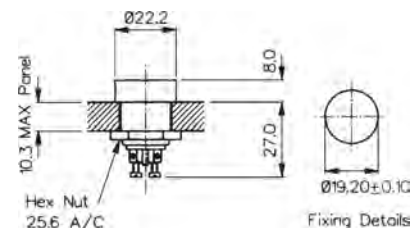


Front Panel Mounting



MP0012/1/Col

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

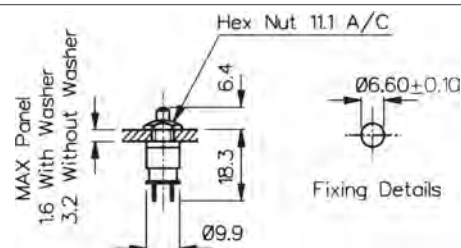


Rear Panel Mounting



MP0016

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



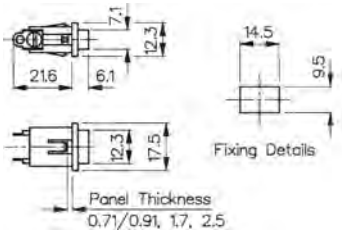
| Specifications            | MP0012/Colour                                 | MP0012/1/Colour                               | MP0016/Colour                                 |
|---------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| Terminations:             | Screw Terminals                               | Screw Terminals                               | Solder Tags                                   |
| Switching:                | S.P. Push to Make<br>Slow Momentary Action    | S.P. Push to Make<br>Slow Momentary Action    | S.P. Push to Make<br>Slow Momentary Action    |
| Max. Rating:              | 0.25A. 250Vac, 1A. 110Vac,<br>2A. 12Vac/dc    | 0.25A. 250Vac, 1A. 110Vac,<br>2A. 12Vac/dc    | 1A 28Vac/dc (non-inductive)                   |
| Contact Resistance:       | <15mΩ                                         | <15mΩ                                         | <15mΩ                                         |
| Insulation Resistance:    | >10 <sup>4</sup> MΩ                           | >10 <sup>4</sup> MΩ                           | >10 <sup>4</sup> 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:                 | Glass Filled Nylon Brass,                     | Glass Filled Nylon Brass,                     | Glass Filled Nylon Brass,                     |
| Body:                     | Brass, Chrome Plated                          | Brass, Chrome Plated                          | Brass, Chrome Plated                          |
| Contacts/Terms:           | Brass, Silver Plated                          | Brass, Silver Plated                          | Brass, Silver Plated                          |
| Variant                   | Button Colour: Standard - Black,<br>/RD (Red) | Button Colour: Standard - Black,<br>/RD (Red) | Button Colour: Standard - Black,<br>/RD (Red) |
| RoHS                      | Compliant                                     | Compliant                                     | Compliant                                     |

Front Panel Mounting



MP0022/Col

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



Switch Contact Operation



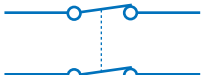
S.P. Push to Make S.P.M.B



S.P.C.O.



D.P.C.O.



D.P.M.B.

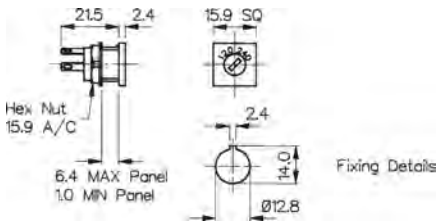
| Specifications         | MP0022/Colour                                                                                |
|------------------------|----------------------------------------------------------------------------------------------|
| Terminations:          | Solder Tags                  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

120/140V Voltage Selector



VS0001

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

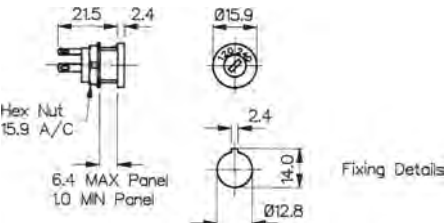


120/140V Voltage Selector

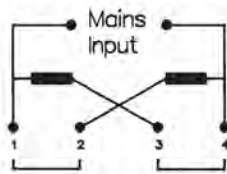


VS0002

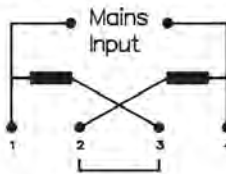
- 2.8 series tabs/Solder tags
- Round Front Bezel
- 6.3A
- CSA & VDE approvals



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.

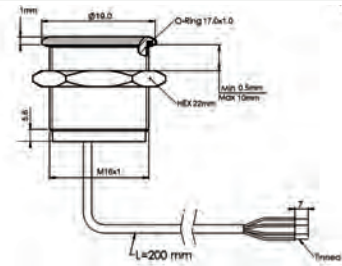


## 16MM Stainless Steel Non Illuminated



MPZ016

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



## Specification

## MPZ016

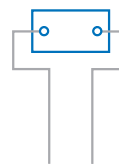
|                                     |                                             |
|-------------------------------------|---------------------------------------------|
| Type                                | Momentary                                   |
| Material                            | Stainless Steel<br>(Aluminium upon request) |
| Maximum Voltage                     | 24V AC/DC                                   |
| Switch Resistance “ON“              | <1Ω                                         |
| Switch Resistance “OFF“             | 5MΩ                                         |
| Capacitance                         | 100pF                                       |
| Switching current<br>(momentary)    | 1A Max                                      |
| Switching current<br>(prolonged)    | 300 mA                                      |
| Switching pulse time<br>(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 +85°C |
| 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 |

# Piezo Switches

## 19mm Stainless Steel

Illuminated and Non Illuminated

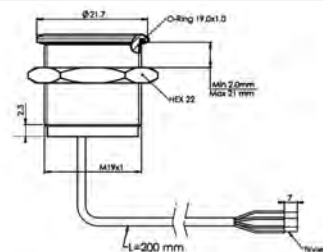


### 19MM Stainless Steel Illuminated

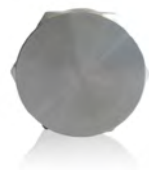


MPZI019

- Blue Illumination
- 20 cm lead
- Flathead

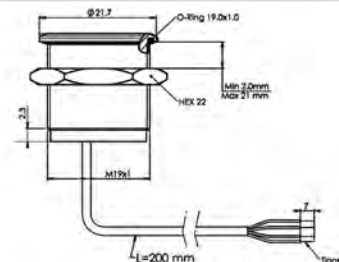


### 19MM Stainless Steel Non Illuminated



MPZ019

- Non Illumination
- 20 cm lead
- Flathead



### Specification

#### MPZ019, MPZI019

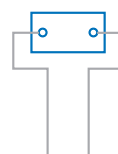
|                                     |                                             |
|-------------------------------------|---------------------------------------------|
| Type                                | Momentary                                   |
| Material                            | Stainless Steel<br>(Aluminium upon request) |
| Maximum Voltage                     | 24V AC/DC                                   |
| Switch Resistance "ON"              | <1Ω                                         |
| Switch Resistance "OFF"             | 5MΩ                                         |
| Capacitance                         | 100pF                                       |
| Switching current<br>(momentary)    | 1A Max                                      |
| Switching current<br>(prolonged)    | 300 mA                                      |
| Switching pulse time<br>(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 +85°C |
| Vibration Resistances | 5-500Hz/9.4m   |
| Shock resistance      | 75g (g-force)  |
| RoHS                  | Compliant      |

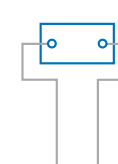
### Circuit Specification

#### 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  |

Piezo Switches  
**22mm Stainless Steel**  
 Illuminated and Non Illuminated

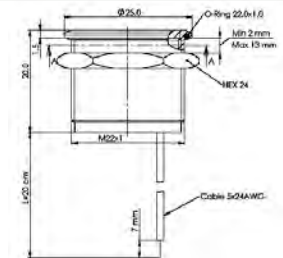


22MM Stainless Steel Non Illuminated



MPZ022

- Non Illumination
- 20 cm lead
- Flathead

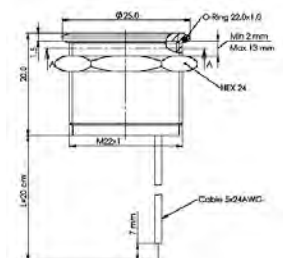


22MM Stainless Steel Illuminated



○ ○  
 MPZI022

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

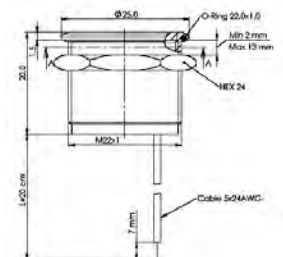


22MM Stainless Steel Illuminated



○ ○  
 MPZI022

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



**Specification**

**MPZ022, MPZI022**

|                                  |                                             |
|----------------------------------|---------------------------------------------|
| Type                             | Momentary                                   |
| Material                         | Stainless Steel<br>(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 +85°C° |
| 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  |

Piezo Switches

# 22mm Stainless Steel Flathead

Illuminated

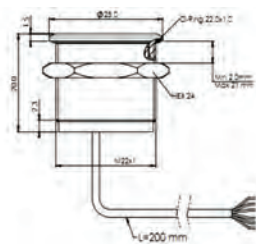


22MM Stainless Steel Illuminated



MPZI022/L

- Blue Illumination
- 1 colour
- 20 cm lead



Specification

MPZI022/L

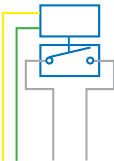
|                            |                                             |
|----------------------------|---------------------------------------------|
| Type                       | Latching Toggle                             |
| Material                   | Stainless Steel<br>(Aluminium upon request) |
| 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 +85°C |
| 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       |

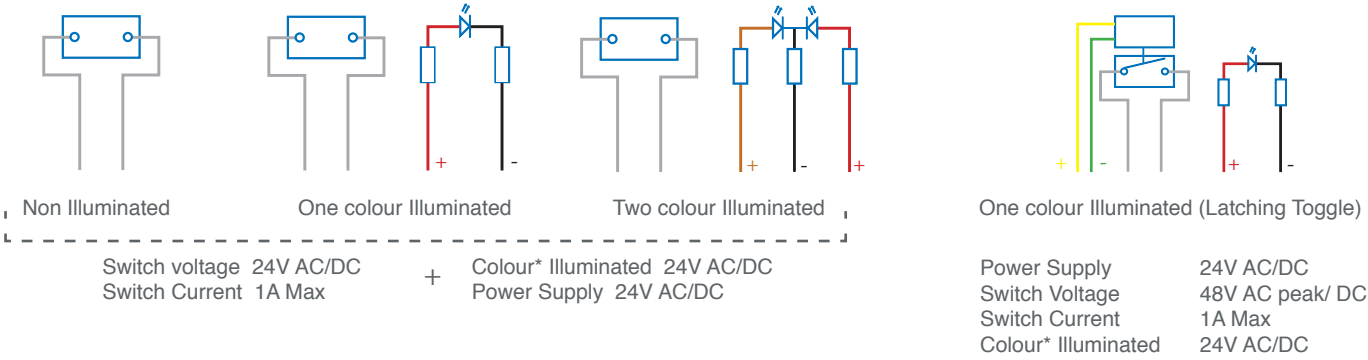
Part No System

|                                             |   |                                        |   |                                     |   |                                                           |   |             |   |                                               |
|---------------------------------------------|---|----------------------------------------|---|-------------------------------------|---|-----------------------------------------------------------|---|-------------|---|-----------------------------------------------|
| MPZ                                         | / | 016                                    | / | X                                   | / | XX                                                        | / | X           | / | X                                             |
| Series                                      |   | Body Diameter                          |   | Profile                             |   | Colour                                                    |   | Led Voltage |   | Type                                          |
| MPZ - Non Illuminated<br>MPZI - Illuminated |   | 016 = 16mm<br>019 = 19mm<br>022 = 22mm |   | F = Flat Head<br>G = Guided Profile |   | BL = Blue<br>RD = Red<br>GN = Green<br>D1 = Red and green |   | 24v         |   | L = Latching Toggle<br>(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



Other switches are available upon request\*

**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.

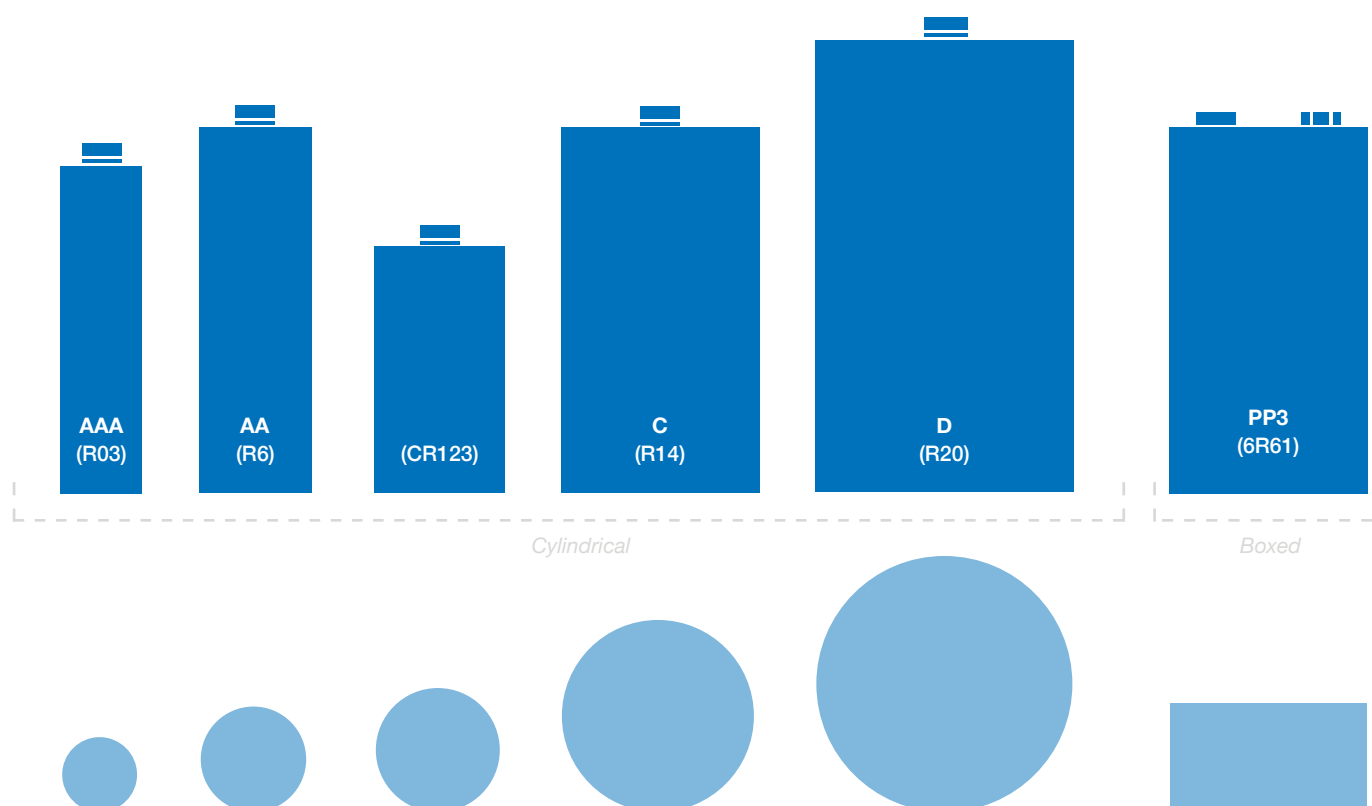
The open frame styles are designed to be either PCB or base mounted and most have an interlocking facility to join adjacent holders together.

Principle applications include portable equipment and memory back-up.

|                   |         |
|-------------------|---------|
| IP67 Sealed       | 123     |
| Panel Mounting    | 124-125 |
| PCB/Base Mounting | 126-127 |



| 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   |



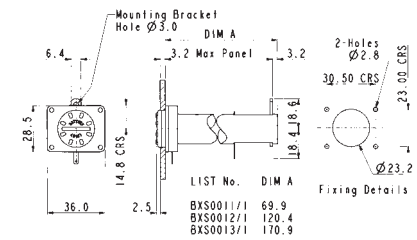
As batteries from different manufacturers may vary slightly in size, Dimensions & Drawings are approximate only.  
 All Bulgin Battery Holders have polarity clearly marked.

#### 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

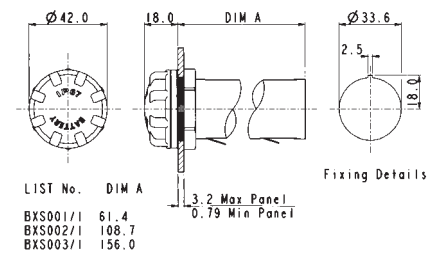


#### C SIZE BATTERY HOLDER



BXS001/1

- 1, 2 or 3 Cells
- Panel Mount
- Screw Cap/Hand release
- Supplied with gasket

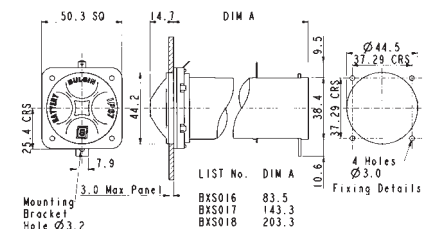


#### D SIZE BATTERY HOLDER



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

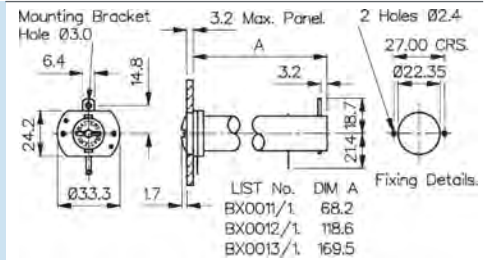
|                           |                                                                                                   |                                                                                                |                                                                         |
|---------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Battery/Cell Type:        | AA (R6)                                                                                           | C (R14)                                                                                        | D (R20)                                                                 |
| No. Cells:                | BXS011/1 - 1 cell<br>BXS012/1 - 2 cells<br>BXS013/1 - 3 cells                                     | BXS001/1 - 1 cell<br>BXS002/1 - 2 cells<br>BXS003/1 - 3 cells                                  | BXS016 - 1 cell<br>BXS017 - 2 cells<br>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<br>Glass filled Polyester<br>Polycarbonate                                                  | Nylon<br>Glass filled Polyester                                                                | Nylon<br>Glass filled Polyester                                         |
| Flammability Rating:      | UL94V-0                                                                                           | UL94V-0                                                                                        | UL94V-0                                                                 |
| Contacts:                 | Brass, Tin Plated - rear contact<br>Nickel Silver, clean - front contact<br>and cap contact plate | Brass, Tin Plated - front and rear contacts<br>Nickel Silver, clean - cap contact plate        | Brass, Nickel Plated - front and rear<br>contacts and cap contact plate |
| Features:                 | Bayonet cap with finger grip and<br>coin slot<br>Rear support bracket                             | Screw on cap with finger grip<br>Recommended torque for panel ring<br>1.13-1.7Nm (10-15lbf.in) | Bayonet cap with finger grip<br>Rear support bracket                    |
| Sealing (front of panel): | Protection classification<br>IP67, EN60529:1992+A2:2013                                           | Protection classification<br>IP67, EN60529:1992+A2:2013                                        | Protection classification<br>IP67, EN60529:1992+A2:2013                 |
| Notes:                    | Recommend 2 & 3 cell versions are<br>supported by rear bracket                                    |                                                                                                | Recommend 2 & 3 cell versions are<br>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

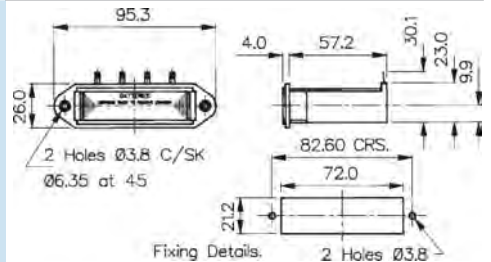


#### AA SIZE BATTERY HOLDER



BX0027

- 4 Cells
- Flanged Panel Mount
- Drawer function

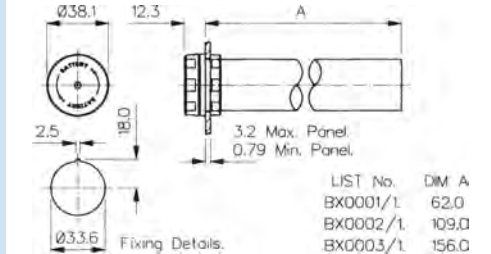


#### C SIZE BATTERY HOLDER



BX0001/1

- 1, 2 or 3 Cells
- Panel Mount
- Screw Cap/Hand release



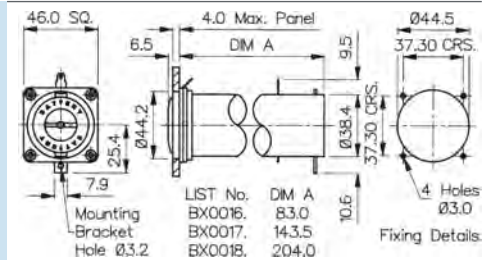
| Specification          | BX0011/1, BX0012/1, BX0013/1                                  | BX0027                                              | BX0001/1, BX0002/1, BX0003/1                                             |
|------------------------|---------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------|
| Battery/Cell Type:     | AA (R6)                                                       | AA (R6)                                             | C (R14)                                                                  |
| No. Cells:             | BX0011/1 - 1 cell<br>BX0012/1 - 2 cells<br>BX0013/1 - 3 cells | 4 cells                                             | BX0001/1 - 1 cell<br>BX0002/1 - 2 cells<br>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                                                       | UL94V-0                                             | UL94V-0                                                                  |
| Mouldings:             | Glass Filled Nylon & Polyester                                | Glass Filled Nylon                                  | Nylon & Glass Filled Nylon                                               |
| Contacts:              | Brass, Tin Plated<br>Nickel Silver, clean                     | Phosphor Bronze, Tin Plated<br>Nickel Silver, clean | Nickel Silver, clean<br>Brass, Tin Plated                                |
| Features:              | Bayonet cap with coin slot<br>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

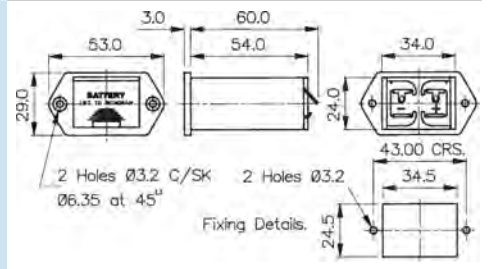


#### PP3 SIZE BATTERY HOLDER



BX0023

- 1 Cell
- Flanged Panel Mount
- Drawer function

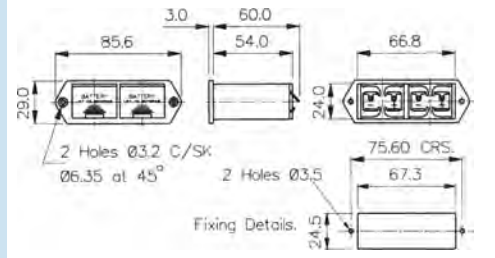


#### PP3 SIZE BATTERY HOLDER



BX0026

- 2 Cell
- Panel Mount
- Screw Cap/Hand release



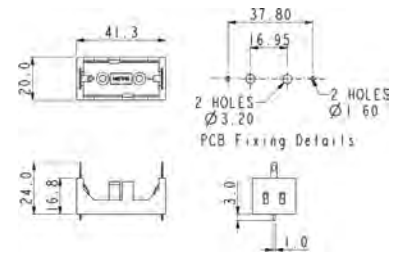
| Specification          | BXS011/1, BXS012/1, BXS013/1                                | BX0023                      | BX0026                      |
|------------------------|-------------------------------------------------------------|-----------------------------|-----------------------------|
| Battery/Cell Type:     | D (R20)                                                     | PP3 (6R61)                  | PP3 (6R61)                  |
| No. Cells:             | BX0016 - 1 cell<br>BX0017 - 2 cells<br>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                                                     | UL94V-0                     | UL94V-0                     |
| 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<br>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

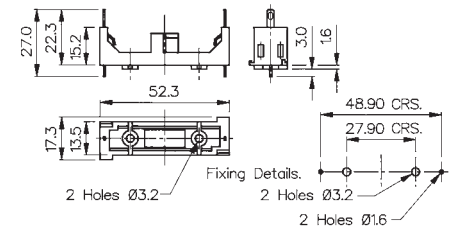


#### AAA SIZE BATTERY HOLDER



BX0034

- 1 Cell
- PC/Base Mount
- Open style

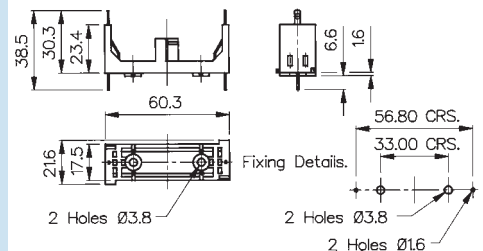


#### AA SIZE BATTERY HOLDER



BX0035

- 1 Cell
- PC/Base Mount
- Open style



#### Specification

#### BX0123

#### BX0034

#### BX0035

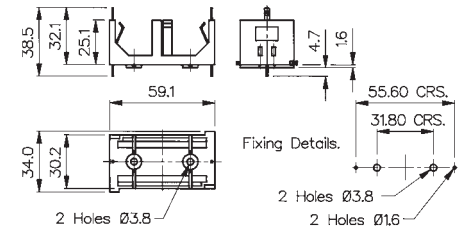
|                        |                                                                                                       |                                                                                                       |                                                                                                       |
|------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 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:   | UL94V-0                                                                                               | UL94V-0                                                                                               | UL94V-0                                                                                               |
| 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                                                                  |
| <b>RoHS</b>            | Compliant                                                                                             | Compliant                                                                                             | Compliant                                                                                             |

#### C SIZE BATTERY HOLDER



BX0036

- 1 Cell
- PC/Base Mount
- Open style

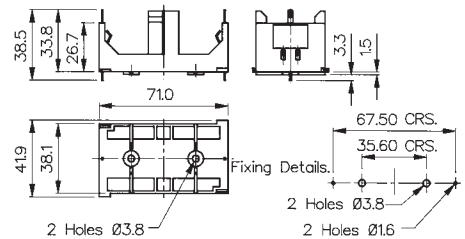


#### D SIZE BATTERY HOLDER



BX0037

- 1 Cell
- PC/Base Mount
- Open style

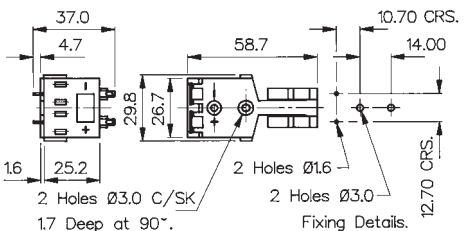


#### PP3 SIZE BATTERY HOLDER



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:   | UL94V-0                                                                                               | UL94V-0                                                                                               | UL94V-0                                                                                               |
| 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                                                                  |                                                                                                       |
| <b>RoHS</b>            | 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.

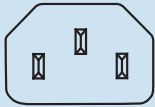
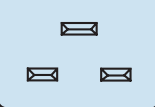
Completing the range are insulating boots, retaining and safety covers

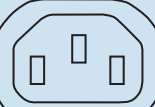
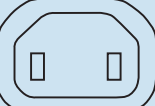
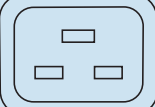
In addition to the standard black moulding, most styles are also available in either white or grey and special colours to match OEM equipment can also be supplied. (Subject to product approval requirements)

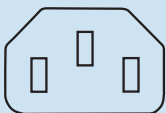
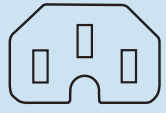
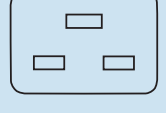
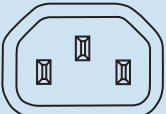


|                              |         |
|------------------------------|---------|
| Inlets and Outlet Connectors | 129-152 |
| Distribution Units           | 153-157 |
| Polysnap Connection Modules  | 158-180 |
| EMI Mains Filters            | 181-189 |



| 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<br>PX0580<br>PX0580/PC<br>PX0580/PC/12132<br>PX0580/PC/7<br>PX0580/PC/7LC | PX0575<br>PX0575/PC | PF0001<br>PF0001/PC<br>PF0002<br>PF0030<br>PF0030/PC | PF0011<br>PF0011/PC | PS00<br>PS01 | PS20<br>PS21<br>PS25<br>PS26 |
|   | C16       | 3       | 10A, 250V a.c.   | PX0590                                                                           | PX0595              |                                                      |                     |              |                              |
|   | C18       | 2       | 10A, 250V a.c.   | PX0690                                                                           | PX0691<br>PX0691/PC | PF0006<br>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<br>PX0675/PC<br>PX0675/PC/12599<br>PX0793 (Shuttered)<br>PX0793/1(Shuttered) | PX0695<br>PX0695/PC<br>PX0783<br>(Shuttered)<br>PX0716<br>PX0717<br>PX0718 |              |                |          |               |
|  | H         | 2       | 10A, 250V a.c. | PX0705                                                                              | PX0725                                                                     |              |                |          |               |
|  | J         | 3       | 16A, 250V a.c. | PX0591                                                                              | PX0592                                                                     |              |                |          |               |

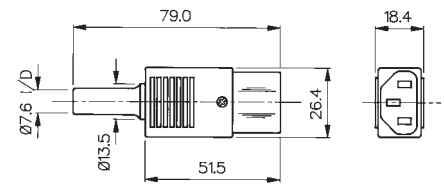
| IEC60 320-1                                                                         | Sheet No: | No Pins | Current Rating | Rewirable        | Side Entry<br>Rewirable |
|-------------------------------------------------------------------------------------|-----------|---------|----------------|------------------|-------------------------|
|    | C13       | 3       | 10A, 250V a.c. | PX0587<br>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<br>Rewirable |
|  | E         | 3       | 10A, 250V a.c. | PX0686           | PX0685<br>PX0686/SE     |

## Straight Female Connector



PX0587

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.

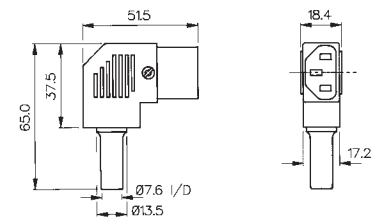


## Side Entry Female Connector



PX0587/SE

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.

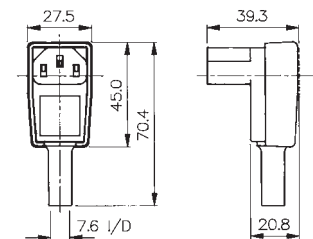


## Angled Female Connector



PX0588

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.



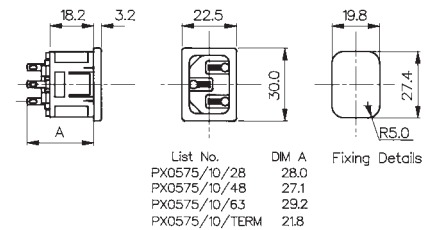
| Specifications         | PX0587/Col                                                                          | PX0587/SE/Col                                                                        | PX0588                                                                                |
|------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 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: | >10 <sup>3</sup> MΩ                                                                 | >10 <sup>3</sup> MΩ                                                                  | >10 <sup>3</sup> MΩ                                                                   |
| A.C. Breakdown:        | Pole-Pole 4.5kV.<br>(Poles-Accessible) Parts 4kV                                    | Pole-Pole 4.5kV.<br>(Poles-Accessible) Parts 4kV                                     | Pole-Pole 5kV.<br>(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                                |
| <b>RoHS</b>            | Compliant                                                                           | Compliant                                                                            | Compliant                                                                             |

## 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)

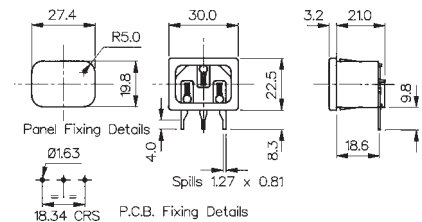


## PC Snap Fit to Panel Inlet



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)  
 Terminations: /28 (2.8mm solder), /48 (4.8mm tab)  
 Colours: No suffix (Black), /WH (White), /GY (Grey)  
 Max. Rating: 10A, 250V a.c.  
 (UL & CSA 15A, 250V a.c.)  
 Contact Resistance: <10mΩ  
 Insulation Resistance: >10<sup>9</sup> MΩ  
 A.C. Breakdown: Pole-Pole 5kV. Poles-Panel 5.4kV  
 Operating Temp. Range: -40°C to +70°C  
 Max. Pin Temp.: +70°C  
 Mouldings: Nylon, Flammability Rating UL94V-0  
 Contacts: Brass: Pins, Nickel Plated. Tabs, Tin Plated, Screw Terms, Nickel Plated

Approvals:     

Accessories / Notes: P.No. 11328 (See Page 152)  
 VDE and ENEC approval for black versions only.

Mating Connectors: PX0587, PX0587/SE, PX0588

RoHS

Compliant

Fixing(Panel): Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)  
 Terminations: P.C. Spills  
 Colours: No suffix (Black), /WH (White), /GY (Grey)  
 Max. Rating: 10A, 250V a.c.  
 (UL & CSA 15A, 250V a.c.)  
 Contact Resistance: <10mΩ  
 Insulation Resistance: >10<sup>9</sup> MΩ  
 A.C. Breakdown: Pole-Pole 5kV. Poles-Panel 5.4kV  
 Operating Temp. Range: -40°C to +70°C  
 Max. Pin Temp.: +70°C  
 Mouldings: Nylon, Flammability Rating UL94V-0  
 Contacts: Brass: Pins, Nickel Plated. Spills, Tin Plated

Approvals:     

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

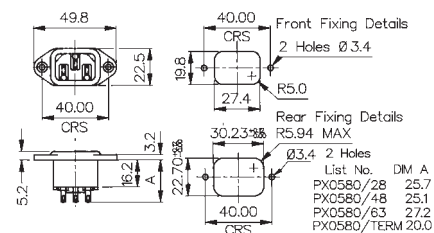
Compliant

## 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)

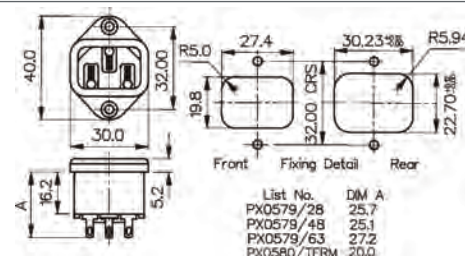


## Vertical Flange Mount Inlet



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)<br>/63 (6.3mm tab), /TERM (screw)                                          | /28 (2.8mm solder), /48 (4.8mm tab)<br>/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.<br>(UL & CSA 15A, 250V a.c.)                                                                    | 10A, 250V a.c.<br>(UL & CSA 15A, 250V a.c.)                                                  |
| Contact Resistance:    | <10mΩ                                                                                                          | <10mΩ                                                                                        |
| Insulation Resistance: | >10 <sup>3</sup> MΩ                                                                                            | >10 <sup>3</sup> 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)<br>(See Pages 150 and 152)<br>VDE and ENEC approval for black versions only. | P.No. 11328 (See Page 152)                                                                   |
| Mating Connectors:     | PX0587, PX0587/SE, PX0588                                                                                      | PX0587, PX0587/SE, PX0588                                                                    |
| <b>RoHS</b>            | Compliant                                                                                                      | Compliant                                                                                    |



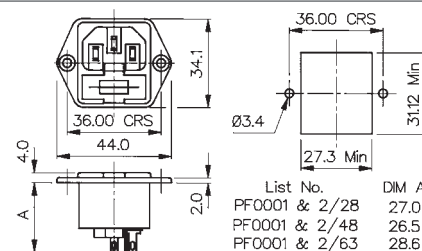
## Flanged Mount Fused Inlet



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)

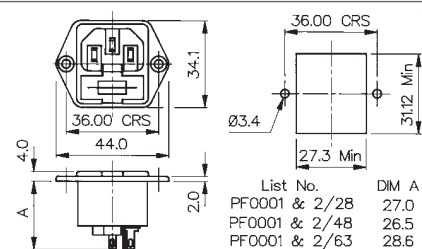


## PC Flanged Mount Fused Inlet



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)<br>/63 (6.3mm tab)                                        | P.C. Spills                                                                                               | /28 (2.8mm solder), /48 (4.8mm tab)<br>/63 (6.3mm tab)                                                                       |
| Colours:               | No suffix (Black), /WH (White),<br>/GY (Grey)                                                 | No suffix (Black), /WH (White),<br>/GY (Grey)                                                             | No suffix (Black), /WH (White),<br>/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: | >10 <sup>3</sup> MΩ                                                                           | >10 <sup>3</sup> MΩ                                                                                       | >10 <sup>3</sup> 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<br>See Pages 150 & 152)<br>VDE and ENEC approval for black versions only. | KT0009 (front of panel mounting only)<br>(See Page 150)<br>VDE and ENEC approval for black versions only. | P.No. 11987, KT0009 (See Pages 150 & 152)<br>(Note: Fuse contact isolated)<br>VDE and ENEC approval for black versions only. |
| Mating Connectors:     | PX0587, PX0587/SE, PX0588                                                                     | PX0587, PX0587/SE, PX0588                                                                                 | PX0587, PX0587/SE, PX0588                                                                                                    |
| <b>RoHS</b>            | Compliant                                                                                     | Compliant                                                                                                 | Compliant                                                                                                                    |

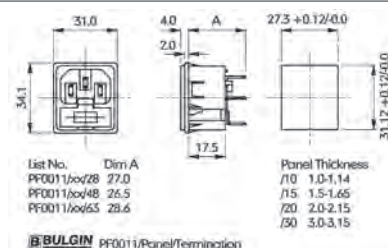


## Snap Fit to Panel Fused Inlet



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.

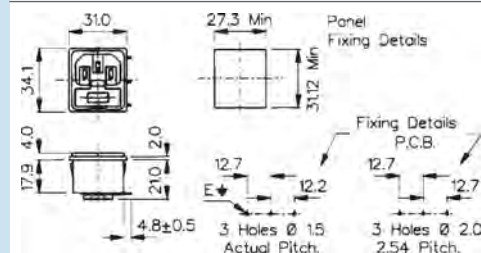


## PC Snap Fit to Panel Fused Inlet



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: | >10 <sup>3</sup> MΩ                                                                 | >10 <sup>3</sup> 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)<br>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                                                            |
| <b>RoHS</b>            | Compliant                                                                           | Compliant                                                                            |



PF0030/28

- 
- Technical drawings of the PF0030/28, PF0030/48, and PF0030/63 models. The drawings show top and side views with dimensions.
- Top View Dimensions:
- Overall Width: 44.0
  - Mounting Hole Diameter: 36.00 CRS
  - Base Thickness: 34.1
- Side View Dimensions:
- Mounting Plate Thickness: 2.0
  - Mounting Plate Width: 4.0
  - Mounting Plate Hole Diameter: Ø3.4
  - Mounting Plate Hole Position: 31.1 Min.
  - Mounting Plate Hole Diameter: 27.3 Min.
  - Mounting Plate Hole Position: 36.00 CRS
- Table:
- | List No.   | DIM A |
|------------|-------|
| PF0030/28. | 38.0  |
| PF0030/48. | 38.0  |
| PF0030/63. | 40.0  |
- Fixing Details.

## PC Flanged Mount Fused Inlet



PF0030/PC

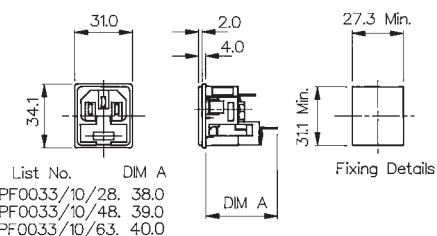
- 
- Technical drawings of the Panel Fixing Details for the 1000 Series. The drawings include a top view, a side view, and a detail view of the P.C.B. Fixing.
- Top View Dimensions:**
- Overall width: 44.0
  - Overall height: 40.0
  - Inner square width: 35.8
  - Inner square height: 35.8
  - Mounting hole diameter:  $\varnothing 3.4$
  - Panel width: 36.00
  - Panel height: 31.3 Min
  - Mounting hole offset: 28.1 Min
- Side View Dimensions:**
- Panel thickness: 2.0
  - Mounting hole offset: 4.0
  - Mounting hole diameter:  $\varnothing 3.4$
  - Mounting hole offset: 7.5
  - Mounting hole offset: 15.0
  - Mounting hole offset: 19.5
  - Mounting hole offset: 31.20
- P.C.B. Fixing Details:**
- Mounting hole diameter:  $\varnothing 3.40 \times 2$  OFF
  - Mounting hole offset: 12.00
  - Mounting hole offset: 36.00 CRS
  - Mounting hole offset: 11.70 CRS
  - Mounting hole offset: 14.00 CRS
  - Mounting hole offset:  $\varnothing 1.70 \times 3$  OFF

### 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.

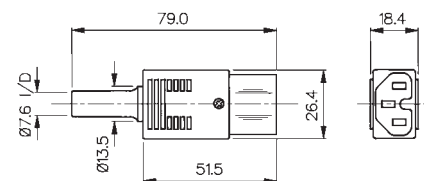
137 IEC Connectors

## Straight Female Connector



PX0597

- Cable Mounting
- Hot Condition
- Mates with PX0590 and PX0595
- Screw Terminals
- 10A, 250V a.c.

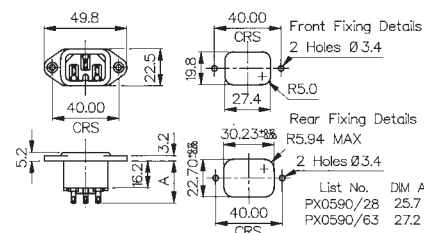


## Flange Mount Inlet



PX0590/28

- Hot Condition
- 2.8 or 6.3mm Tabs
- 10A, 250V a.c.  
(15A, 250V a.c. UL & CSA)

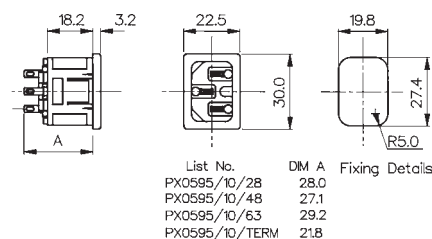


## Snap Fit to Panel Inlet



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)



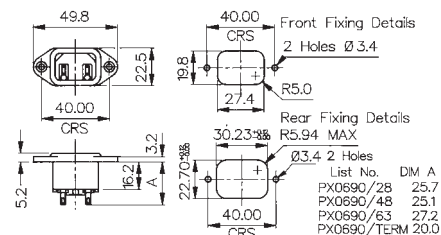
| Specifications         | PX0597/Col                                                                          | PX0590/Term/Col                                                                                | PX0595/Panel/Term/Col                                                                 |
|------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 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.<br>(UL & CSA 15A, 250V a.c.)                                                    | 10A, 250V a.c.<br>(UL & CSA 15A, 250V a.c.)                                           |
| Contact Resistance:    | <10mΩ                                                                               | <10mΩ                                                                                          | <10mΩ                                                                                 |
| Insulation Resistance: | >10 <sup>3</sup> MΩ                                                                 | >10 <sup>3</sup> MΩ                                                                            | >10 <sup>3</sup> 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<br>(See Pages 150 & 152)<br>VDE and ENEC approval for black versions only. | P.No. 11328 (See Page 152)<br>VDE and ENEC approval for black versions only.          |
| Mating Connectors:     | PX0590, PX0595                                                                      | PX0597                                                                                         | PX0597                                                                                |
| <b>RoHS</b>            | Compliant                                                                           | Compliant                                                                                      | Compliant                                                                             |

## 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)

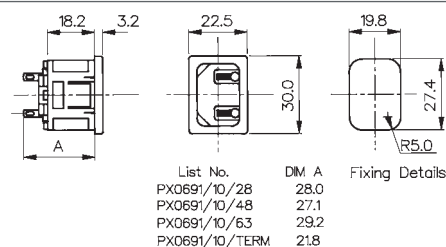


## Snap Fit to Panel Inlet



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)

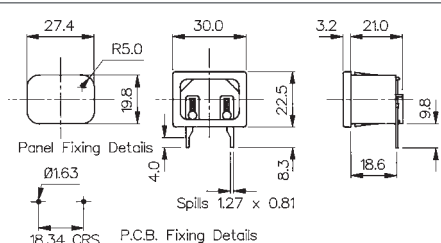


## PC Snap Fit to Panel Inlet



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)



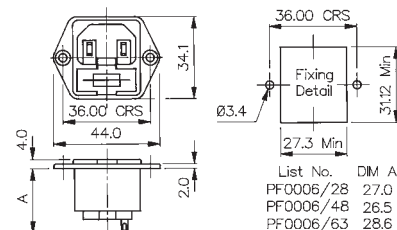
| Specifications         | PX0690/Term/Col                                                                     | PX0691/Panel/Term/Col                                                               | PX0691/Panel/PC/Col                                                                                     |
|------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 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: | >10 <sup>3</sup> MΩ                                                                 | >10 <sup>3</sup> MΩ                                                                 | >10 <sup>3</sup> 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)<br>VDE and ENEC approval for black versions only.        | P.No. 11328 (See Page 152)<br>VDE and ENEC approval for black versions only.        | Standard without cover.<br>With cover add /C to P.No.<br>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                                                                                               |

## 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.

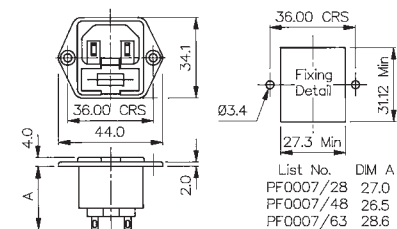


## Flanged Mount Fused Inlet



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.

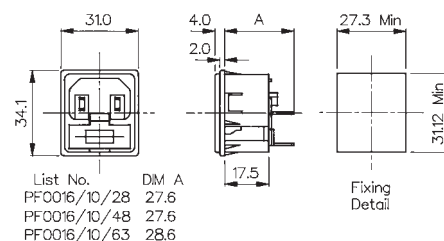


## Snap Fit to Panel Fused Inlet



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.



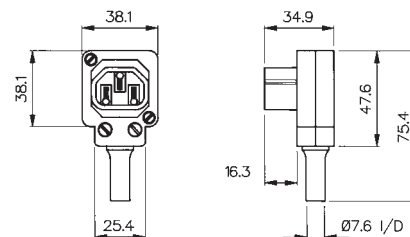
| Specifications         | PF0006/Term/Col                                                                     | PF0007/Term/Col                                                                                                | PF0016/Panel/Term/Col                                                                 |
|------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Fixing(Panel):         | Flange                                                                              | Flange                                                                                                         | Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)                                |
| Terminations:          | /28 (2.8mm solder), /48 (4.8mm tab)<br>/63 (6.3mm tab)                              | /28 (2.8mm solder), /48 (4.8mm tab)<br>/63 (6.3mm tab)                                                         | /28 (2.8mm solder), /48 (4.8mm tab)<br>/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 including Fuseholder)                                                    |
| Insulation Resistance: | >10 <sup>9</sup> MΩ                                                                 | >10 <sup>9</sup> MΩ                                                                                            | >10 <sup>9</sup> 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 (See Page 152)<br>VDE and ENEC approval for black versions only.        | P.No. 11987 (See Page 152)<br>(Note: Fuse contacts isolated)<br>VDE and ENEC approval for black versions only. | P.No. 11987 (See Page 152)<br>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                                                                             |

### Angled Male Connector



PX0685

- Cable Mounting
- Four Position Cable Entry
- Rewirable
- Screw Terminals
- 10A, 250V a.c.

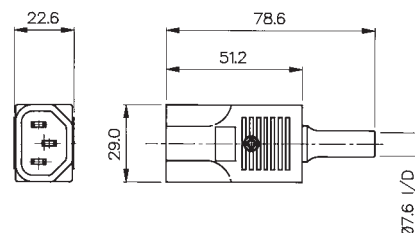


### Straight Male Connector



PX0686

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.

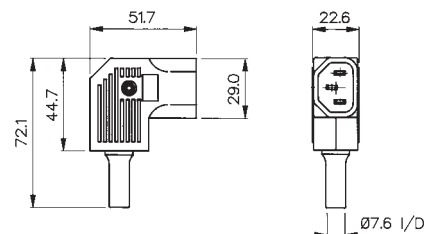


### Side Entry Male Connector



PX0686/SE

- Cable Mounting
- Rewirable
- Screw Terminals
- 10A, 250V a.c.



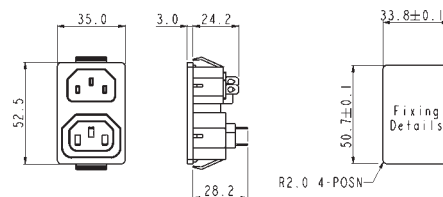
| Specifications         | PX0685/Col                                               | PX0686/Col                                                                | PX0686/SE/Col                                                             |
|------------------------|----------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 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 <sup>4</sup> MΩ                                      | >10 <sup>4</sup> MΩ                                                       | >10 <sup>4</sup> MΩ                                                       |
| A.C. Breakdown:        | Pole-Pole 5.2kV.<br>Poles-Accessible Parts 6kV           | Pole-Pole 5kV.<br>Poles-Accessible Parts 5kV                              | Pole-Pole 5kV.<br>Poles-Accessible Parts 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, Nickel Plated.                                    | Brass, Nickel Plated.                                                     | 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 |
| <b>RoHS</b>            | Compliant                                                | Compliant                                                                 | Compliant                                                                 |

## Snap Fit to Panel Inlet/ Outlet



PX0716/48

- Inlet/Outlet combination
- Panel Size 1.2mm
- 4.8mm tabs
- 10A, 250V a.c.  
(15A, 250V a.c. UL & CSA)

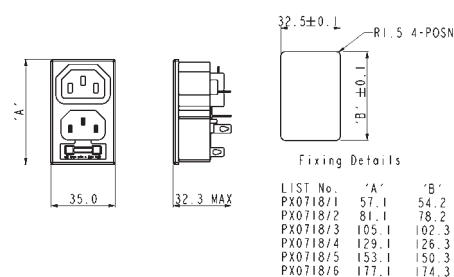


## Snap Fit to Fused Inlet/ Outlet



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.



| 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.<br>(UL 15A, 125V a.c.)                                               | 10A, 250V a.c.<br>(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:         | +70°C                                                                               | +70°C                                                                               |
| Mouldings:             | Nylon 66, Flammability Rating UL94V-0                                               | Glass filled Thermoplastic, UL94V-0                                                 |
| Contacts:              | Brass, Tin Plated                                                                   | Brass, Tin Plated                                                                   |
| Approvals:             |  |  |
| Accessories / Notes:   |                                                                                     |                                                                                     |
| Mating With:           | PX0587, PX0587/SE, PX0588, PX0686,<br>PX0686/SE                                     | PX0587, PX0587/SE, PX0588, PX0686,<br>PX0686/SE                                     |
| <b>RoHS</b>            | Compliant                                                                           | Compliant                                                                           |

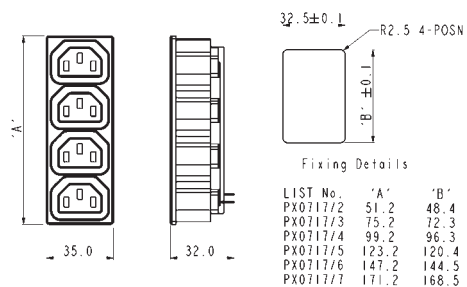


## Snap Fit to Panel Outlet



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

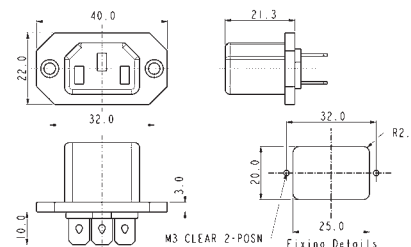


## Flange Mount Outlet



PX0578/63

- Front of Panel Mount
- 6.3mm tabs
- 10A, 250V a.c.  
(15A, 250V a.c. UL)



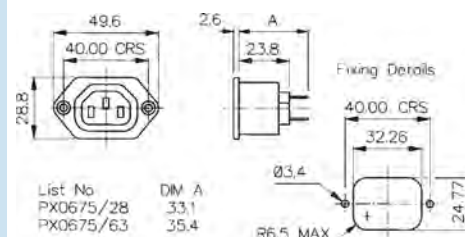
| Specifications         | PX0717/x/15/Termination                                                             | PX0578/Termination                                                                  |
|------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Fixing:                | Snap fit 1.5mm accommodation                                                        | Flange                                                                              |
| Terminations:          | /ST (solder)                                                                        | /63 (6.3mm tab)                                                                     |
| Max. Rating:           | 10A, 250V a.c.<br>(UL 15A, 250v a.c.)                                               | 10A, 250V a.c.<br>(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:             |  |  |
| Accessories / Notes:   |                                                                                     |                                                                                     |
| Mating With:           | PX0686, PX0686/SE                                                                   | PX0686, PX0686/SE                                                                   |
| <b>RoHS</b>            | Compliant                                                                           | Compliant                                                                           |

### Flange Mount Outlet



PX0675/28

- 2.8mm or 6.3mm Tabs
- 10A, 250V a.c.  
(15A, 250V a.c. UL & CSA).

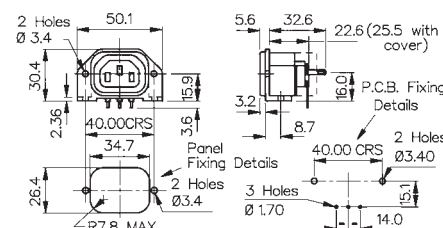


## PC Flange Rear Mount Outlet



PX0675/PC

- PC Spills
- 10A, 250V a.c.  
(15A, 250V a.c. UL & CSA)



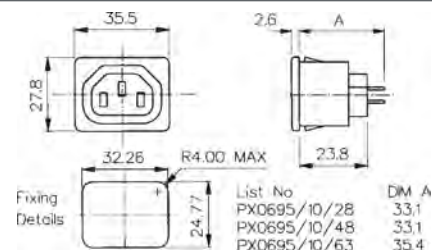
| Specifications         | PX0675/Term/Col                                                                                                                                                                                                                                                                                                                                                                              | PX0675/PC/Col                                                                                                                                                                                                                                                                                                                                   |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fixing:                | Flange                                                                                                                                                                                                                                                                                                                                                                                       | P.C.B./Flange                                                                                                                                                                                                                                                                                                                                   |
| Terminations:          | /28 (2.8mm solder), /48 (4.8mm tab),<br>/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.<br>(UL & CSA 15A, 250V a.c.)                                                                                                                                                                                                                                                                                                                                                  | 10A, 250V a.c.<br>(UL & CSA 15A, 250V a.c.)                                                                                                                                                                                                                                                                                                     |
| Contact Resistance:    | <10mΩ                                                                                                                                                                                                                                                                                                                                                                                        | <10mΩ                                                                                                                                                                                                                                                                                                                                           |
| Insulation Resistance: | >10 <sup>4</sup> MΩ                                                                                                                                                                                                                                                                                                                                                                          | >10 <sup>4</sup> 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<br>(See Pages 150-152)<br>VDE and ENEC approval for black versions only.                                                                                                                                                                                                                                                                                          | Standard without cover.<br>With cover add /12599 to P.No.,<br>14228 (see page 151)<br>VDE and ENEC approval for black versions only.                                                                                                                                                                                                            |
| Mates with:            | PX0685, PX0686, PX0686/SE                                                                                                                                                                                                                                                                                                                                                                    | PX0685, PX0686, PX0686/SE                                                                                                                                                                                                                                                                                                                       |
| RoHS                   | Compliant                                                                                                                                                                                                                                                                                                                                                                                    | Compliant                                                                                                                                                                                                                                                                                                                                       |

## 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)

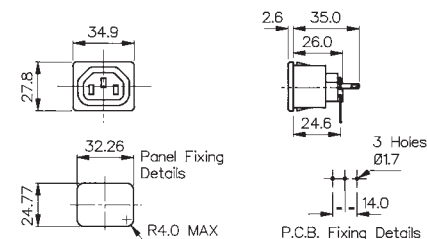


## PC Snap Fit to Panel Outlet



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)                                  |
| Terminations:          | /28 (2.8mm solder), /63 (6.3mm tab)                                                     |
| Colours:               | No suffix (Black), /WH (White), /GY (Grey)                                              |
| Max. Rating:           | 10A, 250V a.c.<br>(UL & CSA 15A, 250V a.c.)                                             |
| Contact Resistance:    | <10mΩ                                                                                   |
| Insulation Resistance: | >10 <sup>4</sup> MΩ                                                                     |
| A.C. Breakdown:        | Pole-Pole 7kV. Poles-Panel 9kV                                                          |
| Operating Temp.        | -40°C to +70°C                                                                          |
| Mouldings:             | Nylon, Flammability Rating UL94V-0                                                      |
| Contacts:              | Brass, Tin Plated                                                                       |
| Approvals:             |      |
| Accessories / Notes:   | P.No. 12075, 14228 (See Page 151-152)<br>VDE and ENEC approval for black versions only. |

|                        |                                                                                     |
|------------------------|-------------------------------------------------------------------------------------|
| Fixing:                | Snap fit, /10 (1mm), /15 (1.5mm), /20 (2mm), /30 (3mm)                              |
| Terminations:          | P.C. Spills                                                                         |
| Colours:               | No suffix (Black), /WH (White), /GY (Grey)                                          |
| Max. Rating:           | 10A, 250V a.c.<br>(UL & CSA 15A, 250V a.c.)                                         |
| Contact Resistance:    | <10mΩ                                                                               |
| Insulation Resistance: | >10 <sup>4</sup> MΩ                                                                 |
| A.C. Breakdown:        | Pole-Pole 4kV. Poles-Panel 9kV                                                      |
| Operating Temp.        | -40°C to +70°C                                                                      |
| Mouldings:             | Nylon, Flammability Rating UL94V-0                                                  |
| Contacts:              | Brass, Tin Plated                                                                   |
| Approvals:             |  |
| Accessories / Notes:   | P.No. 14228 (see page 151)<br>VDE and ENEC approval for black versions only.        |

## Mates with:

PX0685, PX0686, PX0686/SE,

PX0685, PX0686, PX0686/SE,

RoHS

Compliant

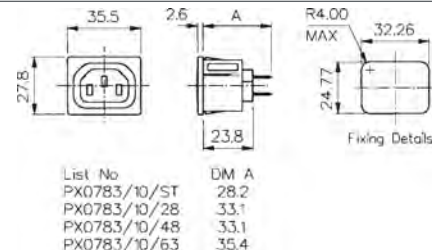
Compliant

## 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)

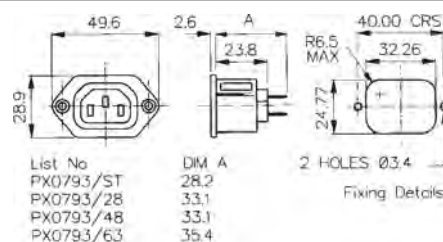


## Flange Mount Outlet



PX0793/28

- Shuttered
- 2.8, 4.8 or 6.3mm Tabs
- 10A, 250V a.c.  
(15A, 250V a.c. UL & CSA)

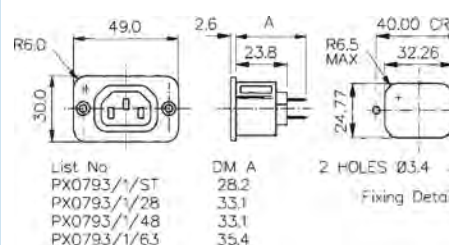


## PC Snap Fit to Panel Outlet



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)



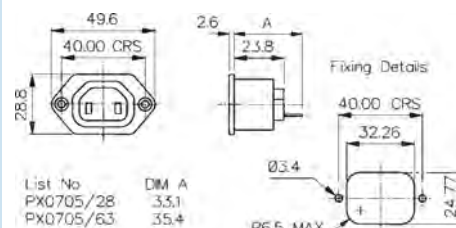
| Specifications         | PX0783/Panel/Term/Col                                                                                                            | PX0793/Panel/PC/Col                                                                                                              | PX0793/1/Term/Col                                                                                                           |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 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.<br>(UL & CSA 15A, 250V a.c.)                                                                                      | 10A, 250V a.c.<br>(UL & CSA 15A, 250V a.c.)                                                                                      | 10A, 250V a.c.<br>(UL & CSA 15A, 250V a.c.)                                                                                 |
| Contact Resistance:    | <10mΩ                                                                                                                            | <10mΩ                                                                                                                            | <10mΩ                                                                                                                       |
| Insulation Resistance: | >10 <sup>4</sup> MΩ                                                                                                              | >10 <sup>4</sup> MΩ                                                                                                              | >10 <sup>4</sup> 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)<br>VDE and ENEC approval for black versions only.                                          | P.No. 12075, KT0006, 14228 (See Pages 150-152)<br>VDE and ENEC approval for black versions only.                                 | P.No. 12075, KT0006, 14228 (See Pages 150-152)<br>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                                                                                                                   |

## 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)

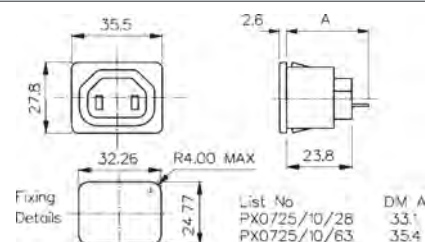


## Snap Fit to Panel Outlet



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

Terminations: /28 (2.8mm solder), /48 (4.8mm tab)  
/63 (6.3mm tab)

Colours: No suffix (Black), /WH (White), /GY (Grey)

Max. Rating: 10A, 250V a.c.  
(UL & CSA 15A, 250V a.c.)

Contact Resistance: <10mΩ

Insulation Resistance: >10<sup>4</sup> MΩ

A.C. Breakdown: Pole-Pole 4kV. Poles-Panel 9kV

Operating Temp. -40°C to +70°C

Mouldings: Nylon, Flammability Rating UL94V-0

Contacts: Brass, Tin Plated

Approvals:     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.

RoHS

Compliant

Snap fit, /10 (1mm), /15 (1.5mm),  
/20 (2mm), /30 (3mm)

/28 (2.8mm solder), /48 (4.8mm tab)  
/63 (6.3mm tab)

No suffix (Black), /WH (White), /GY (Grey)

10A, 250V a.c.  
(UL & CSA 15A, 250V a.c.)

<10mΩ

>10<sup>4</sup> MΩ

Pole-Pole 7kV. Poles-Panel 9kV

-40°C to +70°C

Nylon, Flammability Rating UL94V-0

Brass, Tin Plated

    UR approvals does not cover 4.8mm tab option

P.No. 12075 (See Page 152)  
VDE and ENEC approval for black versions only.

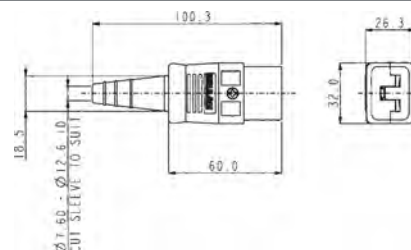
Compliant

## 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 2.5mm<sup>2</sup>, 3 x 12AWG
- Overall cable diameter up to 12mm

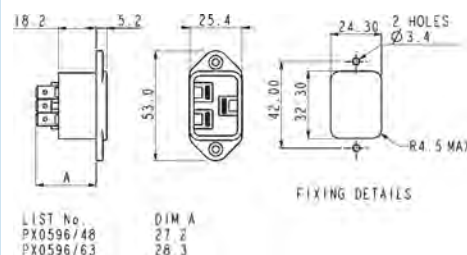


## C20 Flange Mount Inlet



PX0596

- 6.3mm or 4.8mm Tabs
- 16A, 250V a.c.
- (20A, 250V a.c. UL and CSA)

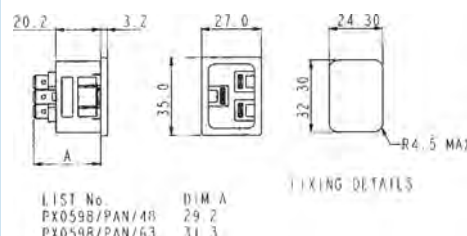


## C20 Snap Fit to Panel Inlet



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)



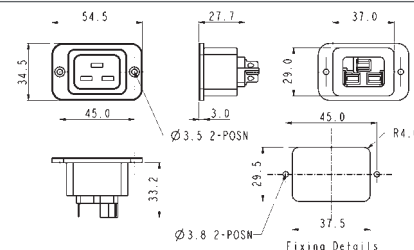
| Specifications                             | PX0599                                                                              | PX0596/Termination                                                                  | PX0598/Panel/Termination                                                              |
|--------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 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<br>20A, 250V ac UL and CSA                                             | 16A, 250V ac<br>20A, 250V ac UL and CSA                                             | 16A, 250V ac<br>20A, 250V ac UL and CSA                                               |
| Insulation Resistance:                     | >5MΩ                                                                                | >10 <sup>6</sup> MΩ                                                                 | >10 <sup>6</sup> MΩ                                                                   |
| Dielectric Strength<br>Between contacts:   | 1.5kV ac                                                                            | 1.5kV ac                                                                            | 1.5kV ac                                                                              |
| Between contacts &<br>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<br>Tabs: Brass, Tin Plate                                | Pins: Brass, Nickel Plated<br>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<br>(see Pages 150 & 152)                                        | P.No. 14064 (see Page 152)                                                            |
| RoHS                                       | Compliant                                                                           | Compliant                                                                           | Compliant                                                                             |

## Flange Mount Outlet



PX0591/63

- Flange Mounting
- 6.3mm Tabs
- 16A, 250V a.c.  
(20A, 250V a.c., UL & CSA)

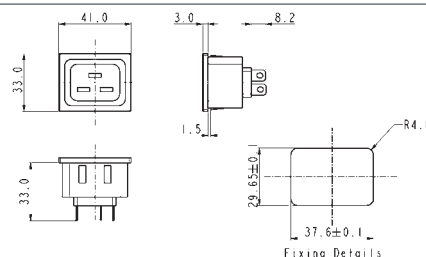


## Snap Fit to Panel Outlet



PX0592/15/63

- Snap Fit to Panel
- Panel Size 1.5mm
- 6.3mm Tabs
- 16A, 250V a.c.  
(20A, 250V a.c., UL & CSA)

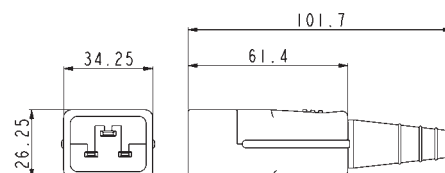


## Straight Cable Connector



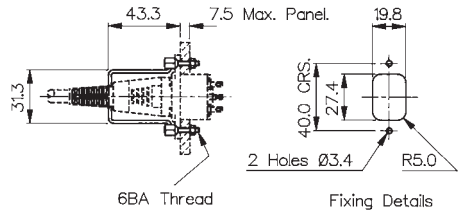
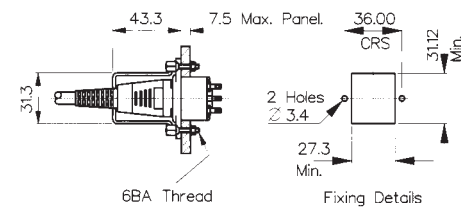
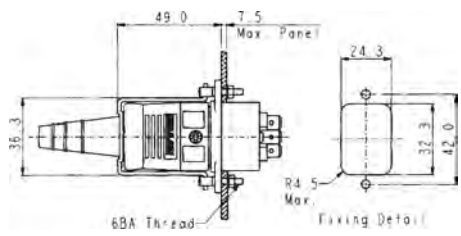
PX0594

- Re-wireable, screw terminals
- 16A, 250V a.c. (20A, 250V a.c. UL & CSA)
- Wire size (max.): 3 x 2.5mm<sup>2</sup>, 3 x 12 AWG
- Overall cable diameter up to 12mm



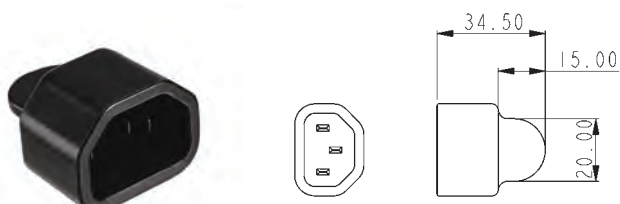
| Specifications                          | PX0591/Termination                                                                  | PX0592/15/Termination                                                               | PX0594                                                                                            |
|-----------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Fixing (Panel):                         | Flange                                                                              | Snap fit, 1.5mm accommodation                                                       |                                                                                                   |
| Terminations:                           | /63 (6.3mm tab)                                                                     | /63 (6.3mm tab)                                                                     | Screw terminals                                                                                   |
| Max. Rating:                            | 16A, 250V a.c.<br>(UL & CSA 20A, 250V a.c.)                                         | 16A, 250V a.c.<br>(UL & CSA 20A, 250V a.c.)                                         | 16A, 250V a.c.<br>(UL & CSA 20A, 250V a.c.)                                                       |
| Insulation Resistance:                  | >100MΩ (250V, 1 min.)                                                               | >100MΩ (250V, 1 min.)                                                               | >5MΩ (min)                                                                                        |
| 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.:                         |                                                                                     |                                                                                     |                                                                                                   |
| Withdrawal Force:                       |                                                                                     |                                                                                     | 15N Min, 60N Max.                                                                                 |
| Mouldings:                              | P.B.T., Flammability Rating UL94V-0                                                 | Nylon, Flammability Rating UL94V-0                                                  | Nylon, Flammability Rating UL94V-0                                                                |
| Contacts:                               | Brass, Tin Plated                                                                   | Brass, Tin Plated                                                                   | Brass, Nickel Plated                                                                              |
| Approvals:                              |  |  |  all pending |
| Accessories:                            |                                                                                     |                                                                                     |                                                                                                   |
| Mates with:                             | PX0594                                                                              | PX0594                                                                              | PX0591, PX0592                                                                                    |
| <b>RoHS</b>                             | Compliant                                                                           | Compliant                                                                           | Compliant                                                                                         |



|                |                                                                                                                                       |                                                                                                                                                |                                                                                                                                                                                                   |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Retaining Clip |  <p>KT0006<br/>(Shown with PX0580 &amp; PX0587)</p>  | <ul style="list-style-type: none"><li>○ Prevents Accidental Removal</li><li>○ Fits flanged inlets</li></ul>                                    |  <p>43.3 7.5 Max. Panel 19.8<br/>31.3 40.0 CRS 27.4<br/>2 Holes Ø3.4 R5.0<br/>6BA Thread Fixing Details</p>    |
| Retaining Clip |  <p>KT0009<br/>(Shown with PF0001 &amp; PX0587)</p>  | <ul style="list-style-type: none"><li>○ Prevents Accidental Removal</li><li>○ Fits fused flanged inlets</li></ul>                              |  <p>43.3 7.5 Max. Panel 36.00 CRS 31.12 Min.<br/>31.3 2 Holes Ø3.4 27.3 Min.<br/>6BA Thread Fixing Details</p> |
| Retaining Clip |  <p>KT0012<br/>(Shown with PX0596 &amp; PX0599)</p> | <ul style="list-style-type: none"><li>○ Prevents Accidental Removal</li><li>○ For use with PX0596 flanged inlet and PX0599 connector</li></ul> |  <p>49.0 7.5 Max. Panel 24.3 36.3 32.3 42.0<br/>6BA Thread R4.5 Max. Fixing Detail</p>                        |

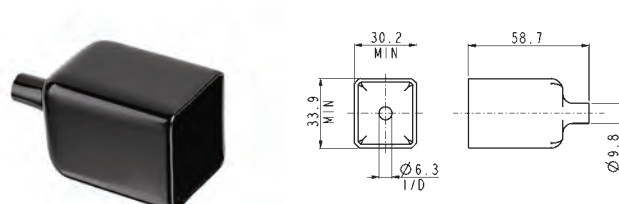
| Specifications | KT0006                                                                                                                                                                                | KT0009                                                                                                                                            | KT0012                                                                                  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|                | Retaining Clip to prevent accidental removal of connector.<br><br>Fits: PX0580 + PX0587 PX0590 + PX0597<br>PX0690 + PX0587<br>PX0675 + PX0686<br>PX0793 + PX0686<br>PX0793/1 + PX0686 | Retaining Clip to prevent accidental removal of connector.<br><br>Fits: PF0001+ PX0587<br>PF0001/PC +PX0587<br>PF0002 + PX0587<br>PF0030 + PX0587 | Retaining Clip to prevent accidental removal of connector.<br><br>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



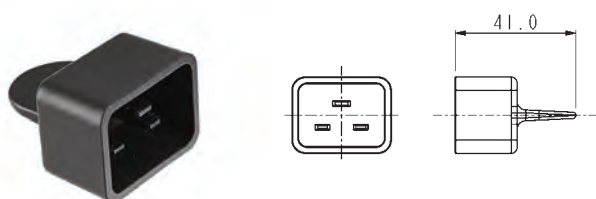
PNo 14228

Insulation Boot



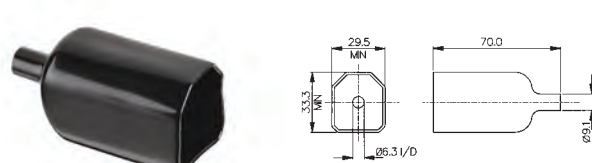
PNo 14340

Blanking Cover



PNo 14277

Insulation Boot



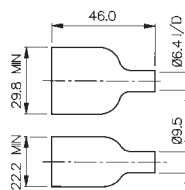
PNo 14317

- Blanking covers
- Protects Front of Outlet Connector
- Protects Against Accidental Electric Shock

- PVC Insulation Boots
- Protects Rear of Connector
- Protects Against Accidental Electric Shock

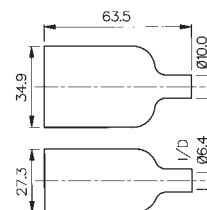
| Specifications        | P.No. 14228                                                                                               | P.No. 14277                              | P.No. 14340                                             | P.No. 14317                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------|---------------------------------------------------------|-------------------------------------------------------------------|
|                       | Blanking cover for<br>PX0578,<br>PX0675,<br>PX0695,<br>PX0783,<br>PX0793,<br>PX0716,<br>PX0717,<br>PX0718 | Blanking cover for<br>PX0591,<br>PX0592, | Insulation boot for<br>PS20,<br>PS21,<br>PS25,<br>PS25, | Insulation boot for<br>PF0030,<br>PF0033<br>(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                                                           |
| <b>RoHS</b>           | Compliant                                                                                                 | Compliant                                | Compliant                                               | Compliant                                                         |

Insulation Boot



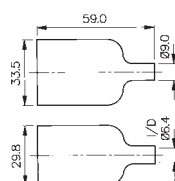
PNo 11328

Insulation Boot



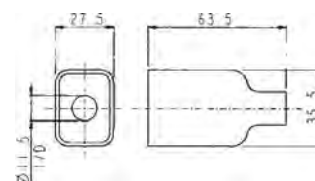
PNo 12075

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<br>PX0575,<br>PX0579,<br>PX0580,<br>PX0590,<br>PX0595 | Insulation boot for<br>PF range<br>PF0001,<br>PF0002,<br>PF0006,<br>PF0007,<br>PF0011,<br>PF0016<br>(Except /PC versions) | Insulation boot for<br>PX0675,<br>PX0695,<br>PX0705,<br>PX0725,<br>PX0783,<br>PX0793,<br>PX0793/1<br>(Except /PC versions) | Insulation boot for<br>PX0596,<br>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**.

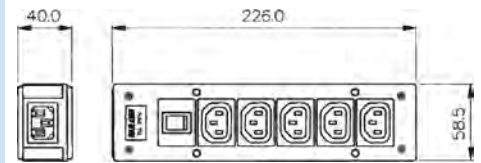


IEC Distribution Units



PXD301/050/01/1

- Five Shuttered Outlets
- 5 x 20mm Fuseholder
- Neon Indicator
- Filtered or Non-filtered
- EN60320 Inlet
- 10A, 250V a.c.

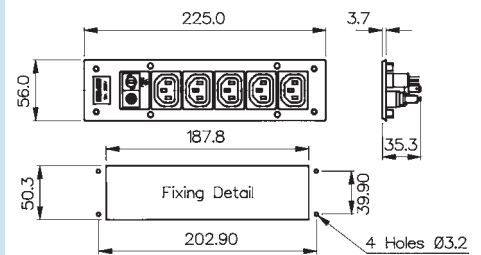


IEC Panel Mount Distribution Unit



PXD100/050/01/1

- Five Shuttered Outlets
- 5 x 20mm Fuseholder
- Neon Indicator
- Screw Fit to Panel
- 10A, 250V a.c.

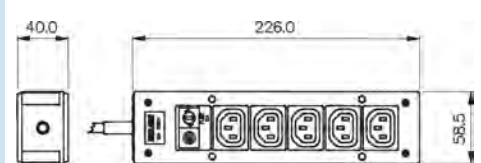


IEC Distribution Unit



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.



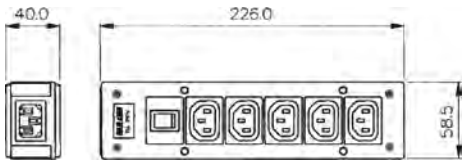
| Part No.        | Inlet                             | Outlet      | EMI Filter | Neon Indicator | Fuse | Illuminated Switch | Approvals |
|-----------------|-----------------------------------|-------------|------------|----------------|------|--------------------|-----------|
| Panel Style:    |                                   |             |            |                |      |                    |           |
| 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.

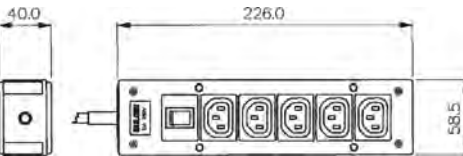


IEC Distribution Unit



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<br>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                                          |
| <b>RoHS</b>        | Compliant                                                  |

**Filter**

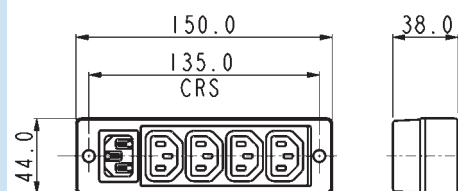
|                     |                                           |
|---------------------|-------------------------------------------|
| Max. Earth Leakage: |                                           |
| Current:            | <0.35mA (at 250V, 50Hz)                   |
| Capacitor           | 2 x 2.2nF (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

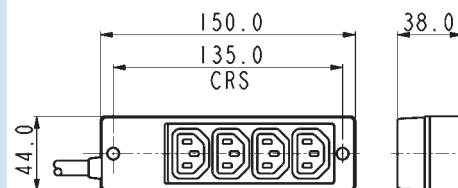


#### Compact Distribution Unit



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<br>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       | cULus Listed (PXD200)                                      |
| <b>RoHS</b>     | 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      |

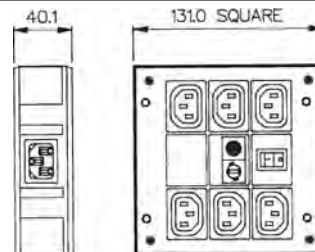


#### Compact Distribution Unit



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.

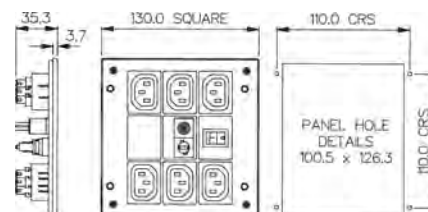


#### IEC Mount Distribution Unit



PXD500/061/10/1

- Six Shuttered Outlets
- 5 x 20mm Fuseholder
- Switch, Fuse, Neon Indicator
- Screw Fit to Panel
- 10A, 250V

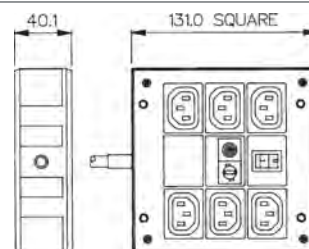


#### Compact Distribution Unit



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  |                                                            | Part No.        | Inlet                             | Outlet      | EMI Filter | Switch | Fuse | Neon Indicator |
|-----------------|------------------------------------------------------------|-----------------|-----------------------------------|-------------|------------|--------|------|----------------|
| Mouldings:      | Thermoplastic                                              | Panel Style:    |                                   |             |            |        |      |                |
| Housing:        | ABS                                                        | PXD500/061/10/1 |                                   | 6 Shuttered |            | 1      | 1    | 1              |
| Connectors:     | Nylon                                                      | Box Style:      |                                   |             |            |        |      |                |
| Contacts:       | Outlets: Brass, Tin Plated<br>Inlets: Brass, Nickel Plated | PXD701/061/10/1 | 1                                 | 6 Shuttered |            | 1      | 1    | 1              |
| Voltage Rating: | 250V a.c. 50/60Hz                                          | PXD701/561/10/1 | 1                                 | 6 Shuttered | ●          | 1      | 1    | 1              |
| Current Rating: | 10A                                                        | PXD703/061/10/1 | 2m cable with BS 1363 plug        | 6 Shuttered |            | 1      | 1    | 1              |
| Proof Voltage:  | 2kV                                                        | PXD703/561/10/1 | 2m cable with BS 1363 plug        | 6 Shuttered | ●          | 1      | 1    | 1              |
| Temp. Range:    | -5°C to +60°C                                              | PXD706/061/10/1 | 2m cable with CEE7 Sheet VII plug | 6 Shuttered |            | 1      | 1    | 1              |
| 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) |



With over 26,000 combinations Bulgin's Polysnap mains power inlet modules offer a very adaptable and flexible solution to panel design. Polysnap 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.

To complement Polysnap the Polyflange 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 Polysnap® and Polyflange Power Inlet Modules

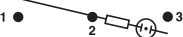
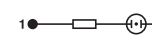
**Note: Components are Approved Individually (where applicable). Please see individual component pages for full specifications.**

### 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<br>See Page 192           |                                                                                         |
| PF0011 | C14 Power Inlet with Integral 5 x 20mm Fuseholder      | Max. rating 10A. 250V a.c.<br>See Page 136      |      |
| PF0033 | C14 Power Inlet with Integral twin 5 x 20mm Fuseholder | Max. rating 10A. 250V a.c.<br>See Page 137      |                                                                                         |
| PX0575 | C14 Power Inlet, Cold condition                        | Max. rating 10A. 250V a.c.<br>See Page 132      |      |
| PX0595 | C16 Power Inlet, Hot Condition                         | Max. rating 10A. 250V a.c.<br>See Page 138      |                                                                                         |
| PX0695 | Sheet F Power Outlet                                   | Max. rating 10A. 250V a.c.<br>See Page 145      |                                                                                         |
| PX0783 | Sheet F Shuttered Power Outlet                         | Max. rating 10A. 250V a.c.<br>See Page 146      |                                                                                 |
| PX0598 | C20 Power Inlet                                        | Max. rating 16A, 250V a.c.<br>See Page 148      |                                                                                 |
| VS0001 | Voltage Selector marked 120/240V                       | Max. rating 6.3A. 120/240V a.c.<br>See Page 114 |                                                                                                                                                                                                                                                           |

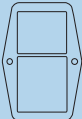
\*Filtered options for 6.3mm tag versions only

### 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.<br>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.<br>Inrush current, 150A to IEC65.    |  |    |
|                                | Illuminated     | Max. rating 16A Resistive, 4A Inductive, 250Vac.<br>250Vac Neon.                      |  |    |
| For Mini Bezel:<br>Single Pole | Non-illuminated | Max. rating 10A Resistive, 4A Inductive, 250Vac.                                      |  |    |
|                                | Illuminated     | Max. rating 10A Resistive, 4A Inductive, 250Vac.<br>250Vac Neon.                      |   |    |
| Double Pole                    | Non-illuminated | Max. rating 10A Resistive, 4A Inductive, 250Vac.                                      |  |    |
|                                | High Inrush     | Max. rating 10A Resistive, 4A Inductive, 250Vac.<br>Inrush current, 85A to EN61058-1. |  |    |
|                                | Illuminated     | Max. rating 10A Resistive, 4A Inductive, 250Vac.<br>250Vac Neon.                      |  |    |
| Indicator                      |                 | 250Vac neon lamp connected internally to terminals.                                   |  |    |

**RoHS** Polysnap and Polyflange range and all components are compliant

Overview of Polysnap Modules

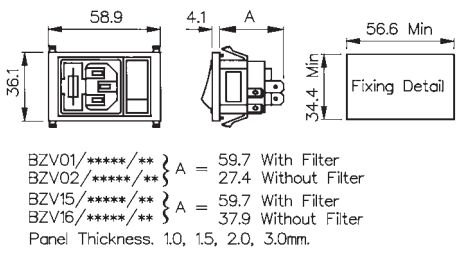
|                                                                                     |                           |     |                 |  |  |  |    |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Style                                                                               | C14                                                                                                        | Inlets                                                                               |                                                                                                  | C20                                                                               | Outlets<br>Sheet F                                                                  | Inlet/ Outlet Combinations                                                          |                                                                                       |
|                                                                                     |                                                                                                            | C14 Fused                                                                            | C16                                                                                              |                                                                                   |                                                                                     | C14                                                                                 | C14 Fused                                                                             |
| Snap to Panel<br>Vertical                                                           | With Single Pole<br>switch<br>Page 163<br><br>With other<br>components<br>Pages 164,<br>165, 166           | With Single Pole<br>switch<br>Page 161<br><br>With Double Pole<br>Switch<br>Page 162 | With Single<br>Pole switch<br>Page 163<br><br>With other<br>components<br>Pages 164,<br>165, 166 | With Single Pole<br>switch<br>Page 167                                            | With Single Pole<br>switch<br>Page 169                                              | With other<br>components<br>Page 168                                                |                                                                                       |
|    |                                                                                                            |                                                                                      |                                                                                                  |                                                                                   |                                                                                     |                                                                                     |                                                                                       |
| Snap to Panel<br>Horizontal                                                         | Mini Bezel<br>With Single Pole<br>Switch Page 175<br><br>Mini Bezel<br>With Double Pole<br>Switch Page 175 | With Single Pole<br>switch Page 170<br><br>With Double Pole<br>Switch Page 171       |                                                                                                  |                                                                                   |                                                                                     | With Single Pole<br>switch Page 177                                                 | With Double<br>Pole switch<br>Page 173<br><br>No additional<br>components<br>Page 174 |
|  |                                                                                                            |                                                                                      |                                                                                                  |                                                                                   |                                                                                     |                                                                                     |                                                                                       |
| Flange Mount -<br>Vertical                                                          |                                                                                                            | With Single Pole<br>switch Page 176<br><br>With Double Pole<br>switch Page 177       |                                                                                                  |                                                                                   |                                                                                     |                                                                                     |                                                                                       |
|  |                                                                                                            |                                                                                      |                                                                                                  |                                                                                   |                                                                                     |                                                                                     |                                                                                       |

Vertical Module Arrangement



BZV01/Z0000/01

- Fused Inlet with 2.8mm or 6.3mm tabs
- Single Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



How to order -

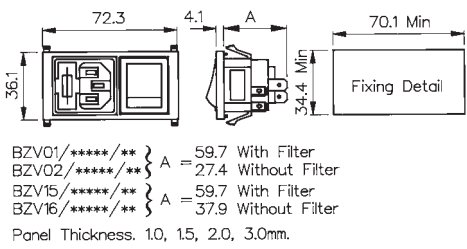
| BZV XX                                                                                                                                                                                                                                                      | / | XXXXX                                                                                                                                                                                                                                         | / | XX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type of Inlet / Outlet</b><br><br>Single Fused C14 Power Inlet (cold condition),<br>6.3 or 2.8mm tabs:<br>01 = PF0011/63<br>02 = PF0011/28<br><br>Twin Fused C14 Power Inlet (cold condition),<br>6.3 or 2.8mm tabs:<br>15 = PF0033/63<br>16 = PF0033/28 |   | <b>Filtered or Non Filtered Inlet</b><br><br>Z0000 = Non Filtered<br>Axxxx = Standard<br><br><a href="#">For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179 -180</a><br><a href="#">E.g. BZV01/A0620/01</a> |   | <b>Filtered or Non Filtered Inlet</b><br><br>Single Pole Switch:<br>01 = S.P. Switch<br><br>Single Pole Neon Switch:<br>02 = S.P. Red Neon Switch<br>08 = S.P. Green Neon Switch<br><br>Neon Indicator:<br>03 = Red Neon Indicator<br><br>Single Pole High Inrush Switch:<br>46 = S.P. High Inrush Switch<br><br>Single Pole Switch Marked I/O:<br>69 = S.P. Switch (I/O)<br><br>Single Pole Neon Switch Marked (I/O):<br>71 = S.P. Red Neon Switch (I/O)<br>74 = S.P. Green Neon Switch (I/O)<br><br>Single Pole High Inrush Switch Marked (I/O):<br>98 = S.P. High Inrush Switch (I/O) |

Vertical Module Arrangement



BZV01/Z0000/10

- Fused Inlet with 2.8mm or 6.3mm tabs
- Double Pole Switch or
- Indicator Variations
- Filtered Inlet Option
- Options of I/O marked switches



How to order -

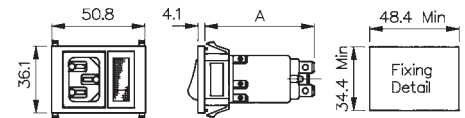
| BZV XX / XXXXX / XX                                                                                                                                                                                              |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of Inlet / Outlet                                                                                                                                                                                           | Filtered or Non Filtered Inlet                                                                                                                                      | Combination of Other Components                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Single Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:<br>01 = PF0011/63<br>02 = PF0011/28<br><br>Twin Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:<br>15 = PF0033/63<br>16 = PF0033/28 | Z0000 = Non Filtered<br><br>Axxxx = Standard<br><br>For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180<br>E.g. BZV01/A0620/10 | Neon Indicator:<br>D3 = Red Neon Indicator<br><br>Double Pole Switch:<br>10 = D.P. Switch<br><br>Double Pole Neon Switch:<br>11 = D.P. Red Neon Switch<br>12 = D.P. Green Neon Switch<br><br>Double Pole High Inrush Switch:<br>13 = D.P. High Inrush Switch<br><br>Double Pole Switch Marked I/O:<br>70 = D.P. Switch (I/O)<br><br>Double Pole Neon Switch Marked (I/O):<br>76 = D.P. Red Neon Switch (I/O)<br>77 = D.P. Green Neon Switch (I/O)<br><br>Double Pole High Inrush Switch Marked (I/O):<br>78 = D.P. High Inrush Switch (I/O)<br>B1 = D.P. High Inrush Green Neon Switch (I/O) |

## 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)

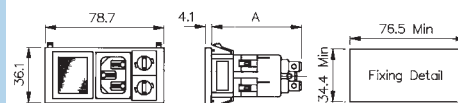


## Vertical Module Arrangement



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



Panel Thickness: 1.0, 1.5, 2.0, 3.0mm.

 BZV03, BZV04/\*\*\*\*/\*\* A = 62.5 With Filter  
 39.0 Without Filter

BZV05, BZV06/\*\*\*\*/\*\* A = 39.0

## 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

09 = 2 x FX0359 + D.P. Green Neon

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

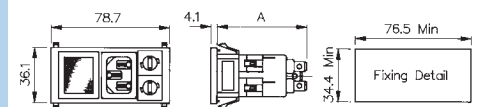
(Right) + D.P. Switch

## 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



Panel Thickness: 1.0, 1.5, 2.0, 3.0mm.

 BZV03, BZV04/\*\*\*\*/\*\* A = 62.5 With Filter  
 39.0 Without Filter  
 BZV05, BZV06/\*\*\*\*/\*\* A = 39.0

## 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)

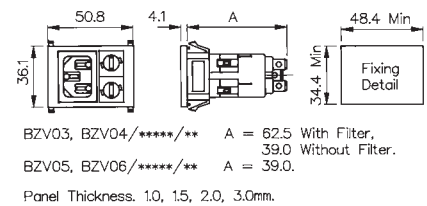
 Fuseholder, Blanking Plate and Double Pole Switch Marked (I/O):  
 A0 = 1 x FX0359 + 1 x Blanking Plate (Right) + D.P. Switch (I/O)  
 B2 = 1 x VS0002 + 1 x Blanking Plate  
 B3 = 1 x FX0359 + 1 x Blanking Plate + D.P. High Inrush Switch (I/O)  
 B5 = 1 x VS0001 + 1 x Blanking Plate + D.P. Switch (I/O)

## 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

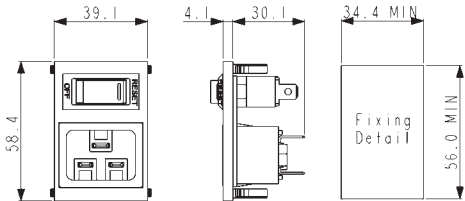
Voltage Selector and Blanking Plate:  
B2 = 1 x VS0001 + Blanking Plate

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 -

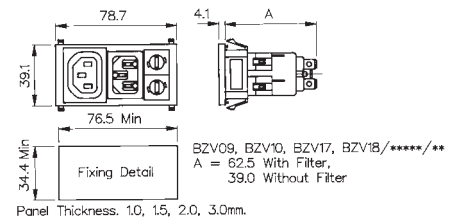
| BZV XX / XXXXX / XX                                                                                  |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of Inlet / Outlet                                                                               | Filtered or Non Filtered Inlet | Combination of Other Components                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p>C20 Power Inlet (cold condition), 4.8 or 6.3mm tabs:</p> <p>49 = PX0598/63<br/>50 = PX0598/48</p> | <p>Z0000 = Non Filtered</p>    | <p>Single Pole Switch:<br/>01 = S.P. Switch</p> <p>Single Pole Switch Marked (I/O):<br/>69 = S.P. Switch (I/O)</p> <p>Single Pole Illuminated Switch:<br/>02 = S.P. Illuminated Red<br/>08 = S.P. Illuminated Green</p> <p>Single Pole Non-illuminated High Inrush Switch Marked I/O:</p> <p>98 = S.P. High Inrush Switch (I/O)<br/>Single Pole Illuminated (Red or Green 250v Neon) Switch Marked I/O:</p> <p>71 = S.P. Switch Illuminated Red (I/O)<br/>74 = S.P. Switch Illuminated Green (I/O)</p> |

## Vertical Module Arrangement



BZV09/Z0000/04

- ⬡ Inlet/Outlet Combination
- ⬡ 2.8mm or 6.3mm tabs
- ⬡ 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

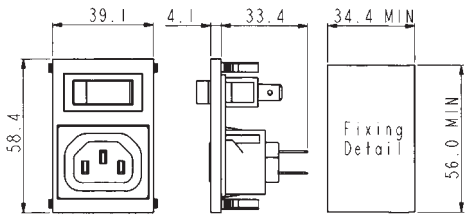
Voltage Selector and Blanking Plate:  
 B2 = 1 x VS0001 + Blanking Plate

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 -

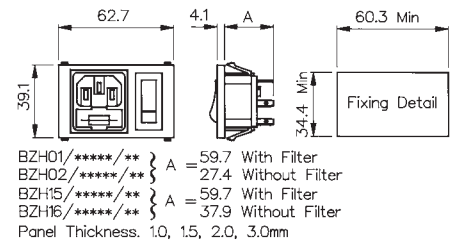
| BZV XX / XXXXX / XX                                                                                                                                                                                  |                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of Inlet / Outlet                                                                                                                                                                               | Filtered or Non Filtered Inlet | Combination of Other Components                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Sheet F Power Outlet (non shuttered), 6.3 or 2.8mm tabs:<br><br>45 = PX0695/63<br>46 = PX0695/28<br><br>Sheet F Power Outlet (shuttered), 6.3 or 2.8mm tabs:<br><br>47 = PX0783/63<br>48 = PX0783/28 | Z0000 = Non Filtered           | Single Pole Switch:<br>01 = S.P. Switch<br><br>Single Pole Neon Switch:<br>02 = S.P. Red Neon Switch<br>08 = S.P. Green Neon Switch<br><br>Neon Indicator:<br><br>03 = Red Neon Indicator<br><br>Single Pole High Inrush Switch:<br>46 = S.P. High Inrush Switch<br><br>Single Pole Switch Marked I/O:<br>69 = S.P. Switch (I/O)<br><br>Single Pole Neon Switch Marked (I/O):<br>71 = S.P. Red Neon Switch (I/O)<br>74 = S.P. Green Neon Switch (I/O)<br><br>Single Pole High Inrush Switch Marked (I/O):<br>98 = S.P. High Inrush Switch (I/O) |

## Horizontal Module Arrangement



BZH01/Z0000/01

- Fused Inlet with 2.8mm or 6.3mm tabs
- Single Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



## How to order -

| BZH XX                                                                                                                                                                                                                                                        | / | XXXXX                                                                                                                                                                                                            | / | XX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type of Inlet / Outlet</b><br><br>Single Fused C14 Power Inlet (cold condition), 2.8 or 6.3mm tabs:<br><br>01 = PF0011/63<br>02 = PF0011/28<br><br>Twin Fused C14 Power Inlet (cold condition), 2.8 or 6.3mm tabs:<br><br>15 = PF0033/63<br>16 = PF0033/28 |   | <b>Filtered or Non Filtered Inlet</b><br><br>Z0000 = Non Filtered<br><br>Axxxx = Standard<br><br>For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180<br>E.g. BZH01/A0620/01 |   | <b>Combination of Other Components</b><br><br>Single Pole Switch:<br>01 = S.P. Switch<br><br>Single Pole Neon Switch:<br>02 = S.P. Red Neon Switch<br>08 = S.P. Green Neon Switch<br><br>Neon Indicator:<br>03 = Red Neon Indicator<br><br>Single Pole High Inrush Switch:<br>46 = S.P. High Inrush Switch<br><br>Single Pole Switch Marked I/O:<br>69 = S.P. Switch (I/O)<br><br>Single Pole Neon Switch Marked (I/O):<br>71 = S.P. Red Neon Switch (I/O)<br>74 = S.P. Green Neon Switch (I/O)<br><br>Single Pole High Inrush Switch Marked (I/O):<br>98 = S.P. High Inrush Switch (I/O) |

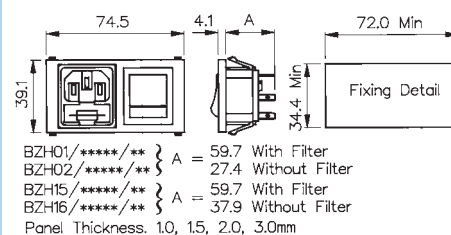


## Horizontal Module Arrangement



BZH01/Z0000/10

- Fused Inlet with 2.8mm or 6.3mm tabs
- Double Pole Switch Variations
- Filtered Inlet Option
- Options of I/O marked switches



## How to order -

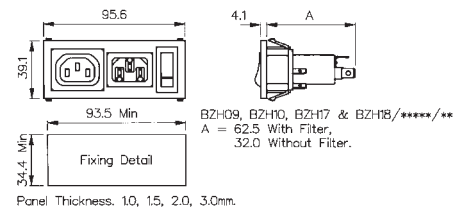
| BZH XX                                                                                                                                                                                                                                                        | XXXXX                                                                                                                                                                                                            | XX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type of Inlet / Outlet</b><br><br>Single Fused C14 Power Inlet (cold condition), 2.8 or 6.3mm tabs:<br><br>01 = PF0011/63<br>02 = PF0011/28<br><br>Twin Fused C14 Power Inlet (cold condition), 2.8 or 6.3mm tabs:<br><br>15 = PF0033/63<br>16 = PF0033/28 | <b>Filtered or Non Filtered Inlet</b><br><br>Z0000 = Non Filtered<br><br>Axxxx = Standard<br><br>For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180<br>E.g. BZH01/A0620/10 | <b>Combination of Other Components</b><br><br>Neon Indicator:<br>03 = Red Neon Indicator<br><br>Double Pole Switch:<br>10 = D.P. Switch<br><br>Double Pole Neon Switch:<br>11 = D.P. Red Neon Switch<br>12 = D.P. Green Neon Switch<br><br>Double Pole High Inrush Switch:<br>13 = D.P. High Inrush Switch<br><br>Double Pole Switch marked I/O:<br>70 = D.P. Switch (I/O)<br><br>Double Pole Neon Switch Marked (I/O):<br>76 = D.P. Red Neon Switch (I/O)<br>77 = D.P. Green Neon Switch (I/O)<br><br>Double Pole High Inrush Switch Marked (I/O):<br>78 = D.P. High Inrush Switch (I/O)<br>B1 = D.P. High Inrush Green Neon Switch (I/O) |

## 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)

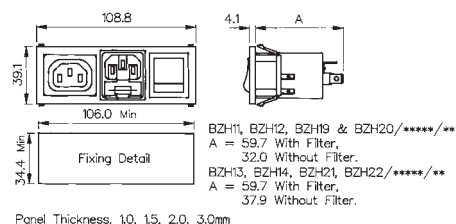
Single Pole High Inrush Switch Marked (I/O):  
98 = S.P. High Inrush Switch (I/O)

## 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)

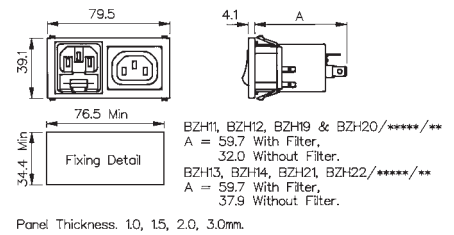
Double Pole High Inrush Switch Marked (I/O):  
 78 = D.P. High Inrush Switch (I/O)  
 B1 = D.P. High Inrush Green Neon Switch (I/O)

## Horizontal Module Arrangement



BZH11/Z0000/00

- Fused Inlet/Outlet
- Combination with 2.8mm or 6.3mm tabs
- Filtered Inlet Option
- Single or Twin Fused



## How to order -

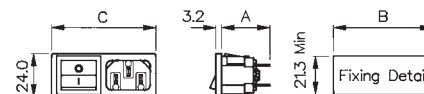
| BZH XX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | / | XXXXX                                                                                                                                                                                                            | / | XX                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------------------------------------|
| <b>Type of Inlet / Outlet</b><br><br>Single Fused C14 Power Inlet (cold condition) and Sheet F Non-shuttered Power Outlet, 2.8 or 6.3mm tabs:<br><br>11 = PF0011/63 + PX0695/63<br>12 = PF0011/28 + PX0695/28<br><br>Twin Fused C14 Power Inlet (cold condition) and Sheet F Non-shuttered Power Outlet, 2.8 or 6.3mm tabs:<br><br>13 = PF0033/63 + PX0695/63<br>14 = PF0033/28 + PX0695/28<br><br>Single Fused C14 Power Inlet (cold condition) and Sheet F Shuttered Power Outlet, 2.8 or 6.3mm tabs:<br><br>19 = PF0011/63 + PX0783/63<br>20 = PF0011/28 + PX0783/28<br><br>Twin Fused C14 Power Inlet (cold condition) and Sheet F Shuttered Power Outlet, 2.8 or 6.3mm tabs:<br><br>21 = PF0033/63 + PX0783/63<br>22 = PF0033/28 + PX0783/28 |   | <b>Filtered or Non Filtered Inlet</b><br><br>Z0000 = Non Filtered<br><br>Axxxx = Standard<br><br>For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180<br>E.g. BZH11/A0620/00 |   | <b>Combination of Other Components</b><br><br>None<br><br>00 = None |

## 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



Panel Thickness 1.0, 1.5, 2.0, 3.0mm

 BZM27/\*\*\*\*\*/\*\*\* } A = 63.5 With Filter.  
 BZM28/\*\*\*\*\*/\*\*\* } 29.1 Without Filter.

 B = 54.9 With D.P. Switch. 45.9 With S.P. Switch.  
 C = 57.5 With D.P. Switch. 48.5 With S.P. Switch.

## How to order -

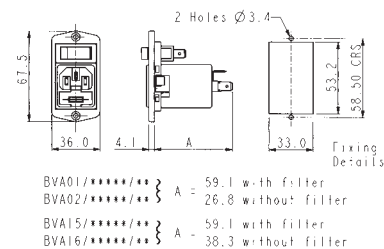
| BZM XX / XXXXX / XX / X                                                                                            |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                  |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Type of Inlet / Outlet                                                                                             | Filtered or Non Filtered Inlet                                                                                                                                  | Switch Variation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Panel Thickness                                  |
| C14 Power Inlet (cold condition), 6.3, 4.8 & 2.8mm tabs:<br><br>27 = PX0575/63<br>42 = PX0575/48<br>28 = PX0575/28 | Z0000 = Non Filtered<br><br>Axxxx = Standard<br><br>For Filtered inlet use 6th to 9th characters from filter ordering code see page 178<br>E.g. BZM27/A0120/57B | Single Pole Switch, 4.8mm or solder tab, marked I/O:<br>53 = S.P. Switch, 4.8mm tab (I/O)<br>54 = S.P. Switch, solder tab (I/O)<br><br>Single Pole Illuminated Switch, 4.8mm or solder tab:<br>55 = S.P. Switch Illum. Red, 4.8mm tab<br>61 = S.P. Switch Illum. Green, 4.8mm tab<br>56 = S.P. Switch Illum. Red, solder tab<br>62 = S.P. Switch Illum. Green, solder tab<br><br>Double Pole Switch, 4.8mm or solder tab, marked I/O:<br>57 = D.P. Switch, 4.8mm tab (I/O)<br>58 = D.P. Switch, solder tab (I/O)<br><br>Double Pole Illuminated Switch, 4.8mm or solder tab:<br>59 = D.P. Switch Illum. Red, 4.8mm tab<br>63 = D.P. Switch Illum. Green, 4.8mm tab<br>60 = D.P. Switch Illum. Red, solder tab<br>64 = D.P. Switch Illum. Green, solder tab<br><br>Double Pole High Inrush, 4.8mm tabs:<br>65 = D.P. High Inrush Switch, 4.8mm tabs (S.P. format)<br><br>Double Pole High Inrush, 4.8mm tabs, marked I/O:<br>68 = D.P. High Inrush Switch, 4.8mm tabs, I/O (S.P. format)<br><br>Single Pole Illuminated Switch, 4.8mm or solder tab, Marked I/O:<br>A1 = S.P. Switch Illum. Red, 4.8mm tab (I/O)<br>A5 = S.P. Switch Illum. Green, 4.8mm tab (I/O)<br>A2 = S.P. Switch Illum. Red, solder tab (I/O)<br>A6 = S.P. Switch Illum. Green, solder tab (I/O)<br><br>Double Pole Illuminated Switch, 4.8mm or solder tab, Marked I/O:<br>A3 = D.P. Switch Illum. Red, 4.8mm tab<br>A7 = D.P. Switch Illum. Green, 4.8mm tab<br>A4 = D.P. Switch Illum. Red, solder tab<br>A8 = D.P. Switch Illum. Green, solder tab | 1.0mm = A<br>1.5mm = B<br>2.0mm = C<br>3.0mm = D |

## 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

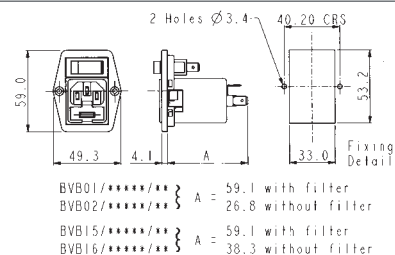


## Vertical Module Arrangement



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 -

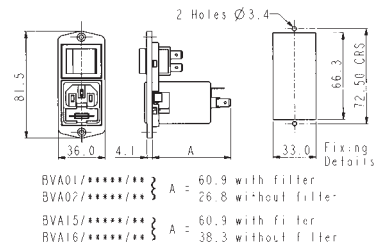
| BV X                              | XX                                                                                                                                                                                                                       | / | XXXXX                                                                                                                                                               | / | XX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Flange Type                       | Type of Inlet / Outlet                                                                                                                                                                                                   |   | Filtered or Non Filtered Inlet                                                                                                                                      |   | Combination of Other Components                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| A = Top fixing<br>B = Side fixing | Single Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:<br><br>01 = PF0011/63<br>02 = PF0011/28<br><br>Twin Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:<br><br>15 = PF0033/63<br>16 = PF0033/28 |   | Z0000 = Non Filtered<br><br>Axxxx = Standard<br><br>For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180<br>E.g. BVA01/A0620/01 |   | Single Pole Switch:<br>01 = S.P. Switch<br><br>Single Pole Neon Switch:<br>02 = S.P. Red Neon Switch<br>08 = S.P. Green Neon Switch<br><br>Neon Indicator:<br>03 = Red Neon Indicator<br><br>Single Pole High Inrush Switch:<br>46 = S.P. High Inrush Switch<br><br>Single Pole Switch Marked I/O:<br>69 = S.P. Switch (I/O)<br><br>Single Pole Neon Switch Marked (I/O):<br>71 = S.P. Red Neon Switch (I/O)<br>74 = S.P. Green Neon Switch (I/O)<br><br>Single Pole High Inrush Switch Marked (I/O):<br>98 = S.P. High Inrush Switch (I/O) |

## 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

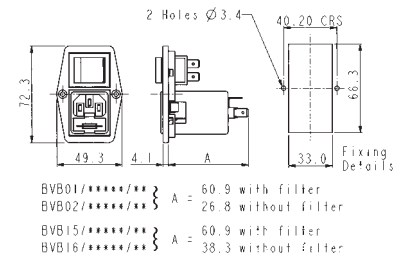


## Vertical Module Arrangement



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                                                                                                                   | Type of Inlet / Outlet                                                                                                                                                                                            | Filtered or Non Filtered Inlet                                                                                                                                      | Combination of Other Components                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| A = Top fixing<br>B = Side fixing                                                                                             | Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:<br><br>01 = PF0011/63<br>02 = PF0011/28<br><br>Twin Fused C14 Power Inlet (cold condition), 6.3 or 2.8mm tabs:<br><br>15 = PF0033/63<br>16 = PF0033/28 | Z0000 = Non Filtered<br><br>Axxxx = Standard<br><br>For Filtered inlet use 6th to 9th characters from filter ordering code see pages 179-180<br>E.g. BVA01/A0620/10 | Neon Indicator:<br>D3 = Red Neon Indicator<br><br>Double Pole Switch:<br>10 = D.P. Switch<br><br>Double Pole Neon Switch:<br>11 = D.P. Red Neon Switch<br>12 = D.P. Green Neon Switch<br><br>Double Pole High Inrush Switch:<br>13 = D.P. High Inrush Switch<br><br>Double Pole Switch Marked I/O:<br>70 = D.P. Switch (I/O)<br><br>Double Pole Neon Switch Marked (I/O):<br>76 = D.P. Red Neon Switch (I/O)<br>77 = D.P. Green Neon Switch (I/O)<br><br>Double Pole High Inrush Switch Marked (I/O):<br>78 = D.P. High Inrush Switch (I/O)<br>B1 = D.P. High Inrush Green Neon Switch (I/O) |

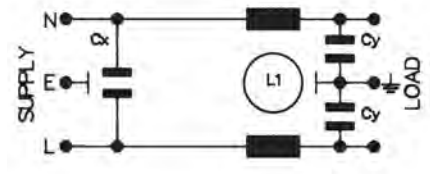


EMI Filter Options



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.       |  | Filter Type  | Rating   | L/C Circuit   | Additional Components |   | Polysnap Part No.       |
| From Polysnap Selection |  | A = Standard | 01 = 1A  | 1 = Version 1 | 0 = None              |   | From Polysnap Selection |
|                         |  |              | 03 = 3A  | 2 = Version 2 |                       |   |                         |
|                         |  |              | 06 = 6A  | 3 = Version 3 |                       |   |                         |
|                         |  |              | 10 = 10A |               |                       |   |                         |

| 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:                   | -25°C to +85°C                                                          |
| Max. Ambient Temp.:<br>(@ Full Load) | 40°C (derate linearly to 0A @ 85°C)                                     |
| Test Voltage:                        | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral |

Approvals:



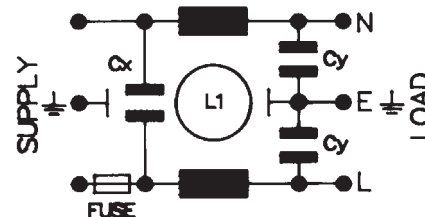
Attenuation Curves:

See PS01/A filter, page 183

## 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<br>03 = 3A<br>06 = 6A | 2 = Version 2<br>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

|                               |                                                                         |
|-------------------------------|-------------------------------------------------------------------------|
| <b>Max. Working Voltage:</b>  | 250V a.c. 50-400Hz                                                      |
| <b>Earth Leakage Current:</b> | <0.35mA (250V. 50Hz)                                                    |
| <b>Temperature Range:</b>     | -25°C to +85°C                                                          |
| <b>Max. Ambient Temp.:</b>    | 40°C (derate linearly to 0A @ 85°C)                                     |
| <b>(@ Full Load)</b>          |                                                                         |
| <b>Test Voltage:</b>          | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral |

## Approvals:



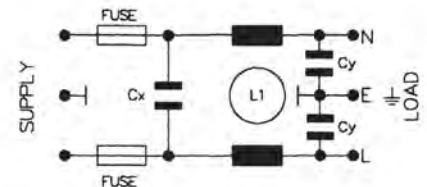
## Attenuation Curves:

See PS21/A filter, page 187

## 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                     |
|--------------------------|--------------------|--------------------|--------------------|------------------------------|--------------------------|
| <b>Polysnap Part No.</b> | <b>Filter Type</b> | <b>Rating</b>      | <b>L/C Circuit</b> | <b>Additional Components</b> | <b>Polysnap Part No.</b> |
| From Polysnap Selection  | A = Standard       | 02 = 2A<br>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

|                                          |                                                                         |
|------------------------------------------|-------------------------------------------------------------------------|
| <b>Max. Working Voltage:</b>             | 250V a.c. 50-400Hz                                                      |
| <b>Earth Leakage Current:</b>            | <0.35mA (250V, 50Hz)                                                    |
| <b>Temperature Range:</b>                | -25°C to +85°C                                                          |
| <b>Max. Ambient Temp.: (@ Full Load)</b> | 40°C (derate linearly to 0A @ 85°C)                                     |
| <b>Test Voltage:</b>                     | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral |

## Approvals:



## Attenuation Curves:

See PS26/A filter, page 189



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.

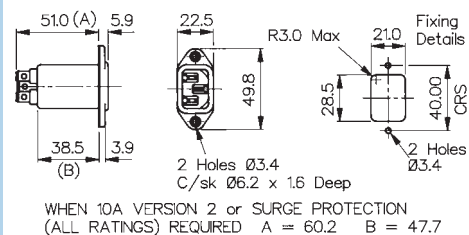
|                            |           |
|----------------------------|-----------|
| Flange and Snap Fit        |           |
| PS00 Series                | 132 - 133 |
| PS01 Series                | 132 - 133 |
| Base Mounting and Bulkhead |           |
| PS02 Series                | 184-185   |
| PS03 Series                | 184-185   |
| Fused Inlets               |           |
| PS20 Series                | 186 - 187 |
| PS21 Series                | 186 - 187 |
| PS25 Series                | 188 - 189 |
| PS26 Series                | 188 - 189 |

## Panel Mounting



Flange PS00/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs

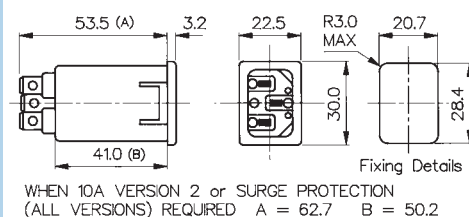


## Snap Fit

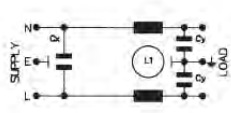


Snap Fit PS01/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs
- 1, 1.5, 2 or 3mm panels



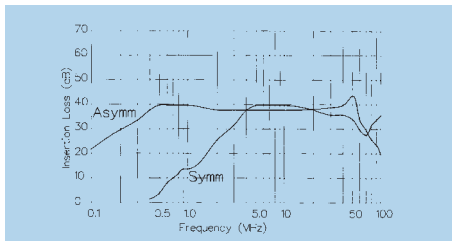
## How to order -

| PS00/A<br>or<br>PS01/A | XX       | X             | 0                        | / | 63                            | XX                 |                                                                                       |
|------------------------|----------|---------------|--------------------------|---|-------------------------------|--------------------|---------------------------------------------------------------------------------------|
| Series                 | Rating   | L/C Circuit   | Additional<br>Components |   | Tag Type and<br>Configuration | Panel<br>Thickness | Circuit Board<br>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         |                                                                                       |

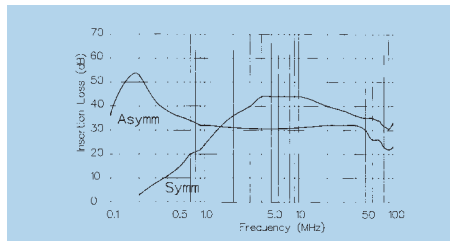
| Specification                    | PS00/Axxxx/xx00                                                                     | PS01/Axxxx/xxxx                                                                     | Part No. Example                                                                                                                                                                    |
|----------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Max. Working Voltage:            | 250V a.c. 50-400Hz                                                                  | 250V a.c. 50-400Hz                                                                  | <b>PS00/A0120/6300</b>                                                                                                                                                              |
| Earth Leakage Current:           | <0.35mA (250V, 50Hz)                                                                | <0.35mA (250V, 50Hz)                                                                | PS00 series, flange fitting,<br>standard filtered IEC power inlet,<br>rated at 1 ampere. L/C circuit<br>version 2, i.e. L1 = 2 x 10mH,<br>Cx = 15nF, Cy = 2 x 2.2nF.<br>6.3mm tabs. |
| Temperature Range:               | -25°C to +85°C                                                                      | -25°C to +85°C                                                                      |                                                                                                                                                                                     |
| Max. Ambient Temp: (@ Full Load) | 40°C (derate linearly to 0A @ 85°C)                                                 | 40°C (derate linearly to 0A @ 85°C)                                                 |                                                                                                                                                                                     |
| Test Voltage:                    | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral             | 2700V d.c. 2 secs. Lines to Earth<br>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 |

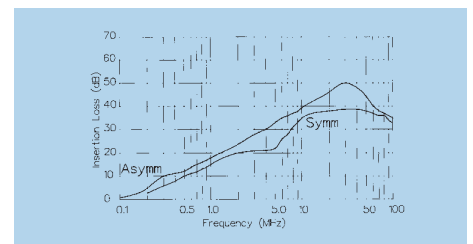
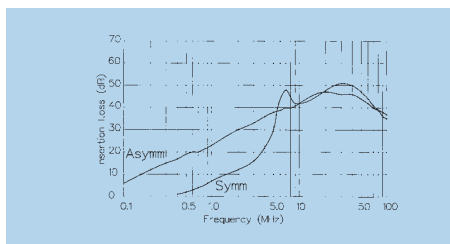
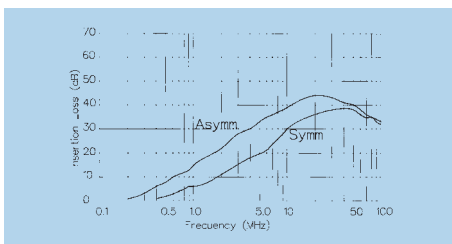
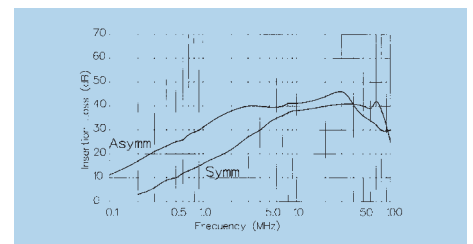
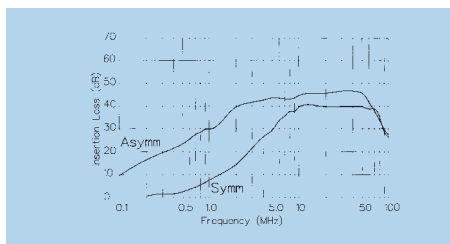
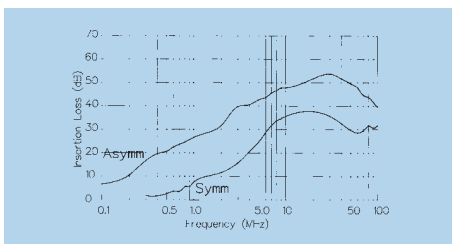
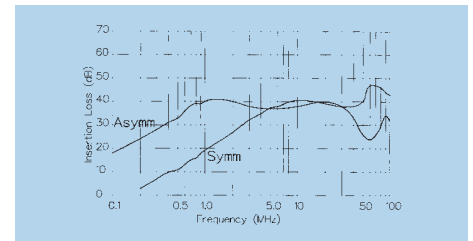
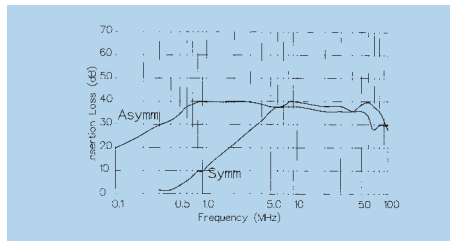
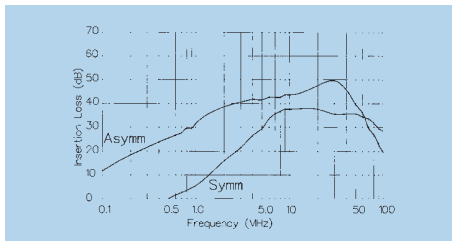
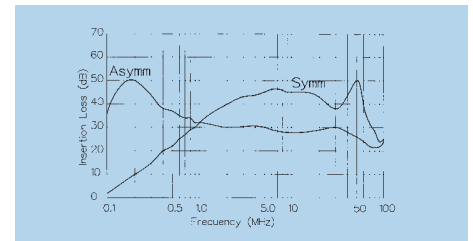
## Version 1



## Version 2



## Version 3

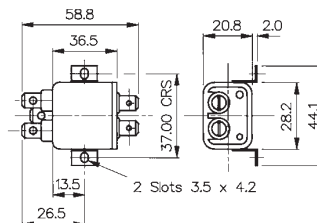


## Base Mounting



Base Mounting PS02/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs

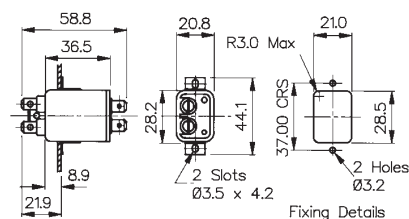


## Bulkhead Mounting



Bulkhead Mounting PS03/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs



## How to order -

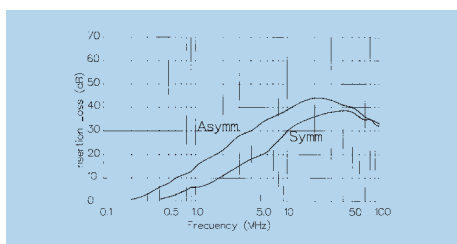
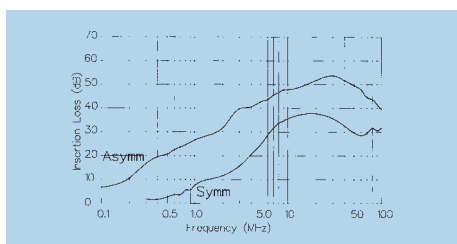
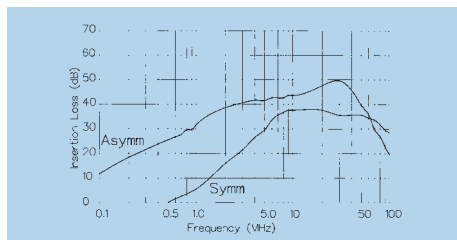
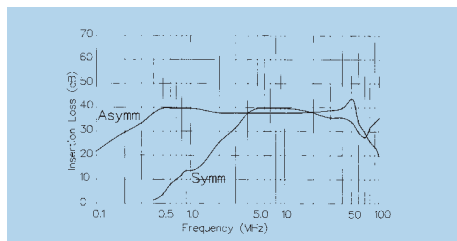
| PS02/A<br>or<br>PS03/A | XX       | X             | 0                     | /                          | 63                                                                                    |
|------------------------|----------|---------------|-----------------------|----------------------------|---------------------------------------------------------------------------------------|
| 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:               | -25°C to +85°C                                                                      | -25°C to +85°C                                                                      |                                                                                                                                                         |
| Max. Ambient Temp: (@ Full Load) | 40°C (derate linearly to 0A @ 85°C)                                                 | 40°C (derate linearly to 0A @ 85°C)                                                 |                                                                                                                                                         |
| Test Voltage:                    | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral             | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral             |                                                                                                                                                         |
| Approvals:                       |  |  |                                                                                                                                                         |
| RoHS                             | Compliant                                                                           | Compliant                                                                           |                                                                                                                                                         |

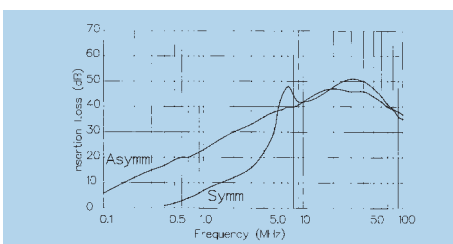
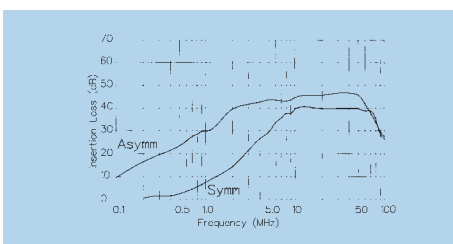
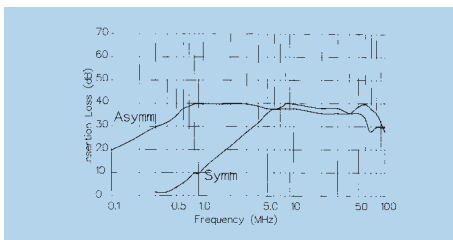
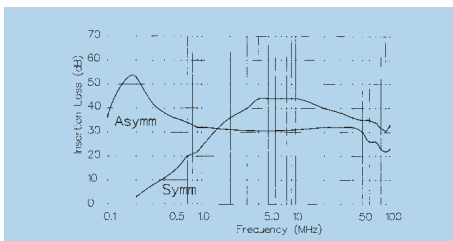


| Rating | Version | L1         | Cx       | Cy        |
|--------|---------|------------|----------|-----------|
| 1 AMP  | 1       | 2 x 2.8mH  | 1 x 15nF | 2 x 2.2nF |
| "      | 2       | 2 x 10mH   | 1 x 15nF | 2 x 2.2nF |
| "      | 3       | 2 x 10mH   | 1 x 47nF | 2 x 2.2nF |
| 3 AMP  | 1       | 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 |

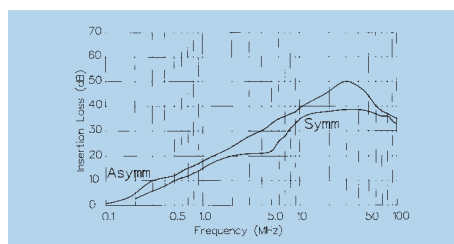
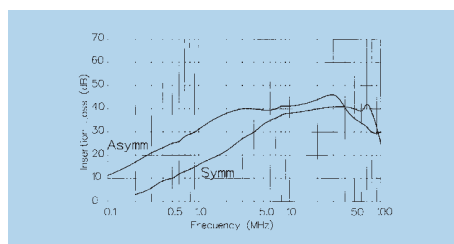
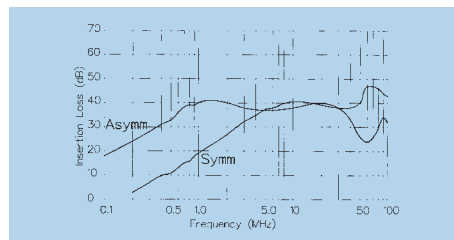
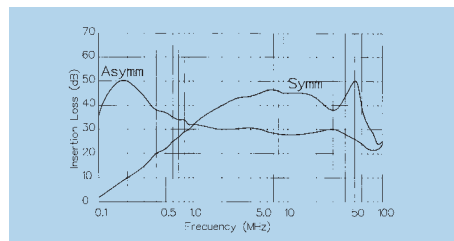
## Version 1



## Version 2



## Version 3

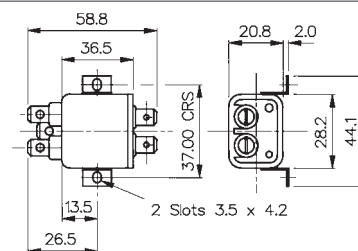


#### Panel Mounting



PS20/A

- 1, 3, or 6 Amp Current Rating
- Single Fused
- 2 Alternative Circuits
- 6.3mm tabs

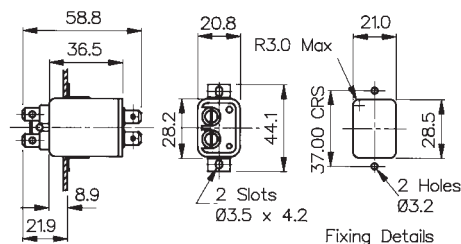


#### Snap Fit



PS21/A

- 1, 3, or 6 Amp Current Rating
- Single Fused
- 2 Alternative Circuits
- 6.3mm tabs
- 1, 1.5, 2 or 3mm panels



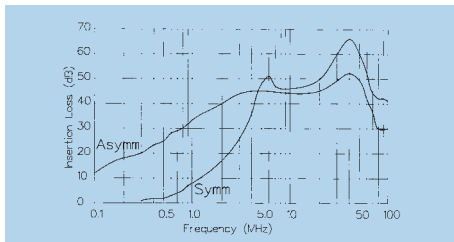
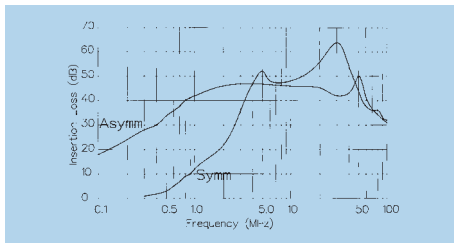
#### How to order -

| 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      |                       |    |   |   |   |    |   |    |

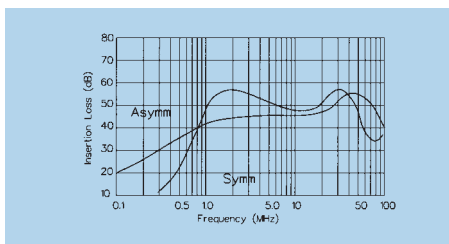
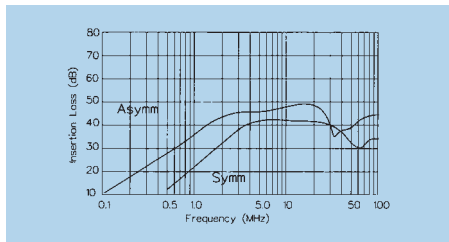
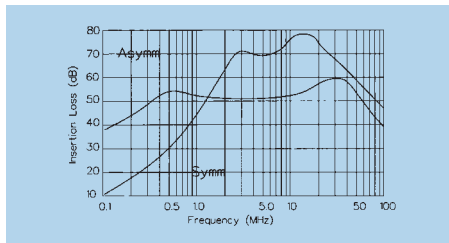
| Specification                    | PS20/Axxx0/xx00                                                         | PS21/Axxx0/xxxx                                                         | Part No. Example                                                                                                                                                                        |
|----------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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:               | -25°C to +85°C                                                          | -25°C to +85°C                                                          |                                                                                                                                                                                         |
| Max. Ambient Temp: (@ Full Load) | 40°C (derate linearly to 0A @ 85°C)                                     | 40°C (derate linearly to 0A @ 85°C)                                     |                                                                                                                                                                                         |
| Test Voltage:                    | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral | 2700V d.c. 2 secs. Lines to Earth<br>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

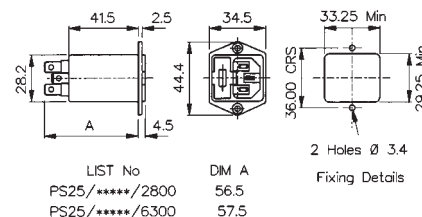


## Base Mounting



PS25/A

- 2 or 4 Amp Current Rating
- Twin Fused
- No additional components
- 6.3mm tabs

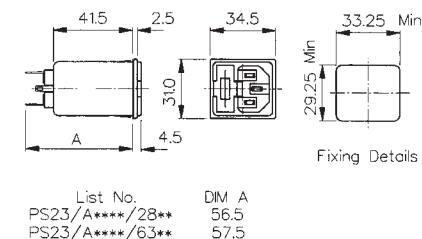


## Snap Fit

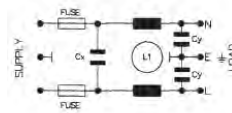


PS26/A

- 2 or 4 Amp Current Rating
- Twin Fused
- No additional components
- 6.3mm tabs
- 1, 1.5, 2 or 3mm panels



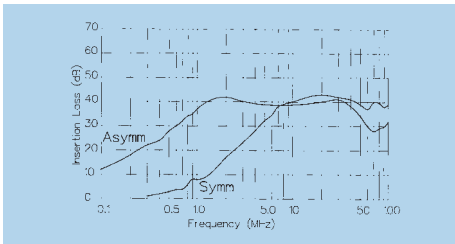
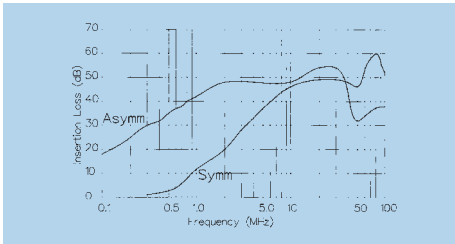
## How to order -

| PS25/A<br>or<br>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,<br>standard filtered IEC power inlet,<br>single fused, rated at 6 amperes.<br>L/C circuit version 2, i.e L1 = 2<br>x 0.7mH, Cx = 1 x 15nF, Cy = 2<br>x 2.2nF. 6.3mm tabs. |
| Temperature Range:                  | <0.35mA (250V, 50Hz)                                                                | <0.35mA (250V, 50Hz)                                                                |                                                                                                                                                                                                        |
| Max. Ambient Temp:<br>(@ Full Load) | 40°C (derate linearly to 0A @ 85°C)                                                 | 40°C (derate linearly to 0A @ 85°C)                                                 |                                                                                                                                                                                                        |
| Test Voltage:                       | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral             | 2700V d.c. 2 secs. Lines to Earth<br>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 spools. 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      | 192-197 |
| IP68 Panel Mounting | 198     |
| IP66 Panel Mounting | 199     |
| PC Mounting         | 200-201 |
| Base Mounting       | 202-203 |
| In-line             | 204     |



### **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.



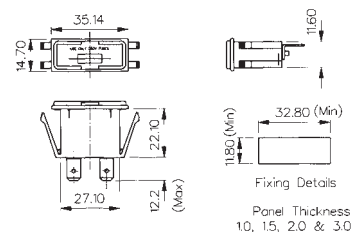


## Snap Fit to Panel



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

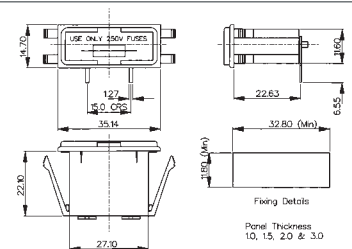


## Snap Fit to Panel



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

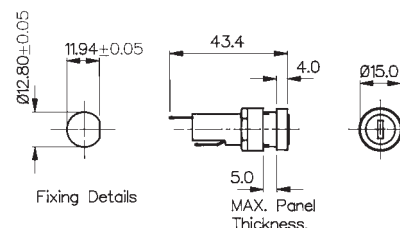


## Panel Mount



FX0460

- Protection Category PC3
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- Captive Fuse Carrier
- 10A, 250V (16A, 250V UL)



| Specifications          | FX0430/Termination                                                                  | FX0430/PC                                                                           | FX0460                                                                                |
|-------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Fuse Size:              | 5 x 20mm                                                                            | 5 x 20mm                                                                            | 5 x 20mm                                                                              |
| Fuse Carrier:           | Captive Drawer                                                                      | Captive Drawer                                                                      | Screw cap/Screwdriver release                                                         |
| Terminations:           | /28 (2.8mm solder), /48 (4.8mm tab), /63 (6.3mm tab)                                | /PC (PC spills)                                                                     | 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)                                                                       | 1.6W (@ 23°C)                                                                         |
| Insulation Resistance:  | >10MΩ @ 500V d.c.                                                                   | >10MΩ @ 500V d.c.                                                                   | >10MΩ @ 500V d.c.                                                                     |
| A.C. Breakdown:         | >2kV                                                                                | >2kV                                                                                | >2kV                                                                                  |
| Contact Resistance:     | <10mΩ                                                                               | <10mΩ                                                                               | <10mΩ                                                                                 |
| Operating Temp:         | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                                 |
| Mouldings:              |                                                                                     |                                                                                     |                                                                                       |
| Body/Drawer:            | Nylon UL94V-0 rated                                                                 | Nylon UL94V-0 rated                                                                 | Polyester UL94V-0 rated                                                               |
| Cap:                    |                                                                                     |                                                                                     | Nylon UL94V-0 rated                                                                   |
| Nut:                    |                                                                                     |                                                                                     | Glass Filled Nylon UL94V-0 rated                                                      |
| Contacts:               | Contact tags: Brass, Tin Plated<br>Fuse Clips: Phosphor Bronze, Nickel Plated       | Contact tags: Brass, Tin Plated<br>Fuse Clips: Phosphor Bronze, Nickel Plated       | Brass, Silver Plated                                                                  |
| Approvals:              |  |  |  |
| Accessories:            |                                                                                     |                                                                                     | P.No. 11327 (See page 205)                                                            |
| Note:                   |                                                                                     |                                                                                     | See page P201 (type FX0416)<br>for PC version                                         |
| <b>RoHS</b>             | Compliant                                                                           | Compliant                                                                           | Compliant                                                                             |

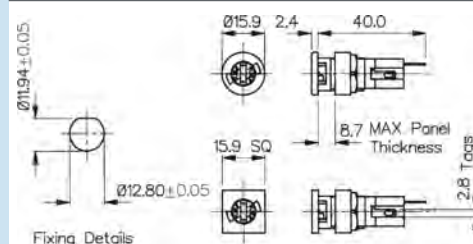
## Panel Mount



FX0357

FX0359

- Protection Category PC2
- Fuse Size 5 x 20mm
- Bayonet Cap/Screwdriver Release
- 10A, 250V (16A, 250V UL)



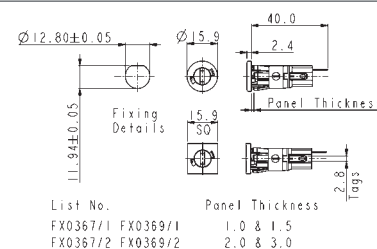
## Snap Fit to Panel



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)



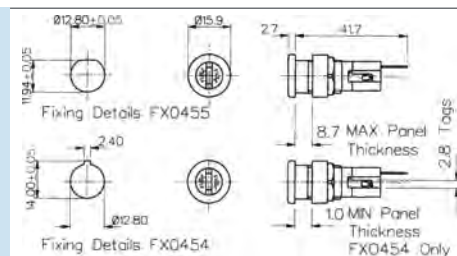
| Specifications          | FX0357, FX0359                                                                      | FX0367/Panel, FX0369/Panel                                                          |
|-------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Fuse Size:              | 5 x 20mm                                                                            | 5 x 20mm                                                                            |
| Panel Size:             |                                                                                     | /1 (1.0-1.5mm panel, black sleeve)<br>/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:  | >10 <sup>2</sup> MΩ @ 500V d.c.                                                     | >10 <sup>2</sup> MΩ @ 500V d.c.                                                     |
| A.C. Breakdown:         | 7kV @ 50Hz                                                                          | 7kV @ 50Hz                                                                          |
| Contact Resistance:     | <10mΩ                                                                               | <10mΩ                                                                               |
| Operating Temp:         | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(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                                                    |                                                                                     |
| 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 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)

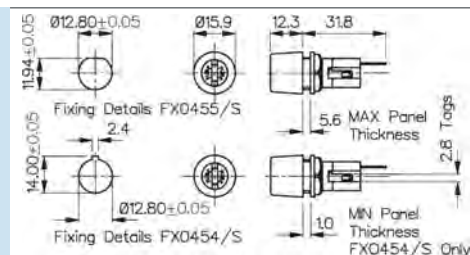


## Panel Mount



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)

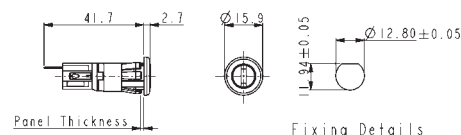


## Snap Fit to Panel



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)



| List No. | Panel Thickness |
|----------|-----------------|
| FX0458/1 | 1.0 & 1.5       |
| FX0458/2 | 2.0 & 3.0       |

| 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)<br>/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:  | >10 <sup>9</sup> MΩ @ 500V d.c.                                                     | >10 <sup>9</sup> MΩ @ 500V d.c.                                                     | >10 <sup>9</sup> MΩ @ 500V d.c.                                                       |
| A.C. Breakdown:         | 7kV @ 50Hz                                                                          | 7kV @ 50Hz                                                                          | 7kV @ 50Hz                                                                            |
| Contact Resistance:     | <10mΩ                                                                               | <10mΩ                                                                               | <10mΩ                                                                                 |
| Operating Temp:         | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(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                                                    |                                                                                       |
| Contacts:               | Brass, Silver Plated                                                                | Brass, Silver Plated                                                                | Brass, Silver Plated                                                                  |
| Approvals:              |  |  |  |
| Accessories:            | P.Nos. 11327, 12297 & 12298<br>(See page 206)                                       | P.Nos. 11327, 12297 & 12298<br>(See page 206)                                       | P.Nos. 11327<br>(See page 205)                                                        |
| RoHS                    | Compliant                                                                           | Compliant                                                                           | Compliant                                                                             |

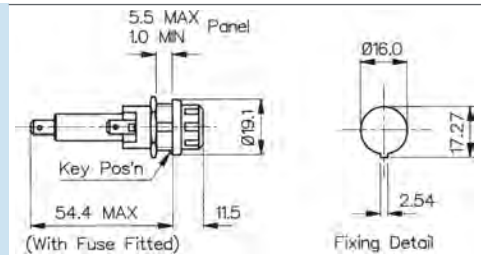
Panel Mount



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)



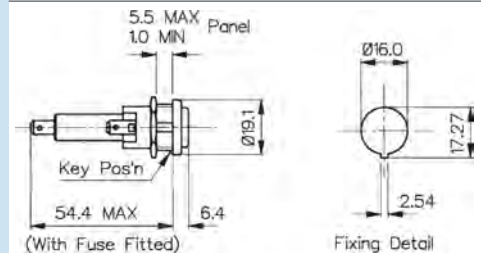
Panel Mount



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)



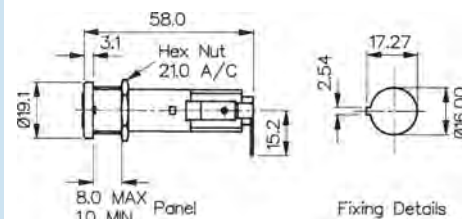
| Specifications          | FX0415, FX0416                                                                      | FX0415/S, FX0416/S                                                                  |
|-------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Fuse Size:              | FX0415 - 6.3 x 32mm<br>FX0416 - 6.3 x 25mm                                          | FX0415/S - 6.3 x 32mm<br>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<br>(16A, 250V UL)                                                         | 13A, 250V<br>(16A, 250V UL)                                                         |
| Max. Power Dissipation: | 4W (@ 23°C)                                                                         | 4W (@ 23°C)                                                                         |
| Insulation Resistance:  | >10 <sup>5</sup> MΩ @ 500V d.c.                                                     | >10 <sup>5</sup> MΩ @ 500V d.c.                                                     |
| A.C. Breakdown:         | 4kV @ 50Hz                                                                          | 4kV @ 50Hz                                                                          |
| Contact Resistance:     | <5mΩ                                                                                | <5mΩ                                                                                |
| Operating Temp:         | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               |
| Mouldings:              |                                                                                     |                                                                                     |
| Body:                   | Glass Filled Nylon UL94V-0 rated                                                    | Glass Filled Nylon UL94V-0 rated                                                    |
| Cap:                    | Nylon UL94V-0 rated                                                                 | Nylon UL94V-0 rated                                                                 |
| Nut:                    | Polyester 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



FX0417

- Protection Category PC2
- Fuse Size 6.3 x 32mm
- Screw Cap/Screwdriver Release
- 16A, 250V (20A, 250V UL)



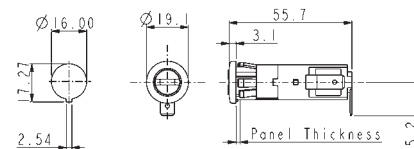
Fixing Details

## Snap Fit to Panel



FX0418

- Protection Category PC2
- Fuse Size 6.3 x 32mm
- Panel Sizes 1.0 & 1.5 and 2.0 & 3.0mm
- Screw Cap/Screwdriver Release
- 16A, 250V (20A, 250V UL)



| List No  | Panel Thickness |
|----------|-----------------|
| FX0418/1 | 1.0 & 1.5       |
| FX0418/2 | 2.0 & 3.0       |

| Specifications          | FX0417                                                                              | FX0418/Panel                                                                        |
|-------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Fuse Size:              | 6.3 x 32mm                                                                          | 6.3 x 32mm                                                                          |
| Panel Size:             |                                                                                     | /1 (1.0-1.5mm panel, black sleeve)<br>/2 (2.0-3.0mm panel, grey sleeve)             |
| Fuse Carrier:           | Screw cap/Screwdriver release                                                       | Screw cap/Screwdriver release                                                       |
| Terminations:           | 6.3 series tabs                                                                     | 6.3 series tabs                                                                     |
| Max. Rating:            | 16A, 250V<br>20A, 250V a.c. UL                                                      | 16A, 250V<br>20A, 250V a.c. UL                                                      |
| Max. Power Dissipation: | 4W (@ 23°C)                                                                         | 4W (@ 23°C)                                                                         |
| Insulation Resistance:  | >10 <sup>6</sup> MΩ @ 500V d.c.                                                     | >10 <sup>6</sup> MΩ @ 500V d.c.                                                     |
| A.C. Breakdown:         | >2kV                                                                                | >2kV                                                                                |
| Contact Resistance:     | <10mΩ                                                                               | <10mΩ                                                                               |
| Operating Temp:         | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               |
| Mouldings:              |                                                                                     |                                                                                     |
| Body:                   | Glass Filled Polyester UL94V-0 rated                                                | Glass Filled Polyester UL94V-0 rated                                                |
| Cap:                    | Nylon UL94V-0 rated                                                                 | Nylon UL94V-0 rated                                                                 |
| Sleeve:                 | Polyester UL94V-0 rated                                                             | Polyester UL94V-0 rated                                                             |
| Contacts:               | Brass, Silver Plate                                                                 | Brass, Silver Plate                                                                 |
| Approvals:              |  |  |
| <b>RoHS</b>             | Compliant                                                                           | Compliant                                                                           |

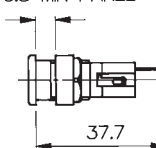
Panel Mount



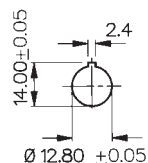
FX0354

- Protection Category PC2
- Low Profile Bezel
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- Keyway Panel Cutout
- 6.3A, 250V

6.4 MAX Panel  
0.8 MIN PANEL



Fixing Details



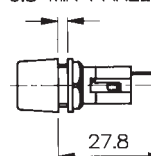
Panel Mount



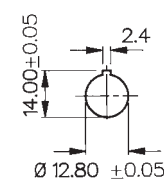
FX0354/S

- Protection Category PC2
- High Profile Bezel
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- Keyway Panel Cutout
- 6.3A, 250V

2.4 MAX Panel  
0.8 MIN PANEL



Fixing Details



| 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:  | >10 <sup>2</sup> MΩ @ 500V d.c.                       | >10 <sup>2</sup> MΩ @ 500V d.c.                       |
| A.C. Breakdown:         | 5kV @ 50Hz                                            | 5kV @ 50Hz                                            |
| Contact Resistance:     | <10mΩ                                                 | <10mΩ                                                 |
| Operating Temp:         | -20°C to +85°C<br>(ambient air temp + fuse temp rise) | -20°C to +85°C<br>(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<br>(See page 205)               | P.No. 11327 and 12298<br>(See page 205)               |
| RoHS                    | Compliant                                             | Compliant                                             |

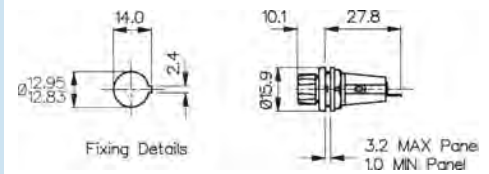
Panel Mount



FX0296/S

FX0296

- Protection Category PC1
- Fuse Size 5 x 20mm
- Screw Cap/Hand Release
- 6.3A, 250V

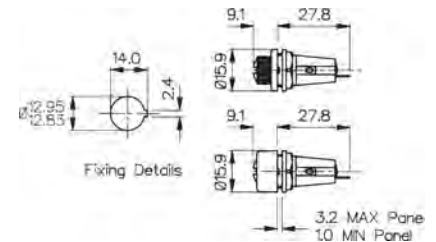


Panel Mount



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<br>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 <sup>5</sup> MΩ @ 500V d.c.                                         | >10 <sup>5</sup> MΩ @ 500V d.c.                       |
| A.C. Breakdown:         | 2.5kV @ 50Hz                                                            | 2.5kV @ 50Hz                                          |
| Contact Resistance:     | <5mΩ                                                                    | <5mΩ                                                  |
| Operating Temp:         | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                   | -20°C to +85°C<br>(ambient air temp + fuse temp rise) |
| Mouldings:              |                                                                         |                                                       |
| Body:                   | Glass Filled Nylon UL94V-0 rated Nylon                                  | Glass Filled Nylon UL94V-0 rated Nylon                |
| Cap:                    | UL94V-0 rated                                                           | UL94V-0 rated                                         |
| Nut:                    | Glass Filled 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)                             |
| <b>RoHS</b>             | Compliant                                                               | Compliant                                             |

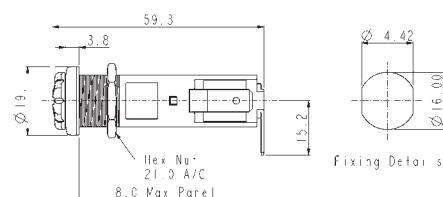


Panel Mount



FX0419

- Panel sealed to IP68
- Touchproof Category PC2
- Fuse Size 6.3 x 32mm
- Screw cap/Screwdriver/Hand Release
- 16A. 250V ac

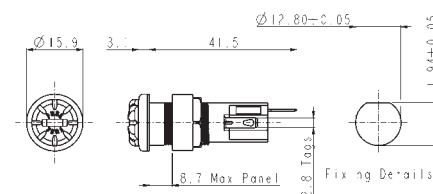


Panel Mount



FX0462

- Panel sealed to IP68
- Touchproof Category PC2
- Fuse Size 5 x 20mm
- Screw cap/Screwdriver/Hand Release
- 10A. 250V ac

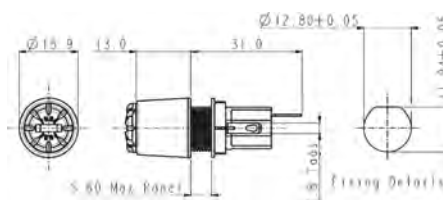


Panel Mount



FX0463

- Panel sealed to IP68
- Touchproof Category PC2
- Fuse Size 5 x 20mm
- High Profile Bezel
- Screw cap/Screwdriver/Hand Release
- 10A. 250V ac



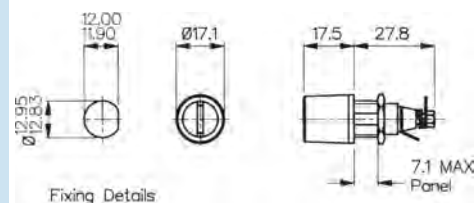
| Specifications          | FX0419                                                                              | FX0462                                                                              | FX0463                                                                                |
|-------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 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 <sup>6</sup> MΩ @ 500V d.c.                                                     | >10 <sup>6</sup> MΩ @ 500V d.c.                                                     | >10 <sup>6</sup> 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<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(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<br>(10m for 2weeks)                                    | IP68 to EN60529:1992+A2:2013<br>(10m for 2weeks)                                    | IP68 to EN60529:1992+A2:2013<br>(10m for 2weeks)                                      |
| Accessories:            |                                                                                     | P.nos. 11327 (see page 205)                                                         | P.nos. 11327 (see page 205)                                                           |
| Approvals:              |  |  |  |
| RoHS                    | Compliant                                                                           | Compliant                                                                           | Compliant                                                                             |

## High Profile Panel Mount



FX0345

- Sealed to IP66
- Protection Category PC1
- Fuse Size 5 x 20mm
- Screw Cap/Screwdriver Release
- 6.3A, 250V

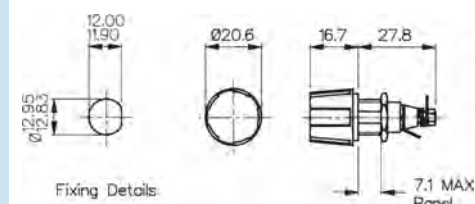


## High Profile Panel Mount



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:  | >10 <sup>3</sup> MΩ @ 500V d.c.                                                                                                                   | >10 <sup>3</sup> MΩ @ 500V d.c.                                |
| A.C. Breakdown:         | >3.5kV @ 50Hz                                                                                                                                     | >3.5kV @ 50Hz                                                  |
| Contact Resistance:     | <10mΩ                                                                                                                                             | <10mΩ                                                          |
| Operating Temp:         | -20°C to +85°C<br>(ambient air temp +<br>fuse temp rise)                                                                                          | -20°C to +85°C<br>(ambient air temp +<br>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<br>Retains sealing integrity with cap removed since they are both panel and barrier sealed |                                                                |
| Variants:               | /A Silicone 'O' ring,<br>Op. Temp. -55°C to +85°C<br>Compliant                                                                                    | /A Silicone 'O' ring,<br>Op. Temp. -55°C to +85°C<br>Compliant |

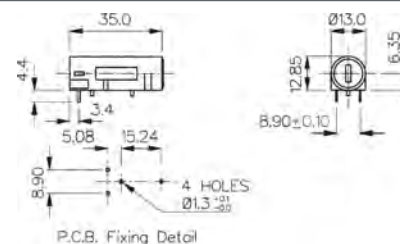
RoHS

## 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)



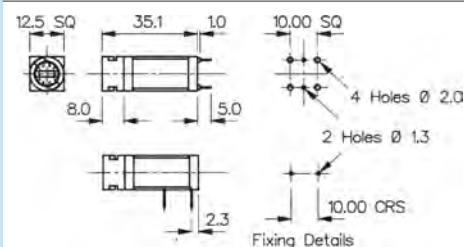
## PC Horizontal and Vertical Mount



FX0456

FX0457

- Protection Category PC2
- Fuse Sizes 5 x 20mm
- Bayonet Cap/Screwdriver Release
- 10A, 250V



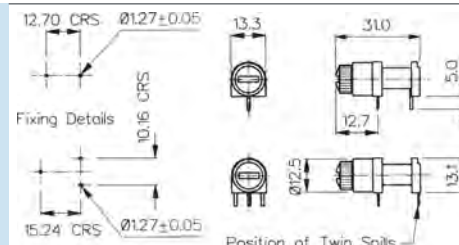
## PC Horizontal Mount



FX0330

FX0342

- Protection Category PC1
- Fuse Size 5 x 20mm
- Two or Three PC Spills
- Screw Cap/Hand Release
- 6.3A, 250V



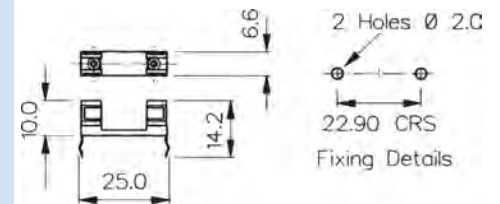
| Specifications          | FX0461                                                                              | FX0456 FX0457                                                                       | FX0330 FX0342                                         |
|-------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------|
| 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<br>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 <sup>9</sup> MΩ @ 500V d.c.                                                     | >10 <sup>4</sup> MΩ @ 500V d.c.                       |
| A.C. Breakdown:         | >2kV                                                                                | 4kV @ 50Hz                                                                          | 6kV @ 50Hz                                            |
| Contact Resistance:     | <10mΩ                                                                               | <10mΩ                                                                               | <5mΩ                                                  |
| Operating Temp:         | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(ambient air temp + fuse temp rise)                               | -20°C to +85°C<br>(ambient air temp + fuse temp rise) |
| Mouldings:              |                                                                                     |                                                                                     |                                                       |
| Body:                   | Polyester UL94V-0 rated                                                             | Polyester UL94V-0 rated                                                             | Glass Filled Nylon UL94V-0 rated                      |
| Cap:                    | Nylon UL94V-0 rated                                                                 | Nylon UL94V-0 rated                                                                 | Nylon UL94V-0 rated                                   |
| End Bung:               |                                                                                     | Polyester UL94V-0 rated                                                             |                                                       |
| Contacts:               | Brass, Silver Plated                                                                | Brass, Silver Plated                                                                | Brass, Tin Plated                                     |
| Approvals:              |  |  |                                                       |
| RoHS                    | Compliant                                                                           | Compliant                                                                           | Compliant                                             |

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

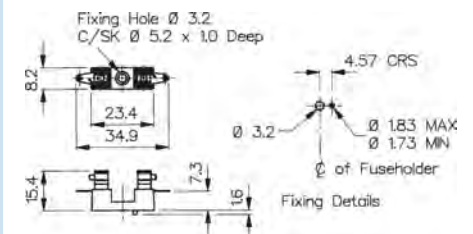


Base Mount



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 <sup>5</sup> MΩ @ 500V d.c.  | >10 <sup>5</sup> MΩ @ 500V d.c.  | >10 <sup>4</sup> MΩ @ 500V d.c. |
| A.C. Breakdown:                                           | 7kV @ 50Hz (Clip to clip)        | 1.5kV @ 50Hz                     | 2kV @ 50Hz                      |
| Contact Resistance:                                       | <10mΩ                            | <10mΩ                            | <10mΩ                           |
| Operating Temp:<br>(ambient air temp +<br>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:                                                 | Phosphor Bronze, Tin Plated      | Phosphor Bronze, Tin Plated      | Phosphor Bronze, Tin Plated     |
| Accessories:                                              | P.No. 12760 (See page 205)       | P.No. 12760 (See page 205)       |                                 |
| <b>RoHS</b>                                               | Compliant                        | Compliant                        | Compliant                       |

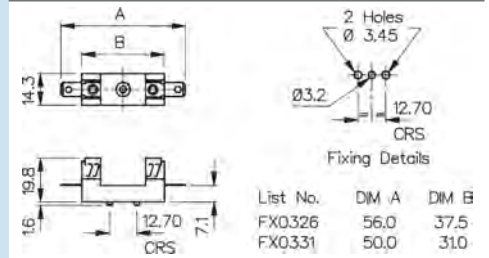
Base Mount



FX0326

FX0331

- Protection Category PC1
- Fuse Sizes:  
6.3 x 32mm (FX0326)  
6.3 x 25mm (FX0331)
- Solder Tags
- 13A, 250V

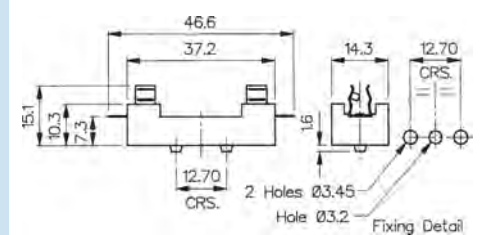


Base Mount

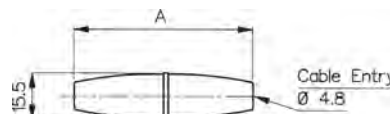
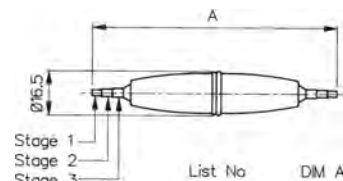


FX0327

- Protection Category PC1
- Fuse Size 6.3 x 32mm
- Solder Tags
- 5A, 250V



| Specifications                                            | FX0326, FX0331                                                | FX0327                               |
|-----------------------------------------------------------|---------------------------------------------------------------|--------------------------------------|
| Fuse Size:                                                | FX0326 - 6.3 x 32mm<br>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 <sup>4</sup> MΩ @ 500V d.c.                               | >10 <sup>5</sup> MΩ @ 500V d.c.      |
| A.C. Breakdown:                                           | 5kV @ 50Hz                                                    | 5kV @ 50Hz                           |
| Contact Resistance:                                       | <5mΩ                                                          | <10mΩ                                |
| Operating Temp:<br>(ambient air temp +<br>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: Phosphor Bronze, Tin Plated<br>Tabs: Brass, Tin Plated | Phosphor Bronze, Tin Plated          |
| RoHS                                                      | Compliant                                                     | Compliant                            |

|                                                                                                                                |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                            |          |       |        |      |        |      |        |      |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|------|--------|------|--------|------|
| <p>In-line</p>  <p>FX0180, FX0280, FX0380</p> | <ul style="list-style-type: none"><li>○ Protection Category PC1</li><li>○ Fuse Sizes 5 x 20mm, 6.3 x 25mm and 6.3 x 32mm</li><li>○ Screw Terminal (Solder to order)</li><li>○ 10A, 50V (250V Inaccessible)</li><li>○ UL Approved (Black Only)</li><li>○ Clear or black</li></ul>                          |  <table><tr><td>List No.</td><td>DIM A</td></tr><tr><td>FX0180</td><td>60.3</td></tr><tr><td>FX0280</td><td>54.5</td></tr><tr><td>FX0380</td><td>48.6</td></tr></table> | List No. | DIM A | FX0180 | 60.3 | FX0280 | 54.5 | FX0380 | 48.6 |
| List No.                                                                                                                       | DIM A                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                            |          |       |        |      |        |      |        |      |
| FX0180                                                                                                                         | 60.3                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                            |          |       |        |      |        |      |        |      |
| FX0280                                                                                                                         | 54.5                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                            |          |       |        |      |        |      |        |      |
| FX0380                                                                                                                         | 48.6                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                            |          |       |        |      |        |      |        |      |
| <p>In-line</p>  <p>FX0185, FX0285, FX0385</p> | <ul style="list-style-type: none"><li>○ Sealed to IP66</li><li>○ Protection Category PC1</li><li>○ Fuse Sizes 5 x 20mm, 6.3 x 25mm and 6.3 x 32mm</li><li>○ Screw Terminal (Solder to order)</li><li>○ 10A, 50V (250V Inaccessible)</li><li>○ UL Approved (Black Only)</li><li>○ Clear or black</li></ul> |  <table><tr><td>List No</td><td>DIM A</td></tr><tr><td>FX0185</td><td>91.0</td></tr><tr><td>FX0285</td><td>85.2</td></tr><tr><td>FX0385</td><td>79.2</td></tr></table>  | List No  | DIM A | FX0185 | 91.0 | FX0285 | 85.2 | FX0385 | 79.2 |
| List No                                                                                                                        | DIM A                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                            |          |       |        |      |        |      |        |      |
| FX0185                                                                                                                         | 91.0                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                            |          |       |        |      |        |      |        |      |
| FX0285                                                                                                                         | 85.2                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                            |          |       |        |      |        |      |        |      |
| FX0385                                                                                                                         | 79.2                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                            |          |       |        |      |        |      |        |      |

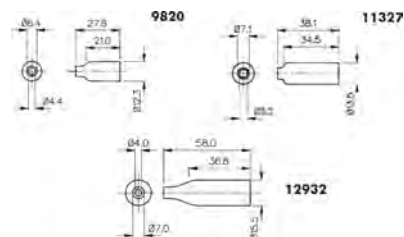
| Specifications                                         | FX0180/colour, FX0280.colour, FX0380/Colour                                                              | FX0185/Colour, FX0285/colour, FX0385/Colour                                                                                                                                   |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fuse Size:                                             | 5 x 20mm FX0380<br>6.3 x 25mm FX0280<br>6.3 x 32mm FX0180                                                | 5 x 20mm FX0385<br>6.3 x 25mm FX0285<br>6.3 x 32mm FX0185                                                                                                                     |
| Cable Acceptance:                                      | 1mm <sup>2</sup> conductor (max.)                                                                        | 1mm <sup>2</sup> conductor (max.)<br>1mm to 2.64mm overall diameter<br>Stepped grommet:<br>Stage 1: 1.00mm to 1.40mm<br>Stage 2: 1.50mm to 1.90mm<br>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 <sup>5</sup> MΩ @ 500V d.c.                                                                          | >10 <sup>5</sup> MΩ @ 500V d.c.                                                                                                                                               |
| High Voltage Proof Test:                               | 2kV (50Hz for 1 minute)                                                                                  | 2kV (50Hz for 1 minute)                                                                                                                                                       |
| Contact Resistance:                                    | <10mΩ                                                                                                    | <10mΩ                                                                                                                                                                         |
| Operating Temp:<br>(ambient air temp + fuse temp rise) | -20°C to +90°C                                                                                           | -20°C to +70°C                                                                                                                                                                |
| Sealing:                                               |                                                                                                          | Protection Classification IP66<br>EN60529: 1992+A2:2013                                                                                                                       |
| Screw Tightening Torque                                | 0.226Nm (2lb/in)                                                                                         | 0.226Nm (2lb/in)                                                                                                                                                              |
| Mouldings:                                             |                                                                                                          | Polybutene UL94HB rated<br>Nylon 6 UL94V-0 rated<br>PVC<br>Nitrile                                                                                                            |
| Body - Clear:                                          | Polybutene UL94HB rated                                                                                  |                                                                                                                                                                               |
| Body - Black:                                          | Nylon 6 UL94V-0 rated                                                                                    |                                                                                                                                                                               |
| Grommet:                                               |                                                                                                          |                                                                                                                                                                               |
| O Ring:                                                |                                                                                                          |                                                                                                                                                                               |
| 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                                                                                                                                                                     |

### Insulation Boots



PNo. 11327 PNo. 12932 PNo. 9820

- Provide Insulation against Shock on Rear of Fuseholder
- PVC
- UL94V-0 rated flame retardant material

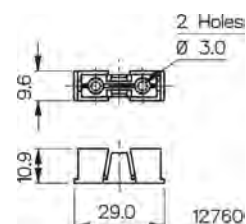


### Insulation Cover



PNo. 12760

- Provide Insulation from Live Parts on Fuseholder
- Clear
- Polycarbonate

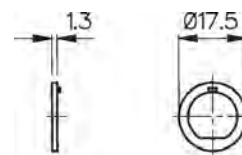


### Adaptor



PNo. 12297

- Adaptor to Convert Fixing Holes
- Maintains Anti-Rotation
- Glass Filled Nylon



12297

| 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<br>P.No. 12760: Polycarbonate                                               |
| P.No. 12297 (Adaptor Washer) | Adapts 'D' fixing to anti-rotation Key Fixing<br>FX0455, FX0455/S                                                    |
| Material:                    | Glass Filled Nylon                                                                                                   |
| <b>RoHS</b>                  | 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 many different needs of panel design including **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  
LED Bezel

207-208  
209-213

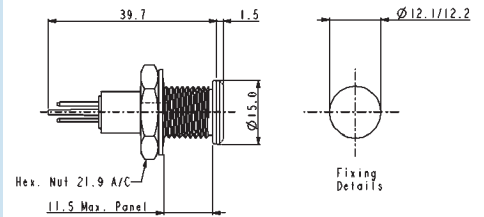


## Proud of Panel Profile



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

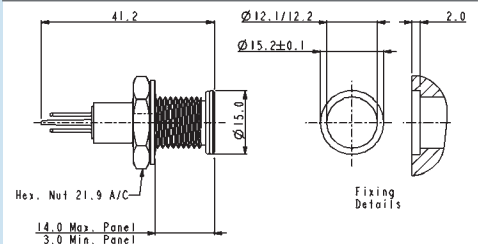


## Flush Panel Profile



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



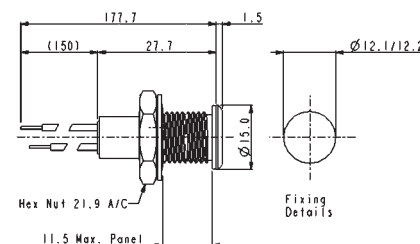
| Specifications               | DX0505/Col/Voltage                                                           | DX0506/Col/Voltage                                                           |
|------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 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                                                                    |

## 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

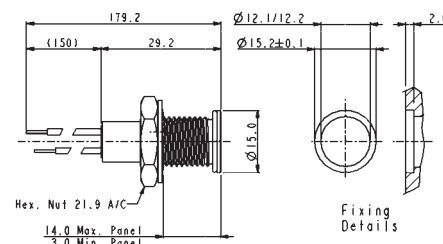


## Flush Panel Profile



DX0508

- Flying Lead Termination
- Sealed to IP67
- Red, Green, Yellow or Blue LED Options
- Wide Viewing Angle
- Shock and Vibration Resistant
- Stainless Steel body

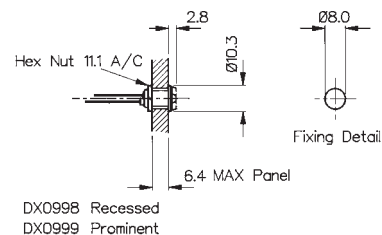


| Specifications               | DX0507/Col/Voltage                                                           | DX0508/Col/Voltage                                                           |
|------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 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                                                                    |

#### Chrome Plated Brass Bezel



- Chrome Plated Brass Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours

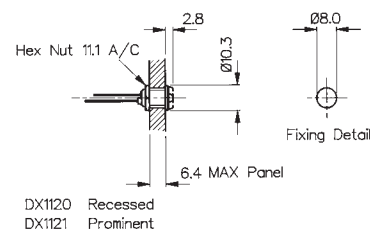


DX0998 Recessed  
DX0999 Prominent

#### Nylon Bezel



- Glass Filled Nylon Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours



DX1120 Recessed  
DX1121 Prominent

| Specifications         | DX0998, DX0999/Colour/Options                                                                                                                                                 | DX1120, DX1121/Colour/Options                                                                                                                                                 |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bezel Material:        | Brass, Chrome Plated                                                                                                                                                          | Glass Filled Nylon                                                                                                                                                            |
| Style:                 | Recessed (DX0998)<br>Prominent (DX0999)                                                                                                                                       | Recessed (DX1120)<br>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),<br>/BL (Blue), /TR (Tri Colour),<br>/D1 (Dual Colour - Red/Green),<br>/D2 (Dual Colour - Red/Amber),<br>/D3 (Dual Colour - Green/Amber) | /RD (Red), /GN (Green), /YL (Yellow),<br>/BL (Blue), /TR (Tri Colour),<br>/D1 (Dual Colour - Red/Green),<br>/D2 (Dual Colour - Red/Amber),<br>/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                                                                                                                                                                |
| <b>RoHS</b>            | Compliant                                                                                                                                                                     | Compliant                                                                                                                                                                     |

See Page 212 for LED options and specifications\*

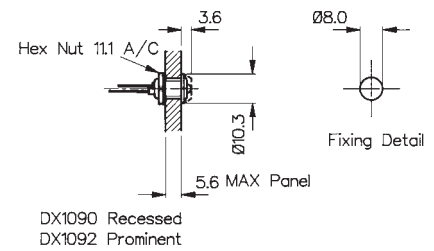
Aluminium Bezel - IP66 Sealed



DX1090

DX1092

- Aluminium Bezel, Black
- Anodised Finish
- IP66 Front Panel Sealed
- Prominent or Recessed Style
- Choice of LED Types and Colours



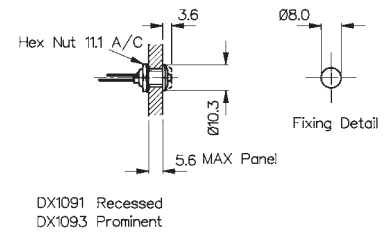
Aluminium Bezel - IP66 Sealed



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)<br>Prominent (DX1092)                                                                                                                                       | Recessed (DX1091)<br>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),<br>/BL (Blue), /TR (Tri Colour),<br>/D1 (Dual Colour - Red/Green),<br>/D2 (Dual Colour - Red/Amber),<br>/D3 (Dual Colour - Green/Amber) | /RD (Red), /GN (Green), /YL (Yellow),<br>/BL (Blue), /TR (Tri Colour),<br>/D1 (Dual Colour - Red/Green),<br>/D2 (Dual Colour - Red/Amber),<br>/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

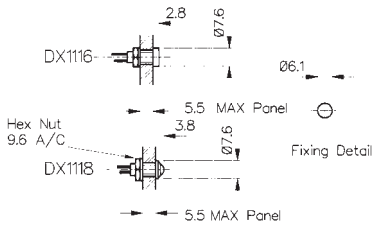
Chrome Plated Brass Bezel



DX1116

DX1118

- Chrome Plated Brass Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours



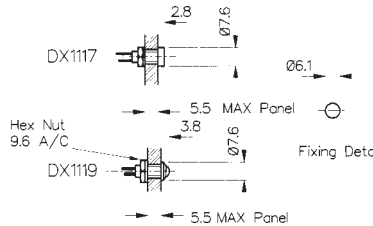
Black Nickel Pated Brass Bezel



DX1117

DX1119

- Aluminium, Black Anodised Bezel
- Prominent or Recessed Style
- Choice of LED Types and Colours

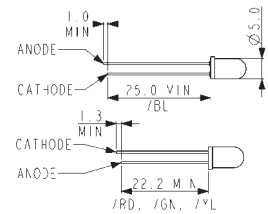


| Specifications         | DX1116, DX1118/Colour                               | DX1117, DX1119/Colour                               |
|------------------------|-----------------------------------------------------|-----------------------------------------------------|
| Bezel Materials:       | Brass, Chrome Plated                                | Aluminium, Black Anodised                           |
| Style:                 | Recessed (DX1116)<br>Prominent (DX1118)             | Recessed (DX1117)<br>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),<br>/BL (Blue) | /RD (Red), /GN (Green), /YL (Yellow),<br>/BL (Blue) |
| RoHS                   | Compliant                                           | Compliant                                           |

See Page 213 for LED specifications\*

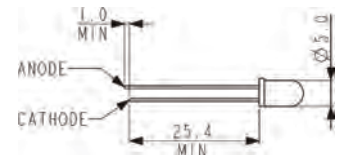
#### 5mm LEDs STANDARD

| 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            |



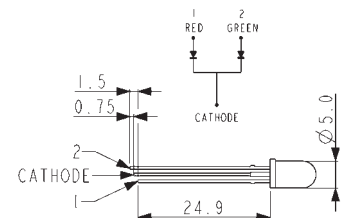
#### 5mm LEDs FLASHING

| 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 |



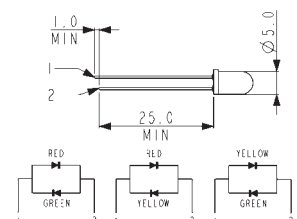
#### 5mm LEDs TRI COLOUR

| 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

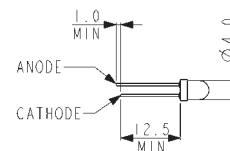
| Specifications         | Red/Green      | Red/Amber  | Green/Amber |
|------------------------|----------------|------------|-------------|
| Luminous Intensity:    | 4.5/5mcd       | 4.5/4mcd   | 4/5mcd      |
| Forward voltage:       | 2.2V           | 2.2V       | 2.2V        |
| Cont. Forward Current: | 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 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<br>RD = Red<br>GN = Green<br>YL = Yellow<br>BL = Blue<br>D1 = Dual Colour - 5mm (Red/<br>Green)<br>D2 = Dual Colour - 5mm (Red/<br>Amber)<br>D3 = Dual Colour - 5mm (Green/<br>Amber)<br>TR = Tri Colour - 5mm (Red/<br>Green/Amber) |   | LED Options<br>Blank = Standard<br>02 = Flashing - 5mm (Red or<br>Green only) |

#### Example:

DX1092/RD/02 = Black Aluminum IP66 Prominent Bezel, with Red flashing LED

# International Approval Bodies

## United Kingdom



B.S.I. Kitemark

## BS EN ISO 9001:2000



B.S.I.  
British Electro-Technical  
Approvals Board

## Austria



O.V.E

## Australia



State Electricity  
Commission of Victoria



The Regulatory  
Compliance Mark  
(RCM)

## Belgium



CEBEC

## Canada



C.S.A.

## China



C.C.C.

## Denmark



D.E.M.K.O

## Europe



E.N.E.C.

## Finland



F.I.M.K.O

## Germany



V.D.E.

## Holland



KEMA-KEUR

## Italy



I.M.Q.

## Norway



N.E.M.K.O.

## South Africa



S.A. Bureau of  
Standards

## Sweden



S.E.M.K.O.

## Switzerland



S.E.V.

## U.S.A.



U.L. Recognised



U.L. Listed

## Russia



GOST The State Committee  
for Standards

# Comparison Chart

Metric to AWG wire sizes



| AWG | Cross Sectional Area in mm <sup>2</sup> | Closest standard equivalent in mm <sup>2</sup> |
|-----|-----------------------------------------|------------------------------------------------|
| 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 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.                             |

# Part No. Index



|                 |            |               |           |                 |        |               |            |
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| 12023           | 24         | DX1093        | 210 - 211 | MP0012/1/Col    | 112    | PNo.14232     | 42         |
| 12023/1         | 24         | DX1116        | 211       | MP0012/Col      | 112    | PNo. 14232/1  | 24         |
| 12023/2         | 24         | DX1118        | 211       | MP0013          | 106    | PNo.14232/2   | 42         |
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| 12734/1         | 31         | DX1121        | 209       | MP0016          | 112    | PNo 14317     | 151        |
| 12734/3         | 31         | EXP-0911/02/P | 10        | MP0022/Col      | 113    | PNo 14340     | 151        |
| 12734/3/1       | 31         | EXP-0911/03/P | 10        | MP0027          | 95     | PNo. 14917    | 42         |
| 12735           | 31         | EXP-0911/04/P | 10        | MP0027/2        | 104    | PNo.14944     | 42         |
| 12735/1         | 31         | EXP-0911/05/P | 10        | MP0027/3        | 102    | PNo. 14944/SP | 50         |
| 12735/3         | 31         | EXP-0911/07/P | 10        | MP0031          | 96     | PNo.14945     | 42         |
| 12735/3/1       | 31         | EXP-0911/10/P | 10        | MP0031/2        | 105    | PNo. 14945/SP | 50         |
| 13027           | 36         | EXP-0931/02/P | 11        | MP0031/3        | 103    | PNo.14946     | 42         |
| 13027/1         | 36         | EXP-0931/03/P | 11        | MP0033          | 106    | PNo.15019     | 42         |
| 13027/2         | 36         | EXP-0931/04/P | 11        | MP0033/2        | 106    | PNo. 15019/SP | 50         |
| 14025           | 36         | EXP-0931/05/P | 11        | MP0037          | 96     | PNo.15021     | 42         |
| 14025/1AMP      | 36         | EXP-0931/07/P | 11        | MP0037/2        | 105    | PNo. 15021/SP | 50         |
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| 14193           | 66, 86     | EXP-0980      | 11        | MP0042/3        | 107    | PS21/A        | 186        |
| 14194           | 66, 86     | EXP-0990      | 11        | MP0045/1D       | 108    | PS25/A        | 188        |
| 14199           | 59, 91     | EXP-0991      | 11        | MP0045/1D1      | 110    | PS26/A        | 188        |
| 14563           | 71         | EXP-0992      | 11        | MP0045/1D2      | 110    | PX0400        | 34         |
| 14564           | 71         | EXP-A911/03/P | 10        | MP0045/1E       | 109    | PX0401        | 34         |
| BVA01/Z0000/02  | 176        | EXP-A911/04/P | 10        | MP0045/1E1      | 111    | PX0402        | 34         |
| BVA01/Z0000/10  | 177 - 178  | EXP-A911/05/P | 10        | MP0045/1E2      | 111    | PX0407        | 77         |
| BVB01/Z0000/01  | 176        | EXP-A980      | 11        | MP0045/3D       | 108    | PX0408        | 77         |
| BVB01/Z0000/11  | 177        | FX0180        | 204       | MP0045/3E       | 109    | PX0409        | 77         |
| BX0001/1        | 124        | FX0185        | 204       | MP0050          | 101    | PX0410        | 34         |
| BX0002/1        | 124        | FX0267        | 202       | MP0050/2        | 101    | PX0411        | 34         |
| BX0003/1        | 124        | FX0280        | 204       | MPB031          | 100    | PX0412        | 35         |
| BX0011/1        | 124        | FX0285        | 204       | MPB037          | 100    | PX0413        | 35         |
| BX0012/1        | 124        | FX0296        | 198       | MPB038          | 100    | PX0414/0M50   | 74         |
| BX0013/1        | 124        | FX0296/1      | 198       | MPI001          | 97     | PX0414/1M00   | 74         |
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| BXS012/1        | 123, 125   | FX0365        | 200       | PF0007/28       | 140    | PX0444/2M00   | 69         |
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| BXS016          | 123        | FX0369        | 193       | PF0011/10/PC    | 136    | PX0444/4M50   | 69         |
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## Dimensions

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- Cadmium
- Mercury
- Hexavalent Chromium
- Polybrominated Biphenyl (PBB) - flame retardant
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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.

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