

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

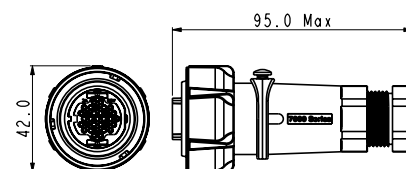


#### Flex Cable Connector



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



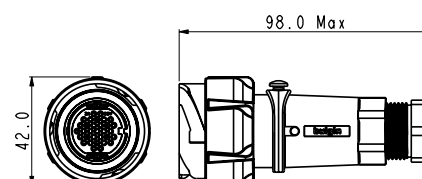
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts         |
|-------|----------------|----------------|-----------------|------------------|
| 2     | Screw          | PXP7010/02P/ST | PXP7010/02S/ST  | Supplied Fitted  |
| 3     | Screw          | PXP7010/03P/ST | PXP7010/03S/ST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



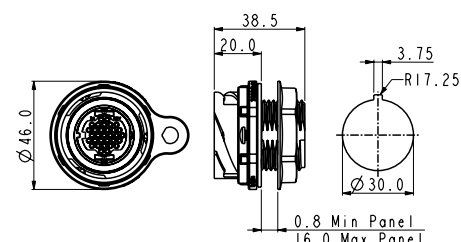
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts         |
|-------|----------------|----------------|-----------------|------------------|
| 2     | Screw          | PXP7011/02P/ST | PXP7011/02S/ST  | Supplied Fitted  |
| 3     | Screw          | PXP7011/03P/ST | PXP7011/03S/ST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



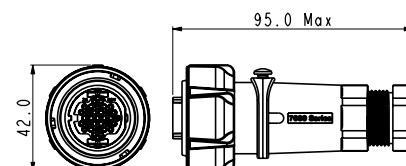
| Poles | Termination    | Pin Contacts   | Socket Contacts | Contacts         |
|-------|----------------|----------------|-----------------|------------------|
| 2     | Screw          | PXP7012/02P/ST | PXP7012/02S/ST  | Supplied Fitted  |
| 3     | Screw          | PXP7012/03P/ST | PXP7012/03S/ST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

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PXM7010

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- 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



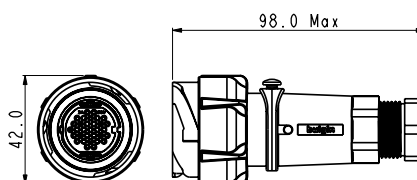
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|-------|----------------|----------------|-----------------|------------------|
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| 10    | Crimp / Solder | PXM7010/10P/CR | PXM7010/10S/CR  | Contact Required |
| 32    | Crimp / Solder | PXM7010/32P/CR | PXM7010/32S/CR  | Contact Required |

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PXM7011

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- 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



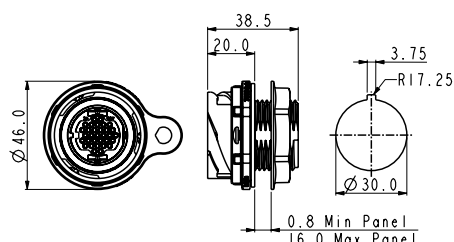
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| 6     | Screw          | PXM7011/06P/ST | PXM7011/06S/ST  | Supplied Fitted  |
| 10    | Crimp / Solder | PXM7011/10P/CR | PXM7011/10S/CR  | Contact Required |
| 32    | Crimp / Solder | PXM7011/32P/CR | PXM7011/32S/CR  | Contact Required |

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

Crimp / Solder Contacts



10 & 32 pole contacts

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

Contacts (for 10 pole)  
(Supplied in packs of 10)

Pins  
Sockets

Crimp

SA3544/P  
SA3544/S

Solder

SA3623/P  
SA3623/S

Contacts (for 32 pole)  
(Supplied in packs of 10)

Pins  
Sockets

Crimp

SA3542/P  
SA3542/S

Solder

SA3622/P  
SA3622/S

Crimp Tooling



PNo 14025

- ⬡ Crimp Tools for 10 and 32 pole crimp contacts

Crimp Tooling

Crimp Tool (10 & 32 pole)  
Positioner (10 pole)  
Positioner (32 pole)

PNo. 14025  
PNo. 15021/SP  
PNo. 15019/SP

Extraction Tools



PNo 14944/SP   PNo 14945/SP

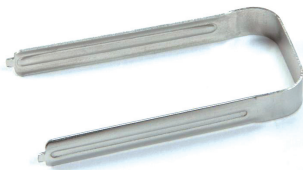
- ⬡ Extraction tool for 10 and 32 pole contacts

Extraction Tools

Extraction tool (10 pole)  
Extraction tool (32 pole)

PNo. 14945/SP  
PNo. 14944/SP

Contact Carrier Removal Tool



PNo 15065/SP

- ⬡ For removal of all contact carriers

Contact Carrier Removal Tool

Contact carrier removal tool  
(all poles)

PNo. 15065/SP

Cable Braid Termination Option



PXM7090

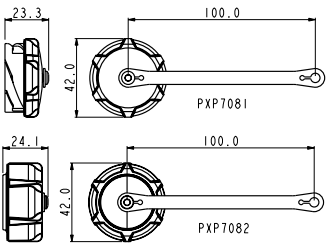
- ⬡ For cable braid termination
- ⬡ Supplied with ty-rap

Sealing Caps



PXP7082      PXP7081

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

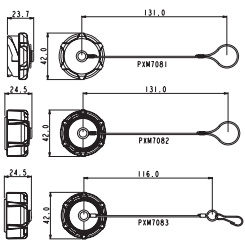


Sealing Caps



PXM7082      PXM7081      PXM7083

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



Cable Gland Packs



PXP7088/ \*

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

| PXX                                      | 7XXX                                               | /                                                                         | XX                    | X                                                                                             | /                                                                                                                                                                                                     | XX                                                                                             | / | XXXX | / | XX |
|------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---|------|---|----|
| Series Designation                       | 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

BUCCANEER FOR POWER  
**7000 Series Buccaneer**  
 Specifications



**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>9</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**

**Metal**

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

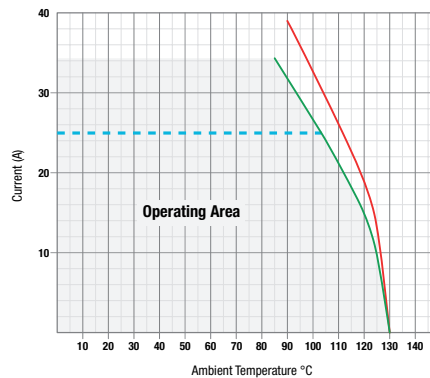
The red line indicates the direct correlation between current applied and the measured temperature rise within the connector. The dotted blue line shows rated current and the green line is derived by applying a factor of 0.8 to the original plot data to give a de-rating curve. The dashed blue line shows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

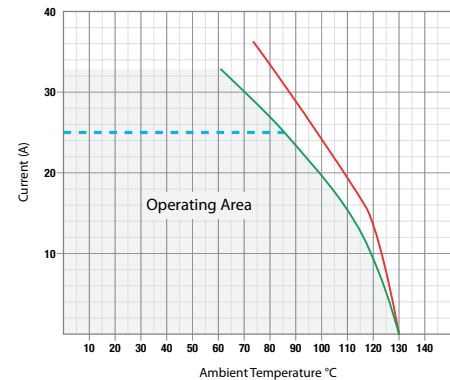
**7000 Series Current vs. Temperature Characteristics**

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



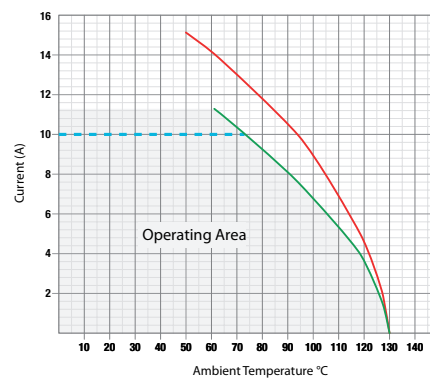
**7000 Series Current vs. Temperature Characteristics**

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



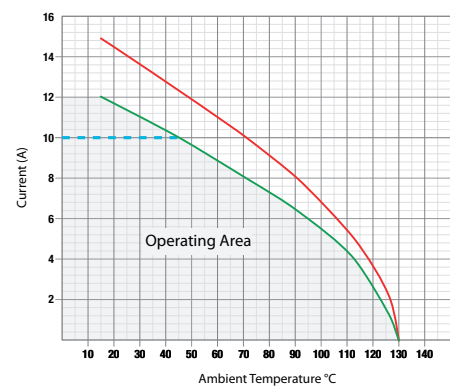
**7000 Series Current vs. Temperature Characteristics**

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

