

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

- **Secure, quick connector mating and release**
- **30° twist locking**
Tamperproof lock prevents accidental un-mating
- **IP66, IP68 and IP69K when mated**
Suitable for a wide range of dust and water borne environments
- **All plastic body version; UL94-V0 rated, UV stable, halogen free**
Light-weight, self-extinguishing material suitable for long-term outdoor use
- **Flex, Inline & 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 Contacts – up to 16A, 277V rated**
Suitable for mains power to signal applications
- **'Scoop proof' contacts**
Prevents damage through mis-mating – ideal for 'blind mating' applications
- **cULus, UL, VDE**
Internationally recognised certification
- **Screw, Crimp and Solder terminations available**

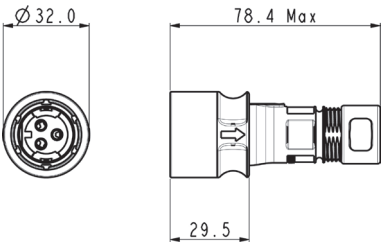


Flex Cable Connector



PXP6010

- Mates with Inline or Panel Mounting versions PXP6011 & PXP6012
- Push/pull locking ring with 30° twist locking
- Plug or socket versions
- Leading earth on 3 Contact connectors
- 2, 3, 4, 8, 16 & 22 Contact
- Screw, solder and crimp termination



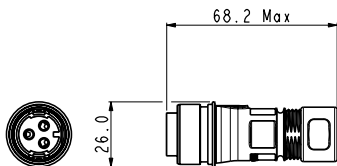
Contacts	Termination	Plug Contacts	Socket Contacts	Contacts
2	Screw	PXP6010/02P/ST	PXP6010/02S/ST	Supplied Fitted
2	Crimp / Solder	PXP6010/02P/CR	PXP6010/02S/CR	Contacts Required
3	Screw	PXP6010/03P/ST	PXP6010/03S/ST	Supplied Fitted
3	Crimp / Solder	PXP6010/03P/CR	PXP6010/03S/CR	Contacts Required
4	Crimp / Solder	PXP6010/04P/CR	PXP6010/04S/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

Inline Cable Connector



PXP6011

- Mates with Flex Cable connector PXP6010
- For Inline cable connection
- Plug or socket versions
- Leading earth on 3 Contact connectors
- 2, 3, 4, 8, 16 and 22 Contact
- Screw, solder and crimp termination



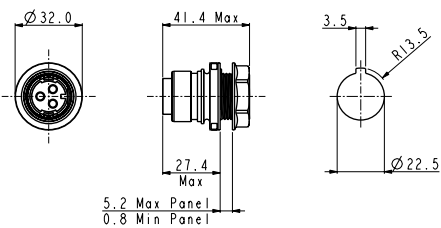
Contacts	Termination	Plug Contacts	Socket Contacts	Contacts
2	Screw	PXP6011/02P/ST	PXP6011/02S/ST	Supplied Fitted
2	Crimp / Solder	PXP6011/02P/CR	PXP6011/02S/CR	Contacts Required
3	Screw	PXP6011/03P/ST	PXP6011/03S/ST	Supplied Fitted
3	Crimp / Solder	PXP6011/03P/CR	PXP6011/03S/CR	Contacts Required
4	Crimp / Solder	PXP6011/04P/CR	PXP6011/04S/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
- Plug or socket versions
- Leading earth on 3 Contact connectors
- 2, 3, 4, 8, 16 and 22 Contact
- Screw, solder and crimp termination



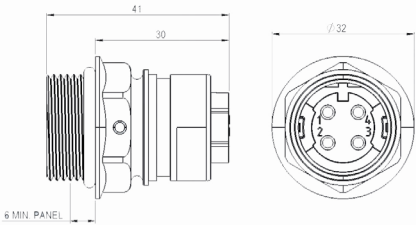
Contacts	Termination	Plug Contacts	Socket Contacts	Contacts
2	Screw	PXP6012/02P/ST	PXP6012/02S/ST	Supplied Fitted
2	Crimp / Solder	PXP6012/02P/CR	PXP6012/02S/CR	Contacts Required
3	Screw	PXP6012/03P/ST	PXP6012/03S/ST	Supplied Fitted
3	Crimp / Solder	PXP6012/03P/CR	PXP6012/03S/CR	Contacts Required
4	Crimp / Solder	PXP6012/04P/CR	PXP6012/04S/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

Screwed Front Panel Mounting Connector



PXP6014

- ⬢ Mates with Flex Cable connectors PXP6010
- ⬢ Front panel mounting
- ⬢ M24x1.5 thread to engage the connector to the panel
- ⬢ Plug or socket versions
- ⬢ Leading earth on 3 Contact connectors
- ⬢ 2, 3, 4, 8, 16 and 22 Contact
- ⬢ Screw, solder and crimp termination



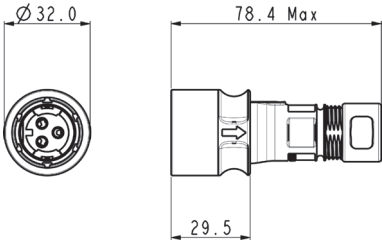
Contacts	Termination	Plug Contacts	Socket Contacts	Contacts
2	Screw	PXP6014/02P/ST	PXP6014/02S/ST	Supplied Fitted
2	Crimp / Solder	PXP6014/02P/CR	PXP6014/02S/CR	Contacts Required
3	Screw	PXP6014/03P/ST	PXP6014/03S/ST	Supplied Fitted
3	Crimp / Solder	PXP6014/03P/CR	PXP6014/03S/CR	Contacts Required
4	Crimp / Solder	PXP6014/04P/CR	PXP6014/04S/CR	Contacts Required
8	Crimp / Solder	PXP6014/08P/CR	PXP6014/08S/CR	Contacts Required
16	Crimp / Solder	PXP6014/16P/CR	PXP6014/16S/CR	Contacts Required
22	Crimp / Solder	PXP6014/22P/CR	PXP6014/22S/CR	Contacts Required

Flex Cable Connector



PXM6010

- Mates with Inline or Panel Mounting versions PXM6011 and PXM6012
- Push/pull locking ring with 30° twist locking
- Plug or socket versions
- Leading earth on 3 Contact connectors
- 2, 3, 4, 8, 16 and 22 Contact
- Screw, solder and crimp termination
- Cable braid termination accessory option, add /SNSuffix



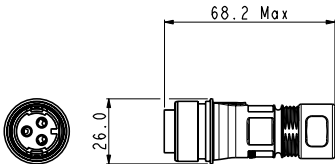
Contacts	Termination	Plug Contacts	Socket Contacts	Contacts
2	Screw	PXM6010/02P/ST	PXM6010/02S/ST	Supplied Fitted
2	Crimp / Solder	PXM6010/02P/CR	PXM6010/02S/CR	Contacts Required
3	Screw	PXM6010/03P/ST	PXM6010/03S/ST	Supplied Fitted
3	Crimp / Solder	PXM6010/03P/CR	PXM6010/03S/CR	Contacts Required
4	Crimp / Solder	PXM6010/04P/CR	PXM6010/04S/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

Inline Cable Connector



PXM6011

- Mates with Flex Cable connector PXM6010
- For Inline cable connection
- Plug or socket versions
- Leading earth on 3 Contact connectors
- 2, 3, 4, 8, 16 and 22 Contact
- Screw, solder and crimp termination
- Cable braid termination accessory option, add /SNSuffix



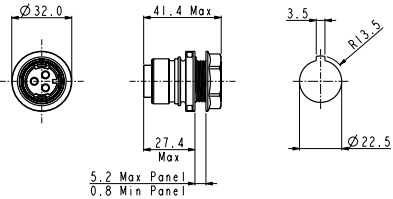
Contacts	Termination	Plug Contacts	Socket Contacts	Contacts
2	Screw	PXM6011/02P/ST	PXM6011/02S/ST	Supplied Fitted
2	Crimp / Solder	PXM6011/02P/CR	PXM6011/02S/CR	Contacts Required
3	Screw	PXM6011/03P/ST	PXM6011/03S/ST	Supplied Fitted
3	Crimp / Solder	PXM6011/03P/CR	PXM6011/03S/CR	Contacts Required
4	Crimp / Solder	PXM6011/04P/CR	PXM6011/04S/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
- Single hole fixing
- Plug or socket versions
- Leading earth on 3 Contact connectors
- 2, 3, 4, 8, 16 and 22 Contact
- Screw, solder and crimp termination



Contacts	Termination	Plug 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
4	Crimp / Solder	PXM6012/04P/CR	PXM6012/04S/CR	Contacts Required
8	Crimp / Solder	PXM6012/08P/CR	PXM6012/08S/CR	Contacts Required
16	Crimp / Solder	PXM6012/16P/CR	PXM6012/16S/CR	Contacts Required
22	Crimp / Solder	PXM6012/22P/CR	PXM6012/22S/CR	Contacts Required

Crimp / Solder Contacts



2, 3, 4, 8, 16 & 22 Contact contacts

- Gold Plated
- Current ratings:
2 & 3 Contact : 16A
4 & 8 Contact : 10A
16 Contact : 3A
22 Contact : 2A

**Contacts (for 2 & 3 Contact)
(Supplied in packs of 10)**

	Crimp	Solder
Plugs	SA3545/P	SA3624/P
Sockets	SA3545/S	SA3624/S

**Contacts (for 4 & 8 Contact)
(Supplied in packs of 10)**

	Crimp	Solder
Plugs	SA3544/P	SA3623/P
Sockets	SA3544/S	SA3623/S

**Contacts (for 16 & 22 Contact)
(Supplied in packs of 10)**

	Crimp	Solder
Plugs	SA3542/P	SA3622/P
Sockets	SA3542/S	SA3622/S

Crimp Tooling



PNo 14232

- Crimp Tools for 2, 3, 4, 8, 16 and 22 Contact crimp contacts

Crimp Tooling

Crimp Tool (2 & 3 Contact)	PNo.14232
Positioner (2 & 3 Contact)	PNo.14232/2/SP
Crimp Tool (4, 8, 16 & 22 Contact)	PNo.14025
Positioner (4 & 8 Contact)	PNo.15021/SP
Positioner (16 & 22 Contact)	PNo.15019/SP

Extraction Tool

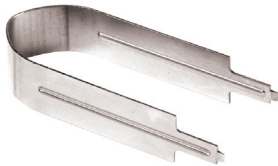


- Extraction Tool for 2, 3, 4, 8, 16 and 22 Contact contacts

Extraction Tools

Extraction Tool (2 & 3 Contact)	PNo.14946/SP
Extraction Tool (4 & 8 Contact)	PNo.14945/SP
Extraction Tool (16 & 22 Contact)	PNo.14944/SP

Contact Carrier Removal Tool



PNo 14917

- For removal of all contact carriers

Tools

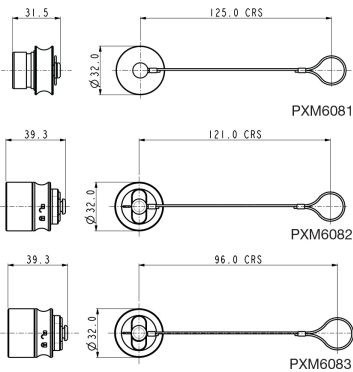
Contact carrier removal tool (all Contacts)	PNo. 14917/SP
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Sealing Caps



PXM6083 PXM6082 PXM6081

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

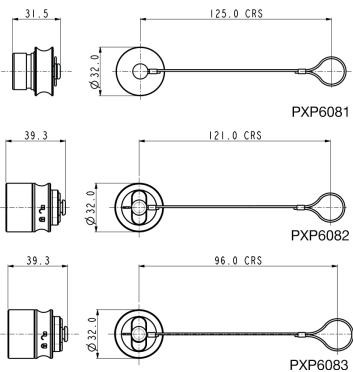


Plastic Sealing Caps



PXP6083 PXP6082 PXP6081

- Maintains IP Rating of Unmated Connectors
- PXP6081: Fits PXP6010 (Flex Connector)
- PXP6082: Fits PXP6011 (Inline Connector)
- PXP6083: Fits PXP6012 & PXP6014 (Panel Connector)



Cable Gland Pack



PXP6088

- Pack of all cable glands to suit cable ranges from 4.0 to 10.0mm diameter
- Light Grey: 9-10mm
- Yellow: 7-9mm
- White: 5-7mm
- Dark Grey: 4-5mm

Cable Braid Termination Option



PXM6090

- For cable braid termination
- Supplied with ty-rap

PXX	601X	/ XX	X	/ XX	/ XXXX	/ XX
Series Designation	Series / Body Style	No. of Contacts	Contacts Type	Terminations	Cable Entry Size	Cable Braid Termination Accessory
PXM= Metal Series PXP= Plastic Series	6010 = Flex 6011 = Inline 6012 = Front Panel 6014 = Screwed Front Panel (Plastic Only)	02 03 04 08 16 22	P = Plug S = Socket	CR = Contacts Required ST = Screw (2 and 3 Contact only)	(for Flex and Inline connectors only) 0405 = 4-5mm (Dark Grey) 0507 = 5-7mm (White) 0709 = 7-9mm (Yellow) 0910 = 9-10mm (Light Grey)	(for Metal Flex and Inline connectors only) SN if required Blank if not required

Examples

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

Electrical:

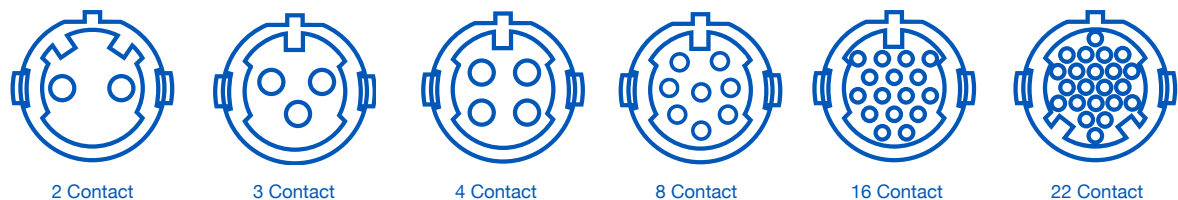
No. Contacts:	2	3	4	8	16	22
Current Rating: See de-rating curves for further information						
VDE	16A	16A	10A	10A	3A	2A
UL	16A	16A	7A	7A	3A	3A
cUL	11A	11A	4A	4A	1.5A	1.5A
Voltage	277V	277V	277V	277V	60V	60V
Rated cable	14 AWG	14 AWG	16-20 AWG	18-20 AWG	22 AWG	26 AWG
Contact Resistance:	<10mΩ					
Insulation Resistance:	>10 ⁹ MΩ @500V DC					
AC Breakdown voltage:						
2 Contact	>10kV					
3 Contact	>8kV					
4 to 22 Contact	>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					

Mechanical:

Locking mechanism	Push/pull with 30° locking
Sealing:	IP66 to En60529:1992+A2:2013 IP68 to En60529:1992+A2:2013 (10m depth for 2 weeks) IP69k to DIN 40050-9
Salt Mist (plastic) :	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Salt Mist (metal) :	EN60068-2-11 Test Ka Salt Mist
Contact Accommodation: 2 & 3 Contact crimp / solder 2 & 3 Contact screw terminals 4 & 8 Contact crimp / solder 16 Contact crimp / solder 22 Contact crimp / solder	14 to 18AWG 16 AWG Max 18 to 20AWG 22 to 26AWG 22 to 26AWG
Cable Acceptance:	4-10mm dia.
Cable retention force (to BS EN61984): 4 - 9mm dia cable 9 - 10mm dia cable	80N 100N
Terminations: 2 Contact: 3 Contact: 4 Contact: 8 Contact: 16 Contact: 22 Contact:	Screw Terminals Screw, crimp or solder terminals Crimp / Solder Contacts Crimp / Solder Contacts Crimp / Solder Contacts Crimp / Solder Contacts Crimp / Solder Contacts
Tightening Torques: Gland Nut: Panel Nut: PXP 6014	1.13Nm (10lb.in.) 1.7Nm (15lbf.in.) 2Nm (17.7lbf.in.)
Panel Nut Thread:	M22 x 1.5-6g
Dimensions: Diameter: (over coupling ring) Diameter: (panel hole cut-out)	32mm 22.5mm

Materials:

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



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

The maximum current varies with different contact layouts, and because of these factors it is necessary to produce de-rating curves for each contact 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 shaded area shows the permitted operating area, and allows safe current vs ambient temperature characteristics to be determined.

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

