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

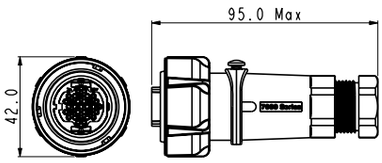
Designed and independently tested to IP66, IP68 & IP69K standards, they are ideal for applications where ingress of dust and water must be avoided and where ease of connection, space and appearance are important considerations.

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

Flex Cable Connector

PXP7010

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

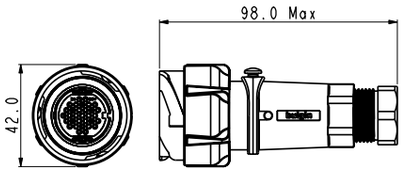


Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7010/02P/ST	PXP7010/02S/ST	Supplied Fitted
3	Screw	PXP7010/03P/ST	PXP7010/03S/ST	Supplied Fitted
6	Screw	PXP7010/06P/ST	PXP7010/06S/ST	Supplied Fitted
10	Crimp / Solder	PXP7010/10P/CR	PXP7010/10S/CR	Contact Required
32	Crimp / Solder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

In-line Flex Cable Connector

PXP7011

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

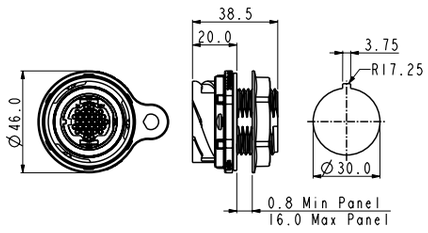


Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7011/02P/ST	PXP7011/02S/ST	Supplied Fitted
3	Screw	PXP7011/03P/ST	PXP7011/03S/ST	Supplied Fitted
6	Screw	PXP7011/06P/ST	PXP7011/06S/ST	Supplied Fitted
10	Crimp / Solder	PXP7011/10P/CR	PXP7011/10S/CR	Contact Required
32	Crimp / Solder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

Front Panel Mounting Connector

PXP7012

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

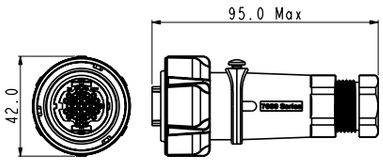


Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7012/02P/ST	PXP7012/02S/ST	Supplied Fitted
3	Screw	PXP7012/03P/ST	PXP7012/03S/ST	Supplied Fitted
6	Screw	PXP7012/06P/ST	PXP7012/06S/ST	Supplied Fitted
10	Crimp / Solder	PXP7012/10P/CR	PXP7012/10S/CR	Contact Required
32	Crimp / Solder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

Flex Cable Connector

PXM7010

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

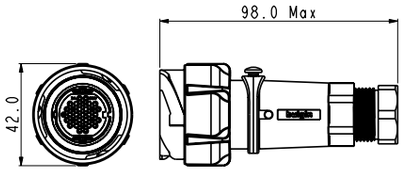


Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXM7010/02P/ST	PXM7010/02S/ST	Supplied Fitted
3	Screw	PXM7010/03P/ST	PXM7010/03S/ST	Supplied Fitted
6	Screw	PXM7010/06P/ST	PXM7010/06S/ST	Supplied Fitted
10	Crimp / Solder	PXM7010/10P/CR	PXM7010/10S/CR	Contact Required
32	Crimp / Solder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

In-line Flex Cable Connector

PXM7011

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

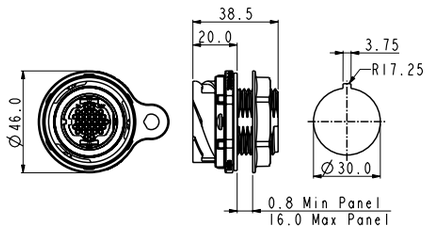


Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXM7011/02P/ST	PXM7011/02S/ST	Supplied Fitted
3	Screw	PXM7011/03P/ST	PXM7011/03S/ST	Supplied Fitted
6	Screw	PXM7011/06P/ST	PXM7011/06S/ST	Supplied Fitted
10	Crimp / Solder	PXM7011/10P/CR	PXM7011/10S/CR	Contact Required
32	Crimp / Solder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

Front Panel Mounting Connector

PXM7012

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



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

Crimp / Solder Contacts

10 & 32 pole contacts

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

Contacts (for 10 pole) (Supplied in packs of 10)	Crimp	Solder
Pins	SA3544/P	SA3623/P
Sockets	SA3544/S	SA3623/S
Contacts (for 32 pole) (Supplied in packs of 10)	**Crimp**	**Solder**
Pins	SA3542/P	SA3622/P
Sockets	SA3542/S	SA3622/S

Crimp Tooling

PNo 14025

- Crimp Tools for 10 and 32 pole crimp contacts

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

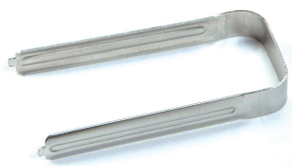
Extraction Tools

PNo 14944/SP PNo 14945/SP

- Extraction tool for 10 and 32 pole contacts

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

Contact Carrier Removal Tool



PNo 15065/SP

- For removal of all contact carriers

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

Cable Braid Termination Option

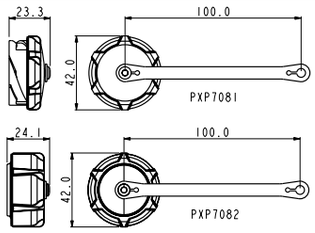
PXM7090

- For cable braid termination
- Supplied with ty-rap

Sealing Caps

PXP7082 PXP7081

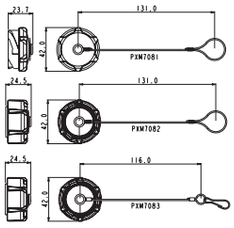
- Maintains IP rating of unmated connectors
- PXP7081: Fits PXP7010 (Flex Connector)
- PXP7082: Fits PXP7011 (FlexIn-Line Connector) and PXP7012: (Panel Connector)



Sealing Caps

PXM7082 PXM7081 PXM7083

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



Cable Gland Packs

PXP7088/ *

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

PXX	7XXX	/ XX	X	/ XX	/ XXXX	/ XX
Series Designation	**Series / Body Style**	**No. of Contacts**	**Contacts Type**	**Terminations**	**Cable Entry Size**	**Cable Brand Termination Accessory**
PXM= Metal Series PXP= Plastic Series	7010 = Flex 7011 = Flex In-Line 7012 = Panel	02 = 2 Pole 03 = 3 Pole 06 = 6 Pole 10 = 10 Pole 32 = 32 Pole	P = Pin S = Socket	ST = Screw Terminal (2, 3, & 6 pole only) CR = Contacts Required (10 & 32 pole only)	(for Flex and Flex In-Line connectors only) 0507 = 5-7mm (grey) 0709 = 7-9mm (white) 0911 = 9-11mm (black) 1113 = 11 to 13 mm (yellow) 1315 = 13 to 15 mm (light grey)	(for Flex and Flex In-Line connectors only) SN - If requires Blank - If not required

Examples

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

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

Electrical:

No Poles:	2	3	6	10	32	
Current Rating:						
CCC, UL and VDE	25A	25A	10A	10A	3A	
cUL (pending)	25A	25A	8A	6A	2A	
Voltage Rating (ac/dc):						
CCC, VDE (pending)	600V	600V	500V	277V	200V	
UL, cUL (pending)	600V	600V	600V	600V	600V	
Contact Resistance:	<10mΩ					
Insulation Resistance:	>10^6MΩ @500V dc					
AC Breakdown voltage:						
2 pole	>10kV					
3 pole	>8kV					
6 to 32 pole	>5kV					
Operating Temp. Range:	–40°C to +120°C					

Approvals (pending):

	UL (Pending)	UL1977
	cULus (Pending)	C22.2 No.182.3-M1987 (R2009)
	VDE (Pending)	IEC 61984:2009
	CCC (Pending)	GB/T11918 and GB/T11919

Mechanical:

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

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

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

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

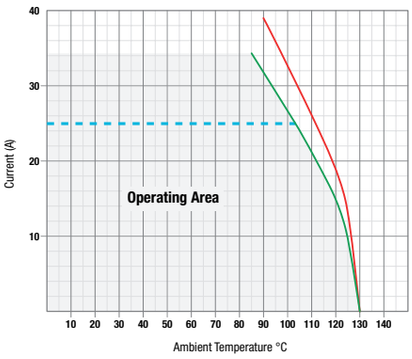
The red line indicates the direct correlation between current applied and the measured temperature rise within the connector. The dotted blue line shows rated current and the green line is derived by applying a factor of 0.8 to the original plot data to give a de-rating curve. The dashed blue line shows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

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

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

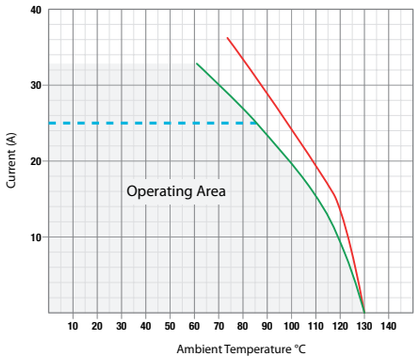
7000 Series Current vs. Temperature Characteristics

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



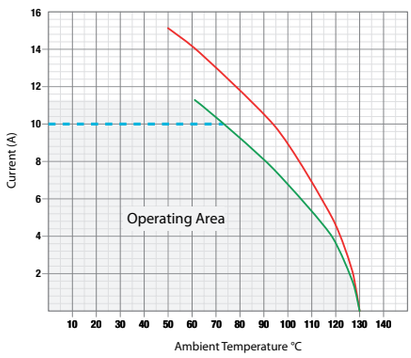
7000 Series Current vs. Temperature Characteristics

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



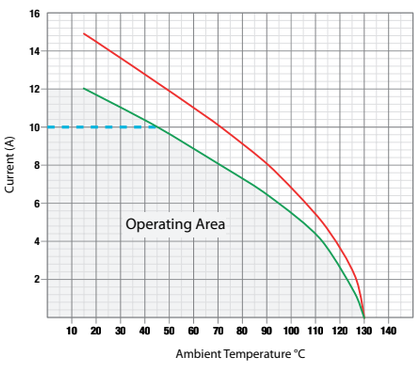
7000 Series Current vs. Temperature Characteristics

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



7000 Series Current vs. Temperature Characteristics

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



7000 Series Current vs. Temperature Characteristics

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