7000 Series Buccaneer



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
- O 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



7000 Series Buccaneer

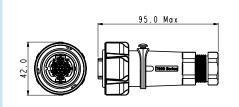


Flex Cable Connector



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
- O Screw solder and crimp termination

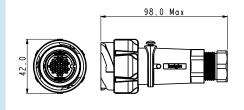


Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7010/02P/ST	PXP7010/02S/ST	Supplied Fitted
3	Screw	PXP7010/03P/ST	PXP7010/03S/ST	Supplied Fitted
6	Screw	PXP7010/06P/ST	PXP7010/06S/ST	Supplied Fitted
10	Crimp / Solder	PXP7010/10P/CR	PXP7010/10S/CR	Contact Required
32	Crimp / Solder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

In-line Flex Cable Connector



- 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
- O Screw solder and crimp termination



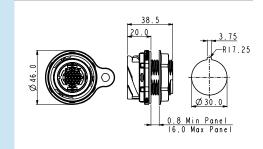
Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP7011/02P/ST	PXP7011/02S/ST	Supplied Fitted
3	Screw	PXP7011/03P/ST	PXP7011/03S/ST	Supplied Fitted
6	Screw	PXP7011/06P/ST	PXP7011/06S/ST	Supplied Fitted
10	Crimp / Solder	PXP7011/10P/CR	PXP7011/10S/CR	Contact Required
32	Crimp / Solder	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
- O Pin or socket versions
- Leading earth on 3 pole connectors
- O 2, 3, 6, 10 and 32 pole
- O 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

7000 Series Buccaneer

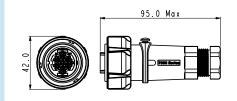
Metal Version



Flex Cable Connector



- 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
- O 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

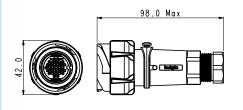
In-line Flex Cable Connector



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



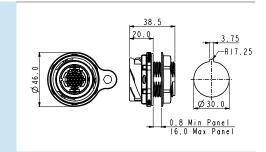
Po	oles	Termination	Pin Contacts	Socket Contacts	Contacts
2	;	Screw	PXM7011/02P/ST	PXM7011/02S/ST	Supplied Fitted
3	;	Screw	PXM7011/03P/ST	PXM7011/03S/ST	Supplied Fitted
6	;	Screw	PXM7011/06P/ST	PXM7011/06S/ST	Supplied Fitted
10)	Crimp / Solder	PXM7011/10P/CR	PXM7011/10S/CR	Contact Required
32	!	Crimp / 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
- O Pin or socket versions
- Leading earth on 3 pole connectors
- Q 2, 3, 6, 10 and 32 pole
- Screw solder and crimp termination



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

7000 Series Buccaneer



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

Crimp Tooling



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



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



For removal of all contact carriers

Contact Carrier Removal Tool

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

Cable Braid Termination Option



- For cable braid termination
- Supplied with ty-rap

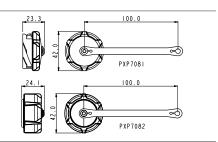
7000 Series Buccaneer

Accessories





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

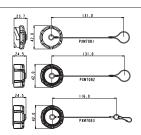


Sealing Caps



PXM7082 PXM7081 PXM7083

- Maintains IP rating of unmated connectors
- PXM7081: Fits PXM7010 (FlexConnector)
- PXM7082: Fits PXM7011
 (Flex In-Line Connector) and PXP7012: (Panel Connector)
- O 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
- O PXP7088/0507: for cable ranges between 5.0 and 7.0mm
- PXP7088/0713: for cable ranges between 7.0 and 13.0mm
- O PXP7088/1315: for cable ranges between 13.0 and 15.0mm

BUCCANEER FOR POWER 7000 Series Buccaneer



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

Examples

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

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

7000 Series Buccaneer

Specifications



Electrical: Mechanical: No Poles: Locking mechanism Quarter turn, rapid locking Current Rating: Sealing: IP66 to EN60529:1992+A2:2013 CCC, UL and VDE 25A 25A 10A 10A ЗА IP68 to EN60529:1992+A2:2013 cUL (pending) 25A 25A 8A (10m depth for 2 weeks) Voltage Rating (ac/dc): ÎP69k to DIN 40050-9 CCC, VDE (pending) 600V 600V 500V 277V 200V UL, cUL (pending) 600V 600V 600V 600V 600V Salt Mist (plastic): EN60068-2-52 Test Kb Salt Mist (Cyclic) Contact Resistance: $<10 m\Omega$ Marine Severity Level 1 Insulation Resistance: $>10^6 M\Omega$ @500V dc AC Breakdown voltage: Salt Mist (metal): EN60068-2-11 Test Ka Salt Mist 2 pole >10kV 3 pole >8kV 6 to 32 pole >5kV Contact Accommodation: 2 & 3 pole screw terminals 6.0mm² max Operating Temp. Range: -40°C to +120°C 6 pole screw 1.00mm² max 10 pole crimp / solder 18 to 20AWG Approvals (pending): 32 pole crimp / solder 22 to 26AWG Ä UL (Pending) UL1977 c**91** us cULus (Pending) C22.2 No.182.3-M1987 (R2009) Cable Acceptance: 5-15mm dia. VDE (Pending) IEC 61984:2009 (1) CCC (Pending) GB/T11918 and GB/T11919 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: 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

7000 Series Buccaneer



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.

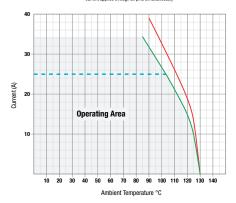
The shaded area under the 0.8 curve shows the permitted operating area, and allows safe current vs ambient temperature characteristics to be determined.

= tested operating limits = de-rated operating limits

= rated current

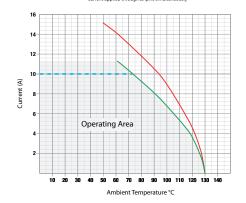
7000 Series Current vs. Temperature Characteristics

2 Pole, Plastic Body, Screw Terminal, 6.0mm2 wire



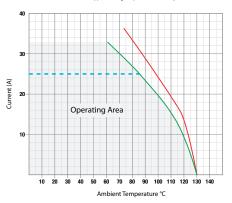
7000 Series Current vs. Temperature Characteristics

6 Pole, Plastic Body, Screw Terminal, 1.0mm wire



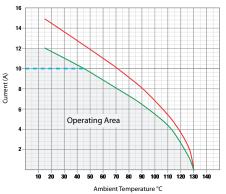
7000 Series Current vs. Temperature Characteristics

3 Pole, Plastic Body, Screw Terminal, 4.0mm² wire



7000 Series Current vs. Temperature Characteristics

10 Pole, Plastic Body, Crimp Terminal, 18 AWG wire



7000 Series Current vs. Temperature Characteristics

32 Pole, Plastic Body, Crimp Terminal, 22 AWG wire

