## 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, 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 32 Contacts 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
- O cULs, UL, 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

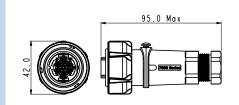
Thermo Plastic



Flex Cable Connector



- Mates with Inline or Panel Mounting versions PXP7011 & PXP7012
- Quick turn locking ring
- O Plug or socket versions
- Leading earth on 3 Contact connectors
- 2, 3, 6, 10 & 32 Contact
- O Screw solder and crimp termination



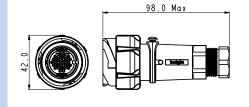
Contacts	Termination	Plug Contacts	<b>Socket Contacts</b>	Contacts
2	Screw	PXP7010/02P/ST	PXP7010/02S/ST	Supplied Fitted
3	Screw	PXP7010/03P/ST	PXP7010/03S/ST	Supplied Fitted
6	Screw	PXP7010/06P/ST	PXP7010/06S/ST	Supplied Fitted
10	Crimp / Solder	PXP7010/10P/CR	PXP7010/10S/CR	Contact Required
32	Crimp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

Inline Cable Connector



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

PXP7011/32S/CR



Contacts	s Termination	Plug Contacts	<b>Socket Contacts</b>	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

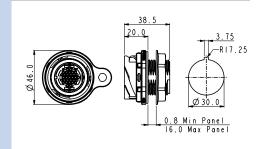
PXP7011/32P/CR

Front Panel Mounting Connector



Crimp / Solder

- PXP7012
- Mates with Flex Cable connectors PXP7010
- Single hole fixing
- O Plug or socket versions
- Leading earth on 3 Contact connectors
- 2, 3, 6, 10 and 32 Contact
- Screw solder and crimp termination



Contact Required

Contacts	Termination	<b>Plug Contacts</b>	<b>Socket Contacts</b>	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

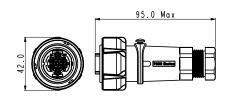
# 7000 Series Buccaneer



Flex Cable Connector



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



PXM7010

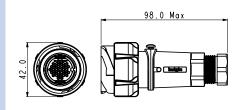
Contacts	Termination	<b>Plug Contacts</b>	<b>Socket Contacts</b>	Contacts
2	Screw	PXM7010/02P/ST	PXM7010/02S/ST	Supplied Fitted
3	Screw	PXM7010/03P/ST	PXM7010/03S/ST	Supplied Fitted
6	Screw	PXM7010/06P/ST	PXM7010/06S/ST	Supplied Fitted
10	Crimp / Solder	PXM7010/10P/CR	PXM7010/10S/CR	Contact Required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

#### Inline Cable Connector



PXM7011

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



Contacts	Termination	Plug Contacts	<b>Socket Contacts</b>	Contacts
2	Screw	PXM7011/02P/ST	PXM7011/02S/ST	Supplied Fitter
0	Caraur	DVI/17011/02D/CT	DVM7011/000/CT	Cupplied Fitte

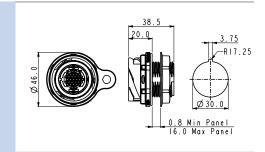
_	Sciew	FAIVI/011/02F/31	FAIVI/011/023/31	Supplied Filled
3	Screw	PXM7011/03P/ST	PXM7011/03S/ST	Supplied Fitted
6	Screw	PXM7011/06P/ST	PXM7011/06S/ST	Supplied Fitted
10	Crimp / Solder	PXM7011/10P/CR	PXM7011/10S/CR	Contact Required
32	Crimp / Solder	PXM7011/32P/CR	PXM7011/32S/CR	Contact Required

#### Front Panel Mounting Connector



PXM7012

- Mates with Flex Cable connectors PXM7010
- Single hole fixing
- Plug or socket versions
- Leading earth on 3 Contact connectors
- 2, 3, 6, 10 and 32 Contact
- Screw solder and crimp termination



Contacts	Termination	Plug 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

# 7000 Series Buccaneer

Accessories



Crimp / Solder Contacts



10 & 32 Contacts

Gold PlatedCurrent ratings:10 Contact: 10A32 Contact: 2A

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

#### Crimp Tooling



Crimp Tools for 10 and 32
Contact crimp contacts

#### **Crimp Tooling**

Crimp Tool (10 & 32 Contact)
Positioner (10 Contacts)
Positioner (32 Contacts)
PNo. 15021/SP
PNo. 15019/SP

#### Extraction Tools



Extraction tool for 10 and 32
 Contact contacts

#### **Extraction Tools**

Extraction tool (10 Contacts) PNo. 14945/SP Extraction tool (32 Contacts) 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 Contacts)

Cable Braid Termination Option



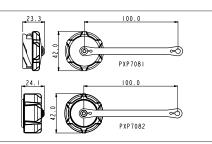
- For cable braid termination
- Supplied with ty-rap

# 7000 Series Buccaneer



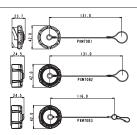


- $\Diamond$ Maintains IP rating of unmated connectors
- PXP7081: Fits PXP7010 (Flex Connector)
- PXP7082: Fits PXP7011 (Inline Connector) and PXP7012: (Panel Connector)





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







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

# BUCCANEER FOR POWER 7000 Series Buccaneer



PXX	701X	/ <b>xx</b>	X	/ <b>xx</b>	/ xxxx	/ xx
Series Designation PXM= Metal Series PXP= Plastic Series	Series / Body Style  7010 = Flex 7011 = Inlline 7012 = Front Panel	No. of Contacts  02 03 06 10 32	Contacts Type P = Plug S = Socket	Terminations ST = Screw Terminal (2, 3, & 6 Contacts only) CR = Contacts Required (10 & 32 Contacts only)	Cable Entry Size  (for Flex and Inline 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 Inline connectors only) SN - If requires Blank - If not required

#### Examples

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

 ${\it PXM7012/03/S/ST=}\ Front\ panel\ mounting\ connector,\ 3\ Contacts,\ socket\ with\ screw\ termination$ 

# BUCCANEER FOR POWER 7000 Series Buccaneer



Electrical:		Mechanical:	
No Contacts:	2 3 6 10 32	Locking mechanism	Quarter turn, rapid locking
Current Rating: UL cUL (pending) Voltage Rating (AC/DC): UL, cUL (pending)	25A 25A 10A 10A 3A 25A 25A 8A 6A 2A 600V 600V 600V 600V 600V	Sealing:	IP66 to EN60529:1992+A2:2013 IP68 to EN60529:1992+A2:2013 (10m depth for 2 weeks) IP69k to DIN 40050-9
Contact Resistance: Insulation Resistance: AC Breakdown voltage:	<10mΩ >10 <sup>6</sup> MΩ @500V DC	Salt Mist (plastic):	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
2 Contacts 3 Contacts 6 to 32 Contacts	>10kV >8kV >5kV	Salt Mist (metal):	EN60068-2-11 Test Ka Salt Mist
Operating Temp. Range:	-40°C to +120°C	Contact Accommodation: 2 & 3 Contacts screw terminals 6 Contacts screw	6.0mm² max 1.00mm² max
Approvals: <b>QI</b> call UL  call Cultus	UL1977 C22.2 No.182.3-M2016 (R2009)	10 Contacts crimp / solder 32 Contacts crimp / solder	18 to 20AWG 22 to 26AWG
		Cable Acceptance:	5-15mm dia.
		Cable retention force (to BS EN61984):	
		5 - 9mm dia cable 9 - 15mm dia cable	80N 100N
		Terminations 2 Contacts: 3 Contacts: 6 Contacts: 10 Contacts: 32 Contacts:	Screw Terminals Screw Terminals Screw Terminals Crimp / Solder Contacts Crimp / Solder Contacts
		Tightening Torques: Gland Nut: Panel Nut:	1.13Nm (10lb.in) 1.7Nm (15lbf.in.)
		Panel Nut Thread	M30 x 2-6g
		Dimensions: Diameter: (over coupling ring) Diameter: (panel hole cut-out)	42mm 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

**Current Carrying Capacity** 



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.

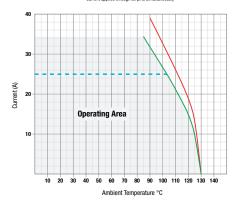
The red line indicates the direct correlation between current applied and the measured temperature rise within the connector. The dotted blue line shows rated current and the green line is derived by applying a factor of 0.8 to the original plot data to give a de-rating curve. The dashed blue line shows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

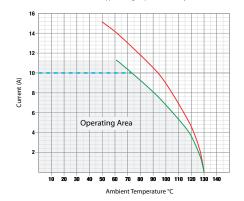
#### 7000 Series Current vs. Temperature Characteristics

2 Pole, Plastic Body, Screw Terminal, 6.0mm<sup>2</sup> wire



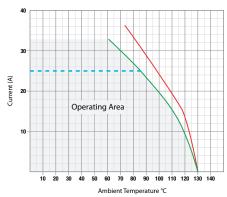
7000 Series Current vs. Temperature Characteristics

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



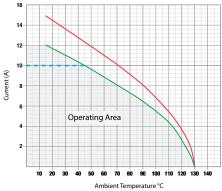
#### 7000 Series Current vs. Temperature Characteristics

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

