## 6000 Series Buccaneer



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.

- Push/Pull mechanism
  - 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, 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 22 poles – 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

O cULus, UL, VDE

Internationally recognised certification

Screw, Crimp and Solder terminations available



# 6000 Series Buccaneer



Flex Cable Connector



30° twist locking

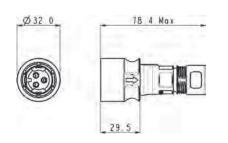
Mates with In-Line Flex or Panel

Mounting versions PXP6011 &

- Push/pull locking ring with
- Pin or socket versions

PXP6012

- Leading earth on 3 pole connectors 0
- 2, 3, 8, 16 & 22 pole
- O Screw, solder and crimp termination



Poles	Termination	Pin Contacts	<b>Socket Contacts</b>	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
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

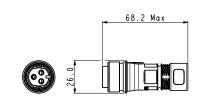
In-line Flex Cable Connector



PXP6011

PXP6010

- Mates with Flex Cable connector PXP6010
- For in-line cable connection
- Pin or socket versions
- Leading earth on 3 pole connectors
- 0 2, 3, 8, 16 and 22 pole
- O Screw, solder and crimp termination

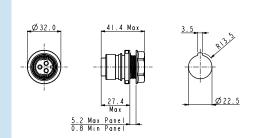


Poles	Termination	Pin Contacts	Socket Contacts	Contacts
2	Screw	PXP6011/02P/ST	PXP6011/02S/ST	Supplied Fitted
2	Crimp / Solder	PXP6011/02P/CR	PXP6011/02S/CR	Contacts Required
3	Screw	PXP6011/03P/ST	PXP6011/03S/ST	Supplied Fitted
3	Crimp / Solder	PXP6011/03P/CR	PXP6011/03S/CR	Contacts Required
8	Crimp / 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



- Mates with Flex Cable connectors PXP6010
- Front panel mounting
- $\bigcirc$ Single hole fixing
- O Pin or socket versions
- O Leading earth on 3 pole connectors
- 2, 3, 8, 16 and 22 pole
- O Screw, solder and crimp termination



PΧ		20	40
РX.	Pr	וור	ш.

Poles	Termination	Pin 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
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

## 6000 Series Buccaneer

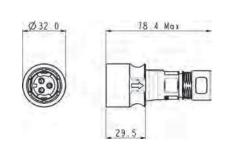
Metal Version



Flex Cable Connector



- Mates with In-Line Flex or Panel Mounting versions PXM6011 and PXM6012
- Push/pull locking ring with 30° twist locking
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 and 22 pole
- Screw, solder and crimp termination
- Cable braid termination accessory option, add /SNsuffix



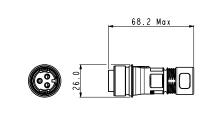
Poles	Termination	<b>Pin Contacts</b>	<b>Socket Contacts</b>	Contacts
2	Screw	PXM6010/02P/ST	PXM6010/02S/ST	Supplied Fitted
2	Crimp / Solder	PXM6010/02P/CR	PXM6010/02S/CR	Contacts Required
3	Screw	PXM6010/03P/ST	PXM6010/03S/ST	Supplied Fitted
3	Crimp / Solder	PXM6010/03P/CR	PXM6010/03S/CR	Contacts Required
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

In-line Flex Cable Connector



PXM6011

- Mates with Flex Cable connector PXM6010
- For in-line cable connection
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 and 22 pole
- Screw, solder and crimp termination
- Cable braid termination accessory option, add /SNsuffix



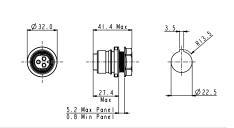
Poles	Termination	Pin Contacts	<b>Socket Contacts</b>	Contacts
2	Screw	PXM6011/02P/ST	PXM6011/02S/ST	Supplied Fitted
2	Crimp / Solder	PXM6011/02P/CR	PXM6011/02S/CR	Contacts Required
3	Screw	PXM6011/03P/ST	PXM6011/03S/ST	Supplied Fitted
3	Crimp / Solder	PXM6011/03P/CR	PXM6011/03S/CR	Contacts Required
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
- Front panel mounting
- Single hole fixing
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 and 22 pole
- O Screw, solder and crimp termination



Poles	<b>Termination</b>	Pin Contacts	<b>Socket Contacts</b>	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
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

# 6000 Series Buccaneer

Accessories





2, 3, 8, 16 & 22 pole contacts

O Gold Plated
Current ratings:
2 & 3 pole : 16A
8 pole : 10A
16 pole : 3A
22 pole : 2A

Contacts (for 2 & 3 pole) (Supplied in packs of 10)	Crimp	Solder
Pins	SA3545/P	SA3624/P
Sockets	SA3545/S	SA3624/S
Contacts (for 8 pole) (Supplied in packs of 10)	Crimp	Solder
Pins	SA3544/P	SA3623/P
Sockets	SA3544/S	SA3623/S
Contacts (for 16 & 22 pole) (Supplied in packs of 10)	Crimp	Solder
Pins	SA3542/P	SA3622/P
Sockets	SA3542/S	SA3622/S





Crimp Tools for 2, 3, 8, 16 and 22 pole crimp contacts

#### **Crimp Tooling**

Crimp Tool (2 & 3 pole)
Positioner (2 & 3 pole)
Crimp Tool (8, 16 & 22 pole)
Positioner (8 pole)
Positioner (16 & 22 pole)

PNo.14232 PNo.14232/2/SP PNo.14025 PNo.15021/SP PNo.15019/SP

Extraction Tool



 Extraction Tool for 2, 3, 8, 16 and 22 pole contacts

#### **Extraction Tools**

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

Contact Carrier Removal Tool



For removal of all contact carriers

#### Tools

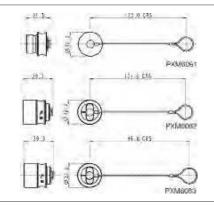
Contact carrier removal tool PNo. 14917/SP (all poles)

# BUCCANEER FOR POWER 6000 Series Buccaneer





- 0 Maintains IP Rating of Unmated Connectors
- 0 PXM6081: Fits PXM6010 (Flex Connector)
- $\Diamond$ PXM6082: Fits PXM6011 (Flex In-Line Connector)
- PXM6083: Fits PXM6012 (Panel Connector)



Cable Gland Pack



PXP6088

Pack of all cable glands to suit cable ranges from 4.0 to 10.0mm diameter

Cable Braid Termination Option



- For cable braid termination
- Supplied with ty-rap

# BUCCANEER FOR POWER 6000 Series Buccaneer



PXX	6XXX	/ <b>xx</b>	X	/ <b>xx</b> ,	/ xxxx	/ <b>xx</b>
Series Designation PXM= Metal Series PXP= Plastic Series	Series / Body Style Body Styles 6010 = Flex 6011 = Flex In-Line 6012 = Panel	No. of Contacts  No. of Contacts  02 = 2 Pole  03 = 3 Pole  08 = 8 Pole  16 = 16 Pole  22 = 22 Pole	Contacts Type Contacts Type P = Pin S = Socket	Terminations Contacts Termination CR = Contacts Required ST = Screw (2 and 3 pole only)	Cable Entry Size Cable Entry Size (for Flex and Flex In- Line connectors only)  0405 = 4-5mm (Dark Grey)  0507 = 5-7mm (White)  0709 = 7-9mm (Yellow)  0910 = 9-10mm (Light Grey)	Cable Brand Termination Accessory Cable Braid Termination Accessory (for Flex and Flex In-Line connectors only) SN if required Blank if not required

#### Examples

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

# BUCCANEER FOR POWER 6000 Series Buccaneer



Electrical:			Mechanical:	
No. Poles:	2 3 8 16	22	Locking mechanism	Push/pull with 30° locking Patent applied for
Current Rating: See de-rating curves for further information			Sealing:	IP66 to En60529:1992+A2:2013 IP68 to En60529:1992+A2:2013 (10m depth
VDE UL cUL	16A 16A 10A 3A 16A 16A 7A 3A 11A 11A 4A 1.5			for 2 weeks) IP69k to DIN 40050-9
CCC Voltage	277V 277V 277V 60V		Salt Mist (plastic):	EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
Rated cable	18 18 18 22 AWG AWG AWG AWG	26 AWG	Salt Mist (metal) :	EN60068-2-11 Test Ka Salt Mist
Contact Resistance: Insulation Resistance: AC Breakdown voltage: 2 pole 3 pole 8 to 22 pole	<10m $\Omega$ >10 $^6$ M $\Omega$ @500V dc >10kV >8kV		Contact Accommodation: 2 & 3 pole crimp / solder 2 & 3 pole screw terminals 8 pole crimp / solder 16 pole crimp / solder 22 pole crimp / solder	14 to 18AWG 1.5mm² max 18 to 20AWG 22 to 26AWG 22 to 26AWG
Operating Temp. Range:	>5kV -40°C to +120°C		Cable Acceptance:	4-10mm dia.
Approvals:  **Nus** UL (E214972)  **Nus** cULus (E214972)  **VDE (40039281)  **CCC (Pending)	UL1977	009)	Cable retention force (to BS EN61984): 4 - 9mm dia cable 9 - 10mm dia cable Terminations: 2 Pole: 3 Pole: 8 Pole: 16 Pole: 22 Pole:	80N 100N Screw Terminals Screw, crimp or solder terminals Crimp / Solder Contacts Crimp / Solder Contacts Crimp / Solder Contacts
			Tightening Torques: Gland Nut: Panel Nut:  Panel Nut Thread:	1.13Nm (10lb.in) 1.7Nm (15lbf.in.)
			Panel Nut Thread:  Dimensions: Diameter: (over coupling ring) Diameter: (panel hole cut-out)	M22 x 1.5-6g 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

## 6000 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 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

