

6000 Series Buccaneer

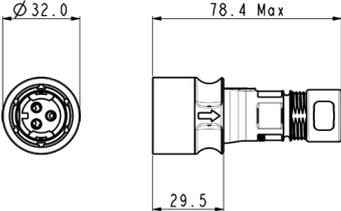
Circular connectors that combine an easy to use 30 degree locking mechanism with proven environmental sealing up to IP68 and IP69K. Available with rugged metal or plastic housings, they are ideal for applications where ingress of dust and water must be avoided and where ease of connection, space and appearance are important considerations.



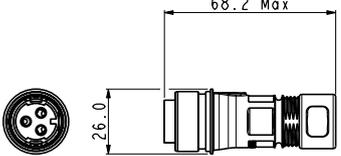
- Flex Cable Connectors
- Water & Dustproof to IP66, IP68, IP69K when Mated with Compatible Connector
- 30 Degree Push Twist Locking, Tamperproof Lock Prevents Accidental Un-Mating
- 2, 3, 8, 16, 22 Pole with leading Earth Contact on 3 Pole Versions
- Screw, Crimp / Solder Terminations available, depending on Part Code; Screw Contacts supplied fitted, Crimp / Solder Contacts & Fitting Tools available separately
- Plastic Body (Part Codes Prefixed PXP)
- Metal Body (Part Codes Prefixed PXM). Cable Braid Termination Option supplied with Part Codes Suffixed /SN or available separately (Part Code PXM6090)
- Choice of Cable Acceptance 4mm-10mm Diameter depending on Part Code (see Data for Details)
- PXP6081/PXM6081 Sealing Cap available separately to maintain IP Rating of Unmated Connectors
- Mate with PXP6011/PXM6011 Series Flex In-Line & PXP6012/PXM6012 Series Front Panel Mount

6000 Series Buccaneer



<p>Flex Cable Connector</p>  <p style="text-align: right; color: blue;">PXP6010</p>	<ul style="list-style-type: none"> ⊕ Mates with In-Line Flex or Panel Mounting Versions PXP6011 & PXP6012 ⊕ Push / Pull Locking Ring with 30° Twist ⊕ Leading Earth on 3 Pole Connectors ⊕ 2, 3, 8, 16 & 22 Pole ⊕ Screw, Solder & Crimp Termination 	
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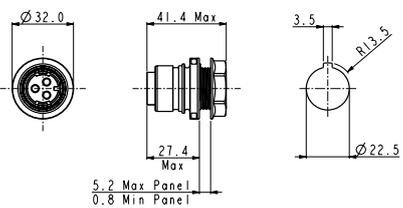
Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PXP6010/02P/ST PXP6010/02P/CR	PXP6010/02S/ST PXP6010/02S/CR	02 02	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXP6010/03P/ST PXP6010/03P/CR	PXP6010/03S/ST PXP6010/03S/CR	03 03	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXP6010/08P/CR	PXP6010/08S/CR	08	Crimp / Solder	Contacts Required
PXP6010/16P/CR	PXP6010/16S/CR	16	Crimp / Solder	Contacts Required
PXP6010/22P/CR	PXP6010/22S/CR	22	Crimp / Solder	Contacts Required

<p>In-line Flex Cable Connector</p>  <p style="text-align: right; color: blue;">PXP6011</p>	<ul style="list-style-type: none"> ⊕ Mates with Flex Cable PXP6010 ⊕ Pin or Socket Versions ⊕ Leading Earth on 3 Pole Connectors ⊕ 2, 3, 8, 16 & 22 Pole ⊕ Screw, Solder & Crimp Termination 	
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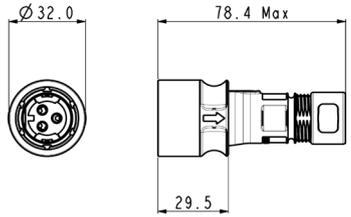
Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PXP6011/02P/ST PXP6011/02P/CR	PXP6011/02S/ST PXP6011/02S/CR	02 02	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXP6011/03P/ST PXP6011/03P/CR	PXP6011/03S/ST PXP6011/03S/CR	03 03	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXP6011/08P/CR	PXP6011/08S/CR	08	Crimp / Solder	Contacts Required
PXP6011/16P/CR	PXP6011/16S/CR	16	Crimp / Solder	Contacts Required
PXP6011/22P/CR	PXP6011/22S/CR	22	Crimp / Solder	Contacts Required

6000 Series Buccaneer



<p>Front Panel Mounting Connector</p>  <p style="text-align: right; color: blue;">PXP6012</p>	<ul style="list-style-type: none"> ⬡ Mates with Flex Cable Connectors PXP6010 Front Panel Mounting ⬡ Single Hole Fixing ⬡ Leading Earth on 3 Pole Connectors ⬡ 2, 3, 8, 16 & 22 Pole ⬡ Screw, Solder & Crimp Termination 	
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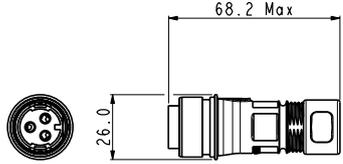
Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PXP6012/02P/ST PXP6012/02P/CR	PXP6012/02S/ST PXP6012/02S/CR	02 02	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXP6012/03P/ST PXP6012/03P/CR	PXP6012/03S/ST PXP6012/03S/CR	03 03	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXP6012/08P/CR	PXP6012/08S/CR	08	Crimp / Solder	Contacts Required
PXP6012/16P/CR	PXP6012/16S/CR	16	Crimp / Solder	Contacts Required
PXP6012/22P/CR	PXP6012/22S/CR	22	Crimp / Solder	Contacts Required

<p>Flex Cable Connector</p>  <p style="text-align: right; color: blue;">PXM6010</p>	<ul style="list-style-type: none"> ⬡ Mates with In-Line Flex or Panel Mounting Versions PXM6011 & PXM6012 ⬡ Push / Pull Locking Ring with 30° Twist ⬡ Leading Earth on 3 Pole Connectors ⬡ Cable Braid Termination Accessory Option, add /SNSuffix 	
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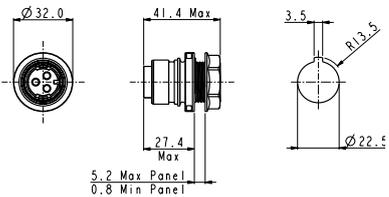
Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PXM6010/02P/ST PXM6010/02P/CR	PXM6010/02S/ST PXM6010/02S/CR	02 02	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXM6010/03P/ST PXM6010/03P/CR	PXM6010/03S/ST PXM6010/03S/CR	03 03	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXM6010/08P/CR	PXM6010/08S/CR	08	Crimp / Solder	Contacts Required
PXM6010/16P/CR	PXM6010/16S/CR	16	Crimp / Solder	Contacts Required
PXM6010/22P/CR	PXM6010/22S/CR	22	Crimp / Solder	Contacts Required

6000 Series Buccaneer



<p>In-line Flex Cable Connector</p>  <p style="text-align: right; color: blue;">PXM6011</p>	<ul style="list-style-type: none"> ⊕ Mates with Flex Cable PXM6010 ⊕ For In-Line Cable Connection ⊕ Leading Earth on 3 Pole Connectors ⊕ Screw, Solder & Crimp Termination ⊕ Cable Braid Termination Accessory Option, add /SNsuffix 	
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Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PXM6011/02P/ST PXM6011/02P/CR	PXM6011/02S/ST PXM6011/02S/CR	02 02	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXM6011/03P/ST PXM6011/03P/CR	PXM6011/03S/ST PXM6011/03S/CR	03 03	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXM6011/08P/CR	PXM6011/08S/CR	08	Crimp / Solder	Contacts Required
PXM6011/16P/CR	PXM6011/16S/CR	16	Crimp / Solder	Contacts Required
PXM6011/22P/CR	PXM6011/22S/CR	22	Crimp / Solder	Contacts Required

<p>Front Panel Mounting Connector</p>  <p style="text-align: right; color: blue;">PXM6012</p>	<ul style="list-style-type: none"> ⊕ Mates with Flex Cable PXM6010 ⊕ Front Panel Mounting ⊕ Single Hole Fixing ⊕ Leading Earth on 3 Pole Connectors ⊕ Screw, Solder & Crimp Termination 	
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Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PXM6012/02P/ST PXM6012/02P/CR	PXM6012/02S/ST PXM6012/02S/CR	02 02	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXM6012/03P/ST PXM6012/03P/CR	PXM6012/03S/ST PXM6012/03S/CR	03 03	Screw Crimp / Solder	Supplied Fitted Contacts Required
PXM6012/08P/CR	PXM6012/08S/CR	08	Crimp / Solder	Contacts Required
PXM6012/16P/CR	PXM6012/16S/CR	16	Crimp / Solder	Contacts Required
PXM6012/22P/CR	PXM6012/22S/CR	22	Crimp / Solder	Contacts Required

6000 Series Buccaneer



Plastic Sealing Caps

PXP6083, PXP6082, PXP6081

- ⬡ IP Rating for Unmated Connectors
- ⬡ PXP6081: Fits PXP6010 (Flex Connector)
- ⬡ PXP6082: Fits PXP6011 (Flex In-Line Connector)
- ⬡ PXP6083: Fits PXP6012 (Panel Connector)

Metal Sealing Caps

PXM6083, PXM6082, PXM6081

- ⬡ IP Rating for Unmated Connectors
- ⬡ PXM6081: Fits PXM6010 (Flex Connector)
- ⬡ PXM6082: Fits PXM6011 (Flex In-Line Connector)
- ⬡ PXM6083: Fits PXM6012 (Panel Connector)

Crimp / Solder Contacts

2, 3, 8, 16 & 22 Pole Contacts

- ⬡ Gold Plated
- ⬡ Current Ratings:
2 & 3 Pole : 16A
8 Pole : 10A
16 Pole : 3A
22 Pole : 2A

Part No.		Description
Crimp:	Solder:	2 & 3 Pole (Supplied In Packs of 10):
SA3545/P	SA3624/P	Pins
SA3545/S	SA3624/S	Sockets
8 Pole (Supplied In Packs of 10):		
SA3544/P	SA3623/P	Pins
SA3544/S	SA3623/S	Sockets
16 & 22 Pole (Supplied In Packs of 10):		
SA3542/P	SA3622/P	Pins
SA3542/S	SA3622/S	Sockets

6000 Series Buccaneer

Crimp Tooling



14232

⬡ Crimp Tools for 2, 3, 8, 16 & 22 Pole Crimp Contacts

Part No.	Description
14232	Crimp Tool (2 & 3 Pole)
14232/2/SP	Positioner (2 & 3 Pole)
14025	Crimp Tool (8, 16 & 22 Pole)
15021/SP	Positioner (8 Pole)
15019/SP	Positioner (16 & 22 Pole)

Extraction Tool



14946/SP, 14945/SP, 14944/SP

⬡ Extraction Tool for 2, 3, 8, 16 & 22 Pole Contacts

Part No.	Description
14946/SP	Extraction Tool (2 & 3 Pole)
14945/SP	Extraction Tool (8 Pole)
14944/SP	Extraction Tool (16 & 22 Pole)

Contact Carrier Removal Tool



14917

⬡ For Removal of all Contact Carriers

Part No.	Description
14917/SP	Contact Carrier Removal Tool (all Poles)

6000 Series Buccaneer



Cable Gland Pack



PXP6088

- ⬡ Pack of all Cable Glands to suit Cable Ranges from 4.0 to 10.0mm Diameter

Cable Braid Termination Option



PXM6090

- ⬡ For Cable Braid Termination
- ⬡ Supplied with Ty-Rap

Technical Overview Data

Electrical:

No. Poles: 2 3 8 16 22

Current Rating:
(See De-Rating Curves
for Further Information)

VDE:	16A	16A	10A	3A	2A
UL:	16A	16A	7A	3A	3A
cUL:	11A	11A	4A	1.5A	1.5A
Voltage:	277V	277V	277V	60V	60V

Rated Cable:	14	14	16-20	22	26
	AWG	AWG	AWG	AWG	AWG

Contact Resistance: <10mΩ
Insulation Resistance: >10⁶MΩ @500V dc

AC Breakdown Voltage

2 Pole:	>10kV
3 Pole:	>8kV
8 to 22 Pole:	>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
Patent applied for

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 Crimp / Solder:	14 to 18AWG
2 & 3 Pole Screw Terminals:	1.5mm ² Max
8 Pole Crimp / Solder:	18 to 20AWG
16 Pole Crimp / Solder:	22 to 26AWG
22 Pole Crimp / Solder:	22 to 26AWG
Cable Acceptance:	4-10mm Dia.

Cable Retention Force (to BS EN61984)

4 - 9mm Dia Cable	80N
9 - 10mm Dia Cable	100N

Terminations

2 Pole:	Screw Terminals
3 Pole:	Screw, Crimp or Solder Terminals
8 Pole:	Crimp / Solder Contacts
16 Pole:	Crimp / Solder Contacts
22 Pole:	Crimp / Solder Contacts

Tightening Torques

Gland Nut:	1.13Nm (10lb.in)
Panel Nut:	1.7Nm (15lb.in.)

Panel Nut Thread: M22 x 1.5-6g

Dimensions

Diameter (over Coupling Ring):	32mm
Diameter (Panel Hole Cut-Out):	22.5mm

Materials:

Body:	PC/ PBT
Colour:	Grey
Contacts:	Brass, Nickel Plate (Screw & Crimp) Brass, (3A – Gold Plated)

O Rings & Gaskets:	Silicone
Flammability Rating:	UL94 V-0
Halogen free	Yes
UV Resistance:	ISO 4892 Part 3 Cycle 1 (QUV)

RoHS Compliant

Metal:

Body:	Brass
Colour:	Matt Silver
Contacts:	Brass, Nickel Plate (Screw & Crimp) Brass, (3A – Gold Plated)

O Rings & Gaskets: Silicone

Flammability Rating: -

Halogen free: -

UV Resistance: -

RoHS Compliant

6000 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.

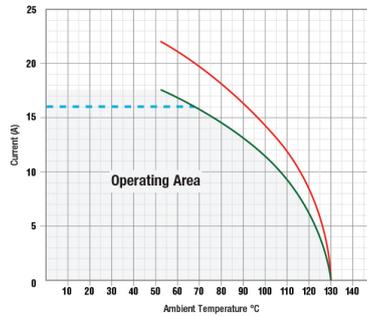
The maximum current varies with different contact layouts, and because of these factors it is necessary to produce de-rating curves for each pole variant. This de-rating curve is specified in the standard IEC 60512 part 3. De-rating curves are plotted for each contact carrier combination with the current 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.

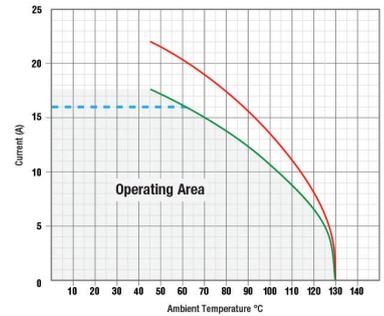
The shaded area under the 0.8 curve shows the permitted operating area, and allows safe current vs ambient temperature characteristics to be determined.

- = Tested Operating Limits
- = De-Rated Operating Limits
- - - = Rated Current

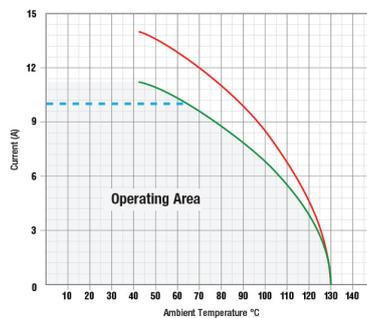
2 Pole, Metal Body, Crimp Terminal, 18 AWG wire
current applied through all pins simultaneously



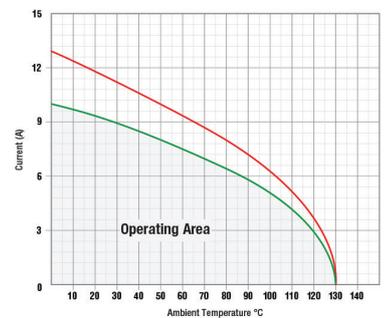
3 Pole, Metal Body, Screw Terminal, 18 AWG wire
current applied through all pins simultaneously



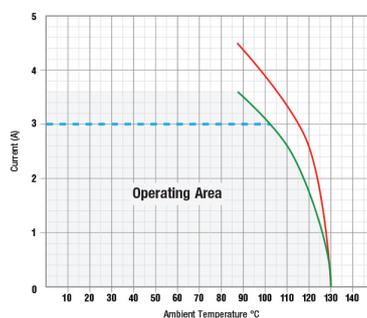
8 Pole, Metal Body, Crimp Terminal, 18 AWG wire
current applied through all pins simultaneously



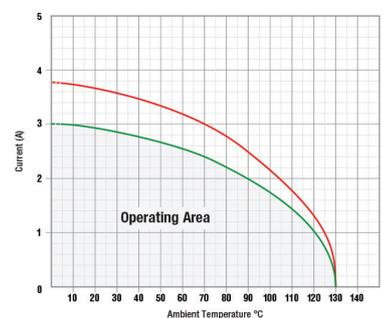
8 Pole, Metal Body, Crimp Terminal, 20 AWG wire
current applied through all pins simultaneously



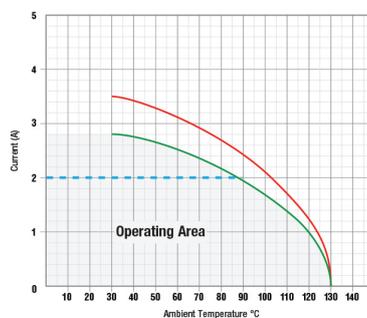
16 Pole, Metal Body, Crimp Terminal, 22 AWG wire
current applied through all pins simultaneously



16 Pole, Metal Body, Crimp Terminal, 26 AWG wire
current applied through all pins simultaneously



22 Pole, Metal Body, Crimp Terminal, 26 AWG wire
current applied through all pins simultaneously



6000 Series Buccaneer

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