

7000 Series Buccaneer

The 7000 Series Buccaneer offers high power in a compact form factor for its class. Available in rugged plastic or metal constructions, these multi pin circular connectors combine an easy to use quick bayonet coupling mechanism with proven environmental sealing for signal and mains power.



- Flex Cable Connectors
- Water & Dustproof to IP66, IP68, IP69K when mated with Compatible Connector
- Quick Turn Locking Ring with less than Quarter Turn Locking & Positive Feedback
- 2, 3, 6, 10, 32 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 PXM7090)
- Choice of Cable Acceptance 5mm-15mm Diameter depending on Part Code (see Data for Details)
- PXP7081/PXM7081 Sealing Cap available separately to maintain IP Rating of Unmated Connectors
- Mate with PXP7011/PXM7011 Series Flex In-Line & PXP7012/PXM7012 Series Front Panel Mount

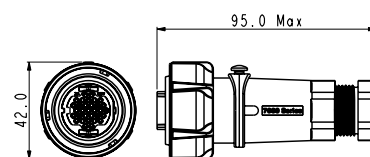
7000 Series Buccaneer

Flex Cable Connector



PXP7010

- ⬡ Mates with In-Line Flex or Panel
- ⬡ Mounting Versions PXP7011 & PXP7012
- ⬡ Quick Turn Locking Ring
- ⬡ Leading Earth on 3 Pole Connectors
- ⬡ Screw Solder & Crimp Termination



Pin Contacts

Socket Contacts

Pole Count

Termination

Contacts

PXP7010/02P/ST
PXP7010/03P/ST
PXP7010/06P/ST

PXP7010/02S/ST
PXP7010/03S/ST
PXP7010/06S/ST

02
03
06

Screw
Screw
Screw

Supplied Fitted
Supplied Fitted
Supplied Fitted

PXP7010/10P/CR
PXP7010/32P/CRP

PXP7010/10S/CR
PXP7010/32S/CR

10
32

Crimp / Solder
Crimp / Solder

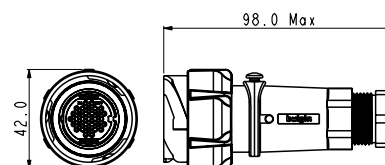
Contact Required
Contact Required

In-line Flex Cable Connector



PXP7011

- ⬡ Mates with Flex Cable PXP7010
- ⬡ For In-Line Cable Connection
- ⬡ Leading Earth on 3 Pole Connectors
- ⬡ 2, 3, 6, 10 & 32 Pole
- ⬡ Screw Solder & Crimp Termination



Pin Contacts

Socket Contacts

Pole Count

Termination

Contacts

PXP7011/02P/ST
PXP7011/03P/ST
PXP7011/06P/ST

PXP7011/02S/ST
PXP7011/03S/ST
PXP7011/06S/ST

02
03
06

Screw
Screw
Screw

Supplied Fitted
Supplied Fitted
Supplied Fitted

PXP7011/10P/CR
PXP7011/32P/CR

PXP7011/10S/CR
PXP7011/32S/CR

10
32

Crimp / Solder
Crimp / Solder

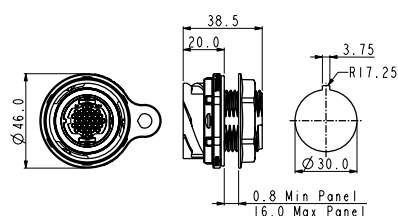
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Contact Required

Front Panel Mounting Connector



PXP7012

- ⬡ Mates with Flex Cable PXP7010
- ⬡ Front Panel Mounting
- ⬡ Single Hole Fixing
- ⬡ Leading Earth on 3 Pole Connectors
- ⬡ Screw Solder & Crimp Termination



Pin Contacts

Socket Contacts

Pole Count

Termination

Contacts

PXP7012/02P/ST
PXP7012/03P/ST
PXP7012/06P/ST

PXP7012/02S/ST
PXP7012/03S/ST
PXP7012/06S/ST

02
03
06

Screw
Screw
Screw

Supplied Fitted
Supplied Fitted
Supplied Fitted

PXP7012/10P/CR
PXP7012/32P/CR

PXP7012/10S/CR
PXP7012/32S/CR

10
32

Crimp / Solder
Crimp / Solder

Contact Required
Contact Required

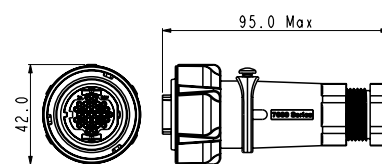
7000 Series Buccaneer

Flex Cable Connector



PXM7010

- ⬡ Mates with PXM7011 & PXM7012
- ⬡ Quick Turn Locking Ring
- ⬡ Leading Earth on 3 Pole Connectors
- ⬡ Screw Solder & Crimp Termination
- ⬡ Cable Braid Termination Accessory Option add /SNSuffix



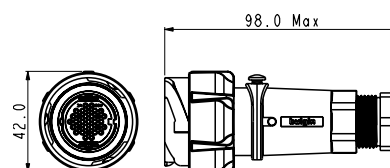
Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PXM7010/02P/ST	PXM7010/02S/ST	02	Screw	Supplied Fitted
PXM7010/03P/ST	PXM7010/03S/ST	03	Screw	Supplied Fitted
PXM7010/06P/ST	PXM7010/06S/ST	06	Screw	Supplied Fitted
PXM7010/10P/CR	PXM7010/10S/CR	10	Crimp / Solder	Contact Required
PXM7010/32P/CR	PXM7010/32S/CR	32	Crimp / Solder	Contact Required

In-line Flex Cable Connector



PXM7011

- ⬡ Mates with Flex Cable PXM7010
- ⬡ Pin or Socket Versions
- ⬡ Leading Earth on 3 Pole Connectors
- ⬡ Screw Solder & Crimp Termination
- ⬡ Cable Braid Termination Accessory Option add /SNSuffix



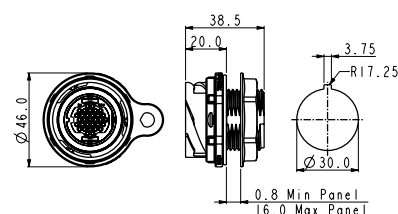
Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PXM7011/02P/ST	PXM7011/02S/ST	02	Screw	Supplied Fitted
PXM7011/03P/ST	PXM7011/03S/ST	03	Screw	Supplied Fitted
PXM7011/06P/ST	PXM7011/06S/ST	06	Screw	Supplied Fitted
PXM7011/10P/CR	PXM7011/10S/CR	10	Crimp / Solder	Contact Required
PXM7011/32P/CR	PXM7011/32S/CR	32	Crimp / Solder	Contact Required

Front Panel Mounting Connector



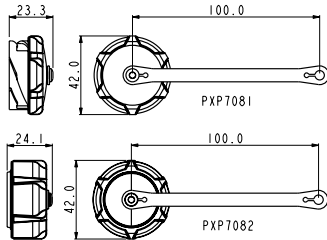
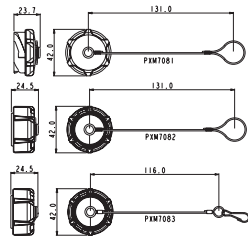
PXM7012

- ⬡ Mates with Flex Cable PXM7010
- ⬡ Front Panel Mounting
- ⬡ Single Hole Fixing
- ⬡ Leading Earth on 3 Pole Connectors
- ⬡ Screw Solder & Crimp Termination



Pin Contacts	Socket Contacts	Pole Count	Termination	Contacts
PXM7012/02P/ST	PXM7012/02S/ST	02	Screw	Supplied Fitted
PXM7012/03P/ST	PXM7012/03S/ST	03	Screw	Supplied Fitted
PXM7012/06P/ST	PXM7012/06S/ST	06	Screw	Supplied Fitted
PXM7012/10P/CR	PXM7012/10S/CR	10	Crimp / Solder	Contact Required
PXM7012/32P/CR	PXM7012/32S/CR	32	Crimp / Solder	Contact Required

7000 Series Buccaneer

Sealing Caps  PXP7082, PXP7081	- Maintains IP Rating of Unmated Connectors - PXP7081: Fits PXP7010 (Flex Connector) - PXP7082: Fits PXP7011 (Flex In-Line Connector) & PXP7012: (Panel Connector)	
Sealing Caps  PXM7082, PXM7081, PXM7083	- Maintains IP Rating of Unmated Connectors - PXM7081: Fits PXM7010 (Flex Connector) - PXM7082: Fits PXM7011 (Flex In-Line Connector) & PXP7012: (Panel Connector) - PXM7083: Fits PXM7012 (Panel Mounting Connector)	
Cable Gland Packs  PXP7088/ *	- Cable Glands, Cages & Gland Nuts Ranging from 5.0 to 15.0mm Diameter - PXP7088/0507: 5.0 & 7.0mm - PXP7088/0713: 7.0 & 13.0mm - PXP7088/1315: 13.0 & 15.0mm	
Crimp Tooling  14025	Crimp Tools for 10 & 32 Pole Crimp Contacts	

Part No.	Description
14025	Crimp Tool (10 & 32 Pole)
15021/SP	Positioner (10 Pole)
15019/SP	Positioner (32 Pole)

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Crimp / Solder Contacts



10 & 32 Pole Contacts

- ⬡ Gold Plated
- ⬡ Current Ratings:
10 Pole: 10A
32 Pole: 2A

Part No.

Description

Crimp:

Solder:

Contacts (10 Pole) (Supplied in Packs of 10):

SA3623/P

SA3544/P

Pins

SA3623/S

SA3544/S

Sockets

Contacts (32 Pole) (Supplied in Packs of 10):

SA3622/P

SA3542/P

Pins

SA3622/S

SA3542/S

Sockets

Extraction Tools



14944/SP, 14945/SP

- ⬡ Extraction Tool for 10 & 32 Pole Contacts

Part No.

Description

14945/SP

Extraction Tool (10 Pole)

14944/SP

Extraction Tool (32 Pole)

7000 Series Buccaneer

Cable Braid Termination Option



PXM7090

- For Cable Braid Termination
- Supplied with Ty-Rap

Contact Carrier Removal Tool



15065/SP

- For Removal of all Contact Carriers

Part No.	Description
15065/SP	Contact Carrier Removal Tool (all Poles)

7000 Series Buccaneer



Technical Overview Data

Electrical:

No Poles: 2 3 6 10 32

Current Rating

UL: 25A 25A 10A 10A 3A
cUL: 25A 25A 8A 6A 2A

Voltage Rating (ac/dc)

UL, cUL (pending) 600V 600V 600V 600V 600V
Contact Resistance: <10mΩ
Insulation Resistance: >10⁹MΩ @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

UL CULus UL1977
C22.2 No.182.3-M1987 (R2009)

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

Body: PC/ PBT
Colour: Grey
Contacts: Brass, Nickel Plate (Screw and 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

Cast Zinc Alloy, Nickel Plated

Matt silver

Brass, Nickel Plate (Screw and Crimp) Brass, (3A – Gold Plated)

Silicone

-

-

-

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.

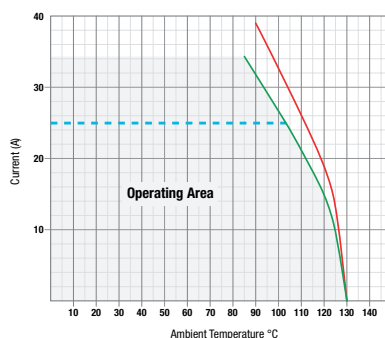
The red line indicates the direct correlation between current applied and the measured temperature rise within the connector. The dotted blue line shows rated current and the green line is derived by applying a factor of 0.8 to the original plot data to give a de-rating curve. The dashed blue line shows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

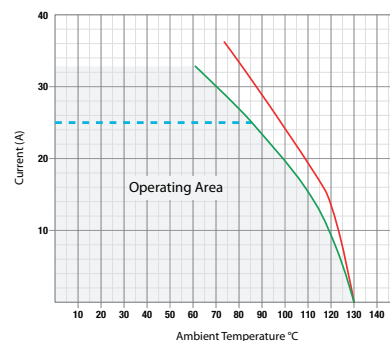
7000 Series Current vs. Temperature Characteristics

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



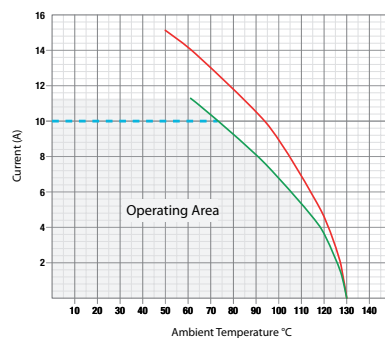
7000 Series Current vs. Temperature Characteristics

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



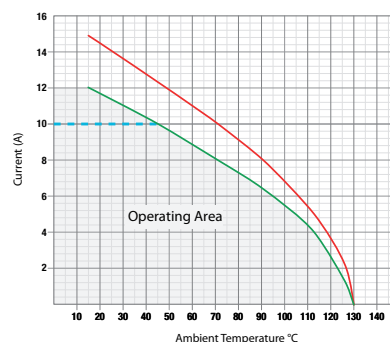
7000 Series Current vs. Temperature Characteristics

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



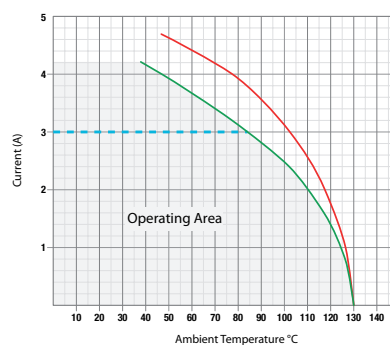
7000 Series Current vs. Temperature Characteristics

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



7000 Series Buccaneer

PXX	/	7XXX	/	XX	/	X	/	XX	/	XXXX	/	XX
Series Designation		Series / Body Style		No. of Contacts		Contact Type		Terminations		Cable Entry Size		Termination
PXM = Metal Series		7010 = Flex		02 = 2 Pole		P = Pin		ST = Screw Terminal (2, 3, & 6 Pole Only)		(Flex and Flex In-Line Only)		(Flex & Flex In-Line Only)
PXP = Plastic Series		7011 = Flex In-Line		03 = 3 Pole		S = Socket		CR = Contacts Required (10 & 32 Pole Only)		0507 = 5-7mm (Grey)		SN - If Requires
		7012 = Panel		06 = 6 Pole						0709 = 7-9mm (White)		Blank - If Not Required
				10 = 10 Pole						0911 = 9-11mm (Black)		
				32 = 32 Pole						1113 = 11 to 13 mm (Yellow)		
										1315 = 13 to 15 mm (Light Grey)		
Example: PXM7010/10/P/CR/0911/SN = Flex Cable Connector, 10 Pole, Pin Contacts with 9 to 11mm Cable Glands & Braid Termination Accessory PXM7012/03/S/ST = Front Panel Mounting Connector, 3 Pole, Socket with Screw Termination												