

7000 Series Buccaneer®



Robust, rapid connections for harsh environments

The all metal construction 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.



For Power

METAL VERSION



● 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 metal body version; cast zinc alloy, nickel plated	Robust construction offering protection against EMI
● 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 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, CCC approvals (pending)	Internationally recognised certification

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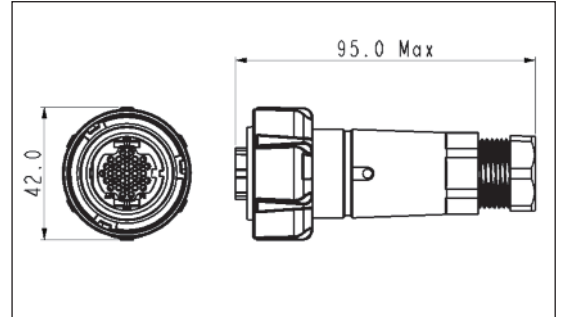
Metal Version

FLEX CABLE CONNECTOR



PXM7010

- 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
- 2, 3, 6, 10 & 32 pole
- Screw and crimp termination
- Cable braid termination accessory option, add /SN suffix



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	PXM7010/10P/CR	PXM7010/10S/CR	Order Separately
32	Crimp	PXM7010/32P/CR	PXM7010/32S/CR	Order Separately

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 and crimp termination
- Cable braid termination accessory option, add /SN suffix



Poles	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	PXM7011/10P/CR	PXM7011/10S/CR	Order separately
32	Crimp	PXM7011/32P/CR	PXM7011/32S/CR	Order separately

FRONT PANEL MOUNTING CONNECTOR



PXM7012

- Mates with Flex Cable connectors PXM7010
- Front panel mounting
- Single hole fixing
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 6, 10 and 32 pole
- Screw and crimp termination



Poles	Termination	Pin 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	PXM7012/10P/CR	PXM7012/10S/CR	Order separately
32	Crimp	PXM7012/32P/CR	PXM7012/32S/CR	Order separately

Metal Version

CRIMP CONTACTS



10 & 32 pole contacts

- Crimp Contacts
- Gold Plated
- Current ratings:

10 pole:	10A
32 pole:	2A

Contacts - Crimp for 10 and 32 pole

Contacts (for 10 pole) (Supplied in packs of 10)

	Crimp
Pins	SA3544/P
Sockets	SA3544/S

Contacts (for 32 pole) (Supplied in packs of 10)

	Crimp
Pins	SA3542/P
Sockets	SA3542/S

CRIMP TOOLING



PNo 14025

- Crimp Tools for 10 and 32 pole crimp contacts

Crimp Tooling

Crimp Tool (10 & 32 pole)	PNo. 14025
Positioner (10 pole)	PNo. 15021/SP
Positioner (32 pole)	PNo. 15019/SP

EXTRACTION TOOLS



PNo 14944/SP PNo 14945/SP

- Extraction Tool for 10 and 32 pole contacts

Extraction Tools

Extraction Tool (10 pole)	PNo. 14945/SP
Extraction Tool (32 pole)	PNo. 14944/SP

CONTACT CARRIER REMOVAL TOOL



PNo. 15065/SP

- For removal of all contact carriers

Tools

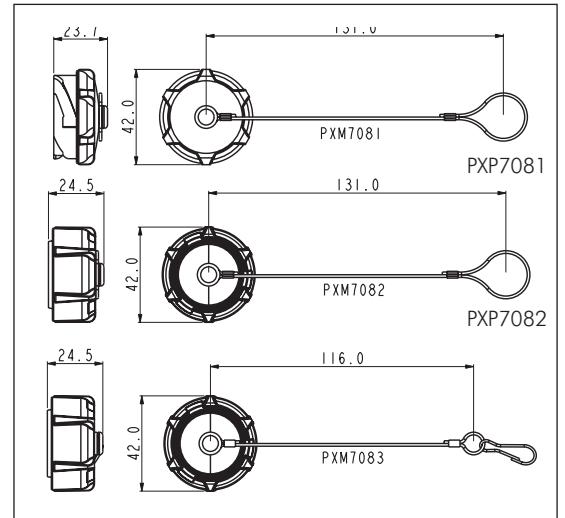
Contact carrier removal tool (all poles)	PNo. 15065/SP
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Metal Version

SEALING CAPS



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



CABLE GLAND PACKS



- Packs of cable glands, cages and gland nuts to suit cables ranges from 5.0 to 15.0mm diameter
- PXM7088/0507: for cable ranges between 5.0 and 7.0mm
- PXM7088/0713: for cable ranges between 7.0 and 13.0mm
- PXM7088/1315: for cable ranges between 13.0 and 15.0mm

CABLE BRAID TERMINATION OPTION



- For cable braid termination
- Supplied with ty-rap

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Metal Version

PART NO SYSTEM

PXM / xxxx / xx x / xx / xxxx / xx



Examples:

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

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

Metal Version

SPECIFICATION

Electrical:		Mechanical:	
No. Poles:	2 3 6 10 32	Locking mechanism	Quarter turn, rapid locking
Current Rating:		Sealing:	IP66 to EN60529:1992 IP68 to EN60529:1992 (10m depth for 2 weeks) IP69k to DIN 40050-9
CCC, UL and VDE (pending)	25A 25A 10A 10A 3A	Contact Accommodation:	
cUL (pending)	25A 25A 8A 6A 2A	2 & 3 pole screw terminals	6.0mm ² max
Voltage Rating (ac/dc):		6 pole screw	1.00mm ² max
CCC, VDE (pending)	600V 600V 500V 277V 200V	10 pole crimp	18 to 20AWG
UL, cUL (pending)	600V 600V 600V 600V 600V	32 pole crimp	22 to 26AWG
Contact Resistance:	<10mΩ	Cable Acceptance:	5-15mm dia.
Insulation Resistance:	>10 ⁹ MΩ @500V dc	Cable retention force (to BS EN61984):	
AC Breakdown voltage:		5 - 9mm dia cable	80N
2 pole	>10kV	9 - 15mm dia cable	100N
3 pole	>8kV	Terminations:	
6 to 32 pole	>5kV	2 Pole:	Screw Terminals
Operating Temp. Range:	-40°C to +120°C	3 Pole:	Screw Terminals
Approvals (pending):		6 Pole:	Screw Terminals
UL	UL1977	10 Pole:	Crimp Contacts
CSA	C22.2 No.182.3-M1987 (R2009)	32 Pole:	Crimp Contacts
VDE	IEC 61984:2009	Tightening Torques:	
CCC	GB/T11918 and GB/T11919	Gland Nut:	TBA
		Panel Nut:	1.7Nm (15lbf.in.)
Material:		Panel Nut Thread:	M30 x 2-6g
Body:	Cast zinc alloy, nickel plated	Dimensions:	
Colour:	Matt silver	Diameter: (over coupling ring)	42mm
Contacts:	Brass, Nickel plated (2A - Gold plated)	Diameter: (panel hole cut-out)	30mm
O Rings & Gaskets:	Silicon		
RoHS	Compliant		

Mated dimensions - Flex to panel connector



Mated dimensions - Flex connector to in-line connector



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

7000 Series Current vs. Temperature Characteristics

