# 6000 Series Buccaneer®

bulgin
a brand of Elektron Technology

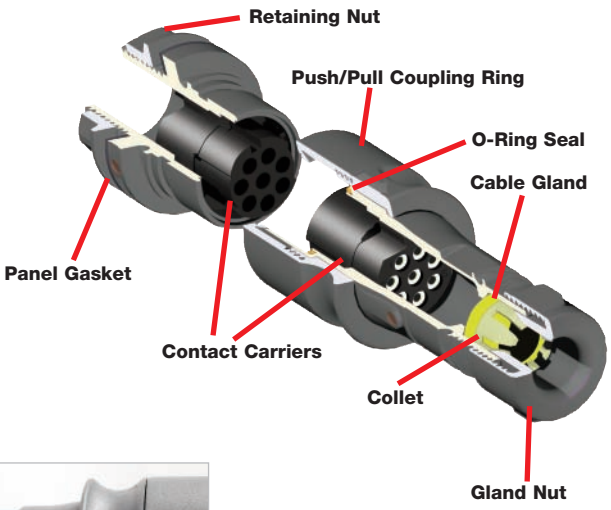
## Robust, instant connections for harsh environments

The all plastic construction 6000 Series Buccaneer - circular connectors that combine the ease of use of a push/pull 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

THERMO-PLASTIC VERSION



| | |
|---|---|
| **Push/pull latching mechanism*** | Secure, instant latching. 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 |
| **cULs, UL, VDE, CCC approvals** (pending) | Internationally recognised certification |

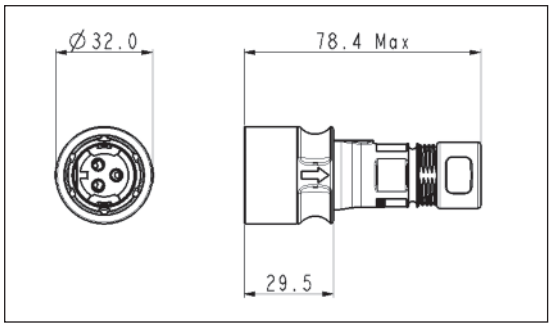
*patent applied for

# Thermo-plastic Version

## FLEX CABLE CONNECTOR

PXP6010/P PXP6010/S

- Mates with In-Line Flex or Panel Mounting versions PXP6011 & PXP6012
- Push/pull locking ring with 30˚ twist locking
- Pin or socket versions
- Leading earth on 3 pole connectors
- 2, 3, 8, 16 & 22 pole
- Screw and crimp termination

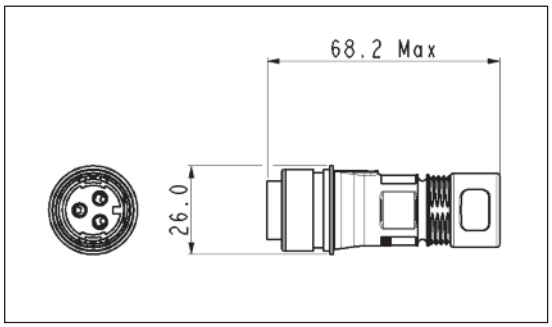



| Poles | Termination | Pin Contacts | Socket Contacts | Contacts |
|---|---|---|---|---|
| 2 | Screw | PXP6010/02P/ST | PXP6010/02S/ST | Supplied Fitted |
| 2 | Crimp | PXP6010/02P/CR | PXP6010/02S/CR | Order Separately |
| 3 | Screw | PXP6010/03P/ST | PXP6010/03S/ST | Supplied Fitted |
| 3 | Crimp | PXP6010/03P/CR | PXP6010/03S/CR | Order Separately |
| 8 | Crimp | PXP6010/08P/CR | PXP6010/08S/CR | Order Separately |
| 16 | Crimp | PXP6010/16P/CR | PXP6010/16S/CR | Order Separately |
| 22 | Crimp | PXP6010/22P/CR | PXP6010/22S/CR | Order Separately |

## IN-LINE FLEX CABLE CONNECTOR

PXP6011/P PXP6011/S

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

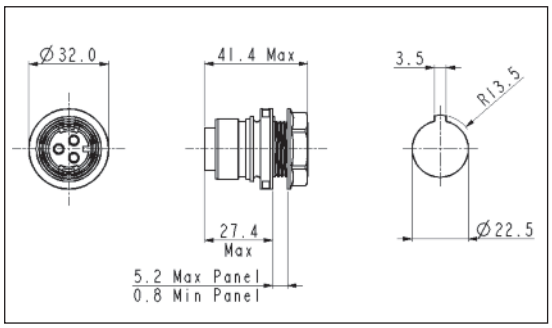



| Poles | Termination | Pin Contacts | Socket Contacts | Contacts |
|---|---|---|---|---|
| 2 | Screw | PXP6011/02P/ST | PXP6011/02S/ST | Supplied Fitted |
| 2 | Crimp | PXP6011/02P/CR | PXP6011/02S/CR | Order separately |
| 3 | Screw | PXP6011/03P/ST | PXP6011/03S/ST | Supplied Fitted |
| 3 | Crimp | PXP6011/03P/CR | PXP6011/03S/CR | Order separately |
| 8 | Crimp | PXP6011/08P/CR | PXP6011/08S/CR | Order separately |
| 16 | Crimp | PXP6011/16P/CR | PXP6011/16S/CR | Order separately |
| 22 | Crimp | PXP6011/22P/CR | PXP6011/22S/CR | Order separately |

## FRONT PANEL MOUNTING CONNECTOR

PXP6012/P PXP6012/S

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




| Poles | Termination | Pin Contacts | Socket Contacts | Contacts |
|---|---|---|---|---|
| 2 | Screw | PXP6012/02P/ST | PXP6012/02S/ST | Supplied Fitted |
| 2 | Crimp | PXP6012/02P/CR | PXP6012/02S/CR | Order separately |
| 3 | Screw | PXP6012/03P/ST | PXP6012/03S/ST | Supplied Fitted |
| 3 | Crimp | PXP6012/03P/CR | PXP6012/03S/CR | Order separately |
| 8 | Crimp | PXP6012/08P/CR | PXP6012/08S/CR | Order separately |
| 16 | Crimp | PXP6012/16P/CR | PXP6012/16S/CR | Order separately |
| 22 | Crimp | PXP6012/22P/CR | PXP6012/22S/CR | Order separately |

# Thermo-plastic Version

## CRIMP CONTACTS

2, 3, 8, 16 & 22 pole contacts

- Crimp Contacts
- Gold Plated
- Current ratings:
  - 2 & 3 pole: 16A
  - 8 pole: 10A
  - 16 pole: 3A
  - 22 pole: 2A

### Contacts - Crimp for 2, 3, 8, 16 and 22 pole

| Contacts (for 2 & 3 pole) (Supplied in packs of 10) | Crimp |
|---|---|
| Pins | SA3545/P |
| Sockets | SA3545/S |

| Contacts (for 8 pole) (Supplied in packs of 10) | Crimp |
|---|---|
| Pins | SA3544/P |
| Sockets | SA3544/S |

| Contacts (for 16 & 22 pole) (Supplied in packs of 10) | Crimp |
|---|---|
| Pins | SA3542/P |
| Sockets | SA3542/S |

## CRIMP TOOLING

PNo 14232

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

| Crimp Tooling | |
|---|---|
| Crimp Tool (2 & 3 pole) | PNo. 14232 |
| Positioner (2 & 3 pole) | PNo. 14232/2/SP |
| Crimp Tool (8, 16 & 22 pole) | PNo. 14025 |
| Positioner (8 pole) | PNo. 15021/SP |
| Positioner (16 & 22 pole) | PNo. 15019/SP |

## INSERTION/EXTRACTION TOOLS

PNo 14946

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

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

## CONTACT CARRIER REMOVAL TOOL

PNo 14917

- For removal of all contact carriers

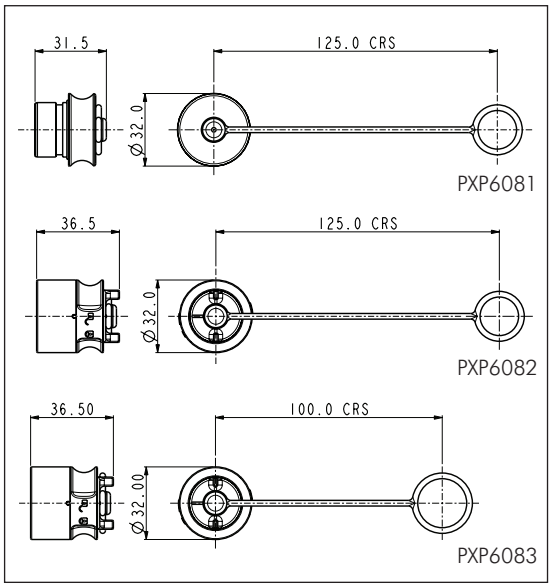
| Tools | |
|---|---|
| Contact carrier removal tool (all poles) | PNo. 14917/SP |

# Thermo-plastic Version

## SEALING CAPS

**PXP6081 PXP6082 PXP6083**

- Maintains IP rating of unmated connectors
- PXP6081: Fits PXP6010 (Flex Connector)
- PXP6082: Fits PXP6011 (Flex In-Line Connector) with 30˚ twist locking
- PXP6083: Fits PXP6012 (Panel Connector) with 30˚ twist locking




## CABLE GLAND PACKS

**PXP6088**

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

# Thermo-plastic Version

## PART NO SYSTEM

**PXP / xxxx / xx / x / xx / xxxx**

Plastic Connector Designation

Series
**6** = 6000 Series

Body Styles
**010** = Flex
**011** = Flex In-Line
**012** = Panel

No. of Contacts
**02** = 2 Pole
**03** = 3 Pole
**08** = 8 Pole
**16** = 16 Pole
**22** = 22 Pole

Contacts Type
**P** = Pin
**S** = Socket

Contacts Termination
**CR** = Crimp
**ST** = Screw (2 and 3 pole only)

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)

Examples:
PXP6010/03/P/CR/0507= Flex cable connector, 3 pole, pin contacts, crimp termination with 5 to 7mm cable glands

PXP6012/03/S/ST= Front panel mounting connector, 3 pole, socket with screw termination

# Thermo-plastic Version

## SPECIFICATION

### Electrical:

| | | | | | |
|---|---|---|---|---|---|
| No. Poles: | 2 | 3 | 8 | 16 | 22 |
| Rated cable | 18 AWG | 18 AWG | 18 AWG | 22 AWG | 26 AWG |
| Current Rating: See de-rating curves for further information | | | | | |
| CCC, UL and VDE (pending) | 16A | 12A | 10A | 3A | 2A |
| cUL (pending) | 13A | 12A | 10A | 3A | 2A |
| Voltage Rating (ac/dc): | 277V | 277V | 277V | 60V | 60V |

| | |
|---|---|
| Contact Resistance: | <10mΩ |
| Insulation Resistance: | >10⁸MΩ @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 (pending): | |
| UL | UL1977 |
| CSA | C22.2 No.182.3-M1987 (R2009) |
| VDE | IEC 61984:2009 |
| CCC | GB/T11918 and GB/T11919 |

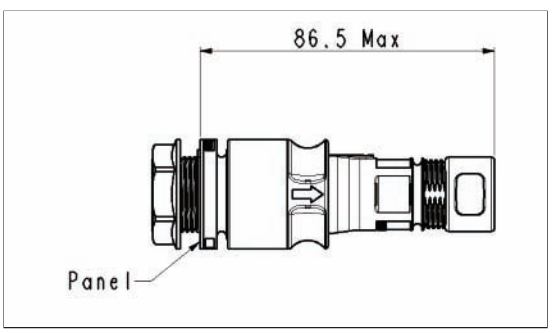
### Material:

| | |
|---|---|
| Body: | PC/ PBT |
| Colour: | Grey |
| Flammability Rating: | UL94 V-0 |
| Halogen free | Yes |
| UV Resistance: | ISO 4892 part 3 cycle 1 (QUV) |
| Contacts: | Brass, Nickel plated (2A – Gold plated) |
| O Rings & Gaskets: | Silicon |
| RoHS | Compliant |

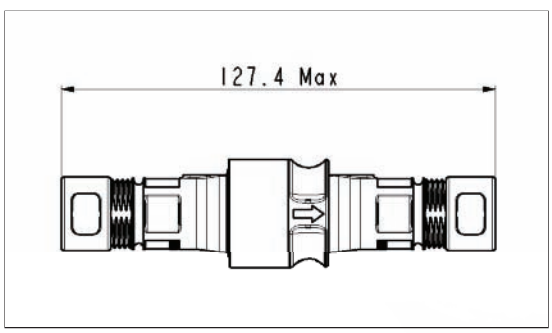
### Mechanical:

| | |
|---|---|
| Locking mechanism | Push/pull with 30° locking Patent applied for |
| Sealing: | IP66 to EN60529:1992<br>IP68 to EN60529:1992 (10m depth for 2 weeks)<br>IP69k to DIN 40050-9 |
| Contact Accommodation: | |
| 2 & 3 pole crimp | 14 to 18AWG |
| 2 & 3 pole screw terminals | 1.5mm² max |
| 8 pole crimp | 18 to 20AWG |
| 16 pole crimp | 22 to 26AWG |
| 22 pole crimp | 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 Terminals & Crimp Contacts |
| 8 Pole: | Crimp Contacts |
| 16 Pole: | Crimp Contacts |
| 22 Pole: | Crimp Contacts |
| Tightening Torques: | |
| Gland Nut: | 1.13Nm (10lb.in) |
| Panel Nut: | 1.7Nm (15lbf.in.) |
| Panel Nut Thread: | M22 x 1.5-6g |
| Dimensions: | |
| Diameter: (over coupling ring) | 32mm |
| Diameter: (panel hole cut-out) | 22.5mm |

Mated dimensions - Flex to panel connector




Mated dimensions - Flex connector to in-line connector



# Thermo-plastic Version

## 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

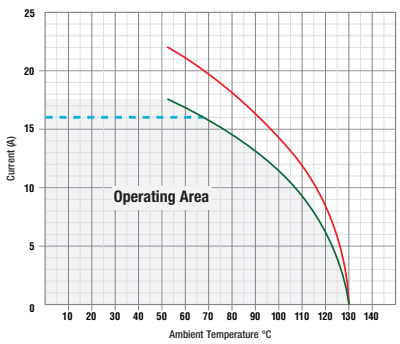
= de-rated operating limits

= rated current

### 6000 Series Current vs. Temperature Characteristics

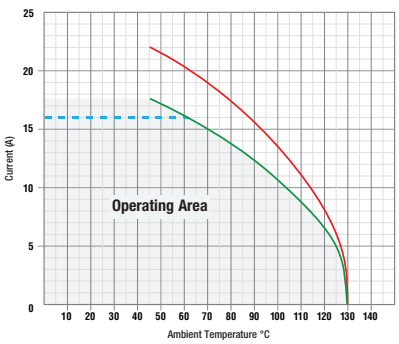
2 Pole, Plastic Body, Crimp Terminal, 18 AWG wire

current applied through all pins simultaneously



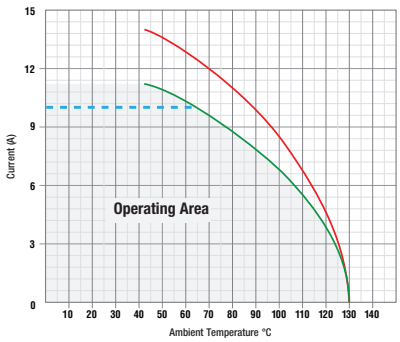

3 Pole, Plastic Body, Screw Terminal, 18 AWG wire

current applied through all pins simultaneously



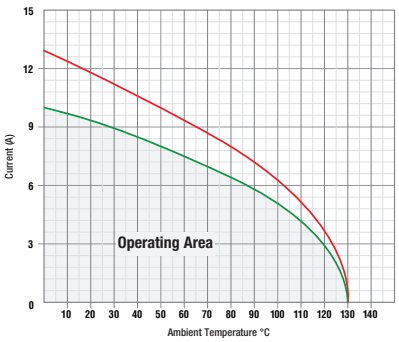

8 Pole, Plastic Body, Crimp Terminal, 18 AWG wire

current applied through all pins simultaneously



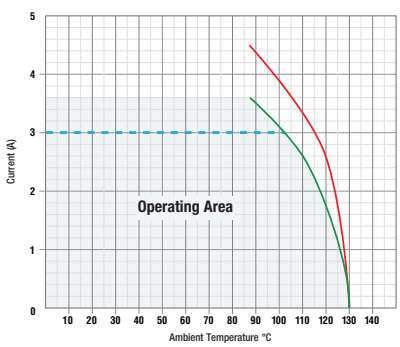

8 Pole, Plastic Body, Crimp Terminal, 20 AWG wire

current applied through all pins simultaneously



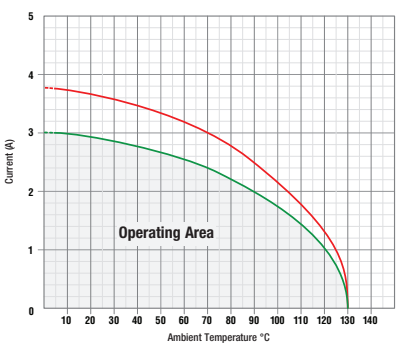

16 Pole, Plastic Body, Crimp Terminal, 22 AWG wire

current applied through all pins simultaneously



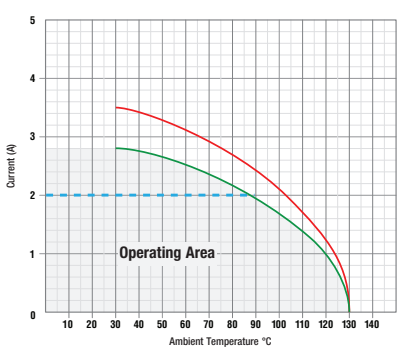

16 Pole, Plastic Body, Crimp Terminal, 26 AWG wire

current applied through all pins simultaneously




22 Pole, Plastic Body, Crimp Terminal, 26 AWG wire

current applied through all pins simultaneously

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Issue no: V1.0

Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

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