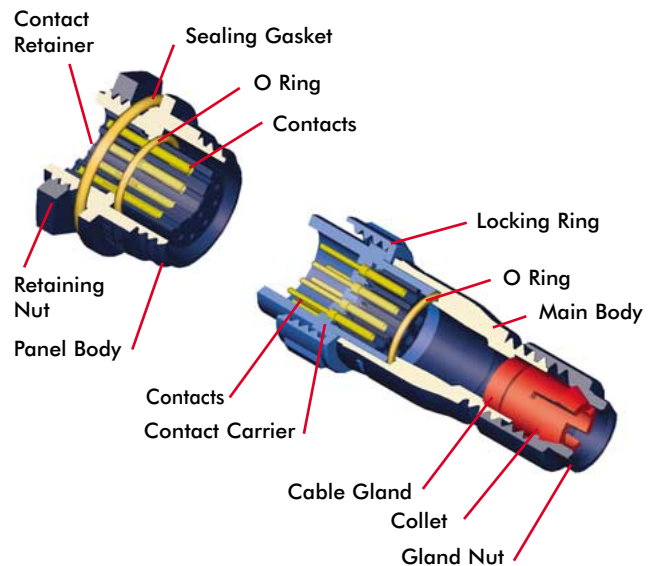# 400 Series Buccaneer®

- Sealed to IP68 when mated
- IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- 2 and 3 pole - 8A, 250V rating
- 4, 6 and 8 pole - 5A, 125V rating
- 10 and 12 pole - 1A, 50V rating
- 2.5mm contact engagement for electrical integrity
- 'Scoop proof' contacts
- Contact inserts are part of body moulding
- Cable range from 3 to 7mm
- Overall length (flex + flex in-line) 80mm
- Gold plated contacts
- Diameter over coupling ring 19.1mm

- Flex, Flex In-Line, Front Panel, Rear Panel and PCB mounting body styles
- Plug and Socket versions in all body styles
- Flame Retardant moulding material - Polyamide UL94-V0
- Contacts supplied separately (except PCB version)
- Sealing caps available to maintain IP68 rating
- Secure sealing system
- Crimp and solder contacts
- PCB mounting connector supplied with contacts pre-loaded
- Front and rear panel mounting panel connectors
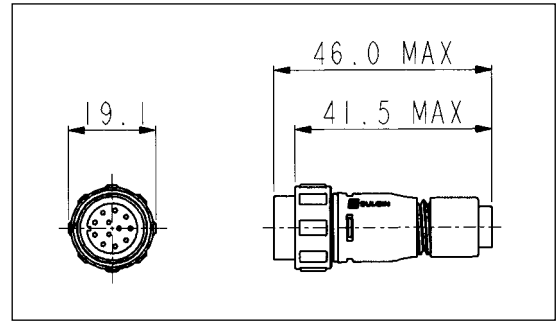- UL, CSA and VDE approvals

## 400 Series Buccaneer®

**FLEX CABLE CONNECTOR**

- Mates with Flex In-line or Panel mounting versions PX0411, PX0412 & PX0413
- Screw locking ring
- Contacts supplied separately

**PX0410/P**   **PX0410/S**
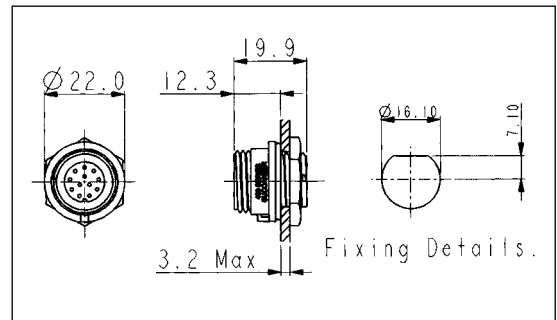
46.0 MAX
41.5 MAX
19.1

**IN-LINE FLEX CABLE CONNECTOR**

- Mates with Flex Cable connector PX0410
- For in-line cable connection
- Contacts supplied separately

**PX0411/P**   **PX0411/S**

46.0 MAX
41.5 MAX
19.1
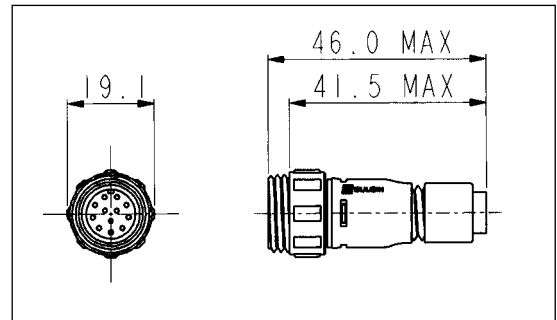
**FRONT PANEL MOUNTING CONNECTOR**

- Mates with Flex Cable connector PX0410
- Front Panel mounting
- Single hole fixing
- Contacts supplied separately

**PX0412/P**   **PX0412/S**

Ø 22.0
12.3
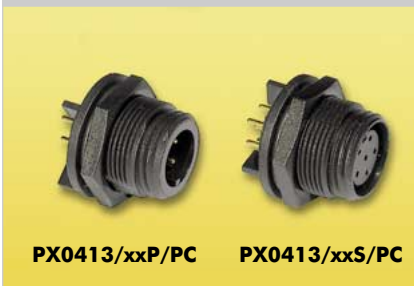19.9
Ø 16.10
7.10
3.2 Max
Fixing Details.

**REAR PANEL MOUNTING CONNECTOR**

- Mates with Flex Cable connector PX0410
- Rear Panel mounting
- Single hole fixing
- Contacts supplied separately
- 2, 3, 4, 6, 8, 10 or 12 pole

**PX0413/xxP**   **PX0413/xxS**

22.23 A/F
20.90
13.90
6.20 MAX PANEL
Ø19.1-19.2
16-0.6
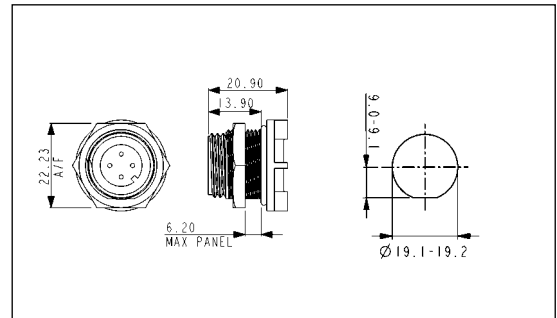
**PCB MOUNTING CONNECTOR**

- Mates with Flex Cable connector PX0410
- PCB Rear Panel mounting
- Straight PC spills
- Supplied with pre-loaded gold plated contacts
- 2, 3, 4, 6, 8, 10 or 12 pole

**PX0413/xxP/PC**   **PX0413/xxS/PC**

22.23 A/F
20.90
3.90
3.50
6.20 MAX PANEL
Ø19.1-19.2
16-0.6
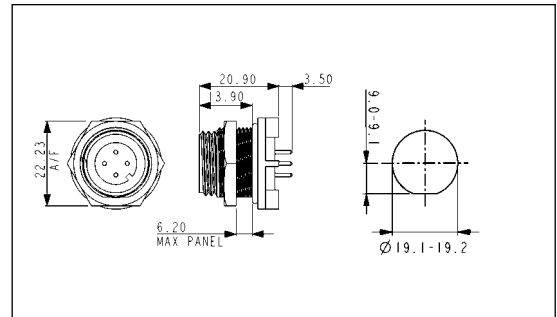
## SEALING CAPS AND ACCESSORIES

**PX0480   PX0480/1   PX0481   PX0484**

- Maintains IP68 Rating of Unmated Connectors
- PX0480. Fits PX0412 style (panel mounting)
- PX0480/1. Fits PX0411 style (flex in-line)
- PX0481. Fits PX0410 style (flex body)
  PX0484. Fits PX0413 styles (PCB and rear panel mount)

### Gland Packs

| Part No | Description |
|---------|-------------|
| PX0482 | Pack of 4 pairs cable glands and collets to suit cables from 3.0 to 5.0mm diameter. |
| PX0483 | Pack of 4 pairs cable glands and collets to suit cables from 5.0 to 7.0mm diameter. |

## CRIMP CONTACTS

| Pole | Current Rating | Pin | Socket | Pack Qty | Cable Acceptance (dia) |
|------|----------------|-----|--------|----------|------------------------|
| 2, 3 | 8A | SA3350 | SA3349 | 10 | 20 - 24 AWG |
| 4, 6, 8 | 5A | SA3348 | SA3347 | 10 | 22 - 26 AWG |
| 10, 12 | 1A | SA3180 | SA3179 | 10 | 24 - 28 AWG |

## SOLDER CONTACTS

| Pole | Current Rating | Pin | Socket | Pack Qty | Cable Acceptance (dia) |
|------|----------------|-----|--------|----------|------------------------|
| 2, 3 | 8A | SA3350/1 | SA3349/1 | 10 | 20 - 24 AWG |
| 4, 6, 8 | 5A | SA3348/1 | SA3347/1 | 10 | 22 - 26 AWG |
| 10, 12 | 1A | SA3180/1 | SA3179/1 | 10 | 24 - 28 AWG |

## CONTACT INSERTION TOOLS

| | Poles | Contact rating | Colour | Part No |
|---|-------|----------------|--------|---------|
| Insertion/Extraction Tool | 2,3 | 8A | Blue | 13027/2 |
| Insertion/Extraction Tool | 4,6,8 | 5A | Red | 13027/1 |
| Insertion/Extraction Tool | 10,12 | 1A | Green | 13027 |

## CRIMP TOOLS

| | Pole | Contact rating | Colour | Part No |
|---|------|----------------|--------|---------|
| Positioner | 2,3 | 8A | Blue | 14025/8AMP |
| Positioner | 4,6,8 | 5A | Red | 14025/5AMP |
| Positioner | 10,12 | 1A | Green | 14025/1AMP |
| 8 Indent Crimp Tool for use with positioners | | | | 14025 |

## ORDERING INFORMATION

- Determine body style, i.e. PX0410 = flex body, PX0411 = flex in-line body.
- Determine number of contacts & type, i.e. 02 = 2 way, P = pin contacts.
- Determine cable range, i.e. 3035 = 3.0 to 3.5mm cable accommodation, not required for PX0412 or PX0413 (panel connectors).
- Choose appropriate contacts pack, i.e. SA3350 = pin contacts suitable for 2 & 3 way connectors, supplied in pack quantities of 10. Not needed for PX0413/PC as pre-loaded.
- Is a sealing cap required?
- Is an insertion tool required?
- Is a crimp tool required?

## 400 Series Buccaneer®

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### SPECIFICATION

**Electrical:**

| Poles: | 2, 3 | 4, 6, 8 | 10, 12 |
|---|---|---|---|
| Current Rating: | 8A | 5A | 1A |
| Voltage Rating: | 250Vac/dc | 125Vac/dc | 50Vac/dc |
| Contact Resistance: | <5mΩ | | |
| Insulation Resistance: | >10⁶MΩ (@ 500V d.c.) | | |
| AC Breakdown Voltage: | 2.5kV | | |
| Operating Temperature Range: | −40° to +80°C | | |
| Approvals: | | | |

Approvals pending for PX0413

**Material:**

| Body Mouldings: | Polyamide |
|---|---|
| Flammability Rating: | UL94V-0 |
| UV Resistance: | To EN 50021:1999 |
| Contacts: | Copper alloy, Gold plated |
| O Rings: | Nitrile |
| Panel Sealing O Ring: | Nitrile |
| **RoHS** | Compliant |

**Mechanical:**

| Sealing: | IP68, EN 60529 tested @ 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks |
|---|---|
| Cable Acceptance: | 3.0 - 7.0mm |
| Contact Accommodation: | 2, 3 pole, 20 - 24 AWG<br>4, 6, 8 pole, 22 - 26 AWG<br>10, 12 pole, 24 - 28 AWG |
| Termination: | Crimp, solder and PCB |

Insertion/Withdrawal Force:

| No. poles: | 2 | 3 | 4 | 6 | 8 | 10 | 12 |
|---|---|---|---|---|---|---|---|
| Insertion Force (typ): | 19N | 25N | 27N | 27N | 28N | 55N | 62N |
| Withdrawal Force (typ): | 12N | 17N | 17N | 21N | 22N | 25N | 29N |

Tightening Torques:
Panel mount (PX0412)
Front fixing nut: 1.36Nm (12lbf.in.)
Panel mount (PX0413)
Rear fixing nut: 1.36Nm (12lbf.in.)

Cable Retention force:
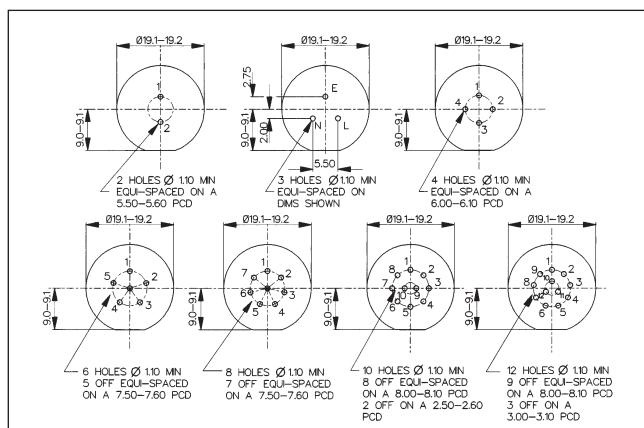3mm dia 60N
4.7mm dia 80N

**Dimensions:**

Overall dimensions of connectors when mated together

Flex + Flex In-Line 80mm
Dia. over coupling ring 19.1mm
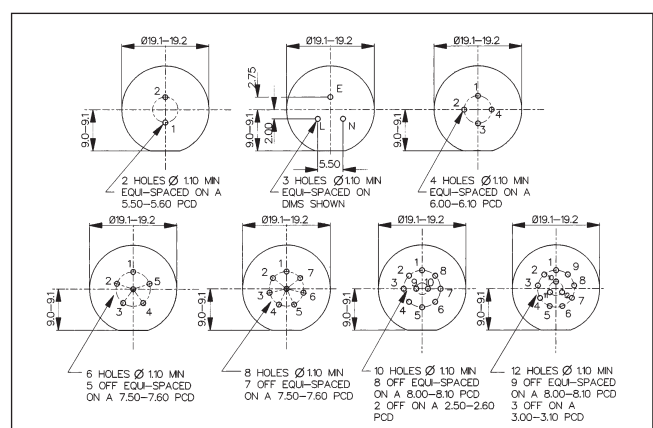
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### PCB CONTACT LAYOUT

**Sockets**

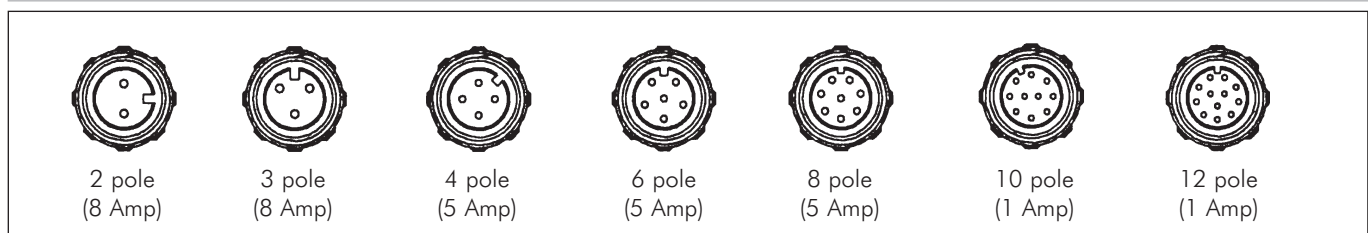Contact numbers viewed from rear of panel



**Plugs**

Contact numbers viewed from rear of panel



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### CONTACT LAYOUT



| 2 pole (8 Amp) | 3 pole (8 Amp) | 4 pole (5 Amp) | 6 pole (5 Amp) | 8 pole (5 Amp) | 10 pole (1 Amp) | 12 pole (1 Amp) |

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## PART NO. SYSTEM

**PX04xx / xx x / xxxx**

Body Styles
**PX0410** = Flex body
**PX0411** = Flex in-line body
**PX0412** = Front panel mounting body
**PX0413** = Rear panel/PCB mounting body

Number Contacts
**02** = 2 pole, **03** = 3 pole, **04** = 4 pole, **06** = 6 pole
**08** = 8 pole, **10** = 10 pole, **12** = 12 pole
(PX0413: 4, 6, 8, 10 & 12 pole only)

Contact Type
**P** = Pin, **S** = Socket

**For** PX0410 and PX0411 cable connectors - Cable Entry Size:

| | | | | |
|---|---|---|---|---|
| **3035** = 3.0 - 3.5mm | (Light Grey) | **5055** = 5.0 - 5.5mm | (Yellow) |
| **3540** = 3.5 - 4.0mm | (Grey) | **5560** = 5.5 - 6.0mm | (Blue) |
| **4045** = 4.0 - 4.5mm | (Green) | **6065** = 6.0 - 6.5mm | (White) |
| **4550** = 4.5 - 5.0mm | (Red) | **6570** = 6.5 - 7.0mm | (Black) |

Cable gland and collet supplied in colour coded pairs.

**For** PX0413 PCB/Rear Panel Mount:
**PC** = Pre-loaded PC pins
**Blank** = no pins supplied

**For** PX0412 Front Panel Mount:
Suffix not required - leave blank

Examples:
PX0410/10S/4045 = Flex cable connector, 10 socket contacts with gland and collet for
cables between 4.0 and 4.5mm diameter (supplied less contacts).
PX0412/08P = Front panel mounting connector, 8 pin contacts (supplied less contacts.)
PX0413/06P = Rear panel mounting connector, for 6 pin contacts (supplied less contacts).
PX0413/04P/PC = Rear panel/PCB connector, 4 pin contacts, PCB mounting (supplied with contacts loaded).