

6000 Series Buccaneer – **circular connectors** that combine the ease of use of a **push/pull coupling mechanism** with proven environmental sealing. Available with **metal** or **plastic** bodies, the range supports both data (USB and Ethernet), 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.

- **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
- **Independent sealing tests**
IP Ratings independently verified
- **USB version 2.0 performance**
Low and high speed bus connection, 1.5Mbps to 480Mbps
- **Plug and play capability**
Hot pluggable, standard 4 Contact interface
- **Shielded system**
High noise immunity and EMI protection
- **Single and double ended cables**
Suitable for PCB and peripheral configuration
- **Push-pull latching system***
Secure, instant latching. Quick connector mating and release
- **Cat 5e compliant**
Data rate up to 100Mbps
- **PUR jacket on cable**
Good chemical resistance, flame retardant
- **Cat 5e shielded coupler**
Maintains shielding
- **Visual mating indication**
Alignment indicator reduces risk of damage during mating
- **Earth lead version of panel adaptor on plastic connector**
Continuous screening of panel mount connector
- **Metal connector grounded to cable screen**
Continuous screening of panel mount connector
- **Sealed through panel Ethernet**
Prevent water ingress into equipment
- **EN60068-2-52 Test Kb Salt Mist (Cyclic)**
Marine Severity Level 1



Sealed USB Cables - Single Ended

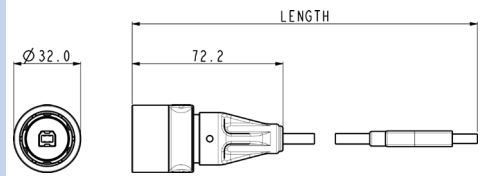
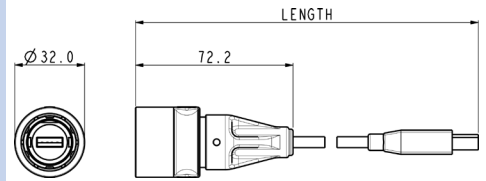


PXP6040/A



PXP6040/B

- Single ended sealed cable assembly
- Mates with all panel mounting connectors
- 30° twist locking
- IP rated 'A' type USB connector to standard 'B' type USB connector, mates with all panel mount connectors
- IP rated 'B' type USB connector to standard 'A' type USB connector, mates with all panel mount connectors
- Available in 2m, 3m & 5m lengths



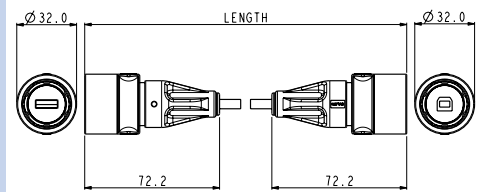
| Part no | Length | Description |
|----------------|--------|--|
| PXP6040/A/2M00 | 2m | IP rated A type USB to standard B type USB |
| PXP6040/A/3M00 | 3m | IP rated A type USB to standard B type USB |
| PXP6040/A/5M00 | 5m | IP rated A type USB to standard B type USB |
| PXP6040/B/2M00 | 2m | IP rated B type USB to standard A type USB |
| PXP6040/B/3M00 | 3m | IP rated B type USB to standard A type USB |
| PXP6040/B/5M00 | 5m | IP rated B type USB to standard A type USB |

Sealed USB Cables - Double Ended



PXP6041/AB

- Double ended sealed cable assembly
- Mates with all panel mount connectors
- 30° twist locking
- IP rated 'A' type USB connector to 'B' type USB connector
- Available in 2m, 3m & 5m lengths



| Part no | Length | Description |
|-----------------|--------|--|
| PXP6041/AB/2M00 | 2m | IP rated A type USB to IP rated B type USB |
| PXP6041/AB/3M00 | 3m | IP rated A type USB to IP rated B type USB |
| PXP6041/AB/5M00 | 5m | IP rated A type USB to IP rated B type USB |

BUCCANEER FOR DATA
6000 Series - USB Buccaneer

USB Thermo Plastic

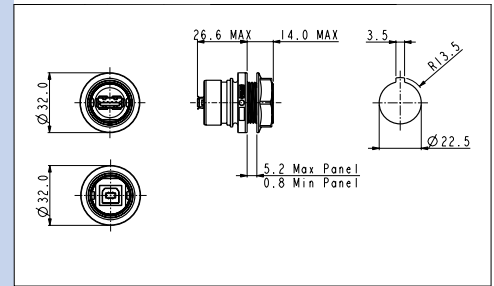


Front Panel Mounting Connector



PXP6042/B PXP6042/A

- PXP6042/A - USB 'A' type IP rated connector
- PXP6042/B - USB 'B' type IP rated connector
- Opposite USB type connector to rear of panel
- Mates with PXP6040 and PXP6041 cable connectors



Part No. **Description**

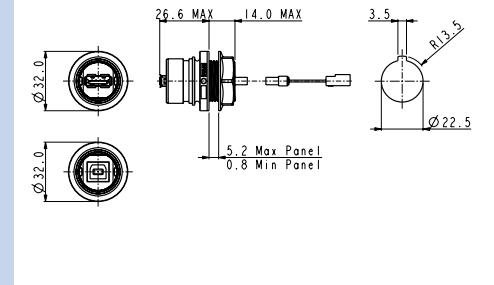
| | |
|-----------|---|
| PXP6042/A | IP rated A type USB, front panel mounted. Sealed A type at front of panel, standard B type at rear. |
| PXP6042/B | IP rated B type USB, front panel mounted. Sealed B type at front of panel, standard A type at rear. |

Front Panel Mounting Connector



PXP6043/B PXP6043/A

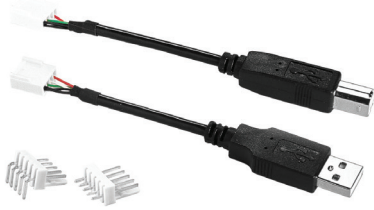
- PXP6043/A - USB 'A' type IP rated connector
- PXP6043/B - USB 'B' type IP rated connector
- Leaded with 5 way crimp connector
- Mates with PXP6040 and PXP6041 cable connectors



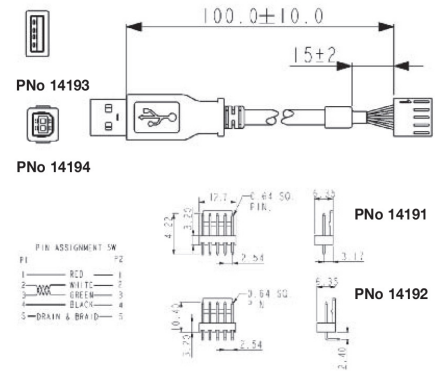
Part No. **Description**

| | |
|-----------|---|
| PXP6043/A | IP rated A type USB, front panel mounted. Sealed A type at front of panel, 5 way crimp connector at rear. |
| PXP6043/B | IP rated B type USB, front panel mounted. Sealed B type at front of panel, 5 way crimp connector at rear. |

PCB Adaptor Leads



- Standard A and B type USB connectors to 5 way crimp adaptor leads
- 5 way headers, 2.54mm pitch, horizontal or vertical mounting



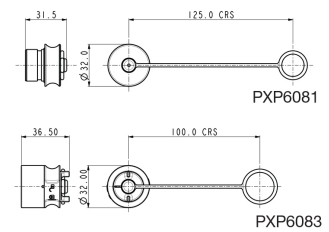
| Part No. | Description |
|----------|---------------------------------------|
| 14193 | USB 'A' type to 5 way crimp connector |
| 14194 | USB 'B' type to 5 way crimp connector |
| 14191 | 5 way PCB header straight |
| 14192 | 5 way PCB header right angle |

Sealing Caps



PXP6083 & PXP6081

- Sealing caps to maintain IP rating when connectors are not in use
- PXP6081 for cable connectors PXP6040 & PXP6041
- PXP6083 for front panel mount connectors PXP6042 & PXP6043, with 30° twist lock



| Part No. | Description |
|----------|---|
| PXP6081 | Sealing Cap for Flex cable connectors (PXP6040, PXP6041) |
| PXP6083 | Sealing Cap for front panel mounting connector (PXP6042, PXP6043) |



| PXP | 6XXX | X or XX | XXXX |
|----------------------------------|--|---|--|
| <p>Series Designation</p> | <p>Series / Body Style</p> <p>040 = Single ended cable 041 = Double ended cable 042 = Panel with adaptor 043 = Panel with lead</p> | <p>Characteristics</p> <p>A = 'A' type sealed interface B = 'B' type sealed interface AB = 'A' & 'B' type sealed interface (for use with 6041 only)</p> | <p>Cable length</p> <p>2M00 = 2 metre cable length (for use with 6040 and 6041 cables only) 3M00 = 3 metre cable length (for use with 6040 and 6041 cables only) 5M00 = 5 metre cable length (for use with 6040 and 6041 cables only) Blank for 6042 & 6043 panel bodies</p> |

Examples

PXP6040/A/2M00 = Cable assembly with sealed 'A' type connector to unsealed 'B' type connector, 2 metres long

PXP6042/A = Panel mounted adapter with sealed 'A' type to unsealed 'B' type at rear

BUCCANEER FOR DATA
6000 Series - USB Buccaneer

USB Thermo Plastic - Specifications



Cables & connectors

Mechanical

| | |
|-----------------------|--|
| Sealing | IP69K, DIN40050-9 IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks) IP66, EN60529:1992+A2:2013 |
| Salt Mist | EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1 |
| Operating temperature | 0°C to +70°C |

Electrical

| | |
|--------------------|-----------------|
| No. of Contacts | 4 |
| Current rating | 1A |
| Voltage rating | 30V AC (RMS) |
| Contact resistance | 30mΩ max. |
| Performance | USB version 2.0 |

Materials - Overmoulded

| | |
|---------------------|-------------|
| Overmould material | PVC (black) |
| Flammability rating | UL94V-0 |

Materials - Re-wireable and Panel Connectors

| | |
|-----------------------|-------------------------------|
| Plastic | PC/PBT |
| Metal | Machined Brass, Nickel Plated |
| Flammability rating | UL94V-0 |
| 'O' rings | Silicone |
| Panel Gasket - round | Silicone |
| Panel Gasket - flange | Silicone |

Materials - cable

| | |
|--------------|---------------------|
| Cable Jacket | PVC (black) |
| Screen | Tinned copper braid |
| Flammability | UL94V-0 |
| RoHS | Compliant |

| Length: | Dia | Conductors | |
|---------|-------|------------|-----------|
| | | Signal | Power |
| 2m | 4.8mm | 2 x 28AWG | 2 x 24AWG |
| 3m | 5.0mm | 2 x 28AWG | 2 x 22AWG |
| 5m | 5.2mm | 2 x 28AWG | 2 x 20AWG |

PCB adaptor leads

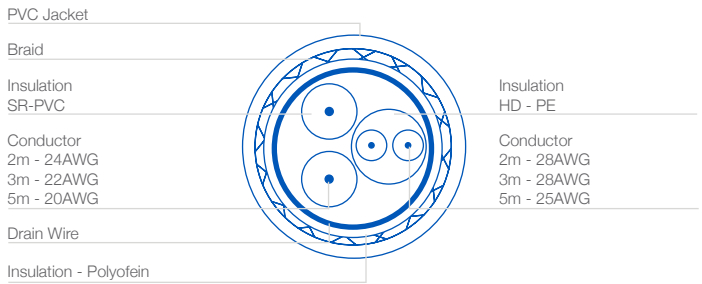
Electrical

| | |
|--------------------|--------------|
| No. of conductors | 4 |
| Current rating | 1A |
| Voltage rating | 30V AC (RMS) |
| Contact resistance | <10mΩ max. |
| PCB pitch | 2.54mm |

Materials

| | |
|-----------------------|--------------------|
| Moulding | Polycarbonate |
| Flammability | UL94V-0 |
| Contact material | Copper Alloy |
| Contact plating | 30 micro inch Gold |
| Wire insulation | PVC (black) |
| Flammability | UL94-V0 |
| Conductors | 4 x 28AWG |
| Operating temperature | 0°C to +70°C |
| Mating cycles | 1,000 |
| RoHS | Compliant |

Cable construction - PXP6040, PXP6041



BUCCANEER FOR DATA
6000 Series - Ethernet Buccaneer

Thermo-plastic version

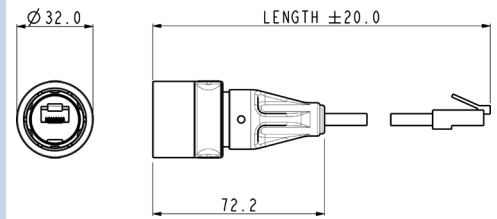


Patch Cord Flex Connector - Pur Jacket Cable



PXP6037

- Mates with PXP6033TP type panel mounting connectors
- 30° twist locking
- Overmoulded patchcords with IP rated connector
- Supplied with shielded RJ45 plug
- Single or double end terminated
- Standard lengths: 2m, 3m & 5m
- S-FTP cable construction
- PUR jacket cable
- Wiring configuration to 568-B
- Exceeds EIA/TIA Cat 5e



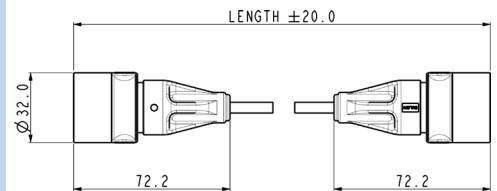
| Part no | Type | Length | Description |
|--------------|--------------|--------|----------------------------------|
| PXP6037/2M00 | Single ended | 2m | IP RJ Buccaneer to Shielded RJ45 |
| PXP6037/3M00 | Single ended | 3m | IP RJ Buccaneer to Shielded RJ45 |
| PXP6037/5M00 | Single ended | 5m | IP RJ Buccaneer to Shielded RJ45 |

Patch Cord Flex Connector - Pur Jacket Cable



PXP6038

- Mates with PXP6033TP type panel mounting connectors
- 30° twist locking
- Overmoulded patchcords with IP rated connector
- Supplied with shielded RJ45 plug
- Single or double end terminated
- Standard lengths: 2m, 3m & 5m
- S-FTP cable construction
- PUR jacket cable
- Wiring configuration to 568-B
- Exceeds EIA/TIA Cat 5e



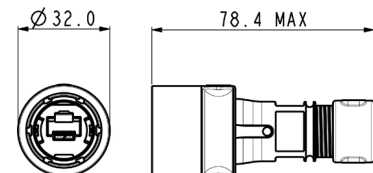
| Part no | Type | Length | Description |
|--------------|--------------|--------|--------------------------------------|
| PXP6038/2M00 | Double ended | 2m | IP RJ Buccaneer to IP68 RJ Buccaneer |
| PXP6038/3M00 | Double ended | 3m | IP RJ Buccaneer to IP68 RJ Buccaneer |
| PXP6038/5M00 | Double ended | 5m | IP RJ Buccaneer to IP68 RJ Buccaneer |

Rewireable Flex Connector



PXP6034

- Mates with PXP6033TP type panel mounting connectors
- 30° twist locking
- Supplied with shielded RJ45 plug
- Two versions:
for PUR jacket cable (Cat 5e)
for other cable sizes from
4.0 to 10.0mm dia.



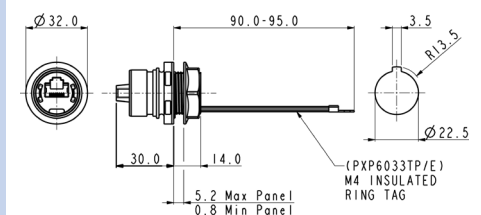
| Part no | Description |
|------------------------|--|
| PXP6034/A PXP6034/B | Cable glands optimised for PUR jacket cable to maintain Cat 5e performance Suitable for use with cables from 4.0 to 10.0mm diameter |

Front Panel Mounting Connector



PXP6033TP

- Sealed through panel
- Cat 5e shielded coupler
- Mates with all plastic flex connectors
- Standard RJ45 patchcord can be plugged into rear
- Version with earth wire available
- Single hole fixing
- Complete with panel sealing gasket



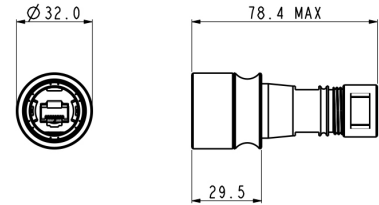
| Part no | Description | Fixing |
|-------------|-----------------------------|--|
| PXP6033TP | Cat 5e coupler | Front panel mounted - sealed through panel |
| PXP6033TP/E | Cat 5e coupler + earth wire | Front panel mounted - sealed through panel |

Re-wireable Flex Connector



PXM6034

- Mates with PXM6033TP type panel mounting connectors
- 30° twist locking
- Supplied with shielded RJ45 plug
- Two versions:
for PUR jacket cable (Cat 5e)
for other cable sizes from 4.0 to 10.0mm dia.



Part no

Description

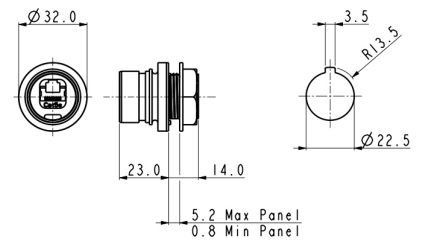
| | |
|-----------|--|
| PXM6034/A | Cable glands optimised for PUR jacket cable to maintain Cat 5e performance |
| PXM6034/B | Suitable for use with cables from 4.0 to 10.0mm diameter |

Front Panel Mounting Connector



PXM6033

- Sealed through panel
- Cat 5e shielded coupler
- Mates with PXM6034 type flex connectors
- Standard RJ45 patchcord can be plugged into rear
- Connector shell ground to cable screen
- Single hole fixing
- Complete with panel sealing gasket



Part no

Description

Fixing

| | | |
|-----------|----------------|--|
| PXM6033TP | Cat 5e coupler | Front panel mounted - sealed through panel |
|-----------|----------------|--|

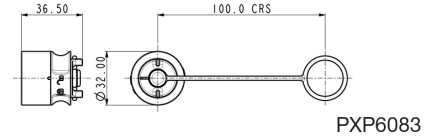
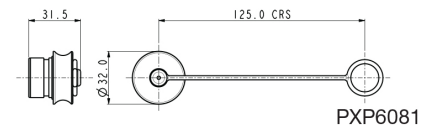
Sealing Caps



PXP6083 & PXP6081

- Plastic connectors
- PXP6081 for cable connectors
 - PXP6034, PXP6037 & PXP6038
 - PXP6083 for front panel mount connectors PXP6033, with 30° twist lock

Sealing caps to maintain IP rating when connectors are not in use



Part no

Description

| | |
|---------|--|
| PXP6081 | Sealing Cap for plastic Flex cable connectors |
| PXP6083 | Sealing Cap for plastic front panel mounting connector |

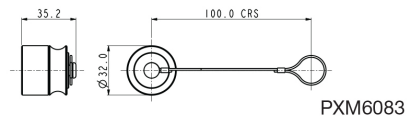
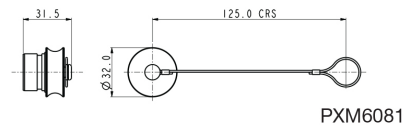
Sealing Caps



PXM6083 & PXM6081

- Metal connectors
- PXM6081 for cable connectors
 - PXM6034
 - PXM6083 for front panel mount connectors

Sealing caps to maintain IP rating when connectors are not in use



Part no

Description

| | |
|---------|--|
| PXM6081 | Sealing Cap for metal Flex cable connectors |
| PXM6083 | Sealing Cap for metal front panel mounting connector |
| 14151 | Hand crimp tooling + die set |
| 14199 | PUR Jacket cable - 50m reel |
| 14150 | Replacement shielded RJ45 |



Series Designation

PXP - Plastic
 PXM - Metal

Series / Body Style

033 = Panel
 034 = Re-wireable Flex
 037 = Patchcord
 (Single Ended)
 038 = Patchcord
 (Double Ended)

Panel Sealing

TP = through panel sealing (for use
 with PXP6033 panel body only)

 Blank = not applicable

Characteristics

E = Earth lead (for use with PXP6033 plastic panel body only)
 A = Glanding for PUR cable (for use with PXP6034 re-wireable flex only)
 B = Glanding for 3.5 to 8mm cables (for use with PXP6034 re-wireable flex only)
 2M00 = 2 metre cable length (for use with PXP6037 and PXP6038 patchcords only)
 3M00 = 3 metre cable length (for use with PXP6037 and PXP6038 patchcords only)
 5M00 = 5 metre cable length (for use with PXP6037 and PXP6038 patchcords only)

Examples

PXP6033TP/E= Panel mounted coupler, sealed through panel with earth lead

PXP6037/2M00= Patchcord with one sealed end, 2 metres long

PXM6034/A = Flex re-wireable connector for use with PUR cable

PXM6033TP = Panel mounted coupler, through panel sealed

BUCCANEER FOR DATA

6000 Series - Ethernet Buccaneer

Metal and Thermo Plastic - Specifications



Ethernet – Metal and Thermo-plastic versions

Connectors

Mechanical

| | |
|---------|--|
| Sealing | IP69K, DIN40050-9 IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks) IP66, EN60529:1992+A2:2013 |
|---------|--|

| | |
|------------|--|
| Salt Mist: | EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1 |
|------------|--|

| | |
|------------------------|----------------|
| Operating Temperature | |
| Re-wireable and Metal | -20°C to +70°C |
| Overmoulded patchcords | 0°C to +70°C |

Materials - Overmoulded

| | |
|---------------------|-------------|
| Overmould material | PVC (black) |
| Flammability rating | UL94V-0 |

Materials - Re-wireable and Panel Connectors

| | |
|-----------------------|-------------------------------|
| Plastic | PC/PBT |
| Metal | Machined Brass, Nickel Plated |
| Flammability rating | UL94V-0 |
| 'O' rings | Silicone |
| Panel Gasket - round | Silicone |
| Panel Gasket - flange | Silicone |
| Approvals | |

| | |
|------|-----------|
| RoHS | Compliant |
|------|-----------|

Stranded S-FTP Patch cord cable - PUR Jacket

Polyurethane (PUR) jacket cable with internal construction exceeding Cat 5e performance levels. The PUR jacket has excellent abrasion, chemical and ozone resistance, low smoke, low halogen flame retardant construction suitable for internal and external industrial environments.

Cable

| | |
|------------------|---|
| Conductors | 24AWG (7/0.2mm) bare copper |
| Insulation | HD-PE |
| Pair | 2 of the above cores twisted |
| Core | 4 of the above cores |
| Tape | 1 lap mylar tape |
| Screen | 1 layer mylar and aluminium tape, 0.12mm tinned copper braid |
| Sheath | PUR Jacket Black |
| Op Temperature | -25°C to +85°C |
| Min. bend radius | 10 x O/D (installation) |
| Min. bend radius | 6 x O/D (installed) |
| Diameter | 6.1mm nominal |

Electrical @ 20°C

| | |
|---------------------------|-----------------------|
| Characteristic Impedance | 100Ω ±15Ω @ 100MHz |
| Capacitance | 330pF/km |
| Conductor Loop resistance | 29Ω/100m maximum |
| Skew | 45 nsec/100m @ 100MHz |
| TIA/EIA Rating | Cat 5e & POE |

Cable construction - PXP6037, PXP6038 and 14199

PCB adaptor leads

Electrical

| | |
|--------------------|------------|
| No. of conductors | 4 |
| Current rating | 350mA |
| Voltage rating | 37V - 57V |
| Contact resistance | <10mΩ max. |
| PCB pitch | 2.54mm |

Materials

| | |
|-----------------------|--------------------|
| Moulding | Polycarbonate |
| Flammability | UL94V-0 |
| Contact material | Copper Alloy |
| Contact plating | 30 micro inch Gold |
| Wire insulation | PVC (black) |
| Flammability | UL94-V0 |
| Conductors | 4 x 28AWG |
| Operating temperature | 0°C to +70°C |
| Mating cycles | 1,000 |
| RoHS | Compliant |

Cable construction - PXP6040, PXP6041

| | | |
|--------------------------------|--|---------------------|
| 24 AWG - 7/0.20mm conductor | | Mylar tape |
| Braiding 7/0.12mm | | Insulation - HD-PE |
| Jacket 6.10mm dia. | | Aluminium/PEPT tape |
| | | Drain Wire |