# 6000 Series - USB Buccaneer



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.

- O 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 testsIP 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



# 6000 Series - USB Buccaneer

USB Thermo Plastic



Sealed USB Cables - Single Ended

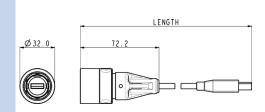


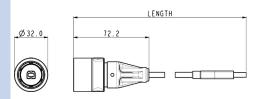
PXP6040/A



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
- O Available in 2m, 3m & 5m lengths





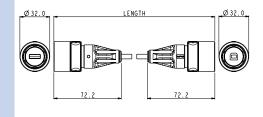
Part no	Length	Description	
PXP6040/A/2M00	2m	IP rated A type USB to standard B type USB	
PXP6040/A/3M00	3m	IP rated A type USB to standard B type USB	
PXP6040/A/5M00	5m	IP rated A type USB to standard B type USB	
PXP6040/B/2M00	2m	IP rated B type USB to standard A type USB	
PXP6040/B/3M00	3m	IP rated 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 PXP6041/AB/3M00 PXP6041/AB/5M00	2m 3m 5m	IP rated A type USB to IP rated B type USB IP rated A type USB to IP rated B type USB IP rated A type USB to IP rated B type USB

# 6000 Series - USB Buccaneer

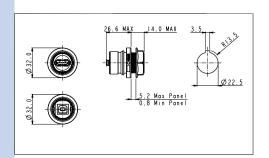
USB Thermo Plastic



Front Panel Mounting Connector



- 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

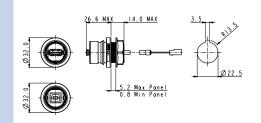
PXP6042/A PXP6042/B IP rated A type USB, front panel mounted. Sealed A type at front of panel, standard B type at rear. IP rated B type USB, front panel mounted. Sealed B type at front of panel, standard A type at rear.

Front Panel Mounting Connector



PXP6043/B PXP6043/A

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

# 6000 Series - USB Buccaneer

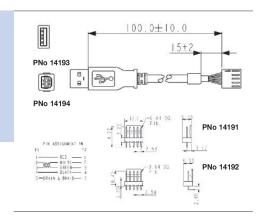
Accessories





- 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

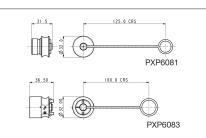






PXP6083 & PXP6081

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

# BUCCANEER FOR DATA 6000 Series - USB Buccaneer

USB Thermo Plastic - Part No System



PXP	/ 6XXX	/ X or XX /	XXXX
Series Designation	Series / Body Style  040 = Single ended cable 041 = Double ended cable 042 = Panel with adaptor 043 = Panel with lead	Characteristics  A = 'A' type sealed interface B = 'B' type sealed interface AB = 'A' & 'B' type sealed interface (for use with 6041 only)	Cable length  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

### **Examples**

 $\label{eq:pxpequal} PXP6040/A/2M00 = Cable \ assembly \ with \ sealed \ 'A' \ type \ connector \ to \ unsealed \ 'B' \ type \ connector, 2 \ metres \ long$ 

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

# 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 30m $\Omega$  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
'O' rings
Panel Gasket - round
Panel Gasket - flange
UL94V-0
Silicone
Silicone

Materials - cable

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

RoHS Compliant

 Length:
 Dia
 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

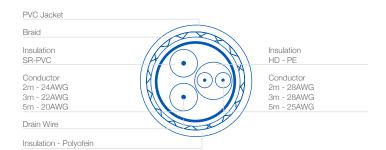
No. of conductors 4 Current rating 1A

 $\begin{array}{ll} \mbox{Voltage rating} & \mbox{30V AC (RMS)} \\ \mbox{Contact resistance} & \mbox{<10m}\Omega\mbox{ max.} \\ \mbox{PCB pitch} & \mbox{2.54mm} \end{array}$ 

Materials

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

### Cable construction - PXP6040, PXP6041



# 6000 Series - Ethernet Buccaneer

PXP6037



Patch Cord Flex Connector - Pur Jacket Cable



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



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

Patch Cord Flex Connector - Pur Jacket Cable



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

	LENGTH ±20.0
Ø 32.0	
	72.2

Part no	Туре	Length	Description	

PXP6038/2M00 Double ended 2m IP RJ Buccaneer to IP68 RJ Buccaneer IP RJ Buccaneer to IP68 RJ Buccaneer Double ended PXP6038/3M00 3m PXP6038/5M00 Double ended IP RJ Buccaneer to IP68 RJ Buccaneer

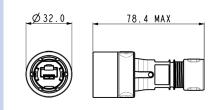
Rewireable Flex Connector



PXP6034

PXP6038

- Mates with PXP6033TP type panel mounting connectors
- 30° twist locking
- Supplied with shielded RJ45  $\bigcirc$ 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



- Sealed through panel
- O Cat 5e shielded coupler
- Mates with all plastic flex connectors
- Standard RJ45 patchcord can 0 be plugged into rear
- Version with earth wire available
- Single hole fixing
- Complete with panel sealing gasket

Ø 32.0 90.0-95.0

### PXP6033TP

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

# 6000 Series - Ethernet Buccaneer

Metal versior



Re-wireable Flex Connector

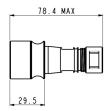


 Mates with PXM6033TP type panel mounting connectors

○ 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.





PXM6034

Part no	Description
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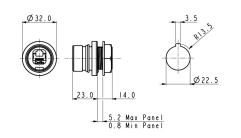
PXM6034/A PXM6034/B Cable glands optimised for PUR jacket cable to maintain Cat 5e performance Suitable for use with cables from 4.0 to 10.0mm diameter

Front Panel Mounting Connector



PXM6033

- Sealed through panel
- O 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
- O Complete with panel sealing gasket



Part no Description Fixing

PXM6033TP

Cat 5e coupler

Front panel mounted - sealed through panel

# 6000 Series - Ethernet Buccaneer



Sealing Caps

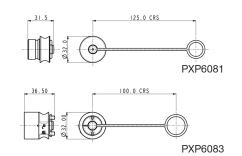


PXP6083 & PXP6081

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

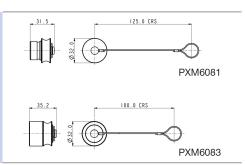
PXP6081 Sealing Cap for plastic Flex cable connectors PXP6083 Sealing Cap for plastic front panel mounting connector



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

# 6000 Series - Ethernet Buccaneer



PX X X or XXXX **6XXX** XX

### Series Designation

PXP - Plastic

### 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

 ${\sf PXM6033TP} = {\sf Panel \ mounted \ coupler}, \ {\sf through \ panel \ sealed}$ 

# 6000 Series - Ethernet Buccaneer



### **Ethernet - Metal and Thermo-plastic versions**

#### **Connectors**

Mechanical

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.

Conductors 24AWG (7/0.2mm) bare copper HD-PE

Insulation

2 of the above cores twisted Pair Core 4 of the above cores Tape 1 lap mylar tape

1 layer mylar and aluminium tape, Screen 0.12mm tinned copper braid

Sheath PUR Jacket Black Op Temperature -25°C to +85°C 10 x O/D (installation) Min. bend radius Min, bend radius 6 x O/D (installed) Diameter 6.1mm nominal

### Electrical @ 20°C

Characteristic

100Ω ±15Ω @ 100MHz Impedance

330pF/km Capacitance Conductor Loop

29Ω/100m maximum resistance 45 nsec/100m @ 100MHz Skew

TIA/EIA Rating Cat 5e & POE

Cable construction - PXP6037, PXP6038 and 14199

### **PCB** adaptor leads

Electrical

No. of conductors 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

