6000 Series Buccaneer®

bulgin
a brand of Elektron Technology

Robust, instant connections for harsh environments

IP66
IP68
IP69K

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 Ethernet and USB data interfaces.

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 Data — USB
THERMO-PLASTIC VERSION

Overmoulded Assembly

Push/Pull Coupling Ring

O' Ring Seal

USB Adaptor

Standard USB Connector

Panel Gasket

Retaining Nut

● **Push-pull coupling latching system***	Secure, instant latching. Quick connector mating and release
● **30˚ twist locking***	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, 1.5Mbs to 480Mbs
● **Plug and play capability**	Hot pluggable, standard 4 pole interface
● **Shielded system**	High noise immunity and EMI protection
● **Visual mating indication**	Alignment indicator reduces risk of damage during mating
● **Single and double ended cables**	Suitable for PC and peripheral configuration

*patent applied for

6000 Series Buccaneer®

USB – Thermo-plastic version

### SEALED USB CABLES - SINGLE ENDED

PXP6040/A
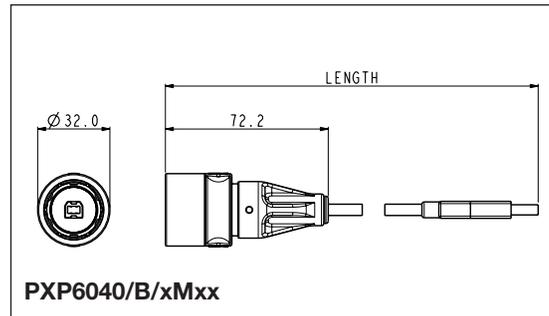

PXP6040/B

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 and 5m lengths
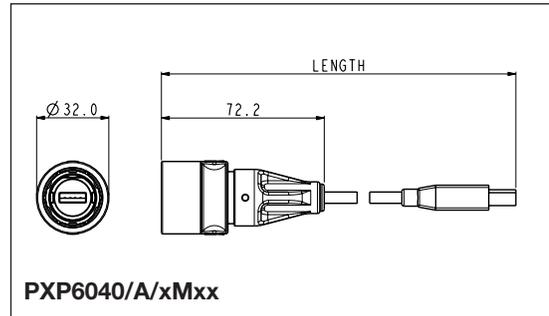
PXP6040/A/xMxx

PXP6040/B/xMxx

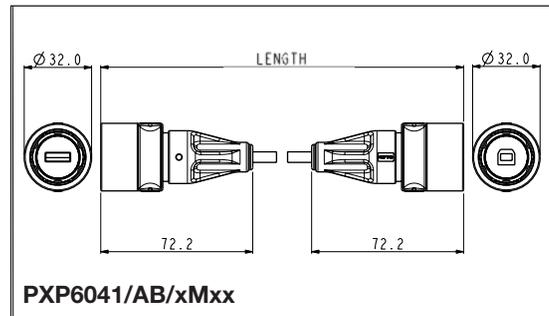| Part No.	Length	Description
PXP6040/A/2M00	2m	IP rated A type USB to standard B type USB
PXP6040/A/3M00	3m	IP rated A type USB to standard B type USB
PXP6040/A/5M00	5m	IP rated A type USB to standard B type USB
PXP6040/B/2M00	2m	IP rated B type USB to standard A type USB
PXP6040/B/3M00	3m	IP rated 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 and 5m lengths

PXP6041/AB/xMxx

| Part No.	Length	Description
PXP6041/AB/2M00	2m	IP rated A type USB to IP68 B type USB
PXP6041/AB/3M00	3m	IP rated A type USB to IP68 B type USB
PXP6041/AB/5M00	5m	IP rated A type USB to IP68 B type USB

6000 Series Buccaneer®

USB – Thermo-plastic version

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
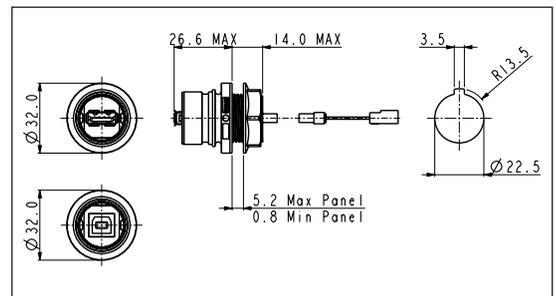- Mates with PXP6040 and PXP6041 cable connectors
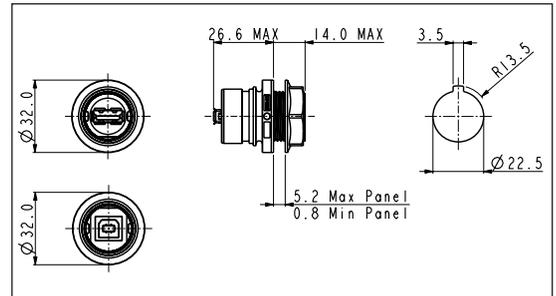
Part No.	Description
PXP6042/A	IP rated A type USB, front panel mounted. Sealed A type at front of panel, standard B type at rear.
PXP6042/B	IP rated B type USB, front panel mounted. Sealed B type at front of panel, standard A type at rear.

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

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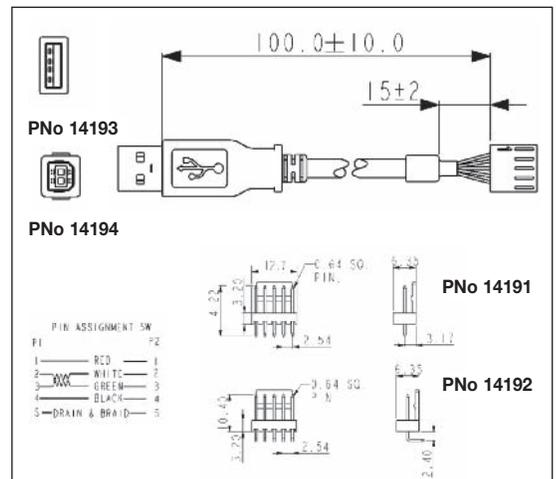
Part No.	Description
14193	USB 'A' type to 5 way crimp connector
14194	USB 'B' type to 5 way crimp connector
14191	5 way PCB header straight
14192	5 way PCB header right angle

ACCESSORIES

- 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
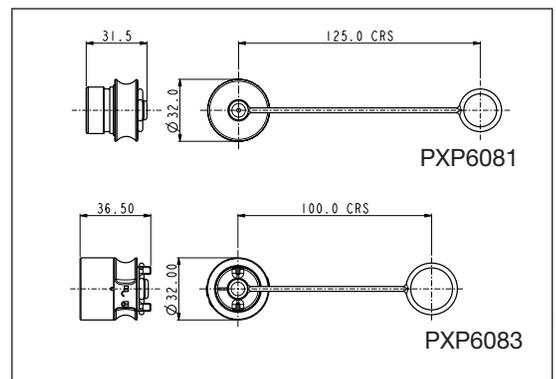
PXP6081

PXP6083

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

6000 Series Buccaneer®

USB – Thermo-plastic version

PART NO SYSTEM

PXP / xxxx / x / xxxx

Plastic Connector Designation

Series
6 = 6000 Series

Body Styles
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:

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 Buccaneer®

USB – Thermo-plastic version

SPECIFICATION

Cables & connectors

Mechanical

Sealing	IP69K, DIN40050-9
	IP68, EN60529
	IP66, EN60529
Operating temperature	0℃ to +70℃

Electrical

No. of poles	4
Current rating	1A
Voltage rating	30Vac (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	Silicon
Panel Gasket - round	Silicon
Panel Gasket - flange	Silicon

Materials - cable

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

Length:	Dia	Conductors Signal	Conductors Power
2m	4.8mm	2 x 28AWG	2 x 24AWG
3m	5.0mm	2 x 28AWG	2 x 22AWG
5m	5.2mm	2 x 25AWG	2 x 20AWG

PCB adaptor leads

Electrical

No. of conductors	4
Current rating	1A
Voltage rating	30Vac (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℃ to +70℃
Mating cycles	1,000
RoHS	Compliant

Cable construction - PXP6040, PXP6041