# BUCCANEER FOR DATA Standard Buccaneer - USB





- IP68 when mated, tested in accordance with EN60529:1992+A2:2013
- IP69K when mated, tested in accordance with DIN 40050/Part 9 IP6k9k
- 0 EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity
- USB version 2.0 and 3.0 performance Ó
- Shielded system 0
- Single and double ended cables O
- 0 Screw coupling
- PCB mounted panel connector

- High-speed bus connection, USB 2.0: up to 480Mbps USB 3.0: up to 5Gbps
- Hot pluggable, USB 2.0 with 4 contact interface, USB 3.0 with 9 contact interface
- Alignment indicator reduces risk of damage during mating
- High noise immunity and EMI protection Ó
- Suitable for PC and peripheral configuration 0
- Secure, proven locking system Ó
- Direct mounting or via adaptor leads
- Plug and play capability

# BUCCANEER FOR DATA Standard Buccaneer - USB



Sealed USB Cables - Single Ended



PX0840/A

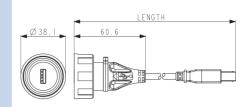


PX0840/B

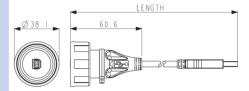


PX0840/AA

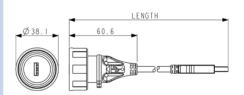
- Single ended sealed cable assembly
- IP68 'A' type USB 2.0 connector to standard 'A' or 'B' type USB 2.0 connector
- IP68 'B' type USB 2.0 connector to standard 'A' type USB 2.0 connector
- IP68 'A' type USB 3.0 connector to standard USB 3.0 'A' type connector
- Mates with all panel mount connectors
- USB 2.0 variants available in 2m, 3m & 5m lengths
- USB 3.0 variants available in 1m, 2m & 3m lengths



PX0840/A/xMxx



PX0840/B/xMxx



PX0840/AA/xMxx

| Part no.       | Length | Description                                    |
|----------------|--------|--|
| PX0840/A/2M00  | 2m     | IP68 A type USB 2.0 to standard B type USB 2.0 |
| PX0840/A/3M00  | 3m     | IP68 A type USB 2.0 to standard B type USB 2.0 |
| PX0840/A/5M00  | 5m     | IP68 A type USB 2.0 to standard B type USB 2.0 |
| PX0840/B/2M00  | 2m     | IP68 B type USB 2.0 to standard A type USB 2.0 |
| PX0840/B/3M00  | 3m     | IP68 B type USB 2.0 to standard A type USB 2.0 |
| PX0840/B/5M00  | 5m     | IP68 B type USB 2.0 to standard A type USB 2.0 |
| PX0840/AA/2M00 | 2m     | IP68 A type USB 2.0 to standard A type USB 2.0 |
| PX0840/AA/3M00 | 3m     | IP68 A type USB 2.0 to standard A type USB 2.0 |
| PX0840/AA/5M00 | 5m     | IP68 A type USB 2.0 to standard A type USB 2.0 |
| PX0840/A3/1M00 | 1m     | IP68 A type USB 3.0 to standard A type USB 3.0 |
| PX0840/A3/2M00 | 2m     | IP68 A type USB 3.0 to standard A type USB 3.0 |
| PX0840/A3/3M00 | 3m     | IP68 A type USB 3.0 to standard A type USB 3.0 |

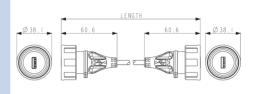


Sealed USB Cables Double Ended

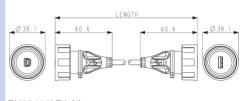




- Double ended sealed cable assembly
- IP68 'A' type USB 2.0 connector to IP68 'A' or 'B' type USB 2.0 connector
- IP68 'A' type USB 3.0 connector to IP68 'A' type USB 3.0 connector
- Mates with all panel mount connectors
- USB 2.0 variants available in 2m, 3m & 5m lengths
- USB 3.0 variants available in 1m, 2m & 5m lengths



PX0841/AA/xMxx



PX0841/AB/xMxx

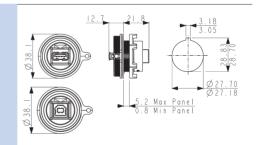
| Part no.       | Length | Description                                |
|----------------|--------|--|
| PX0841/AB/2M00 | 2m     | IP68 A type USB 2.0 to IP68 B type USB 2.0 |
| PX0841/AB/3M00 | 3m     | IP68 A type USB 2.0 to IP68 B type USB 2.0 |
| PX0841/AB/5M00 | 5m     | IP68 A type USB 2.0 to IP68 B type USB 2.0 |
| PX0841/AA/2M00 | 2m     | IP68 A type USB 2.0 to IP68 A type USB 2.0 |
| PX0841/AA/3M00 | 3m     | IP68 A type USB 2.0 to IP68 A type USB 2.0 |
| PX0841/AA/5M00 | 5m     | IP68 A type USB 2.0 to IP68 A type USB 2.0 |
| PX0841/A3/1M00 | 1m     | IP68 A type USB 3.0 to IP68 A type USB 3.0 |
| PX0841/A3/2M00 | 2m     | IP68 A type USB 3.0 to IP68 A type USB 3.0 |
| PX0841/A3/3M00 | 3m     | IP68 A type USB 3.0 to IP68 A type USB 3.0 |

Front Panel Mounting Connector



PX0842/A

- PX0842/A USB 2.0 'A' type IP68 to USB 2.0 'B' type connector
- PX0842/AA USB 2.0 'A' type IP68 to USB 2.0 'A' type connector
- PX0842/A3 USB 3.0 'A' type IP68 connector to USB 3.0 'A' type
- PX0842/B USB 2.0 'B' type IP68 to USB 2.0 'A' type connector
- Mates with PX0840 and PX0841 cable connectors



## Part no.

## **Description**

PX0842/A PX0842/B PX0842/AA PX0842/A3

IP68 A type USB 2.0, front panel mounted. Sealed A type at front of panel, standard B type at rear IP68 B type USB 2.0, front panel mounted. Sealed B type at front of panel, standard A type at rear IP68 A type USB 2.0, front panel mounted. Sealed A type at front of panel, standard A type at rear IP68 A type USB 3.0, front panel mounted. Sealed A type at front of panel, standard A type at rear

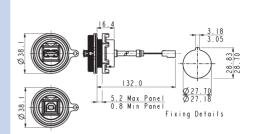


Front Panel Mounting Connector



PX0843/A

- PX0843/A USB 2.0 'A' type IP68 connector with 5-way crimp connector
- PX0843/B USB 2.0 'B' type IP68 connector with 5-way crimp connector
- PX0843/A3 USB 3.0 'A' type IP68 connector with 10-way crimp connector
- Mates with PX0840 and PX0841 cable connectors



#### Part no.

## Description

PX0843/A PX0843/B PX0843/A3 PX0460/A PX0460/B PX0460/A3 IP68 A type USB 2.0, front panel mounted. Sealed A type at front of panel, 5 way crimp connector at rear. IP68 B type USB 2.0, front panel mounted. Sealed B type at front of panel, 5 way crimp connector at rear. IP68 A type USB 3.0, front panel mounted. Sealed A type at front of panel, 10-way crimp connector at rear As PX0843/A with exposed braid for use with PX0465 screening can As PX0843/B with exposed braid for use with PX0465 screening can

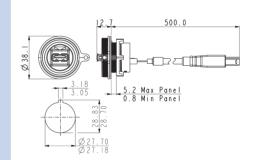
Front Panel Mounting Connector





PX0844/A

- IP68 Sealed through panel
- PX0844/A USB 2.0 'A' type IP68 connector
- PX0844/B USB 2.0 'B' type IP68 connector
- PX0844/A3 USB 3.0 'A' type IP68 connector
- Standard USB interface plug options to rear of panel
- 0.5m standard cable length, other lengths available
- Mates with PX0840 and PX0841 cable connectors



#### Part no. Length Description

| PX0844/A/0M50/A<br>PX0844/A/0M50/B | 0.5m<br>0.5m | IP68 A type USB 2.0, sealed through panel, Sealed 'A' type at front of panel, standard 'A' type at rear IP68 A type USB 2.0, sealed through panel, Sealed 'A' type at front of panel, standard 'B' type at rear |
|------------------------------------|--------------|---|
| PX0844/B/0M50/A                    | 0.5m         | IP68 B type USB 2.0, sealed through panel, Sealed 'B' type at front of panel, standard 'A' type at rear   |
| PX0844/B/0M50/B                    | 0.5m         | IP68 B type USB 2.0, sealed through panel, Sealed 'B' type at front of panel, standard 'B' type at rear   |
| PX0844/A3/0M50/A3                  | 0.5m         | IP68 B type USB 3.0, sealed through panel, Sealed 'A' type at front of panel, standard 'A' type at rear   |

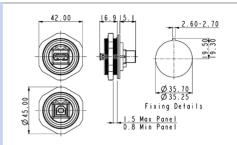


Rear Panel Mounting Connector



PX0848/A

- PX0848/A USB 2.0 'A' type IP68 to USB 2.0 'B' type connector
- PX0848/B USB 2.0 'B' type IP68 to USB 2.0 'A' type connector
- PX0848/A3 USB 3.0 'A' type IP68 to USB 3.0 'A' type connector
- Mates with PX0840 and PX0841 cable connectors



#### **Description** Part no.

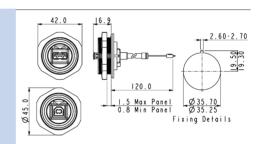
PX0848/A IP68 A type USB 2.0, rear panel mounted. Sealed A type at front of panel, standard B type at rear PX0848/B IP68 B type USB 2.0, rear panel mounted. Sealed B type at front of panel, standard A type at rear IP68 A type USB 2.0, rear panel mounted. Sealed A type at front of panel, standard A type at rear PX0848/AA PX0848/A3 IP68 A type USB 3.0, rear panel mounted. Sealed A type at front of panel, standard A type at rear

Rear Panel Mounting Connector



PX0849/A

- PX0849/A USB 2.0 'A' type IP68 connector with 5-way crimp connector
- PX0849/B USB 2.0 'B' type IP68 connector with 5-way crimp connector
- PX0849/A3 USB 3.0 'B' type IP68 connector with 10-way crimp connector
- Mates with PX0840 and PX0841 cable connectors



#### Part no. **Description**

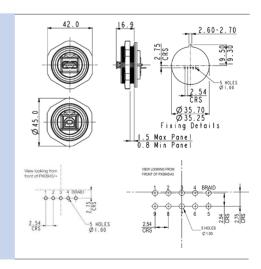
PX0849/A PX0849/B PX0849/A3 IP68 A type USB 2.0, rear panel mounted. Sealed A type at front of panel, 5-way header at rear IP68 B type USB 2.0, rear panel mounted. Sealed B type at front of panel, 5-way header at rear IP68 A type USB 3.0, rear panel mounted. Sealed A type at front of panel, 10-way header at rear

PCB Panel Mounting Connector- PCB Dlrect Mount



PX0845/A

- PX0845/A USB 2.0 'A' type IP68 connector
- PX0845/B USB 2.0 'B' type IP68 connector
- PX0845/A3 USB 3.0 'A' type IP68 connector
- PCB contacts at rear
- Direct PCB mount
- Mates with PX0840 and PX0841 cable connectors



#### **Description** Part no.

PX0845/A PX0845/B PX0845/A3

IP68 A type USB 2.0, rear panel mounted. Sealed A type at front of panel, direct mount PCB contacts at rear IP68 A type USB 2.0, rear panel mounted. Sealed A type at front of panel, direct mount PCB contacts at rear IP68 A type USB 3.0, rear panel mounted. Sealed A type at front of panel, direct mount PCB contacts at rear

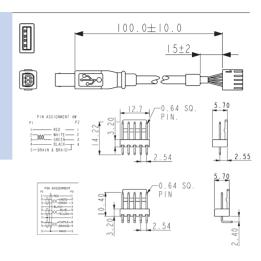
Accessories



## PCB Adaptor Leads



- Standard A and B type USB 2.0 connectors to 5-way crimp adaptor
- 5 way-headers, 2.54mm pitch, horizontal or vertical mounting
- Standard A type USB 3.0 to 10-way crimp adaptor leads



#### Part no. **Description** LISP 2 0 'A' type to 5 way crimr

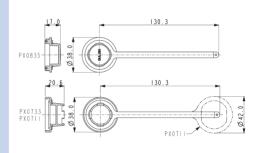
| 14193  | USB 2.0 'A' type to 5-way crimp connector  |
|--------|--|
| 14194  | USB 2.0 'B' type to 5-way crimp connector  |
|        | 71 7 1                                     |
| 100286 | USB 3.0 'A' type to 10-way crimp connector |
| 14191  | 5-way PCB header straight                  |
| 14192  | 5-way PCB header right angle               |
| 100287 | 10-way PCB header straight                 |
| 100288 | 10-way PCB header right angle              |
|        |  |

#### Accessories



- O Sealing caps to maintain IP68 rating when connectors are not in use
- PX0835 for cable connectors PX0840 & PX0841

- PX0733 for front panel mount connectors PX0842, PX0843 & PX0844
- PX0711 for rear panel mount connectors PX0848, PX0849 & PX0845



#### **Description** Part no.

PX0835 Sealing Cap for cable connectors (PX0840, PX0841) Sealing Cap for front panel mounting connector (PX0842, PX0843 & PX0844) PX0733

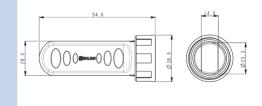
PX0711 Sealing Cap for rear panel mounting connector (PX0848, PX0849, PX0845)

USB Flash Drive Cover



PX0852

- For use with USB Flash Drives
- Maintains IP68 rating when mated with panel connector
- For use with 'A' type connectors: PX0842, PX0843, PX0845, PX0848 & PX0849
- Internal accommodation 17.5 x 14.0 x 83mm approx.

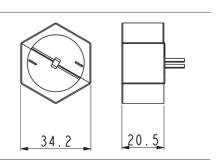


### Screening Can



PX0465

- Maintains cable screening directly to panel
- Screening can clips around the panel fixing nut
- For use on PX0460/A, PX0460/B and PX0360/A3



USB 2.0 Specifications



#### Cables & connectors

MechanicalIP68, EN60529:1992+A2:2013Sealing(10m depth for 2 weeks)

IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k

Operating temperature 0°C to +70°C

Salt Mist EN60068-2-52 Test Kb Salt Mist (Cyclic)

Marine Severity Level 1

4

**Electrical**No. of Contacts

Materials - Overmoulded

Overmould material PVC (black) Flammability rating UL94V-0

#### Materials - Re-wireable and Panel Connectors

Shell material Steel
Shell plating Nickel
Contact material Copper Alloy
Contact plating 30 micro inch Gold
Connector body & locking ring
Panel connector Acetal

Panel connector Acetal
Flammability rating UL94 HB
'O' rings Silicone
Panel Gasket - round Silicone
Panel Gasket - square Neoprene
Mating cycles 1,000

Materials - cable

RoHS

5m

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 22AWG
3m 5.0mm 2 x 28AWG 2 x 22AWG

5.2mm 2 x 25AWG

2 x 20AWG

Compliant

#### **PCB** adaptor leads

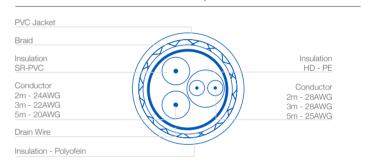
Electrical
No. of conductors 4
Current rating 1A

Voltage rating 30V AC (RMS)
Contact resistance <10m Ω max.
PCB pitch 2.54mm

Materials

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

#### USB 2.0 Cable construction - PX0840, PX0841



### USB 2.0 Contact Diagram - PX0843 & PX0849

| P1               | TYPE | WIRE COLOUR   | P2               |
|------------------|------|---------------|------------------|
| +5V 1            | _    | RED           | 1 +5V            |
| USB- 2<br>USB+ 3 | ∞    | WHITE / BLUE  | 2 USB-<br>3 USB+ |
| GND 4            | —    | BLACK         | 4 GND            |
| 5                | _    | DRAIN & BRAID | 5                |

USB 3.0 Specifications



#### Cables & connectors

Mechanical IP68. EN60529:1992+A2:2013 Sealing (10m depth for 2 weeks)

IP69K, Tested in accordance with DIN

40050/Part 9 IP6k9k

Operating temperature 0°C to +70°C

Salt Mist EN60068-2-52 Test Kb Salt Mist (Cyclic)

Marine Severity Level 1

**Electrical** 

No. of Contacts 9 Current rating 1A

Voltage rating 30V AC (RMS) Contact resistance  $30m\ \Omega\ max.$ Performance USB version 3.0

Materials - Overmoulded

Overmould material PVC (black) Flammability rating UL94V-0

#### Materials - Re-wireable and Panel Connectors

Shell material Steel Shell plating Nickel Contact material Copper Allov Contact plating Gold

Connector body & locking ring Glass Loaded Polyester

Acetal Panel connector Flammability rating UL94 HB 'O' rings Silicone Panel Gasket - round Silicone Panel Gasket - square Neoprene Mating cycles 1,000 RoHS Compliant

Materials - cable

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

RoHS Compliant

Conductors Conductors Length: Dia Signal Power 2 x 24AWG 1m 5.5mm 7 x 28AWG 5.5mm 7 x 28AWG 2 x 24AWG 2m 5.5mm 7 x 28AWG 3m 2 x 24AWG

#### **PCB** adaptor leads

**Electrical** No. of conductors

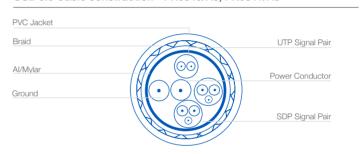
Current rating 1 A Voltage rating

30V AC (RMS) Contact resistance  $30m\ \Omega\ max.$ PCB pitch 2.54mm

Materials

Polycarbonate Moulding Flammability UL94V-0 Contact material Copper Alloy Contact plating Gold Wire insulation PVC (black) UL94-V0 Flammability Conductors 9 x 28AWG 0°C to +70°C Operating temperature Mating cycles 1.000 RoHS Compliant

#### USB 3.0 Cable construction - PX0840/A3, PX0841/A3



### USB 3.0 Contact Diagram - PX0843/A3 & PX0849/A3

| P1               | TYPE | WIRE COLOUR     | P2                 |
|------------------|------|-----------------|--------------------|
| +5V 1            |      | RED             | 1 +5V              |
| USB- 2<br>USB+ 3 | ∞    | WHITE / GREEN   | 2 USB-<br>3 USB+   |
| GND 4            |      | BLACK           | 4 GND              |
| SSTX-5<br>SSTX+6 | ∞    | BLUE / YELLOW   | 5 SSTX-<br>6 SSTX+ |
| GND 7            |      | N/A             | 7 GND              |
| SSRX-8<br>SSRX+9 | ∞    | PURPLE / ORANGE | 8 SSRX-<br>9 SSRX+ |
| s                |      | BRAID           | s                  |
|                  |      | l .             |                    |