4000 C-Type Series USB Buccaneer

Sealed C-Type USB Cables

bulgin

- IP66, IP68 and IP69K rated

- USB V3.1 performance

- Plug and play capability

- Shielded system

- Secure, proven locking system

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

- Data rates up to 10 Gbps

- Tamperproof Construction

- Colour coded O-rings & washers for easy identificaiton purposes

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Sealed C-Type USB Cables

bulgin

- ⬡ Standard 'A' type to sealed 'C' Type
- ⬡ Available in 1m lengths
- ⬡ Plug variant mates with PXP4043/C
- ⬡ Gen 2 ≤ 1m 3.1
- ⬡ Gen 1 > 1m 3.1
- ⬡ See Chart for further details relating to USB speeds.
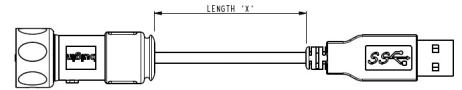
PXP4040/C

Part No.	Length	Description
PXP4040/C/A/1M00	1.0m	IP-sealed 'C-Type' to Std 'A' type USB 3.1 GEN 2
PXP4040/C/A/2M00	2.0m	IP-sealed 'C-Type' to Std 'A' type USB 3.1 GEN 1
PXP4040/C/A/3M00	3.0m	IP-sealed 'C-Type' to Std 'A' type USB 3.1 GEN 1
PXP4040/C/A/5M00	5.0m	IP-sealed 'C-Type' to Std 'A' type USB 3.1 GEN 1

Rear Panel Mount

- ⬡ 'C' type
- ⬡ Leaded with 2x 12 way header
- ⬡ Socket variant mates with PXP4040/C type cables
- ⬡ Gen 2 < 1m 3.1/3.2 compatible
- ⬡ See Chart for further details relating to USB speeds.
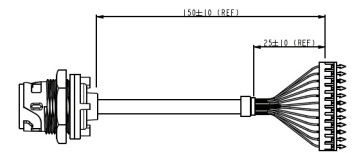
PXP4043/C

Part no.	Description
PXP4043/C	IP-sealed C type USB, rear panel mounted. 2x 12 way header connector at rear

Accessories

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

Part no.	Description
PXP4081	Sealing cap for use with PXP4040/C
PXP4083	Sealing cap for use with PXP4043/C

O-ring & washer pack

Part no.	Description
PXP4089/WH	White coloured O-ring and washer pack
PXP4089/RD	Red coloured O-ring and washer pack
PXP4089/BL	Blue coloured O-ring and washer pack
PXP4089/YL	Yellow coloured O-ring and washer pack
PXP4089/GN	Green coloured O-ring and washer pack

Cables & connectors

Mechanical

Sealing	IP69K, DIN40050-9
	IP68, EN60529:1992+A2:2013
	(10m depth for 2 weeks)
	IP66, EN60529:1992+A2:2013
Panel Mount Nut	1.0 - 1.1NM (91lb.in)
Operating temperature	-40°C to +80°C
Salt Mist	EN60068-2-52 Test Kb Salt Mist
	(Cyclic) Marine Severity Level 1

Electrical

No. of poles	2x 12 way
Current rating	5A
Voltage rating	≤ 30Vac
Contact resistance	40m Ω max.
Gen 2 ≤ 1m USB 3.1	≤ 1m USB 3.1
Gen 1 > 1m USB 3.0	> 1m USB 3.0
Performance	USB version 3.1

Materials - Re-wireable and Panel Connectors

Shell material	Stainless Steel
Shell plating	Nickel
Contact material	Copper Alloy
Contact plating	30 micro inch Gold
Connector body & locking ring	PC/PBT
Panel connector	PC/PBT
Flammability rating	UL94V-0
'O' rings	Silicone
Mating cycles	1,000
RoHS	Compliant

Materials - cable

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

Cable construction - PXP4040 & PXP4043

Jacket
Braid
AL / MYLAR
MYLAR
Conductor
Insulation
Drain
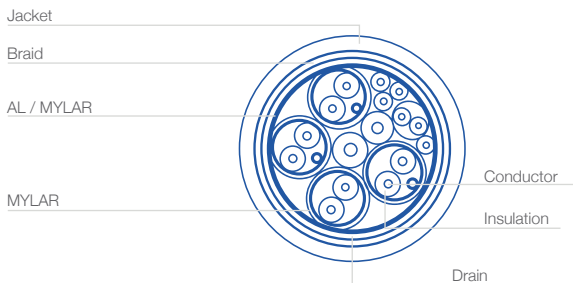
	Wire Colour	Label	Type	Cable Number	PCB Header Pins P2	PCB Header Pins P3
A1	-	Gnd	Braid	-	1	-
A2	Orange	TxI+	Shielded Twisted	3	2	-
A3	Brown	TxI-	Shielded Twisted	3	3	-
A4	Red	Vbus	Power	11	4	-
A5	Blue	CC	Single	10	5	-
A6	White	D0+	Shielded Twisted	5	6	-
A7	Green	D0-	Shielded Twisted	5	7	-
A8	Orange	SbuA	Single	8	8	-
A9	Red	Vbus	Power	11	9	-
A10	Blue	Rx2+	Shielded Twisted	2	10	-
A11	Black	Rx2-	Shielded Twisted	2	11	-
A12	-	Gnd	Braid	-	12	-
B1	-	Gnd	Braid	-	-	12
B2	White	Tx2+	Shielded Twisted	1	-	11
B3	Red	Tx2-	Shielded Twisted	1	-	10
B4	Red	Vbus	Power	11	-	9
B5	Yellow	Vconn	Single	9	-	8
B6	Purple	DI-	Twisted Pair	6	-	7
B7	Grey	DI+	Twisted Pair	6	-	6
B8	Brown	SbuB	Single	7	-	5
B9	Red	Vbus	Power	11	-	4
10	Yellow	RXI-	Shielded Twisted	4	-	3
B11	Green	RXI+	Shielded Twisted	4	-	2
B12	-	Gnd	Braid	-	-	1

Receptacle Pin Colour Key:

A1, A12, B12, B1:	Cable Ground
A2, A3, B3, B2:	High Speed Path (TX for USB or for DP Alt mode)
A4, A9, B9, B4:	Cable Bus Power
A6, A7, B7, B6:	USB 2.0 Interface
A8, B8:	For Sideband Use (not used for USB)
A5, B5:	Plug Configuration Detection (- One becomes Vconn, for cable or adaptor power. - CC is used for USB-PD communication)
A10, A11, B11, B10:	High Speed Data Path (RX for USB, or TX for DP Alt Mode)

USB-C RECEPTACLE PINOUT
END-ON VIEW

| A2 TXI+ | A4 VBUS | A6 D+ | A8 SBUI | A10 RX2- | A12 GND |
| A1 GND | A3 TXI- | A5 CCI | A7 D- | A9 VBUS | A11 RX2+ |

| GND B12 | RXI- B10 | SBU2 B8 | D+ B6 | VBUS B4 | TX2+ B2 |
| RXI+ B11 | VBUS B9 | D- B7 | CC2 B5 | TX2- B3 | GND B1 |

CARRIER SLEEVE 15237

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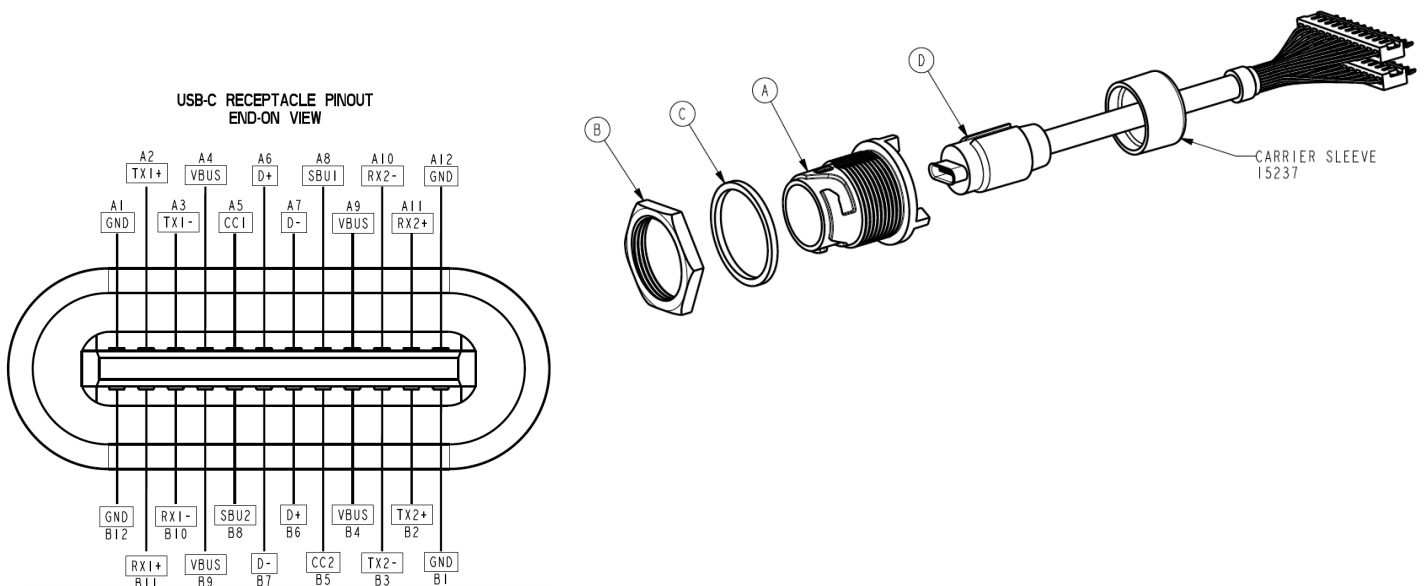
	Wire Colour	Label	Type	Cable Number	USB-3 Plug P2
A1, B1, A12, B12	-	Gnd	Braid	-	4, 7
A4, B4, A9, B9	Red	Vbus	-	10, 11	1
A5	-	CC	-	-	-
B5	-	Vconn	-	-	-
A6	Green	Dp 1	(Twisted Pair)	5	3
A7	White	D -	Twisted Pair	5	2
A2	Blue (Brown Jacket)	SSTXp 1	(Twisted Pair)	1	6
A3	White (Brown Jacket)	SSTXn 1	Twisted Pair	1	5
B11	Blue (Red Jacket)	SSRXp 1	(Twisted Pair)	2	9
B10	White (Red Jacket)	SSRXn 1	Twisted Pair	2	8
Shell	-	-	Braid	Screen	Shield

USB-C PLUG PINOUT
END-ON VIEW
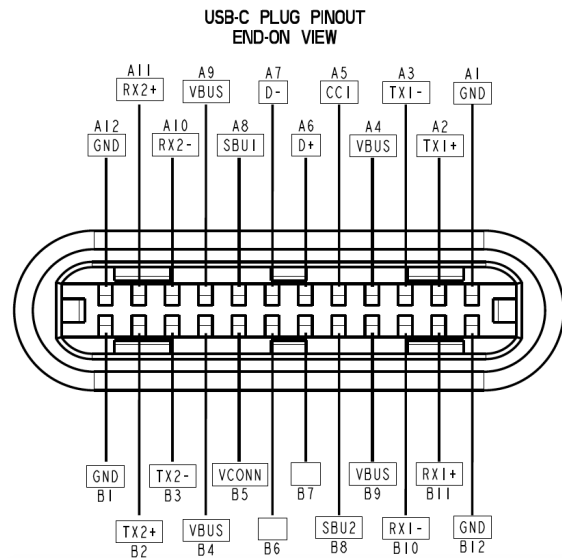
Wiring Notes:

1. Cable used has shielded twisted pairs with drain wires used for all SDP's.

2. Pin A5 (CC) of the USB Type-C Plug shall be connected to Vbus through a 56 K Ω ±5% resistor.

3. Contaacts B6 and B7 are not connected in the USB Type-C Plug.

4. All Vbus pins are connected together within the USB Type-C Plug. A Bypass Capacitor is required between the ground pins in the USB Type-C Plug side of the cable. The Bypass Capacitor is 10nF ± 20%. The bypass capacitor shall is as close as possible to the power supply pad.

5. All ground return pins are connected together within the USB Type-C Plug.

6. Shield and Gnd grounds are connected within the USB Type-C and USB 3.1 standard-A plugs on both ends of the cable assembly.

7. All USB Type-C plug pins that are not listed in this table shall be open (not connected).