CONXALL®

A SWITCHCRAFT COMPANY
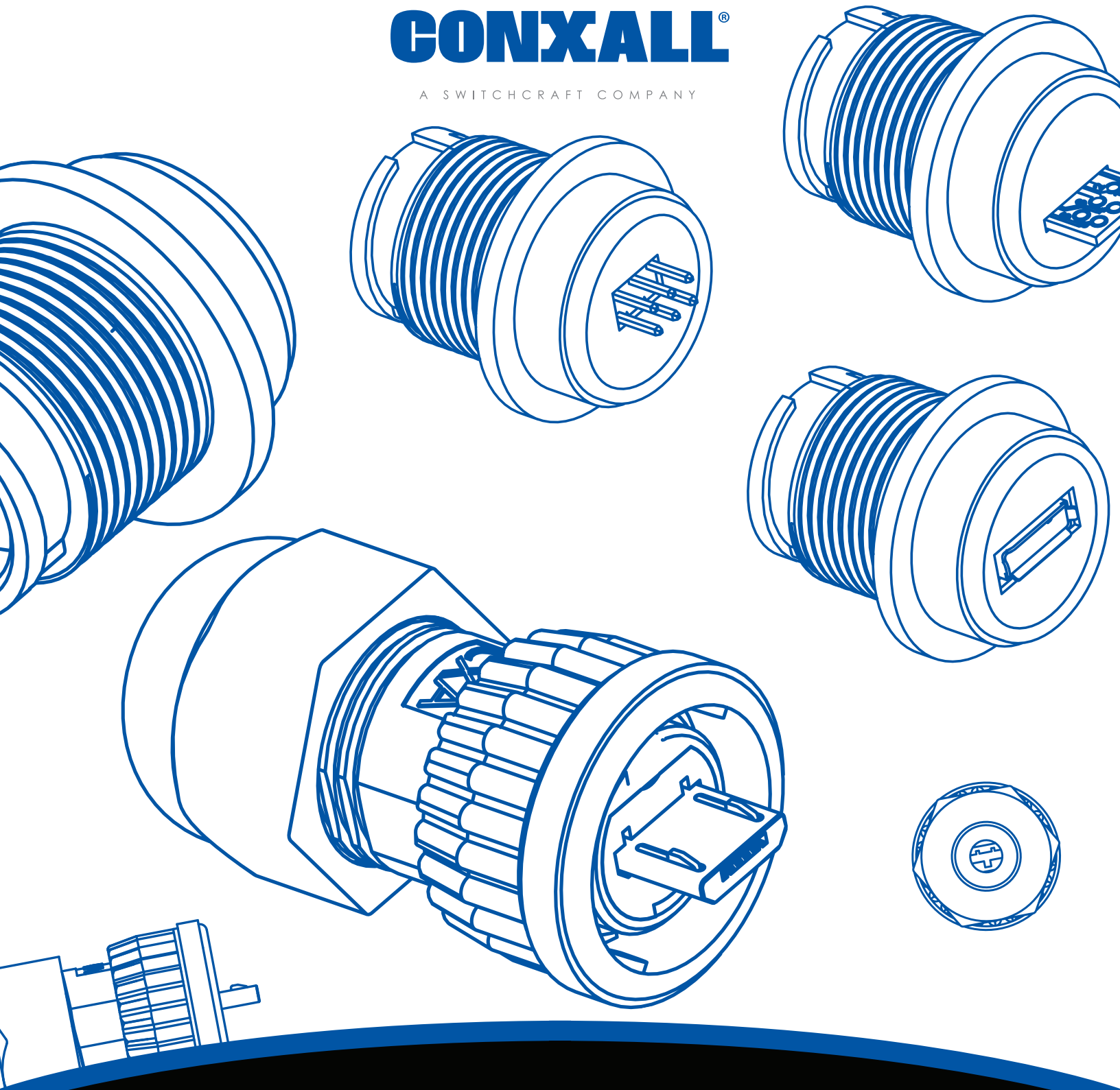
DATA-CON-X® SEALED MICRO-USB CONNECTORS
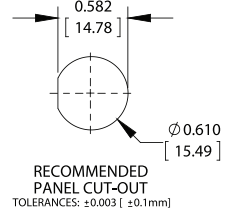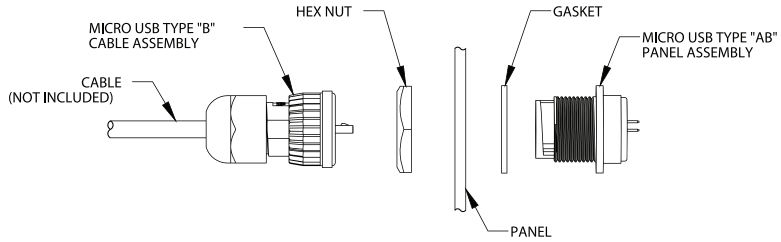
NPB | C716

FEATURES & BENEFITS

- Sealed to IP67 & IP68 NEMA 250 (6P)
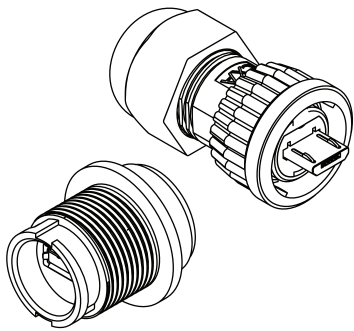
- Feed through, PC Tail or Solder terminals for easy field installation

- Field installable design is easy to assemble

- Quick connect bayonet style interface

- RoHS compliant assembly

APPLICATIONS

- Any sealed data transmission

- Military or industrial GPS location devices

- Instrumentation

- Medical data carts

- Data acquisition units

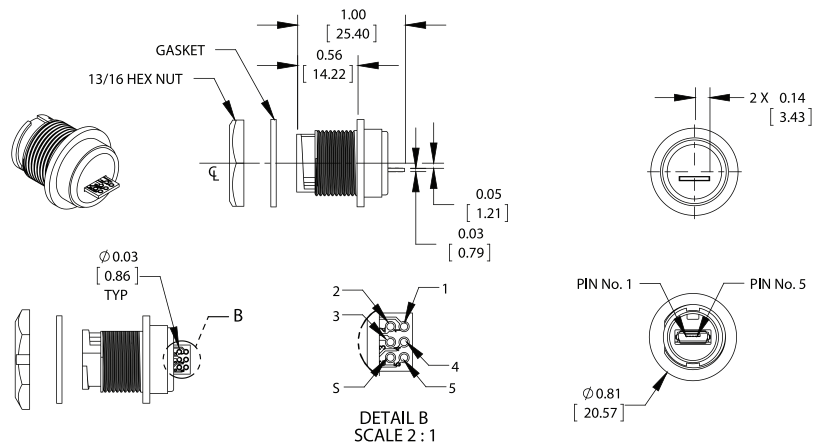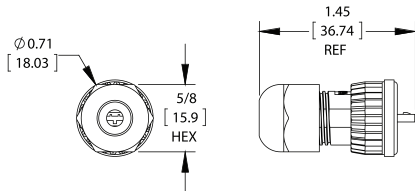- General industrial electronic applications

MICRO USB TYPE "B" CABLE ASSEMBLY
HEX NUT
CABLE (NOT INCLUDED)
GASKET
MICRO USB TYPE "AB" PANEL ASSEMBLY
PANEL

0.582 [14.78]
Ø 0.610 [15.49]
RECOMMENDED PANEL CUT-OUT
TOLERANCES: ±0.003 [±0.1mm]

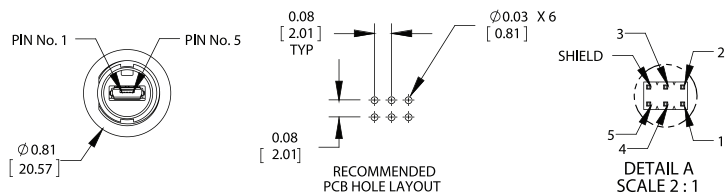## DCC-USBCB-120
Micro-USB Field Installable Cable Plug

Ø 0.71 [18.03]

1.45 [36.74] REF

5/8 [15.9] HEX

DCP-USBCB-SC
Micro-USB Panel Mount - Solder Holes

GASKET
13/16 HEX NUT

1.00 [25.40]
0.56 [14.22]
0.05 [1.21]
0.03 [0.79]

2 X 0.14 [3.43]

Ø 0.03 [0.86] TYP
B

2 1
3
S
4
5
DETAIL B
SCALE 2 : 1

PIN No. 1   PIN No. 5
Ø 0.81 [20.57]

DCP-USBCB-F
Micro-USB Panel Mount - Feed-Thru

GASKET
13/16 HEX NUT

0.85 [21.49]
0.56 [14.22]

PIN No. 1   PIN No. 5
Ø 0.81 [20.57]

PIN No. 1   PIN No. 5

DCP-USBCB-HD
Micro-USB Panel Mount - PC Tails

GASKET
13/16 HEX NUT

0.96 [24.32]
0.56 [14.22]
0.070 [1.79]
0.01 [0.21]

0.08 [2.00] TYP
A

PIN No. 1   PIN No. 5
Ø 0.81 [20.57]

0.08 [2.01] TYP
Ø 0.03 X 6 [0.81]
0.08 [2.01]
RECOMMENDED PCB HOLE LAYOUT

SHIELD
3   2
5   1
4
DETAIL A
SCALE 2 : 1
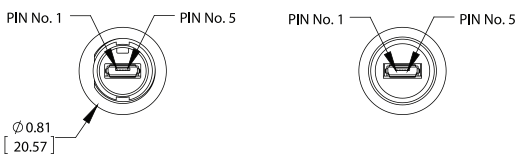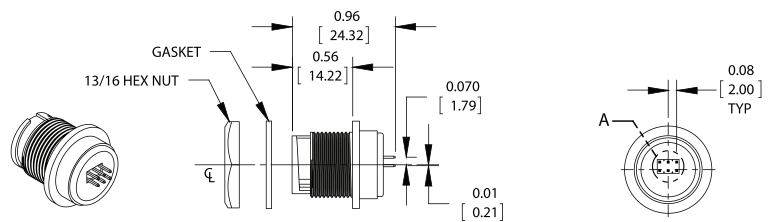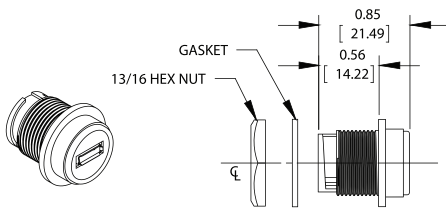
UNITS ARE LISTED IN INCHES [MM]. ALL DIMENSIONS ARE REFERENCE ONLY.

SPECIFICATIONS

Mechanical Specifications

Life:	300 Cycles Minimum
Vibration:	Mil-Std 202G Method 201A
Hex Nut Torque:	10-12 in-lb
Coupling Locking Style:	Quick Connect (Bayonet)
Backshell Style:	Threaded Nut-Squeezed Grommet

Electrical Specifications
Tested Per USB 2.0 Specifications

Environmental Specifications

Operating Temperature Rating:	-25 °C to +85 °C(-13ºF to +185°F)
Moisture Resistance:	Mil-Std 202G Method 106G
Insulation Resistance:	Mil-Std 202G Method 302
Thermal Shock:	Mil-Std 202G Method 107G
Weathertight:	IP67 & IP68, NEMA 250 (6P) (when mated)

Material Specifications

Plug Nut, Coupling Nut:	Thermoplastic
Plug Housing, Insert:	Thermoplastic
Sealing Ring, O-Ring:	Elastomer
Panel Housing, Hex Nut:	Thermoplastic
Gasket:	Elastomer
Printed Circuit Board (PCB):	FR-4

Header:

Insulator:	Thermoplastic UL94V-0, Black
Contacts:	Copper Alloy, Gold Flash

Micro USB Type B Plug:

Insulator:	Thermoplastic UL94V-0, Black
Contacts:	Copper Alloy, Gold Plated (Contact Area)
Metal Shield:	Steel, Nickel Plated

Micro USB Type AB Receptacle:

Insulator:	Thermoplastic UL94V-0, Black
Contacts:	Copper Alloy, Gold Flash (Contact Area)
Metal Shield:	Copper Alloy, Tin Plated

Molded Cable Assemblies
Consult factory for molded options

Other

Recommended Cable O.D. Range:	0.137-0.157 inches [3.5mm-4.0mm]
Recommended Panel Thickness:	0.031-0.187 inches [0.8mm-4.8mm]