

# USB A & B WEATHERTIGHT CONNECTORS

1.44" [37MM] OD



**CABLE END - USB A  
QUICK CONNECT**

MATES WITH PANEL MOUNT



**CABLE END - USB A  
THREADED CONNECT**

MATES WITH PANEL MOUNT



**CABLE END - USB B  
QUICK CONNECT**

MATES WITH PANEL MOUNT



**CABLE END - USB B  
THREADED CONNECT**

MATES WITH PANEL MOUNT



**PANEL MOUNT - USB A  
QUICK CONNECT**

MATES WITH CABLE END



**PANEL MOUNT - USB A  
THREADED CONNECT**

MATES WITH CABLE END



**PANEL MOUNT - USB B  
QUICK CONNECT**

MATES WITH CABLE END



**PANEL MOUNT - USB B  
THREADED CONNECT**

MATES WITH CABLE END

## SPECIFICATIONS

### **Mechanical Specifications**

Life:	350 insertion/withdrawal cycles minimum
Hex Nut Torque:	10-12 in-lb max
Coupling Locking Style:	Quick Connect (Bayonet) or Threaded
Backshell Style:	Threaded Nut-Squeezed Grommet

### **Electrical Specifications**

Current Rating:	1.5 A
Voltage Rating:	Per USB 2.0 standard
Contact Resistance:	30 mΩ max
Insulation Resistance:	1000 MΩ min
Dielectric Withstanding Voltage:	500 V AC/one minute

### **Environmental Specifications**

Operating Temperature Rating:	0 °C to +50 °C (+32°F to +122°F)
Storage Temperature:	-20 °C to +60 °C (-4°F to +140°F)
Moisture Resistance:	Mil-Std 202G Method 106G
Insulation Resistance:	Mil-Std 202G Method 302
Vibration:	Mil-Std 202G Method 201A
Thermal Shock:	Mil-Std 202G Method 107G
Weathertight:	IP67 & IP68, NEMA 250 (6P) (when mated)
Salt Spray:	Mil-Std 202G Method 101E
Product Ratings:	Tested per USB 2.0

### **Material Specifications**

Plug Nut, Coupling Ring:	Thermoplastic
Plug Housing, Insert:	Thermoplastic
Sealing Ring, O-Ring:	Elastomer
Panel Housing, Hex Nut:	Thermoplastic
Retaining Nut:	Copper Alloy, Nickel Plated
Gasket:	Elastomer

#### **USB A or B Plug:**

Shell:	Steel, Nickel Plated
Contacts:	Copper Alloy, Gold Plated
Insulator:	Thermoplastic UL94V-0, White

#### **USB A Receptacle:**

Shell:	Steel, Nickel Plated
Contacts:	Copper Alloy, Gold Plated
Insulator:	Thermoplastic UL94V-0, White

#### **USB B Receptacle:**

Shell:	Copper Alloy, Nickel Plated
Contacts:	Copper Alloy, Gold Plated
Insulator:	Thermoplastic UL94V-0, White

### **Molded Cable Assemblies**

Consult factory for molded options

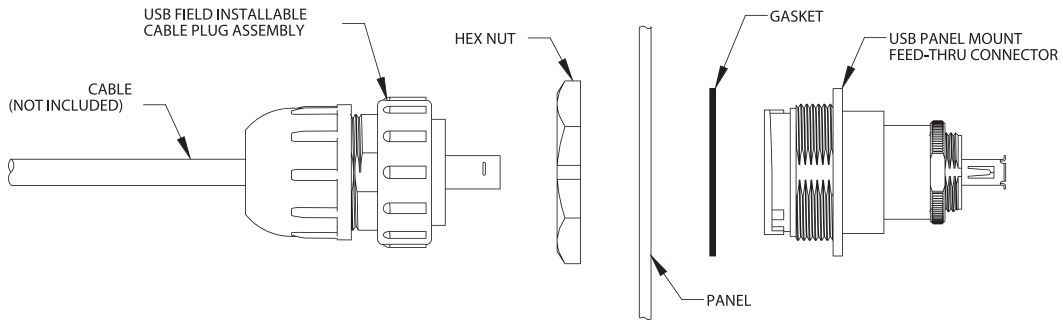
### **Other**

Flame Rating:	UL 94V-0
Recommended Panel Thickness:	1/32" - 3/16" [0.8mm to 4.8mm] - Quick Connect Coupling 1/32" - 5/32" [0.8mm to 3.9mm] - Threaded Coupling

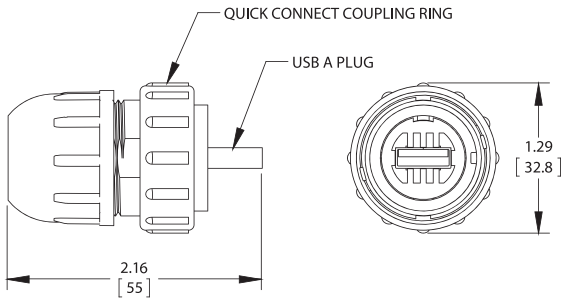
### **Recommended Cable Type**

Conductor Type:	Solid or Stranded Conductors
Outer Cable O.D. Range:	Product 150 Series: 0.134"-0.170" [3.40mm-4.33mm] Product 180 Series: 0.171"-0.208" [4.34mm-5.28mm]

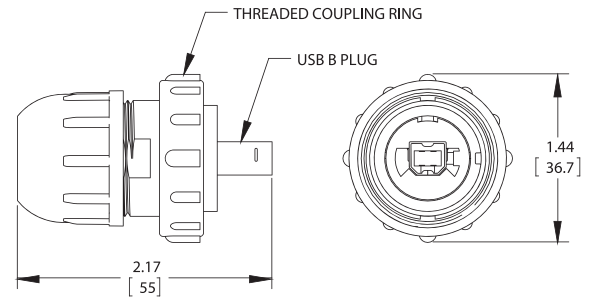
## DATA-CON-X®:USB A & B WEATHERTIGHT CONNECTORS



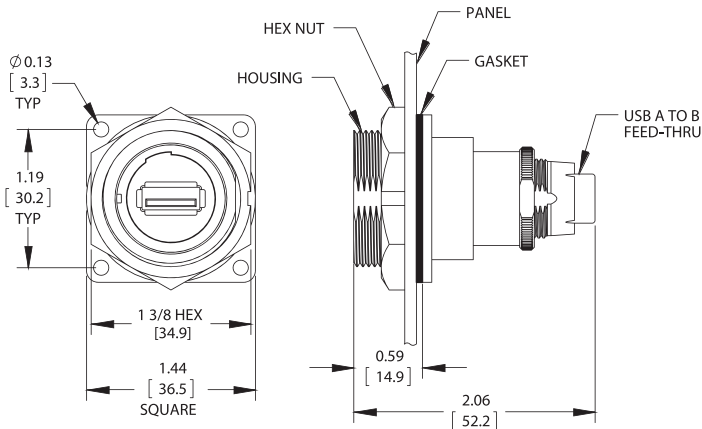
**USB A FIELD INSTALLABLE CABLE PLUG**  
(SHOWN WITH QUICK CONNECT COUPLING)



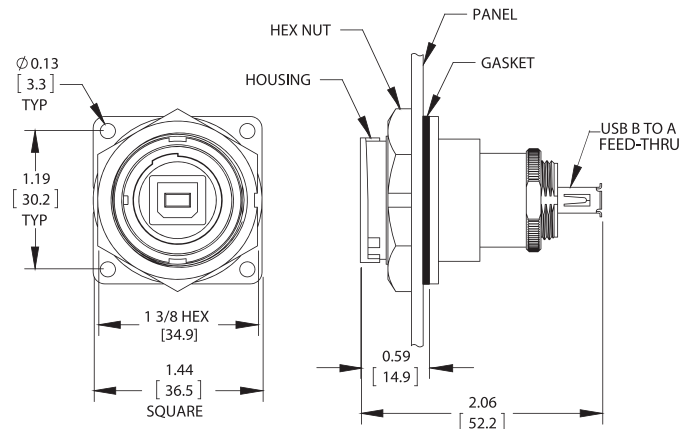
**USB B FIELD INSTALLABLE CABLE PLUG**  
(SHOWN WITH THREADED COUPLING)



**USB PANEL MOUNT FEED-THRU CONNECTOR**  
(SHOWN WITH USB A TO B FEED-THRU CONNECTOR)  
(SHOWN WITH THREADED HOUSING)



**USB PANEL MOUNT FEED-THRU CONNECTOR**  
(SHOWN WITH USB B TO A FEED-THRU CONNECTOR)  
(SHOWN WITH QUICK CONNECT HOUSING)



All dimensions are for reference only. Units shown: in[mm].

# USB A & B WEATHERTIGHT CONNECTORS

1.44" [37<sub>MM</sub>] OD

## PART NUMBER TO ORDER



USB FIELD INSTALLABLE CABLE PLUG PART NUMBER CHART			
USB FIELD INSTALLABLE CABLE PLUG ASSEMBLY	PLUG TYPE	COUPLING TYPE	SERIES
DCC	<b>USBA</b> = USB "A" 2.0 <b>USBB</b> = USB "B" 2.0	<b>B</b> = QUICK CONNECT <b>T</b> = THREADED	<b>150</b> = $\varnothing 0.134''-0.170''$ [3.40-4.33mm] <b>180</b> = $\varnothing 0.171''-0.208''$ [4.34-5.28mm]



USB PANEL MOUNT FEED-THRU CONNECTORS PART NUMBER CHART			
USB FIELD INSTALLABLE PANEL HOUSING ASSEMBLY	RECEPTACLE TYPE (SEALED END)	COUPLING TYPE	RECEPTACLE TYPE (NON-SEALED END)
<b>DCP</b>	<b>USBA</b> = USB "A" 2.0 <b>USBB</b> = USB "B" 2.0	<b>B</b> = QUICK CONNECT <b>T</b> = THREADED	<b>USBA</b> = USB "A" 2.0 * <b>USBB</b> = USB "B" 2.0 **

\* (NOT AVAILABLE WITH USBA ON SEALED END)  
\*\* (NOT AVAILABLE WITH USBB ON SEALED END)

# CON-X® ELECTRICAL CURRENT RATING CHART

CONTACT SIZE	CONDUCTOR SIZE - AWG	NUMBER OF CONDUCTORS	CURRENT RATING
#12	#12	1 through 7	23.0A
	#14	1 through 3	17.0A
		4 through 6	12.75A
		7 through 9	11.0A
	#16	1 through 3	13.0A
		4 through 6	9.75A
7		8.45A	
#16	#16	1 through 10	13.0A
		11 and 12	7.5A
	#18	1 through 3	10.0A
		4 through 12	7.5A
#20	#18	1 through 3	7.5A
		4 through 20	5.6A
		21 through 31	2.3A
	#20	1 through 3	7.5A
		4 through 20	5.6A
		21 through 31	2.3A
	#20 Multi-Con-X	10 through 12	5.0A
	#22	1 through 3	6.0A
		4 through 20	2.5A
		21 through 31	2.5A
	#24	1 through 3	4.5A
		4 through 20	2.0A
21 through 31		1.5A	
#22	#22	4	5.5A
	#24	4	5.0A
#26	#24	5 to 6	4.0A
	#24	7	3.5A
	#26	5 to 6	2.5A
	#26	7	2.5A
	#28*	5 to 6	2.0A
	#28*	7	2.0A

\*Not UL tested for this wire conductor size

## MAX. NUMBER AND SIZE OF CONTACTS PER SERIES:

4 - #12 Multi-Con-X	6 - #16 Multi-Con-X	8 - #20 Mini-Con-X	31 - #20 Mega-Con-X
7 - #12 Maxi-Con-X	12 - #16 Maxi-Con-X	9 - #20 Multi-Con-X	4 - #22 Micro-Con-X
5 - #16 Mini-Con-X	3 - #20 Micro-Con-X	20 - #20 Maxi-Con-X	7 - #26 Micro-Con-X

# TOOLING

## CON-X® MANUAL CONTACT CRIMPING TOOL

Handle	Description	Positioner	Contact Sizes	Wire Sizes	Conductor Strip Length
359-24	Multi Contact Turret Crimp Tool	357-124	#12	12-14 AWG	7/32 in
			#16	16-18-20 AWG	7/32 in
			#20	20-22-24 AWG	3/16 in
359-21	Single Contact Crimp Tool	357-122	#20	20-22-24 AWG	3/16 in
		357-125	#22	22-24 AWG	5/32 in
		357-126	#26(Cable Pin Only)	24-26-28 AWG	3/16 in
		357-127	#26(Panel Pin, Cable & Panel Socket)	24-26-28 AWG	3/16 in

## CON-X® MANUAL CONTACT INSERTION TOOL

Handle	Description	Insertion Bits	Contact Sizes
356-1	Single Contact Hand Tool	356-12	#12
		356-16	#16
		356-20	#20
		356-22	#22 (20 AWG Crimp Barrel)
		356-22-1-K	#22 (22 AWG Crimp Barrel)
		356-26-K	#26

## MIL-E-QUAL® MANUAL CONTACT CRIMPING TOOL

Handle	Description	Positioner	Contact Sizes	Wire Sizes	Conductor Strip Length
359-24	Hand Crimp Tool	358-112	#12	12-14 AWG	7/32 in
			#16	16-18-20 AWG	9/32 in

## MIL-E-QUAL® MANUAL CONTACT INSERTION TOOL

Handle	Description	Insertion Bits	Contact Sizes
356-1	Single Contact Hand Tool	356-12	#12
		356-16	#16