NEW PRODUCT BULLETIN 631

MIXED SIGNAL/POWER CONTACT SIZE MINI-CON-X®



MADE IN THE U.S.A.

Switchcraft®
CONXALL®
HARSH ENVIRONMENT CONNECTIVITY SOLUTIONS

Power and Signal contacts in the same Mini-Con-X connectors

Cable End, Panel Mount, and Cable-to-Cable Connectors Available



Made From High Quality, UV Resistant Thermoplastic (UL F1 rated)

Two options available: 6 pin (2#16 4#20) & 8-pin (2 #16, 6#26)

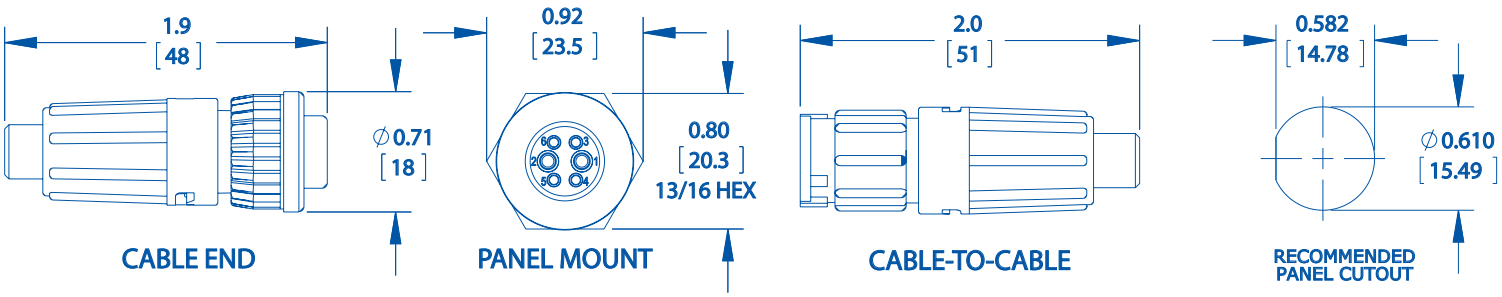
FEATURES

- Combine signal and power into the same connector, saving space and cost.
- Cable End, Panel Mount, and Cable-to-Cable (In-Line) options available with male pin or female socket contacts.
- Fits the same overall dimensions as existing Mini-Con-X® connectors
- Made by Conxall® in the USA
- Also available as factory molded cables
- See drawings on Switchcraft.com for detailed specifications

APPLICATIONS

- Outdoor Instrumentation
- Agriculture and construction vehicles
- Communication devices
- Safety and Security equipment

OVERALL DIMENSIONS



ALL DIMENSIONS ARE FOR REFERENCE ONLY

ORDERING CODE/ CONTACT LAYOUTS (Panel Mount Wiring Side)

W	X	X	XX	-	XXX	-	XXX	W

Connector Type:

6: Cable End

7: Panel Mount

8: Cable to Cable

Mixed Contact Sizes:

A: #16 & #26

C: #16 & #20

Contacts Style:

80: Crimp

81: PC Tail

82: Solder

Positions & Contact Types:

6PG: 6 Pins (2-16 + 4-20)

6SG: 6 Sockets (2-16 + 4-20)

8PG: 8 Pins (2-16 + 6-26)

8SG: 8 Sockets (2-16 + 6-26)

Special Features

W: Winged Coupling Ring

Cable-end and Cable-to-cable Backshell with Grommet - Cable O.D. Range:

513: 0.13-0.15" (3.3 -3.8 mm)

516: 0.16-0.18" (4.1 -4.6 mm)

519: 0.19-0.21" (4.8 -5.3 mm)

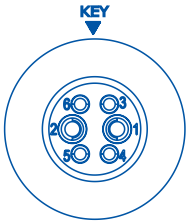
522: 0.22-0.25" (5.6 -6.3 mm)

528: 0.26-0.285" (6.6 -7.2 mm)

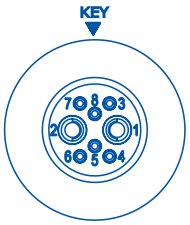
Panel Mount:

300: with Hex Nut & Gasket

3ES: 300 with Epoxy



6 POSITON
2 #16 & 4 #20
PIN OR SOCKET
CONTACTS



8 POSITON
2 #16 & 6 #26
PIN OR SOCKET
CONTACTS

Mixed Contacts Arrangement	Wire (AWG)	Maximum Current Rating (A) at Maximim Operating Temperature (°C)	Minimum Test Voltage (V rms)	Voltage Rating (V rms)
		85°C max		
2-#16 / 4-#20	2x16	10	1300	125
	4x20	4		
2-#16 / 6-#26	2x16	10	1700	250
	6x26	2		
Temperature Rise does not exceed 30°C when tested according to UL2238			Tested per UL2238	

SPECIFICATIONS

MECHANICAL:

Mating / Locking Type:	Bayonet with ribbed coupling ring (winged coupling ring available)
Life:	300 cycles minimum
Vibration:	Mil-Std 202G Method 201A
Panel Hex Nut Tongue:	8-10 in-lb [0.8-1.1 Nm]
Back Shell Type:	Twist lock

ELECTRICAL:

Voltage Rating:	125 V rms for 6 contact arrangement 250 V rms for 8 contact arrangement
Current Rating:	10A max for #16 contacts Refer to table on pg3 for detailed information
Insulation Resistance:	1000 MΩ minimum
Contact Resistance:	10 mΩ typical

ENVIRONMENTAL:

Operating Temperature:	-40ºC to +85ºC (-40ºF to +185°F) Refer to website for detailed information
Moisture Resistance:	Mil-Std 202G Method 106G
Insulation Resistance:	Mil-Std 202G Method 302 Condition B
Thermal Shock:	Mil-Std 202G Method 107G
Salt Atmosphere :	Mil-Std 202G Method 101E Condition B
Ingress Protection :	IP67 (consult factory for specific application)

MATERIAL:

Connector Shell (Insulator)	Thermoplastic, black
Hex Nut:	Thermoplastic, black
Coupling Ring:	Thermoplastic, black
Cable Clamp:	Thermoplastic, black
Backshell:	Thermoplastic, black
Seal O-rings:	Elastomer, red
Seal Grommet:	Elastomer, black
Contacts:	Copper Alloy, gold over nickel plating