

# MEGA-CON-X<sup>®</sup>

1.29" [32MM] OD 31 CONTACTS



**CABLE END - SOCKET**  
MATES WITH PANEL MOUNT



**CABLE END - PIN**  
MATES WITH PANEL MOUNT



**PANEL MOUNT - PIN**  
MATES WITH CABLE END



**PANEL MOUNT - SOCKET**  
MATES WITH CABLE END



**DUST CAP**  
P/N - 24295



**MOLDED CABLE END ASSEMBLY**



**MOLDED RIGHT ANGLE CABLE ASSEMBLY**

## **SPECIFICATIONS**

### **Mechanical Specifications**

Life:	300 insertion / withdrawal cycles minimum
Vibration:	Coupling rings have overriding locking feature to prevent loosening or separation of connector
Hex Nut Torque:	10 in-lb max tightening torque.
Coupling Style:	Bayonet with ribbed coupling nut (winged coupling nut available)
Backshell Style:	Threaded
Conductor Size:	#20 contacts accepts 20 through 24 AWG

### **Electrical Specifications**

Voltage Rating:	600V AC
Current Rating:	2.3 A – max (See page 107 for Electrical Current Rating Chart)

### **Environmental Specifications**

Operating Temperature Rating:	-40°C to +85°C (-40°F to +185°F)
Salt Atmosphere (Corrosion):	300 Hr salt spray when mated
Weathertight:	IP67 when mated

### **Material Specifications**

Backshell:	Thermoplastic, UL 94HB, Black
Contacts:	Copper Alloy, Gold over Nickel Plate
Coupling Ring:	Thermoplastic, UL 94HB, Black
Gasket:	Elastomer, Black
Grommet / Strain Relief:	Elastomer, Black
Hex Nut:	Thermoplastic, UL 94HB, Black
O-Ring:	Elastomer, Black
Shell:	Thermoplastic, UL 94HB, Black
Optional Dust Cap:	Elastomer, Black

### **Molded Cable Assemblies**

Weathertight:	NEMA 6P, 13: IEC IP67
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### **Certifications**

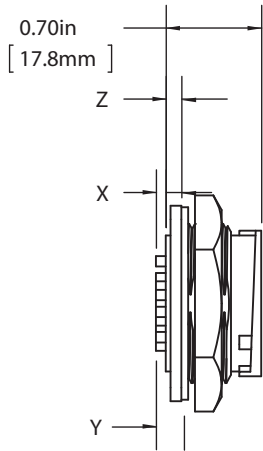
UL File E150822  
CSA File 181200  
Not for current interruption  
RoHS compliant  
REACH compliant

### **Options**

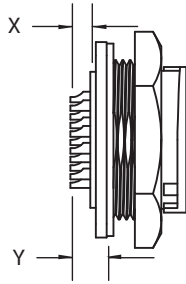
UV Rating:	F1 available
Flame Rating:	UL 94V-0 available

**Consult factory for optional colors and materials**

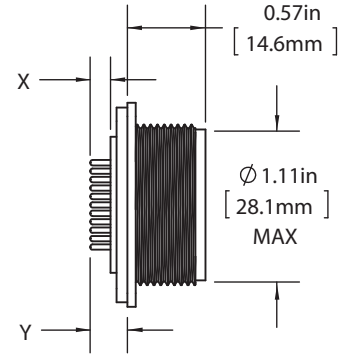
## PANEL MOUNT ASSEMBLY KITS



24280-31XG-3XX  
PANEL MOUNT CONNECTOR  
CRIMP

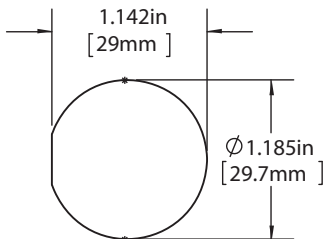
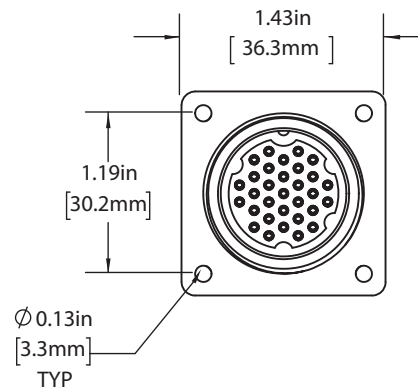
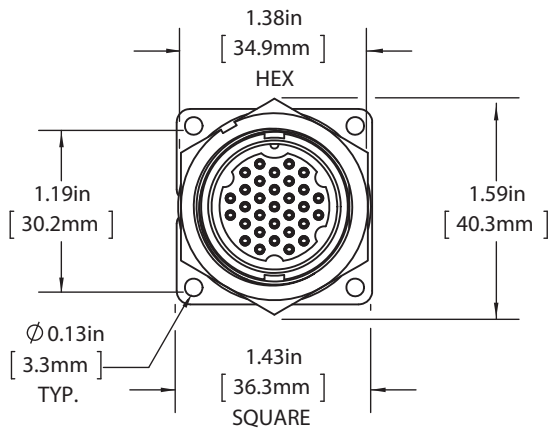


24282-31XG-3XX  
PANEL MOUNT CONNECTOR  
SOLDER CUP

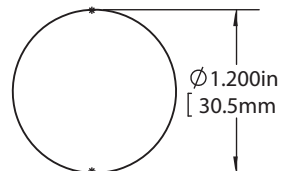


242XX-31XG-3XX  
PANEL MOUNT CONNECTOR  
PC TAIL

\*X, Y, Z - CONSULT FACTORY



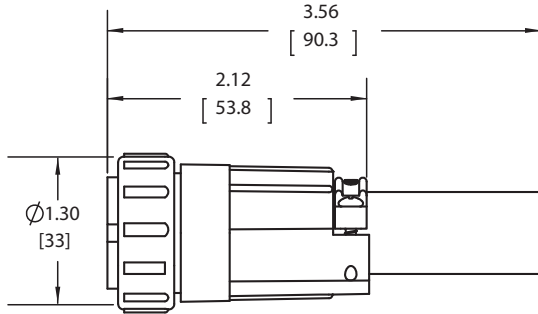
RECOMMENDED  
PANEL CUT-OUT  
QUICK CONNECT TYPE  
TOLERANCE:  $\pm 0.003$  [0.08mm]



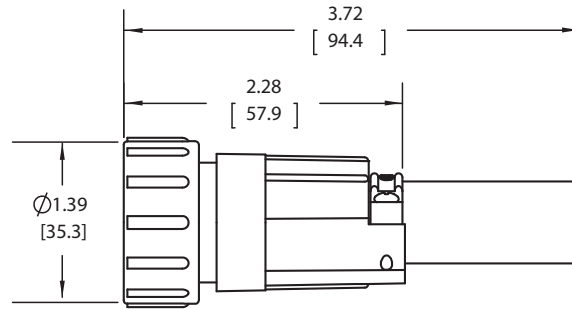
RECOMMENDED  
PANEL CUT-OUT  
THREADED TYPE  
TOLERANCE:  $\pm 0.003$  [0.08mm]

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

## FIELD INSTALLABLE KITS

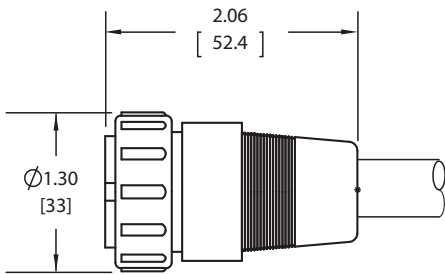


**232XX-31XG-3XX**  
FIELD INSTALLABLE QUICK CONNECT TYPE  
CABLE CONNECTOR - BACKSHELL TYPE 3

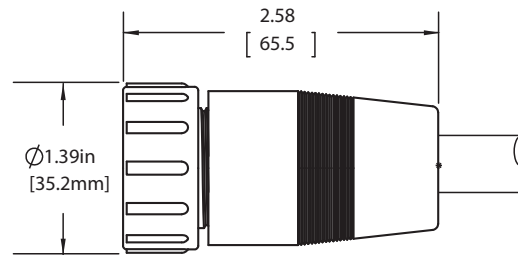


**232XX-31XG-T3XX**  
FIELD INSTALLABLE THREADED TYPE  
CABLE CONNECTOR - BACKSHELL TYPE 3

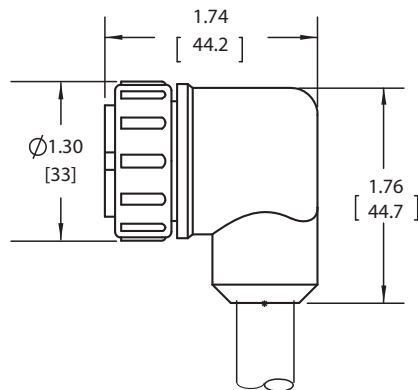
## CUSTOM MOLDED CABLE ASSEMBLIES



**232XX-31XG**  
CUSTOM CABLE CONNECTOR STRAIGHT OVERMOLDED  
QUICK CONNECT TYPE



**232XX-31XG**  
CUSTOM CABLE CONNECTOR STRAIGHT OVERMOLDED  
THREADED CONNECT TYPE

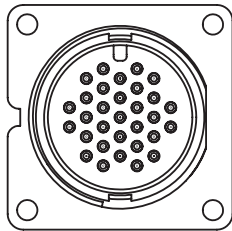


**232XX-31XG**  
CUSTOM CABLE CONNECTOR RIGHT ANGLE OVERMOLDED  
QUICK CONNECT TYPE

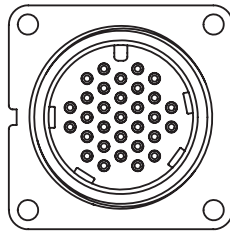
All dimensions are for reference only. Units shown: in[mm].

## PANEL MOUNT CONNECTORS

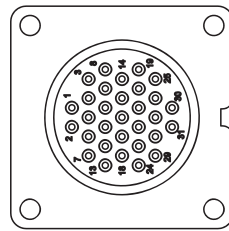
Front View | Wire View



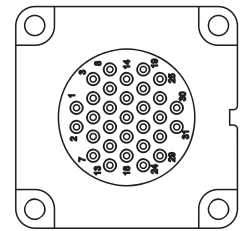
QUICK CONNECT TYPE  
SINGLE KEY  
31-POSITION  
#20 PIN CONTACT



THREADED TYPE  
5 KEY  
31-POSITION  
#20 PIN CONTACT



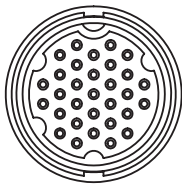
QUICK CONNECT TYPE  
SINGLE KEY  
31-POSITION  
#20 PIN CONTACT



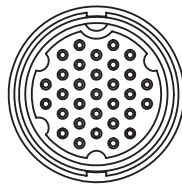
THREADED TYPE  
5 KEY  
31-POSITION  
#20 PIN CONTACT

## CABLE CONNECTORS

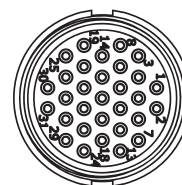
Front View | Wire View



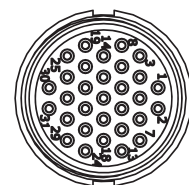
QUICK CONNECT TYPE  
5 KEY  
31-POSITION  
#20 PIN CONTACT



THREADED TYPE  
5 KEY  
31-POSITION  
#20 PIN CONTACT



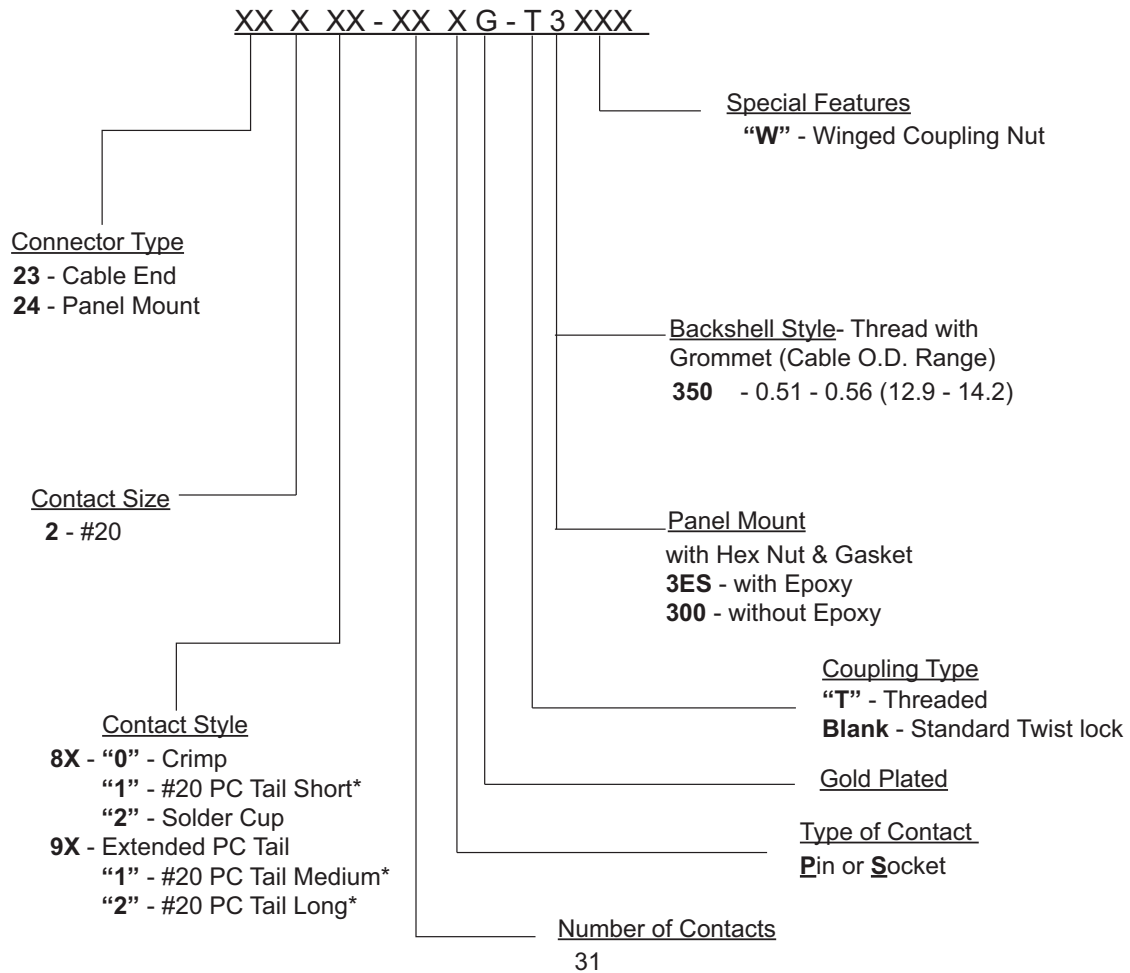
QUICK CONNECT TYPE  
5 KEY  
31-POSITION  
#20 PIN CONTACT



THREADED TYPE  
5 KEY  
31-POSITION  
#20 PIN CONTACT

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

## PART NUMBER TO ORDER



\*Consult factory for length and diameter of PC Tail. Additionally, alternative colors and materials are available.

# 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