

STANDARD CONNECTOR PRODUCTS

Low-cost Standard and Weathertight Connectors for Industrial and Marine Applications.

A completely indoor/outdoor connector system that offers performance and reliability features of MIL-Spec connectors at the cost of a commercial type product.

Economical...The all molded nylon construction provides for substantial savings in cost that helps hold the line on cost objectives without sacrificing performance.

Standard Assemblies

Ideally satisfies power connections for test instruments, calibration or measuring equipment, communications systems, data processing, entertainment devices and a wide range of non-environmental applications where economy and maintenance-free reliability are essential. Especially suited to laboratory instruments, medical analysis devices, automotive test equipment, computer peripherals, recording instruments, etc....

Style...Designed for demanding service although attractive and modern in appearance to complement the most sophisticated equipment.

Lightweight/Strong...50% weight savings over similar metal construction yet has tough, high-impact strength to withstand hard abuse both indoors and outdoors.

Weathertight Assemblies

Optional panel connector gaskets and interfacial "O" ring seals maintain a weathertight connection for outdoor use. The non-corrosive, high impact, all molded construction is perfect for recreational, agricultural or on/off the road vehicle connections. Hazards of electrical shock are minimized in addition to resistance to hostile outdoor environment. Frequently specified for depth sounders, metal detectors, marine/aircraft electronics, boat trailers, electronic farm implements, food processing equipment, etc.

Molded Cable Assemblies (See pages 3 & 26)

Complete Facilities to Assemble and/or Mold All Connector Styles to Many Cable Constructions

Permanently Molded...Cable and connectors are molded together in a choice of attractive boot shapes to add functional improvements to your product.

Accident Proof...Molded encapsulation between cable and connector prevents pull-out or breakage of internal wires for maintenance free operation.

Weathertight...This construction prevents ingress of moisture into contact areas.

Saves Time and Money...Avoids setting up new production line and training personnel plus cost of maintaining inventories.

STANDARD CONNECTOR FEATURES

Panel Connector mounts from behind in round or “D” shaped hole and are securely fastened with hex nut on the front of the panel. Standard assembly include weathertight gasket.

Premium Quality The standard screw-machine socket contact has premium design features at low cost. The closed entry prevents probe damage or accidental loss of spring retention due to misaligned or bent pins.

Reverse Contact Options are available providing pin or socket contacts in all styles.

Locking Type coupling ring prevents accidental disconnect. Quick 90 degree connect/disconnect rotation or threaded.

Cable Splices and/or extension cables can be easily made using the cable to cable connectors.

Unassembled Cable Connectors without mold-on cables are available. This option provides for field installation or replacement service on existing cable assemblies.

Dimensions and Specifications are for reference only and may change without notice where it does not affect form, fit or function.

Electrical Rating Tables are for reference only and are based on continuous current carrying capacity of the connector with all contacts carrying current.

Packaging and Warranty

Packaging

Connectors: Standard Con-X series components are packaged unassembled and individually bulk packed. Kitted packaging, one complete connector per bag, available upon request for an additional cost. Mil-E-Qual components are assembled and individually kitted in plastic bags.

Cable Assemblies: Assemblies less than 3 ft., including connector head, are bundled and boxed. Assemblies over 3 ft., including connector head, are coiled, secured with cable tie and boxed.

Warranty

CONXALL Corp. manufactures the finest quality product available to the marketplace. However, these products are intended to be used in accordance with the specifications described in this catalog. Any use or application that deviates from the stated operating specifications is not recommended and **may be unsafe**. A limited warranty applies to all CONXALL Corp. products. Except for obligations specifically assumed by CONXALL Corp. under warranty, CONXALL Corp. will not be liable for any loss, damage, cost of repairs, incidental or consequential damages of any kind whether or not based upon expressed or implied warranty, contract, negligence, or strict liability arising in connection with the design, manufacture, sale, use or repair of the products.

MICRO-CON-X[®] FIELD INSTALLABLE CONNECTORS



Cable Pin
1628X-XPG-XXX
Matching Mates:

- **Cable-Cable**
1828X-XSG-XXX
- **Panel**
172XX-XSG-XXX



Panel Mount
1728X-XXG-XXX
Matching Mates:

- **Cable Pin**
1628X-XPG-XXX
- **Cable Socket**
1628X-XSG-XXX



P/C Tail Panel Mount
172XX-XXG-XXX
Matching Mates:

- **Cable Pin**
1628X-XPG-XXX
- **Cable Socket**
1628X-XSG-XXX



Cable Socket
1628X-XSG-XXX
Matching Mates:

- **Cable-Cable**
1828X-XPG-XXX
- **Panel**
172XX-XPG-XXX



Cable to Cable
1828X-XXG-XXX
Matching Mates:

- **Cable Pin**
1628X-XPG-XXX
- **Cable Socket**
1628X-XSG-XXX



Dust Cap
16295

Molded Cable Assemblies (See pages 3 & 26)



Cable End



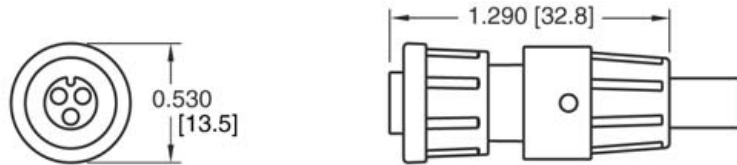
Cable to Cable



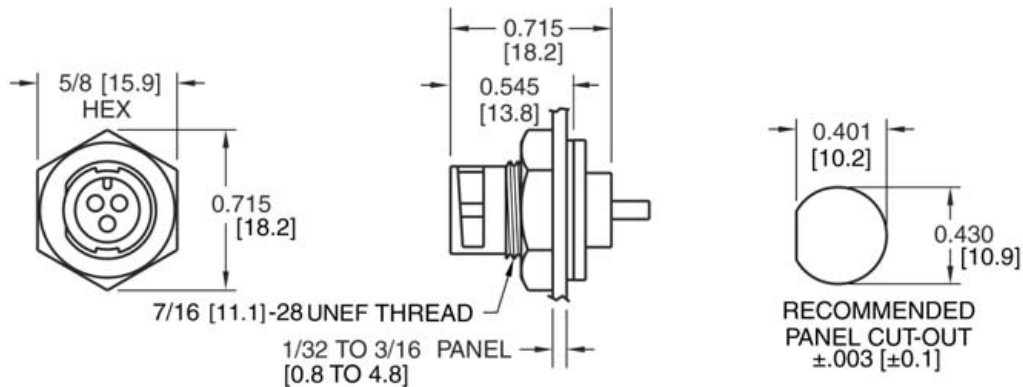
Right Angle

MICRO-CON-X[®] FIELD INSTALLABLE CONNECTORS

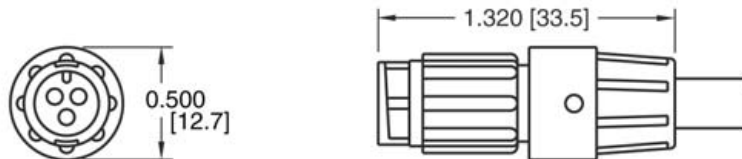
Dimensions (Dimensions in brackets are in millimeters)



CABLE END CONNECTOR - WITH SNAP LOCK BACKSHELL (NON-REMOVABLE)

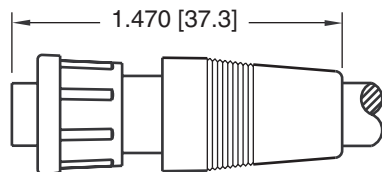


PANEL MOUNT CONNECTOR - SHOWN WITH HEX NUT AND GASKET

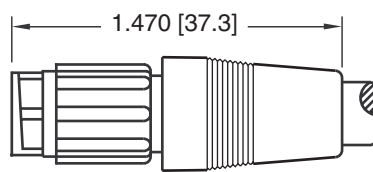


CABLE TO CABLE CONNECTOR - WITH SNAP LOCK BACKSHELL (NON-REMOVEABLE)

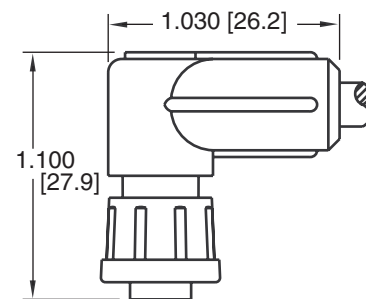
Molded Cable Assemblies (See pages 3 & 26)



CABLE END ASSEMBLY
STRAIGHT BOOT
0.280 [7.1] MAX. CABLE O.D.



CABLE TO CABLE ASSEMBLY
STRAIGHT BOOT
0.280 [7.1] MAX. CABLE O.D.



CABLE END ASSEMBLY
90° BOOT
0.280 [7.1] MAX. CABLE O.D.

MICRO-CON-X[®] FIELD INSTALLABLE CONNECTORS

Part Number to Order

XX X XX-XXG-3XX

Connector Type: _____

- 16 - Cable End
- 17 - Panel Mount
- 18 - Cable to Cable

Contact Size: _____

2 - #20

Contact Style: _____

- 80 - Crimp (Supplied loose)
- 81 - P/C Tail .187" (4.7) (Supplied assembled)
- 82 - Solder Cup (Supplied assembled)
- 91 - P/C Tail .280" (7.1) (Supplied assembled)*
- 92 - P/C Tail .335" (8.5) (Supplied assembled)*

Number of Contacts: _____

2 or 3

Type of Contact: _____

- P - Pin
- S - Socket

Contact Plating: _____

G - Gold over Nickel (Standard)

**Back Shell
Style 3**

Grommet Code –

Cable O.D. Range:

- 11 - .09 - .14 (2.3-3.5)
- 15 - .15 - .17 (3.8-4.3)
- 18 - .18 - .20 (4.6-5.1)

Back Shell Style:

- 3 - Weathertight Grommet
Grip/Seal & (1) interfacial
"O" Ring

**300 - Panel mount with hex nut
& gasket**

3ES - 300 with Epoxy

*Available in #20 size contact only.

Consult factory for optional threaded coupling.

Consult factory for your custom design cable assemblies and connectors. (See pages 3 & 26)

Contact Arrangements

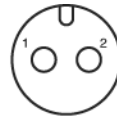


2-#20

CABLE PIN, PANEL SOCKET
AND CABLE TO CABLE SOCKET ONLY

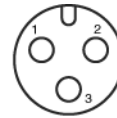


3-#20



2-#20

CABLE SOCKET, PANEL PIN
AND CABLE TO CABLE PIN ONLY



3-#20

Contact arrangements shown are wiring view of cable end pins/sockets.

Key/keyway shown for orientation only.

For higher density patterns, consult factory.

MICRO-CON-X[®] FIELD INSTALLABLE CONNECTORS

Specifications

Typical Specifications

Manufacturers Identifications	Micro-Con-X [®]
Description	Field Installable Connector & Custom Cable Assemblies
Rating	3.0 thru 7.5A, 600V
Conductor Size	20 thru 24 AWG
Configuration	2 & 3 #20 Contacts
Certification	UL Recognized File #E150822 - 250V CSA Certified File #181200 - 600V

Material Specifications

Cable Pin/Socket

Backshell (Non-Removable Snap Lock)	Nylon, UL Recognized, Black
Grommet	Santoprene Rubber, Black
Coupling Ring	Nylon, UL Recognized, Black
Contacts	Brass, Gold over Nickel
Connector Body	Nylon, UL Recognized, Black
O-Ring	Neoprene Rubber, Black

Cable to Cable

Backshell (Non-Removable Snap Lock)	Nylon, UL Recognized, Black
Grommet	Santoprene Rubber, Black
Contacts	Brass, Gold over Nickel
Connector Body	Nylon, UL Recognized, Black

Panel Mount

Contacts	Brass, Gold over Nickel
Panel Body	Nylon, UL Recognized, Black
Gasket	Neoprene Rubber, Black
Hex Nut	Nylon, UL Recognized, Black

Optional

Dust Cap	Santoprene Rubber, Black (Part No. 16295)
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Gasket, O-Ring, & Grommet materials are suitable for -40°C to +90°C (-40°F to +194°F). Consult factory for higher temperature requirements.

Mechanical Specifications

Durability	Minimum 300 mate/unmate cycles without mechanical or electrical failure
Vibration	Coupling rings have overriding locking feature to prevent loosening or separation of connector
Hex Nut Torque	All series hex nut to withstand 10-12 inch/lb tightening torque.

Electrical Specifications

Voltage	600 V
Current	See Electrical Current Rating Chart (Page 27)

Environmental Specifications

Temperature Rating	-40°C to +115°C (-40°F to +239°F)
Corrosion	300 Hr salt spray contacts
Weathertight	Consult factory with specific application

Molded Cable Assemblies

Watertight	(See Pages 3 & 26) NEMA 6P, 13: IEC IP67
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MAXI-CON-X[®] FIELD INSTALLABLE CONNECTORS



Cable Pin
13X8X-XXPG-XXX
Matching Mates:

- **Cable-Cable**
15X8X-XXSG-XXX
- **Panel**
14XXX-XXSG-XXX



Panel Mount
14X8X-XXXG-XXX
Matching Mates:

- **Cable Pin**
13X8X-XXPG-XXX
- **Cable Socket**
13X8X-XXSG-XXX



P/C Tail Panel Mount
14XXX-XXXG-XXX
Matching Mates:

- **Cable Pin**
13X8X-XXPG-XXX
- **Cable Socket**
13X8X-XXSG-XXX



Cable Socket
13X8X-XXSG-XXX
Matching Mates:

- **Cable-Cable**
15X8X-XXPG-XXX
- **Panel**
14XXX-XXPG-XXX



Cable to Cable
15X8X-XXXG-XXX
Matching Mates:

- **Cable Pin**
13X8X-XXPG-XXX
- **Cable Socket**
13X8X-XXSG-XXX



Winged Coupling Ring
W/14482



Dust Cap
14295

Molded Cable Assemblies (See pages 3 & 26)



Cable End



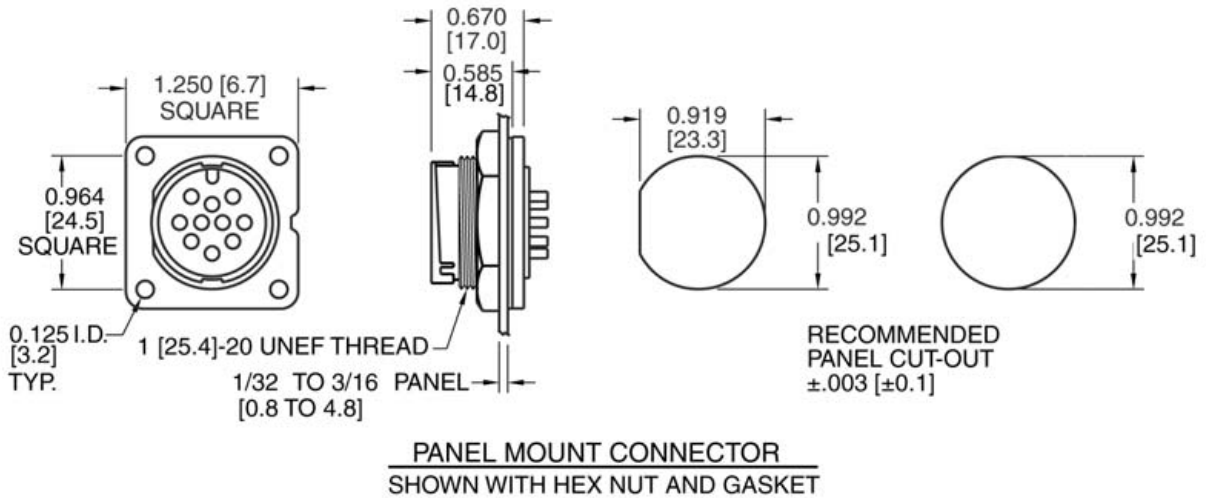
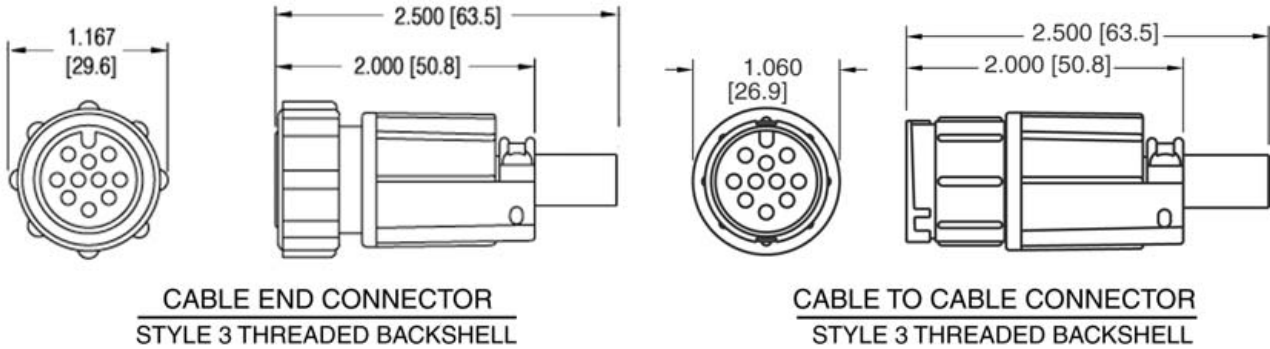
Cable to Cable



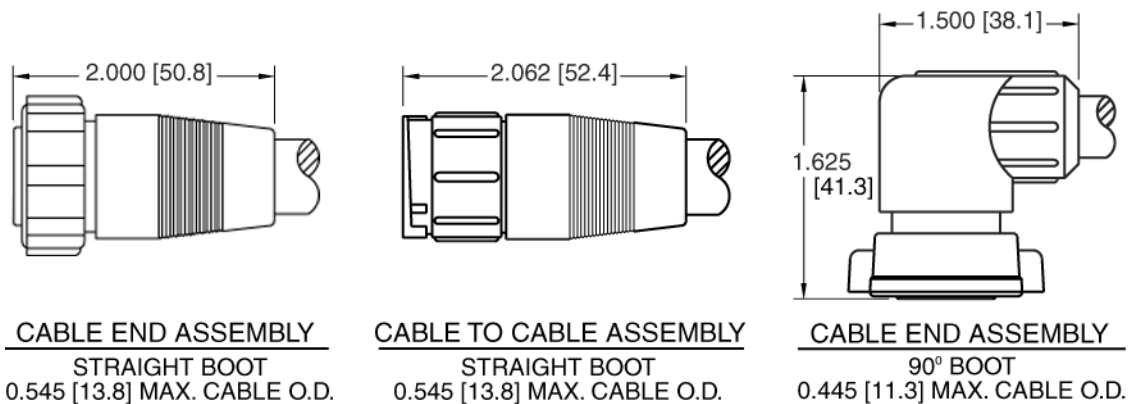
Right Angle

MAXI-CON-X® FIELD INSTALLABLE CONNECTORS

Dimensions (Dimensions in brackets are in millimeters)



Molded Cable Assemblies (See pages 3 & 26)



MAXI-CON-X[®] FIELD INSTALLABLE CONNECTORS

Part Number to Order

XX X XX-XX XG-3XX

Connector Type: _____

- 13 - Cable End
- 14 - Panel Mount
- 15 - Cable to Cable

Contact Size: _____

- 1 - #12 (7 Contacts)
- 2 - #20 (18 & 20 Contacts)
- 3 - #16 (10 Contacts)

Contact Style: _____

- 80 - Crimp (Supplied loose)
- 81 - P/C Tail .187" (4.7) (Supplied assembled)
- 82 - Solder Cup (Supplied assembled)
- 91 - P/C Tail .280" (7.1) (Supplied assembled)*
- 92 - P/C Tail .335" (8.5) (Supplied assembled)*

Number of Contacts: _____

- 7, 10, 18 & 20

Type of Contact: _____

- P - Pin
- S - Socket

Contact Plating: _____

- G - Gold over Nickel (Standard)

EMI/RFI shielded assemblies available - consult factory.

*Available in #20 size contact only.

Consult factory for optional threaded coupling.

Consult factory for your custom design cable assemblies and connectors. (See pages 3 & 26)

Grommet Code - Cable O.D. Range:

Back Shell Style 3

- 21 - .21 - .25 (5.3-6.3)
- 26 - .26 - .30 (6.6-7.6)
- 31 - .31 - .38 (7.8-9.6)

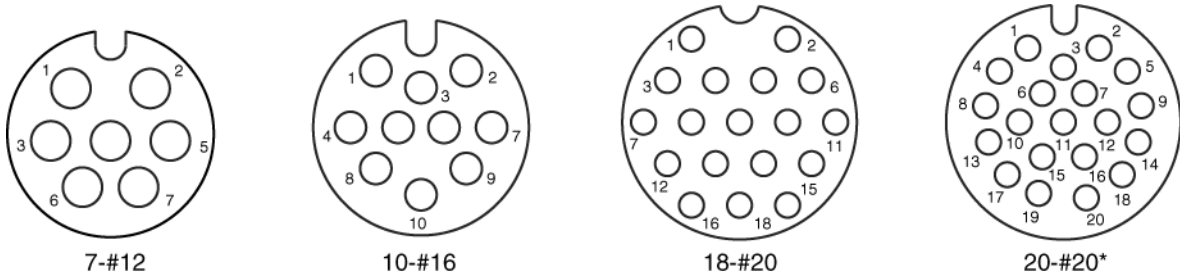
Back Shell Style:

- 3 Mechanical screw-down cable clamp with grommet seal and (1) interfacial "O" ring for cable end.

300 - Panel mount with hex nut & gasket.

3ES - 300 with Epoxy

Contact Arrangements



Contact arrangements shown are wiring view of cable end pins/sockets.

Key/keyway shown for orientation only.

*Available in connector types: cable end socket, panel mount pin styles only.

MAXI-CON-X® FIELD INSTALLABLE CONNECTORS

Specifications

Typical Specifications

Manufacturers Identifications	Maxi-Con-X®
Description	Field Installable Connector & Custom Cable Assemblies
Rating	1.35 thru 23.0A, 600V
Conductor Size	#12 Contacts, 12 thru 14 AWG #16 Contacts, 16 thru 18 AWG #20 Contacts, 20 thru 24 AWG
Configuration	7 - #12 Contacts 10 - #16 Contacts 18 - #20 Contacts 20 - #20 Contacts
Certification	UL Recognized File #E150822 - 250V CSA Certified File #181200 - 600V

Material Specifications

Cable Pin/Socket

Mechanical Backshell (Threaded)	Nylon, UL Recognized, Black
Strap	Nylon, UL Recognized, Black
Screws	Stainless Steel
Grommet	Santoprene Rubber, Black
Coupling Ring	Nylon, UL Recognized, Black
Contacts	Brass, Gold over Nickel
Connector Body	Nylon, UL Recognized, Black
O-Ring	Neoprene Rubber, Black

Optional

Winged Coupling Ring	Nylon, UL Recognized, Black (W/14482)
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Cable to Cable

Mechanical Backshell (Threaded)	Nylon, UL Recognized, Black
Grommet	Santoprene Rubber, Black
Strap	Nylon, UL Recognized, Black
Screws	Stainless Steel
Contacts	Brass, Gold over Nickel
Connector Body	Nylon, UL Recognized, Black

Panel Mount

Contacts	Brass, Gold over Nickel
Panel Body	Nylon, UL Recognized, Black
Gasket	Neoprene Rubber, Black
Hex Nut	Nylon, UL Recognized, Black

Optional

Dust Cap	Santoprene Rubber, Black (Part No. 14295)
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Gasket, O-Ring, & Grommet materials are suitable for -40°C to +90°C (-40°F to +194°F). Consult factory for higher temperature requirements.

Mechanical Specifications

Durability	Minimum 300 mate/unmate cycles without mechanical or electrical failure
Vibration	Coupling rings have overriding locking feature to prevent loosening or separation of connector
Hex Nut Torque	All series hex nut to withstand 10-12 inch/lb tightening torque

Electrical Specifications

Voltage	600 V
Current	See Electrical Current Rating Chart (Page 27)

Environmental Specifications

Temperature Rating	-40°C to +115°C (-40°F to +239°F)
Corrosion	300 Hr salt spray contacts
Weathertight	Consult factory with specific application

Molded Cable Assemblies

Watertight	(See Pages 3 & 26) NEMA 6P, 13: IEC IP67
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CON-X ELECTRICAL CURRENT RATING CHART FOR CONNECTORS & CABLE ASSEMBLIES

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

Max. Number and Size of Contacts per Series:

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