



**THE DATASHEET OF
7281-6SG-3ES**



MINI-CON-X[®] FIELD INSTALLABLE CONNECTORS



Cable Pin
6X8X-XPB-XXX
Matching Mates:

- Cable-Cable
8X8X-XSB-XXX
- Panel
7XXX-XSB-XXX



Panel Mount
7X8X-XXB-XXX
Matching Mates:

- Cable Pin
6X8X-XPB-XXX
- Cable Socket
6X8X-XSB-XXX



P/G Tail Panel Mount
7XXX-XXB-XXX
Matching Mates:

- Cable Pin
6X8X-XPB-XXX
- Cable Socket
6X8X-XSB-XXX



Cable Socket
6X8X-XSB-XXX
Matching Mates:

- Cable-Cable
8X8X-XPB-XXX
- Panel
7XXX-XPB-XXX



Cable to Cable
8X8X-XXB-XXX
Matching Mates:

- Cable Pin
6X8X-XPB-XXX
- Cable Socket
6X8X-XSB-XXX



Dust Cap
6295



Winged Coupling Ring
W/6482

Molded Cable Assemblies (See pages 3 & 26)



Cable End



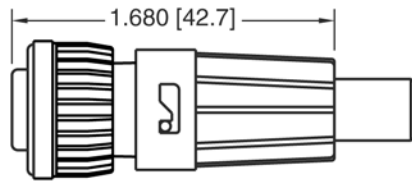
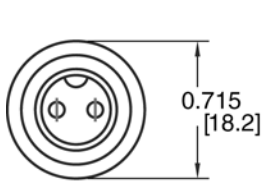
Cable to Cable



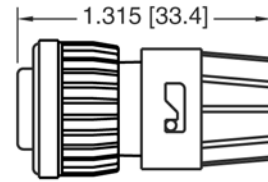
Right Angle

MINI-CON-X® FIELD INSTALLABLE CONNECTORS

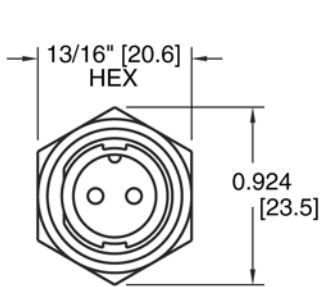
Dimensions



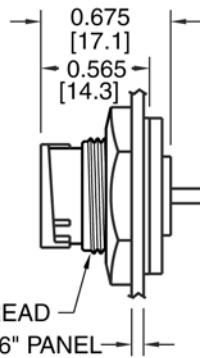
CABLE END CONNECTOR
STYLE 5 LONG
TWIST LOCK BACKSHELL



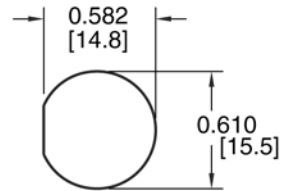
CABLE END CONNECTOR
STYLE 3 AND 3DC SHORT
TWIST LOCK BACKSHELL



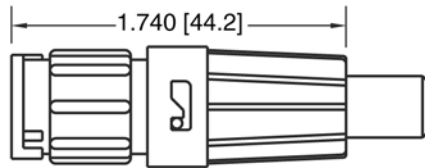
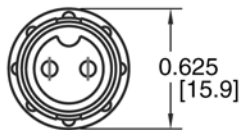
5/8" [15.9]-27 UNEF THREAD
1/32" TO 3/16" PANEL
[0.8 TO 4.8]



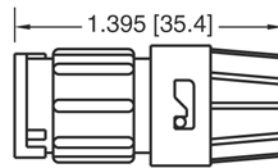
PANEL MOUNT CONNECTOR
SHOWN WITH HEX NUT AND GASKET



RECOMMENDED
PANEL CUT-OUT
±.003 [±0.1]

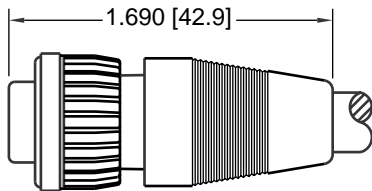


CABLE TO CABLE CONNECTOR
STYLE 5 LONG
TWIST LOCK BACKSHELL

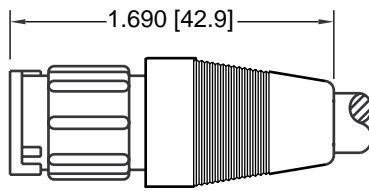


CABLE TO CABLE CONNECTOR
STYLE 3 AND 3DC SHORT
TWIST LOCK BACKSHELL

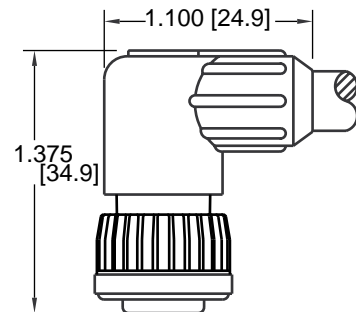
Molded Cable Assemblies (See pages 3 & 26)



CABLE END ASSEMBLY
STRAIGHT BOOT
0.375 [9.5] MAX. CABLE O.D.



CABLE TO CABLE ASSEMBLY
STRAIGHT BOOT
0.375 [9.5] MAX. CABLE O.D.



CABLE END ASSEMBLY
90° BOOT
0.310 [7.9] MAX. CABLE O.D.

MINI-CON-X[®] FIELD INSTALLABLE CONNECTORS

Part Number to Order

X X XX-XXG-XXX

Connector Type: _____

- 6 - Cable End
- 7 - Panel Mount
- 8 - Cable to Cable

Contact Size: _____

- 2 - #20 (2-8 Contacts)
- 3 - #16 (2-5 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: _____

- 2, 3, 4, 5, 6, 7 & 8

Type of Contact: _____

- P - Pin
- S - Socket

Contact Plating: _____

- G - Gold over Nickel (Standard)

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)
- 21 - .21 - .23 (5.3 - 5.8)

Back Shell
Style 3

- 13 - .13 - .15 (3.3 - 3.8)
- 16 - .16 - .18 (4.1 - 4.6)
- 19 - .19 - .21 (4.8 - 5.3)
- 22 - .22 - .25 (5.6 - 6.3)

Back Shell
Style 5

Back Shell Style:

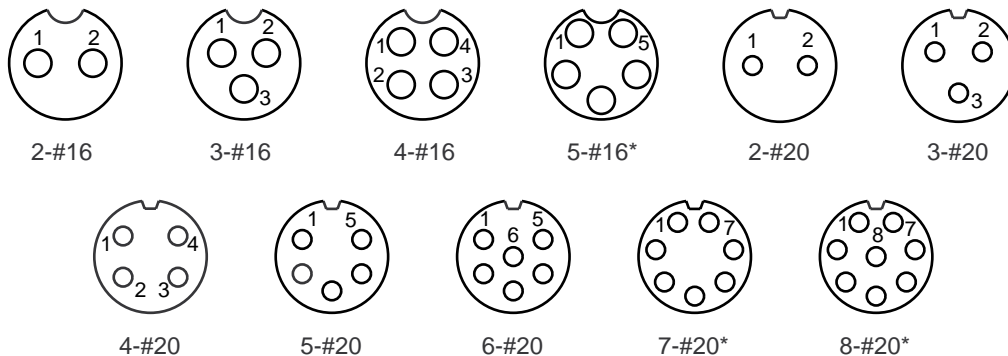
- 3 Weathertight grommet grip/seal & (1) interfacial "O" ring.
- 3DC - Daisy chain grommet with 3 I.D.s. (.125, .188 & .250)
- 5 Long back shell with extended grommet & cable grip. Use with crimp or solder.
- 300 - Panel mount with hex nut & gasket.
- 3ES - 300 with Epoxy

*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



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, and cable to cable pin styles only.

MINI-CON-X® FIELD INSTALLABLE CONNECTORS

Specifications

Typical Specifications

Manufacturers Identifications	Mini-Con-X®
Description	Field Installable Connector & Custom Cable Assemblies
Rating	4.8 thru 13.0A, 600V
Conductor Size	#16 contacts, 16 thru 18 AWG #20 contacts, 20 thru 24 AWG
Configuration	2 thru 5 #16 Contacts or 2 thru 8 #20 Contacts
Certification	UL Recognized File #E138878 - 250V CSA Certified File #LR89277 - 600V

Material Specifications

Cable Pin/Socket

Backshell (Removable Twist 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	Nitrile Rubber, Black

Optional

Long Backshell (Removable Twist Lock)	Nylon, UL Recognized, Black (Style #5)
Winged Coupling Ring	Nylon, UL Recognized, Black (W/6482)

Cable to Cable

Backshell (Removable Twist 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	Nitrile Rubber, Black
Hex Nut	Nylon, UL Recognized, Black

Optional

Dust Cap	Santoprene Rubber, Black (Part No. 6295)
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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	-55°C to +125°C (-67°F to +257°F)
Corrosion	300 Hr salt spray contacts
Weatheright	Consult factory with specific application

Molded Cable Assemblies

Watertight	(See Pages 3 & 26) NEMA 6P, 13: IEC IP67
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Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View 7281-6SG-3ES on WIN SOURCE](#)
-  [Conxall/Switchcraft Information](#)

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-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management