

SHIELDED  
**MINI-CON-X®**  
SEALED CONNECTORS



**Switchcraft®**  
**CONXALL®**

HARSH ENVIRONMENT CONNECTIVITY SOLUTIONS

Special shielding tape offers effective EMI shielding

Thousands of configurations available up to 18 contacts

Available as field installable connectors or factory molded cable assemblies

A machined metal panel connector and coupling ring provides enhanced durability and EMI shielding

## NEW PRODUCT

The Shielded Mini-Con-X® from Conxall® takes the industry standard design of the Mini-Con-X® and adds a metal housing for shielding and enhanced durability. This expansion adds a field-installable cable-mount receptacle for every pin configuration, opening up a host of new applications. Custom, factory overmolded cable assemblies are also available from Conxall.

**IP68**  
RATED WATER  
RESISTANCE

The Shielded Mini-Con-X® series is sealed to IP68 when mated for harsh environment durability

**360°**  
RF/EMI  
SHIELDED

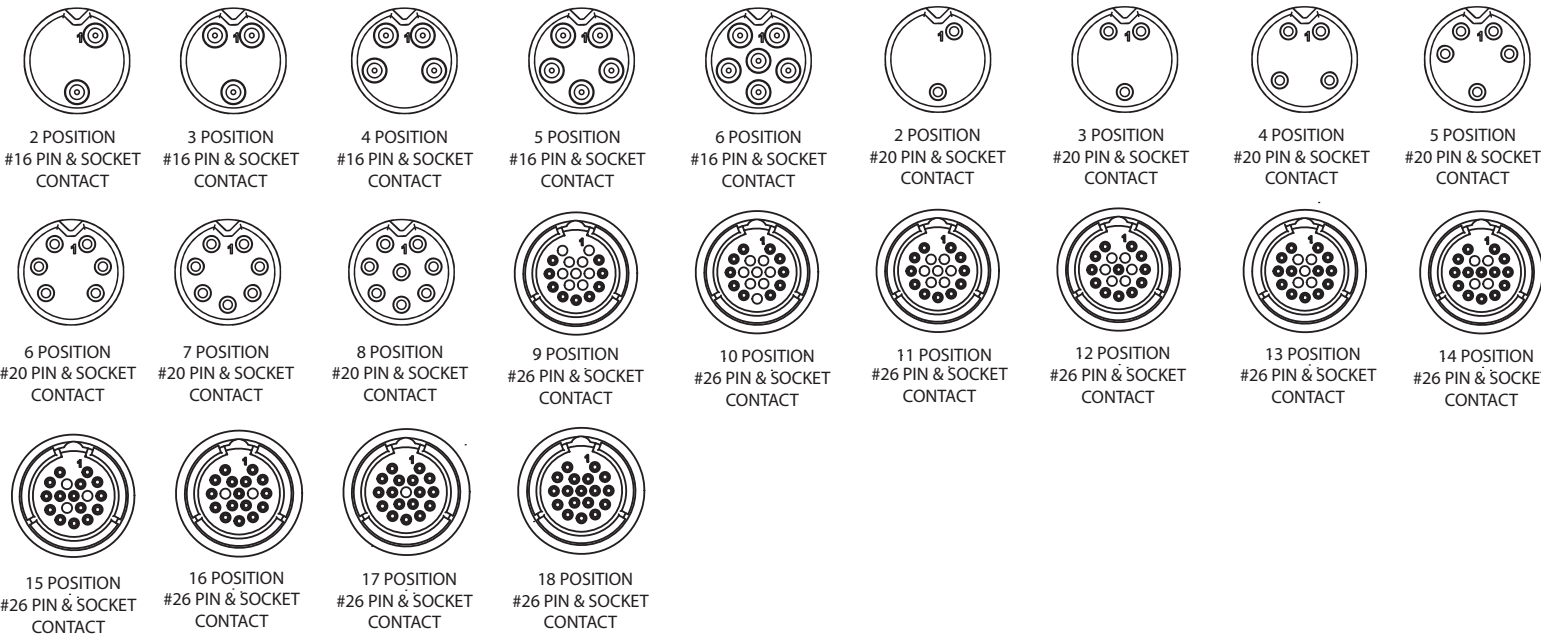
A copper alloy housing with non-magnetic EN plating and the included conducting tape provide effective shielding



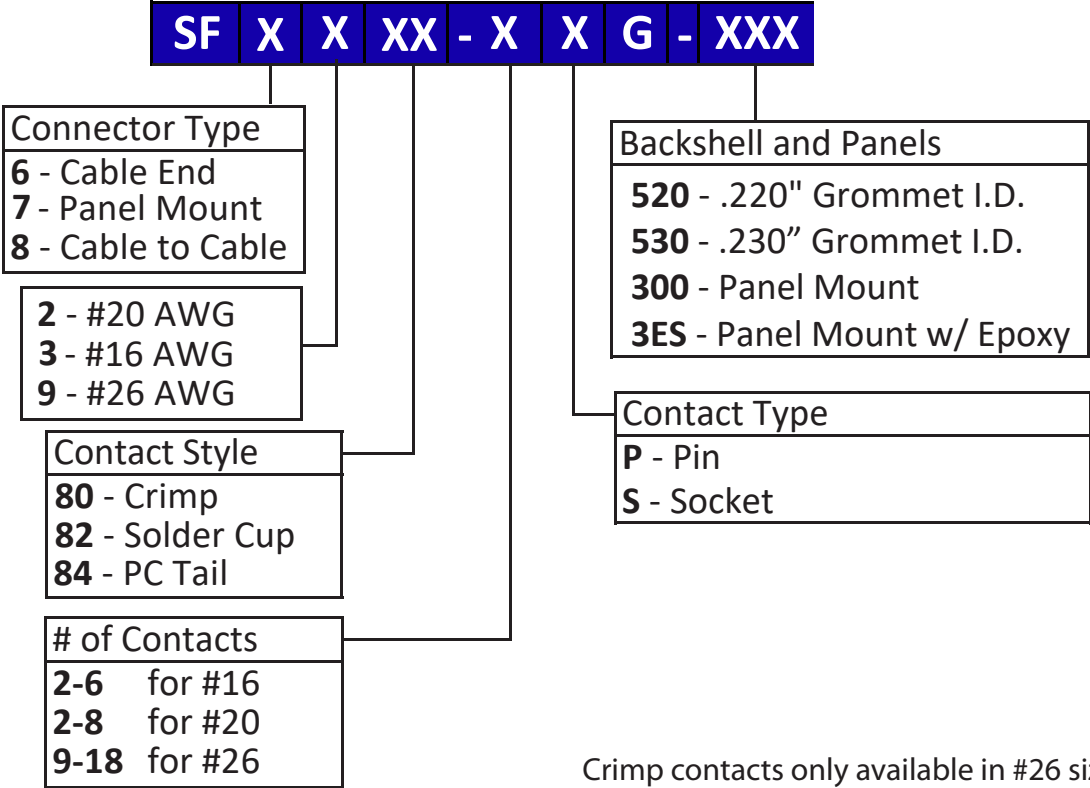
**CONXALL**  
QUALITY

Made in USA to the high standards that have made Conxall the leading name in harsh environment connectors

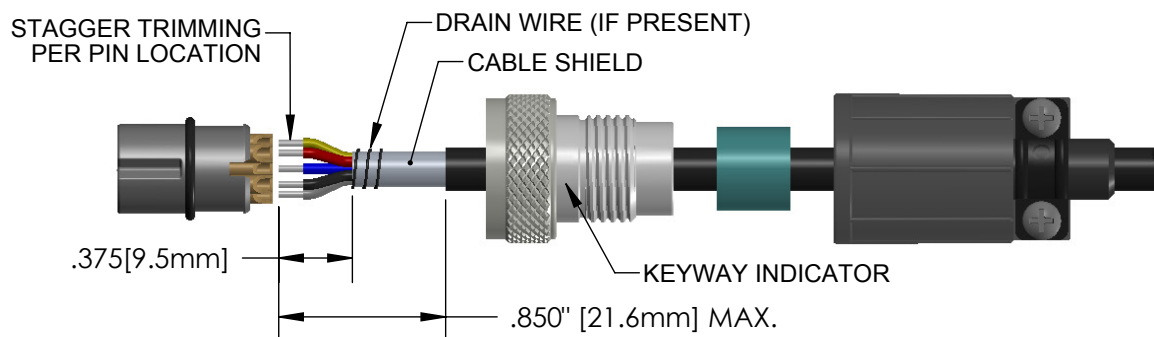
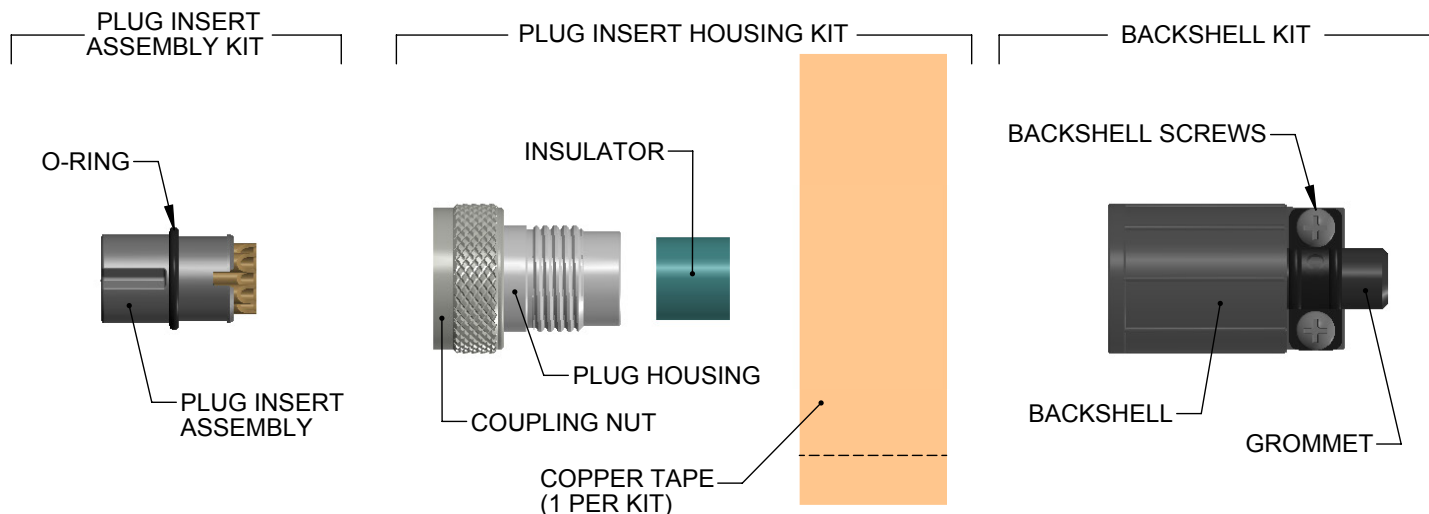
CONTACT LAYOUTS (REAR/WIRING SIDE OF PANEL SHOWN)



ORDERING CODE



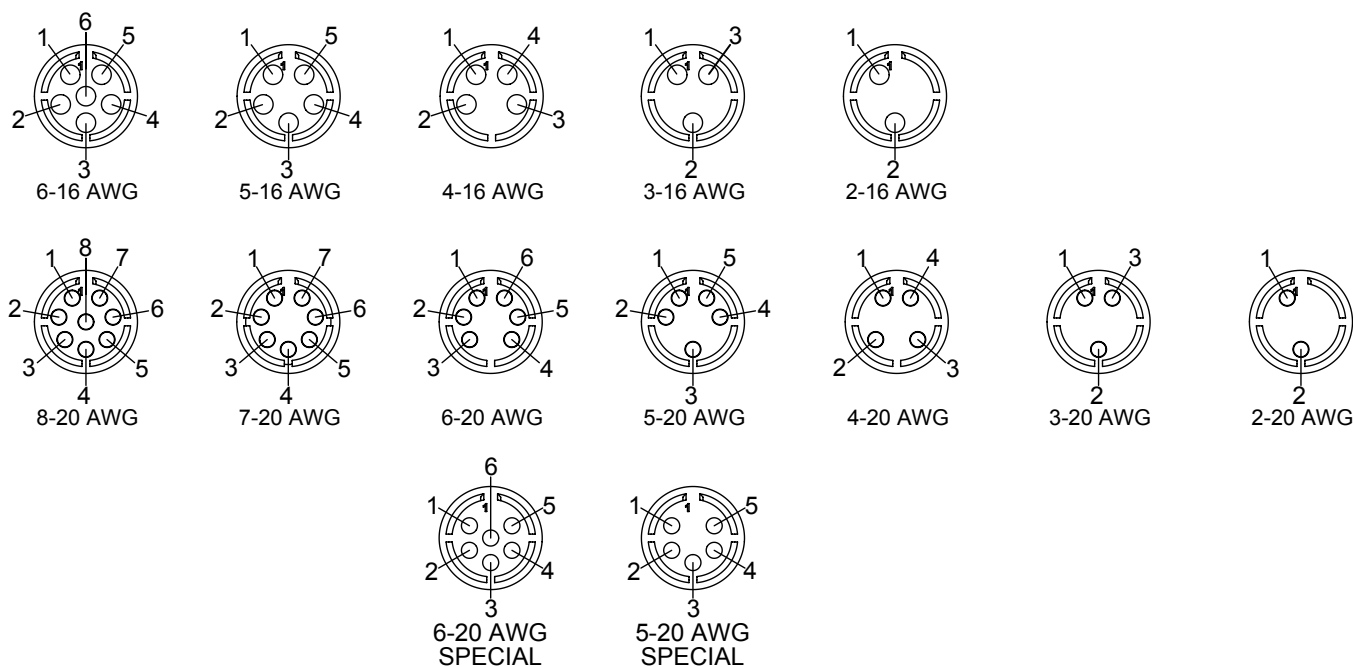
Crimp contacts only available in #26 size

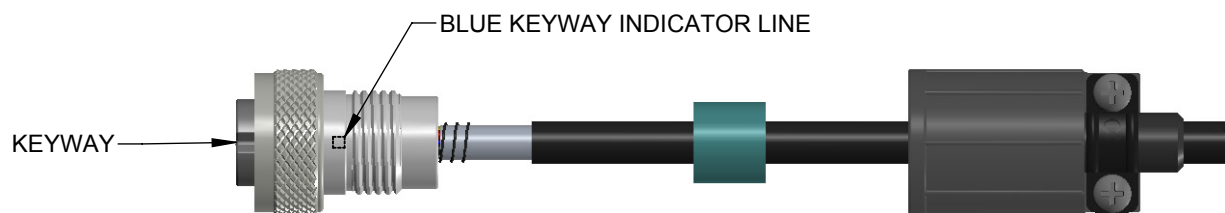


**STEP 1:** SLIDE BACKSHELL, PLUG HOUSING, AND INSULATOR ONTO CABLE IN THE ORDER SHOWN.

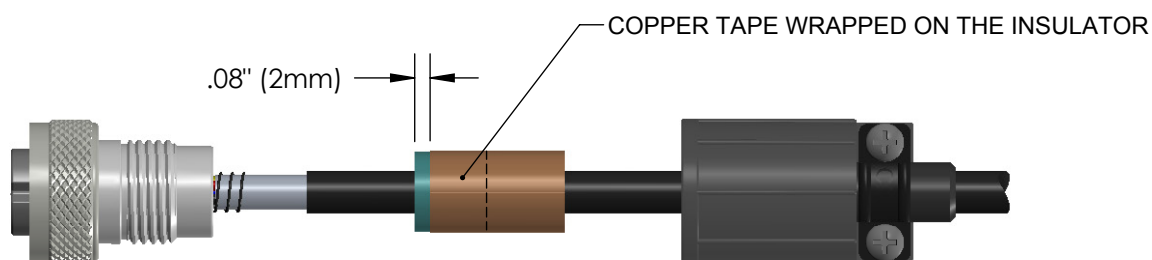
**STEP 2:** STRIP CABLE JACKET AND WIRES TO LENGTH. EXCESS CABLE SHIELD MUST BE TRIMMED OR WRAPPED AROUND WIRES. IF PRESENT, USE THE DRAIN WIRE TO WRAP THE CABLE SHIELD IN PLACE.

**STEP 3:** SOLDER WIRES IN CONTACTS ACCORDING TO YOUR SPECIFICATIONS AND PER PIN ARRANGEMENTS BELOW.





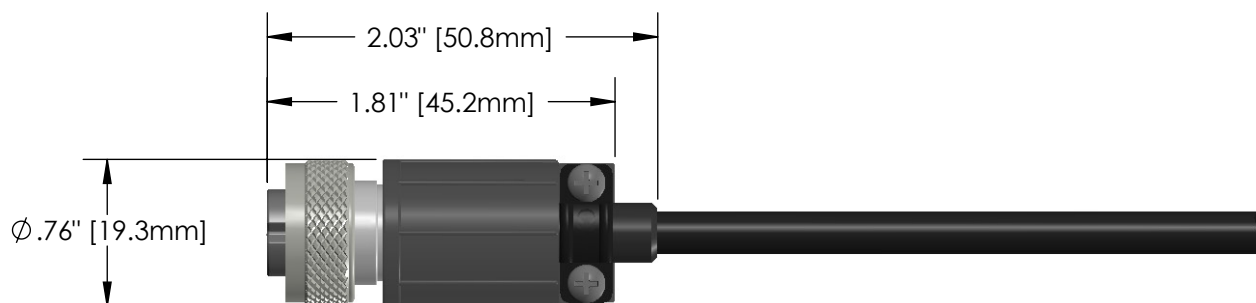
**STEP 4:** ALIGN MAIN KEYWAY OF PLUG INSERT WITH THE BLUE KEYWAY INDICATOR LINE AND PRESS PLUG INSERT INTO PLUG HOUSING UNTIL IT SNAPS IN PLACE. MAKE CERTAIN THAT THE O-RING (LOCATED ON THE PLUG INSERT ASSEMBLY) IS IN PLACE.



**STEP 5:** PEEL-OFF THE BACKING OF ONE PIECE OF COPPER TAPE, WRAP THE TAPE AROUND THE INSULATOR AS SHOWN.



**STEP 6:** SLIDE INSULATOR WITH THE COPPER TAPE INTO THE BACK OF THE PLUG HOUSING. FORM FREE END OF COPPER TAPE TIGHTLY ONTO THE SHIELD OF THE CABLE. MAKE CERTAIN NEITHER THE COPPER TAPE NOR THE CABLE SHIELDING TOUCH ANY OF THE TERMINALS.



**STEP 7:** SLIDE THE BACKSHELL ASSEMBLY UP AGAINST THE PLUG INSERT ASSEMBLY. HOLD THE PLUG INSERT HOUSING AND THREAD THE BACKSHELL ONTO IT. TIGHTEN FIRMLY BY APPLYING 4 - 5 LB-IN [0.45 - 0.56 N-m] TIGHTENING TORQUE.

**STEP 8:** TIGHTEN THE TWO BACKSHELL SCREWS TO SECURE THE CABLE IN THE BACKSHELL.

# SPECIFICATIONS

## MECHANICAL:

|                         |                                          |
|-------------------------|------------------------------------------|
| Life:                   | 400 insertion/ withdrawal cycles minimum |
| Vibration:              | Mil-Std 202G method 201A                 |
| Hex Nut Torque:         | 10-12 in-lb max tightening torque        |
| Coupling Locking Style: | Threaded Coupling Ring                   |
| Backshell Style:        | Threaded                                 |

## ELECTRICAL:

|                 |                                                                                                                                |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------|
| Voltage Rating: | 600 V AC/DC                                                                                                                    |
| Current Rating: | 13.A - max (See page 107 for Electrical Current Rating Chart)                                                                  |
| Conductor Size: | 2 through 6 #16 contacts accepts 16 AWG<br>2 through 8 #20 contacts accepts 20 AWG<br>9 through 18 #26 contacts accepts 26 AWG |

## ENVIRONMENTAL:

|                        |                                                                              |
|------------------------|------------------------------------------------------------------------------|
| Temperature Limits:    | -40°C to +85°C (-40°F to +185°F)                                             |
| Operating Temperature: | 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 106F condition B                                         |
| Ingress Protection :   | IP66, IP67, IP68 per IEC60529<br>(Molded cable assemblies , consult factory) |

## MATERIAL:

|                         |                            |
|-------------------------|----------------------------|
| Backshell & Strap:      | Thermoplastic              |
| Inserts:                | Thermoplastic              |
| Coupling Ring:          | Nickel Plated Copper Alloy |
| Cable Housing           | Nickel Plated Copper Alloy |
| Grommet/ Strain Relief: | Elastomer, black           |
| O-Ring:                 | Elastomer, black           |
| Contacts:               | Copper Alloy, gold plated  |
| Screws:                 | Stainless Steel            |