

SHIELDED
MINI-CON-X[®]
SEALED CONNECTORS



Switchcraft[®]
CONXALL[®]

HARSH ENVIRONMENT CONNECTIVITY SOLUTIONS

Special shielding tape offers effective EMI shielding



Available as field installable connectors or factory molded cable assemblies

Thousands of configurations available up to 18 contacts



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

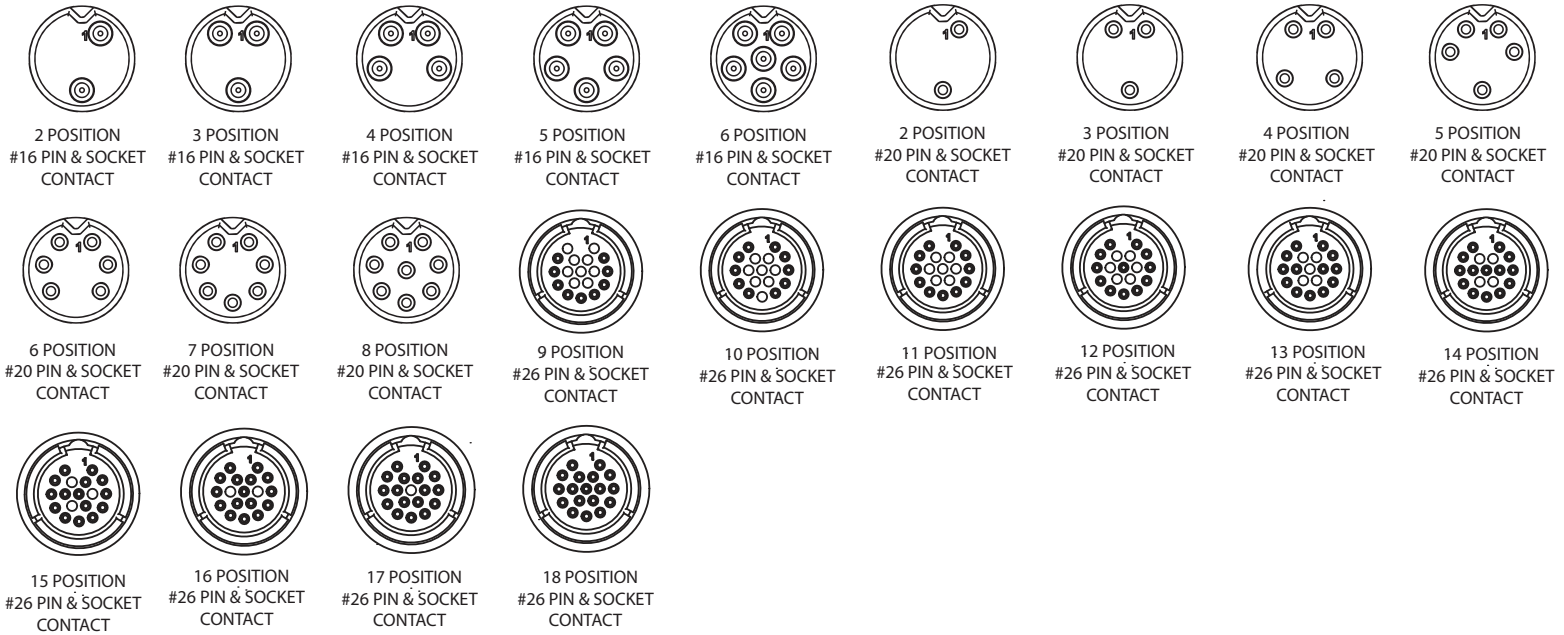
360°
RF/EMI
SHIELDED

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

SF X X XX - X X G - XXX

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

Wire Gauge
 2 - #20 AWG
 3 - #16 AWG
 9 - #26 AWG

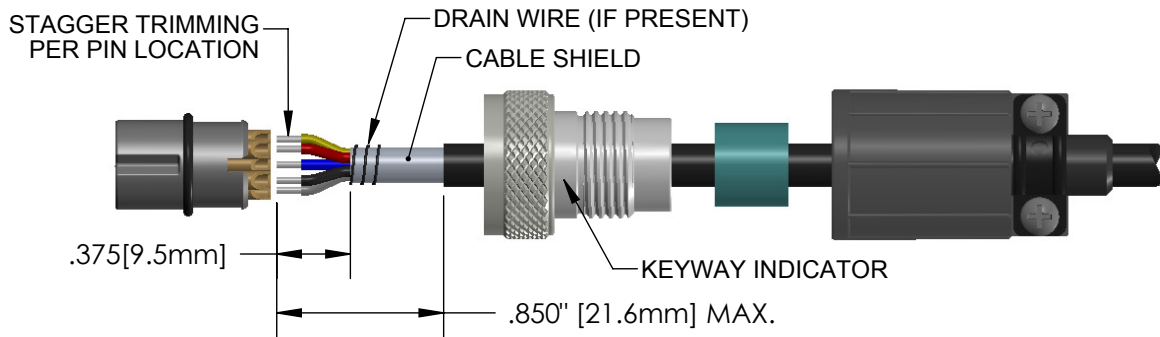
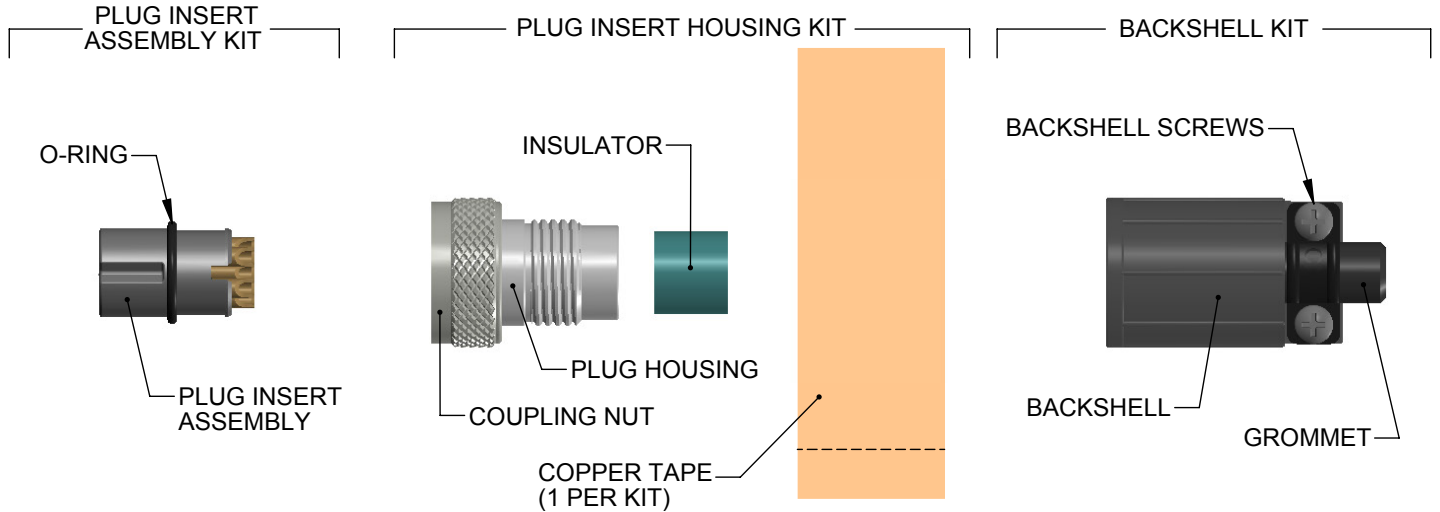
Contact Style
 80 - Crimp
 82 - Solder Cup
 84 - PC Tail

of Contacts
 2-6 for #16
 2-8 for #20
 9-18 for #26

Backshell and Panels
 520 - .220" Grommet I.D.
 530 - .230" Grommet I.D.
 300 - Panel Mount
 3ES - Panel Mount w/ Epoxy

Contact Type
 P - Pin
 S - Socket

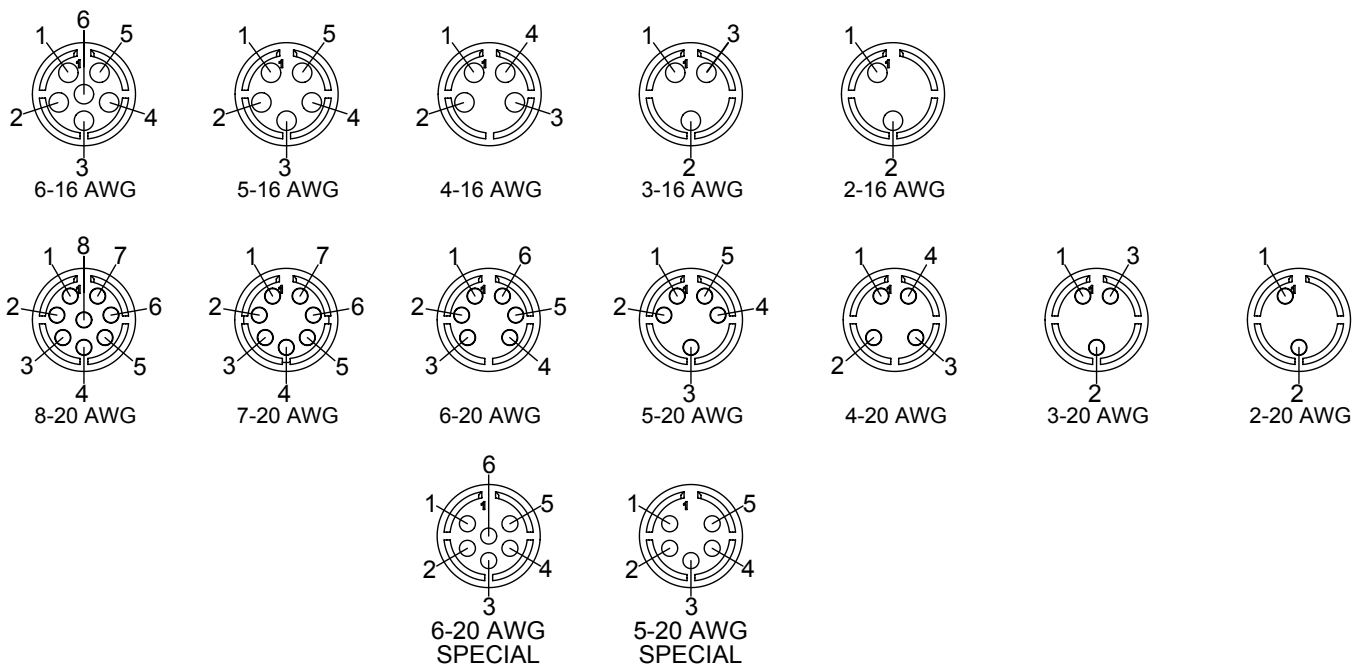
Crimp contacts only available in #26 size

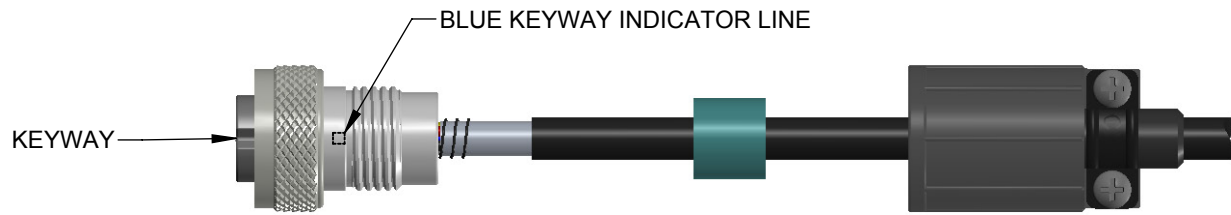


STEP 1: SLIDE BACKSHELL, PLUG HOUSING, AND INSULATOR ONTO CABLE IN THE ORDER SHOWN.

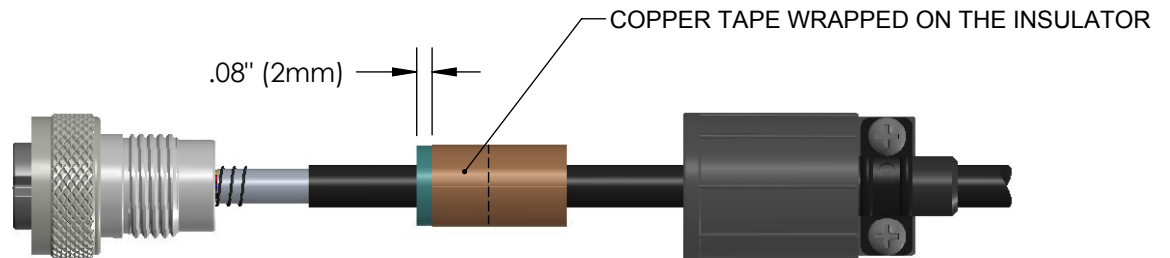
STEP 2: STRIP CABLE JACKET AND WIRES TO LENGTH. EXCESS CABLE SHIELD MUST BE TRIMMED OR WRAPPED AROUND WIRES. IF PRESENT, USE THE DRAIN WIRE TO WRAP THE CABLE SHIELD IN PLACE.

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





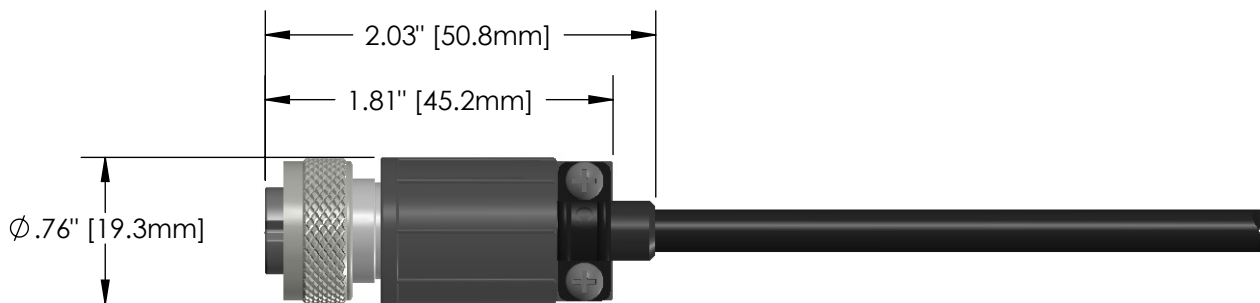
STEP 4: ALIGN MAIN KEYWAY OF PLUG INSERT WITH THE BLUE KEYWAY INDICATOR LINE AND PRESS PLUG INSERT INTO PLUG HOUSING UNTIL IT SNAPS IN PLACE. MAKE CERTAIN THAT THE O-RING (LOCATED ON THE PLUG INSERT ASSEMBLY) IS IN PLACE.



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 2 through 8 #20 contacts accepts 20 AWG 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 (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