# **Switchcraft**®



# EN3<sup>®</sup> SERIES WEATHERTIGHT CONNECTORS - 26 AWG 9-18 CRIMP CONTACTS & CLAMPING SYSTEM

## **Features and Benefits**

- Easier to assemble
- New longer cable clamp secures cable up to .380
- New thicker heavier boot seals cable diameters between .230 & .380
- Brass nut secures cable clamp
- New crimp pins/contacts eliminate soldering
- Gold plated contacts standard
- Withstands 2 meter submersion for 24 hours



## **Product Specifications**

## <u>Materials</u>

Connector Shell, Contact Locking Disc: Thermoplastic polymer

glass fiber, flame retardant

Cable Clamp: High grade thermoplastic

**Boot, Connector Shell Interior:** Thermoplastic elastomer **Contacts:** Copper base alloy, gold plated over nickel underplate

### **Mechanical**

Shock: Mil-Std 202 Method 213B, Condition K

Vibration: Mil-Std 202 Method 201A

**Life:** 600 insertion/withdraw cycles minimum

#### **Electrical**

Voltage Rating (Sea Level): Tested at 600 VRMS

Insulation Resistance: 100 megohms minimum at 77° F.

Contact Resistance: 5 milliohms maximum

**Current Rating: 3 Amps** 

## **Environmental**

**Temperature Limits:** -40° C to +65° C (non-operating)

Moisture Resistance: Mil-Std 202 Method 106F

Insulation Resistance: Mil-Std Method 302 Condition B

Thermal Shock: Mil-Std 202 Method 107G

**Salt Spray:** Mil-Std 202 Method 101D Condition B **Water Tightness Test:** U.S. Coast Guard CFR 46

Part 110.20

## **Product Ratings**

IP16/IP18 IP66/IP68 NEMA 250 (6P) CFR 46 Part 110.20 UL 94V-0



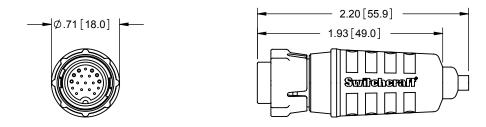
Panel Mount with Crimp Contacts



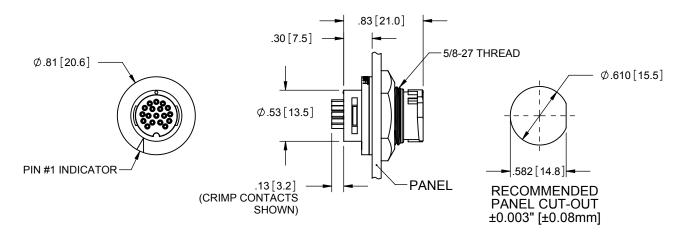
5555 North Elston Avenue / Chicago, IL 60630 Phone: 773-792-2700 / Fax: 773-792-2129

# **EN3™MINI WEATHERTIGHT - 26 AWG MULTI-PIN SERIES**

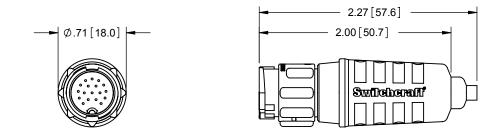
## **Cable End**



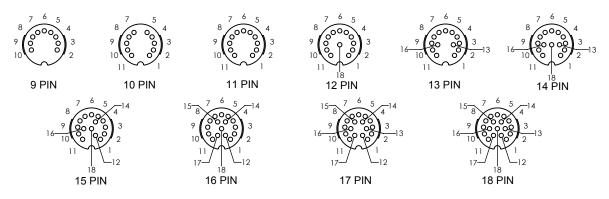
## **Panel Mount**



## In-Line



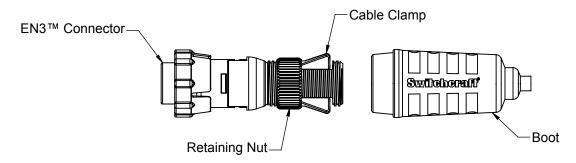
# Contact Arrangements (Wiring View of Cable End)



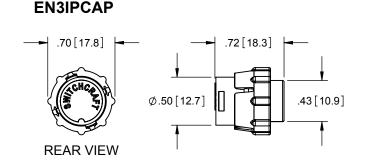
## **NEW CABLE CLAMP SYSTEM FOR LARGER O.D. CABLE**

For cable O.D. 0.230" to 0.380" [5.8 - 9.7] and maximum cable jacket stripping of 0.750" [9.1] long.

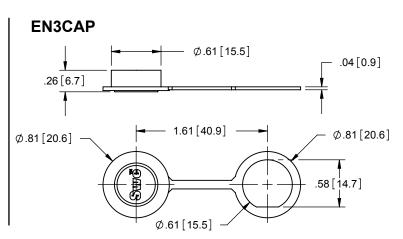
Note: Cable clamp system, for cable O.D. 0.090" to 0.265" [2.3 - 6.7] and maximum cable jacket stripping of 0.375" [9.5] long, still available.



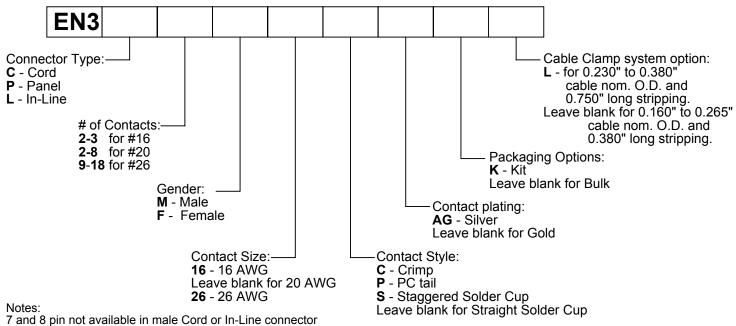
# EN3™ SERIES PLUG CAPS



All dimensions for reference only.



# EN3™ SERIES ORDERING CODE

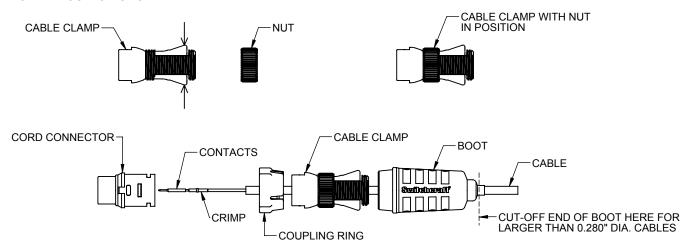


7 and 8 pin not available in male Cord or In-Line connector 7 and 8 pin not available in female In-Line connector AG (silver plating) special order

## EN3™ SERIES FIELD ASSEMBLY INSTRUCTIONS FOR CRIMP CONTACTS:

#### STEP 1:

PRESS THE TWO WINGS OF CABLE CLAMP INWARD, THEN THREAD NUT CLOCKWISE ONTO CABLE CLAMP TO THE POSITION SHOWN.



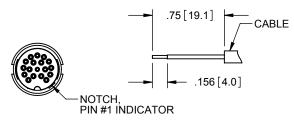
#### STEP 2:

FEED THE FREE END OF CABLE THROUGH BOOT, CABLE CLAMP, AND COUPLING RING IN THE ORDER SHOWN.

NOTE: CUT-OFF END OF BOOT FOR LARGER THAN 0.280"

DIAMETER CABLES.

STRIP CABLE END AND CONDUCTORS AS SHOWN.
CRIMP CONDUCTORS TO CONTACTS.
USE CRIMP HAND TOOL EN3CR OR PNEUMATIC CRIMP TOOL
EN3CRAUTO WITH #26 POSITIONER EN3POS26.
INSERT CONTACTS TO CONNECTOR HOUSING PER CONTACT
ARRANGEMENTS AND INSERTION INSTRUCTIONS.

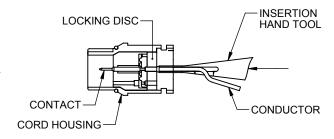


CORD WIRING SIDE VIEW

TYPICAL CONTACT INSERTION INSTRUCTIONS:
PLACE CONTACT IN GROOVE OF INSERTION HAND TOOL
EN3INS26. NOTE: TIP OF TOOL SHOULD BE UP AGAINST
THE SHOULDER OF CONTACT.

INSERT CONTACT INTO CORRECT CAVITY OF CONNECTOR BODY BY APPLYING CONSTANT PRESSURE UNTIL CONTACT BOTTOMS UP AGAINST LOCKING DISC. NOTE: DO NOT TILT TOOL DURING THE INSERTION.

REPEAT ABOVE PROCEDURE TO INSERT ALL CONTACTS PER CONTACT ARRANGEMENTS.



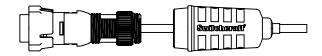
### STEP 3:

ALIGN TABS OF COUPLING RING WITH NOTCHES OF CORD HOUSING AND PUSH COUPLING RING ONTO CORD HOUSING.



#### STEP 4:

ALIGN CABLE CLAMP AND PUSH FORWARD UNTIL IT SNAP-LOCKS ONTO THE REAR OF CONNECTOR HOUSING. TURN NUT OF CABLE CLAMP COUNTERCLOCKWISE UNTIL CABLE CLAMP TIGHTENS AGAINST CABLE.



#### STEP 5:

PUSH BOOT ALL THE WAY FORWARD, OVER CABLE CLAMP, UNTIL FRONT END OF BOOT SEALS TIGHTLY ONTO CONNECTOR HOUSING.

