

## EN3® RIGHT-ANGLE WEATHERTIGHT CONNECTORS

### Features and Benefits

- Patented grommet and "O" ring free design allows for quick assembly
- Gold plated pins and contacts with an integrated design ensures reliable and uninterrupted connectivity
- The only IP68 rated right angle PCB mount connector on the market
- No intermediate PC board
- Available in 2 through 6 pin female and 2 through 8 pin male - 20 AWG pins and contacts only
- EN3® products are currently used in marine, medical, food service, transportation, GPS and general electronic applications

### Product Specifications

#### Materials

**Panel Connector Shells & Locking Nut:** Thermoplastic polymer, glass fiber, flame retardant

**Connector Shell Interior:** Thermoplastic rubber

**Contacts:** Copper base alloy gold-plated over nickel underplating

#### Mechanical

**Shock:** Mil-Std 202 Method 213B, condition K

**Vibration:** Mil-Std 202 Method 201

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

#### Electrical

**Voltage Rating:** Tested at 600 VRMS

**Insulation Resistance:** 100 megohms (minimum) at 77° F

**Contact Resistance:** 10 milliohms (maximum)

**Current Rating:** 6.5 Amps (#20 contact) - 7 and 8 pin  
7.5 Amps (#20 contact) - 2 through 6 pin

#### 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

#### Product Ratings

IP16/IP18 (Unmated EN3 Product)

IP66/IP68 (Mated EN3 Product)

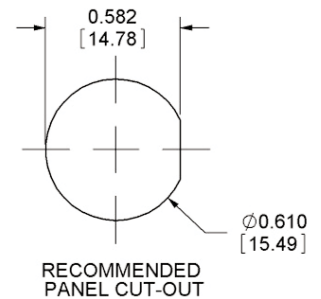
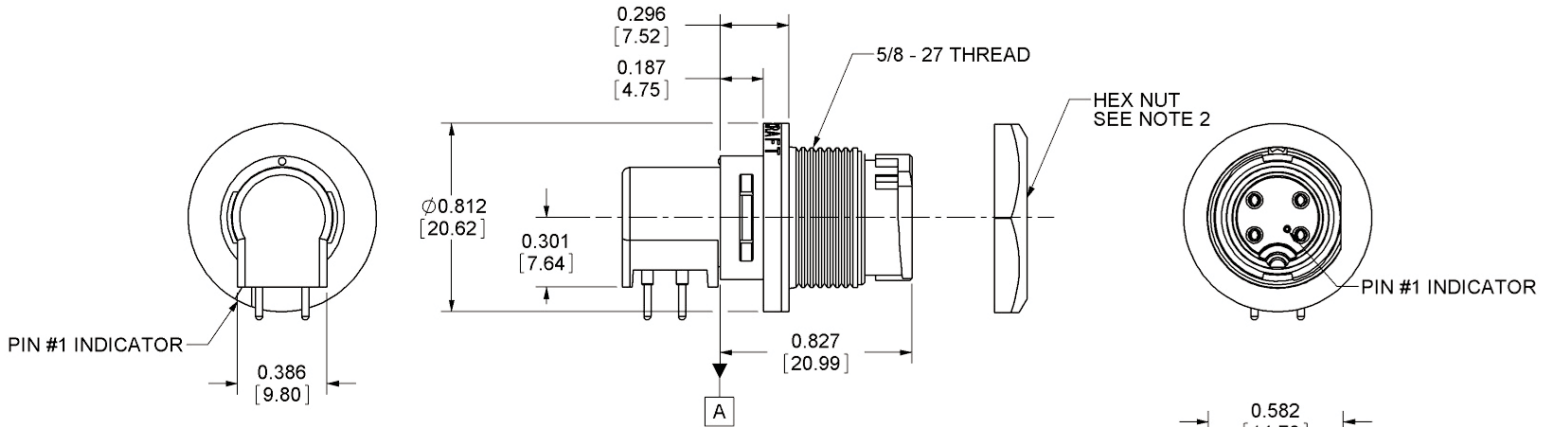
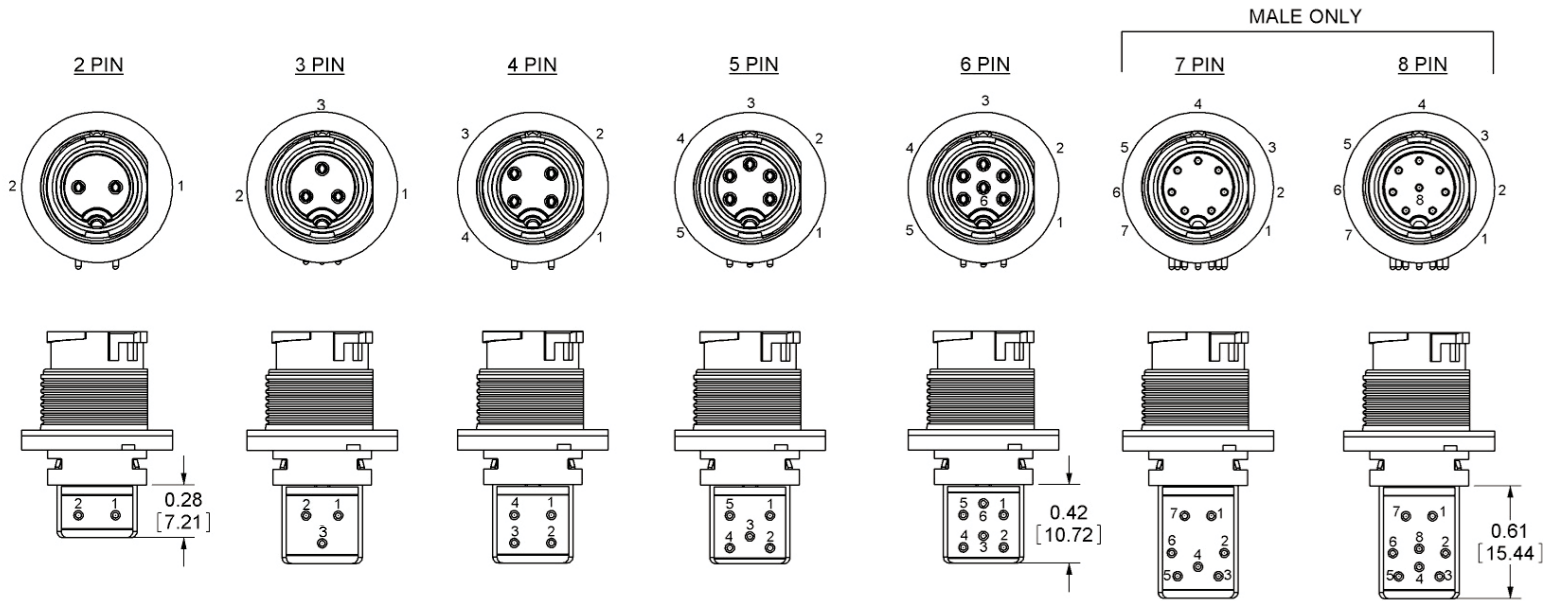
NEMA 250 (6P)

CFR 46 Part 110.20

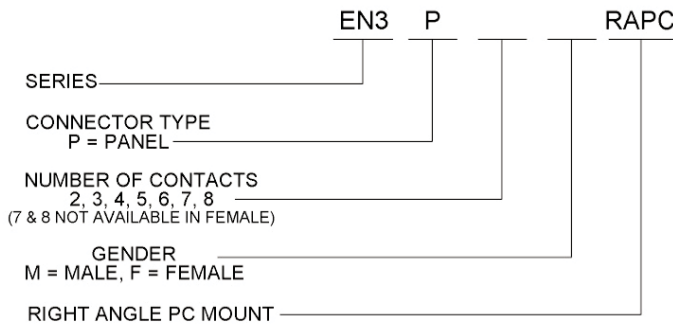
UL 94V-0



# EN3® RIGHT-ANGLE WEATHERTIGHT CONNECTORS

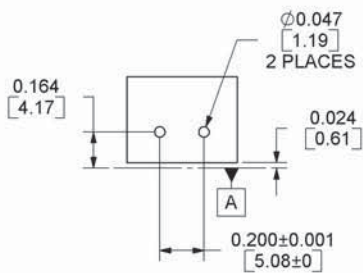


## Part Numbering Chart

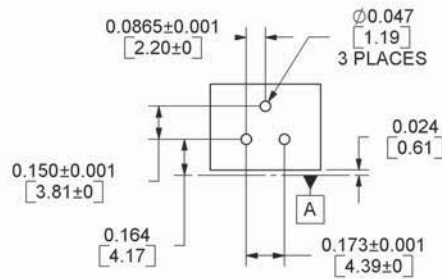


### NOTES:

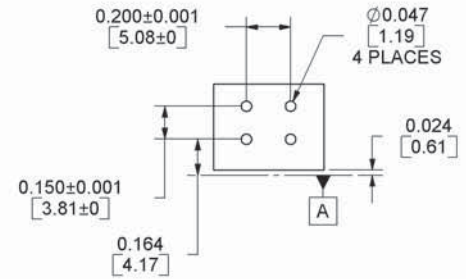
1. CONTACT SIZE: #20 AWG
2. HEX NUT TORQUE: 8 TO 10 INCH-LBS.



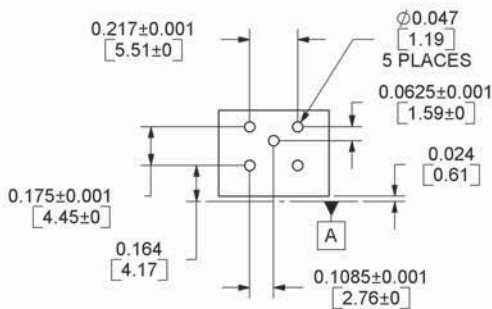
2 PIN MALE/FEMALE  
RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE)



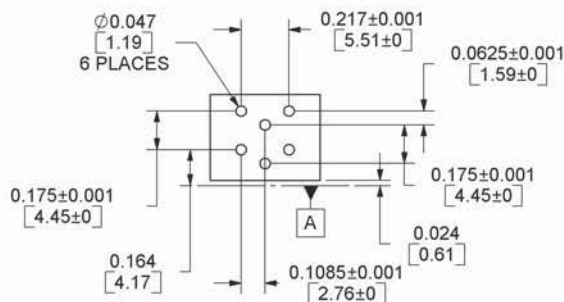
3 PIN MALE/FEMALE  
RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE)



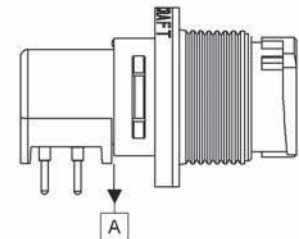
4 PIN MALE/FEMALE  
RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE)



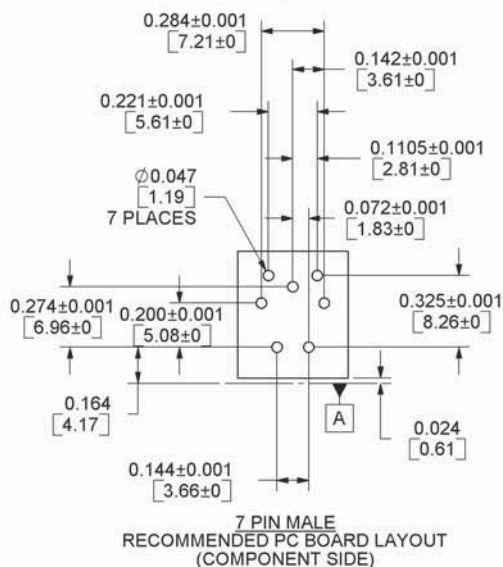
5 PIN MALE/FEMALE  
RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE)



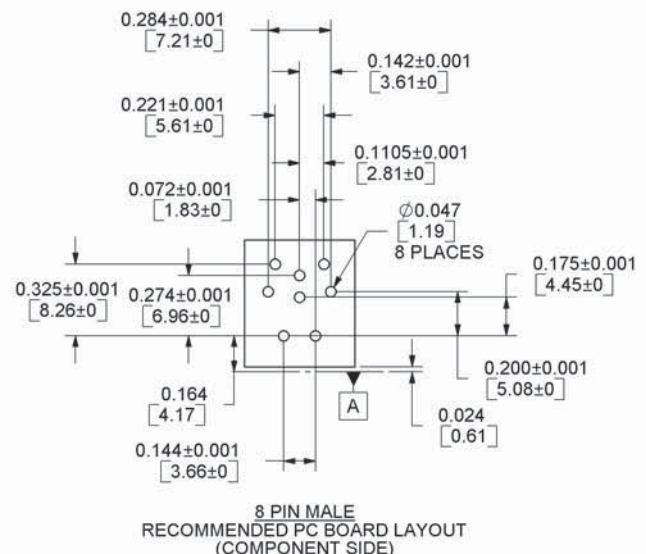
6 PIN MALE/FEMALE  
RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE)



### 7 & 8 PIN NOT AVAILABLE IN FEMALE CONNECTOR



7 PIN MALE  
RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE)



8 PIN MALE  
RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE)

# Switchcraft®

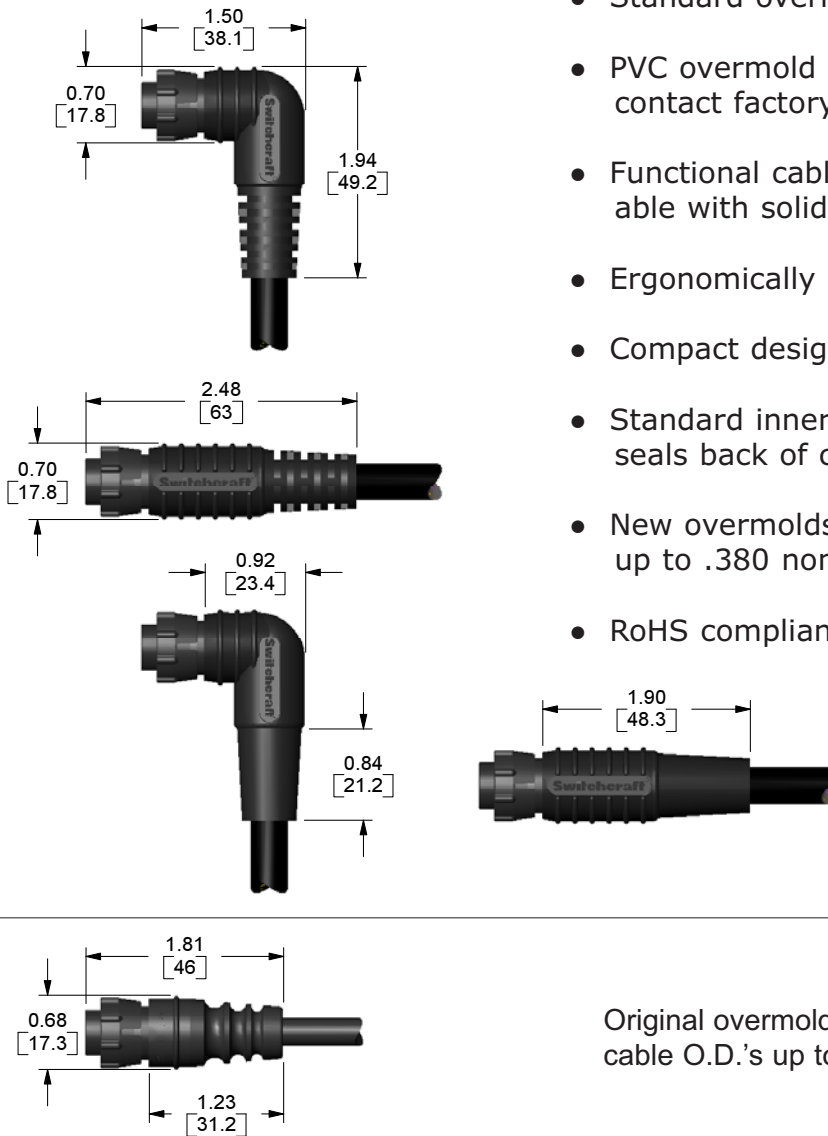
www.switchcraft.com

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

# New EN3® Overmold Options

## Features and Benefits

- Standard overmold color is black
- PVC overmold available in colors - contact factory for price and availability
- Functional cable flex relief, also available with solid tapered end
- Ergonomically designed handle
- Compact design with small profile
- Standard inner pre-mold completely seals back of connector
- New overmolds accept cable diameter up to .380 nom with pin counts 2 - 18
- RoHS compliant



Original overmold design still available for cable O.D.'s up to 0.310" [7.87mm].

All dimensions for reference only.

# Switchcraft®

[www.switchcraft.com](http://www.switchcraft.com)

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