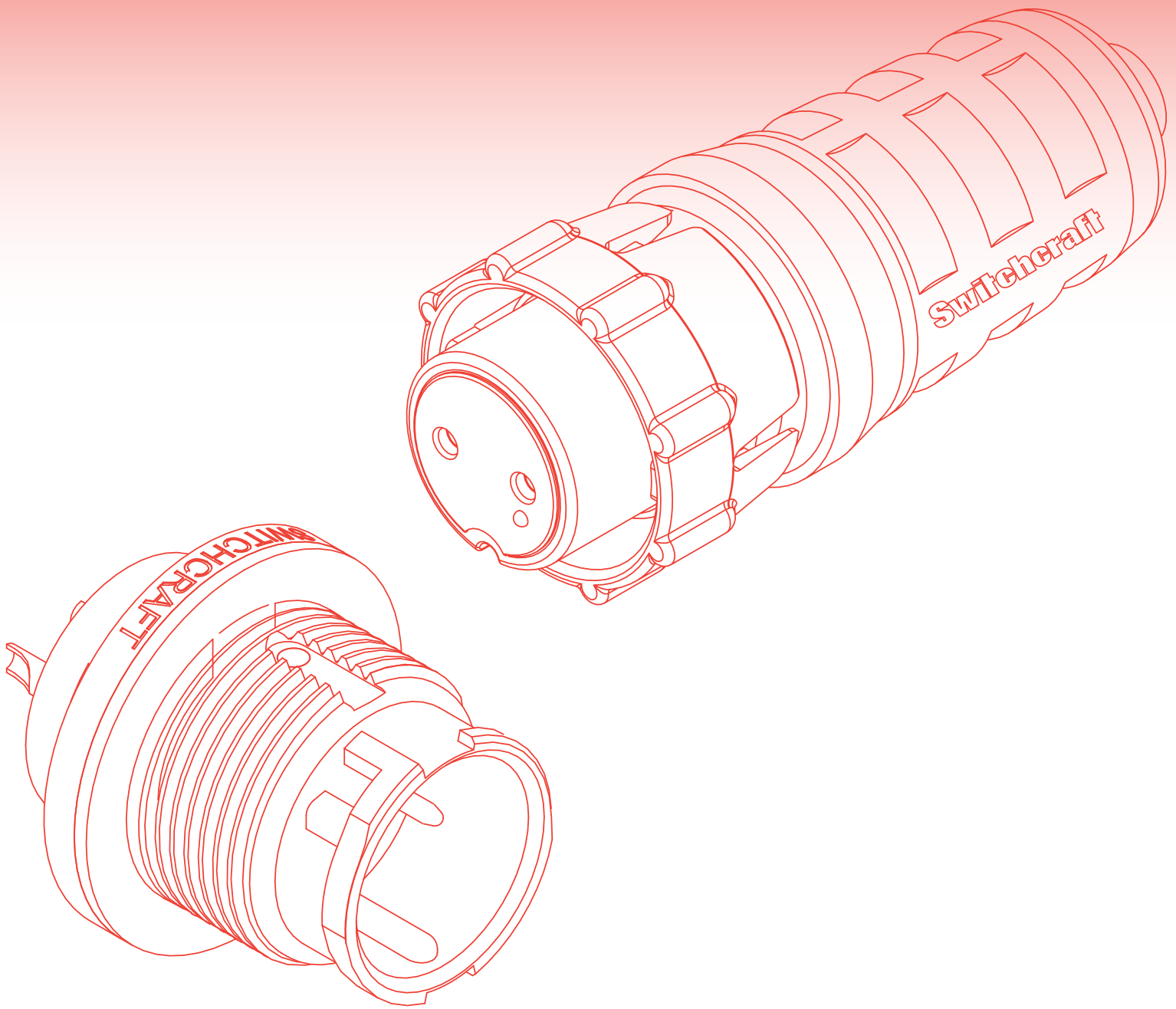


# EN3® SERIES WEATHERTIGHT CONNECTORS

NEW PRODUCT BULLETIN 602

SWITCHCRAFT®

A HEICO COMPANY

Please visit www.switchcraft.com for the most up-to-date product specifications. Made in USA.

# EN3® SERIES WEATHERTIGHT CONNECTORS

NEW PRODUCT BULLETIN 602





## FEATURES & BENEFITS

- Sealed to IP68 NEMA 250 (6P)
- Patented grommet & o-ring free design
- Available in ribbed or winged coupling ring
- Cable, panel & cable to cable options
- Gold plated contacts standard
- Solder, crimp & PC contact options
- Straight & right angle PC contact panel connectors

## APPLICATIONS

- Any sealed data transmission
- Military or industrial GPS location devices
- Instrumentation
- Medical data carts
- Marine Applications
- Transportation
- General industrial electronic applications

# EN3® SERIES WEATHERTIGHT CONNECTORS

NEW PRODUCT BULLETIN 602

## SPECIFICATIONS

### MECHANICAL SPECIFICATIONS

| | |
|---|---|
| Life: | Minimum 600 insertion / withdrawal cycles |
| Vibration: | Mil-Std 202 Method 201 |
| Shock: | Mil-Std 202 Method 213B, condition K |
| Hex Nut Torque: | All series hex nut to withstand 8-10 in-lb tightening torque. |
| Coupling Locking Style | Bayonet with ribbed coupling nut (winged coupling nut optional) |
| Back Shell Style: | Boot |

### ELECTRICAL SPECIFICATIONS

| | |
|---|---|
| Voltage Rating: | 250 V AC/DC |
| Current Rating: | 13.0 A – 2 or 3 #16 contacts accepts 16 through 18 AWG |
| | 7.5 A – 2 through 6 #20 contacts accepts 20 through 22 AWG |
| | 6.5 A – 7 or 8 #20 contacts accepts 20 through 22 AWG |
| | 3 A – 9 through 18 #26 contacts accepts 26 through 28 AWG |
| Insulation Resistance: | 100 MΩ min |
| Contact Resistance: | 20 mΩ max |

### ENVIRONMENTAL SPECIFICATIONS

| | |
|---|---|
| Operating Temperature Rating: | -40ºC to +65ºC (-40ºF to +149°F) |
| Moisture Resistance: | Mil-Std 202 Method 106F |
| Insulation Resistance: | Mil-Std 202 Method 302 condition B |
| Thermal Shock: | Mil-Std 202 Method 107G |
| Salt Atmosphere (Corrosion): | Mil-Std 202 Method 101D condition B |
| Weathertight: | IEC 60529 IP16/IP18 |
| | IEC 60529 IP66/IP68 |
| | IEC 60529 IP68 |
| | NEMA 250 (6P) |
| | CFR 46 Part 110.20 |

### MATERIAL SPECIFICATIONS

| | |
|---|---|
| Panel connector shells & locking disk: | Thermoplastic UL94V-0 |
| Connector shell interior: | Elastomeric, Black UL 94HB |
| Contacts: | Copper Alloy, Gold over Nickel Plate |

### MOLDED CABLE ASSEMBLIES

| | |
|---|---|
| Weathertight: | IEC 60529 IP66/IP68 |
| | IEC 60529 IP68 |
| | NEMA 250 (6P) |
| | CFR 46 Part 110.20 |

**CERTIFICATIONS** UL File E319753 ; 2-8 pin cord, in-line and panel only

# EN3® SERIES WEATHERTIGHT CONNECTORS

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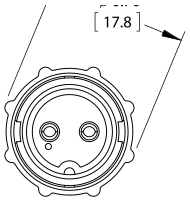
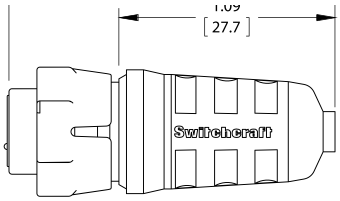
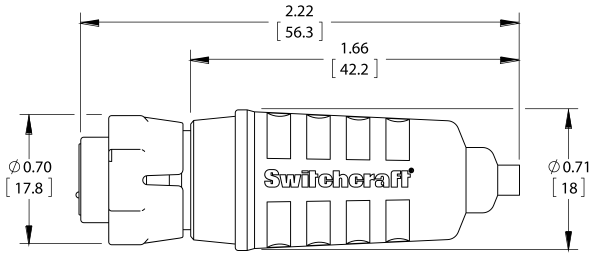
## CORD CONNECTORS

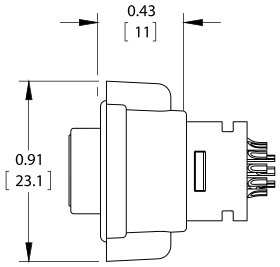



EN3 SERIES 2-18 POSITION
STANDARD
CABLE CLAMP & BOOT

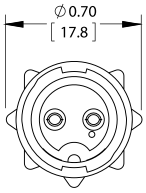


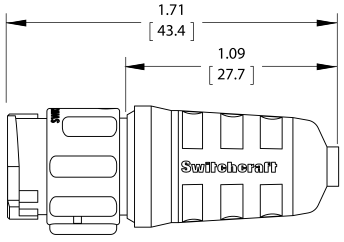

OPTION "L"
EN3 SERIES 2-18 POSITION
LARGE CABLE CLAMP & BOOT



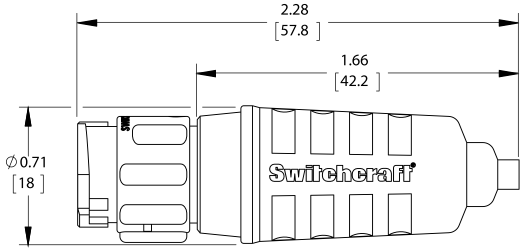

OPTION "W"
EN3 SERIES 2-18 POSITION
WINGED COUPLING RING

## CABLE TO CABLE CONNECTORS



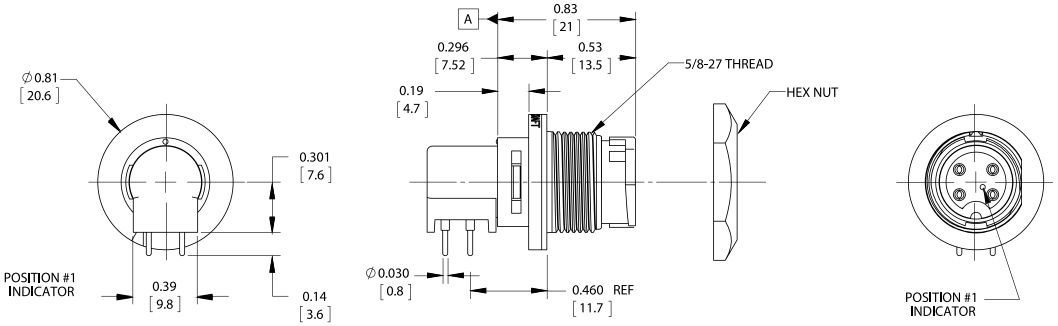




EN3 SERIES 2-18 POSITION
STANDARD
CABLE CLAMP & BOOT
INLINE CONNECTOR




OPTION "L"
EN3 SERIES 2-18 POSITION
LARGE CABLE CLAMP & BOOT
INLINE CONNECTOR

## EN3® RIGHT ANGLE 2-8 POSITION MOLDED CONNECTORS

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# EN3® SERIES WEATHERTIGHT CONNECTORS

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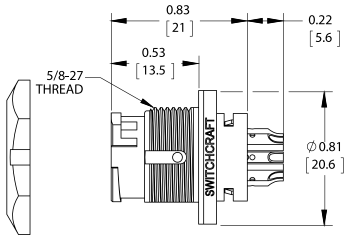
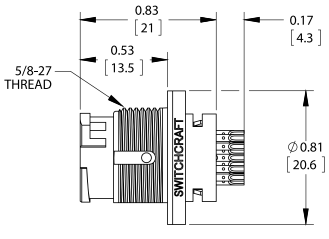
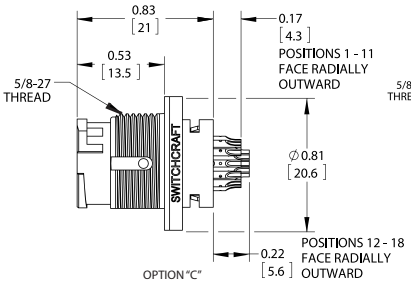
## PANEL CONNECTORS



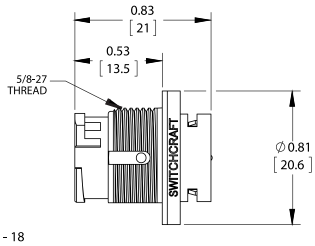

EN3 SERIES 2-8 POSITION
STANDARD SOLDER CUP
ALL POSITIONS FACE RADICALLY OUTWARD
EN3P8MX SHOWN



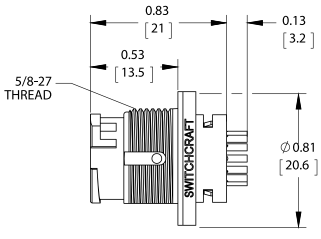

EN3 SERIES 9-18 POSITION
STANDARD SOLDER CUP
ALL POSITIONS FACE UPWARD
EN3P18M26X SHOWN



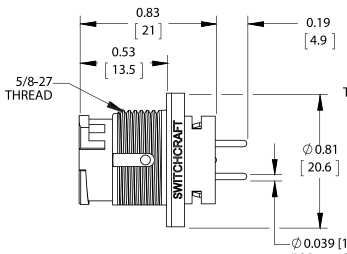

OPTION "C"
EN3 SERIES 2-8 POSITION
CRIMP TERMINALS
EN3P2MCX SHOWN



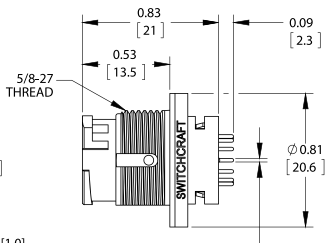

OPTION "S"
EN3 SERIES 9-18 POSITION ONLY
STANDARD SOLDER CUP
EN3P18M26SX SHOWN



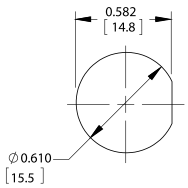

OPTION "C"
EN3 SERIES 9-18 POSITION
CRIMP TERMINALS
EN3P2M26CX SHOWN




OPTION "P"
EN3 SERIES 2-8 POSITION
PC TERMINALS
EN3P2MPX SHOWN

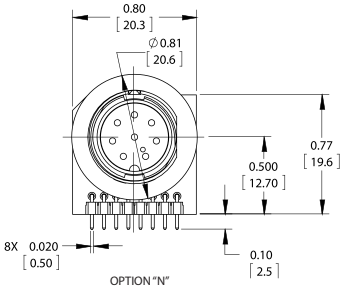



OPTION "P"
EN3 SERIES 9-18 POSITION
PC TERMINALS
EN3P9M26PX SHOWN

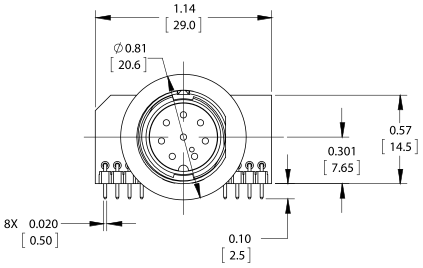



RECOMMENDED PANEL CUT-OUT
0.188 MAX PANEL THICKNESS ± 0.003"[0.08MM]
MOUNTING NUT
8-10 INCH-LBS MAX TORQUE

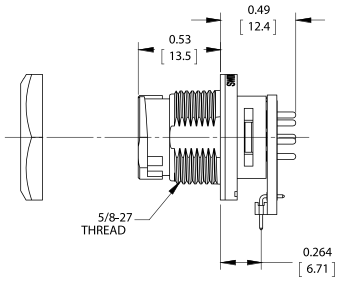
## RIGHT ANGLE PC BOARDS 2-18 CONTACT PANEL CONNECTORS

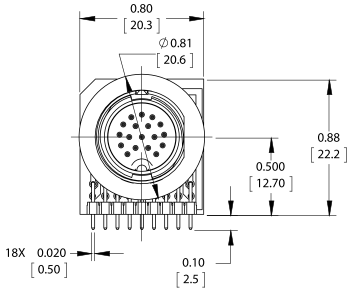



OPTION "N"
EN3 SERIES 2-8 POSITION
NARROW PCB
EN3P8MRAPCBN SHOWN
(NOT AVAILABLE IN FEMALE 7 & 8 POSITION)

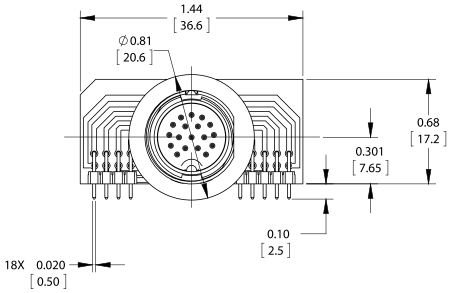



OPTION "W"
EN3 SERIES 2-8 POSITION
WIDE PCB
EN3P8MRAPCBW SHOWN
(NOT AVAILABLE IN FEMALE 7 & 8 POSITION)

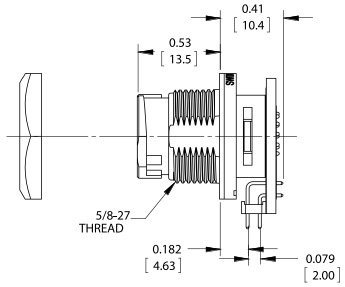



OPTION "N"
EN3 SERIES 9-18 POSITION
NARROW PCB
EN3P18MRAPCBN SHOWN




OPTION "W"
EN3 SERIES 9-18 POSITION
WIDE PCB
EN3P18MRAPCBW SHOWN



# EN3® SERIES WEATHERTIGHT CONNECTORS

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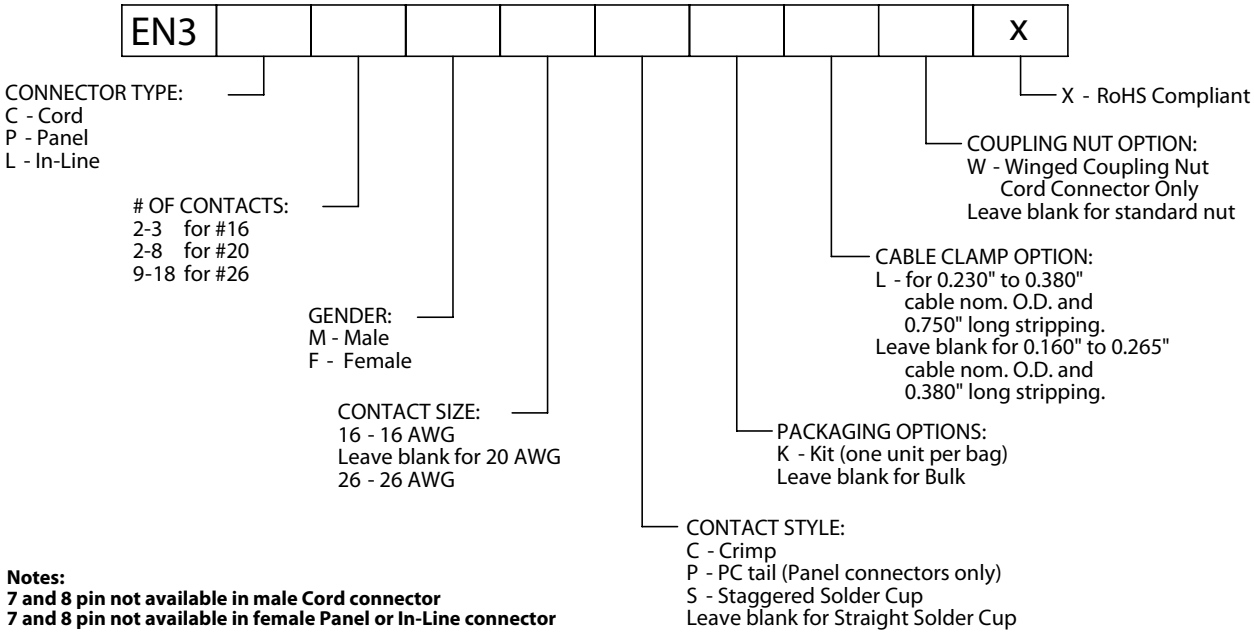
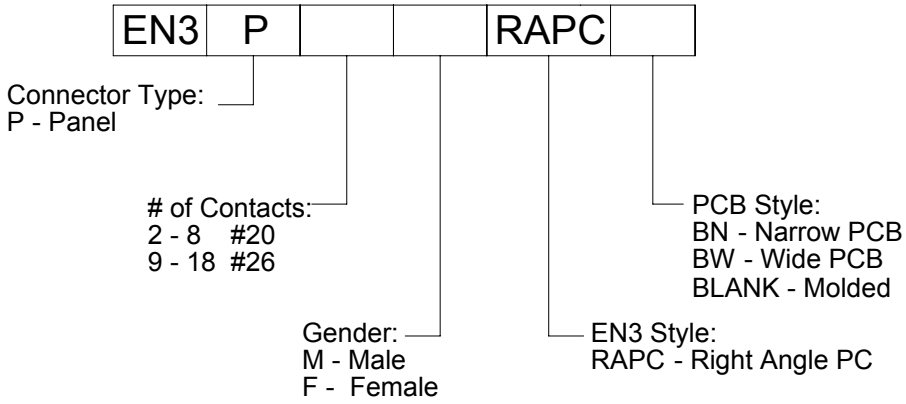
## EN3® ORDERING CODE




**Notes:**
**7 and 8 pin not available in male Cord connector**
**7 and 8 pin not available in female Panel or In-Line connector**

## EN3® RIGHT ANGLE PC BOARD MOUNT 2-18 CONTACT ORDERING CODE




**Notes:**
**7 and 8 pin not available in female Panel connector**

## EN3® SERIES ACCESSORIES

| | |
|---|---|
| **EN3 BOOT** | EN3 SERIES, REGULAR BOOT FOR CABLE DIAMETERS 0.160"-0.265" |
| **EN3 BOOTL** | EN3 SERIES, LARGE BOOT FOR CABLE DIAMETERS 0.230"-0.380" |
| **EN3CAP** | EN3 HARSH ENVIRONMENT PANEL OR CABLE END CAP RATED TO IP68, RUBBER LANYARD STYLE |
| **EN3CAPC** | CORD PLUG CAP FOR EN3 SERIES |
| **EN3CLAMPX** | EN3 HARSH ENVIRONMENT CABLE CLAMP |
| **EN3IPCAPX** | EN3 SERIES, IP68 RATED PANEL OR INLINE CAP WITH LOCK RING |
| **EN3NUT** | EN3 HARSH ENVIRONMENT HARDWARE-NUT |
| **EN3PQCA** | EN3 PANEL ADAPTOR, FOR USE WITH EN3 QUICK CONNECT/ DISCONNECT CABLE ASSEMBLIES |