

Switchcraft®

NEW
PRODUCT
BULLETIN

504

EN3™ MINI WEATHERTIGHT CONNECTOR WITH PC CONTACTS



FEATURES AND BENEFITS

- Superior leakage protection. Contact area is double-sealed for excellent moisture and chemical resistance when mated to Switchcraft's cord connector.
- Integral Gasket. Gasket is molded onto panel housing assembly to prevent leakage and eliminate need for additional gaskets.
- Reduced part count for reduced labor to assemble.
- Thermoplastic rubber body simulates closed entry contact system to prevent probe damage or accidental loss of spring retention due to misaligned or bent pins.
- Housing rated UL 94V-O against flammability.
- Contact terminal: PC Contacts (factory-assembled into panel connector housing ready to be terminated).
- Panel connector shell features a positioning keyway to prevent misalignments and a polarizing single "D" design for proper panel mounting and to prevent rotational movement.
- Panel mount.
- 2-8 pins (7 and 8 pins male only).
- Exceeds Coast Guard specifications for water tightness (CFR 46 Part 110.20).
- Optional cap covers the panel housing assembly when not in use.
- Exceeds enclosure rating IP16/IP18 when not mated or covered and IP66/IP68 when mated or covered (IEC 529).
- Exceeds enclosure rating 6P at 1000V when mated or covered (NEMA 250).

APPLICATIONS

Process Control Transportation
Marine Electronics General Industrial Electronics
Medical Instrumentation
Geothermal Instrumentation
Communications

MATERIALS

Panel connector shells and contact locking disk: Thermoplastic polymer glass fiber, flame retardant
Connector shell interior: Thermoplastic rubber
Contacts: Copper base alloy gold-plated over nickel underplate

SPECIFICATIONS

MECHANICAL

Shock: Mil-Std 202 Method 213B, condition K
Vibration: Mil-Std 202 Method 201
Life: 600 insertion/withdrawal 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: 7.5 Amps (#20 contact)
6.5 Amps (#20 contact) - 7 and 8 Pin (male only)
13.0 Amps (#16 contact) - 2 and 3 Pin

ENVIRONMENTAL

Temperature Limits: -40°C to +65°C (non-operating)
Moisture Resistance: Mil-Std 202 Method 106F
Insulation Resistance: Mil-Std 202 Method 302 condition B
Thermal Shock: Mil-Std 202 Method 107G
Salt Spray: Mil-Std 202 Method 101D condition B

RATINGS

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

Switchcraft Electronics

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FAX

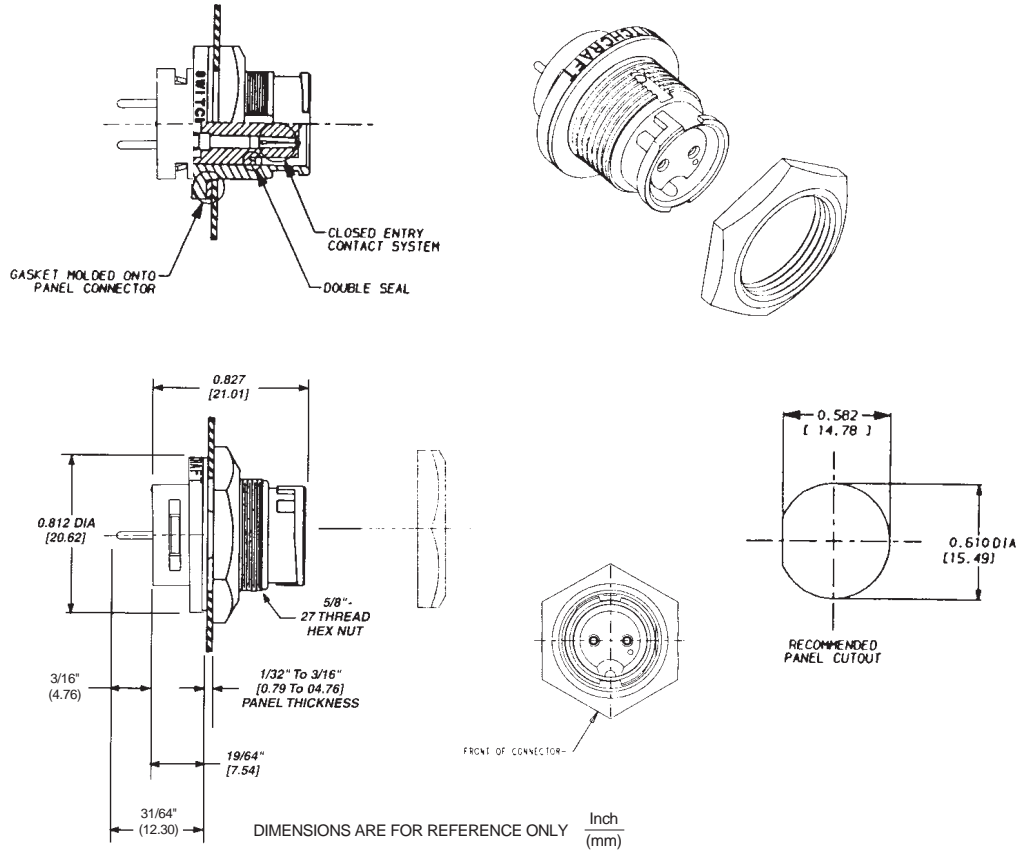
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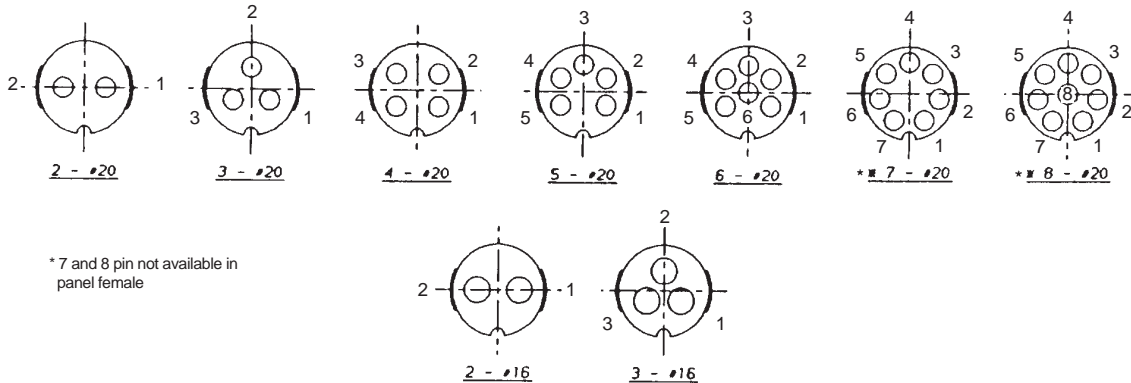
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EN3™ MINI WEATHERTIGHT CONNECTOR SERIES

Switchcraft®



Panel Contact Arrangements



HOLE LAYOUTS VIEWED FROM FRONT OF CONNECTOR
 RECOMMENDED HOLE SIZE: #20 CONTACT: .046" DIA
 #16 CONTACT: .055" DIA.

Switchcraft, Inc., a subsidiary of Raytheon Company, is a major manufacturer of a broad line of electronic/electromechanical components for the audio/video, telecommunication, data communication, computer, medical, military, appliance, transportation and instrumentation



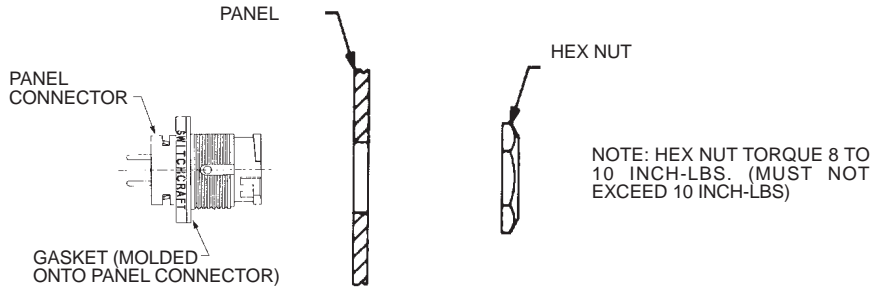
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Switchcraft® Panel Connector Assembly Instructions

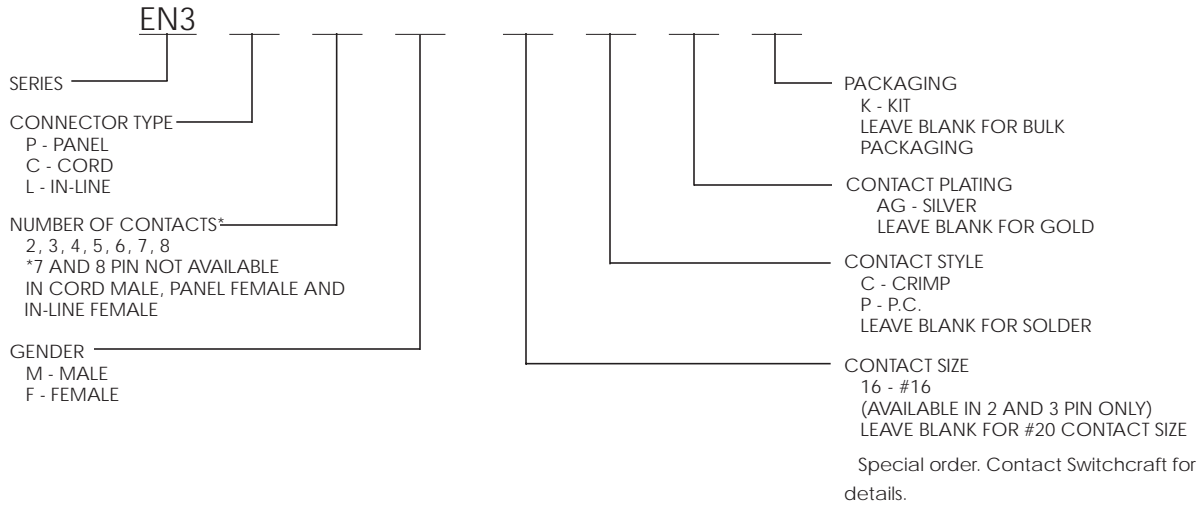


MATING INSTRUCTIONS FOR A CORD CONNECTOR TO A PANEL MOUNT CONNECTOR

First, align the notched keyway on both the panel mount and cord connector. Then, push the cord connector onto the panel mount connector. Grasp the coupling ring between the slots, push it toward the panel mount connector and rotate it clockwise nearly one half a turn.

Continue rotating until you feel the coupling ring ride over the locking "bump". This is the locked position. The cord connector is not securely in place unless this procedure is followed.

Ordering Information**



Optional Cap

- Part Number EN3CAP

Examples:

EN3P2MP

Mini Panel Connector with 2 Male Contacts, Size # 20, PC Style, Gold-Plated, Contacts Factory-Installed; Packaged in Bulk.

EN3P3F16PK

Mini Panel Connector with 3 Female Contacts, Size # 16, PC Style, Gold-Plated, Contacts Factory-Installed, Packaged in Kit.

* 7 and 8 pin not available in cord male, panel female and in-line female

** Panel EN3™ must mate with a cord EN3™. Request NPB 465 for solder options. Request NPB 508 for cord to cord/in-line options. Request NPB 505 for crimp options.

EN3™ Mating Guide

		Male		
		Cord	In-Line	Panel
Female	Cord		•	•
	In-line	•		
	Panel	•		

EN3™ Weathertight Connector Current Carry Capability (per UL 498 Standard)

