



CeeLok FAS-T Nano Circular Connectors

10 Gb/s Ethernet Connectivity . . . Flexible . . . Rugged . . . Compact

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10 Gb/s Ethernet Connectivity



CeeLok FAS-T Nano circular connectors give you 10 Gb/s Ethernet connectivity in a nanominiature circular connector—pushing the limits of high-speed I/O to new levels of compact convenience, durability, and environmental sealing.

The connectors use the same shells as our well-established environmentally sealed circular connectors, but with an enhanced insert to support high-speed signals. The 8-position connector's T-shaped contact pattern provides noise cancellation and decoupling to minimize crosstalk and increase signal integrity.

APPLICATIONS

- Military Weapons
- Ground Support Systems
- Soldier-Worn Applications
- Avionics
- Instrumentation
- Down-hole Telemetry Tools

HIGH SPEED

- Gigabit or 10 Gigabit rates for high-speed transmission of data, ideal for tight link budgets
- Factory terminated assemblies using 30 AWG TurboTwin cable
- T-shaped pin pattern improves signal integrity through uniform crosstalk cancellation

SPACE AND WEIGHT SAVINGS

- Nanominiature size enables high-speed connectivity in an extremely small space envelope
- Lightweight NANONICS housing available in push-pull or threaded coupling for a broad range of applications and uses

FLEXIBLE CONFIGURATIONS

- Choice of coupling styles:
 - Push-pull quick disconnect
 - Threaded
- Available in board-mount and cable-applied versions

RUGGED

- Withstands the harsh operating environment typical of aerospace, defense, and marine applications



TE Components . . . TE Technology . . . TE Know-how . . .
AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem | Rochester | DEUTSCH
SEACON Phoenix | LL ROWE | Phoenix Optix | AFP | SEACON

Get your product to market faster with a smarter, better solution.



MECHANICAL/ENVIRONMENTAL

- **Vibration, Sine:** 10-2000 Hz, 20 g (EIA-364-28, Test Condition IV)
- **Vibration, Random:** 50-2000 Hz, 46.3 g (EIA-364-28, Test Condition V, Letter K)
- **Mating Cycles Min:** 250 Electroless nickel-plated aluminum shells
- **Mechanical Shock:** 300 g, 3 ms, Half-sine (EIA364-27, Test Condition D)
- **Weight:** Push-pull plug with a straight backshell and 1 meter of TurboTwin cable weighs less than 13 g. A PCB mount receptacle weighs less than 3 g
- **Temperature Range:** -55°C to +125°C
- **Environmental Sealing:**
Immersion: IP68, mated
Water Jet: IPX6, mated
Dust: IP6X, mated
- **Durability:** 250 mating cycles
- **Salt Fog/Mist:** per Mil-DTL-83513

ELECTRICAL DATA

- **Dielectric Withstanding Voltage:**
500 VAC @ sea level
100 VAC @ 70,000 ft.
- **Current Rating:** 1 A/contact

MATERIALS

- **Body and Coupling Sleeve:**
Electroless nickel-plated aluminum (standard)
Passivated stainless steel (increased durability)
- **Contacts:** Beryllium copper alloy, gold over nickel
- **Locking Ring:** Electroless nickel-plated beryllium copper
- **Lead Organizer (PCB Mount):** Thermoplastic
- **Insulator:** Liquid crystal polymer
- **O-Ring:** Fluorosilicone

STANDARDS AND TEST REPORT

- **TE Product Specification:** 108-32048
- **TE Qualification Test Report:** 501-134021

Type	Coupling/Mounting	Base Part No.		
		No Backshell	Straight Backshell	Right-Angle Backshell
Plug	Quick Disconnect	1925248-1	1925249-1	1925250-1
	Threaded Coupling	1925251-1	1925252-1	1925253-1
	Flanged Quick Disconnect	1925254-1	1925255-1	1925256-1
Receptacle	Front Flush Mount	1925257-1	—	—
	Rear Panel Mount*	1925258-1	1925259-1	1925260-1
	PCB Mount	1925261-1	—	—

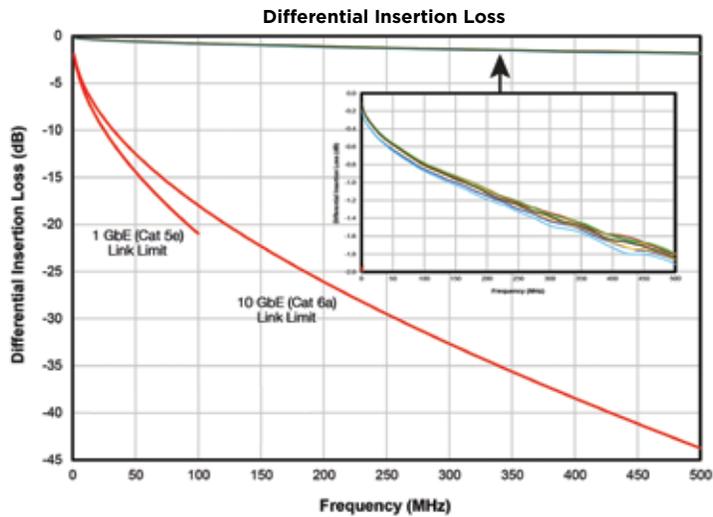
*Mates with both quick-disconnect and threaded plugs.

Cable assemblies use Madison TurboTwin cable, a four-pair 30 AWG cable with a 100-ohm differential impedance. Standard length is 36". Consult TE for other lengths.

Board-mount connectors are terminated with 28 AWG solid copper wire, pre-soldered for ease of termination to the printed circuit board.



Superior Signal Integrity at Gigabit Rates

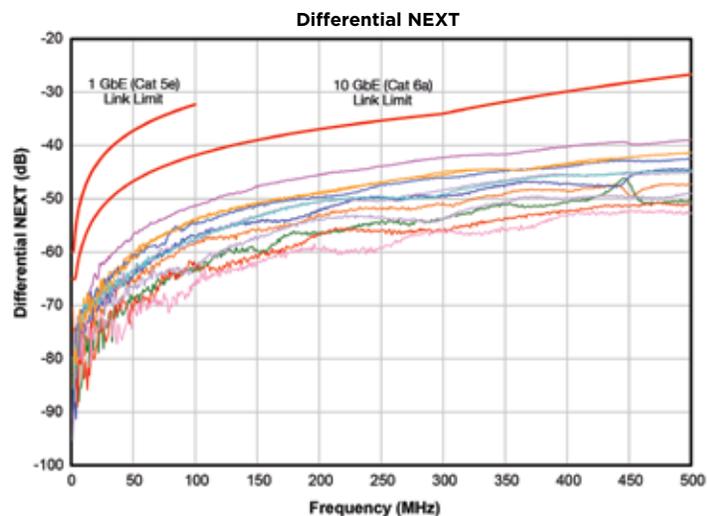
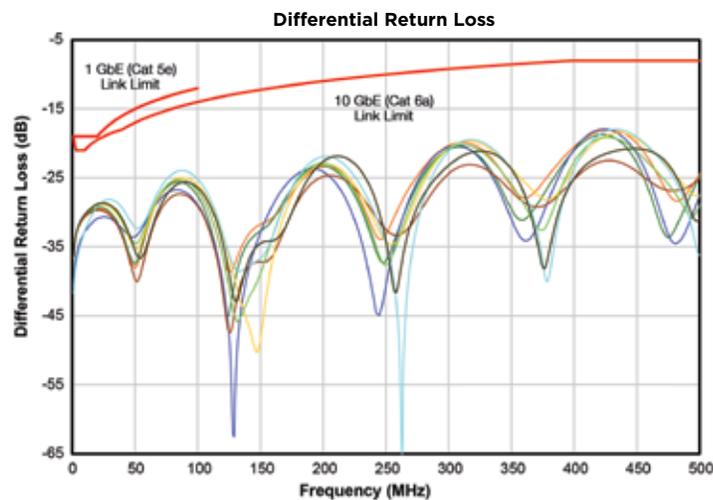


Superior Impedance Matching

CeeLok FAS-T Nano connectors are designed to maintain a highly matched 100-ohm impedance, with superior signal integrity.

More High-Frequency Headroom

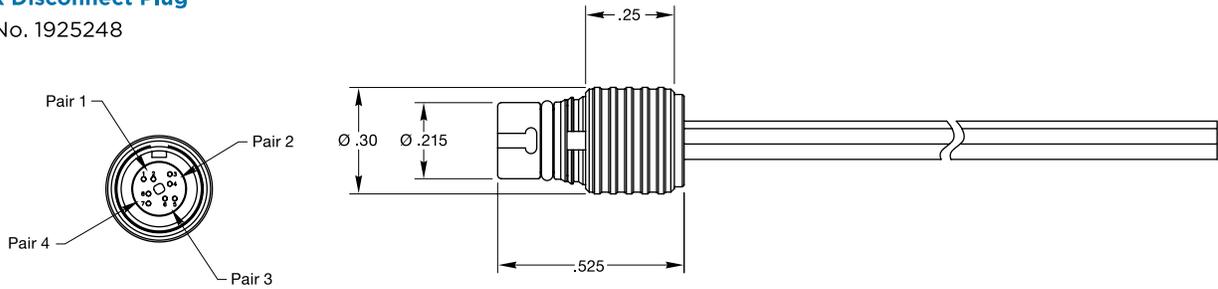
The design and close impedance matching of the CeeLok FAS-T Nano connector gives you more performance margin to tolerate noisy environments that are sensitive to harmful interference.





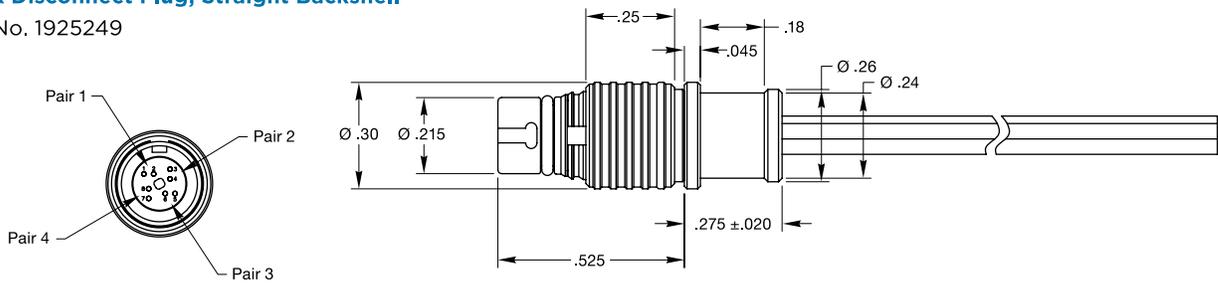
Quick Disconnect Plug

Part No. 1925248



Quick Disconnect Plug, Straight Backshell

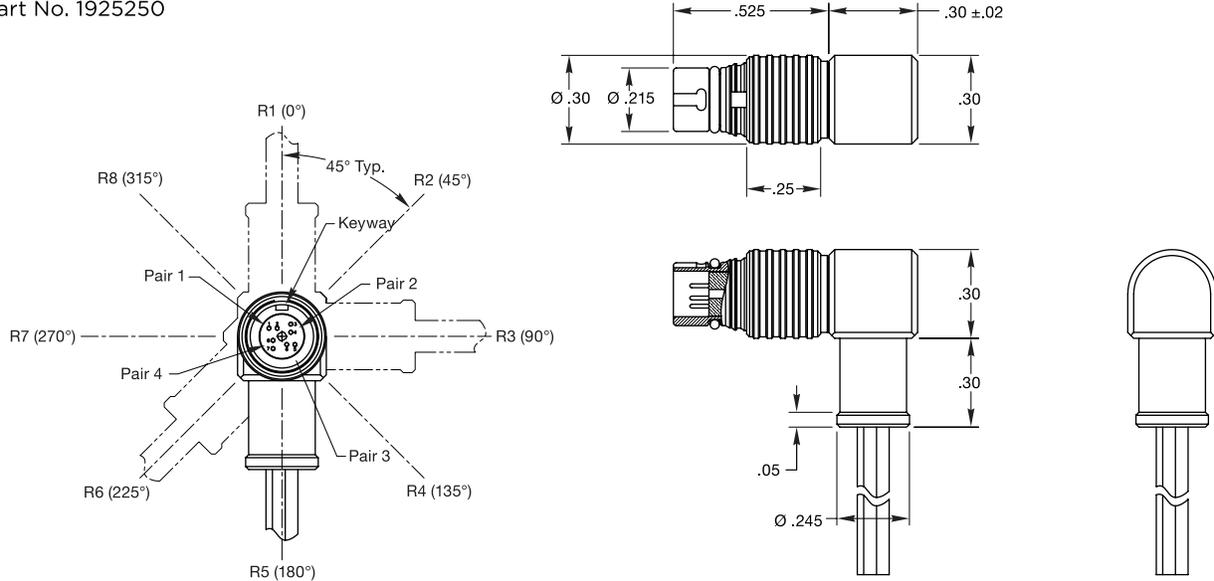
Part No. 1925249





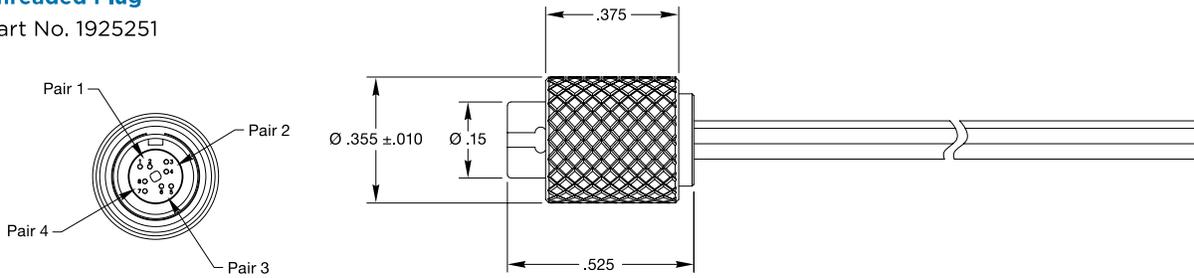
Quick Disconnect Plug, Right-Angle Backshell

Part No. 1925250



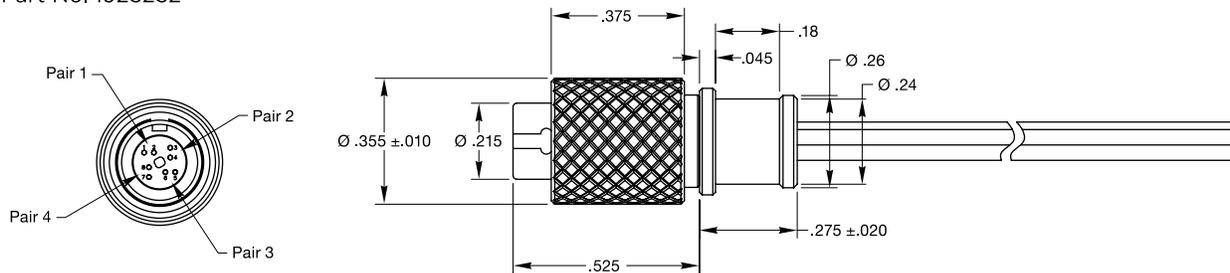
Threaded Plug

Part No. 1925251



Threaded Plug, Straight Backshell

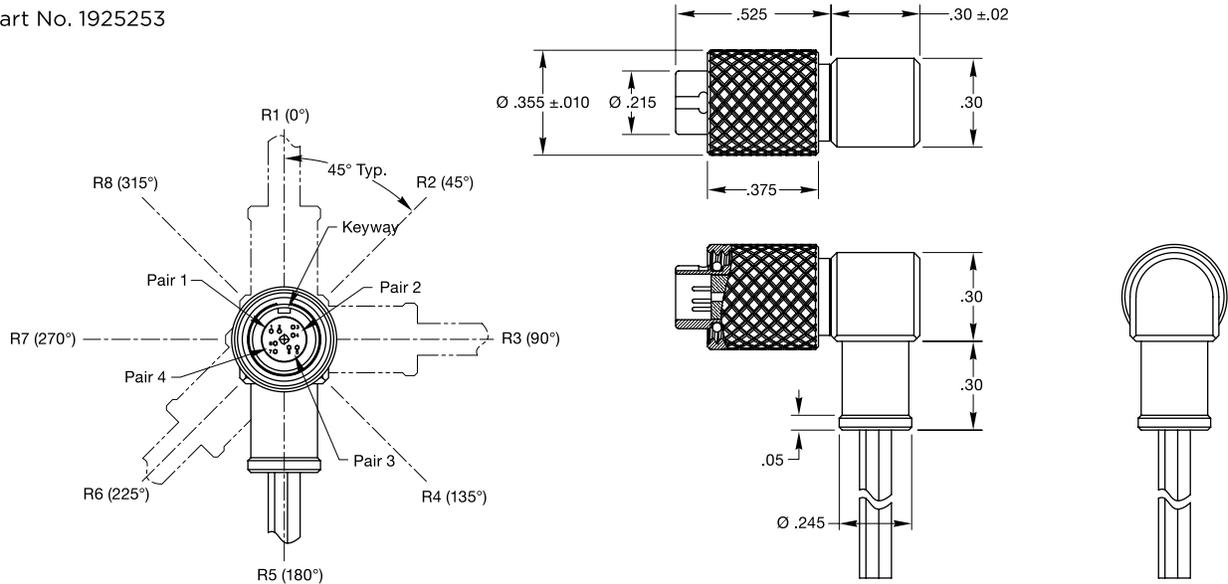
Part No. 1925252





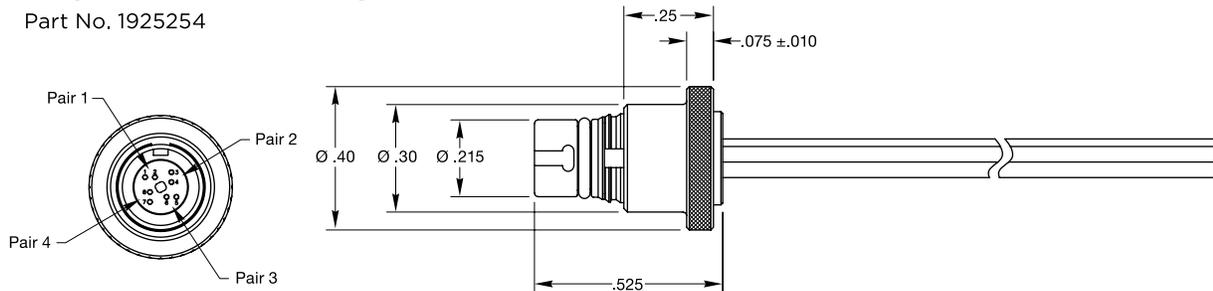
Threaded Plug, Right-Angle Backshell

Part No. 1925253



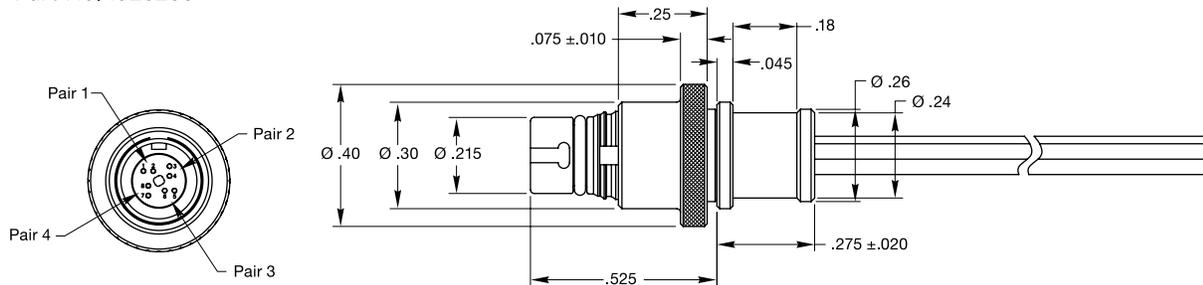
Flanged Quick-Disconnect Plug

Part No. 1925254



Flanged Quick-Disconnect Plug, Straight Backshell

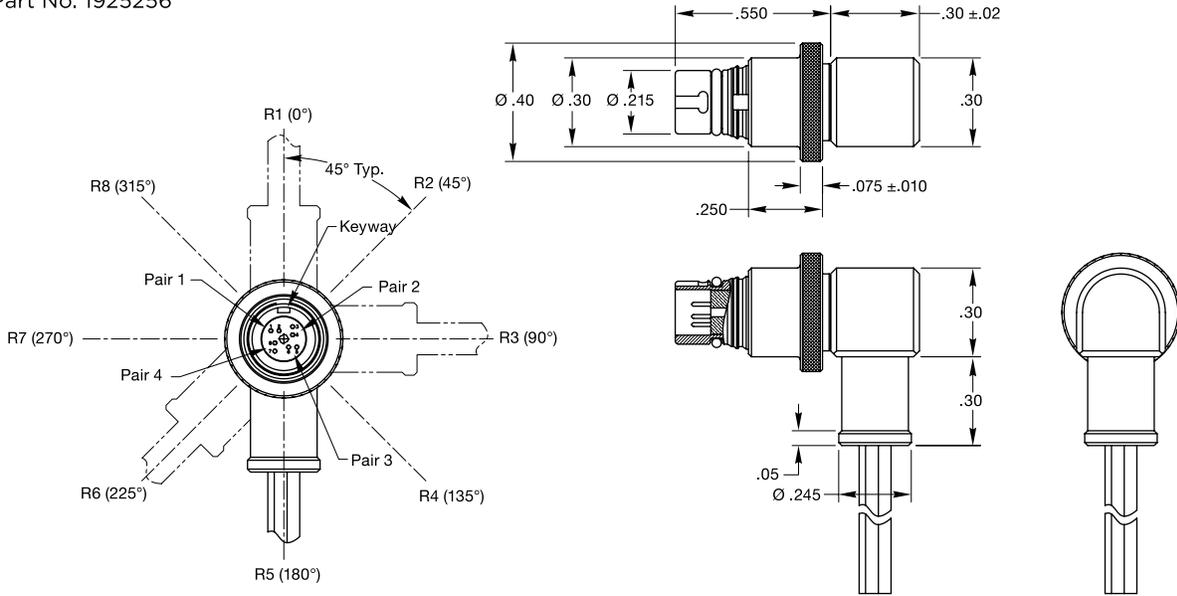
Part No. 1925255





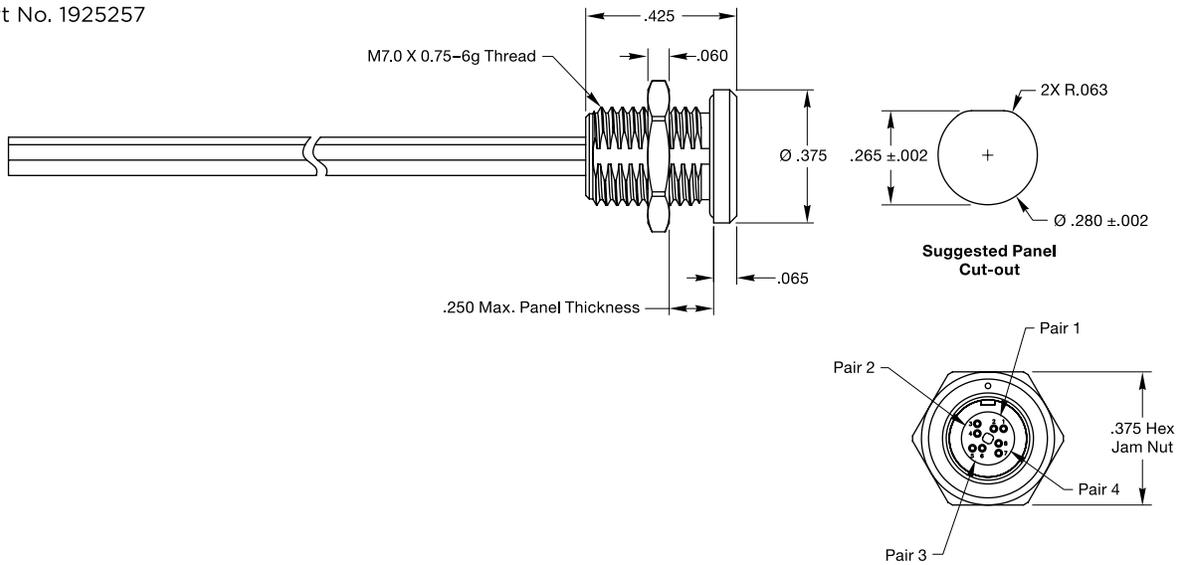
Flanged Quick-Disconnect Plug, Right-Angle Backshell

Part No. 1925256



Front Flush-Mount Receptacle

Part No. 1925257

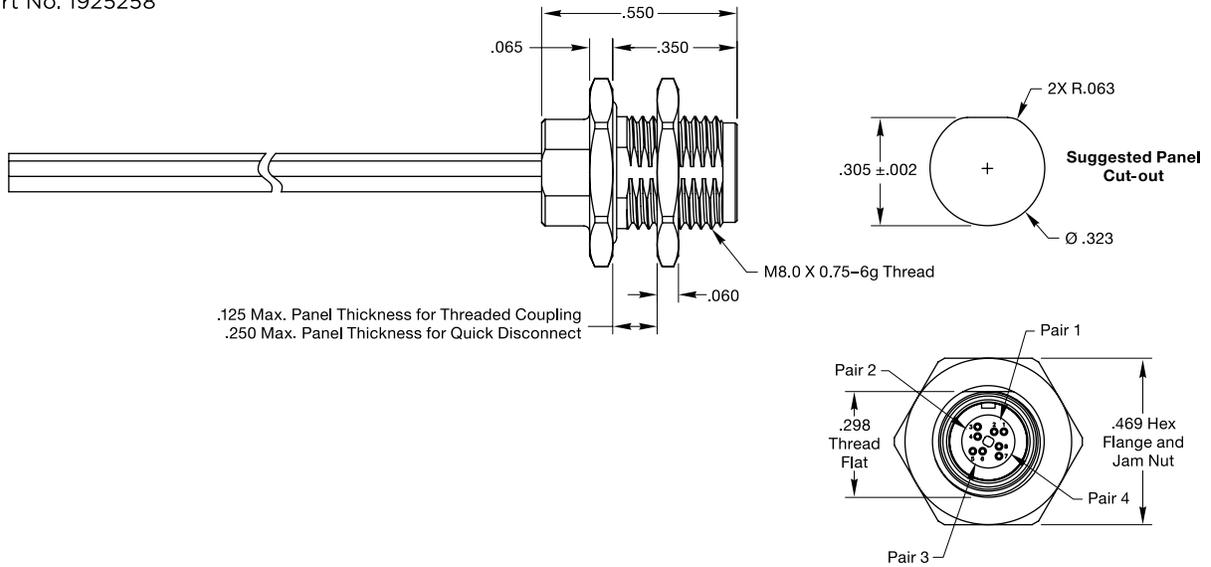




Rear Panel-Mount Receptacle

Mates with both quick-disconnect and threaded plugs

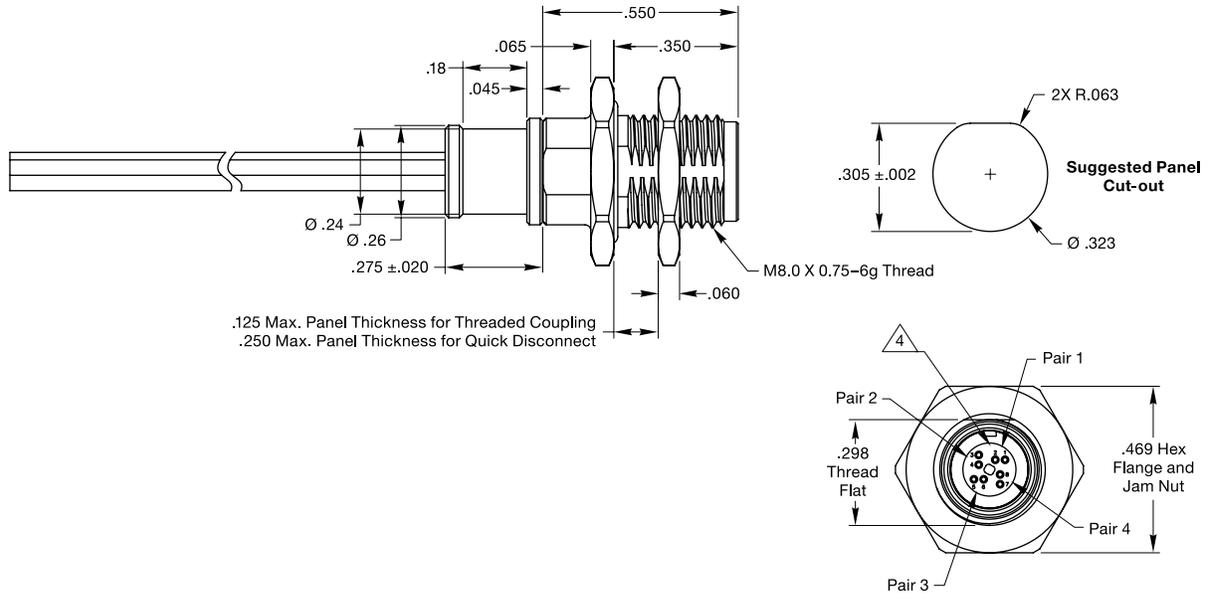
Part No. 1925258



Rear Panel-Mount Receptacle, Straight Backshell

Mates with both quick-disconnect and threaded plugs

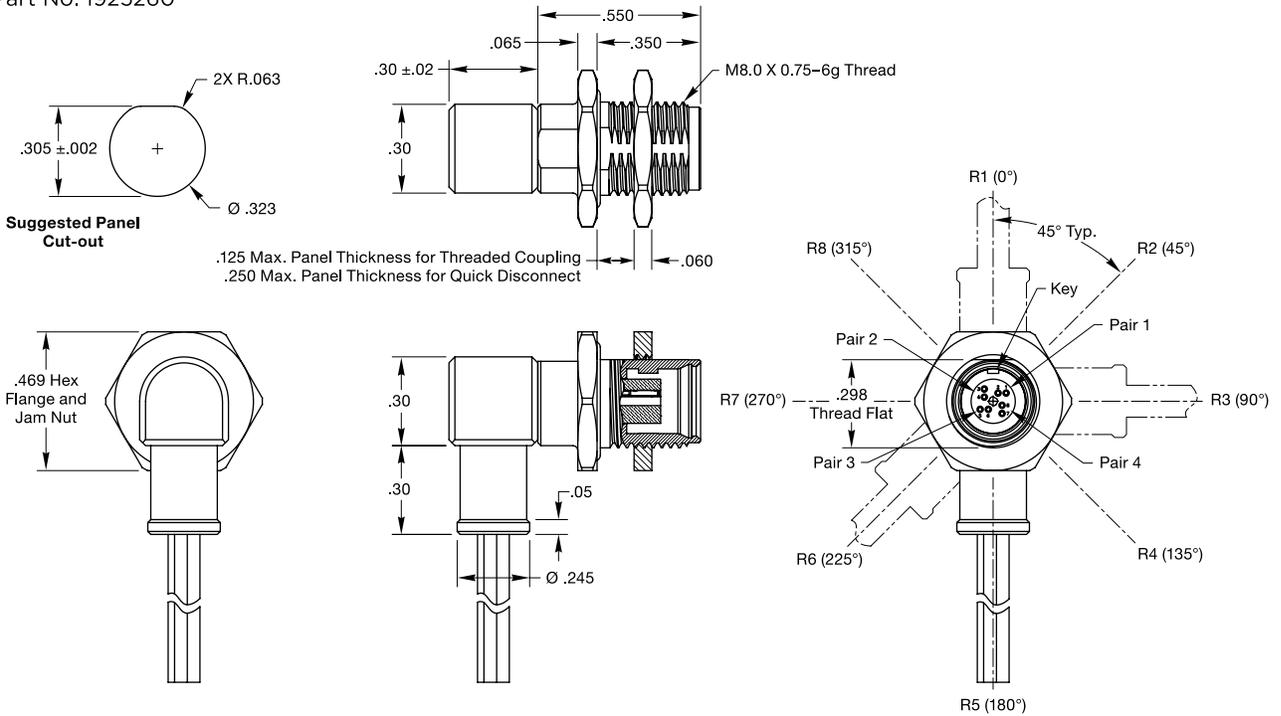
Part No. 1925259





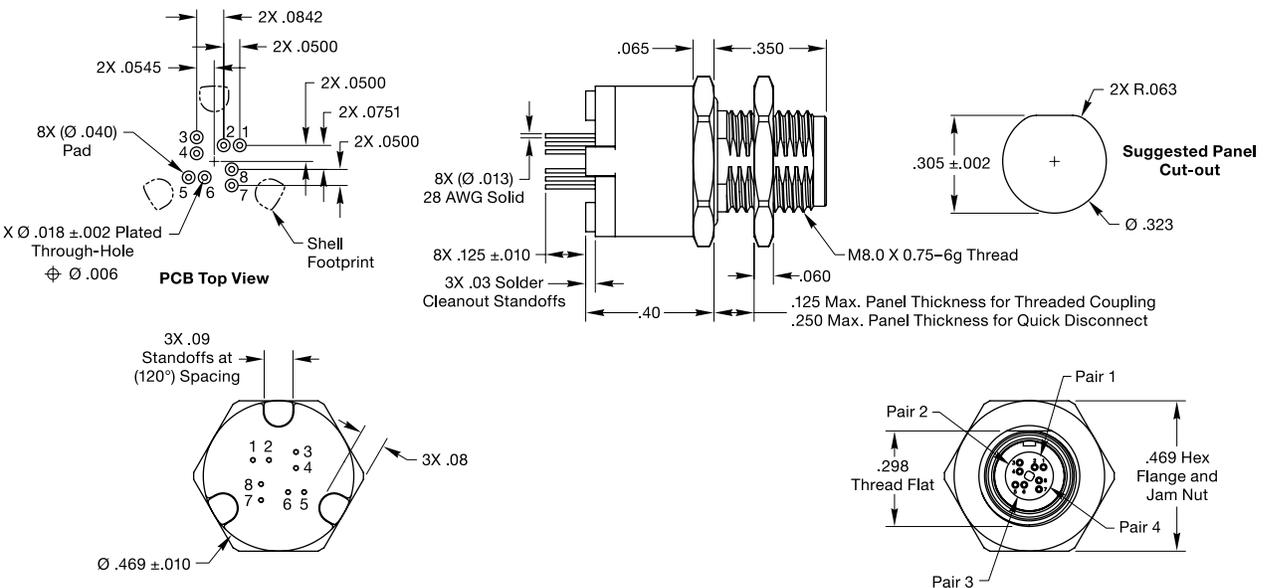
Rear Panel-Mount Receptacle, Right-Angle Backshell

Mates with both quick-disconnect and threaded plugs
Part No. 1925260



Thru-Hole Board-Mount Receptacle

Mates with both quick-disconnect and threaded plugs
Part No. 1925261





Accessories

Heat-Shrinkable Molded Boots



Hazard Matched

- Different materials to meet different temperature and environmental requirements
- Optional with pre-applied adhesives for quick installation and high-reliability IP67 sealing
- Epoxy sealing kits available

Versatile

- Sealing and strain relief to the wires and cables
- Straight or 90 degree cable exit

Application Tooling

- HL1910E or the HG-501A ThermoGun heat gun and appropriate hot air reflectors

Bandstraps



Easy to Use

- Quick, easy, cost-effective and reliable termination of braided shielding

High Performance

- Low profile, one-piece design eliminates EMI leakage paths

Rugged

- Shock, vibration and environmental tested to meet aerospace and defense requirements

Material

- Passivated 304 stainless steel, 8" long x .125" wide

Electrical

- Operating Temperature: -65°C to +200°C
- Electrical Resistance: Meets ≤ 1.0 milliohm requirement of AS85049/128
- Corrosion Resistance: 500 hr. salt spray

Mechanical

- Tensile Strength: 200 lb.
- Braid Retention: Meets 100 lb. requirement of AS85049/128

Application Tooling

- Micro Tie-Dex II, A30199

Description	Part No.
Bandstrap	BND-0812S

LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. Just call your local support number or visit www.te.com/industrial to chat with a Product Information Specialist.

Technical Support

te.com/support-center

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Consult TE for the latest dimensions and design specifications.

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