CEELOK FAS-T NANO CIRCULAR CONNECTORS

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.

HIGH SPEED

- 1 or 10 GbE rates 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

APPLICATIONS

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

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)
- **Weights:** 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

Raytronics AG, Bösch 37, CH-6331 Hünenberg, Tel: +41 41 768 65 75, Fax: +41 41 768 65 80
E-Mail: info@raytronics.ch, Webseite: www.raytronics.ch, www.schrumpfschlauch.ch

CeeLok FAS-T Nano Circular Connectors

- **Environmental Sealing:**
  Immersion: IP68, mated
  Water Jet: IPX6, mated
  Dust: IP6X, mated
- **Durability:** 250 mating cycles
- **Salt Fog/Mist:** per Mil-DTL-83513
- **Sine Wave Vibration:** 10–2000 Hz, 20 g (EIA-364-28, Test Condition IV)
- **Random Vibration:** 50–2000 Hz, 46.3 g (EIA-364-28, Test Condition V, Letter K)
- **Mechanical Shock**: 300 g, 3 ms, half-sine (EIA-364-27, Test Condition D)

ELECTRICAL DATA

- **Dielectric Withstanding Voltage:**
  500 VAC @ sea level
  100 VAC @ 70,000 ft.
- **Current Rating:** 1 amp/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, solder dipped at the lead end.

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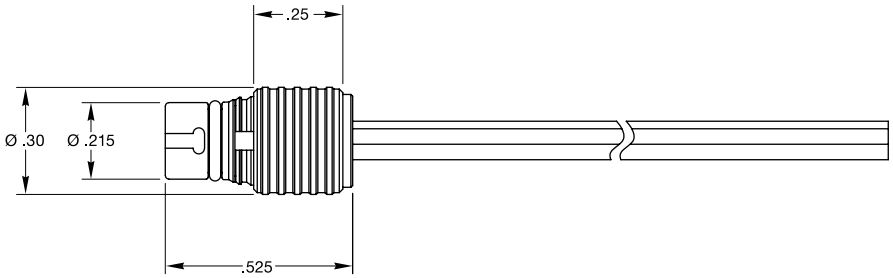
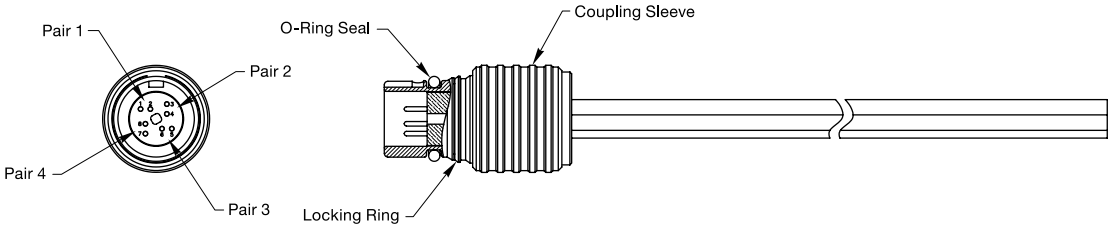
Quick Disconnect Plug

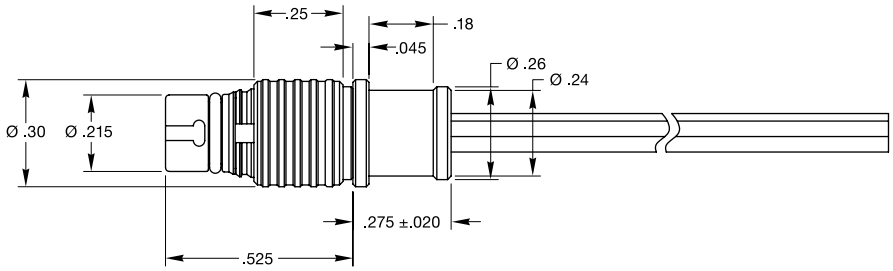
Part No. 1925248

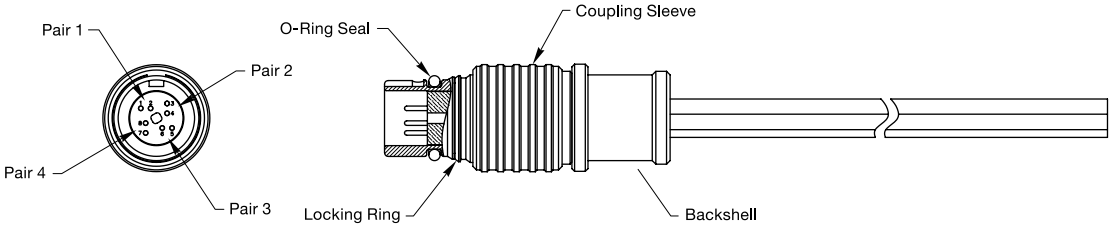




Quick Disconnect Plug, Straight Backshell

Part No. 1925249

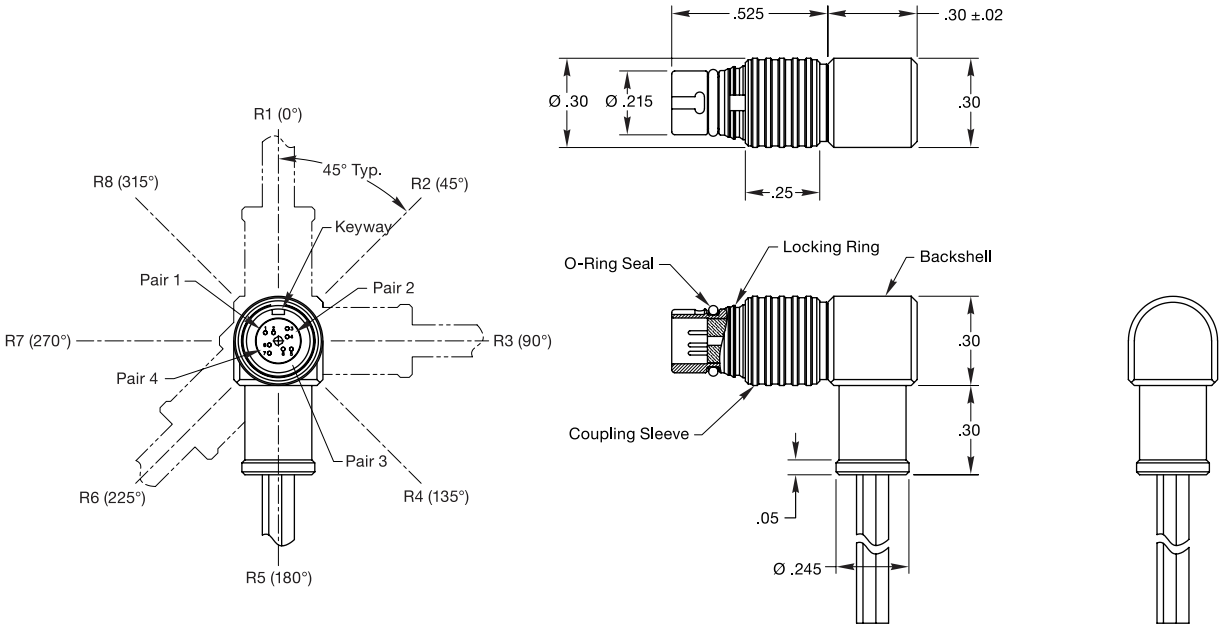




CeeLok FAS-T Nano Circular Connectors

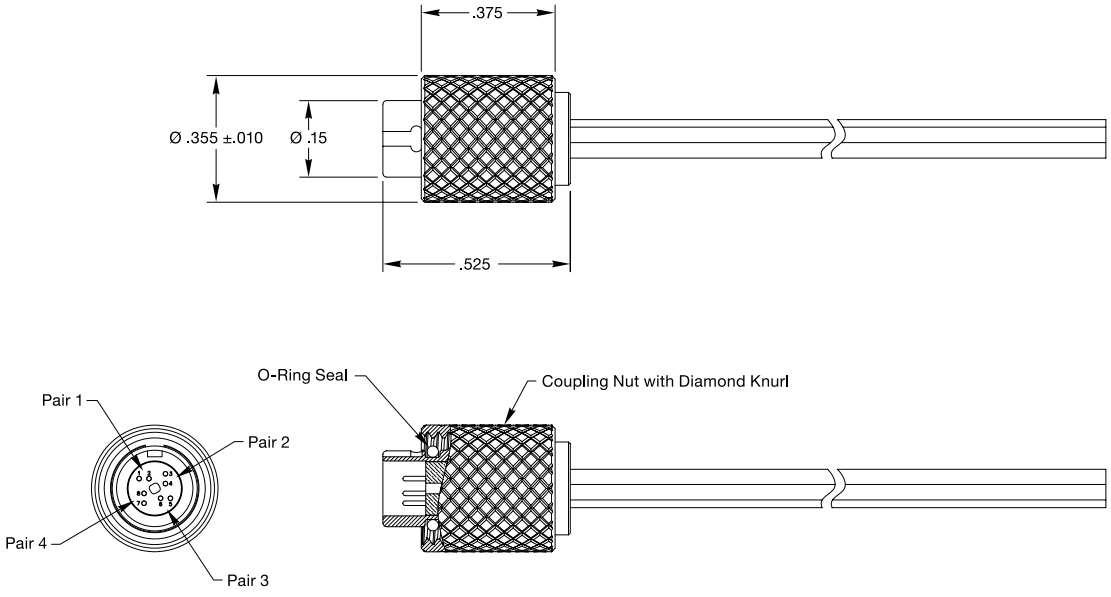
Quick Disconnect Plug, Right-Angle Backshell

Part No. 1925250



Threaded Plug

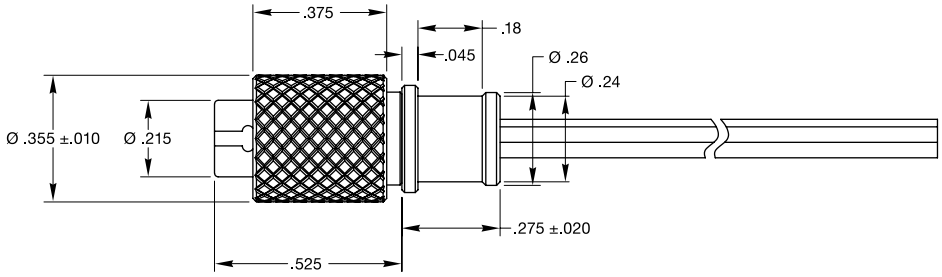
Part No. 1925251

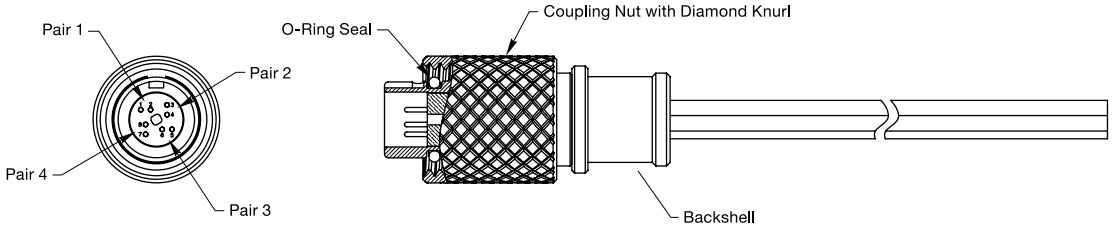


CeeLok FAS-T Nano Circular Connectors

Threaded Plug, Straight Backshell

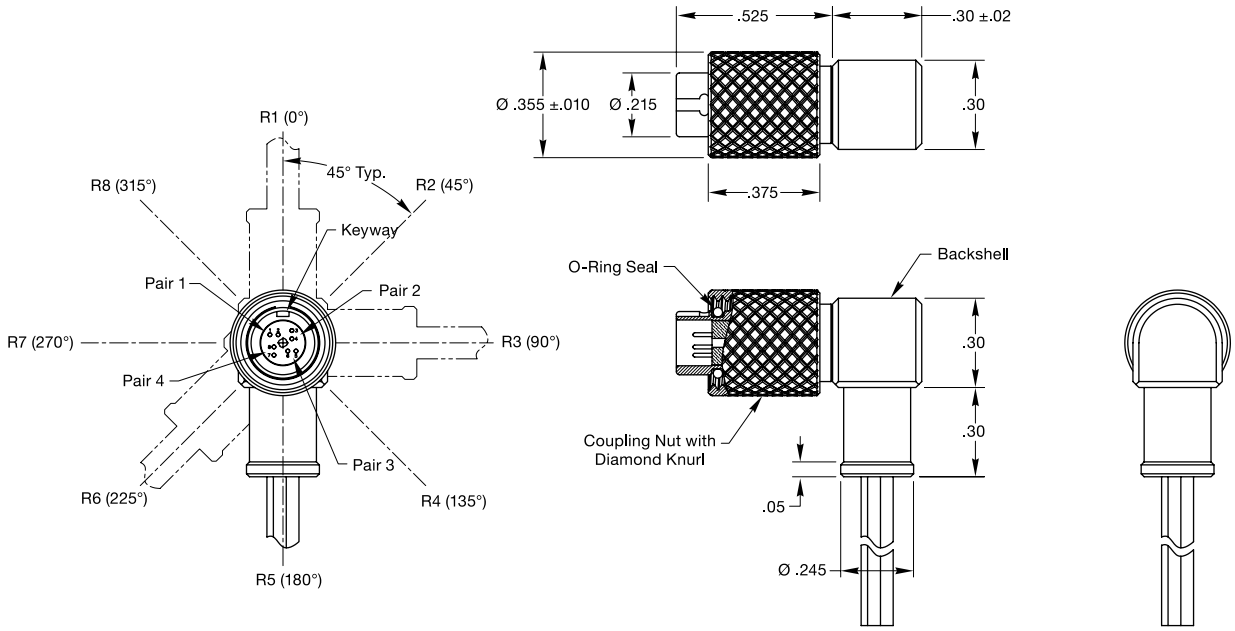
Part No. 1925252





Threaded Plug, Right-Angle Backshell

Part No. 1925253



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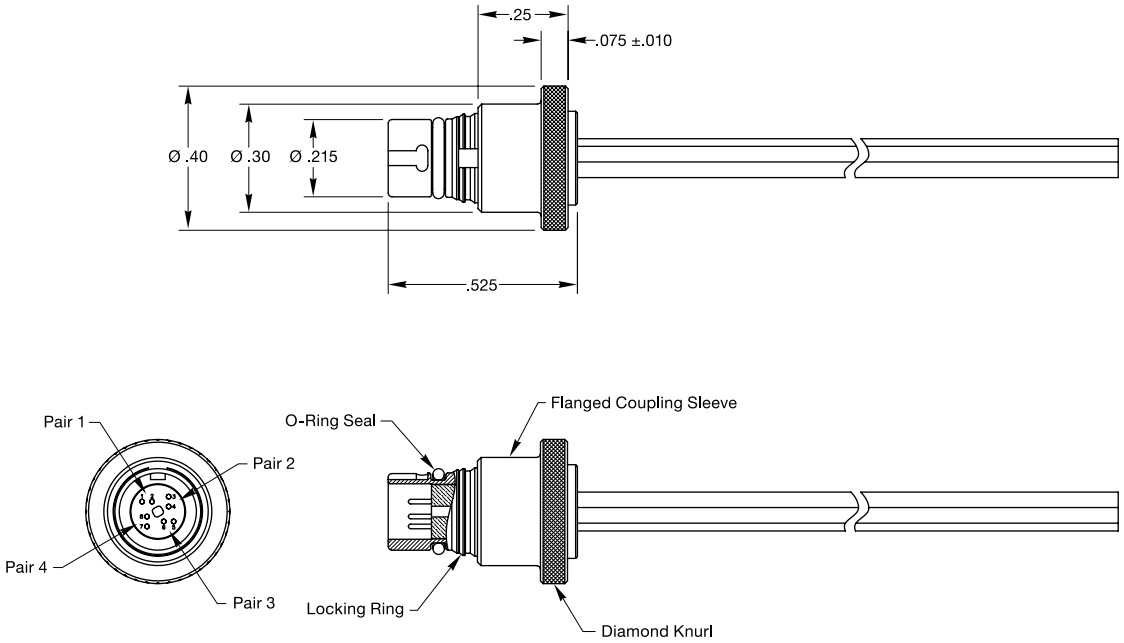
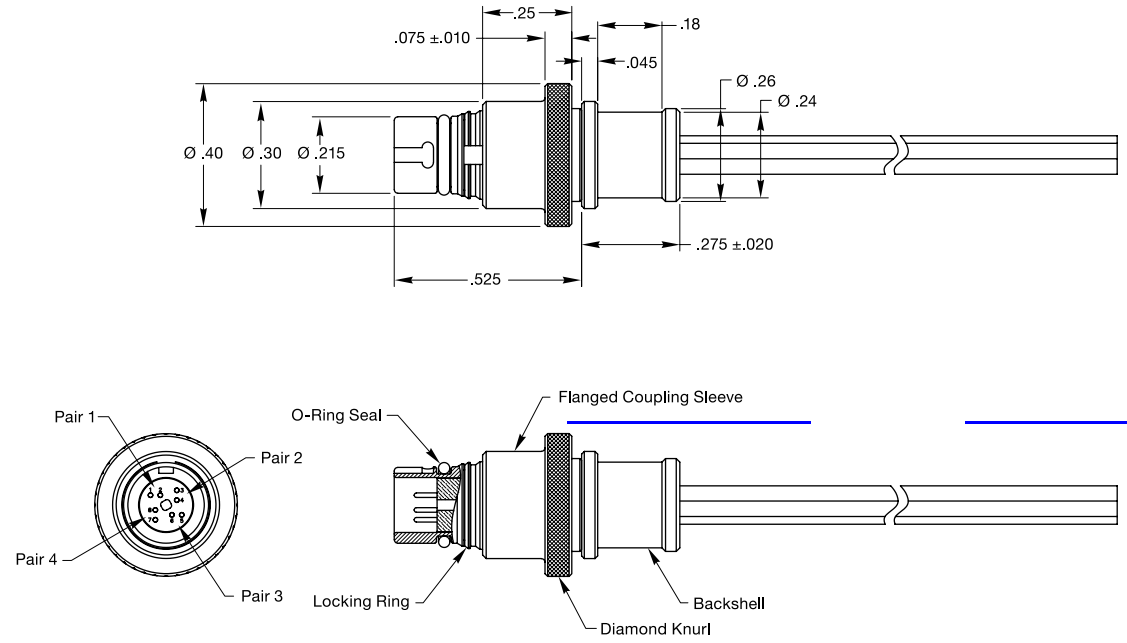
Flanged Quick-Disconnect Plug

Part No. 1925254



Flanged Quick-Disconnect Plug, Straight Backshell

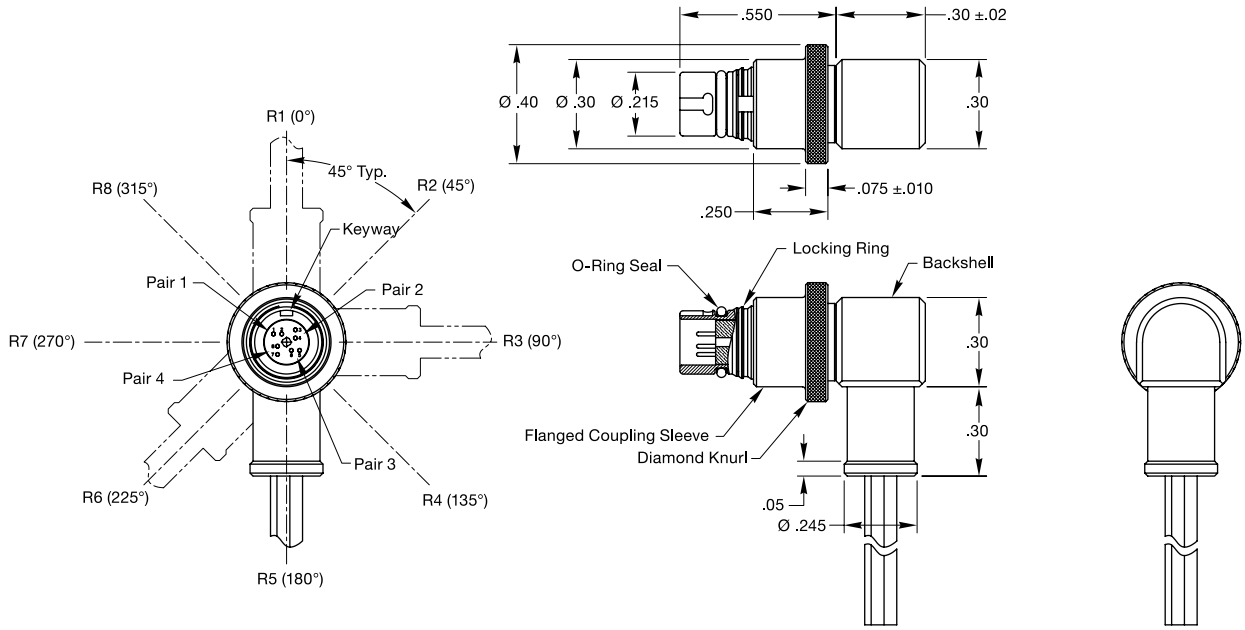
Part No. 1925255



CeeLok FAS-T Nano Circular Connectors

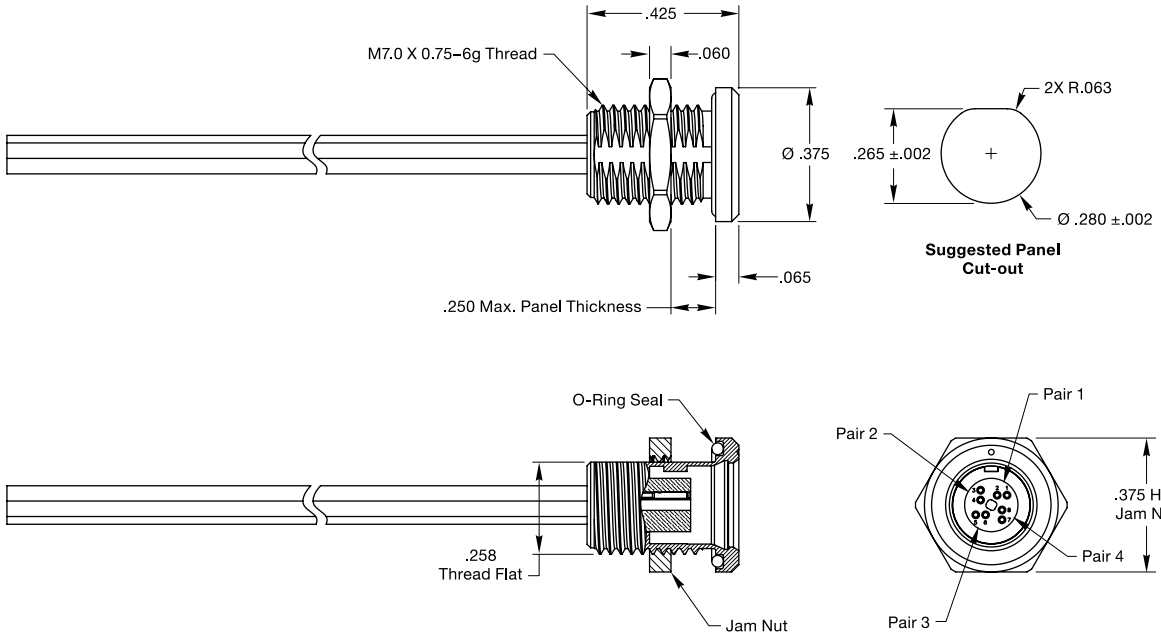
Flanged Quick-Disconnect Plug, Right-Angle Backshell

Part No. 1925256



Front Flush-Mount Receptacle

Part No. 1925257



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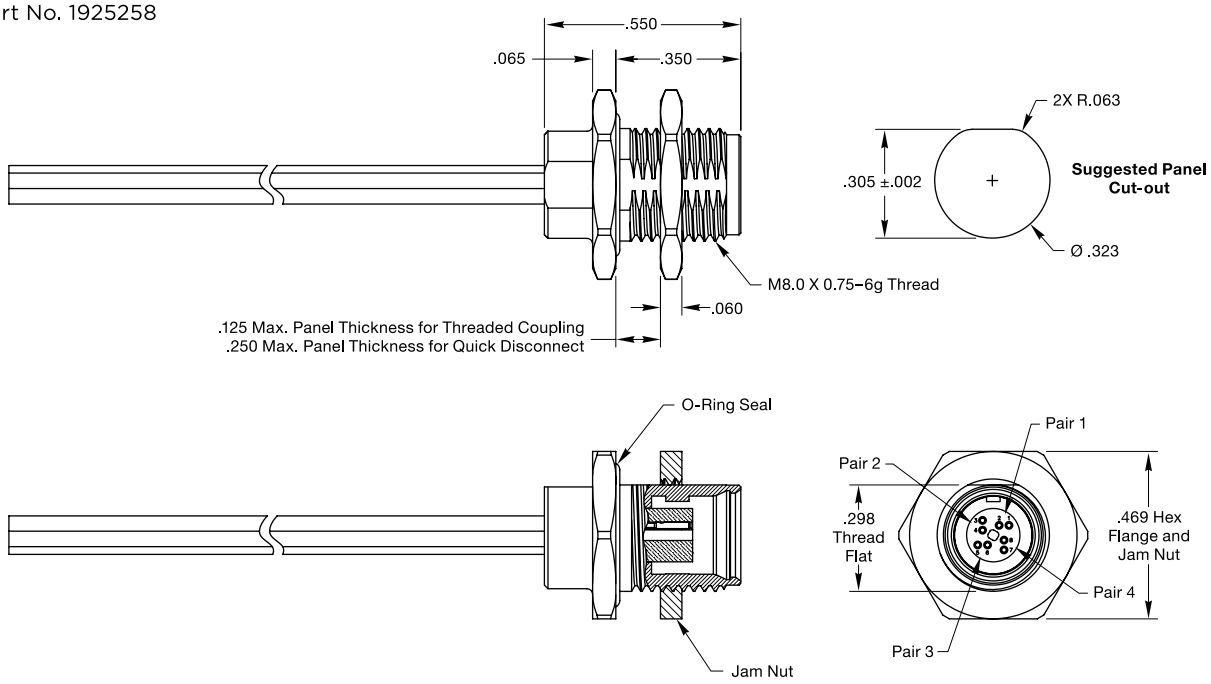
Rear Panel-Mount Receptacle

Mates with both quick-disconnect and threaded plugs

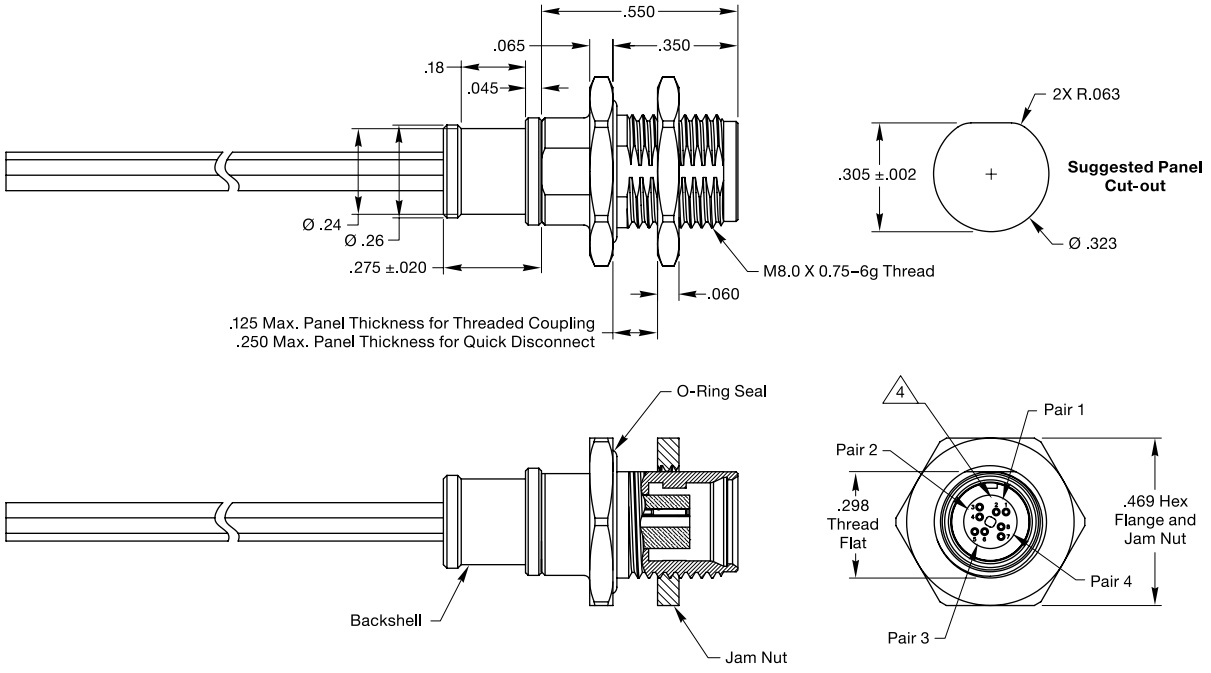
Part No. 1925258



Rear Panel-Mount Receptacle, Straight Backshell

Mates with both quick-disconnect and threaded plugs

Part No. 1925259

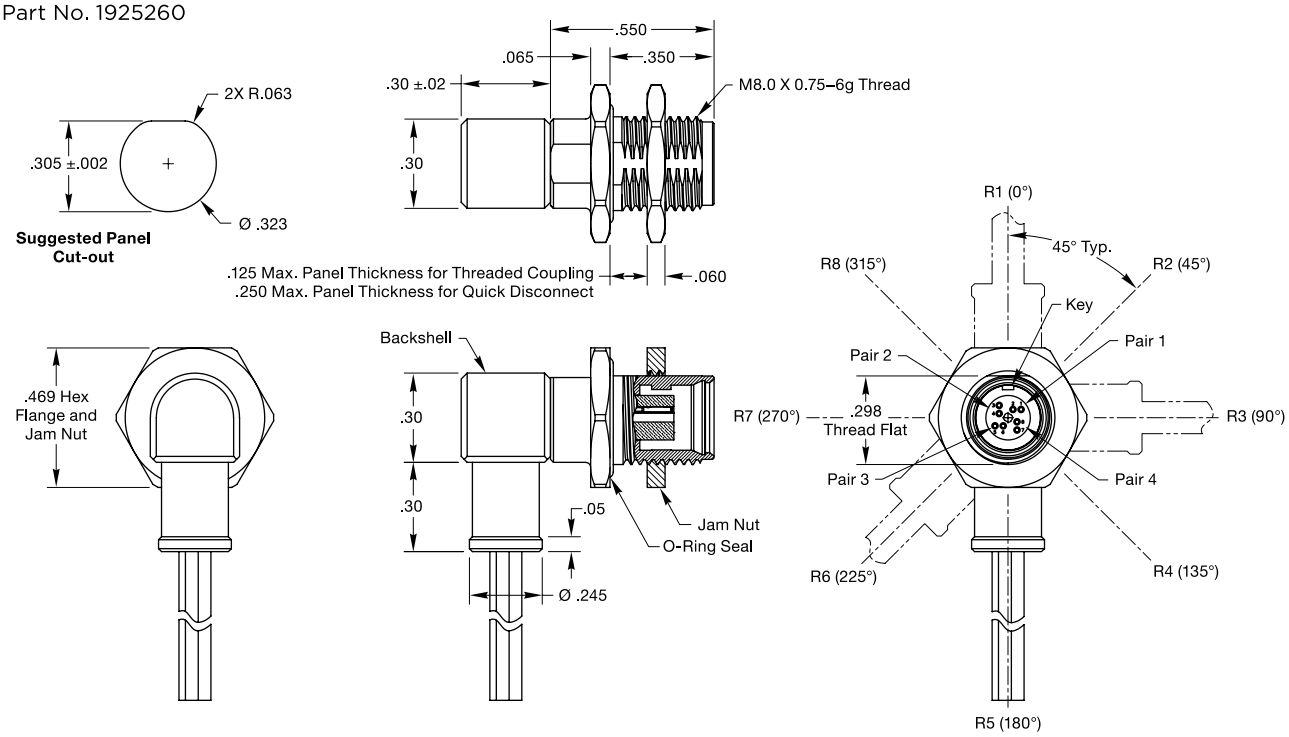


CeeLok FAS-T Nano Circular Connectors

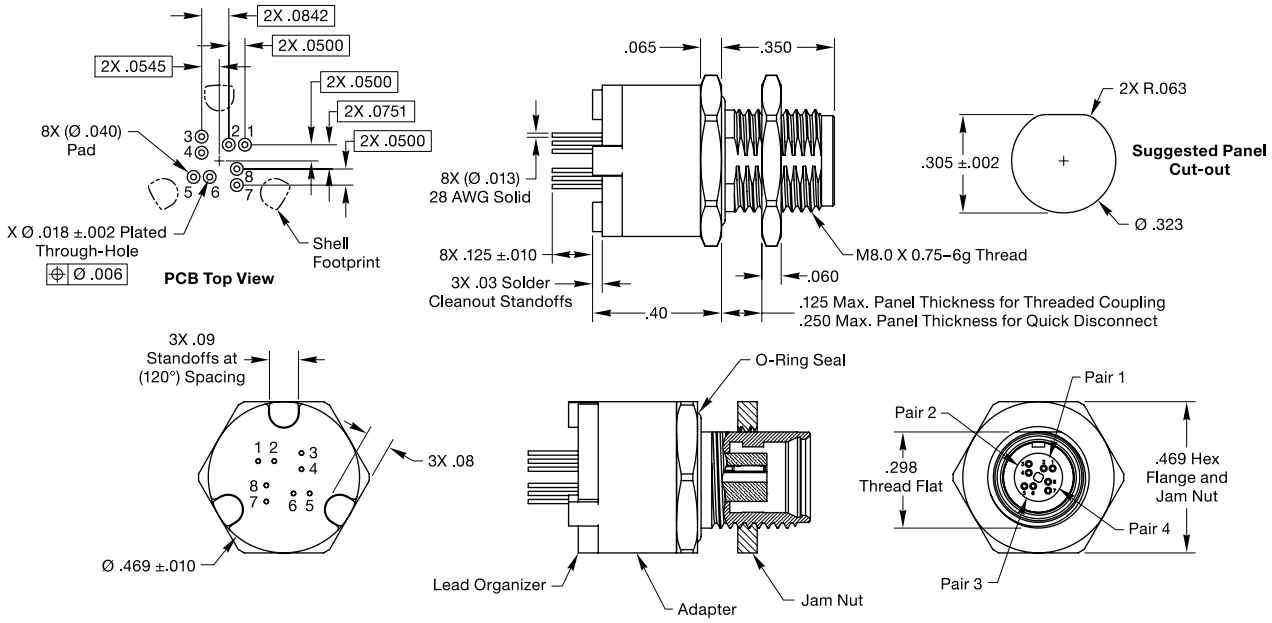
Rear Panel-Mount Receptacle, Right-Angle Backshell

Mates with both quick-disconnect and threaded plugs

Part No. 1925260



Thru-Hole Board-Mount Receptacle

Mates with both quick-disconnect and threaded plugs

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