Amphenol Industrial Products Group introduces a series of thermoplastic receptacles featuring Amphenol's AT contact technology. This series is designed to perform in the demanding applications found on construction and farm equipment, plus truck environments. The AT Circular series is a molded thermoplastic receptacle with a positive reverse bayonet retention system and sealed by redundant grommet wire sealing. The square flange design ensures a drop in replacement to existing panel designs and the jam nut version makes for easy installation. The 9 pin black receptacles are in accordance with the interface of the J1939 diagnostic connector.

AT Contact technology is already used successfully at major OEM's and features machined contacts with both Nickel and Gold plating.

Amphenol AT® Circular Connector Series

Features:
- Jam nut and square flange mounting styles solution
- Quick mating and unmating – reverse bayonet coupling
- Environmentally sealed – sealed against moisture and contaminants
- Contact retention system decreases installation costs and increases reliability
- RoHs compliant product
- Heavy-duty industrial connector, economical connector selection

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Material Specifications

- Receptacle Square Flange Grommet Seal
- Contact (AT Series)
  - Thermoplastic Neoprene Rubber for 3 and 5 pin
  - Silicone Rubber for 9 pin
  - Copper Alloy (Nickel and Gold plating available)

Electrical Specifications based on AT Machined

- Dielectric Withstanding Voltage (Test Voltage): 1500 VAC
- Current leakage less than 2 milliamps
- Current Rating at 125 degree C: 13 A
- Contact Millivolt Drop: 60 (AWG 16 Wire, 13 A)
- Insulation Resistance: 1000 megohms min. at 25°C

Mechanical Specifications

- Operating Temperature Range: -55°C to +125°C
- Durability (Mating Cycle): No electrical or mechanical defects after 100 cycles of engagement or disengagement
- Corrosion Resistance: Connectors show no evidence of corrosion after exposure to 48 hours of salt spray per MIL STD 1344 method 1001
- Moisture Resistance: Water does not penetrate seals when submerged in 3 feet of water
- Fluid Resistance: Connectors show no damage when exposed to most fluids used in industrial applications
- Thermal Shock: -40°C to +125°C, 100 cycles, 1 hour per cycle
- Crimp Tensile Strength: 25 lbs
- Vibration: Maintains continuity and exhibits no mechanical or physical damage during or while subject to sinusoidal vibration, having an amplitude of 0.060 inches double amplitude and the frequency varied linearly between limits of 10 to 2000 to 10 Hz with a maximum force of 20g's. No electrical discontinuities longer than 1 microsecond
- Physical Shock: No unlocking, unmating or other unsatisfactory result during or after 50 g's in each of three mutually perpendicular planes. No electrical discontinuities longer than 1 microsecond. MIL STD 202, Method 213, Condition "C"

How to Order:

Connectors

- ATC 10-9-1939PN
  - 1 designates AT Circular Connector
  - 2 Shell Style
  - 09 = Small Flange Jam Nut Receptacle (includes jam nut)
  - 10 = Square Flange Receptacle
  - 17 = Jam Nut Receptacle (jam nut sold separately)
  - 11 = Round Nut Receptacle
  - 3, 5, 9-1939PN
  - 4 Contact
- P for Pin (only available for Receptacles)

Accessories

- Part Numbers: Description
  - ATC10-RC3C: Cap with Lanyard for Size 3 Square Flange Receptacle
  - ATC10-RC3: Cap less Lanyard for Size 3 Receptacle
  - ATC10-RC5C: Cap with Lanyard for Size 5 Square Flange Receptacle
  - ATC10-RC5: Cap less Lanyard for Size 5 Receptacle
  - ATC10-RC9C: Cap with Lanyard for Size 9 Square Flange Receptacle
  - ATC10-RC9: Cap less Lanyard for Size 9 Receptacle
  - ATC10-RC9L: Cap with Lanyard for Size 9 Jam Nut Receptacle
  - ALHN-19: Hex Nut for ATC-17-9-1939PN
  - ASR9-1939: Strain Relief for Small Flange J1939 Receptacle
  - AWS9-1939: Wave Spring for Small Flange J1939 Receptacle

Part Dimensions for ATC-10-3PN

Part Dimensions for ATC-10-5PN

Part Dimensions for ATC-11-9-1939PN

Part Dimensions for ATC-17-9-1939PN

Part Dimensions for ATC-09-9-1939PN

Part Dimensions for ATC-10-9-1939PN

For Crimp Information please contact factory

The information contained on this data sheet is for reference only.

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