Amphenol®

Amphenol AT® Circular Connector featuring AT Contact Technology

Amphenol Industrial Operations introduces a series of plastic receptacles featuring Amphenol's AT contact technology. This series is designed to perform in the demanding environment found on construction and farm equipment as well as truck environment. 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 design and the jam nut design makes for easy installation. The 9 pin black receptacles are in accordance to the interface of the diagonostic connector of J1939/13.

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

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.

Material Specifications

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

Electrical Specifications based on AT Machined

Dielectric Withstanding Voltage (Test Voltage)	Current leakage less than 2 milliamps at 1500 VAC
Current Rating at 125 degree C	13 A
Contact Millivolt Drop	60 (AWG 16 Wire, 13 A)
Insulation Resistance	1000 megaohms 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°/+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 .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 - 9-1939 P N
1 2 3 4

1 designates AT Circular Connector
2 Shell Style
- 10 = Square Flange Receptacle
- 17 = Jam Nut Receptacle
- 11 = Round Nut Receptacle

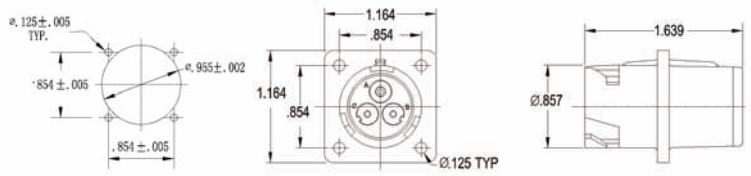
3 Shell Sizes and Insert Arrangements
- 3, 5, 9-1939

4 Contact
- P for Pin (only available for Receptacles)

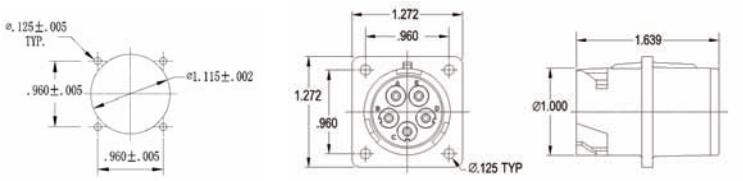
Accessories

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 Size 9 Jam nut receptacle

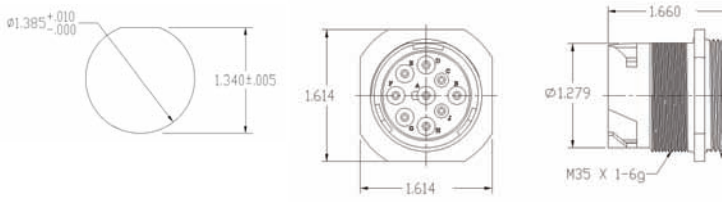
Part Dimensions for ATC-10-3PN



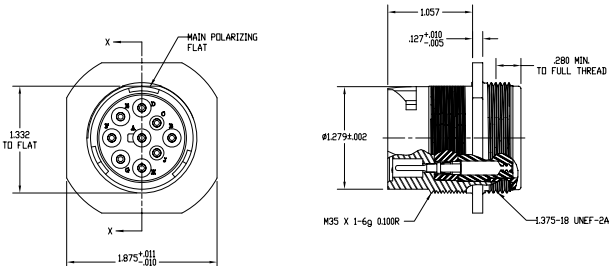
Part Dimensions for ATC-10-5PN



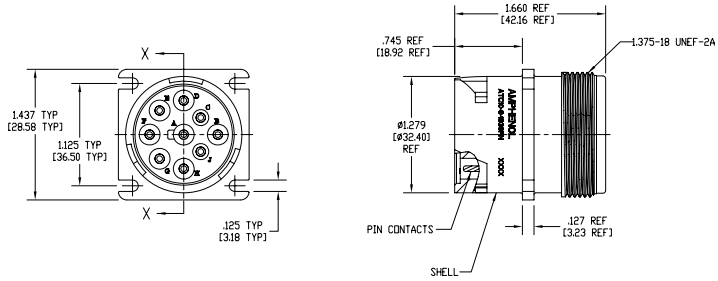
Part Dimensions for ATC-11-9-1939PN



Part Dimensions for ATC-17-9-1939PN



Part Dimensions for ATC-10-9-1939PN



• For Crimp Information please contact factory

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

For further information on your individual application requirements, contact: Amphenol Corporation

North America:
Amphenol Industrial Operations
180 N. Freeport Drive, Plant 4
Nogales, AZ 85621
Tel: (520) 285-5130
Fax: (520) 285-5134
Email: rpedrazzini@amphenol-aio.com

Europe:
Amphenol Industrial Operations Europe
Via Barbaiana 5
1-20020 Lainate (MI) Italy
Tel: +39 02 93254.204
Fax: +39 02 93254.444
Email: info@amphenol-aio.com

Middle East:
Amphenol Middle East Enterprises FZE
Office C-37 PO Box 21107
Ajman Free Zone, UAE
Tel: +9716-7422494
Fax: +9716-7422941
Email: ameefze@eim.ae

Asia:
Amphenol Technology Shenzhen Ltd
Block 5 Fuan 2nd Industrial Park
Dayang Rd, Fuyong Baoan
Baoan, Shenzhen, China 518103
Tel; +86 755 2881 8389
Fax; +86 755 2991 8310
Email: enquiry@amphenol-aio.com