

# Model IND-100

## Industrial Pressure Transmitter



### Description

The Model IND-100 Pressure Transmitter has been designed for use in a variety of industrial applications such as plant process and utility pressure measurements, compressor control, and hydraulic and pneumatic manufacturing systems. The AMETEK IND-100 offers exceptional reliability in industrial as well as outdoor environments. It provides unequalled performance and is perfectly suited for the demanding price requirements of this market.

EMI/RFI resistance is critical and is provided on the AMETEK IND-100 Transmitter as protection against noise-generating variable speed motors and radio equipment that is common on the factory floor. In addition, all AMETEK transmitters are thermally compensated over a wide temperature range to handle outdoor environments.

AMETEK utilizes the most stable sensor available for IND-100 transmitters, sputtered METAL THIN FILM technology. The wetted surfaces are 316L, and Hastelloy. The circuits are isolated from external interference with RFI/EMI filters and a power limiting circuit which has been agency approved to meet Class I, Div. 1 intrinsic safety standards. IND-100 transmitters with pigtail connectors are also NEMA 4x rated to meet the needs of outdoor installations.

AMETEK will supply the product through its global distribution partner network so each application will receive personal support throughout the life of the product.

### Features

- Compact size
- Stainless Steel Construction
- 4-20mA and 0-5VDC output at 12-30VDC
- $\pm 0.25\%$  Accuracy
- Indoor or Outdoor Installations
- Ranges from 100 PSI to 3000 PSI
- Zero and span adjustability
- CSA/NTRL intrinsically safe (Div 1 & Div 2)
- EMI/RFI Protected
- NEMA 4X Available

### Specifications

#### Functional Specifications

- **Service:** Liquid, Gas or Vapor
- **Range Limits:**  
100 PSIG, 250 PSIG, 1000 PSIG, 2000 PSIG  
3000 PSIG. Alternate ranges, including bar also available. Please inquire.
- **Output:** 4-20 mA, 2 Wire, Current Limited, 0-5 VDC
- **Power Supply:** 12-30 VDC with reverse polarity protection
- **Loop Resistance:** 0 ohms at 12 VDC; 900 ohms at 30 VDC (mA only)

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- **Output Loading:** 75kohm (VDC output only)
- **Span/Zero Adjustment:**  $\pm 5\%$  of FS
- **Temperature Limits:**
  - Compensated:  $0^{\circ}$  to  $50^{\circ}\text{C}$
  - Operating:  $-25^{\circ}$  to  $85^{\circ}\text{C}$
  - Storage:  $-40^{\circ}$  to  $85^{\circ}\text{C}$
- **Humidity:** 0-95% RH, Pigtail Model\*
- **Overrange:** 150% FS
- **Burst Pressure:** 400% FS
- **Hazardous Locations:**
  - Intrinsic Safety (With Barrier): Class I, Div 1
  - Non Incendive: Class I, Div 2

\* Atmospheric Reference: Transmitter vents through the cable

## Performance

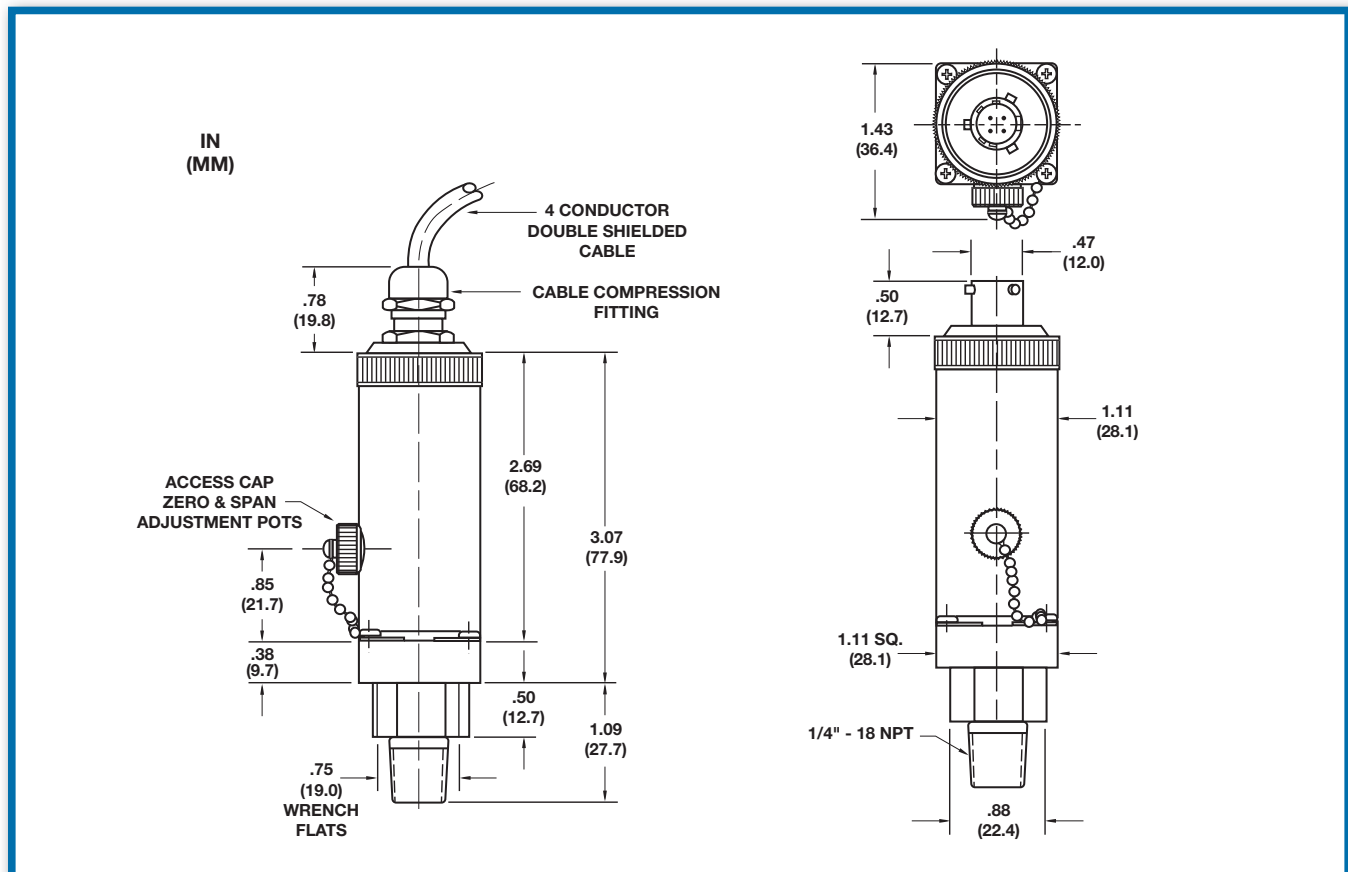
- **Accuracy:**  $\pm 0.25\%$  of FS includes linearity (BFSL), hysteresis and repeatability
- **Response Time:** Time constant of less than 20 milliseconds
- **Stability:**  $\pm 0.125\%$  of FS per 6 months under reference conditions

- **Temperature Effects:**
  - Zero:  $\pm .02\%$  of FS/ $^{\circ}\text{C}$  within compensated range
  - Span:  $\pm .02\%$  of FS/ $^{\circ}\text{C}$  within compensated range
- **Electromagnetic Compatibility:** CE Marked Per EMC Directive: 89/336/EEC Semi E33-94

## Physical

- **Sensing Element:** Metal Thin Film Bridge
- **Wetted Surfaces:** 316L and Hastelloy C22
- **Housing Material:** 300 series SS
- **Output Connector:** Bendix style PTIH-8-4P® or Pigtail (standard length = 10', custom available), or Pigtail with 1/2" NPT Conduit
- **Pressure Connection:** 1/4" NPT male
- **Warranty:** 1 year from date of installation or date of shipment.
- **Internal Diagnostics/Reference Calibration Shunt:** Used for go/no go checks

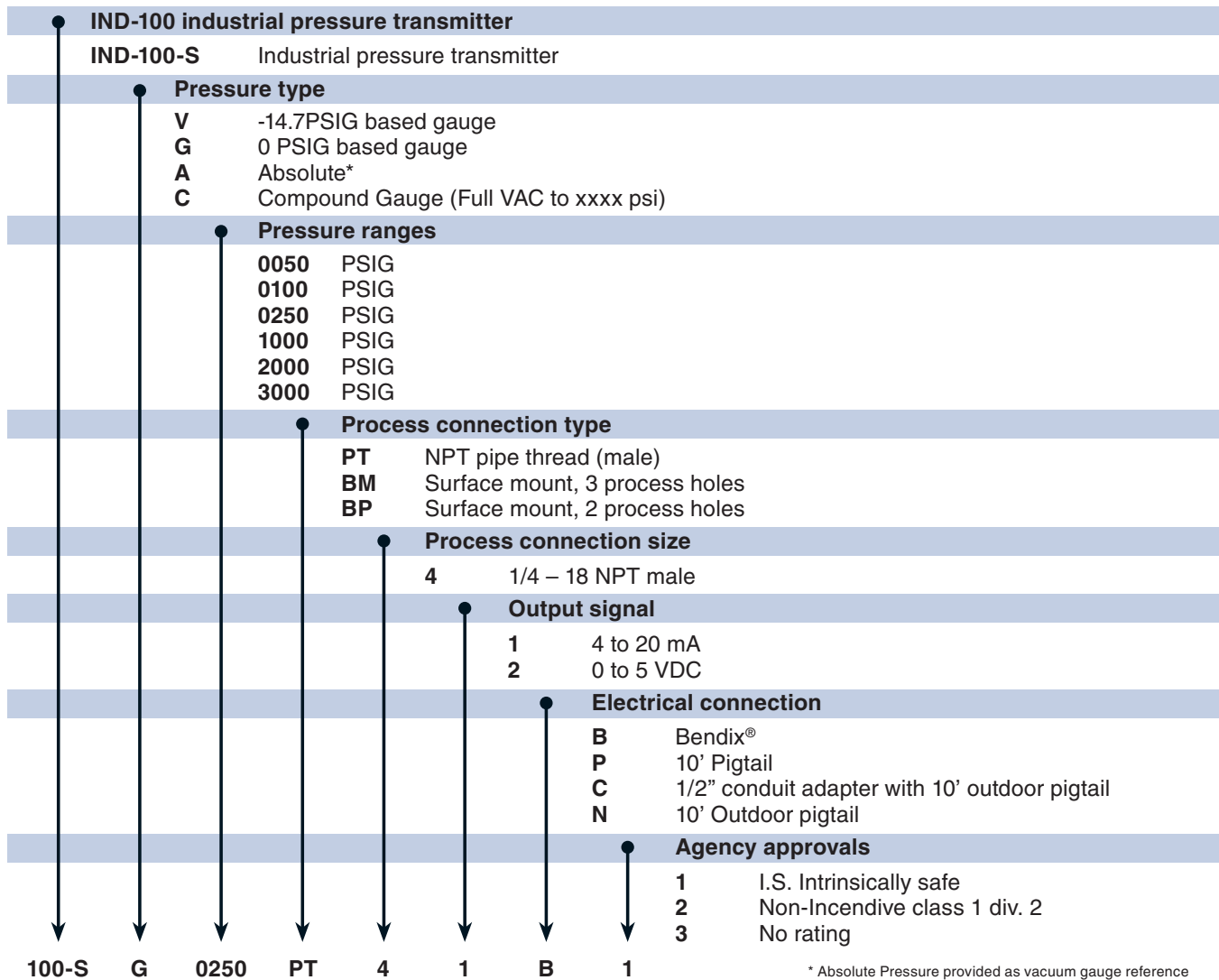
## Dimensions



Tel: 215-355-6900

www.ametekpmt.com

# Model Numbering:



\* Absolute Pressure provided as vacuum gauge reference  
i.e. 0-250 PSIA = -14.7 PSIG to 235.3 PSIG.

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