# UNIVERSAL PRESSURE TRANSMITTER

PT-UNI

## SPECIAL FEATURES




- 316 Stainless steel Housing
- Piezoresistance Sensor
- Ingress Rating: IP 67
- SS 316L stainless steel wetted parts
- All-welded construction with helium leak test
- Standard accuracy: 0.25%
- 50% full scale span adjustment with E-HART
- Interchangeable pressure units
- Pressure ranges from -1bar to 1000 bar
- E-HART software support for zero and span calibration

## APPLICATIONS

- Hydraulic / Mobile Hydraulic
- Pneumatic Systems
- Food and Beverage Industry
- Refrigeration Systems
- Pumps and Compressors
- Energy and water management
- Construction and Agricultural Equipment

## SPECIFICATIONS

**Performance @ 25°C (77 °F)**

| | |
|---|---|
| Accuracy | 0.25% FS, BFSL (includes non-linearity, hysteresis and non-repeatability) |
| Long-term | 0.1% FS |
| Thermal Error(TEB) | 0.5% FS |
| Compensated Temperatures | -10 to 100 ° C (14 to 212 ° F) |
| Operating Temperatures | -20 to 125 ° C (-4 to 257 ° F) |
| Current Consumption | Approx 4mA for 0-5 & 0.5-4.5 voltage output, 11mA for 0-10 voltage output, 23mA for current output (4-20mA). |
| Diaphragm Material | 316L SS <1500 psi, 17-4 SS 1500 psi and above,wetted parts are SS, no internal Orings |
| Shock | 50g, 11ms, 1/2 sign |
| Vibration | 11g peak from 10 to 400 Hz |
| Reverse Polarity Protection | Yes |

**Input**

| | |
|---|---|
| Functional Supply Voltage / (Output) | 10-30 VDC (0-5V, 4-20mA)<br>5 VDC (0.5-4.5V)<br>12-32 VDC (0-10V) |
| Proof Pressure | 3-6000 psi = 3 x<br>6000-10K psi = 2 x |
| Burst Pressure | 3-6000 psi = 4x<br>6000-10K psi = 3x |
| Fatigue Life | More than 5 million cycles |

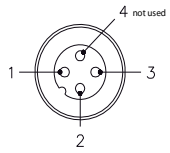
*For best performance use shielded cables.*

*Mating connectors and cable assemblies sold separately.*

** Consult factory for further OEM options.*

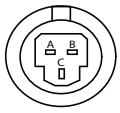
## ELECTRICAL CONNECTIONS

### M12



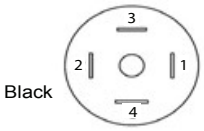

| Signal | Function | Color | Pin |
|---|---|---|---|
| 0-5V | Supply V + | Brown | 1 |
| | Output + | White | 2 |
| | Com | Blue | 3 |
| 4-20mA | Supply V + | Brown | 1 |
| | Output | Blue | 3 |

### 3 pin Packard



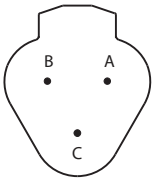

| Signal | Function | Color | Pin |
|---|---|---|---|
| 0-5V | Com | Black | A |
| | Supply + | Red | B |
| | Output + | White | C |
| 4-20mA | Output | Black | A |
| | Supply + | Red | B |

### DIN 4 pin (9.4)



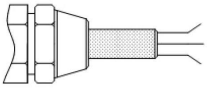

| Signal | Function | Color | Pin |
|---|---|---|---|
| 0-5V | Supply V + | Red | 1 |
| | Output + | Black | 2 |
| | Com | White | 3 |
| | N/A | N/A | 4 |
| 4-20mA | Supply V + | Red | 1 |
| | Output | Black | 2 |

### Transducer View Deutsch DT04-3P



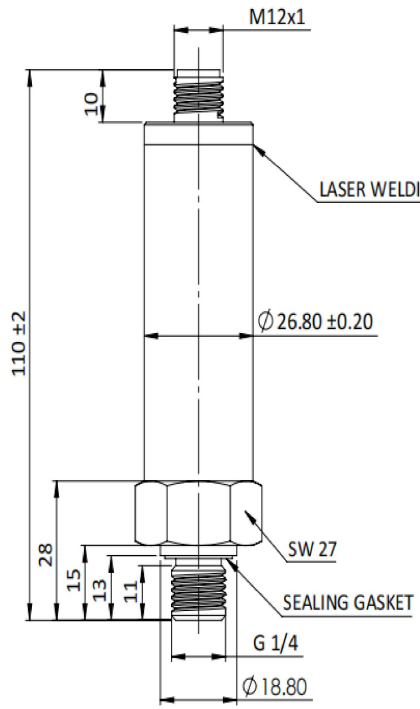

| X3 | PinA | PinB | PinC |
|---|---|---|---|
| mA | Supply+ | N/C | Ouput |
| V | Supply+ | Ouput+ | Com |

### Cable Type

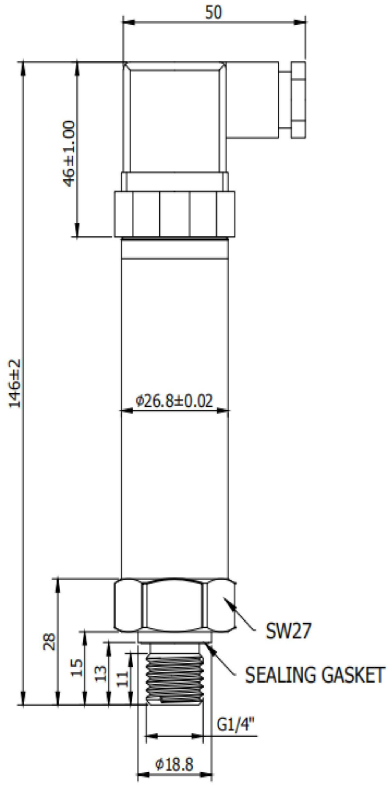


| Signal | Function | Color | Code |
|---|---|---|---|
| 1) 0-5V; 0-10V 0.5-4.5V | Supply V+ | Red | 1 |
| | Com | Black | 2 |
| | Output+ | While | 3 |
| 2) 4-20mA | Supply V + | Red | 1 |
| | Output + | Black | 2 |

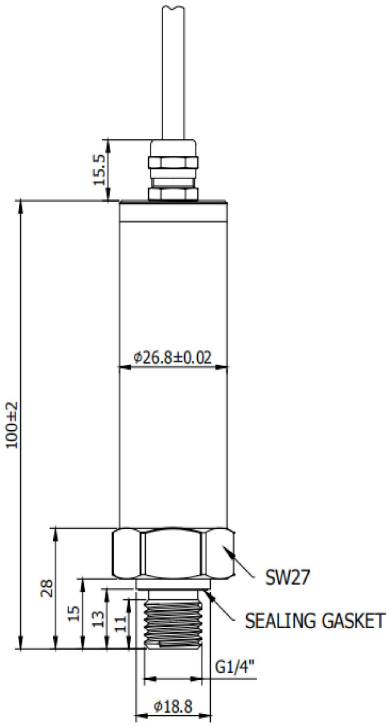
## DIMENSIONS




M12x1 Type




DIN Type




Cable Type

# HOW TO ORDER

Example

## OUTPUT TYPE

X

| | | |
|---|---|---|
| **H** GAUGE | **I** ABSOLUTE | **J** SEALED GAUGE |

## OUTPUT TYPE

X

| | | |
|---|---|---|
| **A** 4-20mA/0-5V/0-10V | **B** 4-20mA+HART | **C** RS485/RS485+4-20mA |
| **D** IO-Link + Switch | **E** Magnentic Zero Adjustment | **F** I²C |
| **G** 0.5-4.5V(ratiometric) | | |

***Please consult factory for any special outputs.

## PRESSSURE PORT

XXX

| | | | |
|---|---|---|---|
| **1BM** | 1/8"BSP(M) | **3BM** | 3/8"BSP(M) |
| **1NM** | 1/8"NPT(M) | **3NM** | 3/8"NPT(M) |
| **1TM** | 1/8"BSPT(M) | **3TM** | 3/8"BSPT(M) |
| **2BM** | 1/4"BSP(M) | **4BM** | 1/2"BSP(M) |
| **2NM** | 1/4"NPT(M) | **4NM** | 1/2"NPT(M) |
| **2TM** | 1/4"BSPT(M) | **4TM** | 1/2"BSPT(M) |
| **4MM** | M20 X 1.5(M) | | |

***Please consult factory for any special connections

## RANGE UNIT

XX

| | | | | |
|---|---|---|---|---|
| **R1** PSI | **R2** BAR | **R3** KG/CM2 | **R4** MPa | **R5** kPa |

***Please consult factory for any special range units.

## RANGE

XX

| CODE | E1 | E2 | E3 | E4 | E5 | E6 | E7 | E8 | E9 | E10 | E11 | E12 | E13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RANGE (psi) | -30"hg | -30"hg-15 | -30"hg-30 | -30"hg-60 | -30"hg-100 | -30"hg-160 | -30"hg-200 | -30"hg-300 | 15 | 30 | 60 | 100 | 160 |
| CODE | E14 | E15 | E16 | E17 | E18 | E19 | E20 | E21 | E22 | E23 | E24 | E25 | E26 |
| RANGE (psi) | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | 1500 | 2000 | 3000 | 4000 | 5000 | 6000 |

***Please consult factory for any special ranges.

## ELECTRICAL CONNECTION

XX

| | | |
|---|---|---|
| **C1** 9.4 Mini DIN - 4PIN | **C2** Packard-3PIN | **C3** Deutsch DT04-3P |
| **C4** DIN 485 | **C5** M12x1 | **C6** Cable |

***Please consult factory for any special electrical connections.

## ACCURARCY

X

| | | | |
|---|---|---|---|
| **1** 0.05%FS | **2** 0.075%FS | **3** 0.1%FS | **5** 0.25%FS |

## OPTIONAL EXTRAS

XX

| | | | |
|---|---|---|---|
| **SG** | OXYGEN SERVICE | **CK** | EPOXY PAINTED |
| **TI** | MONEL BWETTED PART | **SX** | SS TAG PLATE |
| **TF** | TESTED TO NACE STANDARD | **SY** | AISI 316SS TAG PLATE |
| **TB** | HELIUM LEAK TEST | **QB** | INTEGRAL DAMPENING SCREW (AISI 316 SS) |
| **RH** | CUSTOM DESIGNED | **FL** | INTEGRAL DAMPENING SCREW (MONEL) |
| **ZB** | RECEIVER RANGE | **GH** | MATERIAL TEST CERTIFICATES |
| **AT** | ATEX (AS PER 2014/34/EU) | **PW** | FIVE POINT CALIBRATION CERTIFICATE |
| **ZM** | ELECTRO POLISHED | | NATIONAL/INTERNATIONAL STANDARDS |

**Ordering Example: PT-UNI-X-X-XXX-XX-XX-XX-X-XX**