

PTEX1-HU

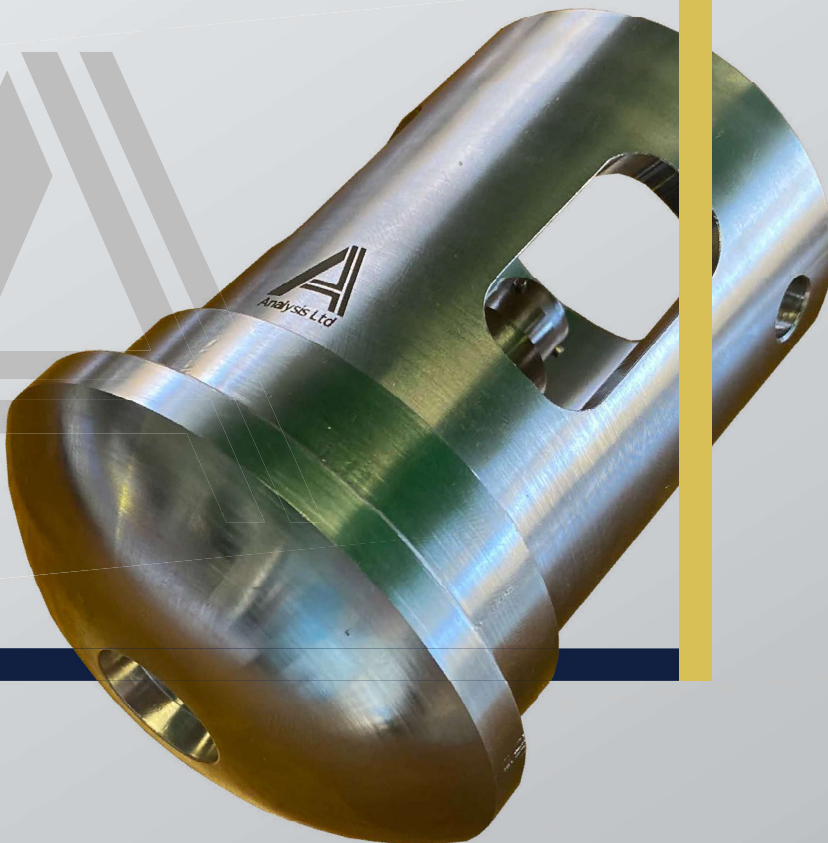


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# HAMMER UNION PRESSURE TRANSMITTER





**APPLICATIONS**

Excavations and pumps  
 Oil and gas , production  
 Mud Pumps

**APROVALS AND CERTIFICATIONS**

ATEX (Certificate number = Ex Veritas 21ATEX0865X)  
 IECEx (Certificate number = IECEx EXV 21.0037X)  
 ATEX and IECEx certified Zone 0 and Zone 20 Category 1  
 IIIG Ex ia IIC T4 Ga  
 IIID Ex ia IIIC T200 107°C Da  
 Type approval Lloyd's Register(Cert. number=LR22230526TA)

**IP PROTECTION**

For all connector versions IP66

**TEMPERATURE SPECIFICATIONS**

Media temperature	-40 to 100 C
Ambient temperature	-40 to 80 C
Storage temperature	-40 to 80 C

**FEATURES**

Reliable and accurate pressure measurement  
 Accuracy (non-linearity, hysteresis and repeatability)  $\leq \pm 0.25\%$  of span  
 Measuring ranges 5000PSI, 10000PSI, 15000PSI and 20000PSI others on request  
 Working temperature -40 to 80C  
 Supply voltage 11 to 28VDC  
 Output 4 to 20mA  
 Process Connection Hammer Union 1502  
 Wetted parts Inconel 718 and AIS316  
 Designed for harsh environments

**OPERATION CONDITIONS**

Shock Resistance	2-13.2Hz at 3 1mm and from 13.2-100Hz at 0.7g
Vibration Resistance	2-25Hz at 3 1mm and from 25-100Hz at 4.0g

**ELECTRICAL SPECIFICATIONS**

Supply voltage	11 to 28 VDC	
Output	4...20 mA	(2 wires connection)



**MATERIALS**

Wetted parts Inconel 718 and AISI316  
 Body material AISI316

**PRESSURE REFERENCE**

PSI  
 Bar

**TESTS AND SPECIFICATIONS**

Environmental	Cold: EN60068-2-1 Dry Heat: EN60068-2-2 Damp heat: EN60068-2-30 Vibration: EN60068-2-6,
Electrical installations	EN 60092-504
Static Inclination	EN 60092-504
Dynamic Inclination	EN 60092-504
Electrostatic Discharge	EN 61000-4-2
Radiated RF Immunity	EN 61000-4-3
Fast Burst Transients	EN 61000-4-4
Conducted RF Immunity	EN 61000-4-6
Radiated Emissions	EN 55016-2-3
Power Supply Variation	EN 60092-504
Power Supply Failure	EN 60945
Insulation Resistance	EN 60945

**ELECTRICAL SPECIFICATIONS**

Reverse polarity protection	Yes
Output Impedance	>10k Ohms
Max load in Ohms	$\leq (\text{supply voltage} - 11 \text{ V}) / 0.021 \text{ A} - (\text{cable length per m} \times 0.15 \text{ Ohms})$
Voltage insulation	500V tested
Insulation resistance	>10Mohms

**PARAMETERS ACCORDING TO ATEX-IECEX**

Entity parameters	Values for gas atmospheres	Entity parameters for dust atmospheres
Ui	28 V	28 V
Ii	119 mA	88 mA
Pi	833 mW	616 mW
Ci	10 nF	10 nF
Li	1.2 uH	1.2 uH
C & L per unit length (cable version)	150 pF/m and 1.1 uH/m	150 pF/m and 1.1 uH/m

**ACCURACY SPECIFICATIONS**

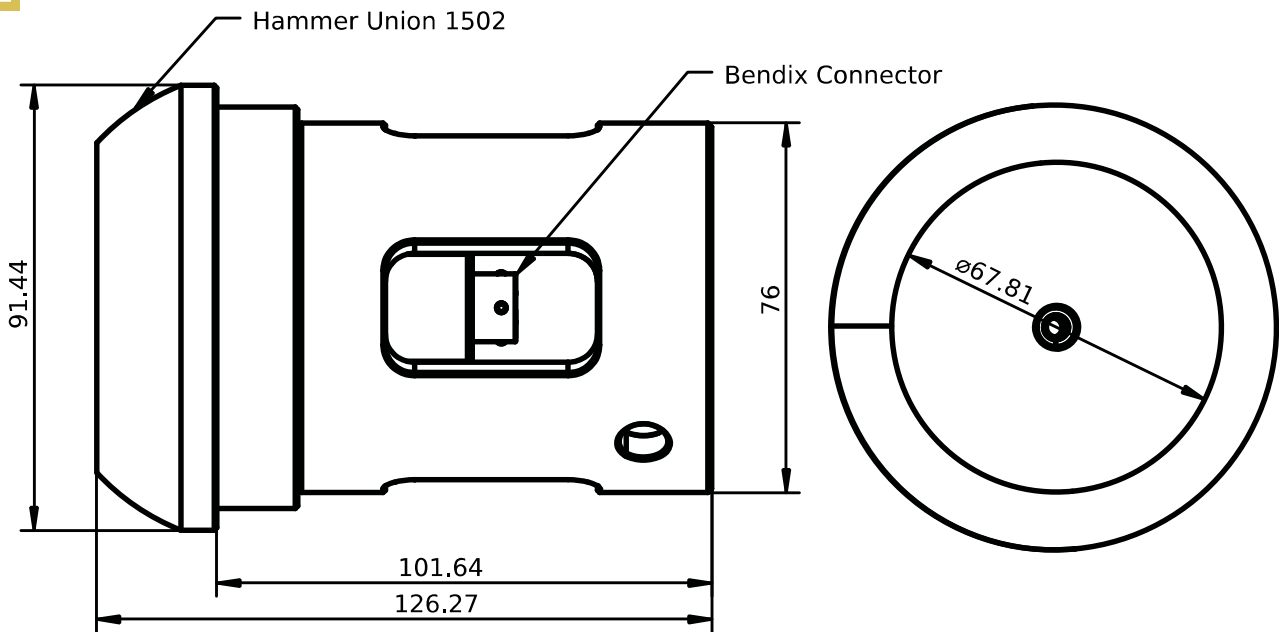
Accuracy (non-linearity, hysteresis and repeatability)	$\leq \pm 0.25 \%$ of FS, typ
Temperature error every 10C	$\leq \pm 0.1 \%$ of FS, typ
Over range Protection	1.5X Rated Pressure
Burst Pressure	2.5X Rated Pressure
Pressure Cycles	> 100 million at full pressure

1.Power supply: 24VDC, Temperature: 18 to 24C, Mount position: Vertical, Humidity: 45 to 75%





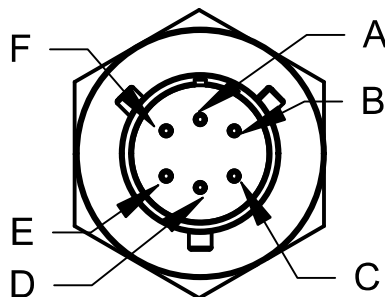
DIMENSIONS



ELECTRICAL CONNECTION

Bendix MIL-DTL-26482  
Bayonet connector

A --> +    B --> -





**INTRINSICALLY SAFE BARRIER CONNECTION**

Sensor must not exceed upper or lower limits of the barrier of the entity parameters (following conditions must be satisfied):

Checking of the voltage:  $U_o$  (barrier)  $\leq$   $U_i$  (sensor in hazardous area)

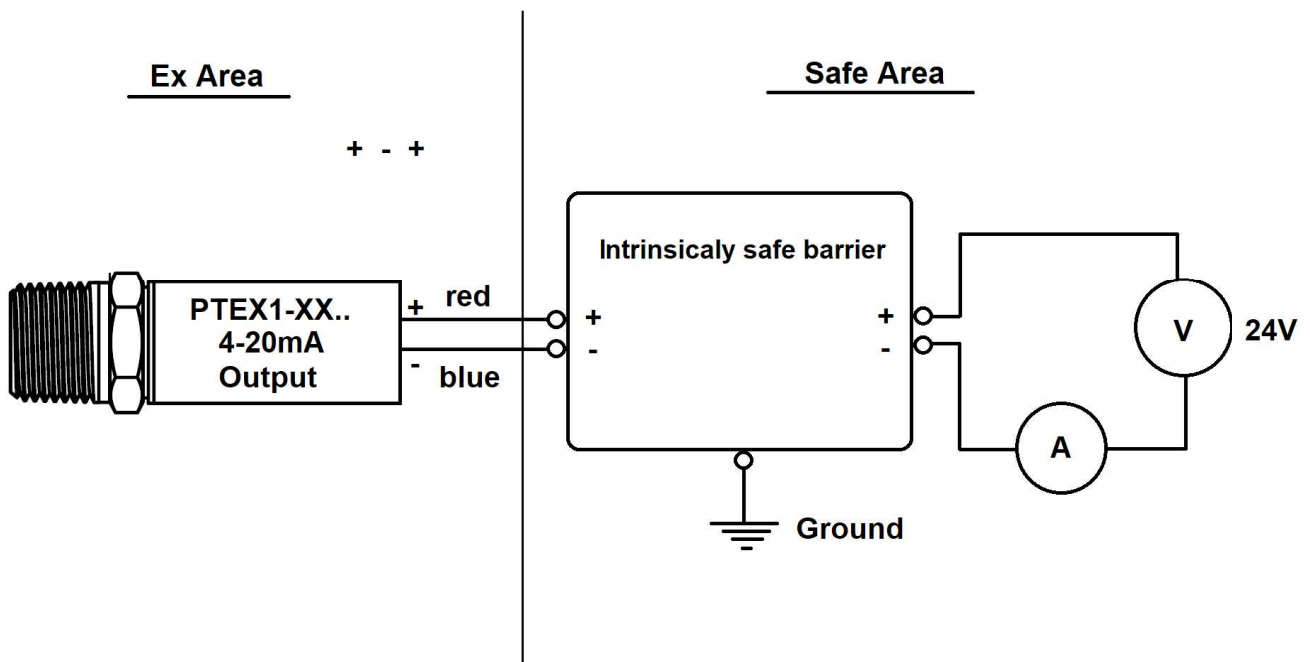
Checking of current:  $I_o$  (barrier)  $\leq$   $I_i$  (sensor in hazardous area)

Checking of power:  $P_o$  (barrier)  $\leq$   $P_i$  (sensor in hazardous area)

Checking of capacitance:  $C_c$  (cable) +  $C_i$  (sensor in hazardous area)  $\leq$   $C_o$  (barrier)

Checking of inductance:  $L_c$  +  $L_i$  (sensor in hazardous area)  $\leq$   $L_o$  (barrier)

Entity parameters: Please see at page 3



PTEX1-HU

ORDER CODE



ANALYSIS LTD

ORDER CODE FOR PTEX1

**ELECTRICAL CONNECTION CHOISE**

Connector

HU

**ELECTRICAL CONNECTION**

Bendix MIL-DTL-26482 Bayonet connector

BEN

**OUTPUT**

4...20 mA (2 wires connection)

420A

**PRESURE REFERENCE**

Bar

B

PSI

P

**PRESURE RANGES**

0 to 5.000 psi

005K

0 to 10.000 psi

010K

0 to 15.000 psi

015K

0 to 20.000 psi

020K

Other pressure reanges on request

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**Wetted parts Material**

Inconel 718 and AISI 316 body

IN76

**PROCESS CONNECTION**

Flange 1502

1502

Other connection on request

XXX

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