

# Hammer Union Pressure Transducer

## Features

- ▶ Reliable and accurate pressure measurement
- ▶ Accuracy (non-linearity, hysteresis and repeatability)  $\leq \pm 0.25\%$  of span
- ▶ Pressure ranges up to 20,000 psi (1,500 BAR)
- ▶ Working temperature -40° to 80°C
- ▶ Supply voltage 11 to 28VDC
- ▶ Output: 4 to 20mA (2 wires connection)
- ▶ Process Connection Hammer Union 1502
- ▶ Designed for harsh environments

## Applications

- ▶ Excavations
- ▶ Pumps
- ▶ Oil and gas production
- ▶ Mud Pumps



## General Specifications\*

Supply:	11 to 28 VDC
Pressure Range:	0 to 5,000 psi (0-350 BAR) 0 to 10,000 psi (0-700 BAR) 0 to 15,000 psi (0-1000 BAR) 0 to 20,000 psi (0-1500 BAR)
Accuracy Specifications	(non-linearity, hysteresis and repeatability) $\leq \pm 0.25\%$ of span
Output:	4 to 20mA (2 wires connection)
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 Cycle	> 100 million at full pressure
Wetted Parts	Inconel 718 and AISI316
Body Material	AISI316

Shock Resistance	2-13.2Hz at $\pm 1$ mm and from 13.2-100Hz at 0.7g
Vibration Resistance	2-25Hz at $\pm 1$ mm and from 25-100Hz at 4.0g
Storage Temperature	-40 to 176°F (-40 to 80°C)
Media Temperature	-40 to 212°F (-40 to 100°C)
Ambient Temperature	-40 to 176°F (-40 to 80°C)
Ingress Protection	IP66
Reverse Polarity	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

\* See product configurator for additional options.

Approvals and Certifications	
ATEX AND IECEx	ATEX and IECEx certified Zone 0 and Zone 20 Category 1 II1G Ex ia IIC T4 Ga II1D Ex ia IIIC T200 107 C Da
Marine	Type approval Lloyd's Register
North America (pending)	Intrinsically Safe Class I, Div1, Groups ABCD

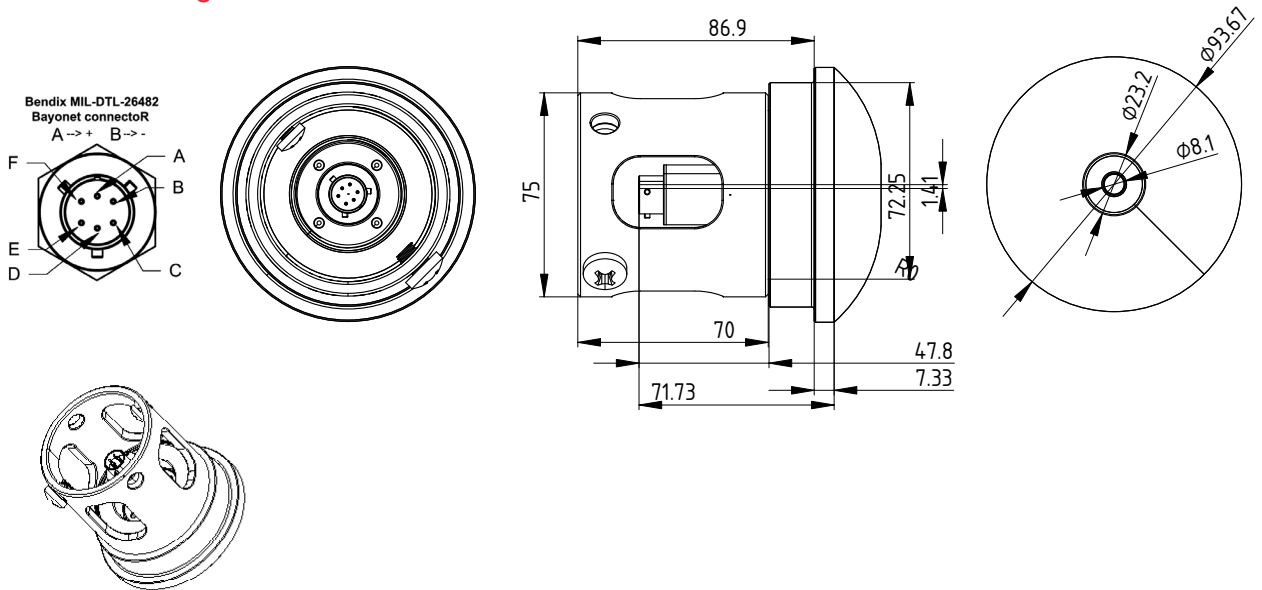
Parameters according to ATEX - IECEx		
Entity Parameters	Values for gas atmospheres	Entity parameters for dust atmospheres
Ui	28 V	28 V
Ii	119 mA	88 mA
Pi	833 mW	616 mW
Ci	10 nF	10 nF
Li	1.2 uH	1.2 uH
C & L per unit length (cable version)	150 pF/m and 1.1 uH/m	150 pF/m and 1.1 uH/m



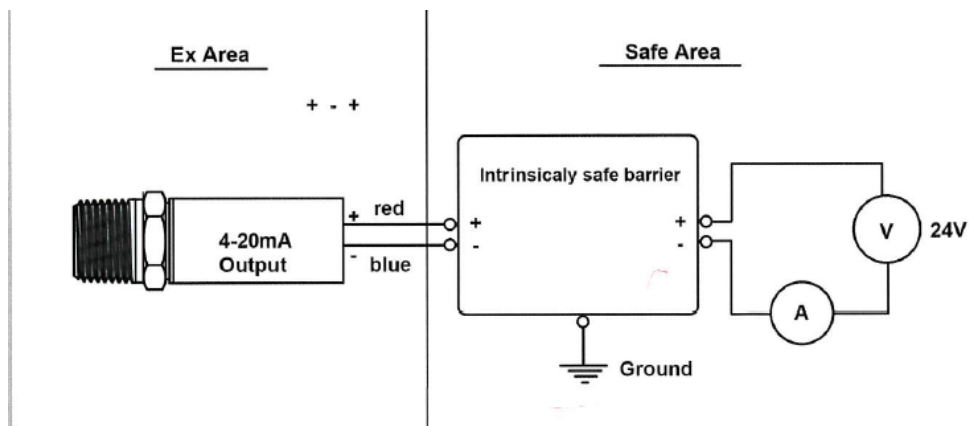
# Hammer Union Pressure Transducer

Test and Specifications	
Environmental	Cold: EN60068-2-1
	Dry Heat: EN60068-2-2
	Damp heat: EN60068-2-30
	Vibration: EN60068-2-6,
Electrical Installation	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

## Technical Drawing



## Intrinsically Safe Barrier Connection



# Hammer Union Pressure Transducer

## Product Configurator

755E -T2 -15 B -Z18-S131

Series

755E	4-20 mA analog output
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Electrical Connection

-T2	- 6 pin connector, SS Hermetic, PTIH-10-6P
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Options

-ZXXY	Special pressure ranges: XX - significant digits Y - number of trailing zeros Example: 130 psi calibration: add -Z131
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Pressure Range

-15	0-5000 psi (0-350 BAR)
-18	0-10000 psi (0-700 BAR)
-29	0-15000 psi (0-1000 BAR)
-30	0-20000 psi (0-1500 BAR)

Pressure Unit and Type

Blank	PSI Gauge Pressure (Standard)
B	Bar-Gauge Pressure