

# Intrinsically Safe Hammer Union Pressure Transmitter



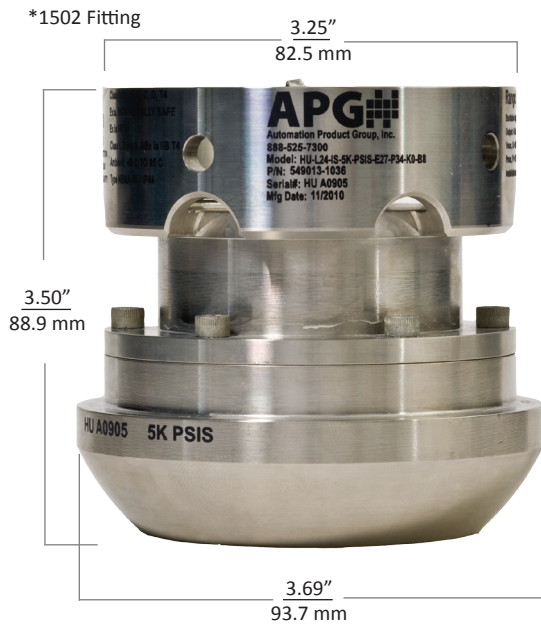
## Flexible by Design

The Hammer Union Pressure Transmitter is an extremely rugged pressure transmitter designed specifically for the harsh environment in the oil patch including Mud Logging and Measurement While Drilling.

### Features

- Ranges to 20,000 psi
- 4-20 mA or 0-5 VDC output
- 1502 or 2202 fitting
- Exceptional shock and vibration resistance
- $\pm 0.25\%$  accuracy of full scale
- CSA/ATEX/IEC Approved

# Hammer Union Specifications



## Performance

- Accuracy (linearity, hysteresis, & repeatability):  $\pm 0.25\%$  of full scale (BFSL)
- Standard Pressure Ranges: 0-20,000 psis
- Compensated Temp:  $-40 - 65^{\circ}\text{C}$  ( $-40 - 150^{\circ}\text{F}$ )
- Temp Effects on Zero & Span:  $\pm 0.026\%$  FSO/ $^{\circ}\text{C}$  ( $\pm 0.01\%$  FSO/ $^{\circ}\text{F}$ )
- Life: 10 million cycles minimum

## Connectivity

- Output Signal @  $21^{\circ}\text{C}$ :  
 4-20 mA: 3-30 mA max  
 0-5 VDC: 110 mA inrush current  
 0-5 VDC: 3.5 mA operating current

## Environmental

- Storage Temp:  $-50 - 120^{\circ}\text{C}$  ( $-50 - 248^{\circ}\text{F}$ )
- Operating Temp:  $-40 - 85^{\circ}\text{C}$  ( $-40 - 185^{\circ}\text{F}$ )
- Enclosure Protection: IP67

## Certification

- CSA/cCSAus Contract #237484
- IS: Class 1, Division 1; Groups C & D  
 Class 1, Zone 0, AEx ia IIB T4  
 Ex ia IIB T4  
 Ambient:  $-40 - 85^{\circ}\text{C}$
- ATEX: 4-20 mA  
 CE 0344 EX II 1G Ex ia IIB T4 Ga  
 ( $T_a = -40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ )
- IEC: 4-20 mA  
 EX ia IIB T4 Ga ( $T_a = -40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ )

## Electrical

- Supply Voltage: 10-30 VDC on sensor
- Loop Resistance: 1125 ohms @ 30 VDC decreasing linearly to 0 ohms @ 10 VDC
- Insulation Resistance:  $>100$  megohms @ 500 VAC,  $70^{\circ}\text{C}$
- Shunt Cal: 100% of full scale output



## Physical

- Wetted Materials: Conforms to NACE MR-01-75 and ISO 15156-3 standards
- Incoloy

# Options

Part Number: HU - L      - IS -      - E      - P      - K       
   A  B  C  D  E

## A. Output

- L24**           4-20 mA with Cal Shunt
- L27**           0-5 VDC

## B. Pressure Range

- 5K**             0 - 5,000 psis
- 6K**             0 - 6,000 psis
- 10K**            0 - 10,000 psis
- 15K**            0 - 15,000 psis
- 20K**            0 - 20,000 psis

## C. Electrical Connection

- E1**             4 pin 'Mini'
- E2**             5 pin 'Mini'
- E3**             4 pin Threaded MS3102 (0-5V)
- E4**             6 pin Bayonet (0-5V)
- E5**             1/2 NPT coupling flying leads
- E10**            1/2 NPT coupling with junction box
- E26**            4 pin Threaded MS3102
- E27**            6 pin Bayonet
- E29**            6 pin Bayonet
- E32**            4 pin Threaded MS3102

## D. Fitting

- P34**            Large Hammer Union 1502 Weco fitting
- P35**            Small Hammer Union 2202 Weco fitting
- P36**            Large Welded Hammer Union 1502 Weco fitting
- P37**            Small Welded Hammer Union 2202 Weco fitting

## E. Enclosure

- K0**             No options (standard)
- K7**             With handle\*
- K1**             With protective cage assembly\*

\*Consult factory



# HU Hammer Union Pressure Transducer

## Built for the Toughest Applications



Automation Products Group, Inc. brings you the highest quality hammer union pressure transducer on the market.

There's a reason why so many are switching to the HU hammer union pressure transducer from APG. We always use a NACE compliant nickel alloy and welded construction for the toughest applications in Oil & Gas drilling and production.

Next time you need a hammer union pressure transducer, call us at (888) 525-7300.



### Short Lead Times

- As little as 2 weeks

### Haz Location Certifications

- Class 1, Division 1; Groups C & D  
Class 1, Zone 0
- ATEX II 1G Ex ia IIB T4 Ga
- IECEx EX ia IIB T4 Ga

### Drain Holes

- It's all about the details

### NACE Compliant Nickel Alloy

- NACE MR-01-75
- ISO 15156-3
- We never sacrifice quality

### Optional Halo Cage

- Toughest cage design on the market

### Wide Top Access

- Just another way we make it easy on you

### Welded Construction

- Built for high vibration
- Field-proven in applications such as Measurement While Drilling

### 1502 & 2202 Fittings

- 1502 shown, 2202 available

