# **Intrinsically Safe Hammer Union Pressure Transmitter**



The Hammer Union Pressure Transmitter is an designed for the rugged environments of land based and offshore drilling installations including Mud Logging and Measurement while drilling.

#### **Features**

- Ranges to 20,000 psi
- 4-20 mA or 0-5 VDC output
- 1502 or 2002 / 2202 fitting
- Exceptional shock and vibration resistance
- ±0.25% accuracy of full scale
- CSA/ATEX/IECEx Approved

### **Hammer Union Specifications**





### Performance

- Accuracy (linearity, hysteresis, & repeatability): ±0.25% of full scale (BFSL)
- Standard Pressure Ranges: 0-20,000 psis
- Overpressure 1.5 times full scale (applies to sensor only, not fitting)
- Burst Pressure 3 times full scale (applies to sensor only, not fitting)
- Compensated Temp: -40 65°C (-40 150°F)
- Temp Effects on Zero & Span: ±0.026% FSO/°C (±0.01% FSO/°F)
- Life: 10 million cycles minimum
- Frequency Response: Less than 5mS

# Environmental

- Storage Temp: -50 120°C (-50 248°F) Operating Temp: -40 - 85°C (-40 - 185°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°C
- ATEX: 4-20 mA

CE 0344 EX II 1G Ex ia IIB T4 Ga  $(Ta = -40^{\circ}C \text{ to } +85^{\circ}C)$ 

IECEx: 4-20 mA

EX ia IIB T4 Ga (Ta = -40°C to +85°C)



Output Signal @ 21°C: 4-20 mA: 3-30 mA max

0-5 VDC: 110 mA inrush current 0-5 VDC: 3.5 mA operating current

# **B** Electrical

- Supply Voltage: 10-28 VDC on sensor
- Loop Resistance: 1012 ohms @ 28 VDC decreasing linearly to 0 ohms @ 10 VDC
- Insulation Resistance: >100 megaohms @ 500 VAC,
- Shunt Cal: 100% of full scale output





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



### **Options**

Part Number: HU - \_\_\_\_ - IS - \_\_\_ - PSIS - \_\_\_ - \_ \_ - \_\_ - \_\_ - \_\_\_ - \_\_\_

#### 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 (2002 fitting only)

#### 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
- □ **E6** 3 pin Turck Minifast (RSFVL36)
- ☐ **E9** 3 pin Threaded MS3102 (4-20 mA loop)
- □ **E10** Junction Box (1502 only)
- ☐ **E12** 3 pin Bayonet (4-20 mA loop)
- ☐ **E13** 7 pin Jupiter (4-20 mA loop w/Shunt Cal)
- ☐ **E18** 4 pin Rota (4-20 mA loop w/Shunt Cal)
- ☐ **E20** 4 pin Turck minifast (P-RSFV 40-0.3)

### D. Fitting

- □ **P34** Large Hammer Union 1502 Weco fitting
- □ P35 Small Hammer Union 2002 / 2202 Weco
  - fitting
- □ **P36** Large Welded Hammer Union 1502 Weco
  - fitting
- □ **P37** Small Welded Hammer Union 2002 /
  - 2202 Weco fitting

#### E. Enclosure

- □ **KO** No options (standard)
- □ **K7** With handle\*
- ☐ **K1** With protective cage assembly\*

<sup>\*</sup>Consult factory



# **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 APG hammer union pressure transducer. 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 &** 2002/2202 Fittings

1502 shown, 2002/2202 available