## **Proudly Distributed By**





# FIELD ADJUSTABLE WECO® "HAMMER" UNION PRESSURE TRANSMITTER



Model 470 Field Adjustable WECO® "Hammer" Union Pressure Transmitter



# **MODEL 470**

## **FEATURES:**

- Reduced zero offset due to installation
- High-accuracy option of ±0.10% FSO
- Corrosion resistant, high strength fasteners eliminate housing breakage
- Field rangeable electronics via hart communicator or hart USB Dongle and GP:50 software
- 0 to 1000 thru 0 to 20K PSI (69 thru 1,379 BAR)
- Compatible with 2" 1502, 2002, 2202, and 602 wing union fittings

## APPLICATIONS:

- Fracking, cementing, coil tubing and acidizing
- Mud pumps / Measure While Drilling
- Choke and kill manifolds
- Standpipe pressure
- Wellhead measurement

## PRODUCT OVERVIEW:

The field adjustable Model 470 WECO® Hammer Union Pressure Transmitter from GP:50 is ruggedly designed and engineered to effectively address demanding shock and vibration and installation challenges within the oilfield environment. Units are directly compatible with WECO® 2"-1502, 2202, 2002 or 602 wing union fittings. The field adjustment option provides for zero and span adjustments as well as rangeability. This field adjustable option eliminates need to rescale your panel meter when replacing transmitters and allows for fewer pressure ranges to stock.

## FIELD OPTIONS:

- Internal, isolated shunt calibration
- Temperature output options
- 'Connector Guard' eliminates connector breakage
- Comprehensive list of electrical connections

© 2020 GP:50 NY Ltd. | 2770 Long Road, Grand Island, NY 14072 USA

Tel: +1.716.773.9300 Fax: +1.716.773.5019 Email: sales@gp50.com Web: www.gp50.com



## **Proudly Distributed By**



## **GP:50 MODEL 470**

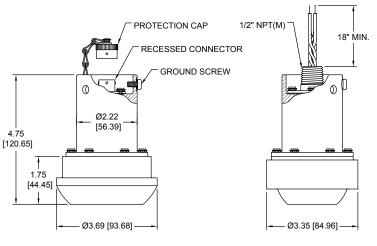
## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

#### STANDARD WIRING

PIN OR WIRE COLOR	MODEL 170/270	MODEL 370
A/1/RED	+EXC	+EXC/SIG
B/2/BLK	-EXC	-EXC/SIG
C/3/BLU	+SIG	N/C
D/4/WHT	-SIG*	CASE GND
E/5/ORG	+SHUNT/CAL**	+SHUNT/CAL**
F/6/BRN	-SHUNT/CAL**	-SHUNT/CAL**
GREEN***	CASE GND.	CASE GND.

<sup>\*</sup> MODEL 270 ONLY, JUMPED TO -EXC (PIN B/2 OR BLACK WIRE)
\*\* NO CONNECT FOR OPTION QY
\*\*\* FOR OPTION CF



2" #1502 CONFIGURATION (SHOWN WITH "CA" CONNECTOR)

2" #2002/2202 CONFIGURATION (SHOWN WITH "CF" CONNECTOR)

### REFERENCE SPECIFICATIONS

#### **ELECTRICAL**

• Supply Voltage: 12-36 Vdc

• Output Signal: Two wire 4-20 mA with digital hart protocol (optional 4-20 mA temperature output)

• Input Impedance: 250 Ω at 17 Vdc

• Insulation Resistance: Better than 10 M $\Omega$  at 50 Vdc

• Circuit Protection: RFI/EMI, reverse polarity (voltage transients above 45 V to 20 A at 0.02 milliseconds)

Resolution: 12-bit

• Frequency Response: From 0.07 to 40 sec (software adjustable)

• Connection: Bendix PTO2E-10-6P

### MATERIALS OF CONSTRUCTION

 Sensor: Wetted Material Selectable Standard Operation: 17-4 PH (H1025) SST for ≤10K PSI and Inconel 718 NACE for ≥ 15K PSI Optional Inconel X750 or 718

• Housing: 300 Series Stainless Steel

#### **ACCURACY**

Static Accuracy (Hysteresis, Non-Linearity & Repeatability @ +70 °F)

• Standard:  $\leq \pm 0.25\%$  FSO (BFSL)

Improved: ≤±0.10% FSO (BFSL)

• Zero Balance:  $\pm 0.50\%$  FSO typ /  $\pm 1.0\%$  FSO max

 $\bullet$  Span:  $\pm 0.50\%$  FSO typ /  $\pm$  1.0% FSO max

#### MECHANICAL

• Process Connection: WECO® 2"- 1502, 2002/2202 or 602

• Proof Pressure: 1.5X FSO or 22.5K PSI, whichever is less

• Burst Pressure: 3.0X FSO

• Approximate weight: <6 lbs (2.7 kg) (options may affect weight)

• Ingress Protection: IP67 (some options may effect rating)

#### PRESSURE RANGES

0 to 1000 PSI thru 0 to 20K PSI (69 thru 1,379 BAR)

Range Adjustments: 2:1

#### THERMAL SPECIFICATIONS

Compensated: -40 °F to +180 °F (-40 °C to +80 °C)

Operating: -50 °F to +190 °F (-45 °C to +85 °C)

• Zero/ Span: <1.0% FSO/100 °F At 2:1 Ranging: ±2.0% FSO/100 °F

> Standard configurations shown. Please consult factory for other options.

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact GP:50 for assistance with your application.

WECO® is a federally registered trademark of FMC Technologies

© 2020 GP:50 NY Ltd. | 2770 Long Rd, Grand Island, NY 14072 USA

Tel: +1.716.773.9300 Fax: +1.716.773.5019 Email: sales@gp50.com Web: www.gp50.com

