



HAMMER OR WING UNION PRESSURE TRANSMITTER



FEATURES

- Silicon on Sapphire Diaphragm Drilling
- Fast response time <100 microseconds
- Infinite cycle life @ rated FSPR
- Flush face abrasion-proof diaphragm
- No signal decay
- No hysteresis
- EMI/RFI protected
- NEMA 4 and 4X enclosure
- On diaphragm temperature sensor

APPLICATIONS

- Measurement While Drilling
- on Choke Manifolds
- Extraction
- Fracturing and Cementing
- on Mud Pumps
- New Well Development
- Nitrogen Injection
- on Service and Cement Trucks
- on Standpipes
- Stimulation
- and Wellhead Measurement

OPTIONS

- 4-20 mA output
- 0-5 VDC output
- 0-10 VDC output
- Compliant with NACE MRO-175
- 2" or 3" pipe size configurations
- Cage or cup configurations
- HART 7 for 4-20 mA configuration available
- On diaphragm temperature sensor

SEN-600 SERIES WING UNION PRESSURE TRANSMITTER

State-of-the-art Silicon-on-Sapphire pressure transducers have a proven track record in the aerospace, flight test, plastics and down-hole markets. Piezoresistive silicon islands are epitaxially grown onto single-crystal sapphire. Sapphire is a perfect electrical insulator that does not require diode isolation junctions found on diffused semiconductor pressure transducers. Sapphire is chemically inert allowing compatibility with virtually all media.

Sensonetix SEN-600 Wing Union Pressure sensors are made with silicon-on-sapphire technology. These transmitters are designed to withstand the roughest of oil field applications including NACE standard MRO-175. The sapphire diaphragms are resistant to corrosive and abrasive materials. A Sensonetix Wing Union Pressure Transmitter is proven to hold up under the shock of regular installation and removal as well as the continuous vibrations of a triplex type pump.

Sensonetix plans to offer this robust transmitter in the WECO #1502 for 15,000 PSI or the WECO #2002 for 20,000 PSI service. These higher pressure sensors will be available with 0-5 VDC, 0-10 VDC or 4-20 ma outputs in 2019.

Silicon-on-sapphire sensors provide accuracy to 0.01% FSO with effectively no hysteresis. Long term drift of less than 1% FSO and proof pressures greater than 2X the rated line pressure are standard features of these hammer union transmitter products.

If accuracy, stability and price are important to you, consider a Sensonetix SEN-600 Series Silicon-on-Sapphire Wing Union/Hammer Union Pressure Transmitter for your pressure measurement needs.

WECO® FMC Corporation

SEN-600 SERIES WING UNION PRESSURE TRANSMITTER

PRODUCT SPECIFICATIONS

ACCURACY:	± 0.25% of FSO (BFSL)
REPEATABILITY:	± 0.1% of FSO
OPERATING TEMPERATURE:	-60°F TO +250°F
COMPENSATED TEMPERATURE:	-60°F TO +250°F
THERMAL ZERO SHIFT:	± 0.01% FSO/°F
THERMAL SPAN SHIFT:	± 0.01% FSO/°F
INPUT VOLTAGE:	14-36 VDC for 0-5 VDC output (12 VDC available) 14-36 VDC for 0-10 VDC output (12 VDC available) 14-24 VDC for 4-20 mA output
OUTPUT SIGNAL:	4 ma @ Zero Pressure, 20 ma @ Full Scale Output Other outputs available as custom options
INSULATION RESISTANCE:	50 MEGAOHMS @ 100 VDC
CIRCUIT PROTECTION:	reverse polarity protection
RFI/EMI IMMUNITY:	0.3-0.9 giga-Hz
OPERATING PRESSURE RANGES:	up to 10.000 PSI (15000, 20000 and 22000 psi options in 2019)
OVER PRESSURE:	1.5 times rated pressure
BURST PRESSURE:	2.5 times rated pressure

SEN-600 SERIES WING UNION PRESSURE TRANSMITTER

PART NUMBER BREAKDOWN

6_***_***_**_***

MODEL: _____

6 = HAMMER UNION OR WING UNION

OUTPUT: _____

1 = 0-5 VDC FOR TRANSMITTER (14-36 VDC INPUT)
 2 = 4-20 mA VDC FOR TRANSMITTER (14-24 VDC INPUT)
 3 = 0-10 VDC FOR TRANSMITTER (14-36 VDC INPUT)

OUTPUT: _____

1 = PRESSURE ONLY
 2 = PRESSURE AND TEMPERATURE

PRESSURE RANGE: _____

EXAMPLES – 5M = 5000 PSI
 10M = 10000 PSI

PRESSURE FITTING: _____

F9 = WECO - 2" pipe
 F10 = WECO - 3" pipe

ELECTRICAL CONNECTION: _____

C6 = 6 PIN CONNECTOR, MALE
 JU = BRAD HARRISON JUPITER CONNECTOR
 FL = FLYING LEADS
 CD = CONDUIT 1/2" NPT
 LE = LEMO

CONFIGURATIONS:

-2 = CAGE (specify length -1 or length -2) _____
 -3 = CUP

OUTLINE DRAWINGS

