



# SENSONETICS

*Sensing today...with tomorrow's technology*

## SEN-600 SERIES WING UNION PRESSURE TRANSMITTER/TRANSDUCER



Configuration -2

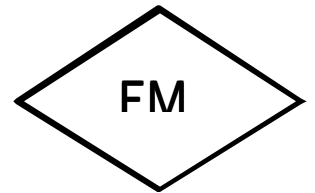


Configuration -3



approved

- Silicon on Sapphire diaphragm
- 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



approved

### OPTIONAL

- 4-20 ma output
- 0-5 VDC output
- 0-10 VDC output
- Compliant with MRO 01-75 (latest revision) for corrosive service
- 3" wing union for 20,000 psi service (#2002 WECO® FMC Corporation)
- On diaphragm silicon RTD

### APPLICATIONS

- Drilling
- Acidizing
- Wellhead measurements
- Mud logging
- Cementing
- Standpipe
- Well stimulation
- Pressure pulse measurement

# 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 strain gages are epitaxially grown onto a single-crystal radiation-hardened structure with virtually undetectable hysteresis and non-repeatability. 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.

Sensonetics' model 600 wing union pressure sensors are made with proven, tough silicon-on-sapphire technology. These transmitters are designed to withstand the roughest of oilfield applications including NACE standard MR-01-75 (latest revision). The sapphire diaphragms are resistant to sour gas, corrosive and abrasive materials. Sensonetics' wing union pressure transmitters are proven to hold up under the shock of regular installation and removal as well as the continuous vibrations of a triplex type pump.

Sensonetics offers this robust transmitter in the WECO #1502 or the WECO #2002 for 20,000-psi service. The sensors are also available with 0-5 volt, 0-10 volt and 4-20 ma outputs.

Silicon-on-sapphire sensors provide accuracy down to 0.01% FSO with effectively no hysteresis. Long term drift of less than 1% FSO and proof pressures greater than 5X the rated line pressure are additional features of these versatile transducers.

If accuracy, stability and price are important to you, consider Sensonetics 600 Series Silicon-on-Sapphire Wing Union Pressure Transmitters for your pressure measurement needs.

- Silicon-on-Sapphire Technology

- Competitive Pricing

- Outstanding long term stability

- High Temperature Capability

- Electron beam welded construction

- Hermetically Sealed

- Outputs of 0-5 VDC,  
0-10 VDC and 4-20 ma

**WECO® FMC Corporation**

# SEN-600 SERIES WING UNION PRESSURE TRANSMITTER

## PRODUCT SPECIFICATIONS

### ***PERFORMANCE***

ACCURACY:	± 0.25% of FSO (BFSL)
REPEATABILITY:	better than 0.1% of FSO

### ***TEMPERATURE***

OPERATING TEMPERATURE:	-60°TO +250°F
COMPENSATED TEMPERATURE:	-60°TO +250°F

### ***THERMAL EFFECTS***

THERMAL ZERO SHIFT:	± 0.01% FSO/°F
THERMAL SPAN SHIFT:	± 0.01% FSO/°F

### ***ELECTRICAL***

INPUT VOLTAGE:	8-30 VDC
OUTPUT SIGNAL: (TWO WIRE)	4 ma @ Zero Pressure 20 ma @ Full Scale Output
INSULATION RESISTANCE:	50 MEGAOHMS @ 100 VDC
CIRCUIT PROTECTION:	reverse polarity protection
RFI/EMI IMMUNITY:	0.3-0.9 giga-Hz

### ***MECHANICAL***

OPERATING PRESSURE RANGES:	up to 20,000 psi
OVER PRESSURE:	1.5 times rated pressure or WECO fitting's maximum pressure of 20,000 psi
BURST PRESSURE:	2.5 times rated pressure or WECO fitting's maximum pressure of 20,000 psi

# SEN-600 SERIES

## ORDERING INFORMATION

**SEN-6XX-XXX-XX-XX-X**

**MODEL:** \_\_\_\_\_

**6 = WING UNION**

**OUTPUT:** \_\_\_\_\_

1 = PRESSURE TRANSDUCER, 0-5 VDC  
 2 = PRESSURE TRANSMITTER, 4-20 ma  
 3 = PRESSURE TRANSDUCER, 0-10 VDC

**OUTPUT:** \_\_\_\_\_

1 = PRESSURE ONLY  
 2 = PRESSURE AND TEMPERATURE

**PRESSURE RANGE:** \_\_\_\_\_

5M = 5,000 PSI                      10M = 10,000 PSI  
 15M = 15,000 PSI                    20M = 20,000 PSI

**PRESSURE FITTINGS:** \_\_\_\_\_

F9 = WECO 1502 - 2 INCH  
 F8 = WECO 2002 - 3 INCH

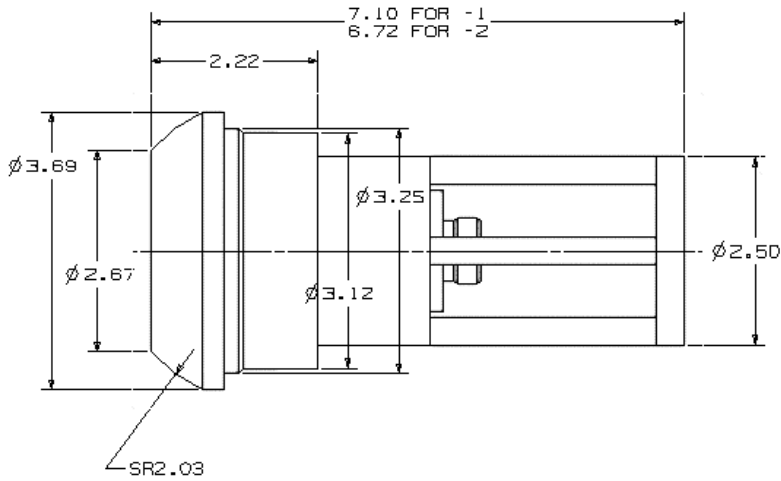
**ELECTRICAL CONNECTORS:** \_\_\_\_\_

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

**CONFIGURATIONS:** \_\_\_\_\_

2 = CAGE  
 3 = CUP

### OUTLINE DRAWINGS



Configuration -2

Configuration -3

