

Pressure Transmitter

572



SECONDARY CONTAINMENT TO 40K PSI

COMPACT AND COMPLETELY SEALED

A sealed gage (PSIS) or absolute (PSIA) pressure reference is available for medium to very high pressures, with a containment pressure rating of 40K PSI. The Model 572 withstands harsh atmospheres and is built to be submersed in up to 100 feet of water.

INCONEL CONTAINMENT CHAMBER

A unique pressure sensing system incorporates a Hastelloy isolation diaphragm to displace the process media. Two sensors are embedded inside an Inconel secondary containment chamber that withstands 40K PSI pressure spikes. Viatran's unique secondary containment design with corrosion resistant materials ensures safe operation in hostile environments found in Oil and Gas recovery.

FULL APPROVALS

The Model 572 is FM approved Intrinsically Safe and fully approved Suitable for use in hazardous locations. It is also designed to meet CSA and ATEX approvals for Intrinsic Safety certification.

External zero, span, and calibration controls are hermetically sealed, yet easily adjusted with Viatran's unique magnetically-coupled adjustments. The signal conditioner in the 572 allows for 5:1 ranging of the transmitter's standard pressure range (FSPR). A field calibration circuit can be used for calibration without an external pressure source.

Viatran offers a complete family of pressure transmitters for the oil and gas production industry.

MODEL

Viatran continues to meet the needs of the oil and gas production industries with the Model 572. The secondary containment vessel provides maximum protection without jeopardizing performance, accuracy or stability.

FEATURES

- All Hastelloy wetted parts
- Secondary containment rating to 40K PSI
- Magnetically coupled external controls
- Built-in field calibration signal

TYPICAL APPLICATIONS

- Natural gas wells
- Sour gas wells
- Oil production platforms
- Offshore oil rigs

Approval Options Available.



SPECIFICATIONS

PERFORMANCE

Full Scale Pressure Range (FSPR) 0-100, 150, 300, 500, 1K, 2K, 3K, 5K, 7500, 10K, 15K, 20K PSIA, PSIS, PSIG

Linearity
 0-100 PSI $\leq \pm 0.5\% \text{ BFSL}$
 150 - 20K PSI $\leq \pm 0.25\% \text{ BFSL}$
 Hysteresis & Repeatability $\leq \pm 0.10\% \text{ FSO}$
 Full Scale Output (FSO) 16 mA at 70°F
 Resolution Infinite
 Long Term Stability $\leq \pm 0.25\% \text{ FSO per 6 months}$
 Response Time (mechanical and electrical combined) $\leq 20 \text{ mSec}$ to reach 90% of FSO
 Temperature Effect on Zero $\leq \pm 1\% \text{ FSO per } 100^\circ\text{F}$
 Temperature Effect on Span $\leq \pm 1\% \text{ FSO per } 100^\circ\text{F}$
 Operating Temperature Range 0°F to +180°F
 Non-operating Temperature Range -65°F to +250°F

ELECTRICAL

Supply Voltage 10 to 40 VDC
 Power Supply Regulation $\leq \pm 0.02\% \text{ FSO per volt}$
 Output Signal 4-20 mA at 70°F
 Load Impedance 1500 Ohms maximum at 40 VDC
 Zero Adjustment
 Elevation -100% of FSO
 Suppression +50% of FSO
 Span Adjustment Rangeable down 5:1 from standard range
 Range Calibration Signal 20% \pm 0.1% of FSPR, externally switched. Exact signal-pressure correlation provided with each unit.

Circuit Protection Varistor protected across the input leads for surges above 40V and currents to 250A peak with a pulse width of 8x20 μ Sec. Reverse polarity protected.

Bridge Resistance 5K Ohms nominal
 Insulation Resistance $\geq 200 \text{ MegOhms}$ to case ground
 RFI/EMI Suppression Negligible effect to 500MHz at 5W direct contact
 Electrical Connection 1/2" NPT Male (conduit connection)
 3 Wires, 18 AWG, 36" long
 Red +Power/Signal
 Black -Power/Signal
 Green Case Ground

MECHANICAL

Pressure Connections
 Ranges $\leq 10\text{K PSI}$ 1/4" NPT female
 Ranges $\geq 10\text{K PSI}</math> Autoclave F-250-C
 Proof Pressure 1.5 times FSPR or 25K PSI, whichever is less
 Burst Pressure Sensor
 0-100 thru 0-3K PSI ≥ 5 times FSPR
 Up to 0-5K PSI ≥ 4 times FSPR
 Up to 0-10K PSI ≥ 2.7 times FSPR
 Up to 0-20K PSI ≥ 2 times FSPR
 Secondary Containment Vessel $\geq 40\text{K PSI}</math>
 Shock Limitation 100 G's
 Weight 4 lbs. 8 oz.
 Materials of Construction
 Wetted Materials Hastelloy C-276
 Secondary Containment Vessel Hastelloy C-276, Molybdenum wire, and glass; Inconel X-750
 Housing Hastelloy C-276 and 316 SS; Inconel X-750$$

CODES

Consult factory for available Certification Options

TF FM: Intrinsic Safety: Class I, II, III, Division 1, Groups A-G, and AEx ia IIC, T4 at Ta=80°C, T5 at Ta=40°C, Indoor and Outdoor NEMA/Type 4X Hazardous Locations

NY FM: Explosion Proof: for use in Class I, Division 1, Groups A-D, Class II, Groups E,F,G, Class III, AEx d IIC, T5 at Ta=88°C, NEMA/Type 4X, Hazardous Locations

NZ FM: Nonincendive: Class I,II,III Div. 2, Groups A-G and Class I, Zone 2, Group IIC, T4 at Ta=80°C, T5 at Ta=40°C

NX CSA: Intrinsic Safety: Class I, Div. 1, A-D Class II, E-G, Class III, Ex ia IIC T4 at Ta=80°C, T5 at Ta=40°C

ME CSA: Explosion Proof: Class I, A-D, Class II, E-G Class III Hazardous Locations.

NK ATEX: Intrinsic Safety: II 1 G
 EEx ia IIC, -20°C T4, Ta $\leq 50^\circ\text{C}$

NG ATEX: Flameproof: II 2 G
 EEx d IIC, T5 (-20°C \leq Ta $\leq 80^\circ\text{C}$)

NJ CE: EMC Directive 89/336/EEC and Low Voltage Directive 72/23/EEC
 EN 61010-101993/A2:1995: Low Voltage Standard
 EN 61326: EMC Conformity Standard
 PED Directive 97/23/EC

CODES

Alternate Connectors
 BB Mini change electrical connector
 BP Micro change electrical connector

Alternate Pressure Ports

YI 1/8" NPT (F)
 YM 9/16"-18 gland thread, pressure relieved. 1/4" OD high pressure tube, 60° cone. Conforms to Autoclave type F-250-C
 YS 3/4"-16 gland thread, pressure relieved. 3/8" OD high pressure tube, 60° cone. Conforms to Autoclave type F-375-C

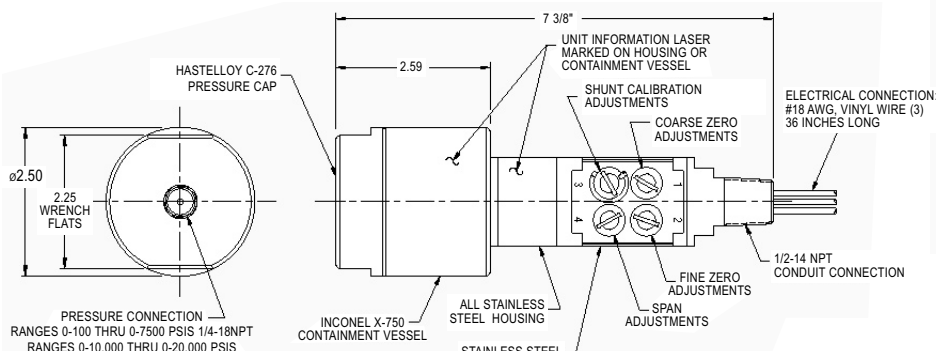
Performance Options

DG Improved temperature performance
 DK Special calibration shunt ___%
 DQ Cleaning for Oxygen service
 EA Special calibration
 NH Customer specified identification
 NSR Non-standard range
 PW 1/8 DIN digital indicator

Note: Application of some available options may affect standard performance. Consult your Viatran representative for details.

ACCESSORIES

Mounting bracket
 Conduit connection box



SECONDARY CONTAINMENT CHAMBER

