PRESSURE TRANSMITTER

Model 571

GAGE. ABSOLUTE. ACCURATE.

FEATURES

- **Hermetically sealed external controls**
- **Built-in field calibration signal**
- **All welded, watertight construction**
- **FM, CSA, CRN, ATEX, GOST (Optional)**
- **4-20 mA**

TYPICAL APPLICATIONS

- **Offshore oil rigs**
- **Shipboard/Marine**
- **Pulp and paper**
- **Chemical processing**
- **Water treatment**

COMPACT AND COMPLETELY SEALED

The 571 is designed to withstand harsh atmospheres. All welded construction combined with 316 stainless steel makes the 571 airtight, watertight, and ideal for corrosive environments. An O-Ring free design ensures reliability.

APPROVAL OPTIONS

Model 571 qualifies for FM, CSA, CRN, ATEX and GOST ratings. External zero, span, and calibration controls are hermetically sealed, yet easily adjusted by means of Viatran's unique magnetically coupled adjustments. The signal conditioner in the 571 allows for 5:1 ranging of the transmitter's standard pressure range.

IN-FIELD SETUP AND RANGING

A calibration circuit permits ranging and setup without a calibrated pressure source. When the cal switch is activated, an electronic signal is sent through the unit, simulating the level or pressure. The optional non-interactive zero and span circuit allows taring of the zero without effecting the span.

JUST ONE PART OF A COMPLETE LINE OF SOLUTIONS FROM VIATRAN

The 571 represents one transmitter in a family of sensors designed for the process control industry. For more information on our complete line of solutions, call the number below to speak to a member of the Viatran process team.

For product availability, or to order please call 1-800-688-0030 or visit us Online.

www.viatran.com

FM APPROVED

REGISTERED CRN 0F13984.5C

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Model 571

PERFORMANCE

Full Scale Pressure Range (FSPR)	0-50 thru 0-100K PSIA/PSIS
Nonlinearity (Best fit straight line)	50 & 100 PSI typical at 0.50% FSO
	150-10K PSI typical at 0.20% FSO
	>10K PSI typical at 0.25% FSO
Hysteresis & Repeatability	≤ ±0.1% FSO
Full Scale Output (FSO)	16 mA at 70°F
Resolution	Infinite
Long-term Stability	≤±0.25% FSO per 6 months
Response Time — Mechanical & Electrical Combined	≤20mSec to reach 90% of FSO
Temperature Effect on Zero	≤±0.5% FSO per 100°F
Temperature Effect on Span	≤±0.5% FSO per 100°F
Temperature Effect on Zero and Span combined at 5:1 Range Down	≤±4.0% FSO per 100°F
Compensated Temperature Range	70°F to +170°F
Maximum Operating Temperature	+190°F
Minimum Operating Temperature	-10°F
Non-operating Temperature Range	-65°F to 250°F

ELECTRICAL

Supply Voltage	12 to 30 VDC
Power Supply Regulation	≤±0.02% FSO per volt
Output Signal	4-20 mA at 70°F
Load Impedance	900 Ohms maximum at 30 VDC
Zero Adjustment — Elevation	-100% of FSO
Suppression	+50% of FSO
Span Adjustment	Rangeable down 5:1 from standard range
Range Calibration Signal	20% of FSPR externally switched
Calibration Signal Accuracy	±1.0% FSO. The exact signal to pressure correlation is 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 20 µSec. Reverse polarity protected.
Bridge Resistance	5K Ohms nominal
Insulation Resistance	≥5 nS to case ground
RFI/EMI Suppression	Negligible to 500 MHz at 5 Watts direct contact
Electrical Connection	1/2" NPT Male, 18 AWG, 72"
Red	+Power/Signal
Black	-Power/Signal
Green	Case Ground

MECHANICAL

Pressure Connections — 50 thru 15K PSI	1/4" NPT female
20K thru 50K PSI	Autoclave Engineers F250-C 1/4" High Pressure Tube
60K thru 100K PSI	Autoclave Engineers F312-C 5/16" High Pressure Tube
Proof Pressure — 50 thru 0-15K PSI	1.5 times FSPR or 20K PSI, whichever is less
20K thru 0-100K PSI	1.2 times FSPR
Burst Pressure — 50 thru 0-3K PSI	5 times FSPR
5K PSI	4 times FSPR
7.5K thru 10K PSI	2.7 times FSPR
15K PSI	2.3 times FSPR
20K thru 100K PSI	1.5 times FSPR or 125K PSI, whichever is less
Shock Limitation	100G's
Weight	24oz.
Enclosure Materials — 50 thru 15K PSI	15-5 PH and 316 stainless steel
20K thru 100K PSI	PH 13-8 Mo SST and 300 Series SST
Wetted Materials — 50 thru 15K PSI	15-5 PH stainless steel
20K thru 100K PSI	PH 13-8 Mo SST
Enclosure Classification	NEMA/Type 4x

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CERTIFICATIONS (Consult Factory for Available Options)

US	Intrinsic Safety: Class I, II, III, Division 1, Groups A-G, Class 1, Zone 0, AEx ia IIC, T4 at Ta≤80ºC, T5 at Ta≤40ºC, Indoor and Outdoor NEMA/Type 4X Hazardous Locations Explosion Proof: for use in Class I, Division 1, Groups A-D, Class II/III, Div 1, Groups E,F,G,CL1, ZN 1, AEx d IIC, T5 at Ta≤88ºC, NEMA/Type 4X, Hazardous Locations Nonincendive: CL I, DIV 2, GPS A-D, CL II DIV 2 GPS F, G, CL III, DIV 2 and CL I, ZN 2, GPS IIC, T4 at Ta≤80ºC, T5 at Ta≤40ºC, NEMA/Type 4X, Hazardous Locations
Canada	Intrinsic Safety: CL I, DIV 1, GPS A-D, CL II, DIV 1, GPS E-G, Class III, DIV 1, Ex ia IIC T4 at Ta≤80ºC, T5 at Ta≤40ºC, Per drawing CD0627 Explosion Proof: Class I, Division 1, Groups A-D, Class II, Division 1, Groups E-G, Class III, Enclosure Type 4, Dual Seal, Hazardous Locations
Europe	Intrinsic Safety: Ⓔx II 1 G Ex ia IIC Ga, T3 (-20ºC≤Ta≤88ºC), T4 (-20ºC≤Ta≤75ºC), T5 (-20°C≤Ta≤40°C) Flameproof: Ⓔx II 2 G Ex db IIC, T6...T4 Gb (-20ºC≤Ta≤+60ºC) Nonincendive: Ⓔx II 3 G EX nA IIC Gc T4 (-20°C<Ta<80°C) EMC Directive 2004/108/EC PED 97/23/EC

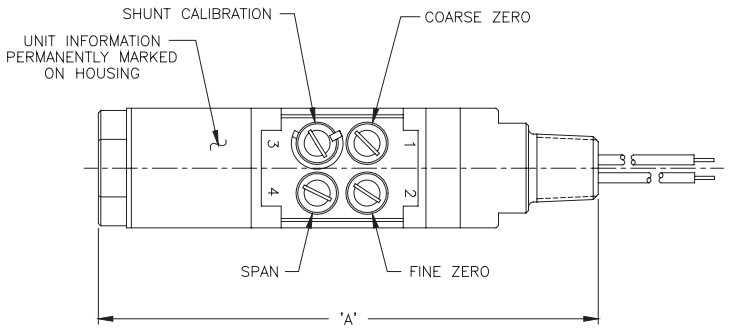
OPTIONS

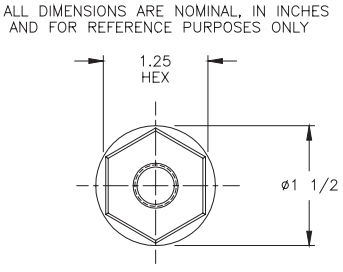
BB	Mini change electrical connector
BP	Micro change electrical connector
DF	Bleed port (6K PSI and below)
DK	Special shunt calibration
DQ	Cleaning for oxygen service
DZ	Noninteractive module
EA	Special calibration run
ME	CSA Explosion Proof label
NG	ATEX Flameproof label
NH	Customer specified identification
NJ	CE label
NK	ATEX Intrinsic Safety label
NT	Secondary containment
NX	CSA Intrinsic Safety label
NY	FM Explosion Proof label
NZ	FM Nonincendive label
TF	FM Intrinsic Safety label
TW	GOST-R
Q ( )	Hastelloy, Inconel or 316 SST wetted parts
W ( )	Alternate pressure ports
Y ( )	Alternate ports
Z ( )	Alternate electrical connection
ZU	Direct coupled cable

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

ACCESSORIES

Mounting Bracket
Conduit Connection Box
Loop Powered Digital Indicator





STD. UNIT LENGTHS BY RANGE (Options may change length, consult factory)	A
0-50 THRU 0-15,000 PSI	6.35
0-20, 000 THRU 0-50,000 PSI	6.72
0-60,000 THRU 0-100,000 PSI	7.47

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