

## Model 570 Pressure Transmitter



# MODEL 570 PRESSURE TRANSMITTER

4-20 MA, 0-100 PSI THRU 100K PSI, HAZARDOUS APPROVALS

570 provides a rugged, sealed solution for hazardous rated and harsh environments.

#### PERFORMANCE

Full Scale Pressure Range	0-100 thru 0-100K PSIS (0-6.89 thru 0-6894 bar)
Accuracy (RSS)	
(BFSL Non-Linearity, Hysteresis, Non- Repeatability)	0-300 PSI thru 0-15K PSI Ranges ±0.20% FSO ( ±0.15% FSO improved with "DN" option) < 0-300 PSI or > 0-15K PSI Ranges ±0.25% FSO ( ±0.15% FSO improved with "DN" option)
Linearity (Best Fit Straight Line)	0-300 PSI thru 0-15K PSI Ranges ±0.10% FSO (BFSL), Typical < 0-300 PSI or > 0-15K PSI Ranges ±0.15% FSO (BFSL), Typical
Hysteresis	< ± 0.05% FSO, Typical
Repeatability	< ± 0.05% FSO, Typical
Full Scale Output (FSO)	16 mA
Zero and Span Balance	±1% FSO
Long Term Stability	≤±0.25% FSO per 6 months
Response Time	<2 mSec to reach 90% FSO
Temperature Effect on Zero	≤±1% FSO per 100°F (37°C)
Temperature Effect on Span	≤±1% FSO per 100°F (37°C)
Compensated Temperature	70°F to 170°F (21°C to 76°C)
Operating Temperature	-40°F to 190°F (-40°C to 87°C)
Storage Temperature Limit  ELECTRICAL	-65°F to 250°F (-53°C to 121°C)
Supply Voltage	12 to 30 Vdc
Power Supply Regulation Effect	≤±0.02% FSO per Volt
Output Signal	4 - 20 mA
Bridge Impedance	5000 Ohms nominal
Circuit Protection	Varistor protected across the input leads for surges above 40 V and currents to 250 Amps peak with a pulse width of 20 µSecs Reverse polarity protected.

1/2" NPT (M), 18 AWG wire, 72"

+Power/Signal

-Power/Signal

No Connection

Case ground

Electrical Connection
Wire Color Codes

Red Black

Green

White

## Model 570 Pressure Transmitter



Many Options available



All Stainless Steel construction



IP-68 Rated



ShuntCal



**High Pressure Applications** 

All welded construction and stainless steel surfaces makes the 570 ideal for corrosive environments. The transmitters Oring free design ensures reliability with corrosive media. Viatran's 570 FM approved labelled units are designed to meet NEC/API Dual Seal requirements. For the most corrosive environments, Hastelloy, Inconel, and 316 SS wetted parts are available.

#### **MECHANICAL**

Pressure Connection	0-50 thru 0-15K PSI 1/4" - 18 NPT Female (0-3.3 thru 0-1034 bar) 0-20K thru 0-50K PSI 1/4" F250-C High Pressure Tube (0-1378 thru 0-3447 bar) 0-60K thru 0-100K PSI 5/16" F312C High Pressure Tube (0-4136) thru 0-6894 bar)
Proof Pressure	0-100 thru 0-15K PSI 1.5 times FSPR or 20K PSI (1378 bar), (0- 6.8 thru 0-1034 bar) whichever is less 0-20K thru 0-100K PSI 1.2 times FSP (0-1378 thru 0-6894 bar)
Burst Pressure	0-100 thru 0-15K PSI ≥ 2.3 to 5 times FSPR dependent on (0-6.8 thru 0-10342 bar) sensor 0-20K thru 0-100K PSI 1.5 times FSPR or 125K PSI (8618 bar) (0- 1378 thru 0-6894 bar) whichever is less
Mounting	Supported by process piping or optional mounting bracket

#### MATERIALS OF CONSTRUCTION

Enclosure	0-100 thru 0-15K PSI 15-5 PH and 316 stainless steel (0-6.8 thru 0-1034 bar) 0-20K thru 0-100K PSI 316 SST and PH 13-8 Mo SST (0-1378 thru 0-6894 bar)
Wetted Parts	0-100 thru 0-15K PSI 15-5 PH stainless steel (0-6.8 thru 0-1034 bar) 0-20K thru 0-100K PSI PH 13-8 Mo SST (0-1378 thru 0-6904 bar)
Shock Limitation	100 G's
Weight	24 oz. (0.680 kilograms)
Identification	Laser etched onto body
Enclosure	Classification NEMA 4X

#### **OPTIONS**

DF	Bleed port (10K PSI and below)
DG	Improved temperature compensation (<± 0.5% FSO/100°F for zero/span)
DH	Special range
DN	Improved Accuracy (±0.15% FSO)
DQ	Cleaning for oxygen service
EA	Special calibration run
IJ	Direct mount indicator with explosion proof housing
IS	Direct mount indicator

### Model 570 Pressure Transmitter



ATEX Flame Proof Declaration of Conformity

ATEX IS Certificate of Compliance

ATEX Non Incendive Certificate of Compliance



Canada Explosion Proof Certificate of Conformity

Canada IS Certificate of Compliance



Model 570 EMC Declaration of Conformity



US Explosion Proof Certificate of Compliance

US Non Incendive Certificate of Compliance

US IS Certificate of Compliance

US NEMA type 4X Declaration of Compliance



lace Certificate of Compliance



Russian Metrology Certification

KN	IECEx flameproof label
ME	CSA explosion proof label
MR	Modified electrical damping
NG	ATEX flameproof label
NH	Customer specified identification
NJ	CE label
NK	ATEX intrinsic safety label
NX	CSA intrinsic safety label
NY	FM explosion proof label
NZ	FM nonincendive label
PW	1/8 DIN digital indicator (consult factory)
QA	316 stainless steel wetted parts
QB	Inconel (X-750) wetted parts
QC	Hastelloy (C-276) wetted parts
TF	FM intrinsic safety label
Y()	Alternate pressure ports
Note:	Application of some available options may affect standard performance. Consult your Viatran Representative for details.

EH[ Ex

Russia Intrinsic Safety
Certificate of Conformity
Russia Flameproof
(for Std., ZL, ZU wired

of Conformity
Russia Non-Sparking
Certificate of Conformity

options only) Certificate