



# 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	-65°F to 250°F (-53°C to 121°C)

### ELECTRICAL

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.
Insulation Resistance	>200 MegOhms to case ground
Electrical Connection	1/2" NPT (M), 18 AWG wire, 72"
Wire Color Codes	
Red	+Power/Signal
Black	-Power/Signal
Green	Case ground
White	No Connection

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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 O-ring 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
JJ	Direct mount indicator with explosion proof housing
JS	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



- IECEx 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.



 Russia Intrinsic Safety  
Certificate of Conformity

 Russia Flameproof  
(for Std., ZL, ZU wired  
options only) Certificate  
of Conformity

 Russia Non-Sparking  
Certificate of Conformity