



# Model 422 Pressure Transmitter



## MODEL 422 PRESSURE TRANSMITTER

0-5 VDC, 0-3 TO 5000 PSI  
DESIGNED FOR OVERHEAD  
JUNCTION BOXES

Model 422 is small in size, but packs a high-performance punch. The electronics and silicon sensor design have a combined accuracy of better than  $\pm 0.08\%$ .

### PERFORMANCE

Full Scale Pressure Range (FSPR)	0-3 thru 0-5000 PSI (0-0.2 to 0-345 bar), 0-15 PSIV (0-1.03 barV)*
Zero balance	$\leq \pm 0.25\%$ FSO
Non-Linearity (Best Fit Straight Line)	$\leq \pm 0.06\%$ FSO standard, optional $\pm 0.04\%$
Hysteresis & Repeatability	$\leq \pm 0.06\%$ FSO standard
Full Scale Output	5 Vdc $\leq \pm 0.25\%$ FSO
Long Term Stability	$\leq \pm 0.3\%$ FSO per 6 months
Compensated Temperature*	32°F to 180°F (0°C to 82°C)
Operating Temperature Range	-40°F to 185°F (-40°C to 85°C)
Storage Temperature	-40°F to 250°F (-40°C to 121°C)
Maximum Fluid Temperature	250°F (121°C)
Combined Thermal Effect (zero & span)	$\leq \pm 2\%$ FSO per 100°F typical
* Modified specification for vacuum and compound ranges:	Compensated Temperature Range 32°F to 170°F (0°C to 77°C)

### ELECTRICAL

Supply Voltage	9 to 30 Vdc (12 to 30 Vdc for DM option)
Power Supply Regulation	$< \pm 0.05\%$ FSO per Volt Output Signal
Output Signal	0-5 Vdc
Circuit Protection	Short circuit and reverse polarity protected
Voltage Spike Protection	Withstand 1000 volt spike per EN6100-4-5
RFI/EMI Suppression	CE marked, EN 61326
Insulation Resistance	$< 5\text{nS}$ conductance
Response Time	$< 1.5$ millisecond
Electrical Connections	6-pin bayonet (standard)
Pin Outs	Pin A +Power Pin B -Power Pin C +Signal Pin D -Signal Pin E AC ground (standard) Pin F No connection
Connector Options	BP Micro change (M12) BN 4-pin bayonet ZU Cable gland

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All Stainless Steel construction



High Accuracy



Shunt Calibration circuit option



Low Pressure Applications

Model 422 is a versatile high performance test and control sensor that offers a fast response time, noise immunity, and is CE compliant. Viatran takes pride in offering excellent customer support combined with a technically superior product. Variants of this model are found throughout the automotive and industrial industries.

## MECHANICAL

Pressure Connection	1/8" NPT female
Proof Pressure	3x range or 1,200 PSI (whichever is less) for 0-3 thru 0-500 PSI 3x range or 9,000 PSI (whichever is less) for 0-1,000 thru 5,000 PSI
Burst Pressure	5x range or 2,400 PSI (whichever is less) for 0-3 thru 0-500 PSI 5x range or 10,000 PSI (whichever is less) for 0-1,000 thru 0-5,000 PSI
Pressure Cavity Volume	1.5 mL
Mounting	May be supported by process piping

## MATERIALS OF CONSTRUCTION

Wetted Parts	316L stainless steel
Housing	316 stainless steel
Weight	4 oz nominal
Identification	Laser etched onto body

## OPTIONS



DA	Isolated internal shunt calibration (6-pin connector required)
DC	Extended Compensated Temperature Range (Cold) -40°F to 170°F (-40°C to 77°C)
DE	Internal shunt calibration (6-pin connector required)
DG	Improved temperature performance
DH	Special range
DM	Modified FSO>5Vdc (Requires 12 to 30 Vdc Supply Voltage)
DN	Improved linearity ±0.04% FSO (not available with TU option)
DQ	Cleaning for oxygen service
DX	Modified FSO<5Vdc
EA	Special calibration
EH	Extended Compensated Temperature Range (Hot) +70°F to 185°F (21°C to 85°C)
LV	Externally powered, optically isolated shunt calibration (6-pin connector required)
NH	Customer specified marking
TU	Compound special ranging

### Alternate Pressure Ports


VE	1/4 AN bulkhead mount
VF	1/4 tube Swagelok bulkhead
VG	M12 x 1.5 mm female
VH	M12 x 1.5 mm male
WQ	G 1/4 female
YA	MS33649-04

# Model 422 Pressure Transmitter



 Model 422 EMC  
Declaration of  
Conformity  
 CE Declaration of  
Conformity (RoHS)



 Russian Metrology  
Certification

YC	MS33656-04
YH	1/8" NPTM
YL	1/8" NPTF (standard)
YJ	1/4" NPTF
YK	1/4" NPTM

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