

# Models 422/423

## PRESSURE TRANSMITTER



### FEATURES

- Small size – 7/8" diameter
- $\pm 0.08\%$  combined accuracy option
- 4-20 mA, 0-5 Vdc output, 0-10 Vdc optional
- Stainless steel construction

### TYPICAL APPLICATIONS

- Automotive test
- Brake test
- Engine test
- Transmission test
- Leak detection

### HIGH-PERFORMANCE

Models 422/423 are versatile high-performance test and control sensors that offer a fast response time, noise immunity, and are CE compliant. Viatran takes pride in offering excellent customer support combined with a technically superior product.

### INSPIRED BY SMALL SPACES

Models 422/423 are small in size, but pack a high-performance punch. The electronics and silicon sensor design have a combined accuracy of better than  $\pm 0.08\%$ . Available standard outputs are 4-20 mA, 0-5 Vdc or 0-10 Vdc.

Viatran's ability to customize products provides extreme flexibility, allowing the 422/423 to easily fit into your existing system. Options include alternate pressure ports, electrical connectors, direct-coupled cable, shunt calibration and various electrical outputs.

### EASILY ADAPTABLE

The 422/423 series is just one of the latest additions to Viatran's portfolio of pressure sensors. They are designed to fit a wide range of applications where accuracy, stability, and reliability are important. The standard 6-pin bayonet electrical connector is one of many standard features.

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## 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	422 .....	5 Vdc $\leq \pm 0.25\%$ FSO
	423 .....	16 mA $\leq \pm 0.25\%$ 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

## ELECTRICAL

Supply Voltage	422 .....	9 to 30 Vdc (12 to 30 Vdc for DM option)
	423 .....	8 to 30 Vdc
Output Signal	Power Supply Regulation.....	$< \pm 0.05\%$ FSO per Volt
	422 .....	0-5 Vdc
	423 .....	4-20 mA
	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)
	422.....	423
Pin A	+Power .....	+Power/Signal
Pin B	-Power .....	-Power/Signal
Pin C	+Signal .....	No connection
Pin D	-Signal .....	No connection
Pin E	AC ground (standard) .....	AC ground (Standard)
Pin F	No connection .....	No connection
Connector Options	BP .....	Micro change (M12)
	BN .....	4-pin bayonet
	ZU .....	Cable gland

## MECHANICAL CONNECTION

Pressure Connection .....	1/8" NPT female
Proof Pressure.....	3 times range for $\leq 300$ PSI (20 bar) range
	2.4 times for 500 PSI (35 bar) range
	3 times for 1,000 to 3,000 PSI (69 to 207 bar) ranges
	2 times for 5,000 PSI (345 bar) range
Burst Pressure.....	5 times for $\leq 300$ PSI (20 bar) range
	4.8 times for 500 PSI (35 bar) range
	5 times for 1,000 to 5,000 PSI (60 to 345 bar) ranges
	10,000 PSI (689 bar) max
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

\* Modified specification for vacuum and compound ranges: Compensated Temperature Range: 32°F to 170°F (0°C to 77°C)

Information is accurate to the best of Viatran's knowledge.  
We reserve the right to change specifications at any time.

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## OPTIONS

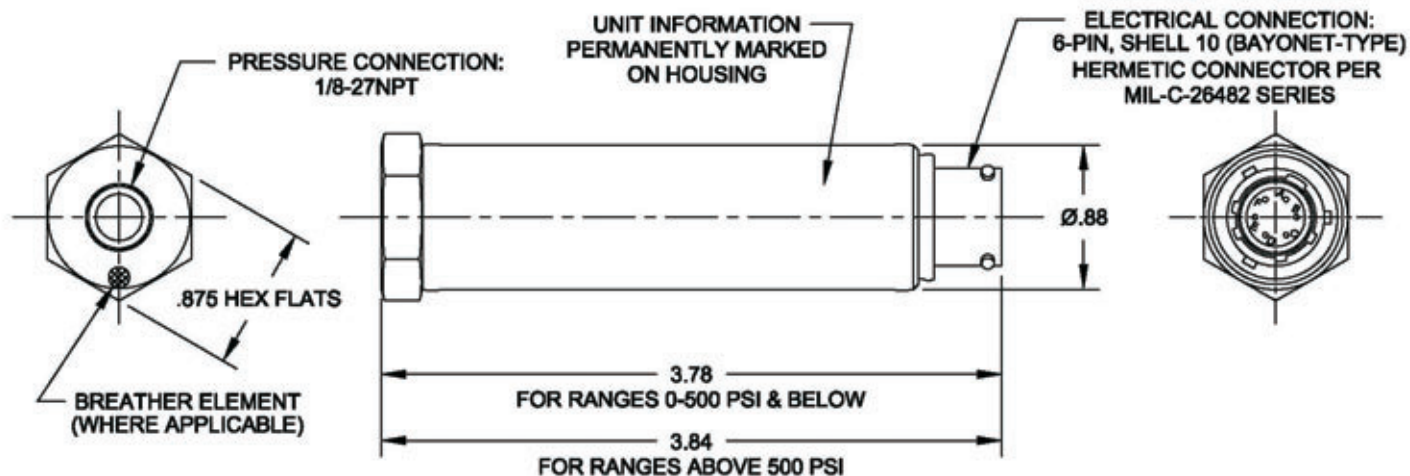
DA .....	Isolated internal shunt calibration (6-pin connector required)
DE .....	Internal shunt calibration (6-pin connector required)
DG .....	Improved temperature performance
DH .....	Special range
DM .....	Modified FSO>5Vdc; 422; (Requires 12 to 30 Vdc Supply Voltage)
DN .....	Improved linearity $\pm 0.04\%$ FSO (not available with TU option)
DQ .....	Cleaning for oxygen service
DX .....	Modified FSO<5Vdc; 422
EA .....	Special calibration
LV .....	Externally powered optically isolated shunt calibration (6-pin connector required)
NH .....	Customer specified marking
TU .....	Compound special ranging
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
YC .....	MS33656-04
YH .....	1/8" NPTM
YI .....	1/8" NPTF (standard)
YJ .....	1/4" NPTF
YK .....	1/4" NPTM

## Alternate Pressure Ports

## ACCESSORIES

Mating cable assembly  
Pressure port adapters

ALL DIMENSIONS ARE NOMINAL, IN INCHES  
AND FOR REFERENCE PURPOSES ONLY



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