



FEATURES

- Small size – 7/8" diameter
- $\pm 0.08\%$ combined accuracy option
- 4-20 mA, 0-5 Vdc output, 1-10 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.

OUR COMMITMENT TO QUALITY

The "422 / 423" series design will perform and maintain on site durability in the most severe applications. To satisfy your unique application requirements, Viatran will also modify our standard products to meet your needs.

Models 422 / 423

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 28 Vdc
	Power Supply Regulation.....	$< \pm 0.05\%$ FSO per Volt
Output Signal	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.....	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

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

Models 422 / 423

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; 422; (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; 422
EA.....	Special calibration
EH.....	Extended Compensated Temperature Range (Hot) +70°F to 185°F (21°C to 85°C)
FA.....	Russian Metrology Certificate
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
YC.....	MS33656-04
YH.....	1/8" NPTM
YI.....	1/8" NPTF (standard)
YJ.....	1/4" NPTF
YK.....	1/4" NPTM

ACCESSORIES

Mating cable assembly
Pressure port adapters

DIMENSIONAL DATA

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

