# VIATRAN

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#### **FEATURES**

- Small size 7/8" diameter
- ±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 COMMITTMENT 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.

Viatran's vision is to be your fastest, easiest and most trusted solution. Call us today to explore the solutions we have to offer.

## 1.800.688.0030

Your local applications specialist:

## Models 422 / 423

0-15 PSIV (0-1.03 barV)*    Zero balance  ≤± 0.25% FS0    Non-Linearity (Best Fit Straight Line)  ≤± 0.06% FS0 standard, optional ±0.04%    Hysteresis & Repeatability  ≤± 0.06% FS0 standard    422  5 Vdc ≤± 0.25% FS0    423  16 mA ≤± 0.25% FS0    Long Term Stability  ≤± 0.3% FS0 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 (121°C)    Combined Thermal Effect (zero & span)  ≤±2% FS0 per 100°F typical    ELECTRICAL  Supply Voltage  422    422  9 to 30 Vdc (12 to 30 Vdc for DM option)    423  8 to 28 Vdc    Power Supply Regulation.  <±0.05% FS0 per Volt    Output Signal  422  -0-5 Vdc    423  4-20 mA    Circuit Protection  Short circuit and reverse polarity protected    Voltage Spike Protection  Short circuit and reverse polarity protected
Non-Linearity (Best Fit Straight Line)  ≤±0.06% FS0 standard, optional ±0.04%    Hysteresis & Repeatability  ≤±0.06% FS0 standard    422
Full Scale OutputHysteresis & Repeatability $\leq \pm 0.06\%$ FSO standardFull Scale Output422 $5 Vdc \leq \pm 0.25\%$ FSO423 $16 \text{ mA} \leq \pm 0.25\%$ FSOLong Term Stability $\leq \pm 0.3\%$ FSO per 6 monthsCompensated Temperature. $32^\circ$ F to 180°F (0°C to 82°C)Operating Temperature Range $-40^\circ$ F to 185°F (-40°C to 85°C)Storage Temperature. $-40^\circ$ F to 250°F (-40°C to 121°C)Maximum Fluid Temperature $250^\circ$ F (121°C)Combined Thermal Effect (zero & span) $\leq \pm 2\%$ FSO per 100°F typicalELECTRICALSupply Voltage422422 $9$ to 30 Vdc (12 to 30 Vdc for DM option)423 $422$ Output Signal422423 $-5 Vdc$ 423 $-420 \text{ mA}$ Circuit ProtectionShort circuit and reverse polarity protected
Full Scale Output $422$ $5 Vdc \le \pm 0.25\%$ FSO $423$ $16 mA \le \pm 0.25\%$ FSOLong Term Stability $\le \pm 0.3\%$ FSO per 6 monthsCompensated Temperature $32^\circ$ F to $180^\circ$ F ( $0^\circ$ C to $82^\circ$ C)Operating Temperature Range $-40^\circ$ F to $185^\circ$ F ( $-40^\circ$ C to $85^\circ$ C)Storage Temperature $-40^\circ$ F to $250^\circ$ F ( $-40^\circ$ C to $121^\circ$ C)Maximum Fluid Temperature $250^\circ$ F ( $121^\circ$ C)Combined Thermal Effect (zero & span) $\le \pm 2\%$ FSO per $100^\circ$ F typicalELECTRICALSupply Voltage $422$ Qutput Signal $422$ Output Signal $422$ Qutput Signal $420$ Qutput Signal $420$ Qutput Signa
42316 mA $\leq \pm 0.25\%$ FSOLong Term Stability $\leq \pm 0.3\%$ FSO per 6 monthsCompensated Temperature $32^{\circ}F$ to 180°F (0°C to 82°C)Operating Temperature Range $-40^{\circ}F$ to 185°F ( $-40^{\circ}C$ to 85°C)Storage Temperature $-40^{\circ}F$ to 250°F ( $-40^{\circ}C$ to 121°C)Maximum Fluid Temperature $250^{\circ}F$ ( $-40^{\circ}C$ to 121°C)Maximum Fluid Temperature $250^{\circ}F$ ( $121^{\circ}C$ )Combined Thermal Effect (zero & span) $\leq \pm 2\%$ FSO per 100°F typicalELECTRICALSupply Voltage $422$ Qutput Signal $422$ Output Signal $422$ Qutput Signal $422$ Circuit Protection $-5$ Vdc423 $-4-20$ mACircuit ProtectionShort circuit and reverse polarity protected
ELECTRICAL  Supply Voltage  422  9 to 30 Vdc (12 to 30 Vdc for DM option)    423  8 to 28 Vdc    Power Supply Regulation  -40° Kop er Volt    Output Signal  422  0-5 Vdc    At 23  422  0-5 Vdc    At 23  422  0-5 Vdc    At 20 mA  Circuit Protection  Short circuit and reverse polarity protected
Compensated Temperature
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
Storage Temperature40°F to 250°F (-40°C to 121°C)    Maximum Fluid Temperature
Maximum Fluid Temperature
ELECTRICAL  Supply Voltage  422  9 to 30 Vdc (12 to 30 Vdc for DM option)    423  8 to 28 Vdc    Power Supply Regulation  <±0.05% FS0 per Volt    Output Signal  422  0-5 Vdc    423  4-20 mA  Circuit Protection    Circuit Protection  Short circuit and reverse polarity protected
ELECTRICAL  Supply Voltage  422  9 to 30 Vdc (12 to 30 Vdc for DM option)    423  8 to 28 Vdc    Power Supply Regulation  <±0.05% FS0 per Volt    Output Signal  422  0-5 Vdc    423  4-20 mA  Circuit Protection
423  8 to 28 Vdc    Power Supply Regulation  <±0.05% FS0 per Volt    Output Signal  422    423  -0.5 Vdc    423  4-20 mA    Circuit Protection  Short circuit and reverse polarity protected
Power Supply Regulation<<±0.05% FSO per Volt Output Signal 4220-5 Vdc 4234-20 mA Circuit ProtectionShort circuit and reverse polarity protected
Output Signal 4220-5 Vdc 4234-20 mA Circuit ProtectionShort circuit and reverse polarity protected
4234-20 mA Circuit ProtectionShort circuit and reverse polarity protected
4234-20 mA Circuit ProtectionShort circuit and reverse polarity protected
Circuit ProtectionShort circuit and reverse polarity protected
RFI/EMI SuppressionCE marked, EN 61326
Insulation Resistance
Response Time
Electrical Connections
422
Pin C +SignalNo connection
Pin D -SignalNo connection
Pin E AC ground (standard)AC ground (Standard)
Pin F No connectionNo connection
Connector Options BPMicro change (M12)
BN4-pin bayonet
ZUCable gland
MECHANICAL CONNECTION Pressure Connection
Proof Pressure3x range or 1,200 PSI (whichever is less) for 0-3 thru 0-500 P 3x range or 9,000 PSI (whichever is less) for 0-1,000 thru 5,00
Burst Pressure5x range or 2,400 PSI (whichever is less) for 0-3 thru 0-500 P 5x range or 10,000 PSI (whichever is less) for 0-1,000 thru 0-
Pressure Cavity Volume1.5 mL MountingMay be supported by process piping
MATERIALS OF CONSTRUCTION Wetted Parts
Housing
Weight
IdentificationLaser 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. Please contact Viatran for specific order inquiries.



### Models 422 / 423

#### **OPTIONS**

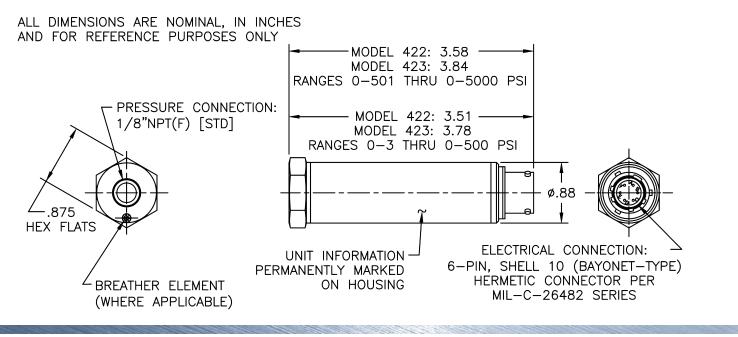
ΠΔ	lsolated internal shunt calibration (6-pin connector required)
	Extended Compensated Temperature Range (Cold) -40°F to 170°F (-40°C to 77°C)
DE	Internal shunt calibration (6-pin connector required)
DG	Improved temperature performance
DH	Special range
DM	Modified FS0>5Vdc; 422; (Requires 12 to 30 Vdc 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
ЕН	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**



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