



## FEATURES

- Small size –7/8" diameter
- $\pm 0.08\%$  Combined Accuracy (Standard)
- 0-3 thru 0-5,000 PSI ranges
- 0-5Vdc output for PSIA  
0.25-5.25 Vdc output for PSIG
- Stainless steel construction
- RoHS compliant

## TYPICAL APPLICATIONS

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



## HIGH-PERFORMANCE

Our Model 424 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.

## INSPIRED BY SMALL SPACES

Developed for engine test stands with space constraints, the Model 424 is small in size, but packs a high-performance punch. The electronics and silicon sensor design have a combined accuracy of better than  $\pm 0.08\%$ . Available standard output is 0-5 Vdc for PSIA or 0.25 - 5.25 Vdc for PSIG measurements.

Viatran's ability to customize products provides extreme flexibility, allowing the 424 to easily fit into your existing system. Options include alternate pressure ports, electrical connectors, direct-coupled cable, and various electrical outputs.

## EASILY ADAPTABLE

The "424" 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 RoHS compliant 6-pin bayonet circular connector is one of many standard features.

## OUR COMMITMENT TO QUALITY

The "424" 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:

# Model 424

## PERFORMANCE

Full Scale Pressure Range (FSPR) .....	0-3 thru 0-5,000 PSI (0-0.2 to 0-345 bar)
Zero balance .....	≤± 0.25% FSO
Non-Linearity (Best Fit Straight Line) .....	≤±0.06% FSO standard, optional ±0.04%
Hysteresis & Repeatability .....	≤±0.06% FSO standard
Full Scale Output .....	5 Vdc ≤± 0.25% FSO
Long Term Stability .....	≤±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).....	≤±2% FSO per 100°F typical

## ELECTRICAL

Supply Voltage.....	9 to 30 Vdc
Power Supply Regulation.....	<±0.05% FSO per Volt
Output Signal.....	0-5 Vdc (PSIA) 0.25 - 5.25 Vdc (PSIG)
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 .....	<5nS conductance
Response Time .....	≤ 2 milliseconds
Electrical Connections .....	6-pin bayonet style SST (standard)

- Pin A +Power
- Pin B -Power
- Pin C +Signal
- Pin D -Signal
- Pin E DC ground (standard)
- Pin F 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 .....	3.5 oz nominal
Identification.....	Laser etched onto body

# Model 424

## OPTIONS

DC.....	Extended Compensated Temperature Range (Cold) -40°F to 170°F (-40°C to 77°C)
DG.....	Improved temperature performance, Combined zero & span $\leq \pm 1\%$ FSO per 100°F typical.
DN.....	Improved linearity $\pm 0.04\%$ FSO
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)
NH.....	Customer specified marking

### Alternate Pressure Ports

VB.....	G 1/8" ( DIN3852-2 ) (Male)
VC.....	G 1/8" ( DIN3852-2 ) (Female)
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 (7/16-20 UNJF-3B) (Female)
YC.....	MS33656-04 (7/16-20 UNF-3A) (Male)
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

