



## XPM4-*Vi* SERIES

High Performance Pressure Transducer



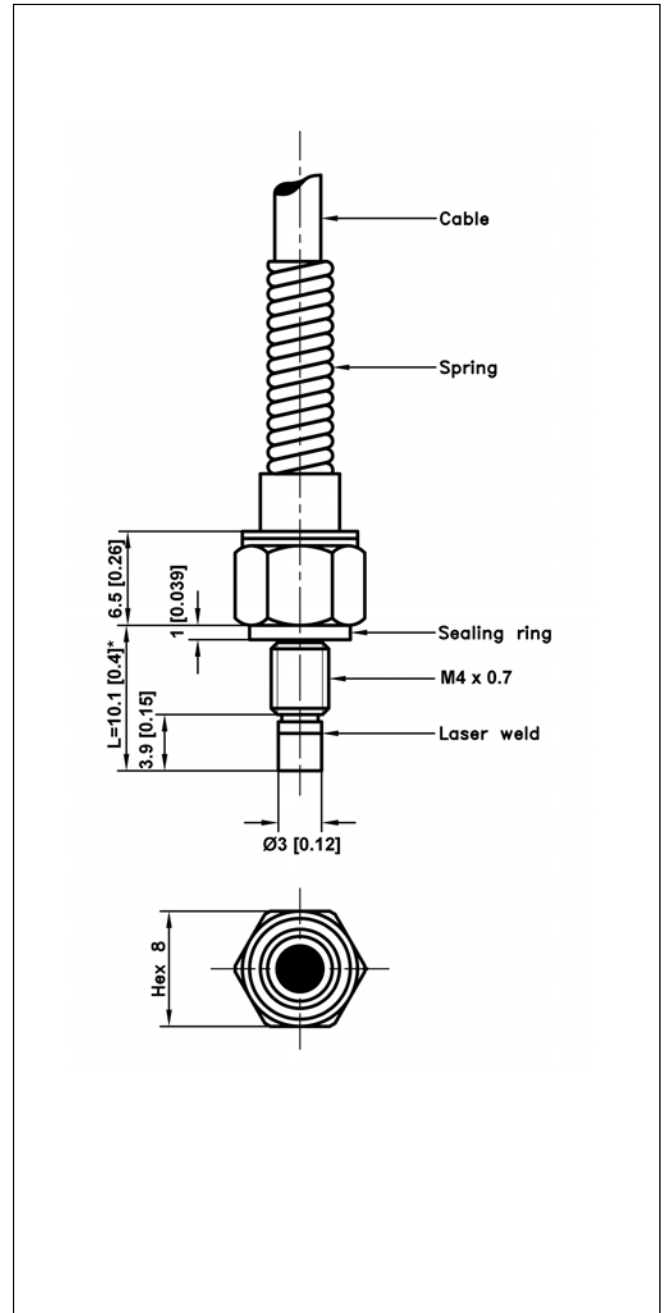
- High Accuracy and Stability
- Temperature Range -40 to 120 °C [-40 to 248 °F]
- High Level Analogue Output
- Full Scale Range :  
from 0-5 to 0-200 bar [0-75 to 0-3,000 psi]
- Flush Diaphragm, All-Titanium Construction
- Low Installation Torque Sensitivity
- M4 Threading

The **XPM4-*Vi*** represents a new series of pressure transducers combining piezoresistive sensor technology and digital temperature compensation, providing superior performance and excellent long- term stability over a temperature range of -40 to 248 °F.

The all-titanium construction and flush diaphragm allow the sensors to withstand most corrosive liquids. Available measurement ranges vary from 0-75 psi up to 0-3,000 psi.

Incorporating FGP Sensors *Vi* technology, the sensor features high level analogue signal output and offers a cost-effective solution for the most demanding applications. Compensation is effected via an external module.

Consult FGP's Engineering Department if the standard options do not meet your needs or should your application require a more comprehensive measurement system.



Performance specifications subject to change without notice. September 19, 2006

## Technical Specifications

### Range (F. S.)

0-5	0-10	0-20	0-35	0-50	0-100	0-200	bar	in gauge, sealed gauge or absolute reference
0-75	0-150	0-300	0-500	0-750	0-1500	0-3000	psi	

### Performance Characteristics

Combined Non-Linearity & Hysteresis : **<±0.35% F.S. (<±0.5% F.S. for 75 psi model)**

Repeatability : ±0.2% F.S.

Zero Shift in CTR : **<0.5% F.S. / 60 °C [108 °F] (<±1.5% F.S. for 75 psi model)**

Sensitivity Shift in CTR : <2% of reading / 60 °C [108 °F]

Operating Temperature Range (OTR) : -40 to 125 °C [-40 to 257 °F]

Compensated Temperature Range (CTR) : **-40 to 120 °C [-40 to 248 °F]**

Safe Overload : 2 x F.S.

Ultimate Pressure : 5 x F.S.

Bandwidth ±1% : 100 Hz

### Electrical Characteristics

Supply Voltage : 8 to 16 Vdc (polarity inversion protection)

F.S. Output : 4 V ±2% F.S.

Zero Offset : 0.5 V ±2% F.S.

Consumption : <20 mA

Output Impedance : <10 Ω

Insulation under 50 Vdc : ≥100 MΩ

### Electrical Termination

Shielded cable from load cell to compensation module, standard length 1.0 m [3.3 ft]

Shielded cable with 3 Teflon wires (AWG30) exiting compensation module, standard length 1.0 m [3.3 ft]

### Tightening Torque

Nominal : 5 N.m [44 lb-in] (zero and sensitivity shift <1%)

Maximal : 10 N.m [88 lb-in]

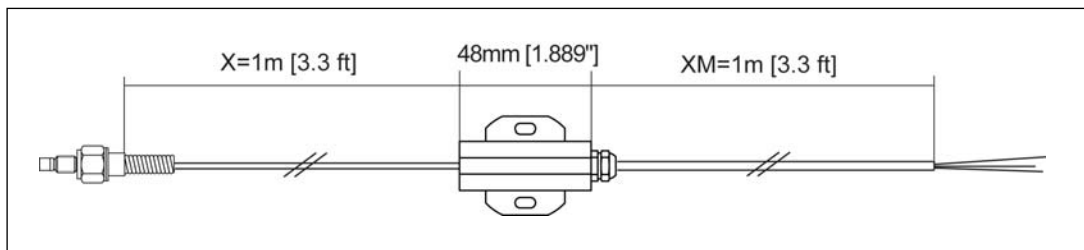
### Mechanical Characteristics

Material : Body and flush diaphragm in titanium, laser welded

Pressure port : M4

Self centered sealing ring

Protection Index : IP 50



### Product References

#### High Level Output Transducer

##### Model

##### Full Scale Range (F.S.)

In psi G (gauge), S (sealed gauge), A (absolute)

##### Option(s)

P5 : IP65 protection

P7 : IP67 protection

LC"X" : Additional cable length in ft (front of module)

LC"XM" : Additional cable length in ft (rear of module)

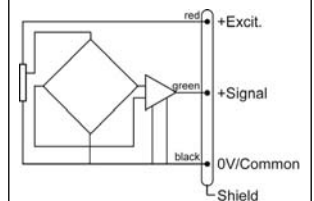
XPM4-ri

1500G

LC2M

"X" = Custom value

### Schéma électrique



Performance specifications nominal and subject to change without notice. Current specifications see web-site. September 19, 2006

**FGP Sensors, Inc.**

A GS Sensors Company

116 West Chestnut St. • EPHRATA PA 17522

Tel. (717) 721 9797 • Fax. (717) 721 9859 • [www.fgpsensors.com](http://www.fgpsensors.com) • [info@gssensors.com](mailto:info@gssensors.com)