



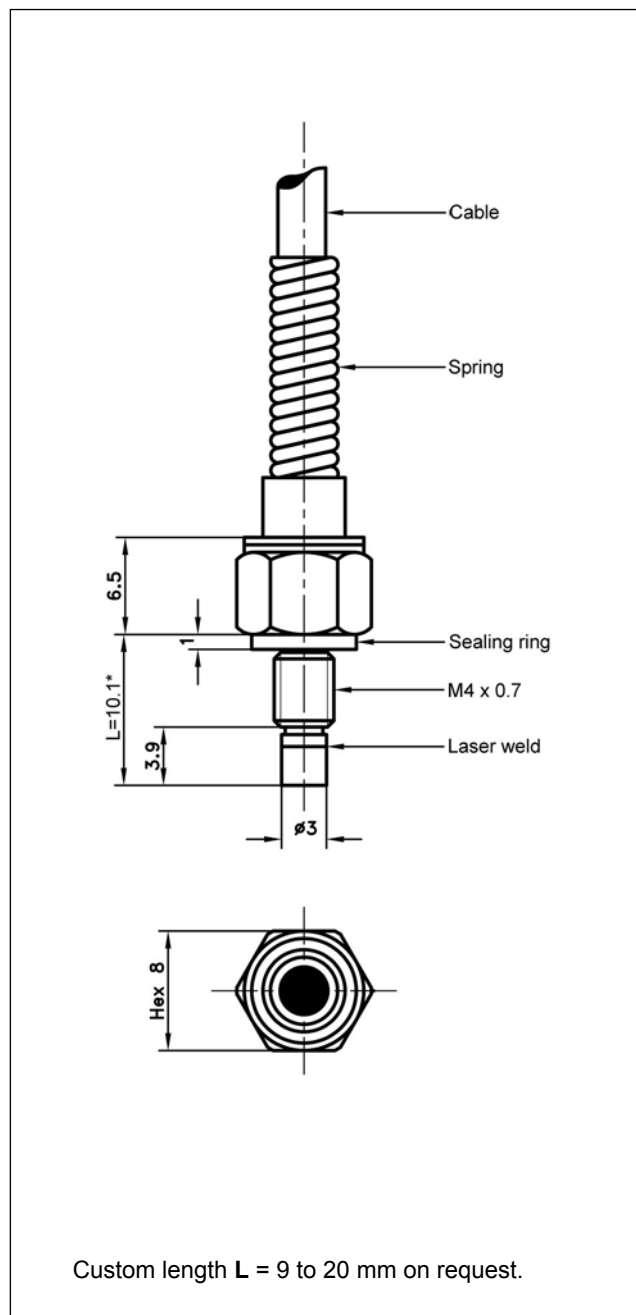
- Flush Diaphragm, All-Titanium Construction
- Full Scale Range from 0-5 bar to 0-200 bar
- For Static and Dynamic Applications
- Low Installation Torque Sensitivity
- Ideally Suited for Hostile Environments
- M4 Threading

The XPM4 is a miniature transducer designed to measure static and dynamic pressure under a wide variety of conditions, including hostile environments. The all-titanium construction and flush diaphragm allow the sensor to withstand most corrosive liquids.

The XPM4 incorporates FGP Sensors' cutting-edge SanShift™ technology, which virtually eliminates zero shifts caused by installation torque.

The XPM4's sensing element is fitted with a fully temperature compensated Wheatstone bridge configuration equipped with high stability micro-machined silicon strain gauges which optimize performance, especially at low ranges and frequencies. All models come with a cable output strengthened by a strain relief spring or with an electrical connector (optional).

With many years of experience as a designer and manufacturer of sensors, FGP Sensors has the expertise to customize and/or design sensors for specific uses and testing environments. To meet your needs we also offer complete turnkey systems. Our conditioning electronics can power the sensor, amplify



the electronic signal, and display the data digitally. A turnkey measurement system arrives with matched components, formatted, calibrated and ready for your immediate use.

Technical Specifications

Range (F. S.)

0-5, 0-10, 0-20, 0-35, 0-50, 0-100 and 0-200 bar gauge, sealed gauge or absolute

Over-range

Without Damage : 2 x F.S.

Without Destruction : 5 x F.S.

Accuracy

Linearity : $\pm 0.35\%$ F.S. ($\pm 0.5\%$ for 5 bar model)

Hysteresis : $\pm 0.25\%$ F.S.

Repeatability : $\pm 0.2\%$ F.S.

Temperature Range

Operating Temperature Range (OTR) : -40 to 120 °C

Compensated Temperature Range (CTR) : 0 to 60 °C

Zero Shift in CTR : $< 2.5\%$ F.S. / 60 °C ($< 7\%$ for 5 bar model)

Sensitivity Shift in CTR : $< 2\%$ of reading / 60 °C

Electrical Characteristics

Supply Voltage	10 Vdc
F.S. Output 5 bar model	30 mV
F.S. Output >5 bar model	100 mV
Zero Offset	$\leq \pm 10$ mV
Input Impedance	1500 Ω
Output Impedance	800 Ω
Insulation under 50 Vdc	≥ 100 M Ω

Electrical Termination

Shielded cable with 4 Teflon wires (AWG28), standard length 2 m with strain relief spring

Tightening Torque

Nominal : 5 N.m (zero and sensitivity shift $< 1\%$)

Maximal : 10 N.m

Mechanical Characteristics

Material : Body and flush diaphragm in titanium, laser welded

Resonance Frequency : 200 kHz to 750 kHz

Self centered sealing ring

Protection Index : IP 50

Product References

Transducer

Model

Full Scale Range (F.S.)

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

Option(s)

HA : Accuracy (CNL&H) $\leq \pm 0.35\%$ F.S. ($\leq \pm 0.5\%$ for 5 bar model)

SI : Sensitivity shift $\leq 1\%$ of reading / 60 °C (except 5 bar model)

ZI : Zero shift $\leq 1.5\%$ F.S. / 60 °C (except 5 bar model)

ET1 : CTR -20 to 100 °C

ET3 : CTR -40 to 150 °C OTR=CTR

SC : Connector output, prewired, cable length 2 m

P5 : IP65 protection

P7 : IP67 protection

LC"X" : Additional Cable length in m

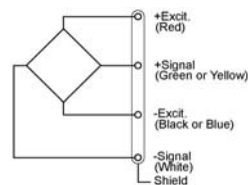
XPM4

20G

ET1

"X" = Custom value

Wiring Schematic



All specifications are nominal. They are subject to change without notice and assume correct loading of the device. Current specifications see web-site. 18/04/2005



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