







- M6x1 thread
- Flush Diaphragm
- For Static and Dynamic Applications
- High Level Tension Output Available
- Low Installation Torque Sensitivity

APPLICATIONS

- Explosion test benches
- Extreme Miniature Devices
- · Robotics and actuators
- Breaking system pressure
- · Laboratory and research

XPM6

Miniature pressure sensor

SPECIFICATIONS

- Ranges 100 to 1000 bars [1.5k to 15k psi]
- Sealed and gauge pressure reference
- Stainless steel housing
- Linearity ±0.25% F.S.

The **XPM6** is a miniature transducer made of stainless steel designed to measure static and dynamic pressure under a wide variety of conditions, including hostile environments.

The **XPM6**'s sensing element is a fully temperature compensated Wheatstone bridge made with high stability micromachined silicon strain gauges. For protection against thermal flash/explosive testing up to 1000 ° C [1832 ° F] the option **MH** allows inserting extra protection into the "H" shape diaphragm.

The **XPM6** incorporates TE CONNECTIVITY's cutting edge SanShift $^{\text{TM}}$ technology, which virtually eliminates zero shifts caused by installation torque.

On request, Instruction documents can be provided to ease the selection and use of our sensors and provide helpful tips.

STANDARD RANGES

| Full Scale (FS) | | Pressure Reference | | | Resonnant | Sensitivity "FSO" | Overpressure | Burst Pressure |
|-----------------|------|--------------------|-------|--------|-----------|----------------------|------------------|------------------|
| bar | psi | Gauge | Abso. | Sealed | Frequency | (non amplified) | (rated pressure) | (rated pressure) |
| 100 | 1.5k | • | | • | 415 kHz | 10 mV/V | 2 x FS | 3 x FS |
| 200 | 3k | • | | • | 415 kHz | 10 mV/V | 2 x FS | 3 x FS |
| 350 | 5k | • | | • | 575 kHz | 10 mV/V | 2 x FS | 3 x FS |
| 500 | 7.5k | • | | • | 750 kHz | 10 mV/V | 2 x FS | 3 x FS |
| 1000 | 15k | • | | • | 910 kHz | 10 mV/V | 2 x FS | 3 x FS |

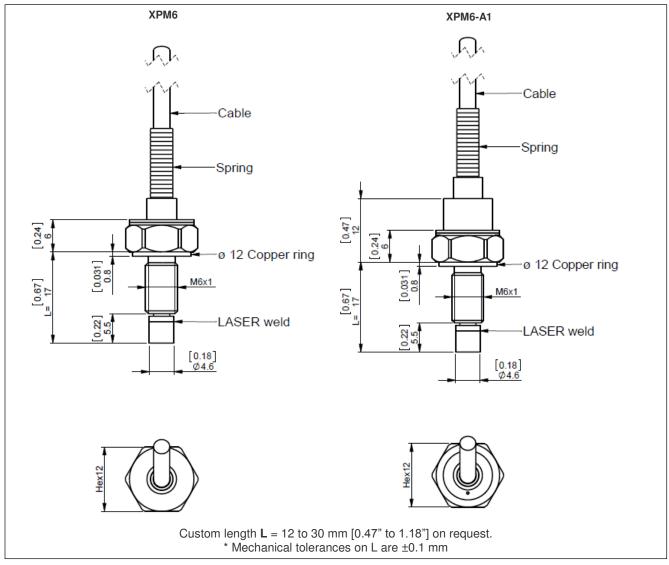
PERFORMANCE SPECIFICATIONS (all values are typical at ambient temperature 23±3°C)

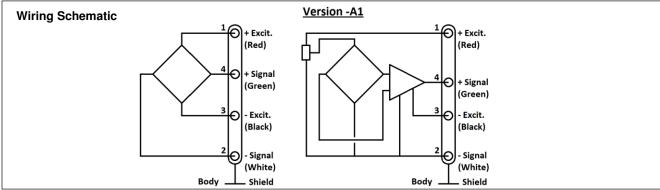
| Parameters | Non amplified | Amplified (A1 opt.) | Notes | | | |
|--|--|--------------------------------|------------------------------------|--|--|--|
| Power supply | 10 Vdc regulated | 10 to 30 Vdc | | | | |
| Sensitivity "FSO" | See previous table | 4 V ±0.2 V | Signal 0.5 V - 4.5 V for A1 option | | | |
| Zero Offset | ±1 mV/V | 0.5 V ±0.2 V | | | | |
| Non Linearity | ±0.25%FS | | | | | |
| Hysteresis | ±0.25%FS | | | | | |
| Repeatability | ±0.2%FS | | | | | |
| Operating Temperature (OTR) | -40 to 150°C (-40 to 302°F) | -40 to 120°C (-40 to 248°F) | | | | |
| Compensated Temperature (CTR) | 0 to 60°C (32 to 140°F) | 0 to 60°C (32 to 140°F) | | | | |
| Thermal Zero Shift in CTR (TZS) | <±2.5%FS/50°C | | | | | |
| Thermal Sensitivity Shift in CTR (TSS) | <±2% of reading /50°C | | | | | |
| Input Impedance or consumption | 1500 Ω nom. | < 30 mA | | | | |
| Output Impedance | 800 Ω nom. | 1000 Ω | | | | |
| Ingress Protection | IP50 | | | | | |
| Media – Pressure Port | Fluids compatible with stainless steel | | | | | |

Insulation under 50Vdc ≥100MΩ

CE certification according to EN 61010-1, EN 50081-1, EN 50082-1.

DIMENSION & WIRING SCHEMATIC (IN METER AND IMPERIAL)





Notes:

- 1. Recommended Tightening Torque: 5 N.m [44 lbf.in] to 10 N.m [88 lbf.in]
- 2. Sealing: One FKM sealing ring is supplied with the sensor (operating temperature -30 to 150°C)
- 3. Electrical connection: Standard = 2m of shielded sable ø3mm with 4 wires AWG30, Silicon jacket

OPTIONS

MH: "H" Diaphragm for thermal flash/explosive testing

HA: Accuracy (CNL&H) ≤±0.25% F.S.

SI: Sensitivity shift in CTR ≤1% of reading / 50 ° C [/100 ° F]

ZI : Zero shift in CTR ≤1.5% F.S. / 50 ° C [/ 100 ° F]

ET1: CTR -20 to 100 ° C [-4 to 212 ° F]

ET3: CTR -40 to 150 ° C [-40 to 302 ° F] OTR=CTR (not available with A1 options)

L00M: special cable length, replace "00" with total length in meters

ORDERING INFORMATION

| XPM6 | - | | ı | 1KB | G | - | /H//SI/L5M |
|-------|---|--|---|-------------------------------------|-----------------------|---|--|
| Model | - | Output signal | - | Pressure Range | Pressure reference | - | Options |
| хрм6 | | (none) : bridge (mV/V) A1 : 0,5 to 4,5V | | 100B 200B 350B 500B 1KB | G: gauge S: sealed | | /MH /HA /SI /ZI /ET1 /ET3 /SC /L00M |

The sensor ordering codes uses only bar as units because **XPM6** uses metric threads. Psi value correspondence is noted as information.

Asia

联系方式

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