

PM4 Series

Miniature pressure sensor



- Gauge and Sealed gauge ranges
- 5 to 200 bar [75 psi to 3000 psi]
- Titanium construction
- For static and dynamic applications
- Linearity up to $\pm 0.35\%$ FSO

Description

These miniature pressure sensors are designed to make static and dynamic measurements of pressure. The All-Titanium construction makes these flush membrane sensors suitable for use in applications where corrosive pressure media may be present. Integrated electronics makes it possible to offer an optional voltage output signal.

Characteristics

Flush diaphragm
M4x0.7
Low installation torque sensitivity
Titanium construction
Miniature design

Applications

Glue dispensing system
Hydraulic circuits
Explosion test benches
Molding and forming profiles
Robotics and effectors

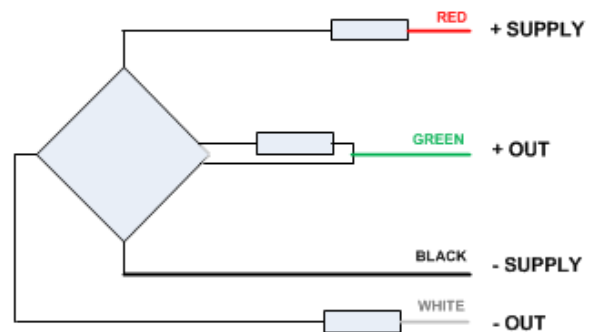
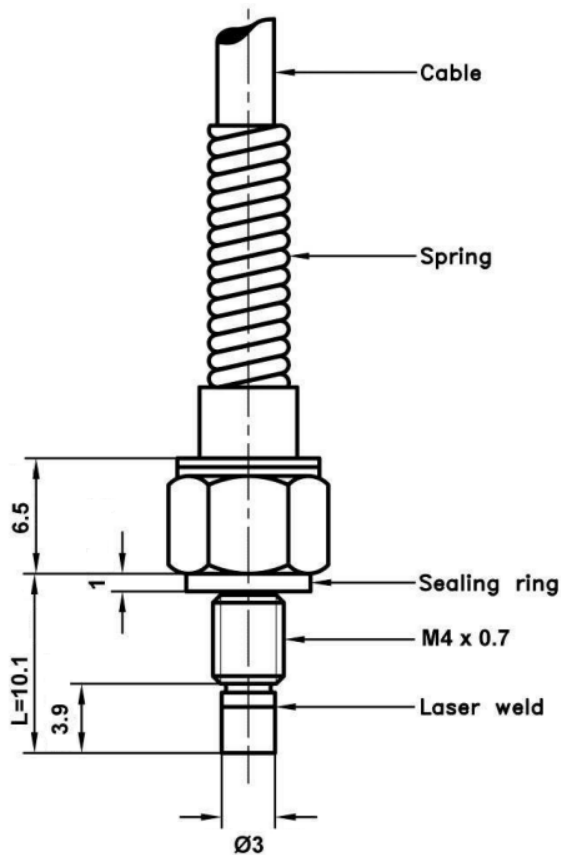
Standard Ranges

Pressure (FS in bar)	Pressure (FS in PSI)	Gauge	Sealed	Output FSO (-30%/+50%)	Linearity	Hysteresis	Resonant Frequency
5	75	•	•	30mV	$\pm 0.5\%$	$\pm 0.25\%$	224 kHz
10	150	•	•	60mV	$\pm 0.35\%$	$\pm 0.25\%$	224 kHz
20	300	•	•	100mV	$\pm 0.35\%$	$\pm 0.25\%$	299 kHz
50	750	•	•	100mV	$\pm 0.35\%$	$\pm 0.25\%$	374 kHz
100	1500		•	100mV	$\pm 0.35\%$	$\pm 0.25\%$	474 kHz
200	3000		•	100mV	$\pm 0.35\%$	$\pm 0.25\%$	673 kHz

Specification

Model	
Over Pressure	2 Times rated pressure
Burst Pressure	5 Times rated pressure
Material	Titanium Tav6
Power Supply	10 Vdc regulated
Input Impedance/Consumption	1200 Ω nominal
Output Impedance	1200 Ω nominal
Zero Offset At 20 °C	± 10 mV
Insulation	> 100 M Ω @ 50 Vdc
Operating Temperature	-40°C to 120°C
Compensated Temperature	0°C to 60°C (See options for other compensated temperature ranges)
Thermal Zero Shift	$\pm 5\%$ FS / 50°C (5 bar or 75 psi) $\pm 2.5\%$ FS / 50°C (>5 bar or 75 psi)
Thermal Sensitivity Shift	$\pm 2\%$ FS / 50°C
Repeatability	$\pm 0.2\%$ FS
Bandwidth	See above Resonant Frequency
Electrical Connection	2m length 4 conductor AWG30 Silicone shielded cable (See options for other cable length)
Mechanical Connection	M4x0.7
Ingress Protection	IP50 (See options for other IP ratings)
Seal	FKM seal ring (included)
Mounting Torque	1.8 Nm nominal, 3 Nm Max

Dimension & Wiring Schematic (mm)



Options

L00M: special length, replace "00" with total length in metres (2 metre is default standard)

L00F: special length, replace "00" with total length in ft

C1: Compensated temperature -40° to 60°C

C2: Compensated temperature 20° to 120°C

Cx: Special compensation temperature, pls contact factory

P7: IP67 rating (only available for sealed type)

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Order information

P	S	M4C	350	B	mV	/L5M
Model	Pressure reference	Model	Pressure range (Bar/Psi)	Unit	Output signal	Options
P	R, S	M4C	5/75	B: Bar	mV: mV	L00M
	R, S		10/150	P: PSI		L00F
	R, S		20/300			C1
	R, S		50/750			C2
	S		100/1500			P7
	S		200/3000			

R: Gauge (Relative), S: Sealed Gauge

Example: **PRM4C200BmV/L5P7**

- Gauge
- 200 bar
- 100mV output
- Metric M4 Thread
- Cable output
- 5m cable length
- Index of protection: IP67