



- Absolute, sealed and gauge ranges
- 20 to 1000 bar [300 psi to 15000 psi]
- Stainless steel construction
- Amplified output available
- For static and dynamic applications
- Linearity & Hysteresis up to $\pm 0.25\%$ FSO

Description

These miniature pressure sensors are designed to measure static and dynamics pressures in a corrosive environment. The sensor is constructed from stainless steel and is compatible with a large number of corrosive or conductive fluids. Integrated electronics provides a voltage output signal.

Additionally, there is an option EP available that offers protection up to 1000°C (1832°F) for scenarios involving thermal flashes or explosive testing. This protection is achieved by adding sacrificial grease into the EP end cup for temperature absorption.

Characteristics

Flush diaphragm
M6x1
Stainless Steel construction
Miniature design

Applications

Hydraulic test rigs
Explosion test benches
Braking systems
Laboratory and research

Standard Ranges

Pressure (FS in bar)	Pressure (FS in PSI)	Gauge	Sealed	Absolute	Resonant frequency (mV output)	Repeatability
20	300	•	•	•	179 kHz	$\pm 0.2\%$
35	500	•	•	•	195 kHz	$\pm 0.2\%$
50	750	•	•	•	227 kHz	$\pm 0.2\%$
70	1000	•	•	•	276 kHz	$\pm 0.2\%$
100	1500		•	•	325 kHz	$\pm 0.2\%$
140	2000		•	•	377 kHz	$\pm 0.2\%$
200	3000		•	•	455 kHz	$\pm 0.2\%$
350	5000		•	•	585 kHz	$\pm 0.2\%$
500	7500		•	•	764 kHz	$\pm 0.2\%$
700	10000		•	•	845 kHz	$\pm 0.2\%$
1000	15000		•	•	926 kHz	$\pm 0.2\%$

PM6 Series

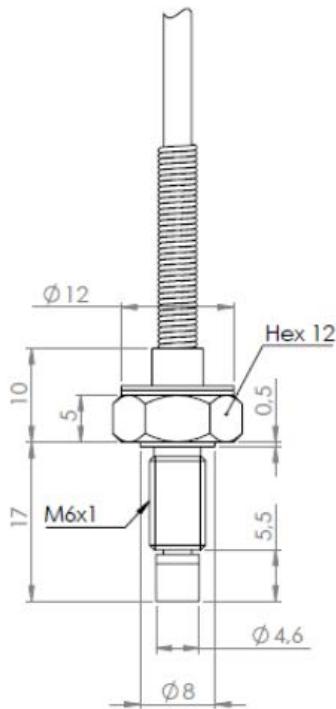
Miniature pressure sensor

Specification

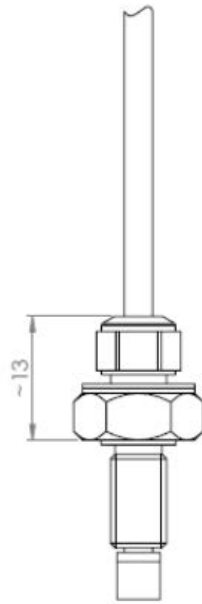
Parameters	mV Output	Amplified Output
Power Supply	10Vdc	10-30Vdc
Output Signal	100mV (-30%/+50%)	0.5 to 5Vdc
Zero Offset At 20°C	±10mV	0.5Vdc ±5%
Overpressure	2x FS	
Burst Pressure	3x FS	
Non Linearity	±0.25% FS	
Hysteresis	±0.25% FS	
Process Connection	M6x1 flush	
Isolation	> 100MΩ @ 50Vdc	
Operating Temperature	-40°C to 150°C	-40°C to 125°C
Compensated Temperature	0°C to 60°C	
Thermal Zero Drift	< 2.5% FS/60°C	
Thermal Sensitivity Drift	< 2% FS/60°C	
Input Impedance/current consumption	1500 Ω	< 30mA
Output Impedance	800 Ω	1000 Ω
Material	Z8CND17-4 Stainless Steel	
Electrical Connection	2m length 4 conductor AWG28 Silicone shielded cable/ Souriau connector - 8STA1Y02-05PN170	
Vibration	50g	
Shock	2g duration 11ms 10 000g duration 1ms	
Bandwidth (-3dB)	Refer to table above	1.25kHz (3kHz on request)
Ingress Protection	IP50 / IP67	
Sealing	British Standard (BS) Ring (300 to 5000 PSI) ARMCO iron ring (5000 to 15000 PSI)	
Mechanical Characteristics	Laser-welded body and diaphragm	
Weight	14 grams	
Mounting Torque	5Nm - Range 300 to 5000PSI 10Nm - Range 5000 to 15000 PSI	

Dimension & Wiring Schematic (mm)

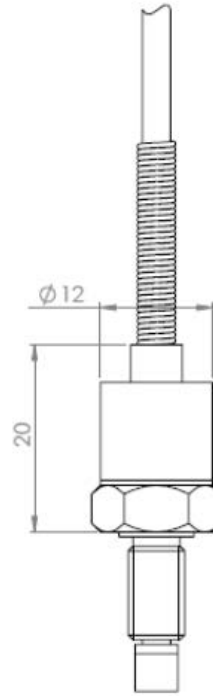
mV Output



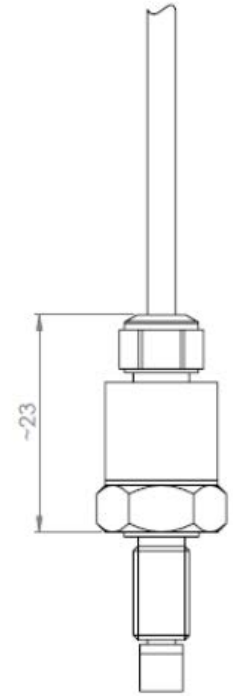
mV Output IP67



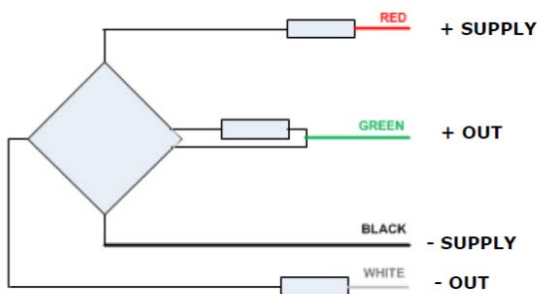
Amplified Output



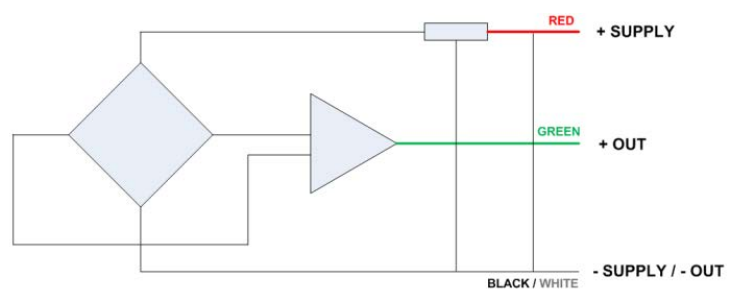
Amplified Output IP67



mV Output



Amplified Output



Options

L00M: special length, replace "00" with total length in metres (2 metres standard)
L00F: special length, replace "00" with total length in ft
C1: Compensated temperature 20° to 120°C
C2: Compensated temperature 20° to 150°C (mV output only)
Cx: Special compensation temperature, pls contact factory
3V: Low power amplified output 0 to 3Vdc (5Vdc excitation)
5V: Standard amplified output 0.5 to 5Vdc
P7: IP67 protection (Sealed gauge only)
EP: Extra protection for thermal flashes or explosive testing, up to 1000°C

Order information

P	S	M6	C	350	B	mV	/L05M
Model	Pressure reference	Model	Electrical Connection	Pressure range (Bar/Psi)	Unit	Output signal	Options
P	A, R, S	M6	C: Cable	20/300	B: Bar	mV	L00M
	A, R, S		CS: Connector	35/500	P: PSI	5V	L00F
	A, R, S			50/750		3V	C1
	A, R, S			70/1000			C2
	A,S			100/1500			P7
	A,S			140/2000			EP
	A,S			200/3000			
	A,S			350/5000			
	A,S			500/7500			
	A,S			700/10000			
	A,S			1000/15000			

A: Absolute, R: Gauge (Relative), S: Sealed Gauge

Example: **PSM6C15KP5V**

- Sealed gauge
- Range: 0 - 15000 PSI
- Output: 0.5-4.5V
- 2m cable length

PRM6C1000BmV/L05MP7

- Gauge
- Range: 0-1000bar
- Output: 100mV
- 5m cable length
- IP67