MEASUREMENT LTD.

2001 Route 46, Waterview Plaza, Suite 310, USA, Parsippany, NJ 07054 www.measurement-ltd.com
TEL: (973) 402-4240 FAX: (973) 402- 4241

Model MLPTO-8

Circuit Board Mountable Pressure Sensor

Product Description & Operation

The **MLPTO-8** is a piezorestive silicon MEMS pressure sensor packaged in a PC board mountable industry standard TO-8 header package. The MEMS processing used insures long term stability and repeatability over the entire operating range. The sensor with external electronics such as a sensor specific correction ASIC or microcontroller can be compensated to better than +/0.1%TEB.

Features

- Low cost
- Compact
- Absolute/Gauge/Differential
- Extreme long term stability
- Rugged
- Compatible with non-corrosive gases and dry air
- Compensatable to better than 0.1% TEB
- Standard TO-8 PCB mountable header
- Based on stable piezoresistive pressure sensor die

Applications:

- HVAC
- Process control
- Vacuum
- Flow measurement and control
- Barometric/metrology
- Air data
- Pneumatic P to I type controllers
- Digital pressure gauges
- Industrial Automation

Performance Specifications (@25℃)

Parameter	Min.	Typical	Max.	Units	Notes
Excitation(input)		5		V	1mA(nom);3mA (max)
Impedance(input/output)	4000	5000	6000	Ω	Optional:3500+/-500
Operating temperature		-40 to 150		℃	
Storage temperature		-55 to 160		℃	

Performance Specifications (@25℃)

Parameter	Value	Units	Notes
Offset	0+/-10	mV/V	Zero pressure, gage only
Linearity	0+/-0.2	%FSO	BSFL(best fit straight line)
Pressure hysterisis	0+/-0.1	%FSO	
TCZ	30	μV/V/℃	0 to 70℃
TCR	0.24	%/℃	0 to 70℃
TCS	-0.20	%FSO/℃	0 to 70℃
Thermal hysteresis	0+/-0.1	%FSO	Zero pressure
Long and term stability	0+/-0.1	%FSO	
Over pressure	3X	Full scale pressure	

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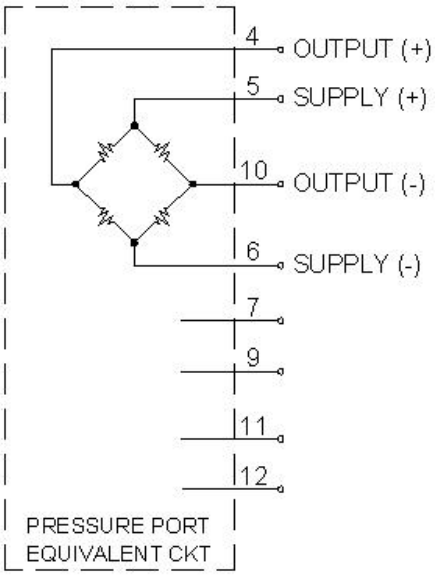
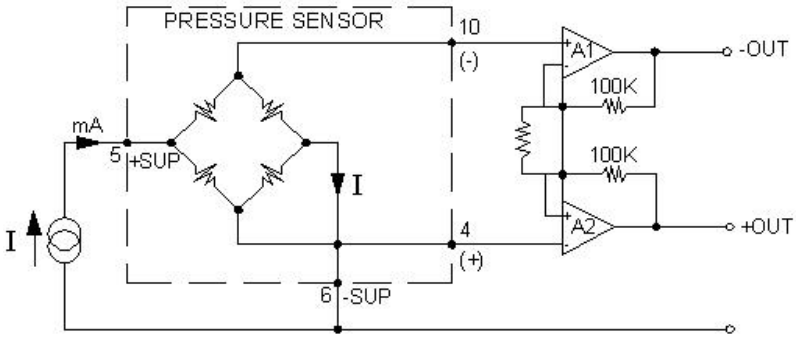
Ordering Information

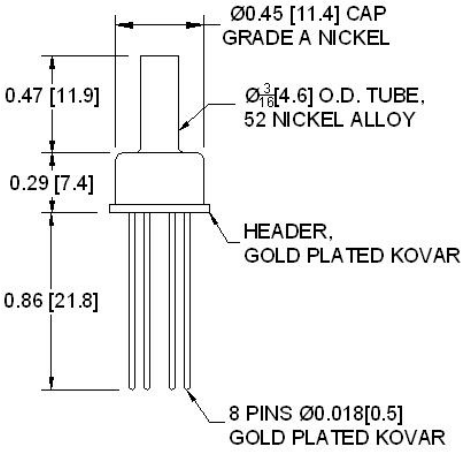
MLPTO-8 Product Model	xxxxx	
	001PD = 0 to 1	psid/g
	005PD = 0 to 5	psid/g
	030PD = 0 to 30	psid/g
	050PD = 0 to 50	psid/g
	100PD = 0 to 100	psid/g
	300PD = 0 to 300	psid/g
	015PA = 0 to 15	psia
	030PA = 0 to 30	psia
	100PA = 0 to 100	psia
	300PA = 0 to 300	psia

Connections



Application Schematic





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