



Model PSC631 Pressure Sensor for High Pressure Industry and General Purpose Applications

PRESSURE SENSOR LIMITED's model PSC631 media isolated high pressure transducer module is based on a piezoresistive pressure sensing element incorporating proprietary technologies. These technologies were developed to give the sensing element superior stability over time and repeatability over a wide temperature range. The sensors are oil filled, diaphragm media isolated and packaged in a welded 316 stainless steel housing. The isolation and packaging allows the sensors to function and withstand application in harsh corrosive environments. To further enhance the sensor's performance each sensor has been individually compensated using resistors to normalize any shifts in zero from changes in temperature.

Compensation resistor values will be given in a printed paper.

The sensor's package is designed to incorporate an O-ring seal to ease application into the target system. The sensors are available in sealed gauge reference configurations.

- Absolute Pressures
- Excellent cost / performance
- Excellent Stability
- O-ring Seal / Weld
- Electrical Connection: 5 Pins
- Analog or Digital Out is Available

Sample Applications:

- Industrial Process Control
- Pressure transmitters and instrumentation
- Hydraulic Systems
- Test and Measurement
- Heavy Industry Application



PSC631 Ordering Model NO.: PSC631-X

X
Pressure Range
1 = 0 to 1000 Psi (A)
2 = 0 to 3000 Psi (A)
3 = 0 to 5000 Psi (A)
4 = 0 to 10000 Psi (A)

Performance (specified @ 25 °C)	MIN	TYP	MAX	UNITS	NOTES
Excitation (+IN)		5	15	V	Max:3 mA
Impedance	4000	5000	6000	Ω	Optional: 3500±500
Operating Temperature	-40		150	°C	
Storage Temperature	-55		160	°C	
Compensated Temperature		0 ~ 50		°C	
Offset	-10	0	10	mV/V	Zero pressure; @25 °C
Non-linearity	-0.2	0	0.2	%FSO	Best Fit Straight Line; @25 °C
Pressure Hysteresis	-0.05	0	0.05	%FSO	@25 °C
Temp Coeff-Zero	-25	0	25	μV/V/°C	-40 °C to 150 °C
Temp Coeff-Resistance	2300	2800	3300	PPM/°C	-40 °C to 150 °C
Temp Coeff-Sensitivity	-1500	-2200	-2500	PPM/°C	-40 °C to 150 °C
Thermal Hysteresis	-0.1	0	0.1	%FSO	Zero pressure
Long-Term Stability	-0.1	0	0.1	%FSO	
Burst Pressure	3X				Full scale pressure
Full-Scale Output (@ 5V excitation)					
600 Bar (8700 PSI; 60Mpa)	109	131	152	mV	

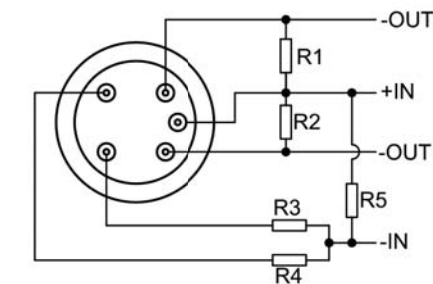
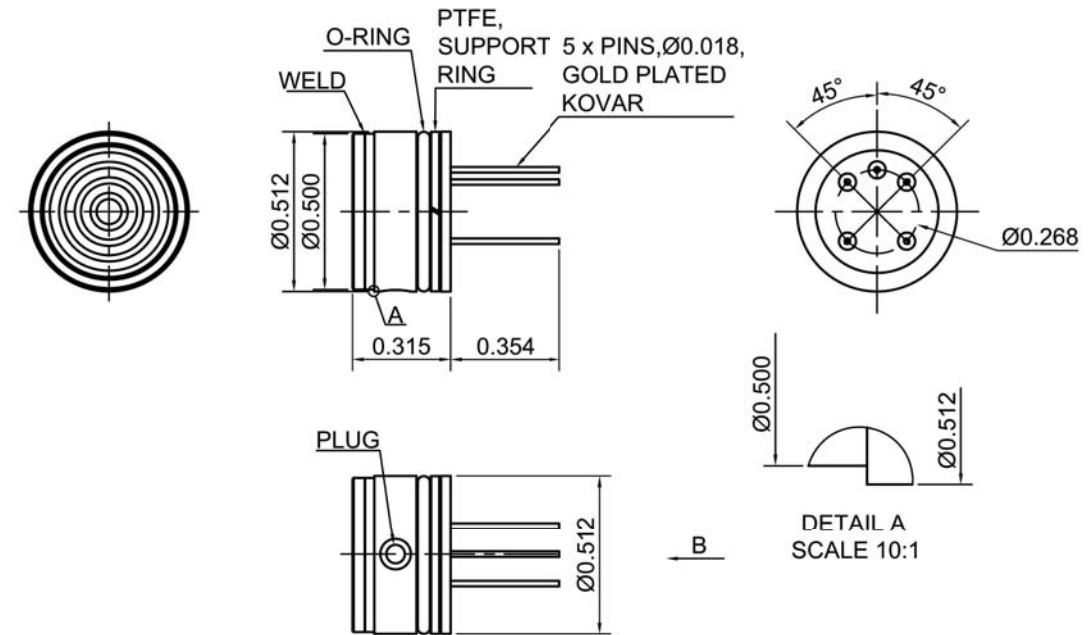


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Mechanical Configuration	
Pressure Port	O-ring Seal
Media	Compatible With 316 stainless steel
Housing	316 stainless steel
Wetted Material	316 stainless steel & Viton
Electrical Connection	5 Pins



Structure reference (Unit: Inch[mm])



R1, R2, R3, R4 & R5 are compensation resistors.
B (Electric Connection)