SMART SENSOR

P-980

Pressure Transducer

- Provides a high level output
- Superior Long term Stability
- Temperature Compensated
- Linear Amplified Output
- Excellent Repeatability & Hysteresis
- EMI/RFI Protection

P-980 series

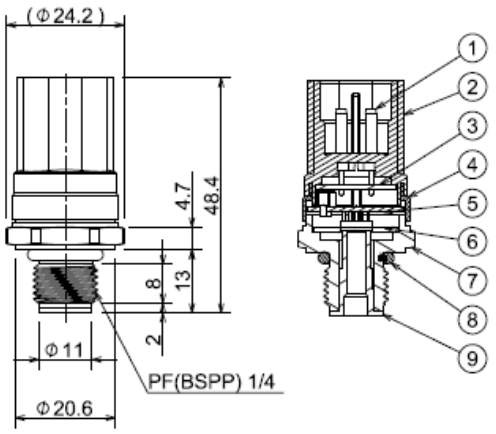
P-980 Long term minimization of these errors is maintained after millions of full scale overpressure cycles, making electronic set point virtually drift-free. Use the sensing element or silicon MEMS strain gage elements glass bonded to stainless steel diaphragm and its mounting provides excellent resistance to most liquids and chemicals. Ruggedness and reliability are also enhanced by a stainless steel housing to resist corrosion pressure sealing for media compatibility is provided by selection of Non-welding Sealing type. metal sensing element contains and integral, reliable, solid state, custom ASIC. This circuit is digital interface can be used for a simple PC-controlled calibration procedure, in order to program a set of calibration coefficients into an on-chip EEPROM and without the cost overhead.

TYPICAL APPLICATIONS

✓Process control
✓ Pneumatic and hydraulic controls
✓ Pump and compressors
✓ Agricultural technology
✓ Environmental control systems

General SPEC		
Characteristic	**P-980A**	**P-980V**
Output	4~20mA	0.5~4.5V / 0~5V / 1~5V
Power Supply	8~30VDC	5V, 8~30VDC
Electric connection	3P connector	
Pressure Range	0~50 / 0~100 / 0~200 /0~250 / 0~400 / 0~500 [bar]	
Operating Temp. Range	-40 to 125℃	
Compensated Temp. Range	-20 to 80℃	
Accuracy	≤±0.5%F.S [Typical/25℃]	
Total Error band	±1.5 %F.S [Typical] / ±2.0 %F.S [MAX]	
Hysteresis and repeatability	±0.1 %F.S [Typical] / ±0.15 %F.S [MAX]	
Process connection	R1/4″ , G1/4″ , 9/16-18UNF, G3/8"	
Wetted Port material	SUS630	
Body material	STS316 / STS303	
Electric connection material	PA66 + GF30 gold plated Pin	
Enclosure	IP67	
Over Pressure / Burst Pressure	2 x F.S. / 10 x F.S.	
Response time 10~90%	≤2ms	
Withstand voltage	500V AC (1minutes between case and all terminals tied)	
Insulation resistance	Greater than 100㏁ (20V DC between case and all terminals tied)	
Mechanical life cycle	5,000,000/cycle	
Circuit protection	Reverse polarity protected. (Power supply +/-)	
Shock proof	1000m/s² (6ms or less, X, Y, Z 3times for each at constant temp.)	
Vibration proof	200m/s² (10~2000Hz, X:4h, Y:2h, Z:2h at constant temp.)	
Weight	45g	

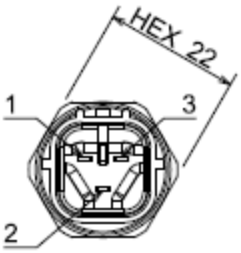
Dimensions (mm)



N.O	Q'TY	PART NUMBER	MATERIAL	REMARK
9	1	MODULE	STS630	
8	1	O-RING	FPM/FKM	ID10.8/d2.4
7	1	HEX BODY	STS303	
6	1	SENSOR PCB	EPOXY RESIN	
5	1	MAIN PCB	EPOXY RESIN	
4	1	STEEL RING	STS303	
3	1	CONNECTOR PCB	EPOXY RESIN	
2	1	CONNECTOR	PBT,GF15%	
1	1	TERMINAL	BRASS	

Smart Sensor			DRAWING TITLE: Pressure Sensor	
UNSPECIFIED DIMENSION TOLERENCE			PART NUMBER: P-980 G1/4 O-ring	
DIMENSION SECTION	TOL' CLASS A	B	C	MATERIAL: - / FINISH: -
TO4	±0.05	±0.1	±0.3	
OVER 4 TO 16	±0.07	±0.2	±0.5	DESIGNED BY: - / DRAWN BY: - / CHECKED BY: -
OVER 16 TO 63	±0.1	±0.3	±0.7	
OVER 63 TO 250	±0.2	±0.5	±1.2	REVISION:X / SCALE: N/S / WIGHT:
OVER 250 TO 1000	±0.3	±0.8	±2.0	

Description



Pin configuration	Description
1	Common
2	Output(+)
3	Power(+)

Mating part :