MSP100

Pressure Transducer

SPECIFICATIONS

- **Analog and 14-Bit Digital Output**
- **Small Size**
- **Low Cost**
- **316L Stainless Steel or 17-4PH**

The MSP100 pressure transducer provides stainless steel media compatibility in a low cost, small profile solution. This sensor has no silicone gel or polymeric media isolation methods to fail in contact with water or other harsh chemicals. Pressure connections are provided via an O-ring seal. The device is available in both analog and 14-bit digital output with a port material of either 316L SS or 17-4PH. Additional custom port options available to meet your application needs. The small size vs. performance and media compatibility are provided through solid-state technology.

FEATURES

- Single Piece Construction; No Welds, No Oil
- 100% Stainless Steel Isolation for Harsh Chemical Measurement
- Low Cost
- 14-Bit Digital Output or Analog

APPLICATIONS

- Beverage Dispensing Systems
- Water Pressure or Flow Monitor
- Medical Equipment
- Industrial Equipment/Hydraulics
- Tank Level Measurement
- Manifold Pressure

STANDARD RANGES

Range	psig
0 to 100	•
0 to 150	•
0 to 250	•
0 to 500	•

PERFORMANCE SPECIFICATIONS (ANALOG, OUTPUT SIGNAL "2")

Ambient Temperature: 25°C (unless otherwise specified)

PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Supply Voltage	4.75	5.00	5.25	V_{DC}	
Zero Offset	-2		2	mV	Ratiometric
Span	98	100	102	mV	Ratiometric
Current Consumption			2	mA	
Proof Pressure	1.5X			Rated	
Burst Pressure	3X			Rated	
Endurance	1E+6			0~FS Cycles	
Accuracy	-0.5	±0.2	0.5	%Span	RSS of BFSL: Linearity, Hysteresis, Repeatability
Long Term Stability		0.25		%Span	
Minimum Resistance between Transducer and Body	50			MΩ	@250V_{DC}
Thermal Zero Shift	-2.0		2.0	%Span	Reference to 25°C over Compensated Temperature
Thermal Span Shift	-2.0		2.0	%Span	Reference to 25°C over Compensated Temperature
Compensation Temperature	0		45	°C	
Operating Temperature	0		55	°C	
Response Time (10% to 90%)		0.1		ms	
Vibration	±20g MIL-STD-810C, Procedure 514.2, Figure 514.2-2, Curve L				
Shock	50g, 11 msec half sine shock per mil standard 202F. Method 213B, Condition A				