

P-700V

Pressure Transmitter

Compact Metal Sensor

- 0 to 1...600bar
- Provides a high level Analog
- Superior Long term Stability
- Temperature Compensated
- Linear Amplified Output
- Excellent Repeatability & Hysteresis
- EMI/RFI Protection

P-700V series Long term minimization of these errors is maintained after millions of full scale overpressure cycles, making electronic set point virtually drift-free. Use of Metal materials in 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 welding Sealing type. metal sensing element contains and integral, reliable, solid state, custom hybrid circuit signal conditioner. 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 associated with trimming by external devices or a laser.

Physical Data [Custom Ranges and Compound Ranges Available]			
Gauge Pressure	Unit	Over Pressure	Burst
◆ 5, 10, 15, 20, 35, 50	bar	◆ 3 x F.S.	◆ 5 x F.S.
◆ 100, 250, 300, 600	bar	◆ 2 x F.S.	◆ 3 x F.S.

General SPEC	
Characteristic	P-700V
Pressure Range	0 to 1...600bar
Power Supply	3VDC / 5VDC
Output	0.5 to 4.5VDC / I ² C output
Operating Temp. Range	-40 to 135°C
Compensated Temp. Range	-30 to 125 °C
Total Accuracy	±1.0 %F.S (Option : ±0.5 %F.S)
Non-linearity	±0.5%
Hysteresis and repeatability	±0.05% typical
Body Material	SUS304

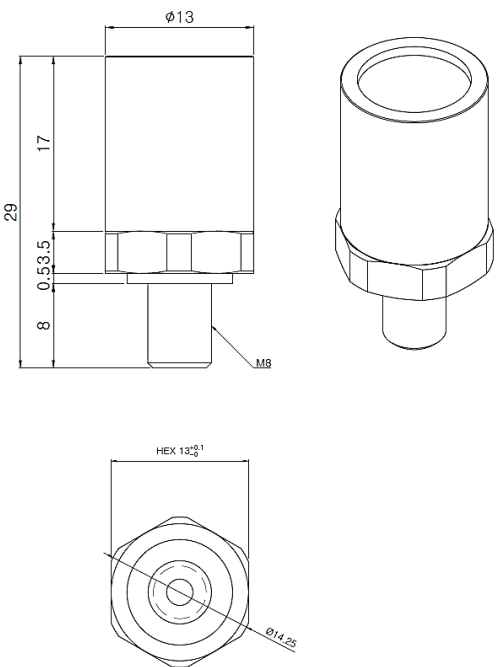
TYPICAL APPLICATIONS

- ✓ Process control
- ✓ Pneumatic and hydraulic controls
- ✓ Pump and compressors
- ✓ Agricultural technology
- ✓ Environmental control systems
- ✓ Level / Depth instrumentation



Dimensions (mm)

Description



Technical drawing of the P-700V Metal sensor showing dimensions and features:

- Overall height: 29 mm
- Top section height: 17 mm
- Threaded section height: 0.53.5 mm
- Bottom section height: 8 mm
- Thread: M8
- Hexagonal base: HEX 13^{+0.1}₋₀
- Base diameter: Ø14.25

Wire Color	Description
RED	VDD
GREEN	Output
BLACK	GND

P - 700V

1) Output type						
0.5 to 4.5 VDC						
Other on request	Z					
2) Pressure range						
0 to 5 bar	-----	-----	005			
0 to 10 bar	-----	-----	010			
0 to 15 bar	-----	-----	015			
0 to 20 bar	-----	-----	020			
0 to 35 bar	-----	-----	035			
0 to 50 bar	-----	-----	050			
0 to 100 bar	-----	-----	100			
0 to 250 bar	-----	-----	250			
0 to 600 bar	-----	-----	600			
Other on request	-----	-----	Z			
3) Supply Voltage						
5 VDC	-----	-----	-----	-----	-----	
Other on request	-----	-----	-----	-----	Z	
4) Process connection						
M6	-----	-----	-----	-----	-----	-----
Other on request	-----	-----	-----	-----	-----	Z

Document#	DATE	Description
P-700V rev1.0	2024.08.08	First Release.

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