

SP3 – General Pressure Transducer

The SP3 series are highly reliable and stable pressure transducers compensated with digital ASIC as well as EMI/RFI protection. This series can be constructed as millivolt output pressure sensor, amplified voltage output pressure transducer, or 4-20mA loop powered pressure transmitter and are available in gauge, sealed gage and compound gage pressure ranges.



Utilizing a one-piece stainless steel sensing element, the SP3 covers a wide variety of applications that require rugged construction, high cycle life, as well as media compatibility to deliver outstanding and long-term performance.

Application

- Pumps and Compressors
- Hydraulic/Pneumatic Systems
- Off Road Machines
- Energy and Water Management
- Pressure Instrumentation
- Train Breaking Systems

BENEFITS

- Wide Operating Temperature Range
- Low Static and Thermal Errors
- Unparalleled Price and Performance
- EMI/RFI Protection

Ordering Information

S	P	3	A	010	B	G	3	B1	0
Accuracy 3 = 0.5%FS		Mounting A = 1/4MNPT B = 1/8MNPT D = G1/4 Male H = M20x1.5 Male K = G1/2 Male		Pressure (--- = in 3 digits) 010 = 10 100 = 100 01K = 1000 10K = 10,000		Pressure Unit B = BAR P = PSI K = Kpa		Header 0=17-4 PH	
Pressure type G = Gage S = Sealed C = Compound		Electrical X = Special B - = meter cable (in 1 meter increment) C = Mini DIN 43650C D = Packard (Metripac 150, 3-Pin) F = DIN 43650A		Output 1 = 0.5-4.5V ratiometric 2 = 1-5V 5 = 20mV/V 3 = 4-20mA 6 = 0-10VDC 4 = 0-5V 9 = 10mV/V					

*Compound ranges up to -1bar to 100bar available. Consult for detail.

General Specification at 25 °C

Pressure range: 0 to 500KPa to 100MPa
Accuracy: $\pm 0.5\%$ of FS Span (combined linearity, hysteresis and repeatability)
Media compatibility: 17-4 PH
Pressure cycles: $>10^8$ full pressure cycles
Pressure overland: 2X rated pressure
Burst pressure: 5X or 20000 PSI whichever is less
Long term stability: $\pm 0.25\%$ FS Span (Typical)

Electrical:

Supply voltage: 5VDC or 10-30VDC
Outputs: 0.5-4.5VDC, ratio metric, 1-5VDC, fixed or 4-20mA, two wire
Zero offset: $\pm 1\%$ of FS
Span tolerance: $\pm 1\%$ of FS Span
EMI Protection: 100V/m

Environmental Performance

Operating temperature range: -40 to 125°C (or consult)
Compensated temperature range: 0 to 70°C
Total Error Band: $\pm 1\%$ FS (within compensation temperature range)
Rating: IP66

Dimensions in mm

