

DIGITAL
PRESSURE TRANSMITTER
(SPD2)

Introduction

A pressure transmitter is a transducer that converts pressure into an analog electrical signal. This SPD2 pressure transmitter is microcomputer digital type which can customize the pressure output via internal parameters. The sensor head use a ceramic piezoresistive pressure element with SUS316.



Feature

- Thick film strain gage on ceramic and stainless steel (SUS316)
 - Pressure range from -1 to 250 bar
 - Display pressure units: bar, kg/cm², kpa, mpa, psi, mmHg, inHg.
 - Memory hold maximum value and minimum value function
 - 16 bit DAC analog output function
 - Protection class NEMA 4/IP 65
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Application

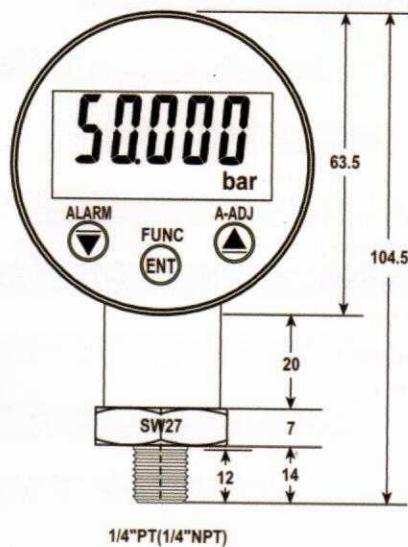
- Air compressor
 - Various type of pumps
 - Hydraulic machine
 - Water treatment plant
 - Water works
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Specification

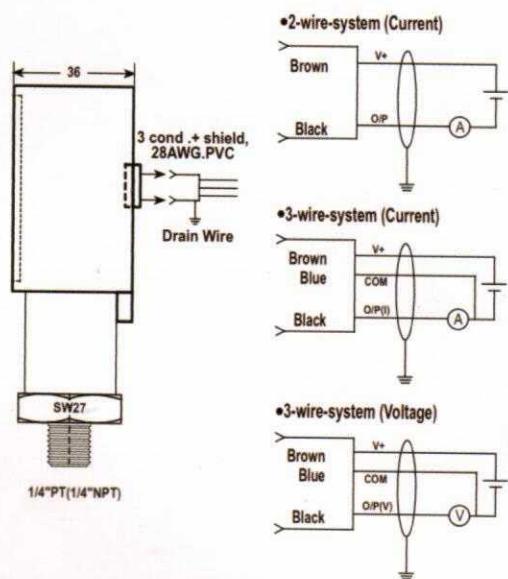
Measuring accuracy	0.25% F.S.
Supply voltage	DC10 to 28V (Output=DC4~20mA(3-wire)/1~5V) DC14 to 28V (Output=DC4~20mA(2-wire)/DC0~10V)
Indication cycle	0.1s~9.9s can be modified
Measuring range	-19999~99999 digit
Zero (offset) range	0~±999 digit adjustable
Span range	0~±999 digit adjustable
Maximum permissible over pressure	Maximum 2 x rated (< 60 Bar) Maximum 1.5 x rated (> 60 Bar)
Burst pressure	3 x rated (<60 Bar) 1.8 x rated (> 60 Bar)
Analog output resolution	16 bit DAC
Response time	50ms (0~90%)
Output drive capability	<[(Vs-12V)/0.02A] Ω (Current 2-wire) <[(Vs-18V)/0.02A] Ω (Current 3-wire) >1K Ω (Voltage 3-wire)
Output ripple (p-p)	< 0.1% F.S.
Thermal span shift	±0.05% F.S./10 °C
Thermal zero shift	±0.05% F.S./10 °C
Zero point long term stability (23 ± 5°C)	±0.1% F.S./year (<60 Bar) ±0.15% F.S./year (>60 Bar)
Display	Bright red LED high 10.16mm (0.4 ")
Parameter setting	Touch switches
Memory mode	Non-volatile E ² PROM memory
Diaphragm material	Ceramic A1203-96%
Pressure port materials	Stainless steel 1.4401 (SUS316)
Seale (media wetted) materials	NBR < 16bar PVDF > 16 Bar
Display housing material	FR-PET (UL94-VO)
Operating temperature range	-10 to 60°C
Storage & medium temperature range	-30 to 80°C
CE EMC Certificate	EN 55022:1998/A1: 2000 Class A EN61000-3-2: 2000 EN61000-3-3:1995/A1: 2001 EN 55024:1998/A1:2001

Digital Pressure Transmitter

Dimension (unit: mm)



Terminal connection



Digital Pressure Transmitter

Ordering Code

SPD2	Digital Pressure Transmitter
<u>Pressure Range</u>	
1	-1 ~ 2 bar
2	-1 ~ 10 bar
3	-1 ~ 50 bar
4	0 ~ 250 bar
<u>Output Range</u>	
1	DC 4-20mA (2-wire system)
2	DC 4~20mA (3-wire system)
3	DC 1~5V (3-wire system)
4	DC 0~10V (3-wire system)
5	Special (3-wire system)
<u>Pressure Connection</u>	
1	1/4" PT
2	1/4 " NPT
9	Special
<u>Cable Length</u>	
2	2M (standard)
9	Special

*3 cond. + shield, 28AWG, PVC