PVA Series Amplified Solid State Pressure Sensors





FEATURES

- 2-wire, 4-20 mA output current linearly proportional to pressure
- 10 to 32 V dc supply voltage
- Screw terminals
- 1/2-14 NPT conduit threads
- · Repeatability is 0.25% of full scale output
- · Buna-N sealing standard
- Rugged, zinc die-cast housing
- -40° C to +85° C temperature range
- Silicon sensor chip...integral diaphragm with implanted resistors provides high accuracy and repeatability
- NEMA 1, 3, 3R, 4, 13 sealing
- UL listed

Modifications

To specify port facing other than front of sensor, add the following modification number to the catalogue listing in the order guide:

- 1 Port to right of sensor front
- 2 Port to left of sensor front
- 3 Port to back of sensor

Example: PVA0100AA2 is the PVA0100AA with port to left of sensor front.

PVA pressure-to-current (P/I) sensors provide a current output rather than voltage. Current is less susceptible to errors from electromagnetic interference (EMI), and remains constant over long control lines, eliminating voltage drop problems. When placed in series with a 10-32 V dc voltage source, the PVA P/I sensor causes a 4-20 mA change in current proportional to pressure.

PVA heavy duty gauge pressure sensors are designed to be used in many types of industrial applications.

ORDER GUIDE

Pressure range (bar)		0-0,6895	0,2068-1,034	0-2,068	0-6,89	0-17,24
Catalogue Listing	Buna-N seal	PVA0010AA	PVA0015AA	PVA0030AA	PVA0100AA	PVA0250AA
	Ethylene propylene seal	PVA0010AC	PVA0015AC	PVA0030AC	PVA0100AC	PVA0250AC
Proof pressure, max. (bar)		2,07	3,10	4,14	13,79	34,48
Sensitivity at 24 V dc, 25° C		23,18 mA/bar	18,84 mA/bar	7,7 mA/bar	2,3 mA/bar	0,9 mA/bar
Supply voltage, (V _s)		10 to 32 V dc				
Change in current, (I _s)		4 to 20 mA, proportional to pressure				
Null		$I_s = 4.0 \pm 0.3$ milliamps				
Full pressure (upper limit F.S.O.*)		$I_s = 20 \pm 0.3 \text{mA}$	20 ± 0,3mA	20 ± 0,5mA	20 ± 0,5mA	20 ±0,5mA
Linearity and hysteresis (Best Fit Straight Line)		0,75 % F.S.O.	0,75 % F.S.O.	0,75 % F.S.O.	0,75 % F.S.O.	± 1,0 % F.S.O.
Repeatability, typical		0,25 % F.S.O.				
Temperature error, max.		± 1,0 % F.S.O.				
Supply voltage sensitivity, typ.		\pm 0,15 % F.S.O. (20 to 24 and 24 to 28 V dc)				
Temperature range Operating and storage Compensated		-40° to +85° C 0° to +50° C				
Response time, max.		1 ms				
Weight		681 g				
Sealing		NEMA 1, 3, 3R, 4, 13				

^{*} F.S.O. (Full Scale Output) is the algebraic difference between end points (output and null).

GENERAL MEDIA COMPATIBILITY

Buna-N: Petroleum products, water and others. Ethylene propylene: Hydraulic fluids, phosphate esters and others.