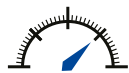
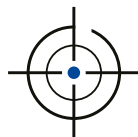


Pressure Sensor

PV-25L Series



High Resolution



Narrow total error band



Excellent long-term Stability

Description

The PV-25L series is a high performance configurable solution for pressure measurement. The micromachined silicon technology and analogue circuitry enables excellent accuracy and stability. On board temperature measurement provides real time temperature compensation while high resolution analogue signal path is available with fast response.

Pressure Ranges (FRO) - Gauge

100 mbar to 150 bar (any zero based range between)
Bi-directional from ± 100 mbar

Pressure Ranges (FRO) - Absolute

250 mbar to 150 bar (any zero based range between)

Overpressure

200% to 400% depending on pressure range (FRO)

Output Signal (3-wire)

0 to 5 V
0 to 10 V
1 to 6 V

Load Impedance

> 5 kOhm

Measurement Performance

Valid for Pressure Ranges ≥ 1 bar

Accuracy

(includes non-linearity, hysteresis and repeatability)

Standard $\leq \pm 0.1$ % FRO
optional $\leq \pm 0.05$ % FRO
optional $\leq \pm 0.02$ % FRO

Total Error Band within Operating Temperature Range

(includes non-linearity, hysteresis, repeatability, zero and span settings, thermal shift on zero and span)

Standard $\leq \pm 0.5$ % FRO
optional $\leq \pm 0.25$ % FRO
optional $\leq \pm 0.1$ % FRO

Stability ≤ 0.1 % FRO per year (typically)

Response Time < 0.5 ms

Zero and Span Setting

Digital adjustable, optional

Operating Temperature Range

-20°C to $+80^{\circ}\text{C}$

Compensation Temperature Range

0°C to $+50^{\circ}\text{C}$

Supply Voltage (V_s)

8 to 32 VDC (for 5 V or 6 V Output Signal)
13 to 32 VDC (for 10 V Output Signal)

Current Consumption

≤ 5 mA

Material of Wetted Parts

1.4404 and 1.4435

Electrical Connection

Cable length 1 m (IP67)
Plug EN 175301-803 Form A (IP65)
(DIN 43650) Mating Connector included
Plug M12x1, Mating Connector optional

Pressure Connection

G1/4 female
G1/4 male, DIN 3852 T11, seal included
Others on Request

Protection Rate

Depending on mating connector

Weight

80 g, app.

EMC

12 V/m 80 MHz-2 GHz to DIN EN 61326 (A)

Vibration

DIN EN 60068-2-64 Grade 1

Electrical Connections

Output	Function	M12x1	DIN 43650	Cable
Volts	+ V_s	1	1	Brown
	+ Output	4	3	Yellow
	- V_s	3	2	White
	Adjustment		n.a.	
	Cable Screen			Black

Dimensions (ca. mm)

Dimensions	C	B (Male)	B (Female)
M12x1	9,5	51.3	61.3
DIN 43650	28	53.6	63.6
Cable	11	48.5	58.5

Dimensions	A	D
G1/4 male	12	$\varnothing 25$
G1/4 female	n.a.	$\varnothing 25$

