



Pressure Sensor **PV-22 Series**



High Resolution



High Speed
Analogue Output



Excellent long-term Stability

Description

The PV-22 series has been designed to withstand the extreme temperature, vibration and shock levels of automotive test applications. The fully welded stainless steel pressure module provides excellent media compatibility, high over-pressure and burst ratings. The temperature compensated signal is a customer specific high level output voltage ideal for interfacing with data acquisition hardware. The PV-22 series can be powered directly from the vehicle battery, even during the start cycle. It is suitable for measurements where temperature cannot be controlled and reliable high performance measurement is required.

Pressure Ranges (FRO) - Gauge

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

Pressure Ranges (FRO) - Absolute

2 bar to 150 bar (any zero based range between)

Overpressure

200 / 400 % depending on pressure range (FRO)

Output Signal (3-wire)

0 to 5 V
1 to 6 V
0.5 to 4.5 V

Load Impedance

> 5 kOhm

Measurement Performance

Valid for Pressure Ranges ≥ 2 bar

Total Error Band within Operating Temperature Range

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

Standard	$\leq 1\%$ FRO
optional	$\leq 0.5\%$ FRO
optional	$\leq 0.25\%$ FRO

Stability

$\leq 0.1\%$ FRO per year (typically)

Response Time

< 0.5 ms

Zero and Span Setting

Digital adjustable, optional

Operating Temperature Range

-40°C to +125°C

Supply Voltage (V_s)

8 to 32 VDC

Current Consumption

≤ 5 mA

Material of Wetted Parts

1.4404 and 1.4435

Electrical Connection

6-pin bayonet MIL-C26482

5-pin M12x1

LEMO HGA.0B.306

High temperature shielded cable

Pressure Connection

M10x1 male length 12 mm, 80° internal cone

M10x1 male length 8 mm, flat end

M14x1.5 male 60° internal cone

On request

M10x1 female

7/16-20 UNF 74° external cone

G1/4 male DIN 3852-2 form A

Rectus 21 (male)

Protection Rate

Depending on mating connector

Weight

75 g. app.

EMC

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

Vibration

DIN EN 60068-2-64 Grade 1

Electrical Connections

Output	Function	M12x1	MIL-C 26482	Cable	HGA.0B
Volts	+ Vs	1	A	Red	4
	+ Output	4	B	White	1
	- Vs	3	C+D	Blue	2+5

Dimensions (mm)

Thread	A	Connector	B	C
M10x1 length 12 mm	12	M12x1	33	12
M10x1 length 8 mm	8	Cable	35	19
M14x1.5	10	MIL-C26482	37	12
		HGA.0B	45	3

