



DDM



## 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  $\pm 100$  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  $\geq 2$  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

$-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

### Supply Voltage ( $V_s$ )

8 to 32 VDC

### Current Consumption

$\leq 5$  mA

### Material of Wetted Parts

1.4404 and 1.4435

### Electrical Connection

6-pin bayonet MIL-C26482  
5-pin M12x1  
LEMO HGA.OB.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

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	MIL-C 26482	Cable	HGA.OB
Volts	+ $V_s$	1	A	Red	4
	+ Output	4	B	White	1
	- $V_s$	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.OB	45	3

