





Pressure Sensor

PV-15 Series



Minimised



High Speed Analogue Output



Excellent long-term Stability



Description

The PV-15 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-15 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:

2.5 bar to 150 bar (any zero based range between) Bi-directional e.g. – 1+4 bar

Pressure Ranges (FRO) - Absolute:

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

Overpressure

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

Output Signal (3-wire)

0.5 to 4.5 V

Load Impedance

> 5 kOhm

Measurement Performance

Total Error Band within Operating Temperature Range (includes non-linearity, hysteresis, repeatability, zero and span settings, thermal shift on zero and span)

 $\begin{array}{lll} \text{Standard} & \leq & 1\,\%\,\text{FRO} \\ \text{optional} & \leq & 0.5\,\%\,\text{FRO} \\ \text{optional} & \leq & 0.25\,\%\,\text{FRO} \\ \end{array}$

Stability

≤ 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

Process Media Temperature

up to +150°C

Supply Voltage (Vs)

8 to 32 VDC

Current Consumption

≤ 5 mA

Material of Wetted Parts

1.4404 and 1.4435

Electrical Connection

5-pin bayonet Deutsch AS 4H 06-05PN-HE High temperature shielded cable

Pressure Connection

M6×1

M8×1

Others on request

Protection Rate

Depending on mating connector

Weight

30 g, app.

FMC

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

Vibration

DIN EN 60068-2-64 Grade 1

Electrical Connections

Output	Function	5-pin Deutsch	Cable
Volts	+ √ _S	4	Red
	+ Output	1	Yellow
	- √ _S	2+3	Blue
	Adjustment	5	Green
	TEDS	_	_

Dimensions (mm)

Connection	В	С	D
5-pin bayonet Deutsch	24.5	9.5	15.9
High temperature cable	19.1	6.2	15.8

Thread	A
M6×1 male	8
M8×1 male	8

