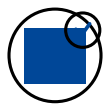


DDM

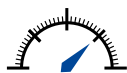


pressure sensor for hydrogen

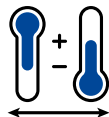
PV-22H₂ Series



qualified for hydrogen use



high resolution analogue output



wide temperature range

Description

DDM's hydrogen use pressure sensors PV-22H2 series have extensively been tested with various compositions of hydrogen, oxygen, water and water vapour. The pressure modules and process connections are made of 316L stainless steel. They are fit together without seal, fully welded and helium leak tested. The PV-22H2 is supplied with a manufacturer's declaration for hydrogen use. Well known car manufacturers have already proven the PV-22H2 pressure sensors to be accurate and reliable.

Pressure Ranges (FRO) - Gauge

0 to 4 bar (other pressure ranges on request)

Pressure Ranges (FRO) - Absolute

0 to 5 bar (other pressure ranges on request)

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 ≥ 1 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 M12×1

LEMO HGA.0B.306

High temperature shielded cable

Pressure Connection

M10×1 male length 12 mm, 80° internal cone

M10×1 male length 8 mm, flat end

M14×1.5 male 60° internal cone

On request

M10×1 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	M12×1	MIL-C 26482	Cable	HGA.0B
Volts	+ V _s	1	A	Red	4
	+ Output	4	B	White	1
	- V _s	3	C+D	Blue	2+5

Dimensions (mm)

Thread	A
M10×1 length 12 mm	12
M10×1 length 8 mm	8
M14×1.5	10

Connector	B	C
M12×1	33	12
Cable	35	19
MIL-C26482	37	12
HGA.0B	45	3

