HEP-3
Miniature Flush Diaphragm Pressure Sensor

HPE-3 is a miniature sensor designed specifically for measuring static and dynamic pressure in various conditions, including harsh environments. It is made of stainless steel and has a standard measurement range of 0-20 bar to 0-70 bar.
HPE-3 has unique features that minimize zero-point deviation caused by installation torque.
HPE-3 can be integrated with different electronic components to achieve amplified output: 0.5-4.5V, 0-5V, 4-20mA.



FEATURES

- Wear-resistant and durable stainless steel
- M8x1, M10x1 threads are available as options
- No cavity flush diaphragm structure
- Suitable for both static and dynamic applications
- Low installation torque sensitivity

GREAT FOR

- Hydraulic adjustment process
- Laboratory and research
- Precision dispensing machine



Configurable Design

The HEP-3 is ideal for demanding industrial applications requiring high ruggedness and reliability. It offers flexible choices of thread sizes, pressure ranges, electrical connections (cable or connector), wetted materials, and output signals.

Hansensol provides semi-custom and fully custom designs based on volume and application needs.

Other unlisted configurations can also be achieved. Please feel free to inquire.

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SPECIFICATIONS

Performance

Accuracy*	⩽±0.25% typical, ±0.5%FS Max
Stability (1 year)	⩽0.25%FS
Pressure Cycles	1×10^7
Proof Pressure	2X
Burst Pressure	3X (Max 20KPSI)

** Accuracy includes non-linearity, hysteresis and non-repeatability*

Thermal

Operating Temperature	-40···125℃
Media Temperature	-40···125℃
Storage Temperature	-40···125℃
Compensated Temperature	-20···85℃
TC Zero	⩽±1.0% typical, ±1.5%FS Max
TC Span	⩽±1.0% typical, ±1.5%FS Max

Enviromantal

Isolation (Body to any Lead)	> 100 MΩ@250VDC
EMI/RFI Protection	Yes
IP Rating:	IP65minimum
Vibration:	±20g,1Hz to 200Hz
Shock	50g,11msec,1/2sine

** IP Rating is dependent on electrical termination selected. Contact factory for more information.*

** IP Rating applies when electrical connector is attached with the appropriate ingress protection.*

Electrical (Current)

Outputs:	4···20mA
Excitation:	9-36V
Current Consumption:	< 10 mA
Output Load:	0···1350Ω
Frequency Response (min):	<3ms Without Snubber
Zero Offset (of FS):	⩽ ±0.5% typical
Span Tolerance (of FS):	⩽ ±0.5% typical

Electrical (Voltage)

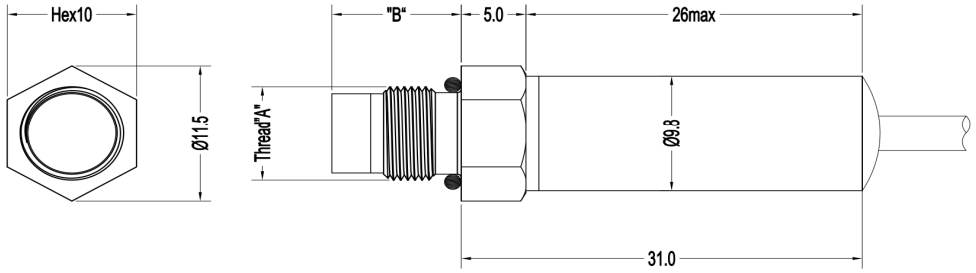
Outputs:	0-5V, 0.5-4.5V
Excitation:	13-36V
Current Consumption:	< 10 mA
Output Load:	> 100kΩ
Frequency Response (min):	<2ms Without Snubber
Zero Offset (of FS):	⩽ ±0.5% typical
Span Tolerance (of FS):	⩽ ±0.5% typical

Outputs:	0.5-4.5V ratiometric
Excitation:	5V
Current Consumption:	< 10 mA
Output Load:	> 100kΩ
Frequency Response (min):	<2ms Without Snubber
Zero Offset (of FS):	⩽ ±0.5% typical
Span Tolerance (of FS):	⩽ ±0.5% typical

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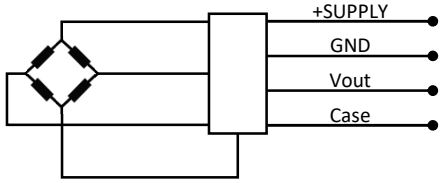
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Demition



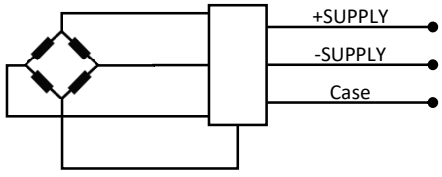
Code	Dem "A"	Dem"B"	HEX	O-RING	Installation torque
M8	M8X1	10	10	Ø6.07x1.78 FKM	2.5 Nm (5 Nm max.)
M10	M10X1	10	10	Ø7.65x1.63 FKM	3 Nm (6 Nm max.)

VOLTAGE AMPLIFIED OUTPUT



Cable	M8*5P
RE	1
BK	2
WH	3
Shield	4

CURRENT AMPLIFIED OUTPUT



Cable	M8*5P
RE	1
BK	2
Shield	4

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Ordering Information

HEP-3	-	4	9	1	2	2	M8	-	020B	G	-	000

Output

1	0.5-4.5V RATIOMETRIC
3	4-20mA
4	0-5V
7	0.5-4.5V
X	Customer Special

Connection

1	Cable
9	M8*5P
X	Customer Special

Material (Diaphragm+Screw)

1	17-4PH+304

Snubber

2	Without Snubber

Label

2	Lazer Marking

Options

000	No Special Option

Pressure Type

G	Gauge

Pressure Range+Unit

Code	PSI	Code	Bar
300P	0-300	020B	0-20
400P	0-400	030B	0-30
500P	0-500	035B	0-35
01KP	0-1000	070B	0-70

Pressure Port

M8	M8X1
M10	M10X1

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