HMP71
Flush Diaphragm Pressure Transmitter

The HMP71 series features a flush diaphragm and cavity-free design, eliminating clogging and residue caused by viscous, particulate, or crystallizing media. Its high-strength stainless steel sensing diaphragm ensures excellent impact, erosion, and corrosion resistance, making it ideal for slurry, crude oil, food, and pharmaceutical applications.

A dedicated ASIC amplifier provides low-noise, high-linearity signal conditioning and temperature compensation, significantly enhancing output stability over the full temperature range. Optimized attaching, bonding and packaging processes reduce creep and hysteresis, delivering nonlinearity accuracy of ±0.25% FS and long-term stability better than 0.25% FS/year.



FEATURES

- Sturdy flush diaphragm, impact resistance
- Pressure range up to 1500Bar
- Variety of Pressure Ports
- Non linearity upto ±0.5%
- Up to ±1.0% Total Error Band
- -20℃...+85℃ Compensated Temperature
- -40℃...+120℃ Operating Temperature

GREAT FOR

- Coatings & polyurethane equipment
- Food/Pharma equipment
- Paint inspection systems
- Mud, slurry pumps, coal slurry, pulp, crude oil, asphalt
- Oilfield drilling, logging, offshore platforms
- Oil well measurement instruments
- Other industrial sites needing anti-clogging, high vibration & impact resistance



Configurable Design

The HMP71 is ideal for demanding industrial applications requiring high ruggedness and reliability. It offers flexible choices of thread sizes, pressure ranges (up to 1,000 bar), 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%FS BSFL
Stability (1 year)	≤0.25%FS
Pressure Cycles	1×10^7
Proof Pressure	2X
Burst Pressure	5X (15k psi Max)

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

Thermal

Operating Temperature	-40···125℃
Media Temperature	-40···125℃
Storage Temperature	-40···120℃
Compensated Temperature	-20···85℃
TC Zero	≤ ±0.5% typical,, ±1% Max
TC Span	≤ ±0.5% typical,, ±1% 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):	≤ ±0.25% typical,±0.5% Max
Span Tolerance (of FS):	≤ ±0.5% typical

Electrical (Voltage)

Outputs:	0-5V, 1-5V, 1-6V, 0-10V
Excitation:	13-36V
Current Consumption:	< 10 mA
Output Load:	> 100kΩ
Frequency Response (min):	<2ms Without Snubber
Zero Offset (of FS):	≤ ±0.25% typical,±0.5% Max
Span Tolerance (of FS):	≤ ±0.5% typical

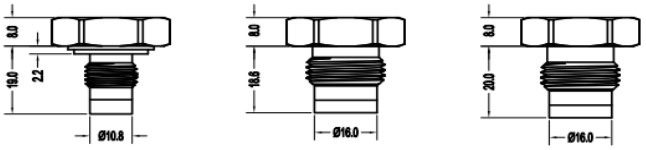
Outputs:	0.5-4.5V ratiometric
Excitation:	5V
Current Consumption:	< 10 mA
Output Load:	> 100kΩ
Frequency Response (min):	<2ms Without Snubber
Zero Offset (of FS):	≤ ±0.25% typical,±0.5% Max
Span Tolerance (of FS):	≤ ±0.5% typical

Outputs:	0.5-2.5V ratiometric
Excitation:	3-5VDC
Current Consumption:	< 3 mA
Output Load:	> 100kΩ
Frequency Response (min):	<2ms Without Snubber
Zero Offset (of FS):	≤ ±0.25% typical,±0.5% Max
Span Tolerance (of FS):	≤ ±0.5% typical

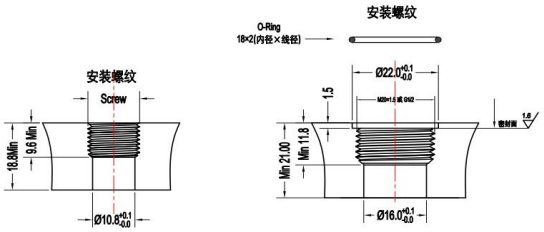
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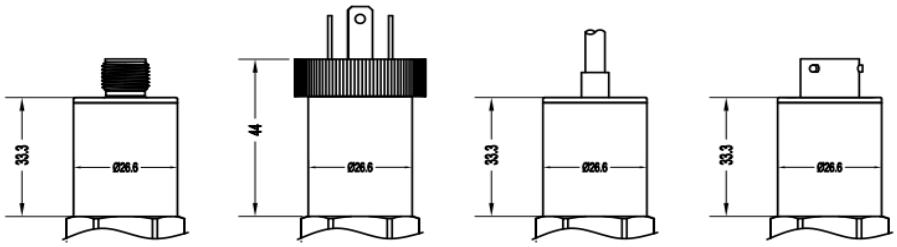
Pressure Connection



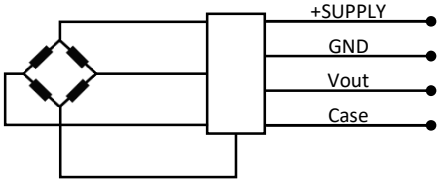
Thread Mounting



Electrical Connection

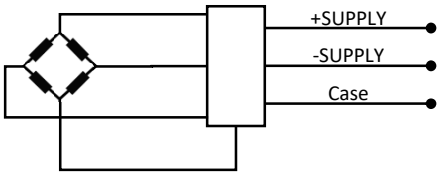


VOLTAGE AMPLIFIED OUTPUT



Cable	M12	Form A	Bindex 6P
RE	1	3	A
BK	2	2	B
WH	3	1	C
Shield	4	4	F

CURRENT AMPLIFIED OUTPUT



Cable	M12	Form A	Bindex 6P
RE	1	1	A
BK	2	2	B
Shield	4	4	F

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Ordering Information

HMP71	-	3	4	4	2	2	G4D	-	500P	G	-	000

Output	
1	0.5-4.5V RATIOMETRIC
2	1-5V
3	4-20mA
4	0-5V
5	0-10V
6	1-6V
7	0.5-4.5V
X	Customer Special

Connection	
1	Cable
4	M12
5	FORM A
7	Bindex-6P
X	Customized

Material (Diaphragm+Screw)	
3	316L
4	17-4PH+316L
5	C276+316L
6	625+316L
7	718+316L

Snubber	
2	Without Snubber

Label	
0	No
1	Adhesive
2	Lazer

Options	
000	No Special Option

Pressure Type	
G	Gauge
C	Compound

Pressure Range+Unit			
Code	PSI	Code	Bar
100P	0-100	007B	0-7
150P	0-150	010B	0-10
250P	0-250	016B	0-16
500P	0-500	035B	0-35
1000P	0-1000	070B	0-70
1500P	0-1500	100B	0-100
2250P	0-2250	150B	0-150
3000P	0-3000	200B	0-200
5000P	0-5000	350B	0-350
7500P	0-7500	500B	0-500
010KP	0-10000	700B	0-700
015KP	0-15000	1000B	0-1000

Pressure Port	
G4D	G1/2 DIN
M20	M20×1.5 mm ISO 6149-2
N4	1/2-18 NPT
U9	9/16-18 UNF Male
X	Customized

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