

OEM Pressure Modules

Ceramic Capacitive – Gage & Absolute Pressures



Description

Kavlico's OEM sensing modules utilize our more than 20-year filed-proven ceramic capacitive sensing technology and are intended for high volume applications. Millions of Kavlico sensors are installed worldwide in a variety of industrial and transportation applications.

The modules are equipped with a robust flush mounted ceramic sensing diaphragm that is compatible with most industrial fluids and gaseous media.

The module allows for easy integration and installation into final assemblies for a wide variety of applications.

With a 10-year minimum shelf life and a lifetime of millions of pressure cycles, Kavlico's ruggedly designed modules are made to last.

PS162: 22mm capsule for high pressures from 0-1 through 0-60 Bar. Staked-on brass spacer.

PS312: 32mm capsule for medium pressures from 0-70 mBar through 0-20 Bar. Staked-on brass spacer.

Features

- Repeatable, Accurate Measurements Over Equipment Lifetime
- High Output Signal Accuracy
- Excellent Long-term Stability
- EMI/RFI Protected
- High Overpressure & Humidity Protection
- High Shock & Vibration Tolerance for Heavy Equipment Use
- Compensated Over a Wide Operating Temperature Range

Applications

- Industrial Pumps & Compressors
- Refrigeration
- Heating, Ventilation and Air-conditioning (HVAC)
- Steam Sterilizers, Boilers & Dryers
- Test & Monitoring Equipment
- Process Controls
- Facility Management
- Mechanical Engineering
- Filter Restriction
- Fuel Cells
- Hydraulics Systems
- Injection Molding
- Level Measurement
- Water Management
- Power Generators



PS162



PS312

Standard Full Scale Pressure Ranges

70 mBar up to 60 Bar



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Type	PS162	PS312
Linearity (BFSL)*	± 0.1% FS Typ. ± 0.25% FS Max.	± 0.1% FS Typ. ± 0.20 % FS Max.
Total Error Band (TEB)	± 2.0% FS [-20 to +85°C]	± 3.0% FS [-40 to +125°C]
Stability	± 0.1% FS Typ.	± 0.25% FS Max. (1 year)
Nominal Output Voltage	1.0 up to 4.0V	Ratiometric to Supply Voltage
Supply Voltage		5.00 Vdc ± 0.25 Vdc
Minimum Supply Voltage		3.5 Vdc
Supply Current	2.0 mA (Max.) at 5 Vdc	2.2 mA at 5 Vdc
Over Voltage		7 Vdc
Reverse Polarity Protection		
Operating Temperature Range		-40°C up to +125°C
Electrical Connection		3 Isolated Wires 0.15 mm, 2 – 75mm Long Red: +Vcc, Green: +Out, Black: GND

*Including Hysteresis and Repeatability

**Linearity + Temperature Coefficient + Zero and Span Tolerances

TC Zero per 10k:	0.05% Typ. ± 0.10% Max.
TC Span per 10k:	± 0.05% Typ. ± 0.10% Max.
Response / Start up Time:	< 10 ms at 63%
Load Resistance:	25 kW Min.
Service Life:	10 Million Full Scale Cycles Min.
Wetted Materials:	Ceramic Al2O3, External Gold Coating on Diaphragm
Process Media:	All Gases and Liquids Compatible with Ceramic Al2O3 and Gold
EMI:	Dependent upon Customer Packaging

How to Order

PS162					
Type	Pressure Ranges (Bar)		Proof Pressure Max.	Burst Pressure Max.	Sensor Thickness (mm)
	Absolute	Gage			
3		0.2	2	4	4.29
5		0.35	2	4	4.29
7		0.5	4.3	8	4.36
15	1	1	4.3	8	4.36
30	2	2	7.2	13	4.46
50	3.5	3.5	10.5	18	4.54
70	5	5	15	25	4.60
100	7	7	21	25	4.67
150	10	10	30	50	4.75
300	20	20	60	100	4.94
500	35	35	105	175	5.10
600	40	40	105	175	5.10
1000	60	60	210	350	5.39

Reference	
A	Absolute
G	Gage

PS162-X-X / For example: PS162-100-A for 7 Bar Absolute

PS312					
Type	Pressure Ranges (Bar)		Proof Pressure Max.	Burst Pressure Max.	Sensor Thickness (mm)
	Absolute	Gage			
1		0.07	1.2	2.4	5.36
3		0.2	1.4	2.7	5.42
5		0.35	1.5	3	5.47
7		0.5	2.25	4.1	5.57
10		0.75	2.25	4.1	5.57
15	1	1	23	5	5.64
30	2	2	6	10	5.78
50	3.5	3.5	10.5	17	5.90
75	5	5	15	25	6.01
100	7	7	21	35	6.11
150	10	10	30	50	6.25
300	20	20	60	100	6.55

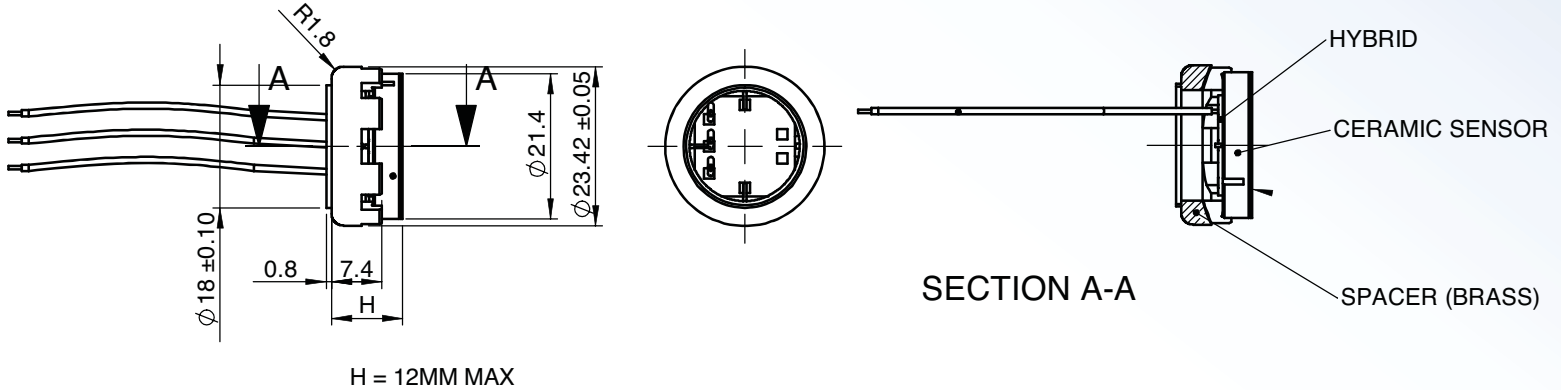
Reference	
A	Absolute
G	Gage

PS312-X-X / For example: PS312-15-G : for 1 Bar Gage

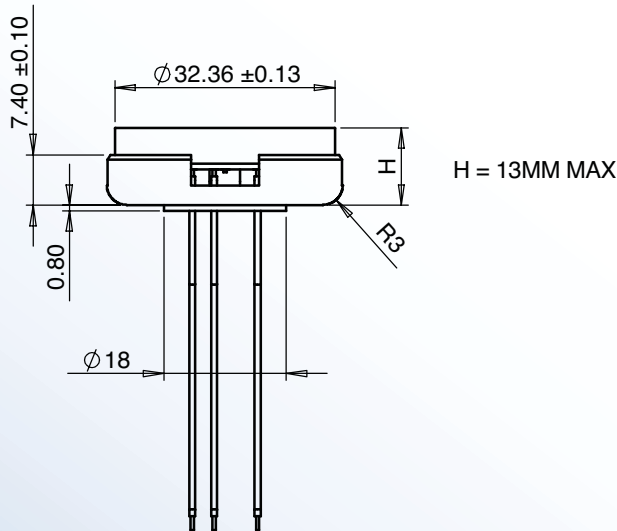
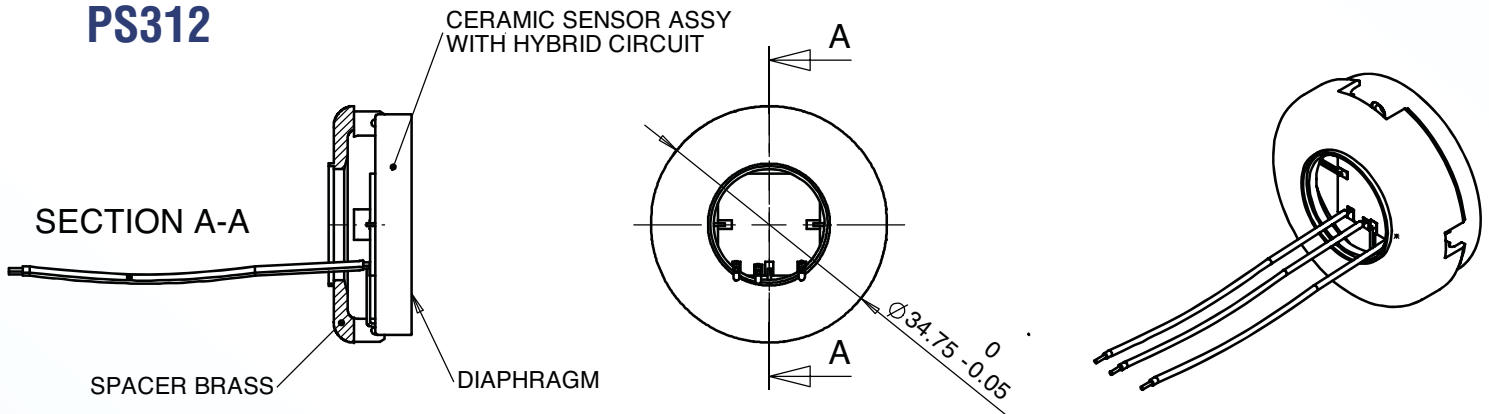
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PS162



PS312



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