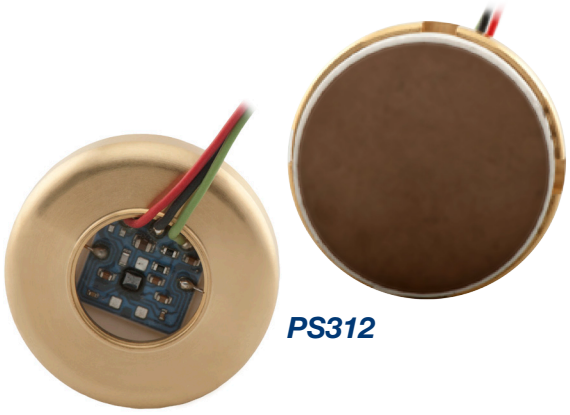
PS162/PS312

Ceramic Capacitive OEM High and Low Pressure Sensing Modules

PS162



PS312

Typical 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
- Process Controls
- Level Measurement
- Water Management
- Power Generators

Standard Full Scale Pressure Ranges

PS162: 0-200 mBar up to 0-200 Bar
PS312: 0-50 mBar up to 0-20 Bar

Features

- Media Resistant
- Superior Long-Term Stability & Repeatability
- High Overpressure Capability
- Shock & Vibration Resistant

Description

Kavlico's OEM Pressure sensing modules utilize our more than 30-year field-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.

These RoHS compliant modules are equipped with a robust flush mounted ceramic sensing diaphragm that is compatible with most industrial fluids and gaseous media. The standard housing material is a Brass Spacer, and the standard electrical connection is 3 Isolated Wires 0.15 mm, 2 – 75mm Long. 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.

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Technical Specifications

		PS Module 312			PS Module 162		
Pressure ranges from 0 to …	bar	0.05	up to	20	0.2	up to	100
Proof pressure	bar	1.2	up to	60	2	up to	300
Burst pressure	bar	2.4	up to	100	4	up to	400
Reference	Absolute or gage						
Materials							
Wetted Parts	Ceramic Al203, gold coating on diaphragm						
Process Media	All gases and liquids compatible with ceramic Al203 and gold						
Electrical							
Supply Voltage	4.75 - 5.25 VDC						
Output Signal	1.0 - 4.0 VDC output				0.5 - 4.5 VDC output configuration		
at Zero	1.0 VDC				0.5 VDC		
at Full Span	4.0 VDC				4.5 VDC		
Supply current	Max. 2.2 mA at 5 VDC						
Load resistance	> 50 kΩ						
Protection							
Overvoltage	7 VDC						
EMI	Dependent upon customer packaging						
Response time	≤ 10 ms max. to 63 % of full scale pressure with step change on input						
Accuracy *)	0,5 % of span						
Non-linearity **)	typ. 0.1 % of span						
Hysteresis	0,2 % of span						
Non-repeatability	0,1 % of span						
1-year stability *)**	typ. 0.1 % of span						
*) Including non-linearity, hysteresis, non-repeatability, zero point and full scale error (corresponds to error of measurement per IEC 61298-2)							
**) BFSL according to IEC 61298-2							
***) with reference conditions to EN 61298-1							
Temperature							
Operating temperature range	-40°C to + 125°C						
TC zero	typ. ± 0.05 % / 10K						
TC span	typ. ± 0.05 % / 10K						
Conformity							
RoHS	according to 2002/95/EC RoHS Directive						
Electrical connection	3 isolated wires 0.15 mm², 75 mm long						
Color code of wires	RED – VSUPPLY, GREEN – OUTPUT, BLACK – GROUND						
Service life	Min. 10 million pressure cycles full scale						
Weight							
PS312	40 gram						
PS162	20 gram						

Customized versions with PS modules already build into housings on request - contact factory for details.

Before installation and operation, ensure that the appropriate pressure sensor has been selected in terms of pressure range, design and specific measuring conditions. Non-compliance can result in serious injury and/or damage to the equipment.

Don't see what you want?
Call us at +49 571 3859-174
to customize this product
to meet your application-specific needs!

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RoHS

A brand of CST CUSTOM SENSORS & TECHNOLOGIES