

## FLUSH MEMBRANE PRESSURE SENSOR OC18 Low Pressure Series

◆ Technology : **Thick Film Strain Gage On Ceramic**  
**Relative and Absolute Pressure**

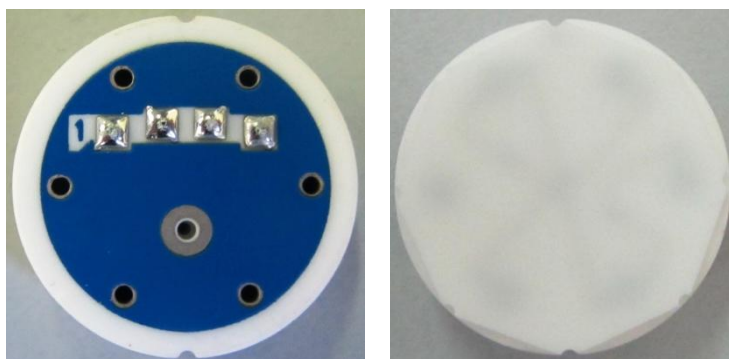
**Membrane material: Al<sub>2</sub>O<sub>3</sub> 96% (>99.5% optional)**

**Operating temperature range - 40 up to + 135°C**

**High reliability + Excellent long term stability**

**All applications**  
**All aggressive fluids (★)**

### OC18



**18 mm Diameter - 0...1 bar to 0...50 bar**

The OC18 sensors are fully **Temperature Compensated**.

The ceramic diaphragm, **inert and chemically neutral**, can be in direct contact with all fluids, even very aggressive, without additional separator device.

#### Mechanical specification:

MODEL	Rated range		Full Scale Output Signal		Overload pressure	Burst pressure
	MPa	Bar	Min mV/V	Max mV/V		
OC18-104	0...0,1	0.....1	2.0	4.0	3x	8x
OC18-204	0...0,2	0.....2	2.0	4.0	3x	6x
OC18-504	0...0,5	0.....5	2.4	4.8	3x	4x
OC18-105	0...1	0...10	2.4	4.8	2x	4x
OC18-205	0...2	0...20	2.4	4.8	2x	4x
OC18-505	0...5	0...50	2.4	4.8	2x	4x

**Other ranges available on request**

**On board NTC temperature probe available on demand**

Combined Error (Linearity + Hysteresis) <sup>1</sup> < ± 0.3% FSO [Terminal based] [ 0-2 Bar to 0-50 Bar]

Repeatability < ± 0.5% FSO [Terminal based] [ 0-1 Bar]

< ± 0.1% FSO

(★) Except hydrofluoric acid

<sup>1</sup>According to IEC 61298-2

**RoHS Compliant**  
Directive 2002/95/EC

Specification subject to change without prior notice

Dec. 2012 Issue

## FLUSH MEMBRANE PRESSURE SENSOR

### OC18 Low Pressure Series

(Continued)

**Electrical specification:**

▣ PRESSURE

- Bridge Excitation Voltage 2.5...30 Vdc
- Input & Output Impedance 11 KΩ ± 30%
- Initial zero unbalance ≤ ± 0.2 mV/V (\*)
- Dielectric strength > 2 kV
- Zero point Long Term Drift 1 year @ 25°C < 0.2% FSO
- Zero point High Temp Drift 1000 hrs @ 150°C < 1% FSO

(\*) other values available on request (typ 0.1... 0.3 mV/V)

**Environmental specification:**

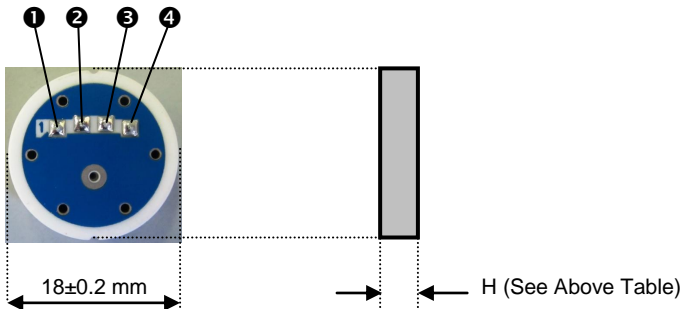
- Material in contact with fluid Alumina Al<sub>2</sub>O<sub>3</sub> – 96% (Option 99.5%, MOQ 500 pieces)
- Operating Temperature Range - 40 up to + 135°C
- Storage Temperature - 50 up to + 150°C
- Residual Temperature Effect (Zero and Span) ≤ ± 0.04% FSO / °C
- Humidity range <95%RH (no condensation)

**Dimensions (mm):**

FS	1	2	5	10	20	50	Bar
H	6.23	6.26	6.33	6.33	6.46	6.71	mm
	± 0.1					± 0.15	

**Electrical Wiring:**

- ① : - Output
- ② : - Excitation
- ③ : + Output
- ④ : + Excitation



◆ ORDERING CODE : **OC18 - xxx - x - x**

Range Code (See table below)

Pressure

- A (Absolute)
- R (Relative / Gage)
- S (Sealed Gage)

**Electrical connection:**

- 0 tinned pads
- 1 male pins, height ~8.5mm
- 2 other on request

Code 104 => FS: 0... 1 bar	Code 105 => FS: 0... 10 bar
Code 204 => FS: 0... 2 bar	Code 205 => FS: 0... 20 bar
Code 504 => FS: 0... 5 bar	Code 505 => FS: 0... 50 bar

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