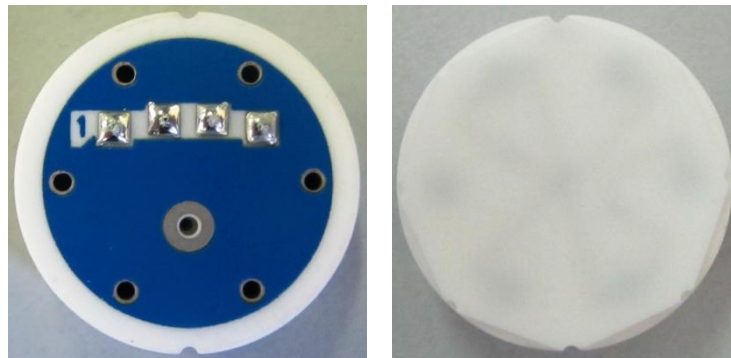


## FLUSH MEMBRANE PRESSURE SENSOR OC18 Low Pressure Series

- ◆ 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<br>mV/V              | Max<br>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 K $\Omega$   $\pm$  30%
- Initial zero unbalance  $\leq \pm 0.2$  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:**

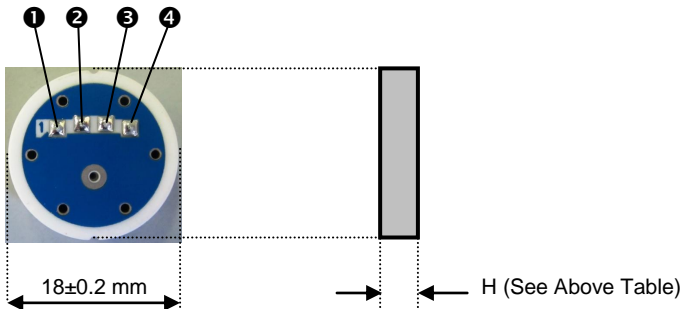
- Material in contact with fluid Alumina Al<sub>2</sub>O<sub>3</sub> – 96% (Option 99.5%, MOQ 500 pieces)
- Operating Temperature Range - 40 up to + 135°C
- Storage Temperature - 50 up to + 150°C
- Residual Temperature Effect (Zero and Span)  $\leq \pm 0.04\%$  FSO / °C
- Humidity range  $< 95\%$  RH (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  |
|    | $\pm 0.1$ |      |      |      |      | $\pm 0.15$ |     |

**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 |