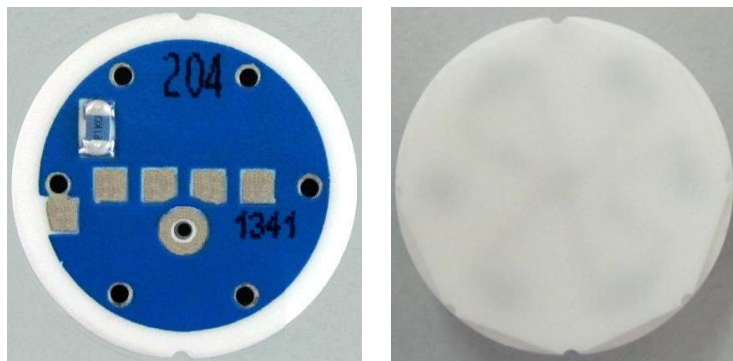


**FLUSH MEMBRANE**  
**DUAL PRESSURE + TEMPERATURE SENSOR**  
**OCS18 or OCST18 Low Pressure Series**

- ◆ **Technology : Thick Film Strain Gage On Ceramic + Pt 1000 Platinum Probe**  
*Dual (P + T) simultaneous measurements (OCST18 Model)*  
*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*

**OCST18**



**18 mm Diameter - 0...2 bar to 0...50 bar**

The OCS18 sensors are fully **Temperature Compensated**.  
 The OCST18 Model features a **Pt 1000 Platinum Probe** which gives an accurate Temperature measurement, allowing a perfect control of the fluid process, whilst the OCS18 performs a single Pressure measurement.  
 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	Max		
			mV/V	mV/V	Bar	Bar
<b>OCS18-204</b>	0...0,2	0.....2	2.1	4.3	4	12
<b>OCS18-504</b>	0...0,5	0.....5	2.9	5.7	10	20
<b>OCS18-105</b>	0...1	0....10	3.5	6,9	15	40
<b>OCS18-205</b>	0...2	0....20	2.6	5.2	40	80
<b>OCS18-505</b>	0...5	0....50	2.5	4.9	100	200

**Other ranges available on request**

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

Combined Error (Linearity + Hysteresis)      < ± 0.3% FSO [Terminal based] [0...2 bar-to 0...50 bar]  
 Repeatability    < ± 0.1% FSO

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

**FLUSH MEMBRANE  
DUAL PRESSURE + TEMPERATURE SENSOR  
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(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)

▣ **TEMPERATURE (OCST18 Model only)**

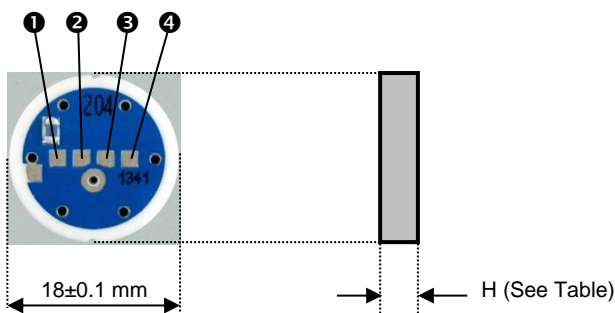
- Pt 1000 Probe 1000  $\Omega$  at 0 °C
- Class B
- Sensitivity Coefficient + 3850 ppm / °C
- Norms Conformity to IEC 751 / EN 60751

**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 on zero offset  $\leq \pm 0.02\%$  FSO / °C
- Residual Temperature Effect on span  $\leq \pm 0.02\%$  FSO / °C
- Humidity range <95%RH (no condensation)

**Dimensions (mm):**

FS	2	5	10	20	50	Bar
H	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 : OCS18/OCST18 - xxx - x - x**

Range in Pascal \_\_\_\_\_  
2 significant digits + multiplier

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

**Output connection:**

- 0 tinned pads
- 1 male pins h=8.0 $\pm$ 0.5mm
- 2 other on request