

**FLUSH MEMBRANE  
4-20 mA DIGITAL PRESSURE SENSOR  
OCS18 CL High pressure Series**

◆ Technology : **Thick Film Strain Gage On Ceramic**

**18 mm Diameter  
0...100 bar to 0...600 bar  
Sealed Gage Pressure**

**4-20 mA, 2 wires, Sensor + Electronics Circuit  
Sealed Gage Pressure**

**Easy transmitters manufacturing**

**Operating temperature range – 25°C to + 125°C**

**Zero and Span adjustments**

**All applications  
All aggressive media (★)**

**Presentation**

The OCS18CL sensors have been especially designed in order to facilitate the pressure transmitters manufacturing. They feature a 4-20 mA current output in a 2 wires configuration and are **protected against reverse polarity and transient voltage**. Pressure and temperature calibration may be done by means of a specific on board IC with a peculiar software tool. The electronics can perform zero and sensitivity adjustment as well as continuous aging detection and correction. A ground connection is available on a 3<sup>rd</sup> pin. The OCS18CL sensors are temperature compensated, regarding both Zero Drift and Sensitivity Shift, by means of a Thick Film Thermistor screen printed on the ceramic base plate. This allows an efficient and short temperature compensation response time. It can be used with an unregulated excitation voltage from **8 to 32 Vdc**. Available Gage pressure configurations from 2 bar Full Scale up to 200 bar Full Scale.

◆ **Transducers Manufacturing - Industrial Equipment**

◆ **Main Applications : Pneumatic, hydraulic, water depth measurement, medical, pharmaceutical, food industry...**

**Mechanical specification:**

MODEL	Rated range		Burst pressure
	MPa	Bar	Bar
OCS18-106	0..10	0..100	250
OCS18-206	0..20	0..200	600
OCS18-406	0..40	0..400	700
OCS18-606	0..60	0..600	800

Combined Error (Linearity + Hysteresis) < ± 0.3% FSO [Terminal based]  
Repeatability < ± 0.1% FSO

(★) Except hydrofluoric acid

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

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### Electrical specification:

(Continued)

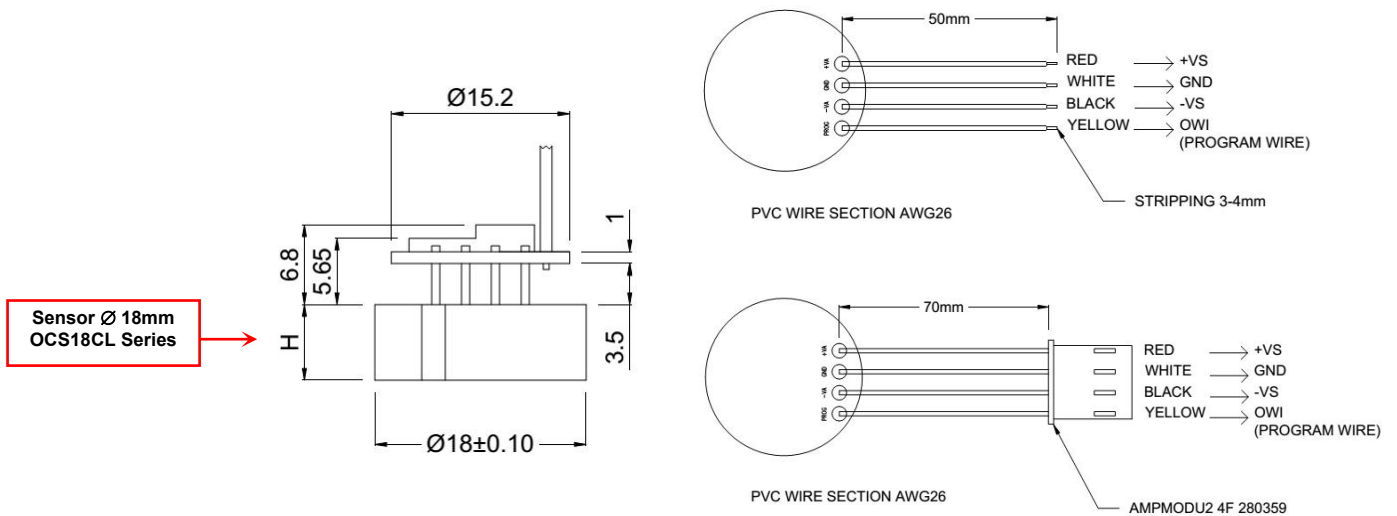
#### ▣ PRESSURE

- |                             |  |
|-----------------------------|--|
| • Excitation voltage [ Vs ] | 8...32 Vdc                                     |
| • Resistor Load [ Ω ]       | $RL = (Vs - 9) / 0.02 A$                       |
| • Power consumption         | 0.7 W  |
| • Output signal             | 4 -20 mA ( Zero & Span digitally programmable) |
| • Output connection         | AMP-MODU II or 4 wires                         |

### Environmental specification:

- |   |  |
|---|--|
| • Material in contact with fluid              | Alumina Al <sub>2</sub> O <sub>3</sub> – 96% |
| • Operating temperature range (Fluid)         | - 25°C to + 125°C                            |
| • Operating temperature range (Ambient)       | - 25°C to + 85°C                             |
| • Storage temperature range                   | - 40°C to + 105°C                            |
| • Residual Temperature Effect (Zero and Span) | ≤ ± 0.04% FSO / °C                           |
| • Humidity range                              | <95%RH (no condensation)                     |

### Dimensions (mm) and Drawing with schematic diagram Connections:



### Dimensions (mm):

FS	100	200	400	600	Bar
H	6.71±0.15	7.09±0.20	7.35± 0.20	7.60± 0.20	mm

### ◆ ORDERING CODE : OCS18CL - xxx - S - x

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

S (Sealed Gage)

#### Electrical connection:

- 0 = wires 50mm length
- 1 = connector AMP MODU II
- 2 = special connection on request