ms18c ''monolit sensor''®
Temperature Compensated
O.E.M. PRESSURE SENSOR

18 mm Diameter
0…2 to 0...200 bar
Gage/Relative Pressure

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

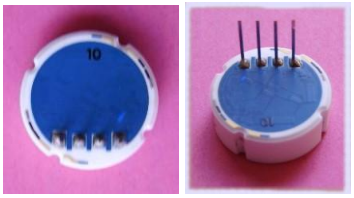
Excellent long term stability
Efficient temperature compensation
Operating temperature range - 40 to + 135°C
High reliability level

Large volume OEM applications
All aggressive media (¬)

The ms18c ''monolit sensor''® is an **ideal Pressure sensing element** ready to be integrated inside an housing or directly mounted on board a machine.
It is **fully temperature compensated** and guarantees a residual temperature effect inside the operating temperature range within ± 0.03 % FS /°C.

This feature results in a very stable sensor under very harsh conditions.

The internal sensing elements are fully protected against humidity, moisture and corrosion of most chemical products. It does not fear condensation(1) and provides a typical 3 mV/V output level allowing a very easy signal conditioning.



¤ **Scale 1:1** ¤

- v **Large volume, High performance, Low cost O.E.M. applications**
- v **Full internal protection against Humidity and Condensation**
- v **Direct contact with aggressive media**
- v **Easy integration on board industrial machines and equipments**

RoHS Compliant
Directive 2002/95/EC

♦ **Main Applications : Pneumatic, hydraulic, medical equipments, air compressors, refrigeration systems, domestic appliances, battery powered instruments …**

Mechanical specification :

MODEL	Rated Range (bar)	Burst Pressure (bar)	Full Scale Output Signal (mV/V) Min. / Max.
• **ms18c – 2**	0….2	4	2.0 / 3.7
• **ms18c – 5**	0….5	12.5	2.4 / 3.6
• **ms18c – 10**	0….10	25	2.4 / 3.6
• **ms18c – 20**	0….20	50	2.4 / 3.6
• **ms18c – 50**	0….50	125	2.4 / 3.6
• **ms18c – 100**	0….100	200	2.3 / 3.2
• **ms18c – 200**	0….200	400	1.6 / 2.8

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

(¬) Except hydrofluoric acid

Specification subject to change without prior notice

Shanghai Sentronics Co., Ltd，Devy Deng，+86 15821459853，www.sentronics.cn
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(Continued)

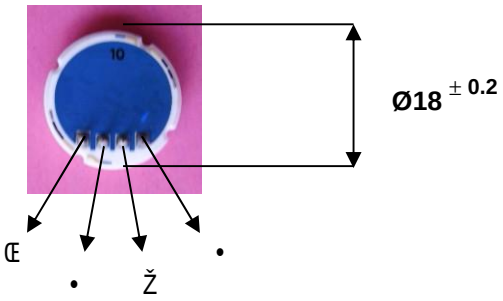
Electrical specification :

• Maximum excitation voltage	30 Vdc (10 Vdc typ.)
• Bridge Impedance	11 KΩ ± 30%
• Initial zero unbalance	≤ ± 0.2 mV/V
• Dielectric strength	> 2 KV
• Zero point Long Term Stability @ 20 °C	± 0.2% FSO, typ. (not cumulative versus time)

Environmental specification :

• Material in contact with fluid	Alumina $Al_2 O_3$ – 96%
• Operating Temperature Range	- 40 up to + 135°C
• Storage Temperature Range	- 50 up to + 150°C
• Residual Temperature Effects (Zero & Sensitivity)	≤ ± 0.03 % FS / °C [Ranges 2 up to 100 bar]
	≤ ± 0.04 % FS / °C [Range 200 bar]
• Relative Humidity (1)	0 - 100%
• Sensor Weight	< 7 g

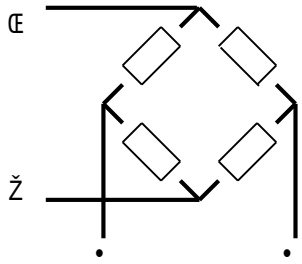
Dimensions (mm) : Height = 6.35 ± 0.05



Œ to • = Printed tinned pads
or 4 male pins for electrical connection
¤ (1) Refer to **T**echnical **N**ote # ***Inst04***
ms18c - Instructions for Use
Ø ***Download TN on www.citysensors.com***

Electrical Wiring :

Œ : **+ Excitation**
• : **- Output**
Ž : **- Excitation**
• : **+ Output**



Remark: Other electrical connection upon request

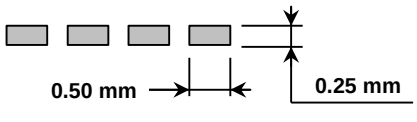
Upon request:
Brass Mounting Kit for sensor test
(Standard thread: 1/4 BSP male)

♦ Ordering information*: ms18c – xxx – x

Range (in bar)
Electrical Connection
0 = Tinned pads
1 = Male pins

*Examples :
ms18c – 020 - 0 è Sensor 20 bar without male pins
ms18c – 100 - 1 è Sensor 100 bar with male pins

Male pins dimensions:
Length: 8.6 mm ± 0.1mm
Pitch 2.54 mm
(Top view)



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