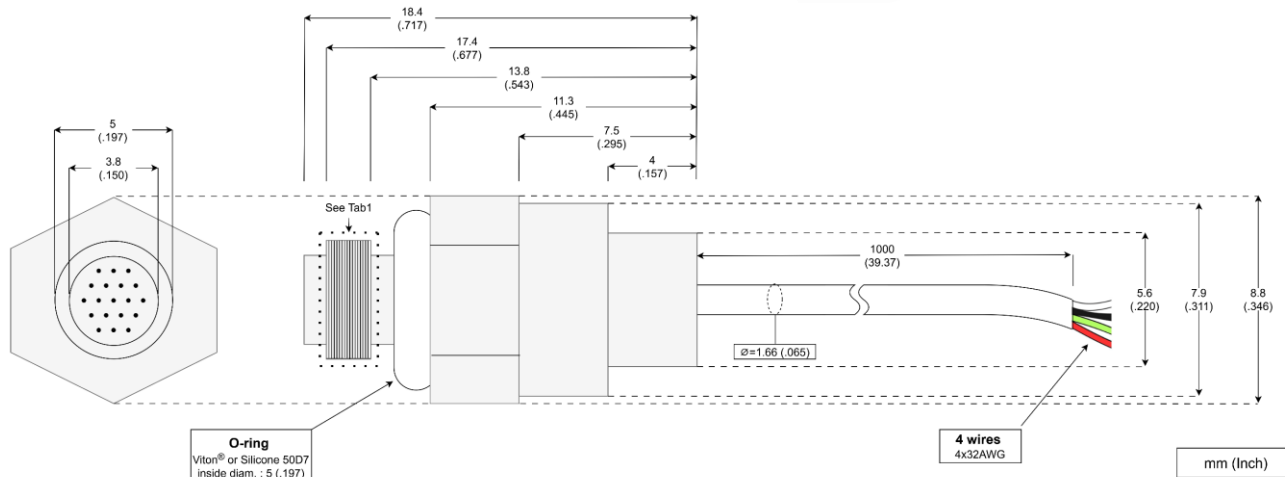




Miniaturized medium pressure sensor

3.80 mm up to 185°C

MMP-004-3.80-XXX-S-YYYY-A-ZZ-YY



MODEL DEFINITION

XXX: SST: mechanical casing in stainless steel

S: M for metric, I for Imperial

YYYY: pressure range in PSI (018, 030, 060, 0100, 0300)

A: absolute pressure measurement

ZZ: **ST:** standard temperature up to 100°C

HT: high temperature up to 185°C

YY: **ST:** Standard temperature up to -20°C

LT: Low temperature up to -55°C

Options: special tube length, material and grid shape also available on request

Tab 1

Type	Value
Metric	M5x0.5
Metric	M5x0.8
Imperial	10-32 UNF-2A

OVERVIEW

- Outer diameter **3.80 mm**
- From 18 to 300 psi Absolute pressure sensor
- Wide temperature range from **-55 °C** up to **+185 °C**
- Harsh environment
- Customized solution possible
- mVolt output
- Highest resonance frequency on the market
- Amplification can be done for a special request
- Shielded wire: TAU-3219.04
- Wire length: 1m

WIRE COLOR CODE

BLACK	Input -
RED	Input +
WHITE	Output -
GREEN	Output +

APPLICATIONS

- Instrumentation (ie: Automotive, ...)
- Aerodynamic testing (ie: wind tunnel)
- Turbomachineries
- Industrial process monitoring
- Pumps
- Biomedical
- Oil and gas
- ...

PART NUMBER		MMP-004-3.80-XXX-S-YYYY-A-ZZ-YY				
Outer diameter	3.8 mm					
Pressure range ¹	0-1.2 bar	0-2 bar	0-4 bar	0-7 bar	0-21 bar	
	0-18 PSI	0-30 PSI	0-60 PSI	0-100 PSI	0-300PSI	
Sensitivity	83mV/bar	50mV/bar	25mV/bar	14mV/bar	5mV/bar	
Proof pressure ¹	3 * nominal				NA	
Burst pressure ¹	5 * nominal				900 PSI	
Bridge resistance	6.2 kΩ typical (5-7 kΩ)				5 kΩ typical (4-6 kΩ)	
Vout span ²	100 mV typical (65-135mV)				100 mV typical (75-125mV)	
Excitation voltage	5V (max 6.5V)					
Tmin ³	-55°C (LT) -20°C (ST)					
Tmax ³	100°C (ST) 185°C (HT)					
Accuracy (BFSL ⁴ - RMSE ⁵) ⁶	30 °C	60 °C	100 °C	185 °C		
	0.05%FS	0.05%FS	0.05%FS	0.05%FS		
Resolution	Infinitesimal					
Insulating resistance ⁷	> 1 GΩ					
Fluid compatibility	All fluids except high corrosivity, high acidity and gels (please consult factory for specific fluids)					

1 | Absolute pressure; 2 | Amplification can be done for a special request; 3 | TMCL qualification tests – JEDEC JESD22-A104 « temperature cycling » from -20 °C/185 °C; 4 | Best fitted straight line; 5 | Root Mean Square Error; 6 | The accuracy on the full range of pressure and temperature is 0.20%FS (2 σ), lower accuracy can be observed on few sensors; 7 | Between cable and casing.

Remark :

- All sensors are provided with a control sheet given pressure level versus mVolt on the **full temperature and pressure range** under a supply voltage of 5 Volt.
- Temperature measurement/compensation available. [See our tutorial on our website.](#)
- Conditioning system on request.
- High robustness: specific protection on wire bonding @MEMS level (protection against particles, dust, condensation...) without impact on frequency measuring range.

CONTACT

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