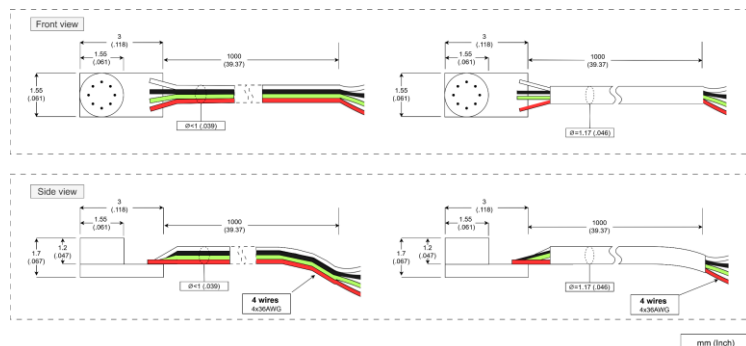


1,55 mm up to 185°C

MP-1.55-TIG-YYY-A-ZZ-FLAT-XX-YY



- L x W x H (max) : 1.55 x 3 x 1.5 (mm)
- From 18 to 100 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
- Unshielded wires : UAA-3601-WH/...-BK/...-RD/...-GR
or
Shielded wire: TAU-3607.04
- Wire length: 1m

TIG : Inconel tube with grid is the standard product)
YYY: Pressure range in PSI (018, 030, 060, 100)
A: Absolute pressure measurement
ZZ: ST: standard temperature up to 100C°
HT: high temperature up to 185C°
FLAT : flat shape
YY : ST: Normal temperature up to -20C°
LT : Low temperature up to -55C°
XX: 00: Unshielded wires
01: Shielded wire

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

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

- Highest resonance frequency of **2.7 MHz** of the market
- The tests have been done on a Polytec MSA-500 using Scanning laser-Doppler vibrometry.

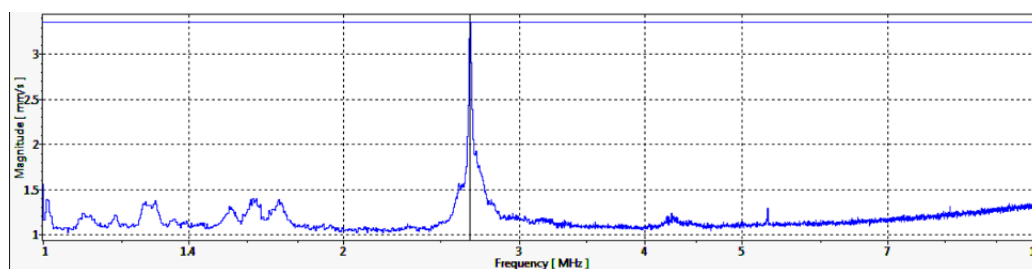


Figure 1: Result for the 30 PSI MEMS absolute pressure sensor

PART NUMBER		MP-1.55-TIG-YYY-A-HT-FLAT-XX-YY			
W x L	1.55 x 3 mm				
Pressure range ¹	0-1.2 bar	0-2 bar	0-4 bar	0-7 bar	
	0-18 PSI	0-30 PSI	0-60 PSI	0-100 PSI	
Sensitivity	83mV/bar	50mV/bar	25mV/bar	14mV/bar	
Proof pressure ¹	3 * nominal				
Burst pressure ¹	5 * nominal				
Bridge resistance	6.2 kΩ typical (5-7 kΩ)				
Vout span ²	100 mV typical (65-135mV)				
Excitation voltage	5V (max 6.5V)				
Tmin ³	-55°C (LT) -20°C (ST)				
Tmax ³	100°C (ST)				
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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