

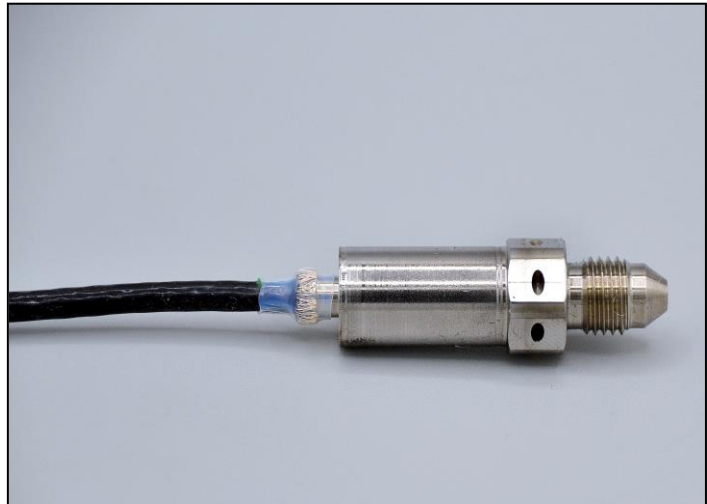
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MPT 6 Series

Miniature Pressure Transmitter

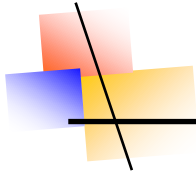
- Extremely small dimensions
- Stainless steel
- Several output options
- Wide pressure range
- Stainless Steel Housing
- **Vibration Tested according DO160 Cat H and Cat R and up to 50g/2kHz**



<u>General Technical Specification</u>		
Feature	Unit	Data
Measurement Range ⁽¹⁾	psi	0 ... 30 psi to 0 ... 15,000 psi
Wetted Material	N/A	Stainless Steel 17-4PH for the sensing element Port according to client's specification
Housing Material	N/A	Stainless Steel (e.g.: 304, 316, ...)

(1) Pressure range is defined by client, absolute pressure on request





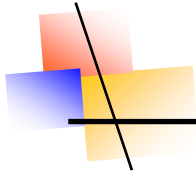
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General Electrical Specification		
Feature	Unit	Data
Supply Voltage	VDC	5 ... 32V depending on Output Option
Supply Current	mA	2 ±20% for Bridge Output < 10 for any other Voltage Output Options
Operating Temperature Range	°F	- 40 ... + 260 (-40 ... +300 opt.) (-328 ... +500 for Bridge Output on request)
Nonlinearity	%FS	< ±0.5 (<±0.25 optional)
Hysteresis	%FS	< 0.2
Repeatability	%FS	< 0.1
Pressure Overload (non destr.)		2 * nominal pressure
Burst Pressure		5 * nominal pressure
Electrical Connection		Please see option list
Vibration Test (on request)	According to DO 160 Cat H and Cat R	No influence on the output signal no defects

Other data on request





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System description:

This system uses a thin film pressure sensor made of stainless steel (17-4PH), which is welded on the pressure port. No additional internal seals are used. For signal conditioning, an ASIC is used. The ASIC has a broad field of options in the systems settings, we have shown just a few parameters in the table above. In addition, the ASIC has the following general features:

- Reverse polarity and short-circuit protection
- Excellent EMC/ESD robustness and AEC-Q100 qualification
- High voltage protection up to 33V
- Digital output (I2C, SPI) on request
- Maximum operational temperature range -40 ... +260F

More data and details on request

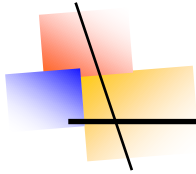
The system provides the following output options:

- Ratiometric output (0.5 ... 4.5V @5VDC Supply or 10 ... 90% Vss)
- Fixed output 0.5 ... 4.5V @ Vss 7 ... 32Vss
- Fixed output 0 ... 10V @ 7 ... 32Vss
- Current output 4 ... 20mA on request
- Digital I²C output
- Digital SPI output

In addition to the ASIC version we are providing a straight forward analogue signal conditioning with a fixed analogue output. Data for that option is on request.

For extreme low and extreme high temperature applications a bridge output is available. The units with a bridge output will be supplied with a mathematical model for compensation or with an additional remote electronics for a full compensated unit.





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Ordering Codes:

MPT6-GGGGG-O-T-E-M

G: Pressure Range in PSI

- O: Output
- 1 = Voltage ratiometric (0.5 ... 4.5V @ 5Vss)
 - 2 = Voltage fixed 0.5 ... 4.5V
 - 3 = Voltage fixed 0 ... 10V
 - 4 = Bridge Output
 - 5 = Current Output 4 ... 20 mA
 - 6 = Custom

T: Temperature Range

- 1 = -13 ... 257F
- 2 = -40 ... 302F
- 3 = -328 ... 500F (Bridge Output only)

E: Electrical Connection

- 1 = Cable (standard)
- 2 = Cable for T=2
- 3 = Cable for T=3
- 4 = Custom

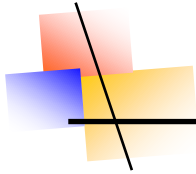
M: Pressure Port Options

- 1 = Metric M6
- 2 = Metric M8*1
- 3 = Metric M10*1
- 4 = MS-33656 -2
- 5 = MS-33656 -3
- 6 = MS-33656 -4
- 7 = Custom

Remarks:

1. Not all options can be combined
2. The final dimensions are depending on the required options
3. Customized transducers will have an individual mechanical drawing
4. Full custom devices can be developed and manufactured even at small quantities.





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Mechanical dimensions (Example):

