

Sub-Miniature Pressure Sensor



Features

- ➔ Available with 0,5-4,5Vdc output
- ➔ Ultra light : < 10 grams
- ➔ Operating from -40 to +125°C
- ➔ Pressure ranges from -1 to 400bar

Applications

- ➔ Energy / Nuclear
- ➔ Test benches
- ➔ Medical instruments
- ➔ Automation & Robotics

The PST100 series is a miniature pressure sensor. Operating from -40 up to +125°C, three compensated temperature ranges are available to best suit your application's environment. Its wetted parts being stainless steel, it is compatible with most media, including corrosive fluids used in automotive and aerospace industries. High performances and stability over temperature are achieved thanks to EFE proprietary sensing technologies. The robust and proven design of the sensor ensures reliability in your application. The PST100 series is available with unamplified (mV/V) and amplified voltage output (0,5-4,5Vdc), integrating a high performance and ruggedized electronic module.

Technical specifications

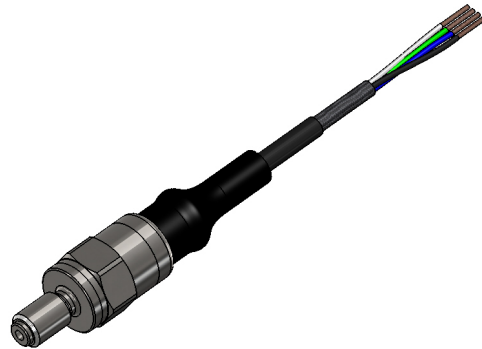
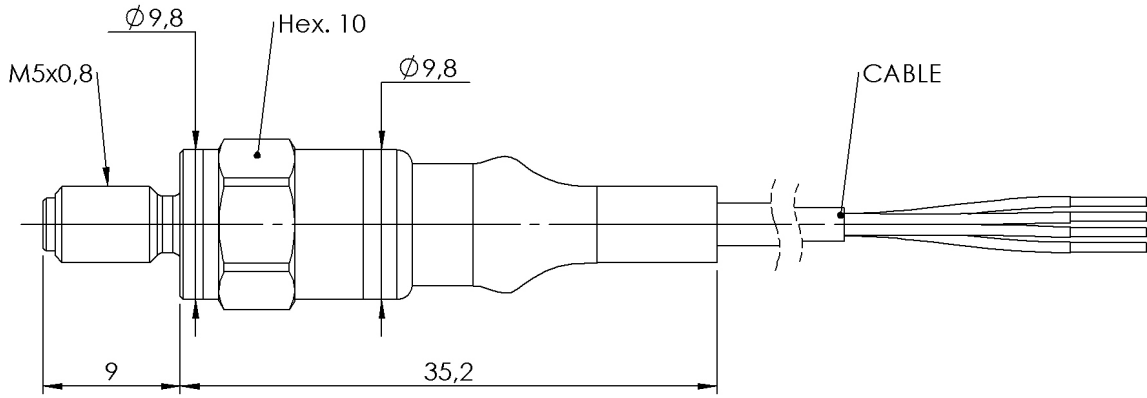
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| Pressure ranges (FS) | -1/+4bar ; -1/+9bar ; 5bar ; 10bar ; 20bar ; 40bar ; 70bar ; 250bar ; -14.5/+60PSI ; -14.5/+140PSI ; 70PSI ; 150PSI ; 300PSI ; 500PSI ; 1000PSI ; 3000PSI |
| Type | Absolute ; Gage |
| Type (for ranges > 40 bar) | Sealed Gage |
| Safe overload | 150% FS |
| Burst pressure | 300% FS |
| Power supply | 5Vdc ± 10mV |
| Consumption | < 10mA |
| Insulation | > 1000 MOhms under 50Vdc at ambient temperature |
| Output at -100%FS (only for ± range) | 0.5Vdc |
| Output at 0%FS (except ranges ±) | 0.5Vdc |
| Output at 100%FS | 4.5Vdc |
| Zero and sensitivity settings tolerances | ±50mV |

Technical Specifications


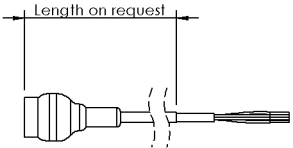
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|--|--|
| Non linearity and hysteresis combined | ±0.25% FS typical (±0.35% FS max.) |
| Non repeatability | ±0.02% FS typ. |
| Signal bandwidth | 1000Hz @ -3dB Option : Special Adjustment up to 3000Hz @ -3dB |
| Compensated temperature range | 0 to +60°C Option : -25 to +85°C ; -25 to +125°C |
| Operating temperature range | -40 to +125°C |
| Combined thermal zero & sensitivity shifts | ±0.02% FS/°C |
| Constant acceleration in linear vibrations | ± 0.02% FS/g (frequency 20-2000Hz, 50g max.) |
| Mechanical shock | 100g ½ sinus 1ms |
| Electrical protection | Not protected against polarity inversion |
| EMC protection | Compliant to EN61000 |
| Electrical connection | AWG26, Viton Jacketed Shielded Cable Ø3mm, 4 wires |
| Mechanical connection | M5x0.8-6g male |
| Material(s) of wetted parts | Stainless Steel 316L ; Stainless Steel 17-4PH ; Stainless steel 15-5PH |
| Weight | 10g without cable |
| Enclosure protection | IP65 for absolute & sealed gage version |

Codification

| | | | | | | | | | | | |
|--|-------|---|---|-------|----|----|-------|---|---|---|---|
| Sub-Miniature Pressure Sensor | PST10 | 3 | S | 10bar | G | 05 | 08/1m | A | 3 | 1 | B |
| Output Signal | | | | | | | | | | | |
| 0.5-4.5Vdc regulated power supply | | 3 | | | | | | | | | |
| Material | | | | | | | | | | | |
| Stainless Steels | | | S | | | | | | | | |
| Range | | | | | | | | | | | |
| Example | | | | 10bar | | | | | | | |
| Type | | | | | | | | | | | |
| Gage | | | | | G | | | | | | |
| Sealed Gage | | | | | SG | | | | | | |
| Mechanical connection | | | | | | | | | | | |
| M5x0.8-6g male | | | | | | 05 | | | | | |
| Electrical connection | | | | | | | | | | | |
| AWG26, Viton Jacketed Shielded Cable Ø3mm, 4 wires | | | | | | | 08/1m | | | | |
| Compensated temperature range | | | | | | | | | | | |
| 0 to +60°C | | | | | | | | A | | | |
| -25 to +85°C | | | | | | | | B | | | |
| -25 to +125°C | | | | | | | | C | | | |
| Non linearity and hysteresis combined | | | | | | | | | | | |
| ±0.25% FS typical (±0.35% FS max.) | | | | | | | | | 3 | | |
| Combined thermal zero & sensitivity shifts | | | | | | | | | | | |
| ±0.02% FS/°C | | | | | | | | | | 1 | |
| Options | | | | | | | | | | | |
| Special Adjustment up to 3000Hz @ -3dB | | | | | | | | | | | B |



DIMENSIONS : mm

| | | | |
|--|--|------------------|---|
|  | #26 AWG, 4 CONDUCTOR SHIELDED VITON CABLE | |  |
| | VOLTAGE OUTPUT | CONDUCTOR | |
| | + EXCITATION | RED | |
| | + SIGNAL | GREEN / YELLOW | |
| | NC | WHITE | |
| | 0 VOLT | BLUE / BLACK | |
| | SENSOR HOUSING | SHIELD | |

Agent :



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