

## Semi Flush Miniature Pressure Sensor



The PSF160 series is designed for highly dynamic pressure measurements. Thanks to a semiflush construction, the pressure diaphragm is exposed, in direct contact with the medium, with reduced dead volume. Being all titanium, it is compatible with most media including corrosive fluids used in industry. Unamplified (mV/V output) or equipped with the latest signal conditioning technologies from EFE (0-5 and 0.5-4.5Vdc outputs), it is able to measure very dynamic pressure spikes. Its thin film sensitive element ensures high performances and stability over wide temperature range. Models with built-in electronics (power supply: 8-30Vdc), being low consumption ( < 10mA) and with high bandwidth capabilities are particularly adapted to embedded applications.

## Technical specifications 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 Absolute ; Gage Type Type (for ranges > 40 bar) Sealed Gage 150% FS Safe overload 300% FS Burst pressure 8 to 30Vdc Power supply Consumption < 10mA Insulation > 1000 MOhms under 50Vdc at ambient temperature Output at -100%FS (only for ± range) 0Vdc 0Vdc Output at 0%FS (except ranges ±) 5Vdc Output at 100%FS ±50mV Zero and sensitivity settings tolerances

www.efe-sensor.com

## **Technical Specifications**

Non linearity and hysteresis combined ±0.25% FS

Option: ±0.1% FS

Non repeatability  $\pm 0.02\%$  FS typ.

Signal bandwidth 1000Hz @ -3dB

Option: Special Adjustment up to 5000Hz@-3dB

Compensated temperature range 0 to +60°C

Option: -25 to +85°C; -25 to +125°C; -40 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 Protected against polarity inversion

EMC protection Compliant to EN61000

Electrical connection AWG26, Viton Jacketed Shielded Cable Ø3mm, 4 wires

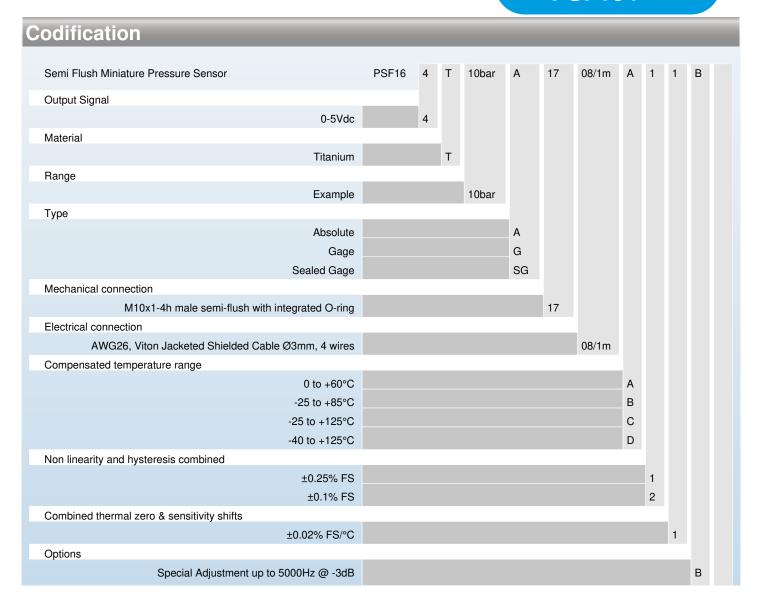
Mechanical connection M10x1-4h male semi-flush with integrated O-ring

Material(s) of wetted parts

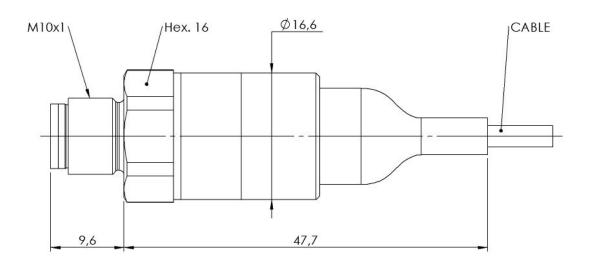
Titanium TA6V (3.7165)

Weight < 20g without cable

Enclosure protection IP65 for absolute & sealed gage version



Dimensions PSF164

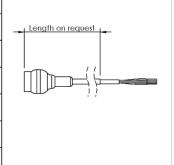




DIMENSIONS: mm



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





E.F.E.

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