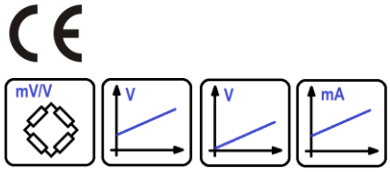


P125

High Pressure Sensor

SPECIFICATIONS

- **Ranges from 2000 to 7000 bar (30k to 100k psi)**
- **Stainless steel pressure port**
- **Robust for Fatigue testing**
- **For static and dynamic applications**
- **Linearity up to ±0.3% F.S.**

FEATURES

- M16x1.5 high pressure port
- Metal / metal screw sealing
- Integrated Amplifier optional
- Heavy duty body

APPLICATIONS

- Burst pressure test benches
- Fatigue test benches
- Laboratory and research
- Pressure amplifier equipment

The **P125** is a high pressure transducer designed for to measure static and dynamic pressure up to 7 000 bar (100 kpsi). The mechanical design and a stainless steel construction allow the sensor to withstand most aggressive liquids and fatigue testing.

The sensing element is fitted with a temperature compensated Wheatstone bridge equipped with thin strain gauges. TESS offers amplified analogue versions to obtain 0.5-4.5V, 0-5V and 4-20mA.

For miniature with flush diaphragm designs, the model **XPM6** can measure up to 1 000 bar (15 kpsi).

With many years of experience as a designer and a manufacturer of sensors, TE CONNECTIVITY often works with customers to design or customize sensors for specific uses and testing environments.

On request, Instruction documents can be provided to ease the selection and use of our sensors and provide helpful tips.

STANDARD RANGES

Ranges (FS)		Pressure Reference Gauge	Combined Linearity & Hysteresis (%FS)
Bar	**psi**		
2k	30k	•	±0.5%
4k	60k	•	±0.5%
7k	100K	•	±0.5%

TEMPERATURE CHARACTERISTICS

Ranges (FS)		Operating Temperature Range (OTR)		Compensated Temperature Range (CTR)		ZeroShift in CTR /50°C	Sensitivity Shift in CTR /50°C
Bar	**psi**	**Celcius**	**Farenheit**	**Celcius**	**Farenheit**		
2k	30k	-20 to 80°C	0 to 170°F	0 to 60°C	32 to 140°F	< ±2%FS	< ±3%
4k	60k	|	|	|	|	|	|
7k	100K	|	|	|	|	|	|

MECANICAL CHARACTERISTICS

Ranges (FS)		Pressure limit		Tightening Torque	
Bar	**psi**	**Without damage**	**Without destruction**	**N.m**	**lbf.in**
2k	30k	1,5x FS	3x FS	30	265
4k	60k	1,5x FS	3x FS	30	265
7k	100K	1,2x FS	2x FS	45	400

Notes

1. Material: Body in stainless steel; housing in aluminium alloy.
2. Protection Index: IP65 with cable gland, IP50 with connector output
3. Electrical Termination: cable gland with Ø5 mm shielded cable with 4 wires, standard length 2.0 m [6.6 ft]

ELECTRICAL CHARACTERISTICS (All values are typical at temperature 23±3ºC)

NON AMPLIFIED VERSION

Ranges (FS)		Frequency resonnance	Power supply	Sensitivity (FSO)	Zero Offset	Input Impedance Ze	Output Impédance Zs
Bar	Psi						
2k	30k	TBD	10 Vdc	2 mV/V	< ±1mV/V	1500 Ω	500 Ω
4k	60k	TBD	|	|	|	1500 Ω	500 Ω
7k	1K	TBD	|	|	|	1000 Ω	500 Ω

Note
1. Output impedance standard, available <100Ω on request

AMPLIFIED VERSION A1

Ranges (FS)		Bandwidth	Power supply	Sensitivity [1] (FSO)	Zero Offset	Consumption	Output Impédance Zs[2]
Bar	Psi						
All ranges		3 kHz	10 to 30 Vdc	4 ±0.2V	0.5 ±0.2V	25 mA	1 000 Ω

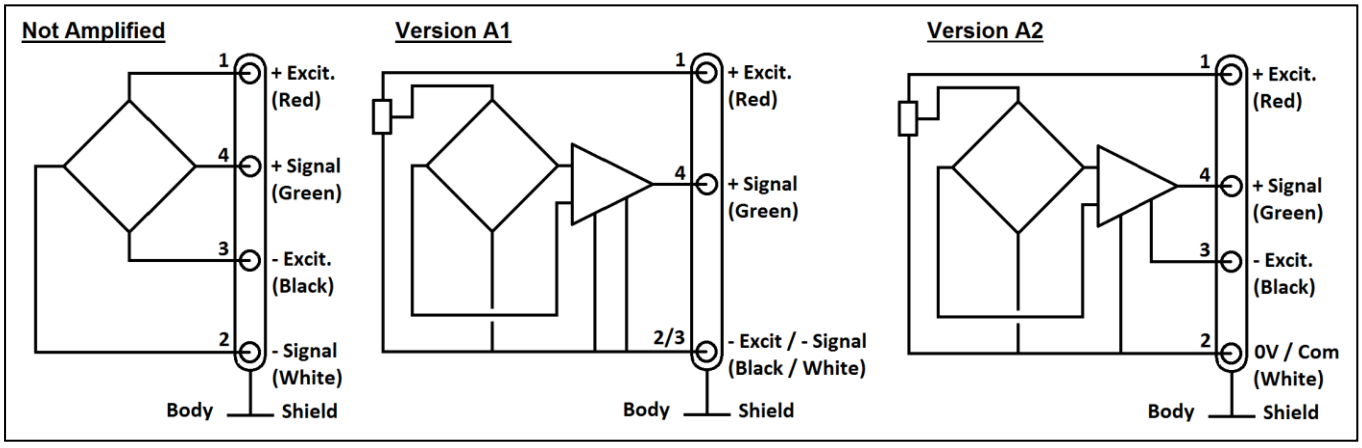
AMPLIFIED VERSION A2

Ranges (FS)		Bandwidth	Power supply	Full Scale Output [1] (FSO)	Zero Offset	Consumption	Output Impédance Zs[2]
Bar	Psi						
All ranges		3 kHz	±12 to ±18 Vdc	5 ±0.25V	0 ±0.25V	25 mA	1 000 Ω

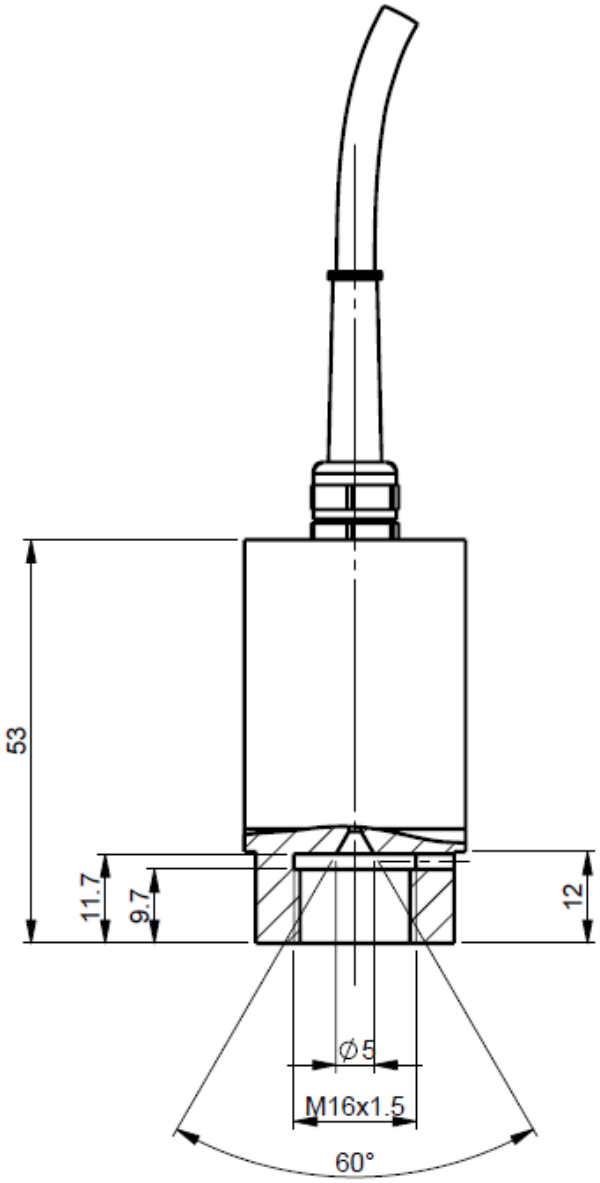
AMPLIFIED VERSION A3[4]

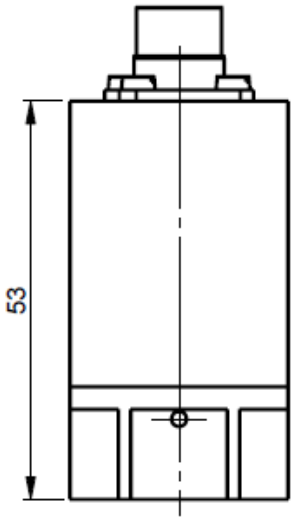
Ranges (FS)		Bandwidth	Power supply	Full Scale Output (FSO)	Zero Offset	Consumption	Output Impédance Zs
Bar	Psi						
All ranges		3 KHz	10 to 26 Vdc	16 ±0.3mA	4 ±0.3mA	Up to 20 mA	-

Notes
1. Standard output signal, custom outputs available on request.
2. Output impedance standard, available <100Ω on request.
3. Insulation under 50Vdc ≥100MΩ
4. A3 current output is a two wires version
5. CE conformance according to EN 61010-1, EN 50081-1, EN 50082-1.

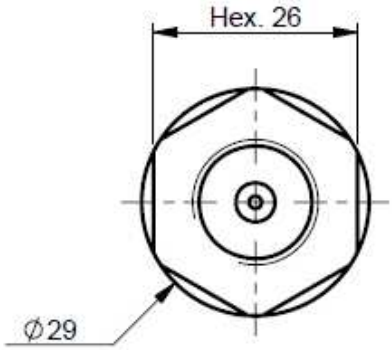


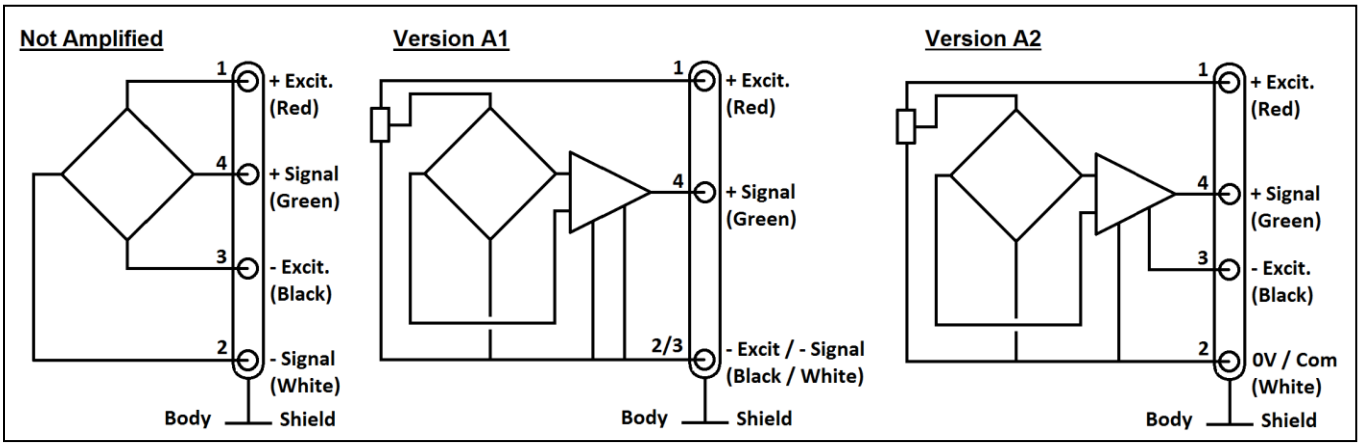
DIMENSIONS (METRIC ONLY)





Version SC





OPTIONS

SC : Connector output
L00M : special cable length, replace “00” with total length in meters

ORDERING INFORMATION

P125	-	A1	-	2KB	G	-	/L4M
Model	-	Electrical interface	-	Ranges & unit	Pressure Reference	-	/Options
P125	**-**	(empty) = bridge mV/V **A1** = 0.5 to 4.5V **A2** = 0-5V **A3** = 4-20mA	**-**	**2KB** **4KB** **7KB**	**G** = Gage	**-**	**/ETX** **/SC** **/L00M**

The sensor ordering codes uses only bar as units because **P125** uses metric threads. Psi value correspondence is noted as information

SUPPLIED ACCESSOIRES (ONLY WITH **SC** OPTION)

EFMX-4M : mating plug Jaeger 530-801-006 with clamp 530-841-006 standard with SC option
EFMX-4H : mating plug Jaeger 530-804-006 with clamp 530-844-006 for ET1, ET2 or ET3 & SC options

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