

## 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

## 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  $\pm 0.3\%$  F.S.

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	Fahrenheit	Celcius	Fahrenheit		
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						

## MECHANICAL 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  $23\pm3^{\circ}\text{C}$ )**NON AMPLIFIED VERSION**

Ranges (FS)		Frequency resonance	Power supply	Sensitivity (FSO)	Zero Offset	Input Impedance $Z_e$	Output Impedance $Z_s$
Bar	Psi						
2k	30k	TBD	10 Vdc	2 mV/V	$< \pm 1\text{mV/V}$	1500 $\Omega$	500 $\Omega$
4k	60k	TBD				1500 $\Omega$	500 $\Omega$
7k	1K	TBD				1000 $\Omega$	500 $\Omega$

**Note**

1. Output impedance standard, available  $<100\Omega$  on request

**AMPLIFIED VERSION A1**

Ranges (FS)		Bandwidth	Power supply	Sensitivity <sup>1</sup> (FSO)	Zero Offset	Consumption	Output Impedance $Z_s^2$
Bar	Psi						
All ranges		3 kHz	10 to 30 Vdc	$4 \pm 0.2\text{V}$	$0.5 \pm 0.2\text{V}$	25 mA	1 000 $\Omega$

**AMPLIFIED VERSION A2**

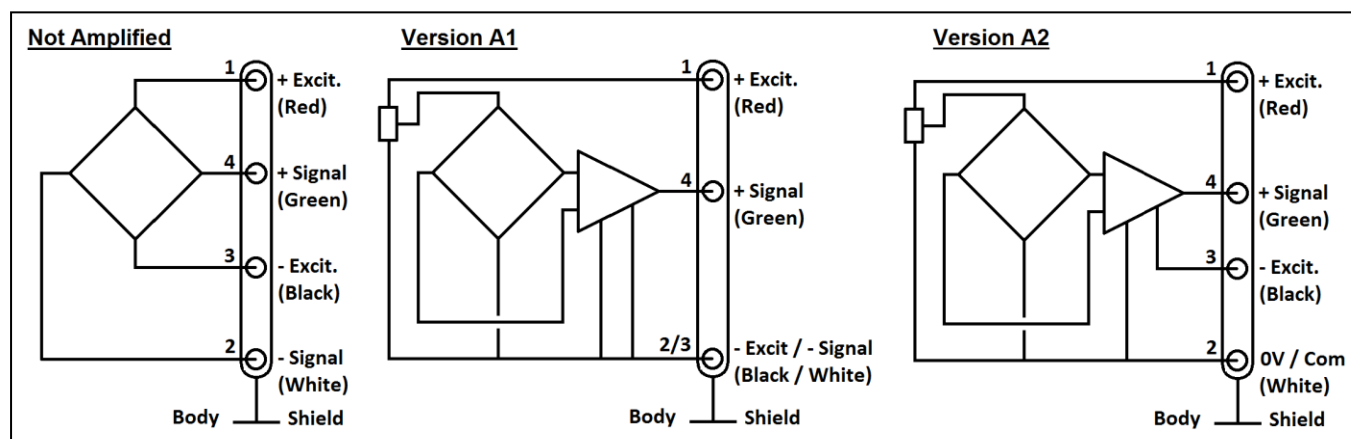
Ranges (FS)		Bandwidth	Power supply	Full Scale Output <sup>1</sup> (FSO)	Zero Offset	Consumption	Output Impedance $Z_s^2$
Bar	Psi						
All ranges		3 kHz	$\pm 12$ to $\pm 18$ Vdc	$5 \pm 0.25\text{V}$	$0 \pm 0.25\text{V}$	25 mA	1 000 $\Omega$

**AMPLIFIED VERSION A3<sup>4</sup>**

Ranges (FS)		Bandwidth	Power supply	Full Scale Output (FSO)	Zero Offset	Consumption	Output Impedance $Z_s$
Bar	Psi						
All ranges		3 KHz	10 to 26 Vdc	$16 \pm 0.3\text{mA}$	$4 \pm 0.3\text{mA}$	Up to 20 mA	-

**Notes**

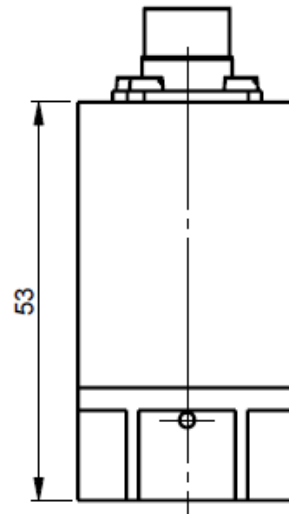
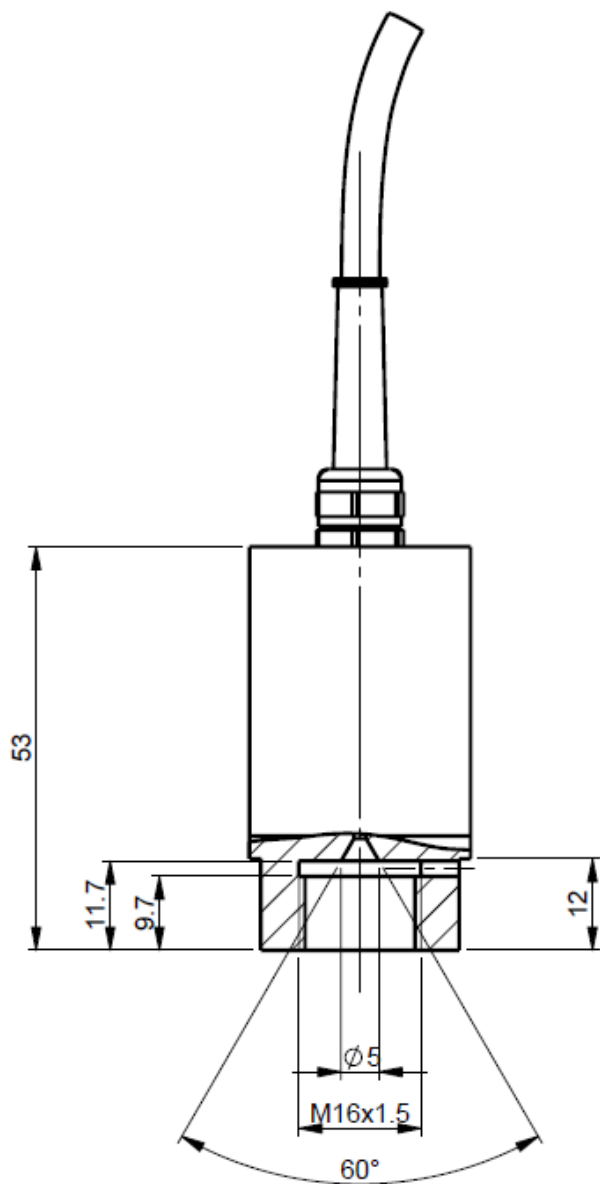
1. Standard output signal, custom outputs available on request.
2. Output impedance standard, available  $<100\Omega$  on request.
3. Insulation under 50Vdc  $\geq 100\text{M}\Omega$
4. A3 current output is a two wires version
5. CE conformance according to EN 61010-1, EN 50081-1, EN 50082-1.



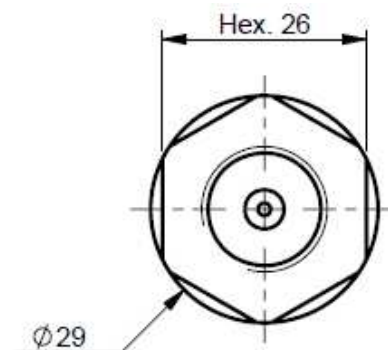
## P125

High pressure sensor

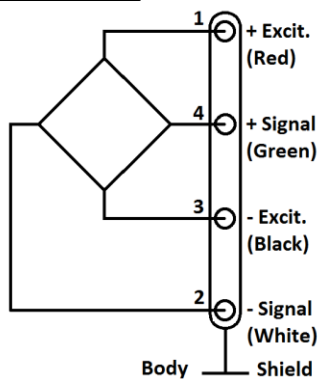
### DIMENSIONS (METRIC ONLY)



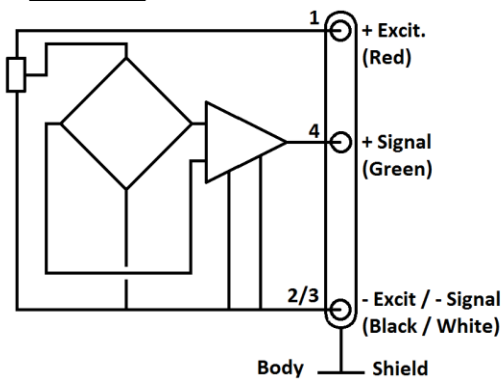
Version SC



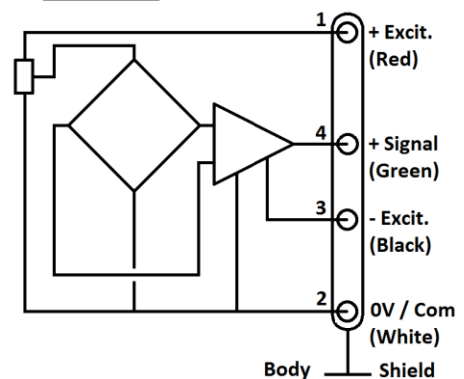
#### Not Amplified



#### Version A1



#### Version A2



## P125

High pressure sensor

## 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



株式会社 クローネ

■ カタログに掲載してある製品の色は印刷インキの関係上、実際とは異なる場合があります。  
■ 製品のデザイン、仕様等などは、予告なく変更する場合があります。

本 社 : 〒124-0023 東京都葛飾区東新小岩3丁目9番6号 TEL: (03) 3695-5431 / FAX: (03) 3695-5698  
大阪支店 : 〒530-0054 大阪市北区南森町2-2-9(南森町八千代ビル7F) TEL: (06) 6361-4831 / FAX: (06) 6361-9360  
e-mail: sales-tokyo@krone.co.jp URL: https://www.krone.co.jp

### TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.