

PIEZORESISTIVE PRESSURE TRANSMITTERS TYPE 23-25 S

Absolute - Gauge pressure

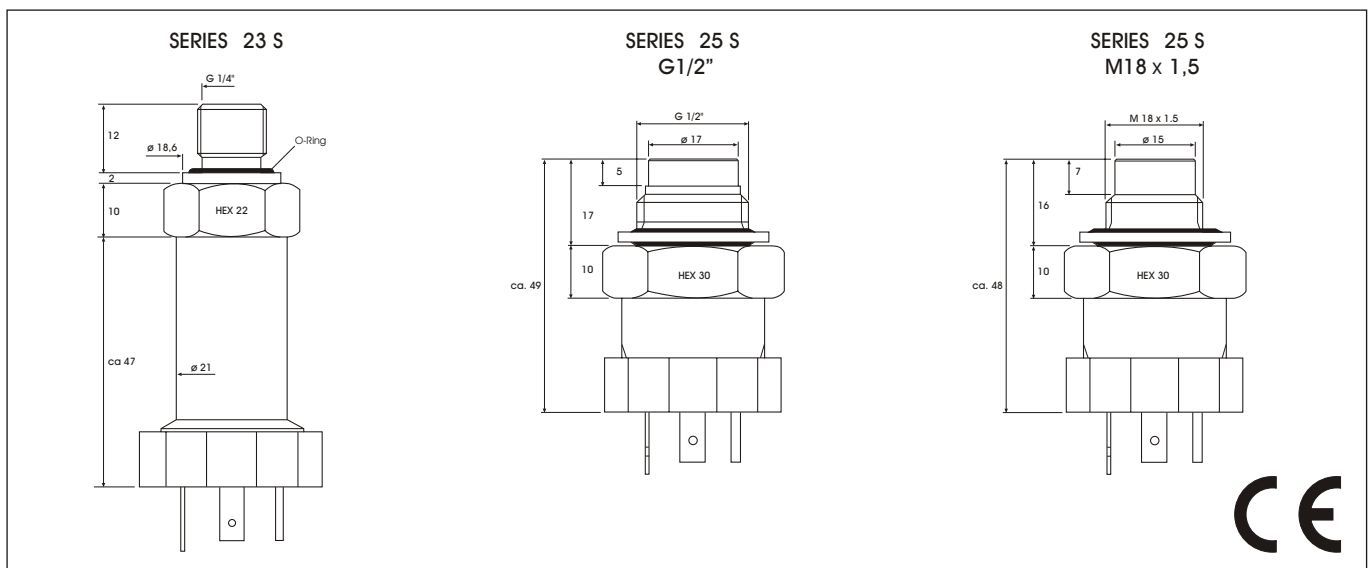
SERIES 23-25 S

For low pressure measurements, high stability has previously only been achieved with large piezoresistive or ceramic capsules and stress-free, floating mountings with O-rings or seals. However, in modern industrial applications, the increasing demand for reliability and extended lifetimes means that O-rings and seals are less and less acceptable, as they are potential causes of failure.

KELLER have now introduced a totally new production method, using a stainless steel brazing technique to give high stability and high accuracy without internal O-rings. This is the new 23 S and 25 S production line.

- Series 23 S Male pressure port G1/4"
Accuracy 0,25% FS (best straight line), optional 0,1% and 0,2% FS
 - Series 25 S G1/2" pressure port with flush diaphragm
 - Series 25 S M18 x 1,5 pressure port with flush diaphragm
Accuracy 0,25% FS (best straight line), optional 0,1% and 0,2% FS
- | | |
|-------------------|--|
| · PAA-23 S / 25 S | Absolute Pressure Transmitter (Zero @ 0 bar abs.) |
| · PA-23 S / 25 S | Sealed Gauge Pressure Transmitter (Zero @ ~1 bar) |
| · PR-23 S / 25 S | Vented Gauge Pressure Transmitter (Zero @ atmospheric) |

- A Comprehensive Range
Absolute, barometric, gauge (positive and negative pressures). 16 nominal pressure ranges.
Current or voltage output.
- Flexibility
A modular concept is used, with fast and economical production achieved by using off-the-shelf Series 7 S and 9 S capsules and Series 6 S sensors.
Numerous options and variations are available to meet customers specific requirements:
Pressure ranges, pressure ports, signal outputs, electrical connectors, etc.
- Quality
Each transmitter is subjected to severe test- and calibration procedures. Transmitters are manufactured and tested according to ISO 9001 / EN 29001.



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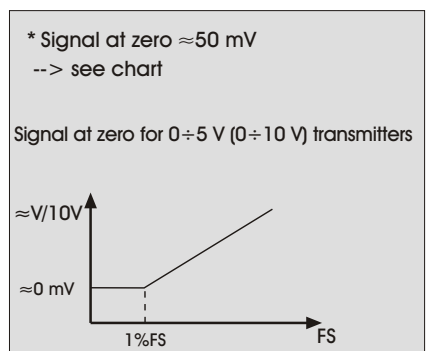
SPECIFICATIONS

	PRESSURE RANGES (FS) IN BAR															
	-1	-0,5	-0,2	0,2	0,5	1	2	5	10	20						
PR-23 S / PR-25 S G1/2"																
PR-25 S M18 x 1,5									5	10	20					
PAA-23 S / PAA-25 S G1/2"				0,2	0,5	1	2	5	10	20						
PAA-25 S M18 x 1,5									5	10	20					
PA-23 S						1	2	5	10	20	50	100	200	400	600	1000
PA-25 S G1/2"						1	2	5	10	20	50	100	200			
PA-25 S M18 x 1,5								5	10	20	50	100	200			
Overpressure	-1	-1	-1	2,5	2,5	3	4	10	20	40	100	200	300	600	900	1200

Linearity ⁽¹⁾ +Hysteresis+Repeatability	± 0,25 % FS	(¹) best straight line
Storage-/Operating Temperature	-40...100°C	
Compensated Temperature Range	-10...80°C	
Temperature Coefficients...	OF ZERO, IN %FS/°C	OF SENSITIVITY, IN %/°C
· Range > 1 bar	0,005 typ. 0,01 max.	0,02 max.
· Range 1 bar	0,010 typ. 0,02 max.	0,02 max.
· Range 0,5 bar	0,015 typ. 0,03 max.	0,02 max.
· Range 0,2 bar	0,025 typ. 0,05 max.	0,02 max.
Stability		
· Range > 2 bar	0,1% FS typ. 0,2% FS max.	
· Range ≤ 2 bar	1 mbar typ. 2 mbar max.	

Signal Output / Type	4...20 mA / 2-WIRE	0...10 V / 3-WIRE *
Supply	10...30 VDC	13...28 VDC
Load Resistance (Ω)	(U-10V)/0,02A	> 5 k

Electrical Connector	Plug DIN 43650
Dead Volume Change	< 0,1 mm ³
Material in Media Contact	Stainless steel 316L (DIN 1.4435), hard solder
Protection Class	Ip65
Weight	Series 23 S: ≈ 105 g. Series 25 S: ≈ 115 g.
Insulation	> 100 MΩ@50 V
Endurance	> 10 million cycles 0÷100% FS at 25°C
Frequency Response	1 kHz (5 kHz option)
Oil Filling	Silicone fluid



OPTIONS

Pressure Port	On request.
Electrical Output	Cable (with reference tube for gauge); protection IP 65.
Pressure Ranges	Any range between 0,2 and 1000 bar, various units (PSI etc.)
Accuracy	±0,1 and ±0,2%FS
Oil Filling	Fluorocarbon oil (Q-compatible), olive-oil, low temperature oil

ELECTRICAL CONNECTIONS

2-Wire Transmitter	3-Wire Transmitter	DIN 43650 Plug	Cable
-	GND	1	white
OUT/GND	+OUT	2	red
+Vcc	+Vcc	3	black



TRANSMITTER

