

PIEZORESISTIVE PRESSURE TRANSDUCERS

VENTED GAUGE AND ABSOLUTE PRESSURE

SERIES 6 S / SC

SERIES 6 MC

These piezoresistive pressure transmitter-heads are produced on the new KELLER automatic brazing lines, making possible the mass production of high quality pressure transmitters at low cost. This new technology allows the crevice-free construction of the pressure port without using seals or O-rings. In the brass sensor line (Series 6 MC), a steel insert and a nickel diaphragm are brazed into a brass housing. In the steel version (Series 6 S, Series 6 SC), all parts are of stainless steel (AISI 316 L). The header with the silicon pressure sensor and the glass feed-through pins are welded to the steel insert underneath the oil filling.

These transducers are the ideal basis for pressure transmitters, pressure switches or digital pressure instruments. The transducer heads come in 3 basic versions:

- 6 MC:** Compact version in brass, lowest price, accuracy 1 % FS. Ranges 5...200 bar
- 6 SC:** Compact version in stainless steel, accuracy 0,5 % FS. Ranges: 5...200 bar.
- 6 S:** Stainless steel, highest performance, accuracy 0,5 % FS. Ranges: 0,3...1000 bar



Series 6 SC / 6 MC: Ranges 5...200 bar
(Compact Version)



Series 6 S: Ranges 0,3...200 bar



Series 6 S: Ranges 400...1000 bar

SPECIFICATIONS	Excitation I=4 mA												
PR-6 ...	*0,3	*0,5	*1,0	2,0	5,0	10	20	* also neg. ranges possible			bar		
PAA-6 ...	0,3	0,5	1,0	2,0	5,0	10	20				bar		
PA-6 ...			*1,0	2,0	5,0	10	20	50	100	200	400	600	bar
Overpressure	2,5	2,5	2,5	3,0	10	20	40	100	200	300	600	900	bar
Signal Output typ.	150	250	400	540	600	-----						600	mV

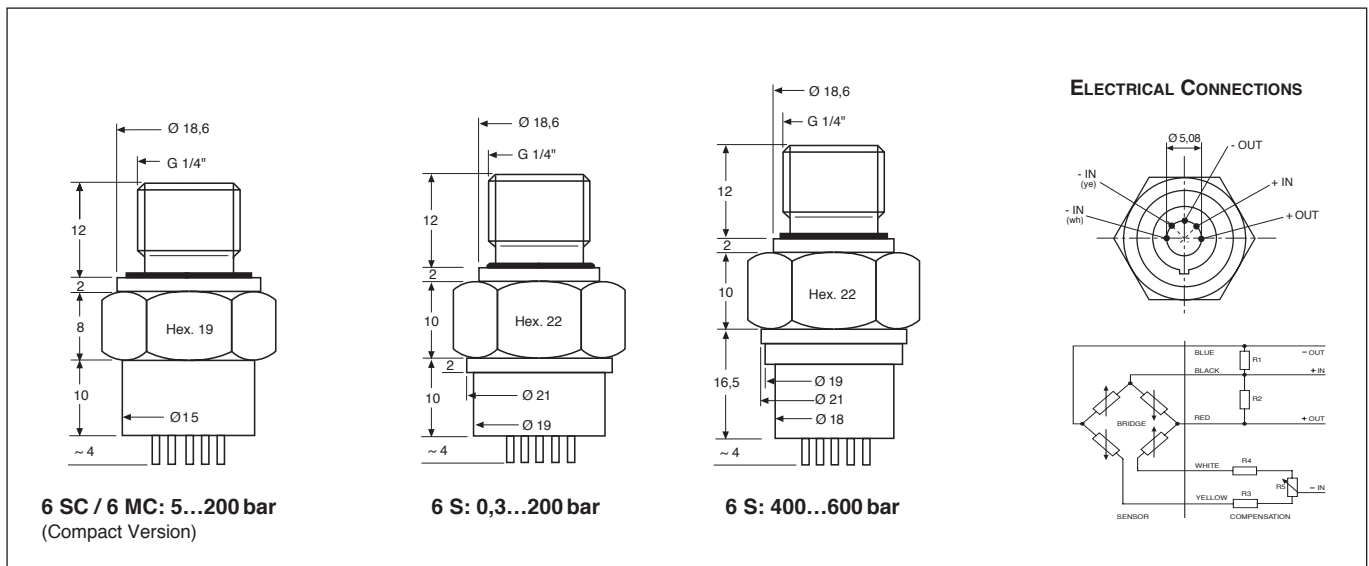
PR: Vented gauge pressure PAA: Absolute pressure PA: Sealed gauge, zero at 1 bar absolute

Excitation / Res. bridge @ 25 °C	0,5...5 mA constant / 3500 Ω ± 20 %		
Offset at 25 °C	≤ 20 mV typ. ≤ 100 mV max. (compensatable with R3...R5)		
Storage / Operating Temp.	- 40...120 °C / - 20...80 °C		
Compensated Temp. Range	0...50 °C		
Oil Filling	Silicone		
Insulation @ 500 V	≥ 100 MΩ		
Vibration / Shock	5...2000 Hz/10 g, axes X/Y/Z / 20 g sinus 11 ms		
Time Constant	< 1 millisecond (resonance > 30 kHz)		
Pressure Connection	G 1/4", Viton seal		

	6 S	6 SC	6 MC
Accuracy *	0,5 %FS	0,5 %FS	1 %FS
Temp. Coefficients			
- of zero, 0...50 °C	0,15 mV/°C	0,10 mV/°C	0,1 mV/°C
- of gain 0...50 °C	0,02 %/°C	0,02 %/°C	0,03 %/°C
Long term stability	0,2 %FS	0,2 %FS	0,5 %FS

OPTIONS Threads in NPT, UNF, Oil fillings, leads attached.

* Including linearity, hysteresis and repeatability. Linearity calculated as best straight line through zero.



Subject to alterations

9/00