

## PIEZORESISTIVE PRESSURE TRANSMITTERS FOR AUTOMOTIVE- AND INDUSTRIAL APPLICATIONS

## SERIES 22 M (BRASS) SERIES 22 S (STEEL)

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 22 M), a steel insert and a nickel diaphragm are brazed into a brass housing. In the steel version (Series 22 S), 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.

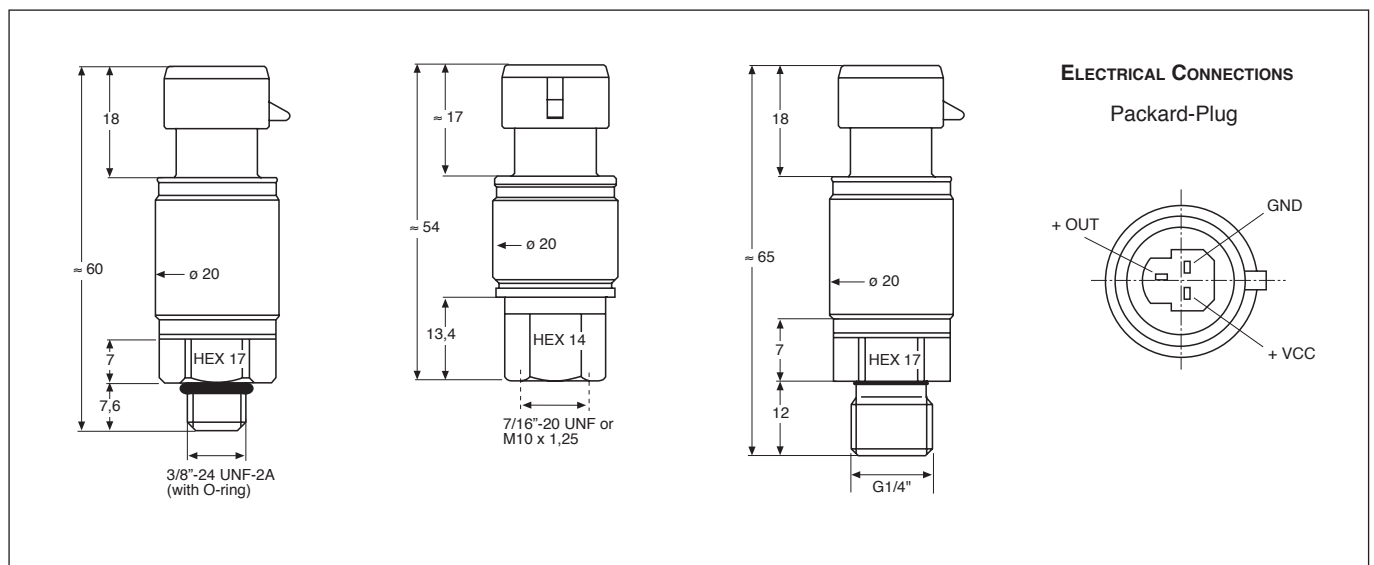
The electronic print is soldered onto the Packard plug. The EMC-protection-components are mounted on the plug side, the amplifier and the compensation electronics on the sensor side. A flexible printed circuit "TAB" (Tape Automated Bonding) connects the sensor with the electronics.

### SPECIFICATIONS

	Pressure Ranges										
PR-22 M / PR-22 S	10	20									bar
PAA-22 M / PAA-22 S	7	10	20	30							bar
PA-22 M / PA-22 S	7	10	20	30	50	100	200	250	400	bar	
Overpressure	15	30	60	90	150	250	400	400	400	bar	

PAA: Absolute. Zero at vacuum PA: Sealed Gauge. Zero at atmospheric pressure (at calibration day) PR: Vented Gauge. Zero at atmospheric pressure

Supply	5 V ± 0,25 V	<b>CE</b>
Output	0,5 V...4,5V ratiometric	
Accuracy (Comp. Temp.-Range)	± 1 %FS (10...40 °C) ± 2 %FS (0...80 °C) ± 4 %FS (-40...135 °C)	
Insulation @ 50 V	≥ 10 MΩ	
Vibration / Shock	10 g / 5...2000 Hz, axes X/Y/Z / 20 g sine 11 ms	
Response Time	(0...99%) < 10 msec	
Pressure Connection	G1/4" (with Viton®-seal), 3/8"-24 UNF-2A (with O-ring), 3/8"-24 UNF-2A (female), 7/16"-20 UNF or M10 x 1,25 (both with Schrader nipple)	
EMC	E.M. Emission: EN 50081-1/-2; E.M. Sensitivity: EN 50082-2	
Homologation	C.R.F. (Centro Ricerche FIAT) for automotive applications	
Protection	IP67	
Weight	≈ 40 g	
Options	Intermediate ranges / customer-specific housings	



Subject to alterations

9/99