

# Piezoresistive Pressure Transmitters

## Automotive and industrial applications

Series 22 offers a reliable cost effective solution for customers requiring medium to high quantities, of mass produced transmitters. Utilising the KELLER Pressure automatic brazing lines, this new technology allows crevice-free construction of the pressure port with no internal seals or O-rings, making possible high volumes at low cost. In the brass 22M, a steel insert and a nickel diaphragm are brazed into a brass housing. In the steel 22S, all parts are stainless steel (AISI 316 L). The glass feed-through header and silicon pressure sensor are welded to the steel insert underneath the oil filling.

The electronic circuit is fitted to the Packard plug. EMC-protection-components are mounted on the plug side, the amplifier on the sensor side. A flexible printed circuit «TAB» connects the sensor with the electronics. The transmitters are designed to have exceptionally good EMC ratings and operate over a wide temperature band, ideal for automotive, hydraulic and refrigeration control applications.

Specifications	Pressure Ranges								
PAA-22M / PAA-22S	5	10	20	30					bar
PA-22M / PA-22S	5	10	20	30	50	100	200	250	bar
Overpressure	15	30	60	90	150	250	300	300	bar

PAA: Absolute. Zero at vacuum PA: Sealed Gauge. 1000 mbar absolute

Type	<u>2-Wire</u>	<u>3-Wire</u>
Supply	8...28 VDC	5 VDC ± 0,25 VDC
Output	4...20 mA	0,5...4,5 V ratiometric
Accuracy (Comp. Temp.-Range)	± 1 %FS (0...50 °C) ± 2 %FS (0...80 °C) ± 4 %FS (-40...125 °C)	
Isolation	> 10 MΩ @ 50 VDC	
Vibration / Shock	10 g / 5...2000 Hz, axes X/Y/Z / 20 g sine 11 ms	
Response Time	(0...99%) < 10 msec	
Pressure Connection	3/8"-24 UNF-2A (with O-ring), 7/16"-20 UNF (female), G1/4" (with O-ring, oil and water resistant)	
EMC	EN IEC 61000-6-1 / EN IEC 61000-6-2 / EN IEC 61000-6-3 / EN IEC 61000-6-4 / EN IEC 61326-2-3	
Homologation	E4-110R, E4-10R (Homologation applies only to selected and authorised products)	
Protection	IP67	
Weight	≈ 40 g	
Options	Intermediate ranges, customer-specific housings, mating plug with cable	

## Series 22M (Brass)

## Series 22S (Steel)



Series 22M  
3/8"-24 UNF-2A



Series 22S  
7/16"-20 UNF



Series 22S  
G1/4"

