

Piezoresistive Pressure Transmitters

Automotive and industrial applications

Series 22 M (Brass)

Series 22 S (Steel)

Series 22 offers a reliable cost effective solution for customers requiring medium to high quantities, of mass produced transmitters. Utilising the KELLER 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 22 M, a steel insert and a nickel diaphragm are brazed into a brass housing. In the steel 22 S, 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-22 M / PAA-22 S	5	10	20	30					bar
PA-22 M / PA-22 S	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 V	5 V ± 0,25 V
Output	4...20 mA	0,5 V...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*)	
EMC	EN 61000-6-1 to -6-4 / EN 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	

*oil and water resistant



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



Series 22 S
7/16"-20 UNF



Series 22 S
G1/4"

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

Series 22 S
7/16"-20 UNF

Series 22 S
G1/4"

Electrical Connections
Compatible with Packard-Plug
Type 12065286