

LOW COST PRESSURE TRANSMITTERS Series 21MC / 21SC

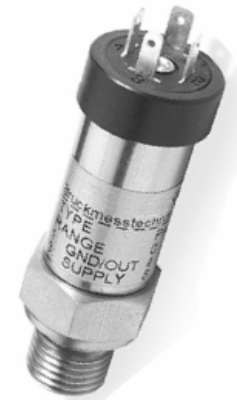
FOR INDUSTRIAL APPLICATIONS / COMPACT VERSION

These piezoresistive silicon pressure transmitters are produced on the new 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 21 MC), a steel insert and a nickel diaphragm is brazed into a brass housing. In the steel sensor line (Series 21 SC), all parts are of stainless steel (AISI 316 L). The header with the silicon pressure sensor and glass lead-through pins is welded to the steel insert underneath the oil filling. The tiny chip-on-board amplifier (weight ≈ 1 gram) with the specific "PROGRES" circuit is mounted directly on the glass feed-through pins. It is then encapsulated in silicone compound for humidity and vibration protection.

Note: The cable version of the transmitters has exceptionally high RFI protection.



Series 21 MC
Brass Sensor Head, Steel Body



Series 21 SC
Steel Sensor Head, Steel Body

SPECIFICATIONS

PA Sealed Gauge (zero at 1 bar abs.) Overpressure	Pressure Ranges (FS)					
	5	10	20	50	100	200
	bar		bar			
	10	20	40	100	200	300
	bar		bar			
	<u>2-Wire</u>	<u>3-Wire</u>	<u>4-Wire</u>			
Output (ratiometric@Excitation)	4...20 mA	0,5...4,5 V@5 V	0...100 mV@10 V			
Excitation	8...28 V	4,75...5,25 V	5...15 V			
	<u>SERIES 21 SC</u>	<u>SERIES 21 MC</u>				
Total Accuracy at RT	± 0,5% FS	± 1% FS				
T.C. of Zero	± 0,03% FS / °C	± 0,04% FS / °C				
T.C. of Sensitivity	± 0,03% / °C	± 0,04% / °C				
Long Term Stability, typ.	< 0,2% FS	< 0,5% FS				
Operating Temperature	-25...+80 °C					
Compensated Temperature Range	0...+50 °C					
Protection	IP 65					
Vibration	20 g (5...2000 Hz, max. amplitude ± 3 mm), according to IEC 68-2-6					
Shock	20 g (11 ms)					
CE-Conformity	EN 50081-1, EN 50082-2					
Insulation	> 100 MΩ / 500 V					
Pressure Port	G 1/4" male, Eolastic®-seal					
Cable / Connector	2 m / mPm (option DIN 43650)					
Weight (Connector Version)	≈ 60 g					



Series 21 MC
Series 21 SC

Cable Version

Series 21 MC
Series 21 SC

Connector Version

ELECTRICAL CONNECTIONS

Connector	2-Wire	Cable	3-Wire	Cable	4-Wire	Cable
1	OUT/GND	white	GND	green	GND	white
2			+OUT	white	+OUT	red
3	+VCC	brown	+VCC	brown	+VCC	black
4 (E)			-OUT		-OUT	blue