

Pressure Transducer Model KCK

Piezoresistive sensor element on ceramic
without internal transmission fluid
Accuracy 1 % F.S.

Features

- Rugged stainless steel construction
- Ceramic sensor element
- Good long term stability
- Protection IP65

Ranges

0 ... 1 bar up to 0 ... 250 bar
0 ... 15 psi up to 0 ... 3.625 psi

Applications

Machine- and apparatus construction
Automation
Refrigeration- and air conditioning



Technical specifications	KCK
Measuring principle	Piezoresistive bridge on ceramic diaphragm made by thick film technology
Range [bar]	1 1,6 2,5 4 5 6 10 16 25 40 50 60 100 200 250
Overpressure limit [bar]	2 4 4 10 10 10 20 40 40 100 100 100 200 400 400
Pressure type	Gauge
Process connection	G 1/2 B male according EN 837 1/2 NPT male according ANSI/ASME B1.20.1 Others on request
Material	
Process connection	Stainless steel 316Ti (1.4571)
Sealing gasket (wetted)	FKM (Viton)
Sensor	Al ₂ O ₃ diaphragm with piezoresistive bridge at back side
Case	Stainless steel 304 (1.4301)
Power supply	14 ... 30 VDC
Output signal	4 ... 20 mA, 2-wire 0 ... 10 VDC, 3-wire 0 ... 5 VDC, 3-wire 1 ... 5/6 VDC, 3-wire
Maximum loop resistance for 4 ... 20 mA	≤ (U _B - 9 V) / 0,02 A
Isolation between case and electrical connection	> 1 MΩ at 50 VDC
Isolation voltage	350 VAC
Supply current	Max. 5 mA for VDC output, 20 mA for 4 ... 20 mA output
Accuracy according to DIN 16 086	1,0 % F.S. (terminal based)
Repeatability	≤ ±0,1 % F.S.
Response time (10 ... 90 %)	≤ 1 ms
Permissible	
Operation temperature	-10 ... 70 °C
Medium temperature	-10 ... 85 °C
Storage temperature	-10 ... 100 °C
Compensated temperature	-10 ... 70 °C
Temperature influence	±0,5 % / 10 K
Vibration	≤ 0,1 % F.S. for 0 ... 2000 Hz, 20 g in all directions according IEC 770
Noise of output signal	≤ 0,02 % F.S.
CE-mark/EMC	Emission and immunity according EN 61 326 + A1 (1997)
Electrical connection	4 PIN angle connector according EN 175301-803 Cable connection
Protection acc. EN 60 529/IEC 529	IP65
Weight [kg]	0,2
Accessories, options	Diaphragm seals, valves

Technical drawing of a 1/2 inch Bore (B) ball valve assembly. The drawing shows a side view of the valve with dimensions in millimeters. The total length is 106 mm. The distance from the end of the handle to the center of the valve is 77.5 mm. The handle has a width of 42 mm. The valve body has a diameter of 34.5 mm. The ball has a diameter of 27 mm. The valve is labeled "SW 27" and "G 1/2 B". The drawing is labeled "Rev. A".