

Pressure transducer model KJ1, KJ1HT

Piezoresistive with internal or flush mounted diaphragm

Accuracy 0,5 % or 1 % F.S.

Features

- Absolute and gauge pressure
- High temperature model up to 200 °C
- Sanitary application
- Rugged stainless steel construction
- Excellent long term stability
- Protection IP65 and IP68

Ranges

0 ... 0,6 bar up to 0 ... 25 bar absolute pressure

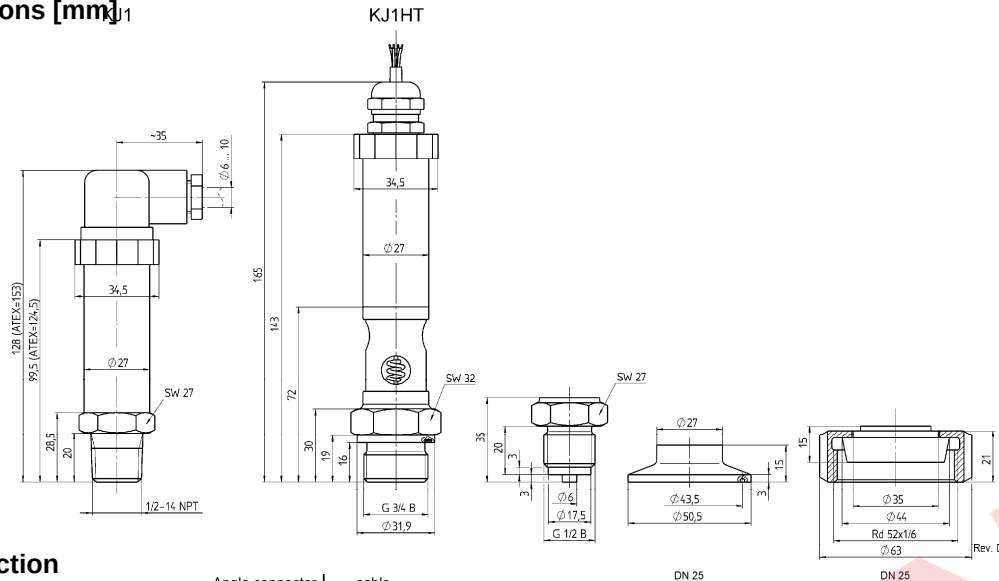
-1 ... 0 bar up to 0 ... 25 bar gauge pressure

-30 in. Hg ... 0 psi up to 0 ... 360 psi gauge pressure



Technical specification	KJ1	KJ1HT
Measuring principle	Piezoresistive	
Range [bar]	0,25* 0,4* 0,6* 1 1,6 2,5 4 6 10 16 25	* not permissible for KJ1HT
Overpressure limit [bar]	0,5 0,8 1,2 2 3,2 5 8 12 20 32 50	
Pressure type	Absolute pressure and positive/negative gauge pressure	
Process connection	G 3/4 B male according DIN 3852 flush mounting G 1 1/2 B male flush mounting Taper pressure connection with slotted nut according DIN 11 851 (DN 20, 25, 32, 40, 50) Clamp according ISO 2852 (DN 20, 25) G 1/4 B male according EN 837-1 G 3/8 B male according EN 837-1 G 1/2 B male according EN 837-1 1/2 NPT male according ANSI/ASME B1.20.1/EN 837-1	others on request
Material	Stainless steel 316Ti (1.4571) Stainless steel diaphragm 316 (1.4401) Stainless steel 304 (1.4301)	
Power supply	12 ... 30 VDC	
Output signal	4 ... 20 mA, 2-wire 0 ... 20 mA, 3-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 signal	
Accuracy according DIN 16 086 (terminal point)	0,5 % F.S.	
Repeatability	1,0 % F.S. for range 0,4 bar	
Response time (10 ... 90 %)	≤ ±0,1 % F.S.	
Permissible	Operation temperature Medium temperature Storage temperature -30 ... 85 °C -30 ... 100 °C -40 ... 100 °C	
Compensated temperature	-20 ... 70 °C	
Temperature influence	±0,3 % / 10 K from 0 ... 100 °C (ref. 20 °C) from 0,4 bar, ±0,6 % / 10 K from 0 ... 100 °C (ref. 20 °C) at 0,25 bar	
Shock resistance	100 g / 4 ms	
Vibration	≤ 0,1 % F.S. for 0 ... 2000 Hz, 10 g in all directions according IEC 770	
Noise of output signal	≤ 0,02 % F.S.	
Nominal position	≤ 4 bar vertical, > 4 bar any	
CE-mark/EMC	Emission according EN 50 081-1 (March 1993) Immunity according EN 50 082-2 (March 1995)	
Electrical connection	4 PIN angle connector according DIN EN 175301-803, cable connection	
Protection according EN 60 529/IEC 529	IP65, optional IP68	
Weight [kg]	0,25 ... 0,32 (depending on process connection)	
Accessories, options	Diaphragm seals, valves	

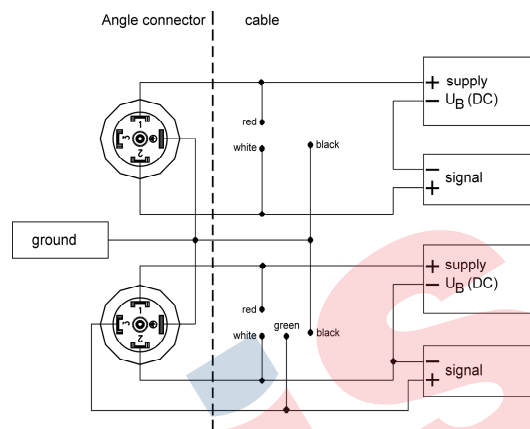
General dimensions [mm]



Electrical connection

2-wire

3-wire



Order information

Type	Output signal	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Options
J1	(01) 0/10 VDC	(050) 0,50 %	Gauge pressure		(=) IP65	(MG2) G 1/4 B male	(M1) Angle connector according DIN EN 175301-803	(NH) Tagging wired
J1HT	(05) 0/5 VDC	(100) 1,0 %	-1/ 0	BAR	(IP68) IP68 (only with cable connection)	(MG3) G 3/8 B male	(F2) Cable connection	(HD1) Optional overpressure
	(15) 1/5 VDC		-1/ 0,6	m BAR		(MG4) G 1/2 B male	specify cable lengths in [m]	
	(16) 1/6 VDC		-1/ 1,5	0/40		(M04) 1/2 NPT male		
	(20) 0/20 mA		-1/ 3	0/60				
	(42) 4/20 mA		-1/ 5	0/100				
			0/ 0,25 ¹⁾	0/160				
			0/ 0,4 ^{1) 2)}	0/250				
			0/40					
			0/60					
			Gauge pressure respectively absolute pressure			(MG75F) G 3/4 B male flush mounting		
			0/ 0,6 ¹⁾	BAR respectively BARABS		(KNDN25) Taper pressure connection with slotted nut DN 25 according DIN 11 851		
			0/ 1			(CDN25) Clamp DN 25 according ISO 2852		
			0/ 1,6					
			0/ 2,5					
			0/ 4					
			0/ 6					
			0/ 10					
			0/ 16					
			0/ 25					
			¹⁾ not permissible for KJ1HT					
			²⁾ accuracy 1,0 %					

How to order

Series	Type	Signal output	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Option
K	J1	42	050	0/0,25	BAR	=	MG2	M1	NH

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