

## 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

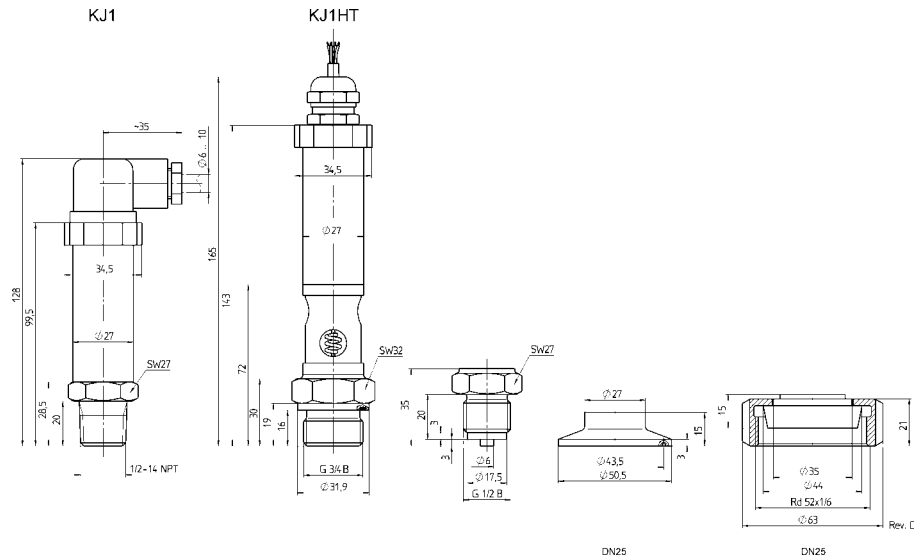
### Ranges

- 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



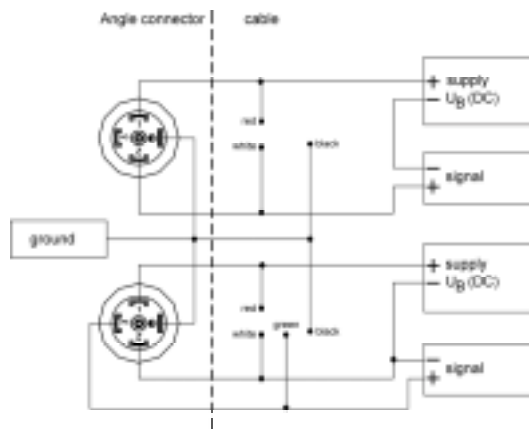
Technical specification	KJ1	KJ1HT
Measuring principle	piezoresistive	
Range [bar]	0,25* 0,4* 0,6* 1 1,6 2,5 4 6 10 16 25	* not permissible for KJ1HT
Overpressure limit [bar]	0,5 0,8 1,2 2 3,2 5 8 12 20 32 50	
Pressure type	Absolute pressure and positive/negative gauge pressure	
Process connection	G 3/4 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)	
Process connection		
Sensor		
Case		
Power supply	12 ... 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 0 ... 20 mA, 3-wire	
Maximum loop resistance for 4 ... 20 mA	≤ (U <sub>B</sub> - 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	0,5% F.S. 1,0% F.S. for range 0,4 bar	
Repeatability	≤ ± 0,1% F.S.	≤ ± 0,1% F.S.
Response time (10 ... 90%)	≤ 3 ms	
Permissible		
Operation temperature	-30 ... 85°C	-30 ... 85°C
Medium temperature	-30 ... 100°C	-30 ... 200°C
Storage temperature	-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 43 650, cable connection	
Protection according EN 60 529/IEC 529	IP65 (using a cable with vent tube)	
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 -1/ 0	BAR	(=) IP65	(MG2) G ¼ B male	(M1) Angle connector according to DIN 43 650	(NH) Tagging wired
J1HT	(05) 0/5 VDC (15) 1/5 VDC (16) 1/6 VDC (20) 0/20 mA (42) 4/20 mA	(100) 1,0%	-1/ 0,6 -1/ 1,5 -1/ 3 -1/ 5 0/ 0,25 <sup>1)</sup> 0/ 0,4 <sup>1) 2)</sup>			(MG3) G 3/8 B male (MG4) G 1/2 B male (M04) 1/2 NPT male (MG75F) G 3/4 B male flush mounting (KNDN25) Taper pressure connection with slotted nut DN 25 according to DIN 11 851 (CDN25) Clamp DN 25 according to ISO 2852	(F2) Cable connection  Specify cable lengths in [m]	(HD1) Optional overpressure
			Gauge pressure respectively absolute pressure 0/ 0,6 <sup>1)</sup> 0/ 1 0/ 1,6 0/ 2,5 0/ 4 0/ 6 0/ 10 0/ 16 0/ 25	BAR respectively BARABS				
			<sup>1)</sup> not permissible for KJ1HT <sup>2)</sup> accuracy 1%					

## How to order

Series	Type	Signal output	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Option
K	J1	42	050	0/10	BAR	=	MG2	M1	NH