

Pressure transducer model KXD and KXDHT

Complete stainless steel thin film sensing element without internal liquid filling
 Accuracy 0,25 % and 0,5 % F.S.

Features

- Rugged stainless steel construction
- High overpressure limits
- High shock and vibration stability
- Excellent long term stability
- Protection IP65 and IP68

Ranges

-1 ... 0 bar up to 0 ... 1400 bar
 -30 in. Hg ... 0 psi up to 0 ... 20.000 psi

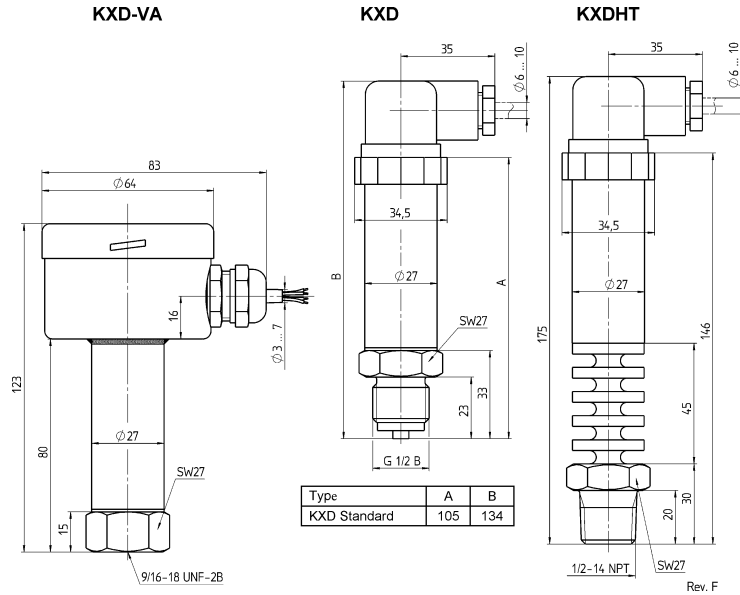
Application

Hydraulic, refrigeration, machine tool,
 test/measurement, pump control, HVAC,
 medical, construction equipment and all
 general purpose industrial process applications



Technical specifications	KXD	KXDHT
Measuring principle	Polysilicon thin film technology	
Range in bar	1 1,6 2,5 4 6 10 16 25 40 60 100 160 250 400 600 1000 1400	
Overpressure limit in bar	6 6 6 10 14 20 40 70 100 138 200 304 525 640 900 1200 1680	
Pressure type	Gauge, vacuum and compound	
Process connection	G 1/4 B male according EN 837-1 1/4 NPT male according ANSI/ASME B1.20.1/EN 837-1 9/16-18 UNF-2B Aminco (high pressure) G 1/2 B male according EN 837-1 1/2 NPT male according ANSI/ASME B1.20.1 Others on request (for pressure limitations see order information)	
Material	Stainless steel 316L (1.4404) Stainless steel 1.4542/1.4548 (17-4PH) 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	$\leq (U_B - 9 \text{ V}) / 0,02 \text{ A}$	
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. 0,25 % F.S. ¹⁾ ¹⁾ not for range 1 bar, 1,6 bar, 2,5 bar, 600 bar, 1000 bar and 1400 bar not for option HD1	
Repeatability	$\leq \pm 0,03 \text{ % F.S.}$	
Response time (10 ... 90 %)	$\leq 1 \text{ ms}$	
Permissible		
Operation temperature	-30 ... 85 °C	-30 ... 85 °C
Medium temperature	-30 ... 100 °C	-30 ... 150 °C
Storage temperature	-40 ... 100 °C	
Compensated temperature	-20 ... 70 °C	
Temperature influence	$\pm 0,3 \text{ %} / 10 \text{ K}$ from 0 ... 50 °C (ref. 20 °C)	
Shock resistance	At 100 g / 20 ms $\leq 0,05 \text{ % F.S.}$	
Vibration	$\leq 0,1 \text{ % F.S.}$ for 0 ... 2000 Hz, 20 g in all directions according IEC 770	
Noise of output signal	$\leq 0,02 \text{ % F.S.}$	
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 Field housing	
Protection according EN 60 529/IEC 529	IP65, optional IP68	
Weight in kg	0,25	0,4
Accessories, options	Diaphragm seals, valves, digital panel meter	

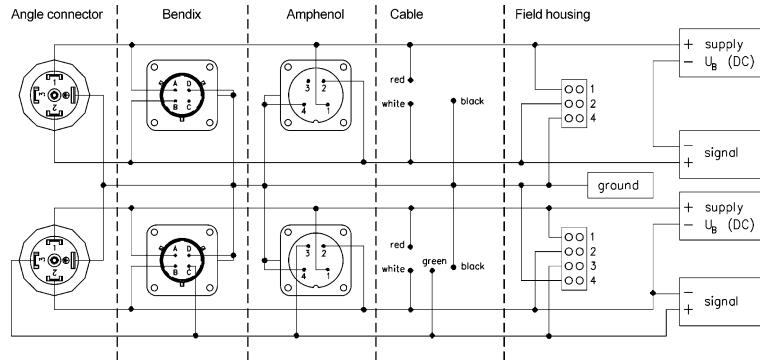
General dimensions in mm



Electrical connection

2-wire

3-wire



Order information

Type	Output signal	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Options	
XD	(10) 0/10 VDC	(025) 0,25 %	-1/ 0 ¹⁾	BAR	(=) IP65	(MG2) G 1/4 B male ¹⁾	(M1) Angle connector according DIN EN 175301-803	(NH) Tagging wired	
XDHT	(05) 0/5 VDC	(050) 0,50 %	-1/ 1,5 ¹⁾		(IP68) IP68 (only with cable connection)	(MG4) G 1/2 B male ¹⁾	(F2) Cable connection	(6B) Cleaned for Oxygen	
	(15) 1/5 VDC		-1/ 3						
	(16) 1/6 VDC		-1/ 5						
	(20) 0/20 mA		0/ 1 ¹⁾			(M02) 1/4 NPT male ¹⁾	(A4) Amphenol 4 PIN	(HD1) Optional overpressure	
	(42) 4/20 mA		0/ 1,6 ¹⁾						
			0/ 2,5 ¹⁾			(M04) 1/2 NPT male ¹⁾	(VA) Field housing in stainless steel		
			0/ 4						
			0/ 6			(F09) 9/16-18 UNF-2B Aminco (high pressure)			
			0/ 10						
			0/ 16						
			0/ 25						
			0/ 40						
			0/ 60						
			0/ 100						
			0/ 160						
			0/ 250						
			0/ 400						
			0/ 600 ¹⁾						
			0/ 1000 ¹⁾						
			0/1400 ¹⁾						
			¹⁾ see front page for accuracy	psi and others on request		others on request	Specify cable lengths in m (e.g. F2-1)		
						¹⁾ max. 1000 bar			

Order example

Series	Type	Output signal	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Options
K	XD	42	050	0/10	BAR	=	MG4	M1	NH

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