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

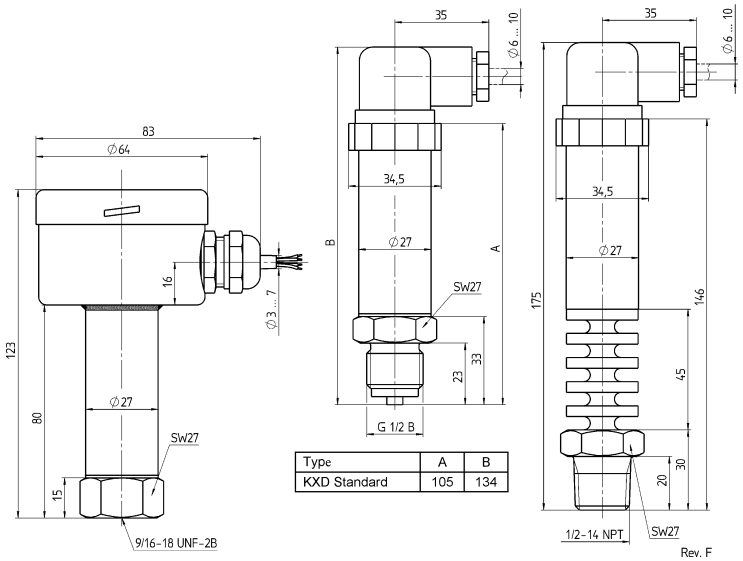
Application

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		
Process connection	Stainless steel 316L (1.4404)	
Sensor	Stainless steel 1.4542/1.4548 (17-4PH)	
Case	Stainless steel 304 (1.4301)	
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	$\leq (U_B - 9\ V) / 0{,}02\ A$	
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. 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	≤ ±0,03 % F.S.	
Response time (10 ... 90 %)	≤ 1 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	±0,3 % / 10 K from 0 ... 50 °C (ref. 20 °C)	
Shock resistance	At 100 g / 20 ms ≤ 0,05 % F.S.	
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 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	

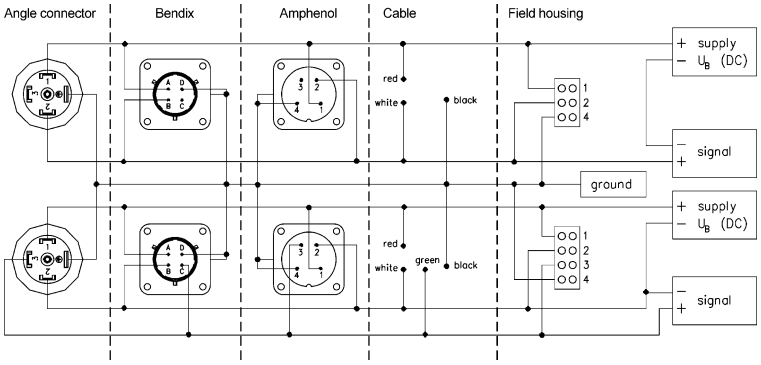
General dimensions in mm

KXD-VA KXD KXDHT



Type	A	B
KXD Standard	105	134

Electrical connection



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 Oxy-gen
	(15) 1/5 VDC		**-1/ 3**			**(M02)** 1/4 NPT male [1]	**(A4)** Amphenol 4 PIN	**(HD1)** Optional overpres-sure
	(16) 1/6 VDC		**-1/ 5**			**(M04)** 1/2 NPT male [1]	**(VA)** Field housing in stainless steel	
	(20) 0/20 mA		**0/ 1** [1]			**(F09)** 9/16-18 UNF-2B Aminco (high pressure)		
	(42) 4/20 mA		**0/ 1,6** [1]					
			0/ 2,5 [1]					
			0/ 4					
			0/ 6					
			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 [1] max. 1000 bar	Specify cable lengths in m (e.g. F2-1)	

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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