

Pressure transducer model KXF, KXF (Exi), KXFHT

Complete stainless steel thinfilm sensor with flush mounted stainless steel diaphragm
Accuracy 0,5 % and 1 % F.S.

Features

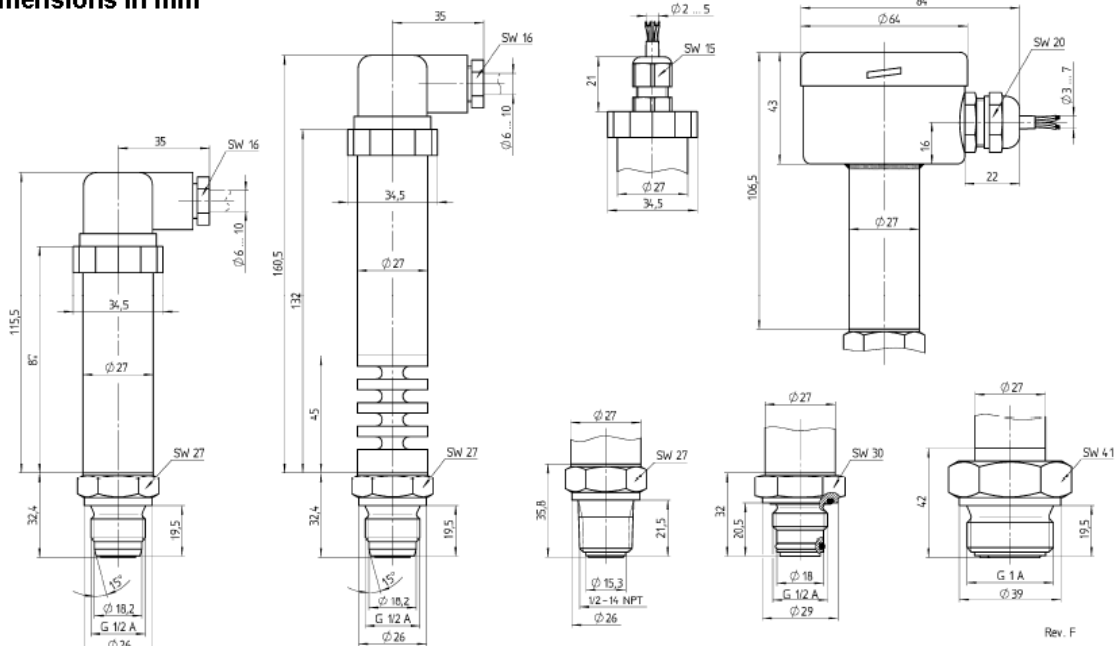
- Flush mounted diaphragm
- Sanitary application
- High temperature model up to 200 °C medium temperature
- Excellent long term stability
- Protection IP65
- Explosion proof (intrinsically safe) for zone 1 and 2 according ATEX



Ranges

- 1 ... 3 bar up to 0 ... 600 bar
- 30 in. Hg ... 45 psi up to 0 ... 8.700 psi

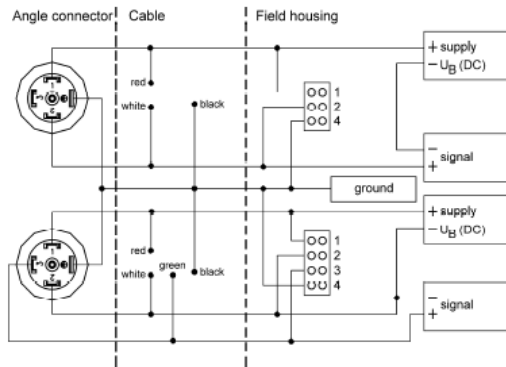
Technical specification	KXF	KXFHT	KXF (Exi)
Measuring principle	Thinfilm		
Range in bar	1 2,5 4 6 10 16 25 40 60 100 160 250 400 600		
Overpressure limit in bar	6 6 10 14 20 40 70 100 138 200 304 525 640 900		
Pressure type	Gauge and compound		
Process connection	G ½ A male according DIN 3852 with metal seal cone at the top G ½ A male with O-ring and sealing ring ½ NPT male according ANSI/ASME B1.20.1, others on request		
Material	Process connection: Stainless steel 316Ti (1.4571) Diaphragm: Stainless steel 316Ti (1.4571), Hastelloy C (only ½ NPT male) Transmission liquid: Silicon oil, Halocarbon or Almond oil Sensor: Stainless steel diaphragm 1.4542/1.4548 (17-4PH) with polysilicium cell Case: Stainless steel 304 (1.4301)		
Power supply	12 ... 30 VDC		12 ... 26 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		4 ... 20 mA, 2-wire
Maximum loop resistance for 4 ... 20 mA	≤ (U _B - 9 V) / 0,02 A		≤ (U _B - 11,2 V) / 0,02 A
Explosion proof (intrinsically safe)			EEx ib IIC T6 or T5 according to PTB 02 ATEX 2194 CE 0518 Ex II 2 GD
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., 1,0 % F.S. for ranges 1 bar, 2,5 bar and 600 bar Please advise/note inclination of mounting position		
Repeatability	≤ ±0,15 % F.S.		
Response time (10 ... 90 %)	≤ 5 ms		
Permissible			For T5 and T6 (EEx ib)
Operation temperature	-30 ... 85 °C	-30 ... 85 °C	-20 ... 60 °C T6 -20 ... 75 °C T5
Medium temperature	-30 ... 100 °C	-30 ... 200 °C (Silicon oil) -30 ... 150 °C (Halocarbon) 0 ... 130 °C (Almond oil)	-20 ... 60 °C T6 -20 ... 75 °C T5
Storage temperature	-40 ... 100 °C		
Compensated temperature	-20 ... 70 °C		
Temperature influence	±0,3 % / 10 K from 0 ... 50 °C (ref. 20 °C) for > 10 bar ±1,2 % / 10 K from 0 ... 50 °C (ref. 20 °C) for ≤ 10 bar		
Medium temperature influence	±0,2 % / 10 K		
Shock resistance	At 20 g / 20 ms ≤ 0,1 % F.S.		
Vibration	≤ 0,1 % F.S. for 0 ... 400 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 EN 175301-803, cable connection, field housing		
Protection according EN 60 529/IEC 529	IP65, optional IP68		IP65 for dust with cable connection IP65 for gas with angle connector IP67 for gas with cable connection
Weight in kg	0,25	0,4	0,25
Accessories, options	Weld in adapter		



Electrical connection

2-wire

3-wire



Order information

Type	Output signal	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Options
XF	(01) 0/10 VDC	(050) 0,50 %	-1/ 3	BAR	(=) IP65	(MG4F) G 1/2 A male flush mounting	(M1) Angle connector according EN 17530 1-803	(NH) Tagging wired
XFHT	(05) 0/5 VDC	(100) 1,0 %	-1/ 5		(ATEXGD) Intrinsically safe for gas and dust (only for type KXF with output signal 4/20 mA and electrical connection F2)	(M04F) 1/2 NPT male flush mounting	(F2) Cable connection	(6B) Oxygen cleaned (only with Halocarbon filling)
	(15) 1/5 VDC		0/ 1 ¹⁾		(ATEXG) Intrinsically safe for gas (only for type KXF with output signal 4/20 mA)	(M04FHS) 1/2 NPT male flush mounting, diaphragm Hastelloy C, socket 316Ti (1.4571)	(VA) Field housing in stainless steel (not for KXF (E.xi))	(GX) Halocarbon filling
	(16) 1/6 VDC		0/ 2,5 ¹⁾		(IP68) IP68 (only with cable connection)	(MG5F) G 1/2 A male flush mounting with O-ring and sealing ring		(GZ) Almond filling
	(20) 0/20 mA		0/ 4			(MG6F) G 1 A male flush mounting according DIN 3852 part 2 form A		(HD1) Optional overpressure
	(42) 4/20 mA		0/ 6					
			0/ 10					
			0/ 16					
			0/ 25					
			0/ 40					
			0/ 60					
			0/100					
			0/250					
			0/400					
			0/600 ¹⁾					
			¹⁾ min. 1,0 %					
				psi and others on request		others on request	specify cable lengths in m	

How to order

Series	Type	Signal output	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Option
K	XF	42	050	0/10	BAR	=	MG4F	M1	NH