

Pressure sensor module K8, KX8

Complete stainless steel thinfilm sensor
without internal liquid filling, or with flush mounted diaphragm
Accuracy 0,5% and 1% F.S.

Features

- Wetted parts stainless steel
- High overpressure limits
- High shock and vibration stability
- Excellent long term stability
- Compact design

Ranges

3 bar up to 1400 bar

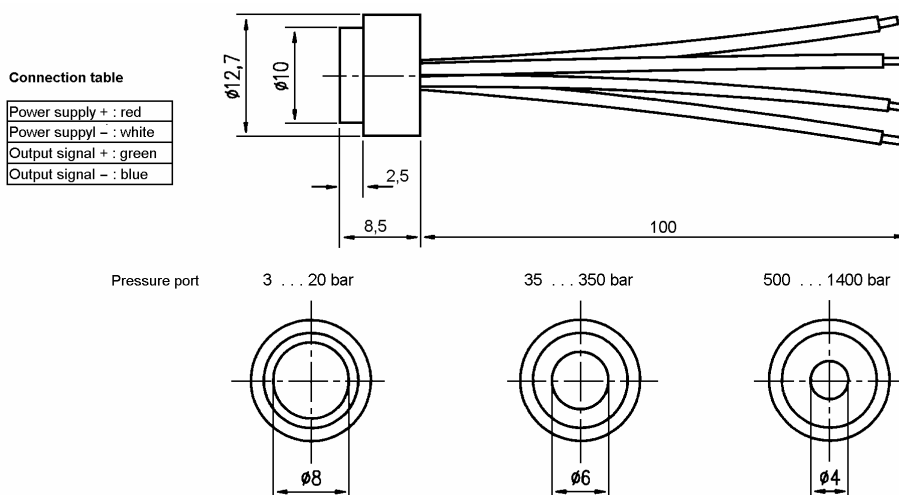
Applications

OEM, Robotics, Data loggers
Hydraulics and mech. Engineering
Refrigeration control systems



Technical specifications	K8	KX8														
Construction	Sensor only	Sensor welded to a process connection														
		Internal diaphragm without filling							Flush mounted diaphragm							
									High temperature version							
Measuring principle	Thinfilm															
Range [bar]	3 ²⁾	5 ²⁾	7	10	14	20	35	50	70	100	200	350	500	700 ^{1) 2)}	1000 ^{1) 2)}	1400 ^{1) 2)}
	¹⁾ not for flush mounted diaphragm construction															
Overpressure limit [bar]	6	10	14	20	28	40	70	100	140	200	304	525	640	900	1200	1680
Pressure type	Gauge															
Process connection		1/4 NPT male, 1/2 NPT male according to ANSI/ASME B1.20.1 G 1/4 B male, G 1/2 B male according to DIN 16 288 9/16-18 UNF-2B Aminco (high pressure) Others on request (for pressure limitations see order information)							G ½ B male according DIN 3852 with metal seal G ½ B male with O-ring and sealing ring 1/2 NPT male according to ANSI/ASME B1.20.1							
Material																
Process connection, wetted parts	Stainless steel 316Ti (1.4571)							Stainless steel 316Ti (1.4571), optional Hastelloy C diaphragm								
Transmission liquid	Stainless steel 1.4542/1.4548 (17-4PH) with polysilicon cell															
Sensor	Stainless steel 304 (1.4301)															
Case																
Power supply	5 ... 10 VDC															
Output signal	mV/V, (9 mV up to 18 mV per volt)															
Zero offset	max. ± 0,6 mV/VDC															
Bridge resistance typical	3500 Ohm															
Isolation between case and electrical connection	> 100 MΩ at 500 VDC															
Isolation voltage	350 VAC															
Accuracy according DIN 16 086	0,5% F.S.															
	1,0% F.S. for the ranges 3 bar, 5 bar, 700 bar, 1000 bar and 1400 bar															
Repeatability	≤ ± 0,03% F.S.															
Response time (10 ... 90%)	≤ 1 ms															
Permissible																
Operation temperature	-20 ... 70°C							-30 ... 100°C							-30 ... 100°C	
Medium temperature	-20 ... 70°C							-30 ... 100°C							-30 ... 200 °C (Silicone oil)	
															-30 ... 150 °C (Halocarbon)	
															0 ... 130 °C (Almond oil)	
Storage temperature	-40 ... 120°C															
Temperature influence	± 0,3% / 10 K from 0 ... 50°C (ref. 20°C), ± 0,7% / 10 K from -20 ... 0 / 50 ... 80°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															
Electrical connection	Tinned 4 core stranded flying leads, 100 mm long, special connectors on request.															
Protection according EN 60 529/IEC 529	IP40															
Weight [g]	3	100							150				180			
Accessories, options	Amplifying electronic, special constructions															

General dimensions [mm]



Order information

Type	Output signal	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Options
(8) OEM Sensor	(MV) mV/V	(050) 0,50%	3 ¹⁾	BAR	(OEMZ) K8	(=) standard for K8	(=) Standard	(NH) Tagging wired
(X8) OEM sensor with process connection		(100) 1,0%	5 ¹⁾ 7 10 14 20 35 50 70 100 200 350 500 700 ^{1) 2)} 1000 ^{1) 2)} 1400 ^{1) 2)}		(IP00) KX8	(MG2) G 1/4 B male ¹⁾ (MG4) G 1/2 B male ¹⁾ (M02) 1/4 NPT male ¹⁾ (M04) 1/2 NPT male ¹⁾ (F09) 9/16-18 UNF-2B Aminco (high pressure) (MG4F) G 1/2 B male flush mounted ^{2) 4)} (M04F) 1/2 NPT male flush mounted ^{2) 4)} (M04FHS) 1/2 NPT male flush mounted, with Hastelloy C diaphragm ^{2) 4)} (MG5F) G 1/2 B male flush mounted with O-ring and sealing ring ^{2) 4)} For high temperature version, with cooling device add HT to the coding as marked with ⁴⁾ above e.g. MG4FHT others on request		(=) Silicone oil (-30 ... 200°C) (GX) Halocarbon (-30 ... 150°C) (GZ) Almond oil (0 ... 130°C)
	others on request		¹⁾ min. 1,0% ²⁾ not for flush mounted diaphragm			¹⁾ max. 1000 bar ²⁾ max 600 bar		

How to order

Series	Type	Output signal	Accuracy	Range	Engineering unit	Protection	Process connection	Electrical connection	Option
K	8	MV	050	0/10	BAR	OEMZ	=	=	NH

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