

KAM-B Force Transducer

Applications

- Measuring of pressure forces in machinery and system
- "Load cookies"

Features

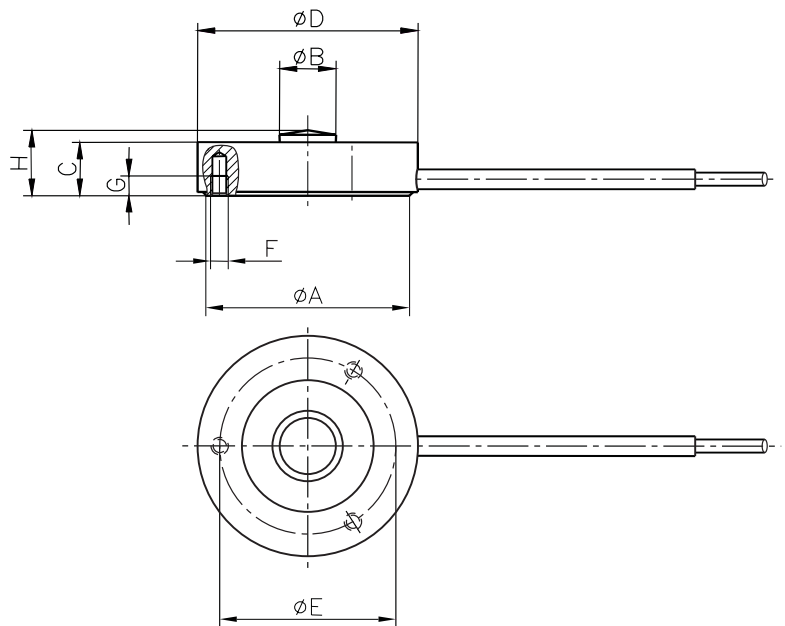
- Membran force transducer
1kN up to 100kN
- High accuracy class: 0.5 up to 2% F_{nom}
- Made from stainless steel
- Environmental protection IP 65



Options

- ATEX Certificate for 1kN ... 10kN

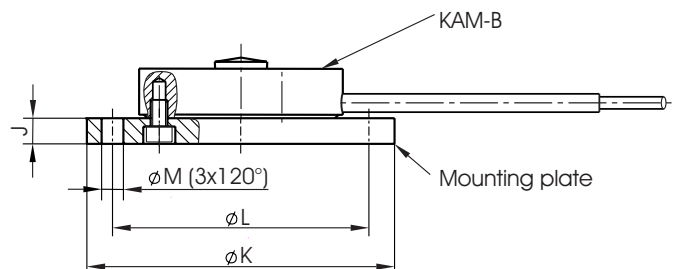
Dimensions (mm)



Rated Force in kN	A	B	C	D	E	F	G	H	Weight
1 ... 10	29.4	8.1	8.1	31.8	25.4	M2.5	3	9.9	40g
20 ... 50	35.0	10.7	14.0	38.1	31.5	M2.5	3	16.0	50g
100	49.0	15.2	22.9	50.8	42.0	M4.0	6	25.4	300g

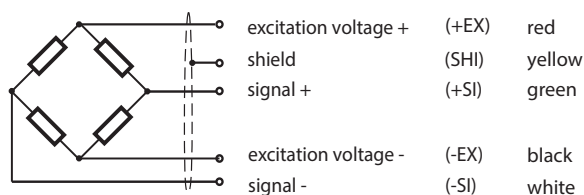
Appliances for Installation and Mounting

Rated Force in kN	J	K	L	M
1 ... 10	4	48	40	3.4
20 ... 50	7	58	47	4.1
100	14	78	64	5.8



Wiring Code

Cable length 1.5m



Specifications

Accuracy Class	% F _{nom}	0.5	1	2
Rated force (F _{nom})	kN	1/ 2/ 5/ 10	20	50/ 100
Maximum operating force (F _G)	% F _{nom}		150	
Breaking force (F _B)	% F _{nom}		> 300	
Lateral force limit (F _Q)	% F _{nom}			
Rated characteristic value (C _{nom})	mV/V		1.5 ± 0.05	
Relative deviation of zero signal	%		3	
Reference excitation voltage (U _{ref})	VDC		10	
Input resistance (R _e)	Ω		380 ± 30	
Output resistance (R _a)	Ω		352 ± 1.5	
Insulation resistance (R _{is})	Ω		> 5 × 10 ⁹	
Relative linearity error (d _{lin})	%	≤ 0.5		≤ 1
Relative reversibility error (v)	%	≤ 0.5		≤ 1
Temperature effect on zero signal (TK ₀)	%/10K	≤ 0.5		≤ 1
Temperature effect on characteristic value (TK _c)	%/10K	≤ 0.5		≤ 1
Relative creep over 30 minutes (d _{cr, F+E})	%			
Reference temperature (T _{ref})	°C		+23	
Rated temperature range (B _{T, nom})	°C		-15 ... +70	
Operating temperature range (B _{T, G})	°C		-15 ... +70	
Storage temperature range (B _{T, S})	°C		-20 ... +100	
Environmental protection (EN 60529)			IP 65	

All data according to VDI/VDE/DKD 2638

Order Example

Type Code	Description
KAM-B/10kN/0.5	Force transducer 10kN with 0.5% accuracy class
	Accuracy class
	Rated force
	Model

Accessoires / Options

	Type Code	Description
Mounting plate	XKM 290	for 1kN up to 10kN
	XKM 291	for 20kN up to 50kN
	XKM 292	for 100kN
ATEX	KAM-B-EX	for 1kN ... 10kN. Please note ATEX-datasheet!