

KAM-B Force Transducer

Applications

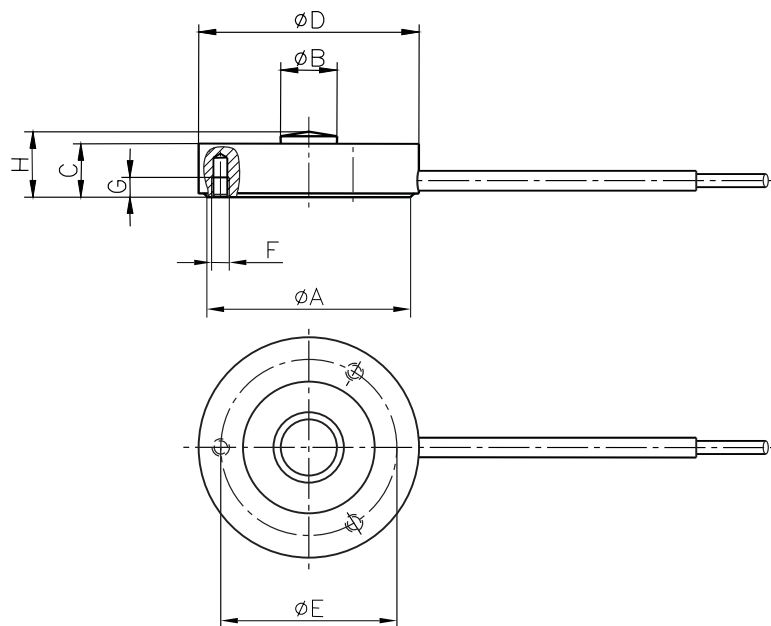
- Measuring of pressure forces in machinery and system
- "Load cookies"

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



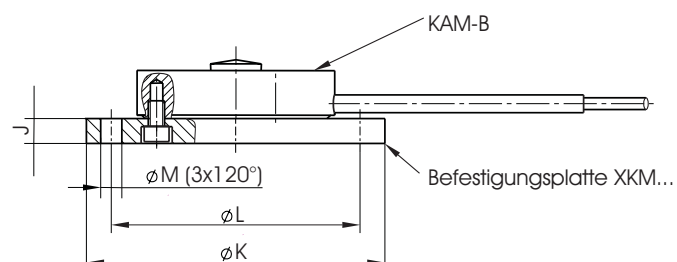
Dimensions (mm)



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	48.0	15.2	22.4	50.8	42.0	M4.0	6	25.4	300g

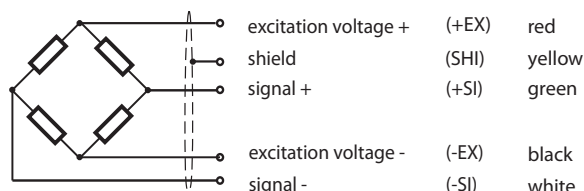
Appliances for Installation and Mounting

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
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		$> 5 \times 10^9$
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})	$^{\circ}\text{C}$		+23
Rated temperature range ($B_{T, nom}$)	$^{\circ}\text{C}$		-15 ... +70
Operating temperature range ($B_{T, G}$)	$^{\circ}\text{C}$		-15 ... +70
Storage temperature range ($B_{T, S}$)	$^{\circ}\text{C}$		-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 load
	Model

Accessoires / Options

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