

KAM/100N KAM/200N

Force Transducer for Small Forces

Applications

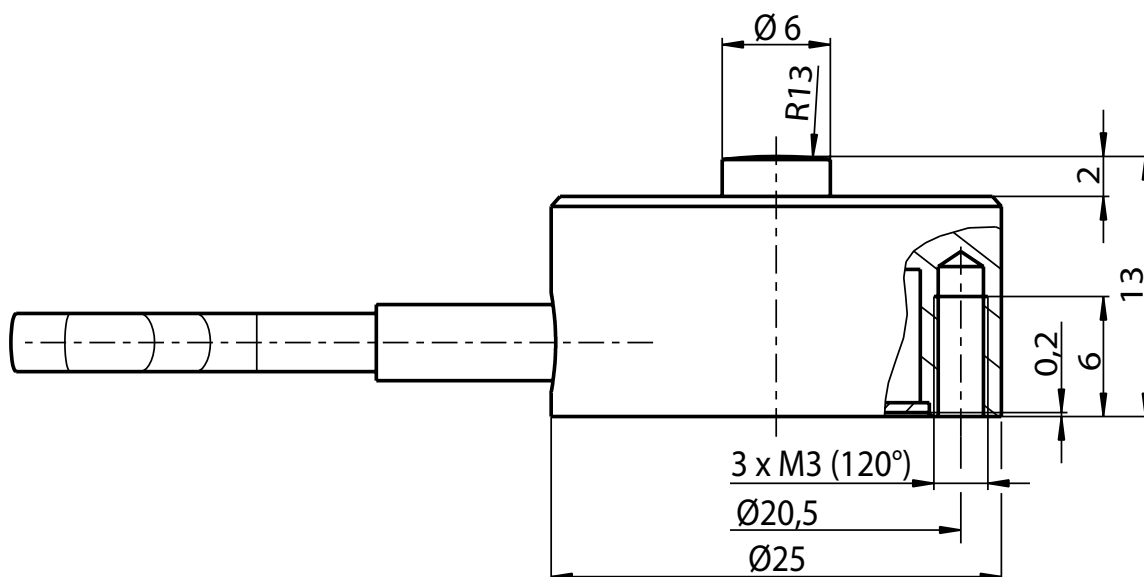
- Industrial automation
- Mounting and fitting with small forces
- Robotics sensors
- Polishing machines
- Semiconductor industry

Features

- Rated force 100N to 200N
- High accuracy
- Small dimension
- Made of aluminium
- Hermetically sealed (IP 67)

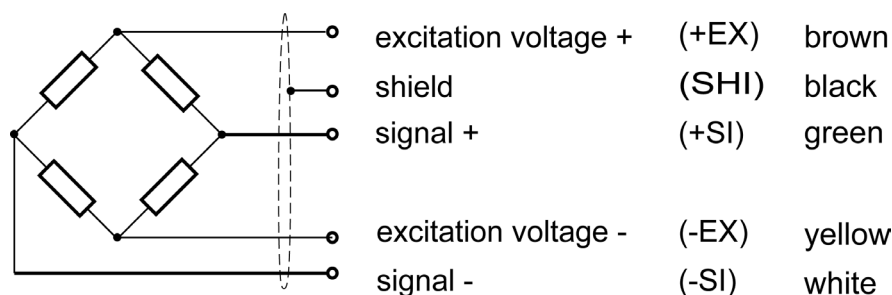


Dimensions



Wiring Code

Cable length 1.5m



Specifications

Accuracy Class	% F_{nom}	0.5	0.2	0.1
Rated (nominal) force (F_{nom})	N	100 / 200		
Maximum operating force (F_G)	% F_{nom}	150		
Breaking force (F_B)	% F_{nom}	>300		
Lateral force limit (F_Q)	% F_{nom}	50		
Rated characteristic value (C_{nom})	mV/V	1.000 ± 0.005		
Zero signal tolerance	%	≤ 3		
Reference excitation voltage	V_{ref}	5		
Operating range of excitation voltage (B_{UG})	VDC	0.5 ... 12		
Input resistance (typ.) (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	≤ 0.2	≤ 0.1
Relative reversibility error (v)	%	≤ 0.5	≤ 0.2	≤ 0.1
Temperature effect on zero signal (TK_0)	% / 10K	≤ 0.5	≤ 0.2	≤ 0.1
Temp. effect on characteristic value (TK_c)	% / 10K	≤ 0.5	≤ 0.2	≤ 0.1
Relative creep over 30 minutes ($d_{cr, F+E}$)	%	≤ 0.5	≤ 0.2	≤ 0.1
Reference temperature (T_{ref})	$^{\circ}C$	+23		
Rated temperature range ($B_{T, nom}$)	$^{\circ}C$	-20 ... +60		
Operating temperature range ($B_{T, G}$)	$^{\circ}C$	-30 ... +70		
Storage temperature range ($B_{T, S}$)	$^{\circ}C$	-40 ... +70		
Environmental protection (EN 60529)		IP 67		

All data according to VDI/VDE/DKD 2638

Order Example

Type Code	Description
KAM/100N/0.1	Force transducer 100N with 0.1% accuracy (with free cable ends)
Accuracy class	
Nominal force	
Model	

Accessories / Options

	Type Code	Description
Plug and cable	XKC 041	6 pin plug connected to sensor cable or connection to display units, i.e. AE703
	XKC 071	6 pin plug including TEDS function connected to sensor cable for connection to display unit AE703
	MF-KAM	6 pin plug including TEDS-M function (masterforce® sensor incl. multi point calibration) connected to sensor cable for connection to display unit AE703