

KAM-D Force Transducer

Applications

- Testing machines for tension and compression
- Force calibration in railway vehicles
- Calibration of machines and systems
- Force measurement on hydraulic cylinder

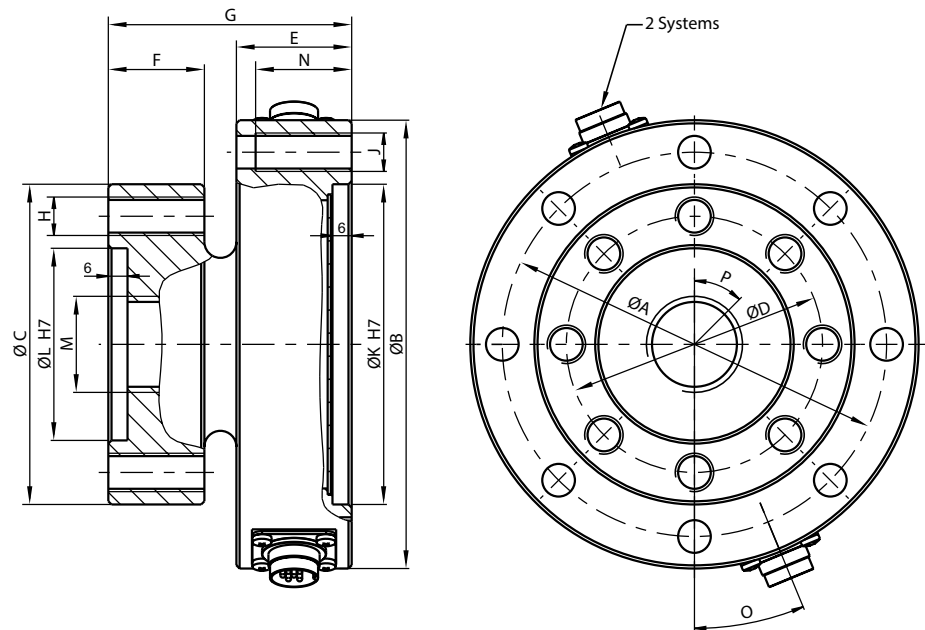
Features

- Nominal force 5kN to 500kN
- Redundant system with two measuring bridges
- Made from stainless steel

Options

- 1 System

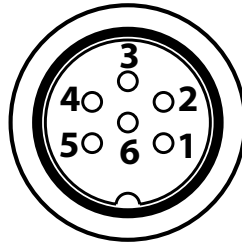
Dimensions (mm)



Rated Force	A	B	C	D	E	F	G	H	J	K ^{H7}	L ^{H7}	M	N	O	P
5kN - 10kN	120	140	80	55	36	20	66	8xM8	8xM12	100	40	M30x2	36	22.5°	45°
25kN	120	140	80	60	36	20	66	8xM10	8xM12	100	40	M30x2	36	22.5°	45°
63kN	120	140	80	60	36	30	76	8xM10	8xM12	100	40	M30x2	30	22.5°	45°
100kN	120	140	100	80	36	30	76	8xM12	8xM12	100	60	M30x2	30	22.5°	45°
100kN	170	200	160	130	56	40	106	8xM16	8xM16	140	100	M52x3	30 (*34)	22.5°	45°
250kN	170	200	160	130	56	40	106	8xM16	8xM16	140	100	M52x3	30 (*34)	22.5°	45°
500kN	170	200	160	130	76	50	136	16xM16	16xM16	140	100	M72x4	30 (*38)	11.25°	22.5°

*threaded hole is not a drilled-through hole - length of the threaded hole

Wiring Code



1	-EX	Excitation voltage -
2	+EX	Excitation voltage +
3		
4	+SI	Signal -
5	-SI	Signal +
6		

Specifications

Accuracy Class	% F _{nom}	0.2	0.5
Rated (nominal) force (F _{nom})	kN	5/ 10/ 25/ 63/ 100 ¹⁾	100 ²⁾ / 250/ 500
Maximum operating force (F _G)	% F _{nom}	150	
Breaking force (F _B)	% F _{nom}	>300	
Rated characteristic value (C _{nom})	mV/V	approx. 1.0	
Relative deviation of zero signal	%	≤ 3	
Reference excitation voltage	VDC	5	
Operating range of excitation voltage (B _{UG})	VDC	0.5 12	
Input resistance (R _e)	Ω	380 ± 30	
Output resistance (R _a)	Ω	352 ± 1.5	
Insulation resistance (R _{is})	Ω	> 5 x 10 ⁹	
Relative linearity error (d _{lin})	%	≤ 0.2	≤ 0.5
Relative reversibility error (v)	%	≤ 0.2	≤ 0.5
Temperature effect on zero signal (TK ₀)	%/10K	≤ 0.2	≤ 0.5
Temperature effect on characteristic value (TK _c)	%/10K	≤ 0.2	≤ 0.5
Relative creep over 30 minutes (d _{cr, F+E})	%	≤ 0.2	≤ 0.5
Reference temperature (T _{ref})	°C	+23	
Rated temperature range (B _{T, nom})	°C	-20 +60	
Operating temperature range (B _{T, G})	°C	-30 +70	
Storage temperature range (B _{T, S})	°C	-40 +70	
Environmental protection (EN 60529)		IP 42	

All data according to VDI/VDE/DKD 2638

1) Version D=140mm

2) Version D=200mm

Order example

Type Code	Description
KAM-D/100kN/0.2	Force transducer 100kN with 0.2% accuracy
	Accuracy class
	Nominal load
	Model