

KAD-S Load Cell

Applications

- For measuring tensile and compressive forces
- Machinery and systems
- Ideal for non-approvable platform scales with particularly flat design for industrial use
- Container weighing
- Level measurement



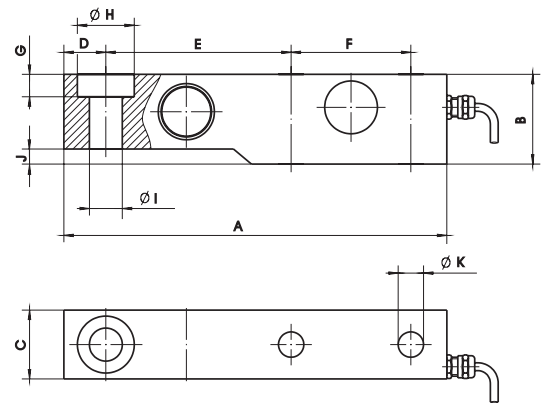
Features

- 0.5t up to 10t
- Accuracy class C1
- Made from stainless steel
- Rugged design
- Hermetically sealed enclosure (IP 67)

Options

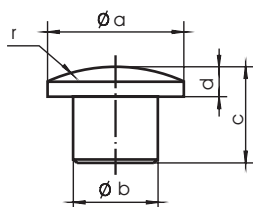
- ATEX-Certificate 0.5t ... 5t

Dimensions (mm)

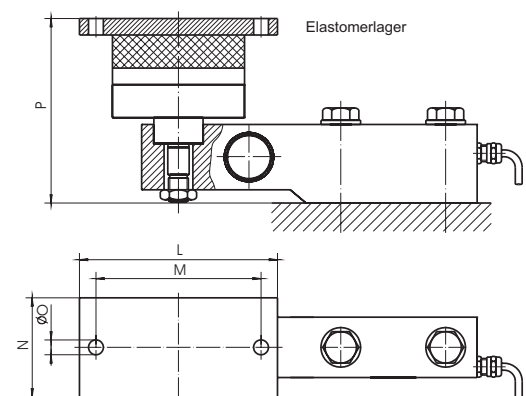


Rated Load	A	B	C	D	E	F	G	H	I	J	K	Weight
0.5t	203.2	47.6	36.5	22.3	98.3	63.5	11.9	Ø30.2	Ø17.5	17	Ø13.4	2.3kg
1t	203.2	47.6	36.5	22.3	98.3	63.5	11.9	Ø30.2	Ø17.5	13.6	Ø13.4	2.3kg
2t	203.2	47.6	36.5	22.3	98.3	63.5	11.9	Ø30.2	Ø17.5	8	Ø13.4	2.3kg
5t	234	70	47.6	23.2	123.7	66.5	15.9	Ø41.3 ^{+0.2}	Ø25.5	21.2	Ø22.5	5.0kg
10t	279.4	82.6	60.3	31.7	139.7	82.6	20.7	Ø51.0 ^{+0.2}	Ø32 ^{H11}	19.1	Ø27	8.0kg

Appliances for Installation and Mounting



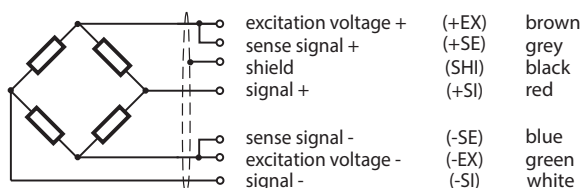
Load button



Rated Load	a	b	c	d	r	L	M	N	O	P
0.5t ... 2t	30	17.5 f7	33	23	R50	120	100	60	9	112
5t	41	25.5 f7	29	9	R50	150	125	100	11	147

Wiring Code

Cable length 3m with free end



Specifications

Accuracy class	% E	C1	C3*
Rated load (E_{max})	t	0.5/ 1/ 2/ 5/ 10	
Maximum operating load (E_u)	% E_{max}	150	
Breaking load (E_d)	% E_{max}	> 500	
Transverse load limit (E_{iq})	% E_{max}	100	
Minimum measuring range (B_{min})	% E_{max}	25	
Rated characteristic value (C_n)	mV/V	2.000 ± 0.002	
Relative deviation of zero signal	%	≤ 1	
Reference excitation voltage (U_{ref})	VDC	10	
Input resistance (R_{iC})	Ω	380 ± 30	
Output resistance (R_o)	Ω	352 ± 1.5	
Insulation resistance (R_{iS})	Ω	> 5 × 10 ⁹	
Combined error	%	≤ 0.030	≤ 0.021
Changeability	%	≤ 0.030	≤ 0.010
Temperature effect on zero signal (TK_{S0})	%/10K	≤ 0.025	≤ 0.008
Temperature effect on characteristic value (TK_c)	%/10K	≤ 0.017	≤ 0.008
Relative creep over 30 minutes (d_{cr})	%	≤ 0.049	≤ 0.024
Reference temperature (T_{ref})	°C	+23	
Rated temperature range (B_T)	°C	-20 ... +60	
Operating temperature range (B_{Tu})	°C	-30 ... +70	
Storage temperature range (B_{Ti})	°C	-40 ... +70	
Environmental protection (EN 60529)		IP 67	

All data according to VDI/VDE/DKD 2637

*) only on request

Order Example

Type Code	Description
KAD-S/1t/C1	Load cell 1t with accuracy class C1
	Accuracy class
	Rated load
	Model

Accessoires / Options

	Type Code	Description
Load button	XKM 048 XKM 039	K17-50 for 0.5t ... 2t K25-50 for 5t
Elastomere bearing	XKM 050.04 XKM 050.02 XKM 054 XKM 059	for 0.5t transverse stiffness 1200N/mm for 1t and 2t transverse stiffness 3000N/mm for 5t for 10t
ATEX-Certificate	KAD-S-EX	for 0.5t, 1t, 2t, 5t. Please note ATEX data sheet!