

# KAB Load Cell

## Applications

- For measuring tensile and compressive forces
- Mechanical engineering
- Measuring of bending force
- Tankweighing
- Process-control weighing-hop harvest
- Weighing system in the food and pharmaceutical industries



## Features

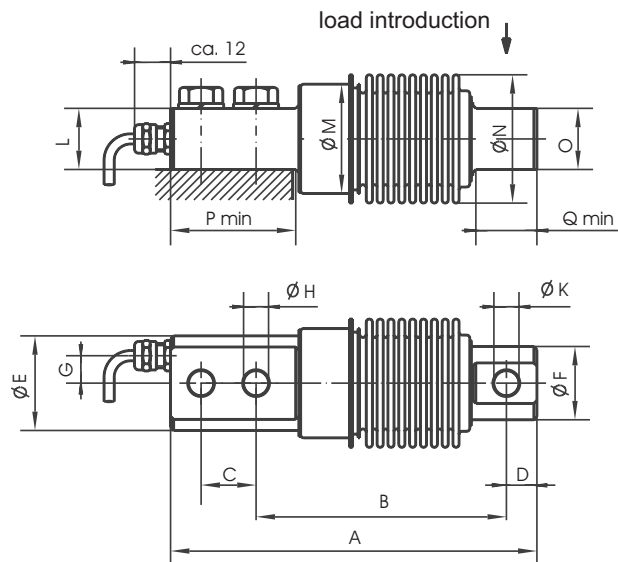
- 10kg up to 1000kg
- Made from stainless steel
- Hermetically sealed case (IP 67)



## Options

- ATEX-Certificate

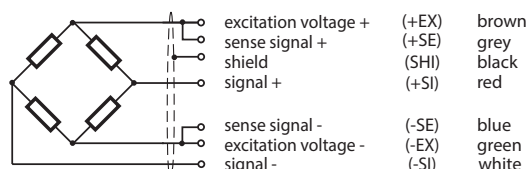
## Dimensions (mm)



Rated Load	A	B	C	D	E	F	G	H	K	L	M	N	O	P	Q	Rated Display / mm	Weight
10kg ... 50kg																0.3	
100kg	120	82±0.1	18±0.1	10	Ø31	Ø24	9	Ø8.2	Ø8.2 <sub>-0,1</sub>	20	Ø35.8	Ø42±0.5	20	41	20	0.24	0.6 kg
200kg																0.28	
500kg	210	133±0.1	40±0.1	22	Ø48	Ø34	15	Ø13	Ø11±0.1	40	Ø55	Ø55±0.6	25	68.5	42.5	0.4	2.3 kg
1000kg																0.6	

## Wiring Code

Cable length 3m



Compressive load is positive change of signal.

## Specifications

Accuracy Class	% F <sub>nom</sub>	C1	C3 <sup>1)</sup>
Rated load (E <sub>max</sub> )	kg	10/ 20/ 50/ 100/ 200/ 500/ 1000	
Maximum operating load (E <sub>u</sub> )	% E <sub>max</sub>	150	
Breaking load (E <sub>d</sub> )	% E <sub>max</sub>	> 300	
Transverse load limit (E <sub>iq</sub> )	% E <sub>max</sub>	100	
Minimum measuring range (B <sub>min</sub> )	% E <sub>max</sub>	18	
Rated characteristic value (C <sub>n</sub> )	mV/V	2.000 ± 0.002	
Relative deviation of zero signal	%	≤ 1	
Reference excitation voltage (U <sub>ref</sub> )	VDC	12	
Input resistance (R <sub>LC</sub> )	Ω	380 ± 30	
Output resistance (R <sub>O</sub> )	Ω	352 ± 1.5	
Insulation resistance (R <sub>IS</sub> )	Ω	> 5 × 10 <sup>9</sup>	
Combined error	%	≤ 0.030	≤ 0.021
Changeability	%	≤ 0.030	≤ 0.010
Temperature effect on zero signal (TK <sub>S0</sub> )	%/10K	≤ 0.025	≤ 0.008
Temperature effect on characteristic value (TK <sub>C</sub> )	%/10K	≤ 0.017	≤ 0.008
Relative creep over 30 minutes (d <sub>cr</sub> )	%	≤ 0.049	≤ 0.024
Reference temperature (T <sub>ref</sub> )	°C	+23	
Rated temperature range (B <sub>T</sub> )	°C	-10 ... +40	
Operating temperature range (B <sub>Tu</sub> )	°C	-30 ... +70	
Storage temperature range (B <sub>Tl</sub> )	°C	-40 ... +70	
Environmental protection (EN 60529)		IP 67	

1) Report Nr. 1.13-93.167

All data according to VDI/VDE/DKD 2637

## Order Example

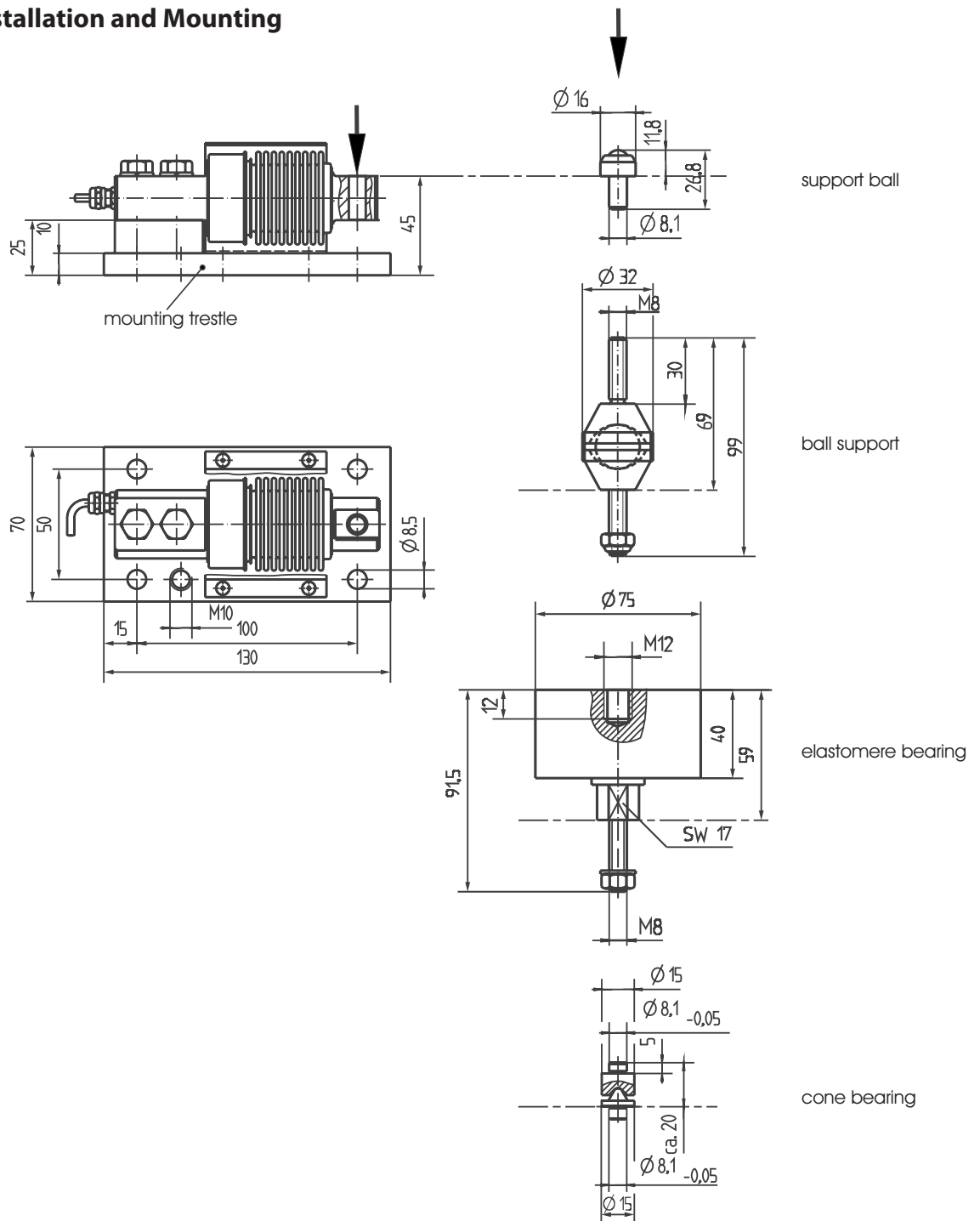
Type Code	Description
KAB/100kg/C3	Load cell 100kg with accuracy class C3

## Option

	Type Code	Description
ATEX-Certificate	KAB-EX	for 100N, 200N, 500N, 1kN, 2kN, 5kN, 10kN. Please note ATEX datasheet!

## Appliances for Installation and Mounting

KAB 10kg ... 200kg



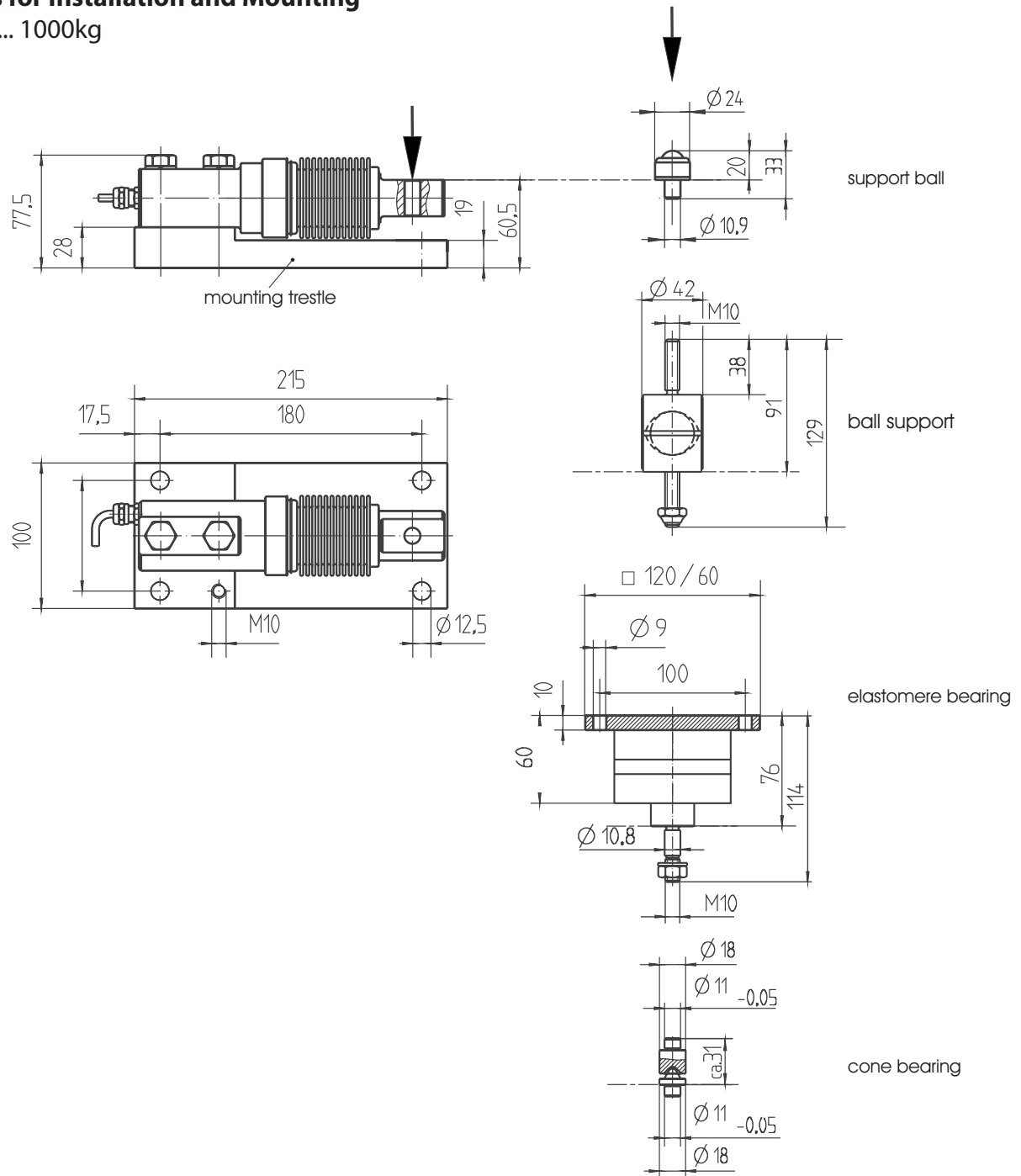
## Accessoires / Options

	Type Code	Description
Mounting trestle	XKM 001	with protective enclosure for 10kg ... 200kg
Support ball	XKM 106.01	for 10kg ... 200kg
Ball support	XKM 102	for 10kg ... 200kg
Elastomere bearing	XKM 053.01 <sup>2)</sup> XKM 053.03 <sup>2)</sup>	for 10kg, 20kg and 50kg for 100kg and 200kg transverse stiffness 70N/mm transverse stiffness 300N/mm
Cone bearing	XKM 060	for 10kg ... 200kg
Protective cable	XKC 009.01	for 10kg ... 200kg
ATEX-Certificate	KAB-EX	for KAB 10kg, 20kg, 50kg, 100kg, 200kg. Please see ATEX data sheet!

2) for platform size (1000x1000) mm with 4 load cells

## Appliances for Installation and Mounting

KAB 500kg ... 1000kg



### Accessoires / Options

	Type Code	Description
Mounting trestle	XKM 005	for 500kg / 1000kg
Support ball	XKM 107.01	for 500kg / 1000kg
Ball support	XKM 103	for 500kg / 1000kg
Elastomere bearing	XKM 051.01 <sup>3)</sup> XKM 051.02 <sup>3)</sup>	for 500kg for 1000kg transverse stiffness 1200N/mm transverse stiffness 3000N/mm
Cone bearing	XKM 061	for 500kg / 1000kg
Protective cable	XKC 009.02	for 500kg / 1000kg
ATEX-Certificate	KAB-EX	for KAB 500kg, 1000kg. Please see ATEX data sheet!

3) for platform size (1500 x 1500) mm with 4 load cells