

# KAU Load Cell

## Applications

- Measuring of pressure forces in machinery and systems - also in mining
- Wheel-load-measurement
- Automation technology
- Container- and silo-weighing, „guided“ force measurement in mechanics

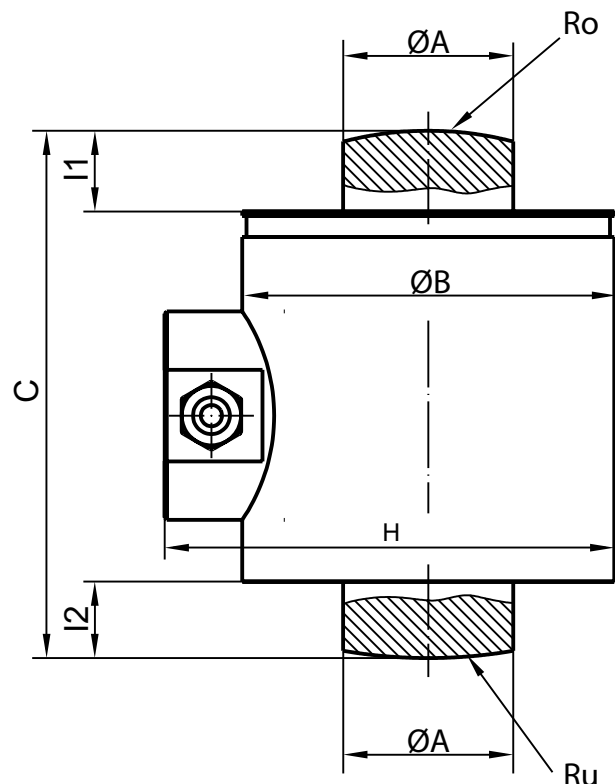
## Features

- 10t up to 500t
- Accuracy class C1
- Made from stainless steel
- Environmental protection IP 67
- Self oscillating assembly sets
- Installation set with lifting and tipping locks

## Options

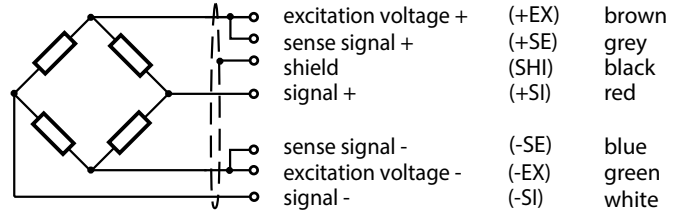
- ATEX-Certificate

## Dimensions (mm)



Rated Load in t	A	B	C	H	I1	I2	Ro	Ru	Weight
10 up to 40	40	87.5	124	106	18	18	80	120	ca. 4.0 kg
60	58	87.5	124	106	18	18	100	200	ca. 4.5 kg
100	76	112.5	190	132	27	27	200	400	ca. 9.3 kg
200	100	150	200	172.5	40	40	180	300	ca. 16 kg
500	152	220	300	245	80	81.5	600	600	ca. 62 kg

**Wiring Code**  
Cable length 3m



**Specifications**

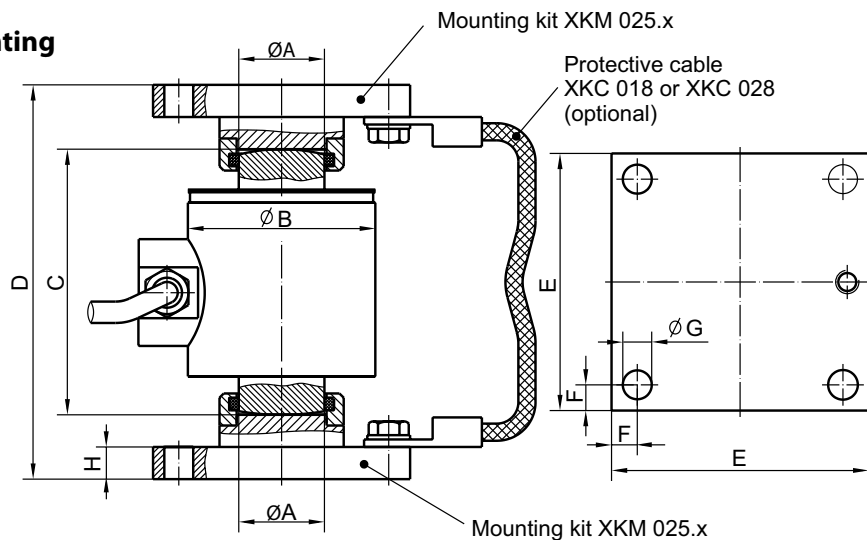
Accuracy lass	% F <sub>nom</sub>	C1
Rated load (E <sub>max</sub> )	t	10/ 20/ 30/ 40/ 60/ 100/ 200/ 500
Maximum operating load (E <sub>u</sub> )	% E <sub>max</sub>	150
Breaking load (E <sub>d</sub> )	% E <sub>max</sub>	> 500
Transverse load limit (E <sub>iq</sub> )	% E <sub>max</sub>	25
Rated characteristic 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	10
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 x 10 <sup>9</sup>
Combined error	%	≤ 0.030
Changeability	%	≤ 0.030
Temperature effect on zero signal (TK <sub>50</sub> )	%/10K	≤ 0.025
Temperature effect on characteristic value (TK <sub>C</sub> )	%/10K	≤ 0.017
Relative creep over 30 minutes (d <sub>cr</sub> )	%	≤ 0.049
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>Ti</sub> )	°C	-40 ... +70
Environmental protection (EN 60529)		IP 67

All data according to VDI/VDE/DKD 2637

**Appliances for Installation and Mounting**

**Dimensions (mm)**

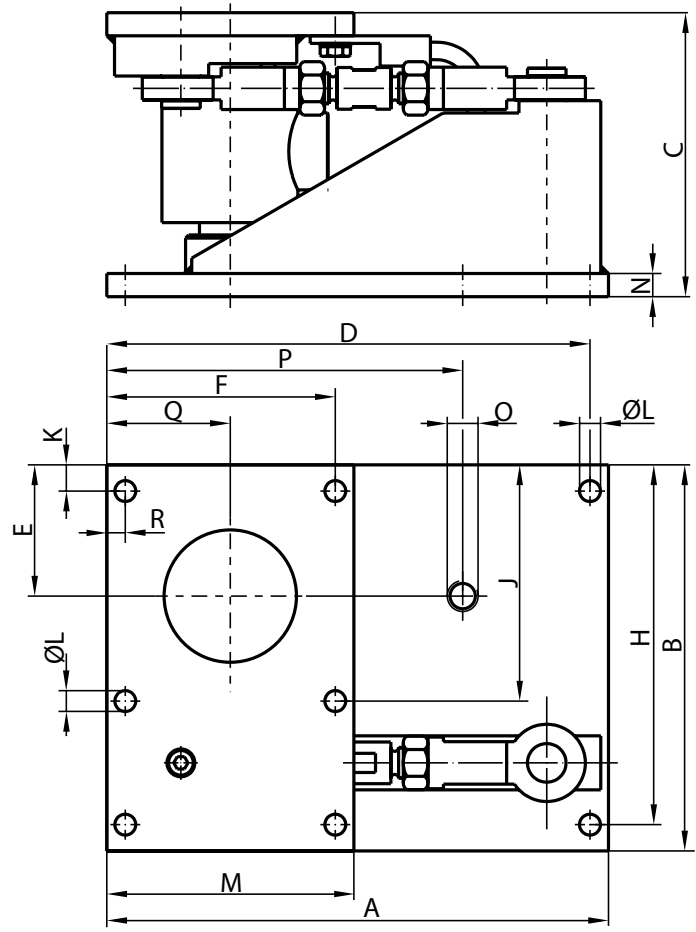
**KAU 10t ... 200t with Mounting kit**  
XKM 025.x (XKM 025.01/02/03/04)



KAU with mounting kit XKM 025.x and protectiv cable XKC.x tilting plates with self restoring force)

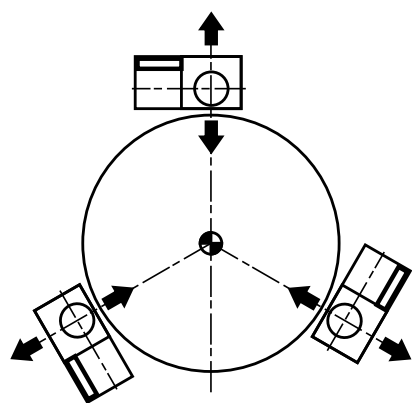
XKM	Rated Load in t	A	B	C	D	E	F	G	H
025.01	10 up to 40	40	87.5	124	184	120	12	13.5	15
025.02	60	58	87.5	124	184	120	12	13.5	15
025.03	100	76	112.5	190	270	160	14	14	15
025.04	200	100	150	200	290	180	15	17	30

**KAU 10t to 100t with assembly set**  
 XKM 027.x (XKM 027.02/03/04)

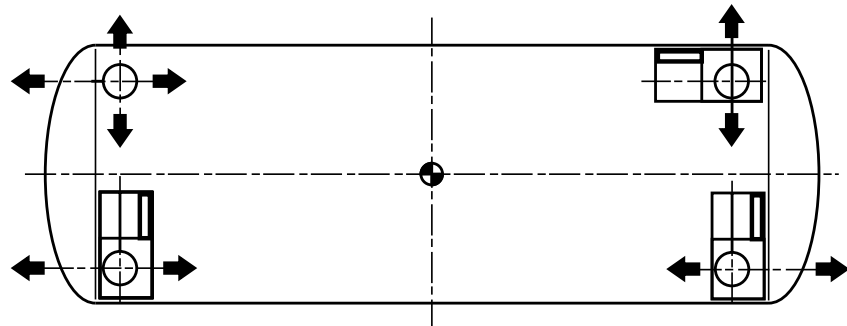
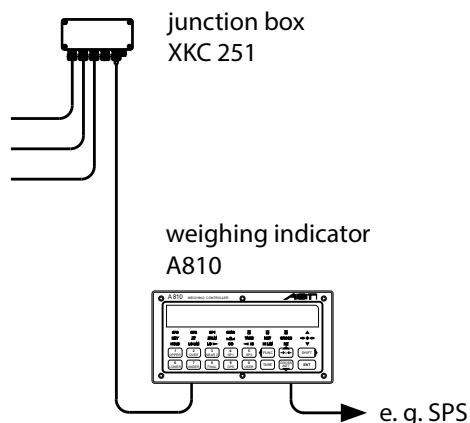


XKM	KAU with assembly kit	A	B	C	D	E	F	H	J	K	L	M	N	O	P	Q	R
027.02	10t up to 40t	325	250	184	313	85	148	233	153	17	13.5	160	15	M20	230.5	80	12
027.03	60t	325	250	194	312	85	142	232	152	18	18	160	20	M24	230.5	80	18
027.04	100t	445	280	270	427	85.5	182	262	153	18	22	200	20	M30	300	100	18

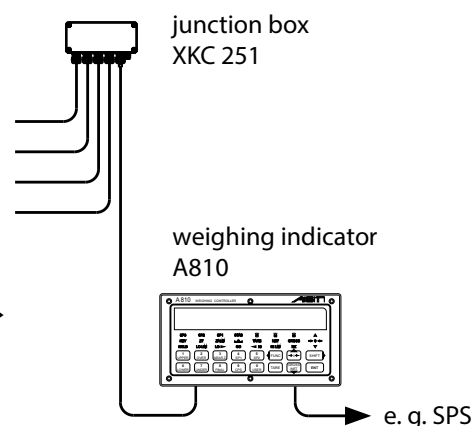
## Application Scheme Hopper weighing



Hopper on 3 assembly sets XKM 027  
arrows show direction of free sliding



Hopper on 3 assembly sets XKM 027  
and 1 x XKM 025 arrows show direction of free sliding



## Order Example

Type Code	Description
KAU/10t /C1	Load cell 10t with accuracy class C1
	Accuracy class
	Rated load
	Model

## Accessoires/ Options

	Type Code	Description
Mounting kit	XKM 025.01	for KAU 10t up to 40t
	XKM 025.02	for KAU 60t
	XKM 025.03	for KAU 100t
	XKM 025.04	for KAU 200t
Assembly set	XKM 027.02	for KAU 10t up to 40t max. transverse force < 5t
	XKM 027.03	for KAU 60t
	XKM 027.04	for KAU 100t max. transverse force < 10t
Fixed bearing	XKM 027.12	for assembly set XKM 027.xx max. rated load: 20t, max. transverse force < 2t
Protective cable	XKC 028	for KAU 10t up to 60t
	XKC 018	for KAU 100t
ATEX-Certification	KAU-EX	for KAU 100kN, 200kN, 300kN, 400kN, 500kN. Please see ATEX data sheet.