

Single Point Load Cell AK-60 with a Rated Load of 6 ... 60 kg



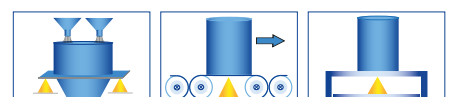
Data sheet

Performance Features

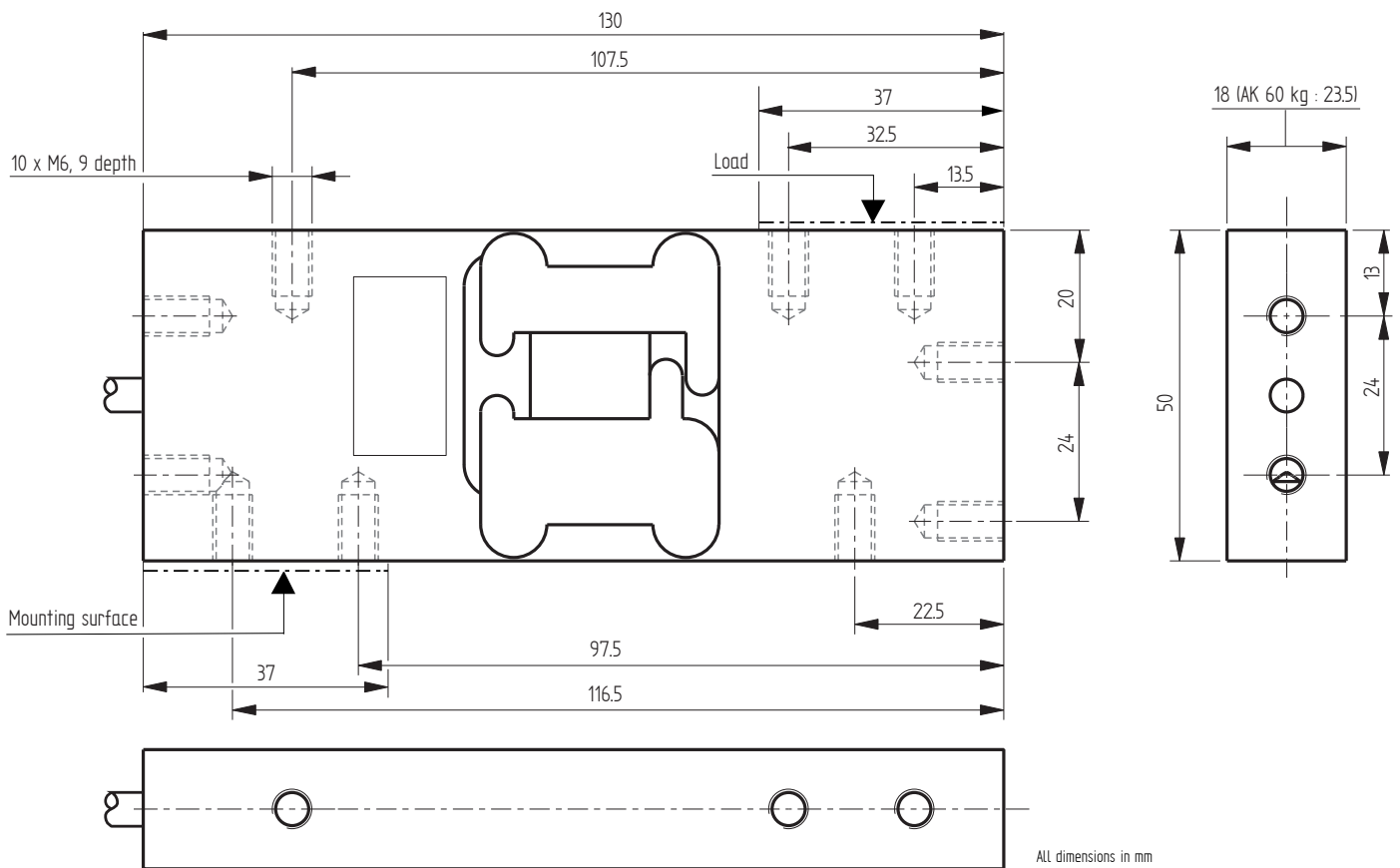
- Stainless steel single point load cell
- 3000d OIML R60 and 5000d NTEP approved
- Level of protection: IP68
- Designed for platforms of maximum dimensions 420 mm x 420 mm (off-center load compensated)
- Optimized for dynamic weighing (deflection < 0.25mm)
- Side fixing holes for use in multihead weighers
- ATEX 2014/34/EU version for hazardous area (option)

Application

- Food industry
- Chemical/pharmaceutical industry
- Dosing equipment in humid and corrosive environments



Dimensions in mm



Article-No.	Version	Rated Load [kg]
107797	C3 12e	6
106857	C3 12e	12
106858	C3 12e	30
106859	C3 12e	60

Connection Assignment

Electrical Connection

Function	Wire Color	
Excitation (+)	Brown	●
Signal (+)	Yellow	●
Signal (-)	White	○
Excitation (-)	Green	●
Sensing (+)	Gray	●
Sensing (-)	Pink	●

Technical Data

Type	AK	
Version		C3 12e
Rated load E	kg	6; 12; 30; 60
Maximum load for approved weighing E_{max}	kg	6.3; 12.3; 30.3; 60.3
Accuracy class OIML R60		C3
Maximum numbers of load cell intervals n_{max}	d OIML	3000
Minimum verification interval v_{min}	kg	E/12000
Creep division factor $Z = E_{max}/2 \times DR$		3000
Combined error	% E	±0.017
Temperature coefficient of zero signal	% E/°C	±0.0012
Temperature coefficient of characteristic value	% E/°C	±0.0014
Load creep d_{cr, F} in 30 min.	% E	±0.025
Zero balance	% E	±10
Rated characteristic value C_{nom}	mV/V	2 ±10 %
Rated range of excitation voltage B_{U, nom}	V	1 ... 15
Input resistance R_e	Ω	385 ±20
Output resistance R_a	Ω	350 ±5
Insulation resistance R_{is}	MΩ/50V	5000
Electrical connection		Cable, PVC, 3 m
Rated temperature range B_{T, nom}	°C	-10 ... 40
Operating temperature range B_{T, G}	°C	-20 ... 60
Limit load E_{lim}	% E _{max}	150
Breaking load E_b	% E _{max}	200
Tightening torque	Nm	15
Maximum platform dimension	mm	6, 12 = 350 x 350; 30, 60 = 420 x 420
Level of protection		IP68
Material		Stainless steel
Weight		6 ... 30 kg = 0,7; 60 kg = 0,9

Options

Article-No.	Description
111735	Protective coating
107798	ATEX 2014/34/EU, IECEx: ex II 1 G/D, Ex ia IIC T6 Ga, Ex ia IIIC T80 °C Da, IP6X, -20 °C < Ta < +60 °C (zones gaz 0/1/2, dust 20/21/22)
115049	ATEX 2014/34/EU, IECEx: ex II 1 D, Ex ta IIIC T125 °C Da, IP6X, -20 °C < Ta < +60 °C (zones dust 20/21/22)
115048	ATEX 2014/34/EU, IECEx: ex II 3 G, Ex nA IIC T6 Gc, -20 °C < Ta < +60 °C (zone gaz 2)

Accessories

Electrical Connection

Article-No.	Description
10323	Male cable connector KS6 (6-pin, Series 581) incl. mounting
10320	Male cable connector KSSH15 (15-pin) incl. mounting
43418	Input connector ZA9612FS (ALMEMO) incl. sensor mounting and connector calibration
49205	Input connector ZKD712FS (ALMEMO 202) incl. sensor mounting and connector calibration

Accessories (continued)

Weighing Electronics

ALCJB-A	CPJ/CPJ2S	IPE50 Panel
 The image shows the ALCJB-A terminal block, which is a white plastic enclosure with a green printed circuit board (PCB) inside. The PCB has several gold-plated terminals and is connected to a larger white terminal block.	 The image shows the CPJ/CPJ2S terminal block, which is a green plastic enclosure with a black PCB inside. The PCB has several gold-plated terminals and is connected to a larger green terminal block.	 The image shows the IPE50 Panel, which is a black and blue electronic device. It features a red LED display showing the number '30.000' and several buttons below it.

Further suitable accessories you can find on our homepage under:
<https://www.lorenz-messtechnik.de/english/products/load-cells.php>