

## LCS130 500kg, 1t, 2t



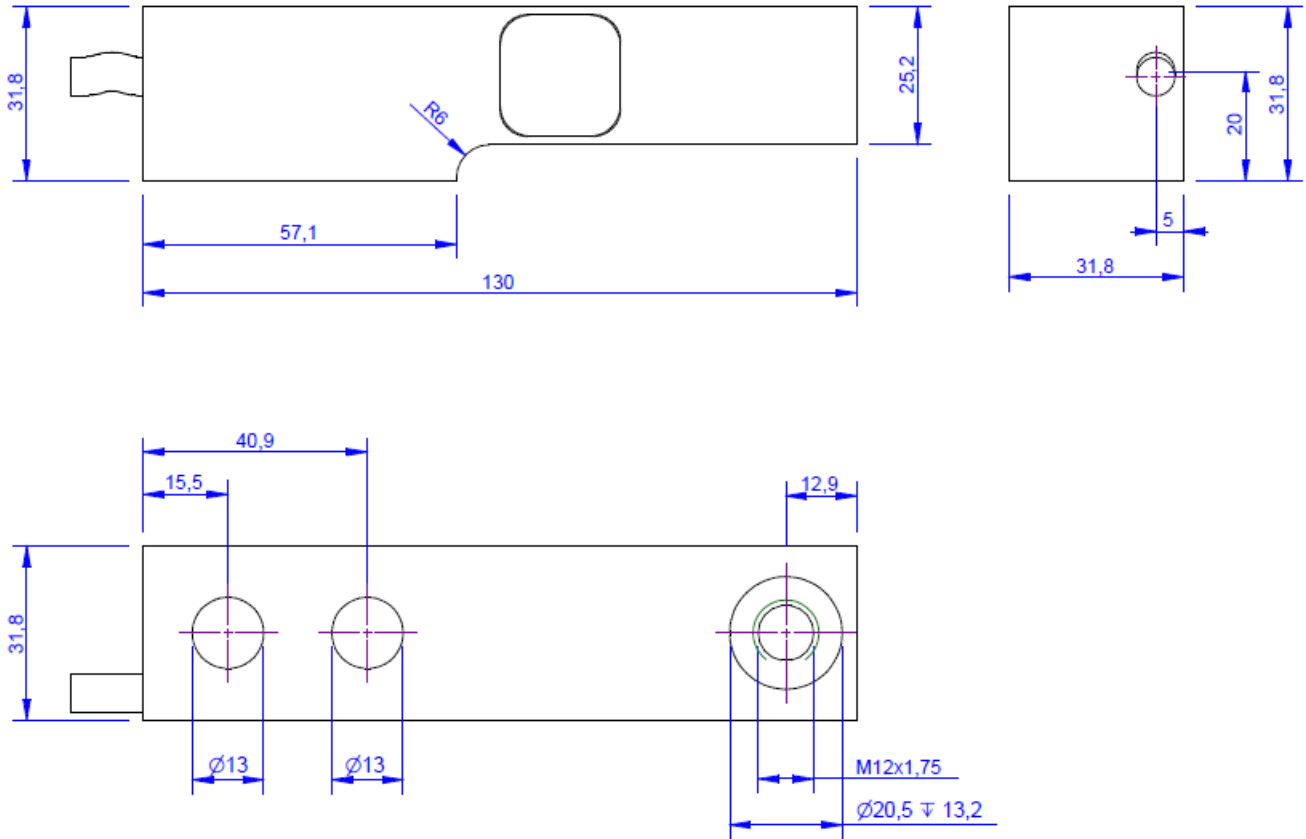
### Description

The load cell LCS130 is used in platform-type weighing scales. Three to four load cells support a platform of any size. The output current calibration allows parallel connection of the load cells for operation at a common measuring amplifier without additional equalization.

The platform is placed on the weighing platform using three or four height-adjustable elastomer bearings (EL 120), in order to avoid twisting.

The load cell LCS 130 conforms to the stringent European requirements for use in calibration-obligatory weighing scales. The method of protection is IP 67.

### Dimensions



## Technical Data

### Force sensor

Type	load cell
Force direction	Compression
Force introduction	Inner thread
Dimension 1	M12x1,75
Sensor Fastening	Through bore
Dimension 2	2xØ13
Operating force	150 %FS
Rated displacement	0.08 mm
Material	Stainless steel
Height	32 mm
Length or Diameter	130 mm

### Electrical Data

Input resistance	1000 Ohm
Tolerance input resistance	50 ±
Output resistance	1000 Ohm
Tolerance output resistance	10 ±
Insulation resistance	5x10 <sup>9</sup> Ohm
Rated range of excitation voltage f	2.5 ... 5 V
Operating range of excitation voltage f	1 ... 10 V
Zero signal	0.05 mV/V
Rated output	2 mV/V / FS

### Precision

Accuracy class	0,05%
Relative linearity error	0.05 %FS
Relative zero signal hysteresis	0.05 %FS
Temperature effect on zero signal	0.012 %FS/K
Temperature effect on characteristic value	0.009 %RD/K
Relative creep	0.25 %FS

### Connection Data

Connection type	6 conductor open
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### Temperature

Rated temperature range f	-10 ... 70 °C
Operating temperature range f	-10 ... 85 °C
Storage temperature range f	-10 ... 85 °C
Environmental protection	IP67

Abbreviation : RD: „Reading“; FS: „Full Scale“;

1) The exact nominal sensitivity is indicated in the test report;

2) Nominal output for LCS130 250kg is 0,1%.

## Pin Configuration

Channel	Symbol	Description	Wire colour
Type 500kg ... 2t	+Us	positive bridge supply	green
	-Us	negative bridge supply	black
	+Ud	positive bridge output	white
	-Ud	negative bridge output	red
	+Uf	positive sense lead	yellow
	-Uf	negative sense lead	blue
Type 250kg	+Us	positive bridge supply	brown
	-Us	negative bridge supply	white
	+Ud	positive bridge output	green
	-Ud	negative bridge output	yellow

Shield- transparent.

## Mounting

### Elastomer bearing EL 120

The elastomer bearing is the connecting element between the load cells and the weighing table or tank, silo, trough etc.

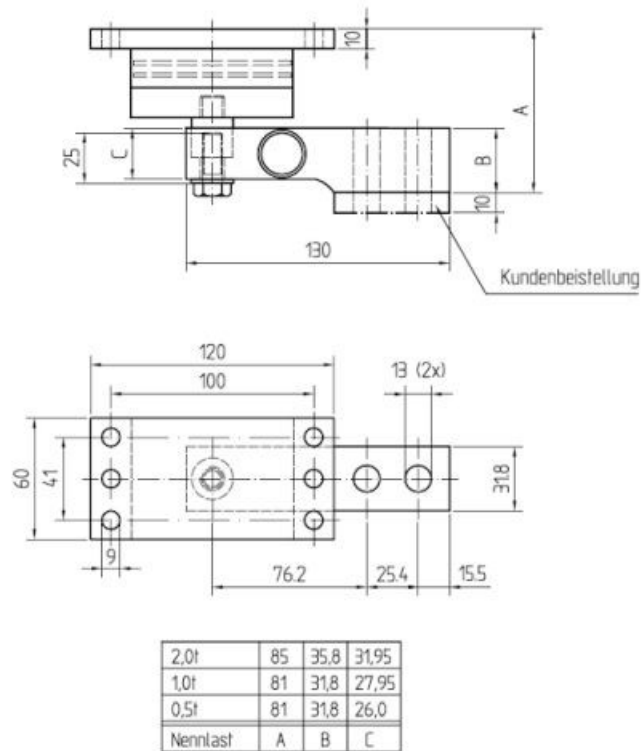
The elastomer bearing is adjustable in height, so that it is possible to achieve a uniform distribution of the load even with four load cells on an uneven foundation.

The elastomer bearing is robust and absorbs load impacts e.g. when used with vibrators.

For the installation of the load cell on a flat surface spacers 57mm x 31.8mm x 5mm with two holes of  $\varnothing 13$ mm are available.







## Dimensions



Alle Teile exakt waagrecht ausrichten und verspannungsfrei montieren!

Einfederung bei Nennlast (2t) 0,8-1,0mm  
 zulässige Abhebekraft Dauerbelastung 1,5kN, kurzfristig 2,3kN  
 zulässige Horizontalkraft 2,7kN  
 zulässige Horizontalverformung: 5,2mm

## accessories

Description	Description
	Elastomeric bearing for LCS130 to 2t
Accessories for the force sensor LCs130	
	KL4 CG
clamping box for parallel connection of 4 sensors, dimensions: 175mm x105mm x 60mm, 4xPG9, 7-pole	
	GSV-15KL4
Junction box with measuring amplifier for sensors with straingages. Analogue output $\pm 10$ Volt and 4...20 mA configurable.	
	KL4 M12
clamping box for parallel connection of 4 sensors, dimensions: 175mm x105mm x 60mm, 4xM12 female, 1xM12 male	