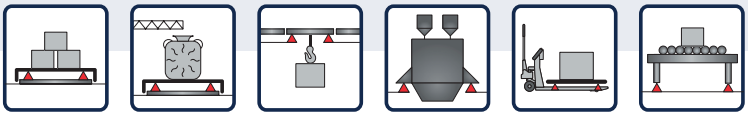
BOSCHE
WEIGHING SYSTEMS

Shear beam load cell *K30N*



Features

- Stainless steel construction
- Capacity: 500 - 10.000 kg
- Accuracy class C3, Y= 10.000
- Approved to OIML R60 up to 3000 d
- Protection class: IP 66
- Design: The measuring element is hermetically sealed and has a calibrated output current
- Robust design for harsh industrial environment
- Low profile with load introduction by partially threaded through hole
- Compatible with other sources

Typical Application

- Plattform scales
- Floor scales
- Overhead track scales
- Silo, Hopper and Tank Scales and weighing systems
- Pallet truck weighing
- Big-Bag Scales
- Filling and Bagging Machines
- Force and Torque Measurements in the test machines and Industrial Automation

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WEIGHING SYSTEMS

Shear beam load cell *K30N*

Approved to OIML R60 for 300d, reproducible results in harsh industrial environments

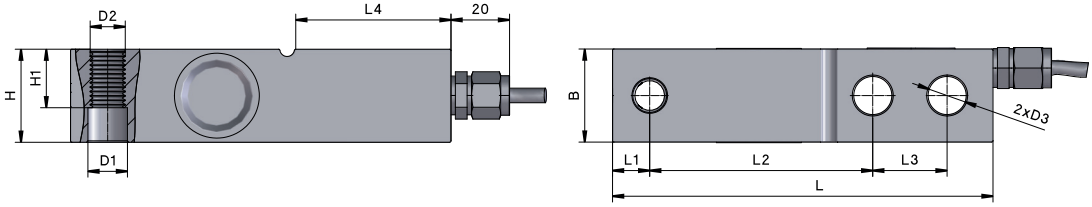
The K30N single ended shear beam type load cells are one of the widely used sensors in the field of weighing technology. The load cells are manufactured from stainless steel and characterized with high accuracy and linearity.
These load cells are approved to OIML R60 for 3000 d and guarantee accurate and reproducible results over a long term in harsh industrial environments.
The current calibration output ensures easy and accurate parallel connection of multiple load cells, which removes the need for corner load adjustment.
The K30N load cells are laser-welded and meet the requirements of protection class IP66. The hermetically sealed enclosure allows operation even under harsh operating conditions.

Easy installation of the shear force sensor by a semi-continuous thread in the last hole, where the force is on a height-adjustable foot with ball head.

TECHNICAL DETAILS

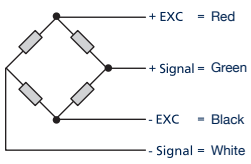
Accuracy class		G3, C3
Maximum capacity (E_{max})	kg	500, 1.000, 2.000, 2.500, 5.000, 10.000
Maximum number of intervals (n_{LC})		3000
Output sensitivity (C_n) / Sensivity tolerance	mV/V	3,0 ± 0,003
Minimum dead load (E_{min})		0
Ratio of max. capacity to min. verification interval (Y = Emax / vmin):		10.000 % of Emax
Limit load (EL)		120 % of Emax
Breaking load (Ed)		200 % of Emax
Recommended supply voltage (Uref)	V	5 - 12
Excitation, maximum (BU)	V	15
Zero balance		± 3 % v. Cn
Input resistance (RLC) at reference temperature	Ω	400 ± 20
Output resistance (RO) at reference temperature	Ω	352 ± 3
Insulation resistance	MΩ	>5.000
Cable length		On request
Nominal temperature range (BT)	°C	- 10 ... + 40
Protection class (DIN 40.050 / EN 60529)		IP 66
Material		Alloyed steel

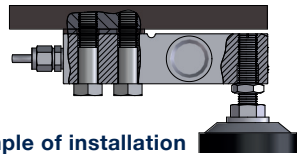
TECHNICAL DRAWING



Load	L	L1	L2	L3	L4	H / B	H1	D1	D2	D3
0,5 - 2,5 t	130	12,7	76,2	25,4	53,5	31,8	20	Ø 13,5	M12	Ø 13
3 - 5 t	171,5	19	95,3	38,1	72,5	38,1	26	Ø 20	M18 * 1,5	Ø 20
10 t	225,5	25,3	124	50,8	102	50,8	25,4	Ø 27	M24 * 2	Ø 27

Electrical connection
4-conductor-cable





Example of installation

All dimensions are given in millimetres (mm)
Technical specifications are subject to change without prior notice

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