

## Type SLB Load Cell



### Product Description

The type SLB is a stainless steel beam type load cell with an improved potting. It is suitable for use in industrial environments.

### Application

- Platform scales, small hopper and tank scales

### Key Features

- Wide range of capacities from 200 lb to 5 000 lb (91 kg to 2 268 kg)
- Stainless steel construction
- Environmental Protection IP67
- Unique blind loading hole
- High input resistance
- Calibration in mV/V/Ω

### Approvals

- OIML approval to C3 (Y = 11 500)
- NTEP approval to 7 500 intervals, Class III
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

### Packed Weight

Capacity (lb)	200–2 500	5 000
Weight (kg)	1.1	1.2

### Available Accessories

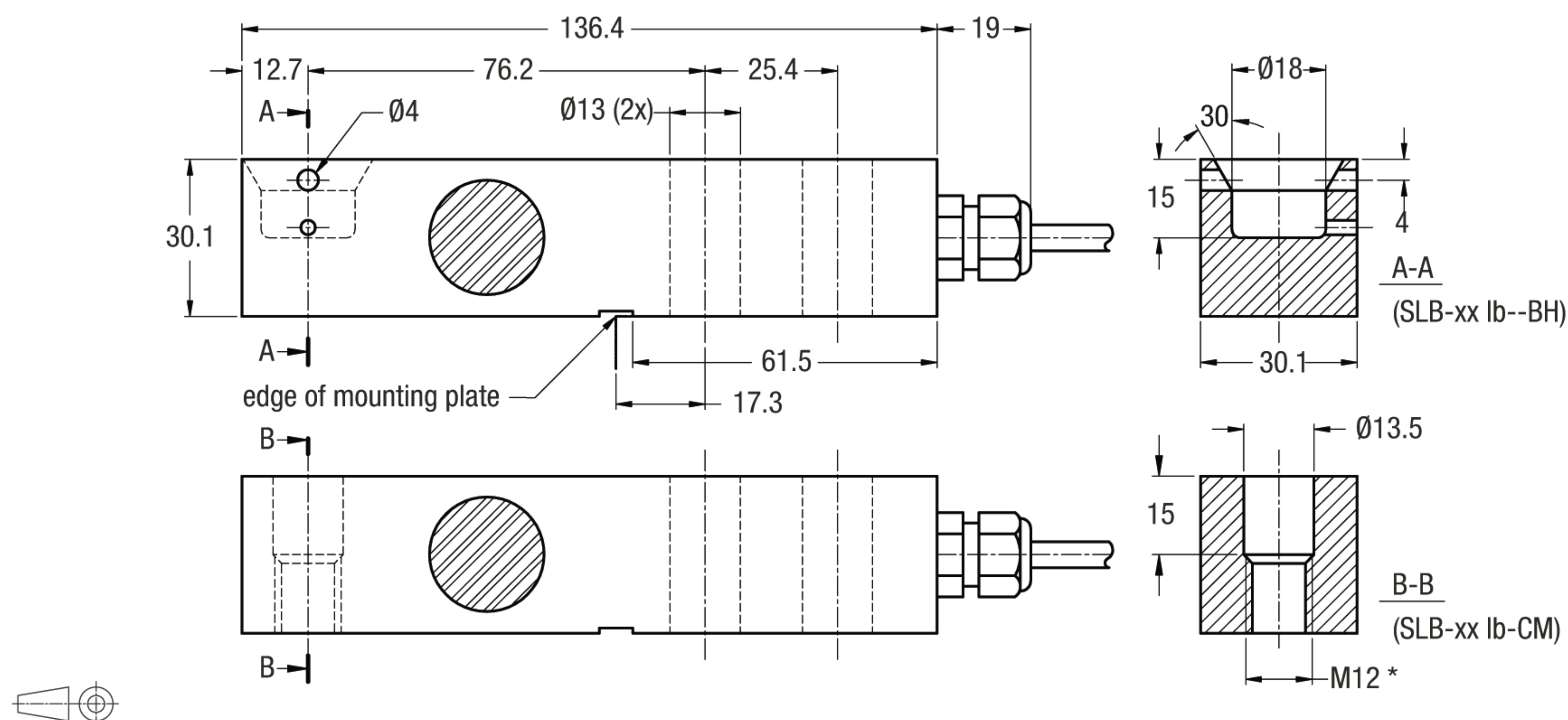
- Compatible range of application hardware
- Compatible range of electronics

### Specifications

Maximum capacity	(E <sub>max</sub> )	lb	200 / 500 / 1 000 / 2 500 / 5 000
Metric equivalents (1 lb=0.45359 kg)		kg	91 / 227 / 454 / 1 134 / 2 268
Accuracy class according to OIML R60		(GP)	C3
Maximum number of verification intervals	(n <sub>max</sub> )		n.a. / 3 000
Minimum load cell verification interval	(v <sub>min</sub> )		n.a. / E <sub>max</sub> / 11 500
Temperature effect on minimum dead load output	(TC <sub>0</sub> )	%*RO/10°C	≤ ± 0.0400 / ≤ ± 0.0122
Temperature effect on sensitivity	(TC <sub>RO</sub> )	%*RO/10°C	≤ ± 0.0200 / ≤ ± 0.0100
Combined error		%*RO	≤ ± 0.0500 / ≤ ± 0.0200
Non-linearity		%*RO	≤ ± 0.0400 / ≤ ± 0.0166
Hysteresis		%*RO	≤ ± 0.0400 / ≤ ± 0.0166
Creep error (30 minutes) / DR		%*RO	≤ ± 0.0600 / ≤ ± 0.0166
Rated Output	(RO)	mV/V	2 ± 0.1%
Calibration in mV/V/Ω (A...I classified)		%	≤ ± 0.05 (≤ ± 0.005)
Zero balance		%*RO	≤ ± 5
Excitation voltage		V	5...15
Input resistance	(R <sub>LC</sub> )	Ω	1 100 ± 50
Output resistance	(R <sub>out</sub> )	Ω	1 000 ± 2
Insulation resistance (100 V DC)		MΩ	≥ 5 000
Safe load limit	(E <sub>lim</sub> )	%*E <sub>max</sub>	200
Ultimate load		%*E <sub>max</sub>	300
Safe side load		%*E <sub>max</sub>	100
Compensated temperature range		°C	-10...+40
Operating temperature range		°C	-20...+65 (ATEX -20...+60)
Load cell material			stainless steel 17-4 PH (1.4548)
Sealing			potted
Protection according EN 60 529			IP67

The limits for Non-Linearity, Hysteresis, and TC<sub>RO</sub> are typical values.  
The sum of Non-linearity, Hysteresis and TC<sub>RO</sub> meets the requirements according to OIML R60 with p<sub>LC</sub>=0.7.

### Dimensions (in mm)



Mounting bolts for 200 lb to 2500 lb: M12 8.8 / torque 90 Nm; for 5000 lb: M12 10.9 / torque 120 Nm. Torque values assume oiled threads.  
\* Unified thread 1/2-20 UNF is available (type designation SLB-xx-CU).

### Wiring

- The load cell is provided with a shielded, 4 conductor cable (AWG 24).  
Cable jacket polyurethane
- Cable length: 3 m
- Cable diameter: 5 mm
- The shield is floating  
(On request the shield can be connected to the load cell body)

