

Type SLB Load Cell



Beam Type Load Cells

Flintec load cells are designed to meet the most stringent accuracy requirements. Certifications have been obtained from Weights & Measures Authorities, worldwide.

SLB load cells are available in the capacities 200 lb to 5000 lb (91 kg to 2268 kg) and include Accuracy Classifications GP, C1 and C3 according to OIML R 60; NTEP $n_{max} = 7500$.

They offer stainless steel construction and improved potting, making them suitable for use in tough industrial environments.

The unique “blind” loading hole combined with the available Flintec loading hardware provides an excellent price-performance ratio.

It allows very low profile platform design and offers advantages in all kinds of weighing applications.

A version with metric or unified threaded loading hole is available as well.

The Flintec calibration technique (in $mV/V/\Omega$) eliminates time consuming corner calibration in multiple load cell systems.

The SLB is available for use in hazardous areas zone 0, 1, 2 (gas) and 20, 21, 22 (dust) according to EEx ia IIC T6...T4 T150°C ATEX.

Important Features

- Capacities: 200 lb to 5000 lb.
- High accuracy.
- Stainless steel construction.
- Protection IP 67.
- Low profile.
- High input resistance: 1100 Ω .
- W&M certified for 3000 intervals (PTB: D09-97.01 Rev. 1).
- Unique “blind” loading hole.
- Calibration in $mV/V/\Omega$.
- Complete range of loading hardware available.
- Factory Mutual approved.

Option

- Explosion protection zone 0, 1, 2 and 20, 21, 22 ATEX.

Mounting parts

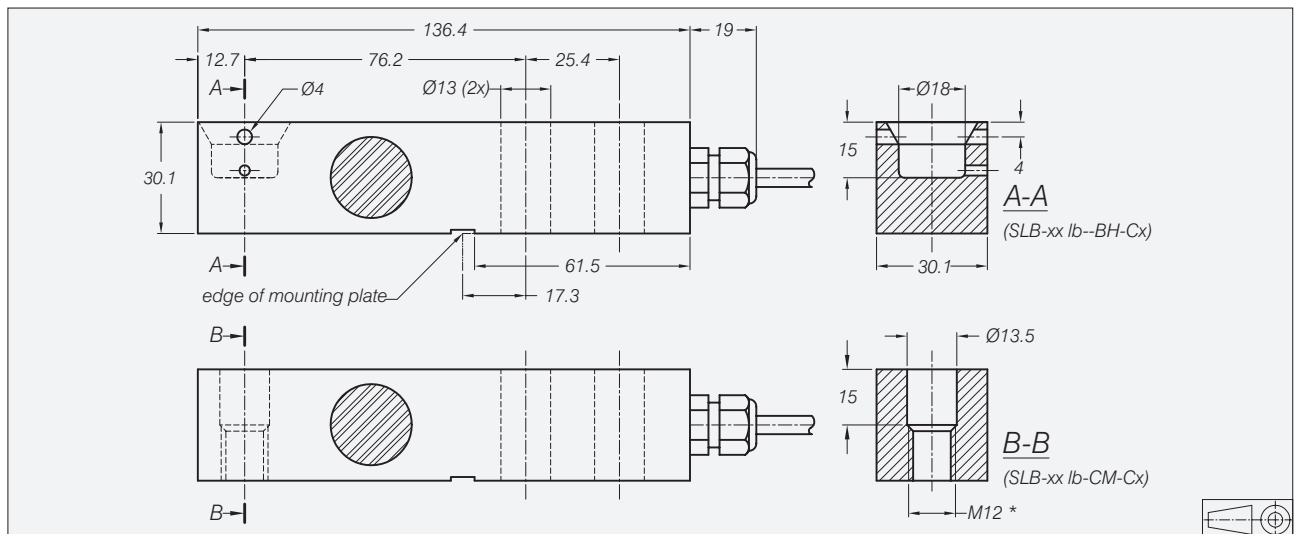
- Spacer plate.

SLB Specifications

Maximum capacity	(E _{max})	lb	200 / 500 / 1000 / 2500 / 5000
Metric equivalents (1 lb=0.45359 kg)		kg	91 / 227 / 454 / 1134 / 2268
Rated Output	(Cn)	mV/V	2 ± 0.1%
Calibration in mV/V/Ω (A...I classified)		%Cn	≤ ± 0.05 (≤ ± 0.005)
Accuracy class according to OIML R 60		(GP)	C3
Maximum number of verification intervals	(n _{max})		n.a. / 3000
Minimum load cell verification interval	(v _{min})		n.a. / E _{max} / 11500
Combined error	%Cn		≤ ± 0.040 / ≤ ± 0.020
Creep error (30 minutes) / DR	%Cn		≤ ± 0.060 / ≤ ± 0.016
Temperature effect on minimum dead load output	%Cn/°C		≤ ± 0.0040 / ≤ ± 0.0011
Temperature effect on sensitivity	%/°C		≤ ± 0.0020 / ≤ ± 0.0011
Excitation voltage	V		5...15
Zero balance	%Cn		≤ ± 5
Input resistance	Ω		1100 ± 50
Output resistance	Ω		1000 ± 2
Insulation resistance (100 V DC)	MΩ		≥ 5000
Compensated temperature range	°C		-10...+40
Operating temperature range	°C		-20...+65
Safe load limit	(E _{lim})	%E _{max}	200
Ultimate load		%E _{max}	300
Safe side load		%E _{max}	100
Load cell material			stainless steel 17-4 PH (1.4548)
Sealing			potted
Protection according DIN 40.050			IP 67

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Dimensions



All dimensions in mm. Dimensions and specifications are subject to change without notice.

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 lb-Cx-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).

