

SLB beam load cell



product description

The SLB is a high accuracy, low profile bending beam available in a wide range of capacities. Full stainless-steel construction with potted environmental sealing provides an economical solution for a broad range of weighing applications. Available with a range of load introduction systems, the blind hole variant combined with Flintec self-aligning load feet ensure optimum weighing accuracy.

applications

Platform weighing machines, pallet truck scales, tank and vessel weighing systems, conveyor scales and patient weighing systems such as intensive care beds and wheelchair scales.

approvals

OIML approval to C3 (Y = 11,500)

NTEP approval to 7,500 intervals, Class III

ATEX hazardous area approval for zones 0, 1, 2, 20, 21 and 22

FM hazardous area approval

key features

Stainless steel construction

Environmentally sealed by potting to IP67

High accuracy

Ideal for industrial platform scales

Wide range of capacities from 200lb to 5,000lb (91kg to 2,268kg)

Unique blind loading hole

High input resistance

Calibration in mV/V/Ω

accessories

Compatible range of application hardware

Compatible range of electronics



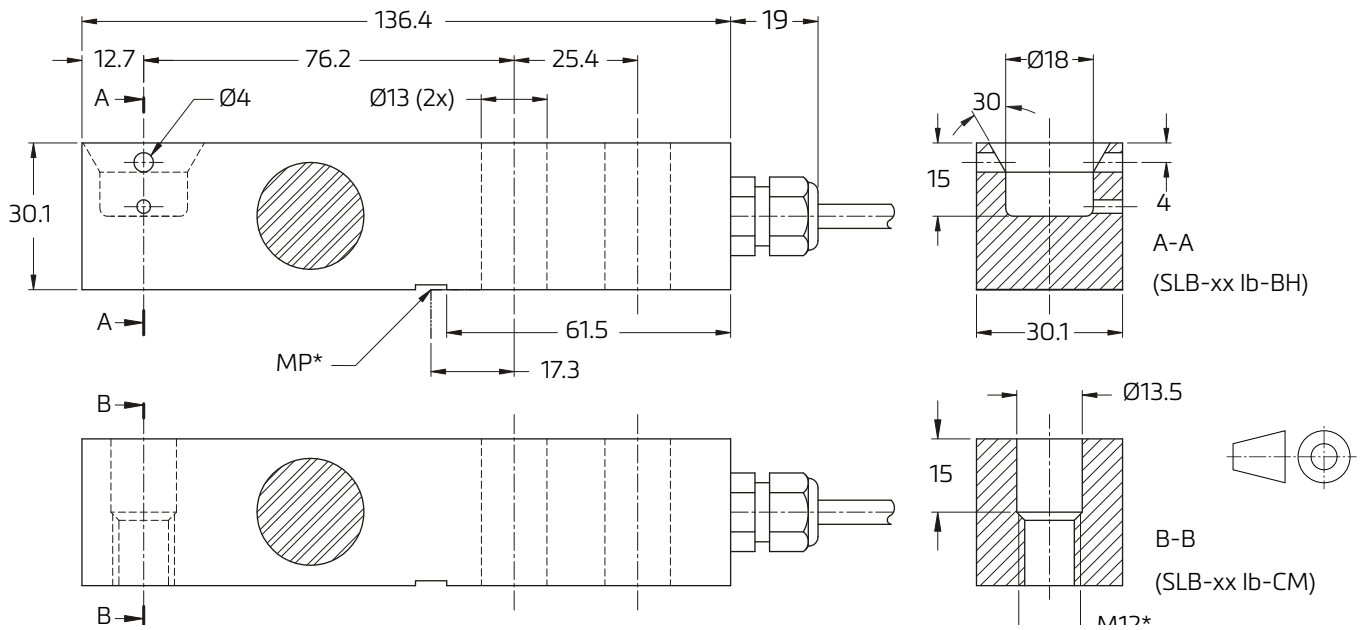
specifications

Maximum capacity ($E_{\max}$)	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 ($n_{\max}$)		n.a.	3,000
Minimum load cell verification interval ($v_{\min}$)		n.a.	$E_{\max} / 11,500$
Temperature effect on minimum dead load output (TC_0)	%*RO/10°C	± 0.0400	± 0.0122
Temperature effect on sensitivity (TC_{RO})	%*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_{LC})	Ω	1,100 ± 50	
Output resistance (R_{out})	Ω	1,000 ± 2	
Insulation resistance (100 V DC)	MΩ	≥ 5,000	
Safe load limit (E_{lim})	%* $E_{\max}$	200	
Ultimate load	%* $E_{\max}$	300	
Safe side load	%* $E_{\max}$	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	
Packet weight	kg	1.1 (200-2,500lb), 1.2 (5,000lb)	

The limits for Non-Linearity, Hysteresis, and TC_{RO} are typical values.

The sum of Non-linearity, Hysteresis and TC_{RO} meets the requirements according to OIML R60 with $pLC=0.7$.

product dimensions (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).

MP* - Edge of mounting plate

wiring

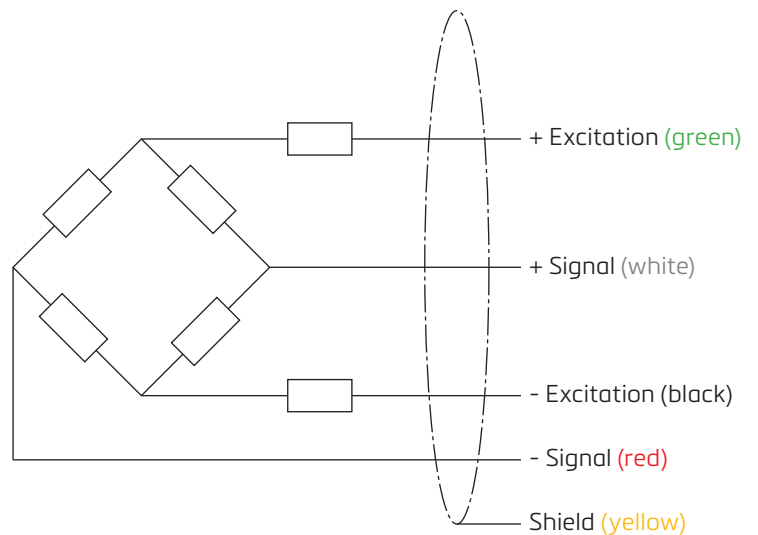
The load cell is provided with a shielded, 4 conductor cable (AWG 24).

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)



Specifications and dimensions are subject to change without notice.