Single-Ended Load Beam

FEATURES

- Capacities: 0.5 t, 1 t, 2 t, 5 t, 10 t, 1k lbs., 2k lbs., 5k lbs., and 10k lbs.
- Fully welded, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 4000d and NTEP 10000d
- Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells
- Digital version available (model SBC)
- **Optional**
  - ATEX & UKCA Approval.
  - FM approval

APPLICATIONS

- Platform scales
- Belt scales
- Pallet scales
- Overhead track scales
- On-board weighing
- Silo hopper weighing



DESCRIPTION

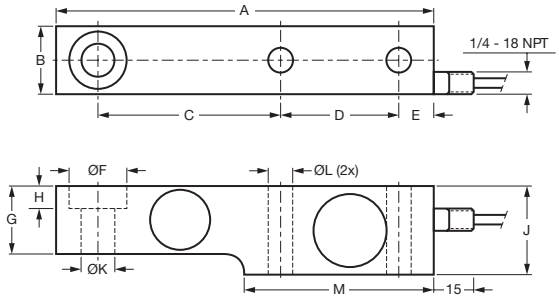
Model SSB is a stainless-steel single-ended shear beam type load cell.

The robust product is suitable for a wide range of platform scales, pallet scales, overhead track scales, and process-weighing applications.

The fully-welded construction and water block cable entry ensure that this product can be used successfully in demanding environments found in the food, chemical, and allied process industries.

The product meets the stringent Weights and Measures requirements throughout Europe and the USA.

OUTLINE DIMENSIONS in millimeters [inches}



Cable specifications:

Cable length: 5m

+ Excitation	Green
– Excitation	Black
+ Output	White
– Output	Red
Shield	Transparent

CAPACITY (kg)	500–2000		5000	
	mm	in	mm	in
A	203.2	8.00	235.0	9.25
B	36.5	1.44	47.5	1.87
C	98.4	3.87	123.8	0.50
D	63.5	2.50	66.7	2.63
E	19.1	0.75	20.6	0.81
F	$30.2^{+0.2/-0}$	$1.19^{+0.008/-0}$	$41.3^{+0.2/-0}$	$1.63^{+0.008/-0}$
G	36.5	1.44	47.6	1.87
H	11.9	0.47	15.8	0.62
J	47.6	1.87	69.9	2.75
K	17.5 H11	0.69 H11	25.5 H11	1 H11
L	14.0	0.55	22.0	0.87
M	101.6	4.00	111.2	4.38

For 10 t capacity, please consult factory

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SPECIFICATIONS						
PARAMETER	**VALUE**					**UNIT**
Standard capacities (E_{max})	0.5, 1, 2, 5 (1)			2, 5 (1)		t
Accuracy class according to OIML R-60	NTEP III	Non-Approved	C3	C3MI8	C4	
Max. no. of verfication intervals	10000		3000	3000	4000	
Min. verification interval ($V_{min}=E_{max}/Y$)			E_{max}/10000	E_{max}/15,000	E_{max}/10000	
MDLOR ($Z=E_{max}/2*DR$)			–	8000	–	
Min. verification interval, type MR			E_{max}/20000		E_{max}/20000	
Rated output (=S)	2					mV/V
Rated output tolerance	0.02					±mV/V
Zero balance	1.0					±% FSO
Combined error	0.0200	0.0500	0.0200	0.0200	0.0170	±% FSO
Non-repeatability	0.0100	0.0200	0.0100	0.0100	0.0090	±% FSO
Minimum dead load output return	0.0250	0.0500	0.0167	0.0063	0.0125	±% applied load
Creep error (30 minutes)		0.0600	0.0245	0.0245	0.0184	±% applied load
Creep error (20 minutes)	0.030	0.0200	0.0053	0.0053	0.0039	±% applied load
Temp. effect on min. dead load output	(0.001)	0.0250	0.0070	0.0050	0.0070	±% FSO/5°C (/°F)
Temp. effect on min. dead load output, type MR			0.0035		0.0035	±% FSO/5°C
Temperature effect on sensitivity	(0.0008)	0.0250	0.0050	0.0050	0.0045	±% applied load/ 5°C(/°F)
Minimum dead load	0					% E_{max}
Maximum safe over load	150					% E_{max}
Ultimate over load	300					% E_{max}
Maximum safe side load	100					% E_{max}
Deflection at E_{max}	0.5 max.					mm
Excitation voltage	5 to 15					V
Maximum excitation voltage	18					V
Input resistance	350±3.5					Ω
Output resistance	353±3					Ω
Insulation resistance	≥5000					MΩ
Compensated temperature range	–10 to +40					°C
Operating temperature range	–40 to +80					°C
Storage temperature range	–40 to +90					°C
Element material	Stainless steel 1.4542					
Sealing (DIN 40.050 / EN60.529)	IP66 & IP68					
SC-Version (current calibration)	Standard					
Recommended torque on fixation bolts	0.5-2 t: 110 / 5 t: 540					N*m

(1) For 10 t capacity please consult factory

FSO—Full Scale Output

SC-version: The rated output and the output resistance are balanced in such a way that the output current is calibrated to within 0.05% of a reference value. This allows easy parallel connection of the load cells.

All specifications subject to change without notice.

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CERTIFICATION MARKINGS

ATEX & UKEX Markings (For Zone 1, 2 and Zone 21, 22)

II 2 G Ex ib IIC T6…T4 Gb
II 2 D Ex ib IIIC T70°C Db
II 2 D Ex tb IIIC T70°C Db

II 3 G Ex ic IIC T6…T4 Gc or Ex nA IIC T6…T4 Gc
II 3 D Ex ic IIIC T70°C Dc or Ex tc IIIC T70°C Dc

FM Approval Markings (USA and Canada)

IS Class I, II, III, Division 1, Groups A, B, C, D, E, F and G;
NI Class I, Division 2, Groups A, B, C, and D;
DIP Class II, III, Division 2, Groups F and G;
T4;
Ta = -25°C to +40°C;

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