

Single-Ended Load Beam

FEATURES

- Capacities: 5–500 kg
- Fully welded, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 4000d and NTEP class III L, 10000 divisions
- Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells
- **Optional**
 - ATEX and FM certified versions are available for use in potentially explosive atmospheres



APPLICATIONS

- Platform scales
- Belt scales
- Packaging machines
- Silo/hopper weighing

This product is suitable for low capacity platform scales, packaging machines, hybrid scales and process weighing.

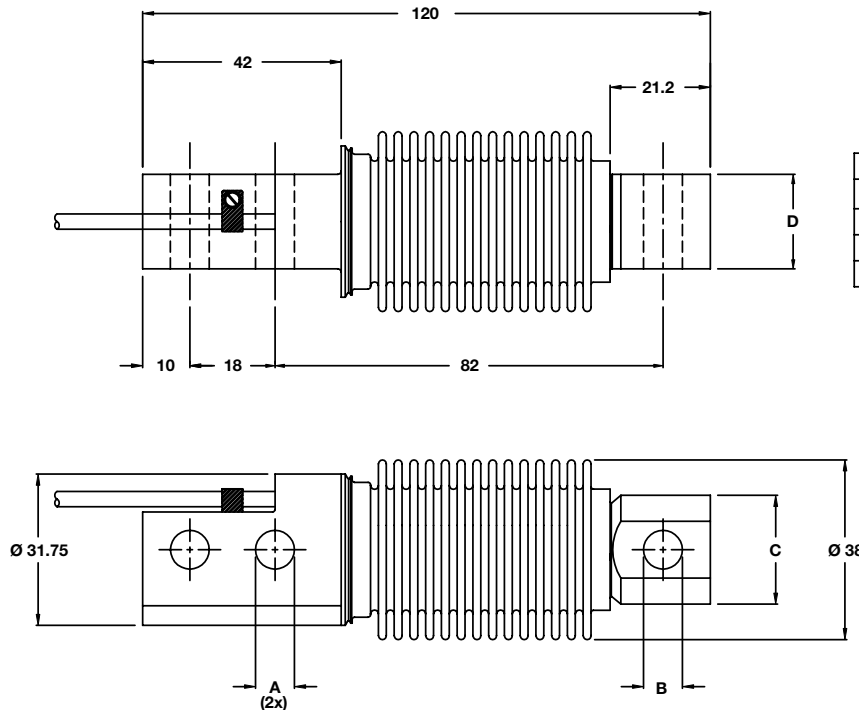
Fully welded construction and water block cable-entry ensure that this product can be used successfully in harsh environments found in the food, chemical and allied industries.

DESCRIPTION

The SHBxR is a fully weld-sealed stainless steel bending beam type load cell.

This product meets the stringent Weights and Measures requirements throughout Europe.

OUTLINE DIMENSIONS in millimeters



Capacity (kg)	5-200	350 / 500
A	8.2	10.3
B	8.2 ± 0.1	10.3 ± 0.1
C	23.0	24.0
D	20.0	19.0

Note: Dimensions in millimeters

Cable specifications:

- Cable length 3m
- Excitation + Green
- Excitation - Black
- Output + White
- Output - Red
- (Sense + Yellow)
- (Sense - Blue)
- Shield Transparent

4-wire cable standard,
6-wire cable optional

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SPECIFICATIONS							
PARAMETER	VALUE					UNIT	
Standard capacities (E _{max})	5, 10, 20, 30, 50, 100, 200, 350, 500 ⁽¹⁾					100, 200, 350, 500 ⁽²⁾	kg
Accuracy class according to OIML R-60 /NTEP	NTEP III L	Non-Approved	C3	C4	C3MI7.5		
Max. no. of verification intervals	10000		3000	4000	3000		
Min. verification interval (V _{min} =E _{max} /γ)			E _{max} /15,000	E _{max} /15,000	E _{max} /15,000		
MDLOR (Z=E _{max} /2*DR)					7500		
Rated output (=S)	2						mV/V
Rated output tolerance	0.02						±mV/V
Zero balance	1.0						±% FSO
Combined error	0.0200	0.05000	0.0200	0.0170	0.0200		±% FSO
Non-repeatability	0.0100	0.0200	0.0100	0.0090	0.0100		±% FSO
Minimum dead load output return	0.0250	0.0500	0.0167	0.0125	0.0067		±% applied load
Creep error (30 minutes)		0.0600	0.0245	0.0184	0.0245		±% applied load
Creep error (20 - 30 minutes)	0.0300	0.0500					±% applied load
Temp. effect on min. dead load output	(0.0008)	0.0250	0.0047	0.0047	0.0047		±% FSO/5 °C (°F)
Temperature effect on sensitivity	(0.0010)	0.0250	0.0050	0.0045	0.0050		±% 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}	0.30±0.03						mm
Excitation voltage	5 to 12						V
Maximum excitation voltage	15						V
Input resistance	460±50						Ω
Output resistance	350±3.5						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 (DIN)	Stainless steel 1.4542						
Sealing (DIN 40.050 / EN60.529)	IP66 and IP68						
SC-Version (current calibration)	Standard						
Recommended torque on fixation bolts	23 (70 for 350/500 kg)						N*m

⁽¹⁾ 5 and 10 kg capacities are not approved by NTEP.
5 kg is not approved by OIML.

⁽²⁾ D_{max} = 0.75 * E_{max}

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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LOADCELLS | PRESSURE SENSORS | ELECTRONICS
Meer en Duin 64b Phone : +31 (0)88-4224440
2163 HC Lisse Fax : +31 (0)88-4224441
The Netherlands Email : info@stekon.nl