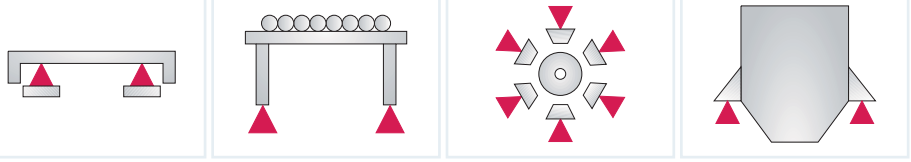
Revere Transducers Europe

Model SHBxR
Single Ended Beam Load Cell

APPROVALS

OIML	C4 $n_{lc} \leq 4000$, Y ≤ 15000, Z ≤ 7500
NTEP	B10 $n_{lc} \leq 10000$
ATEX Ex	II2G EEx ib IIC T6/T4 or II1D T70°C II3G EEx nA II T6/T4 or II3D T70°C
FM APPROVED	Factory Mutual System

APPLICATIONS



Platform scales	Belt scales	Packaging machines	Silo/hopper weighing

DESCRIPTION

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

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

The 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.

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

FEATURES

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

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SHBxR SPECIFICATIONS

PARAMETER	VALUE					UNIT
Standard capacities (E_{max})	5, 10, 20, 30, 50, 100, 200, 350, 500				100, 200, 350, 500**	kg
Accuracy class according to OIML R-60/NTEP	Non-Approved	**NTEP IIIL**	**C3**	**C4**	**C3MI7.5**	
Max. no. of verfication intervals (n_{lc})		10000	3000	4000	3000	
Min. verification interval ($V_{min}=E_{max}/Y$)		--	E_{max}/15,000	E_{max}/15,000	E_{max}/15,000	
MDLOR ($Z=E_{max}/2\times DR$)		--	--	--	7500	
Rated output (=S)	2					mV/ V
Rated output tolerance	0.02					±mV/ V
Zero balance	1.0					±% FSO
Combined error	0.0500	0.0200	0.0200	0.0170	0.0200	±% FSO
Non-repeatability	0.0200	0.0100	0.0100	0.0090	0.0100	±% FSO
Minimum dead load output return*	0.0500	0.0250	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)*	0.0500	0.0300	0.0053	0.0039	0.0053	±% applied load
Temp. effect on min. dead load output	0.0250	(0.0008)	0.0047	0.0047	0.0047	±% FSO/5°C (/°F)
Temperature effect on sensitivity	0.0250	(0.0010)	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 350/500kg)					Nm

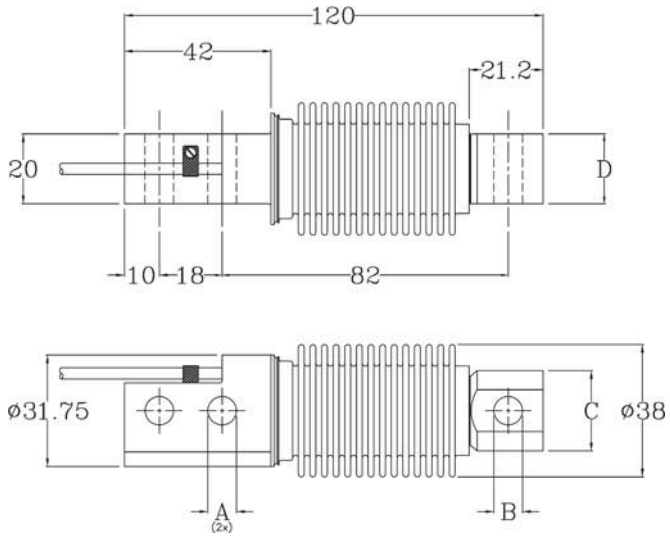
* Applies for the temperature range -10 to +40 °C

** 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.

OUTLINE DIMENSIONS



Capacity (kg)	5 ➔ 200	350 / 500
ØA	8.2	10.3
ØB	$8.2^{+0.1}_{0}$	$10.3^{+0.1}_{0}$
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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