

SHBxR

Single-Ended Load Beam



For platform scales with low capacity, packaging machines, hybrid scales and process weighing.

SHBxR

Load cell

Manufactured by Vishay Precision Group, for low capacity platform scales, packaging machines, hybrid scales and process weighing. Capacity for up to 50kg.



WASHABLE

Developed in hermetically sealed stainless steel, IP66 and IP68, which allows washing with water jets.

PARALLEL CONNECTION

Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells.

OPTIONAL

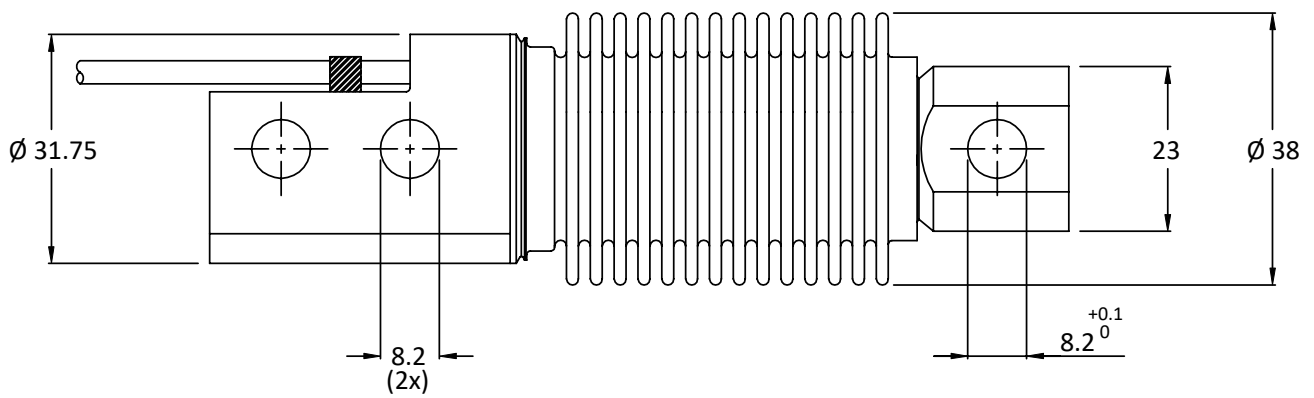
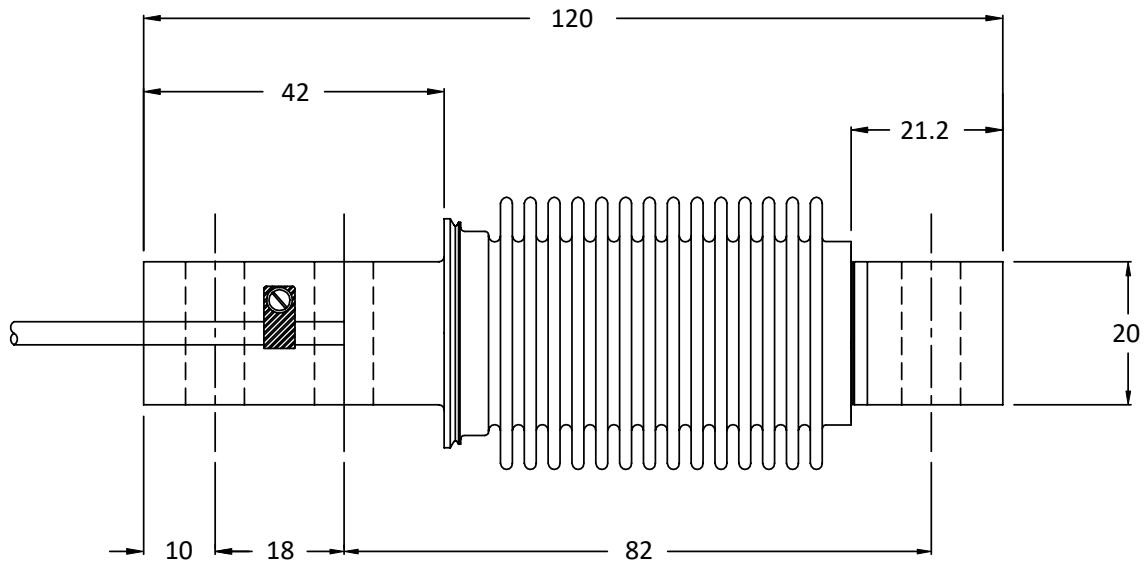
ATEX and FM certified versions are available for use in potentially explosive atmospheres.



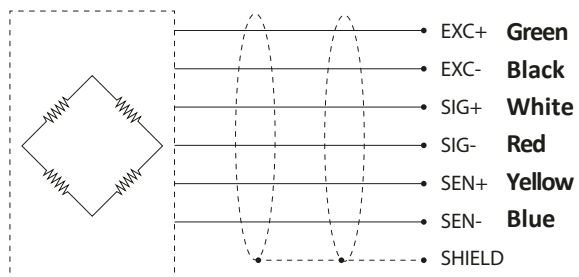
LASER SEALED

Fully sealed construction, ensuring use in aggressive environments such as in the food, chemical and similar industries.

DIMENSIONS (mm)



WIRING DIAGRAM



SPECIFICATIONS					
PARAMETER	VALUE				UNIT
Standard capacities (E _{max})	5, 10, 20, 30, 50 ⁽¹⁾				kg
Accuracy class according to OIML R-60 /NTEP	NTEP IIIIL	Non-Approved	C3	C4	
Max. no. of verification intervals	10000		3000	4000	
Min. verification interval (V _{min} =E _{max} /Y)			E _{max} /15,000	E _{max} /15,000	
MDLOR (Z=E _{max} /2*DR)					
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	±% FSO
Non-repeatability	0.0100	0.0200	0.0100	0.0090	±% FSO
Minimum dead load output return	0.0250	0.0500	0.0167	0.0125	±% applied load
Creep error (30 minutes)		0.0600	0.0245	0.0184	±% 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	±% FSO/5 °C (/°F)
Temperature effect on sensitivity	(0.0010)	0.0250	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}	0.30±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				N*m

⁽¹⁾ 5 and 10 kg capacities are not approved by NTEP. FSO—Full Scale Output
5 kg is not approved by OIML.

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.

WEIGHTECH CODES

Product's name	Code
Vishay's Load Cell SHBxR-10kg	10293
Vishay's Load Cell SHBxR-20kg	10294
Vishay's Load Cell SHBxR-50kg	10296