

Product Description

The type SB8 is a stainless steel beam type load cell with complete hermetic sealing. It is a perfect fit for use in industrial environments.

Application

- Platform scales, bench scales, conveyor scales, small hopper and tank weighing systems, bagging machines and other

Key Features

- Wide range of capacities from 10 kg to 500 kg
- Stainless steel construction
- Environmental Protection IP68 with complete hermetic sealing
- Calibration in mV/V/Ω

Approvals

- OIML approval to C1 (Y = 5 000) and C3 (Y = 10 000)
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

Packed Weight

■ Capacity (lb)	10–20	50–250	500
Weight (kg)	0.62	0.64	0.8

Available Accessories

- Compatible range of application hardware
- Compatible range of electronics available

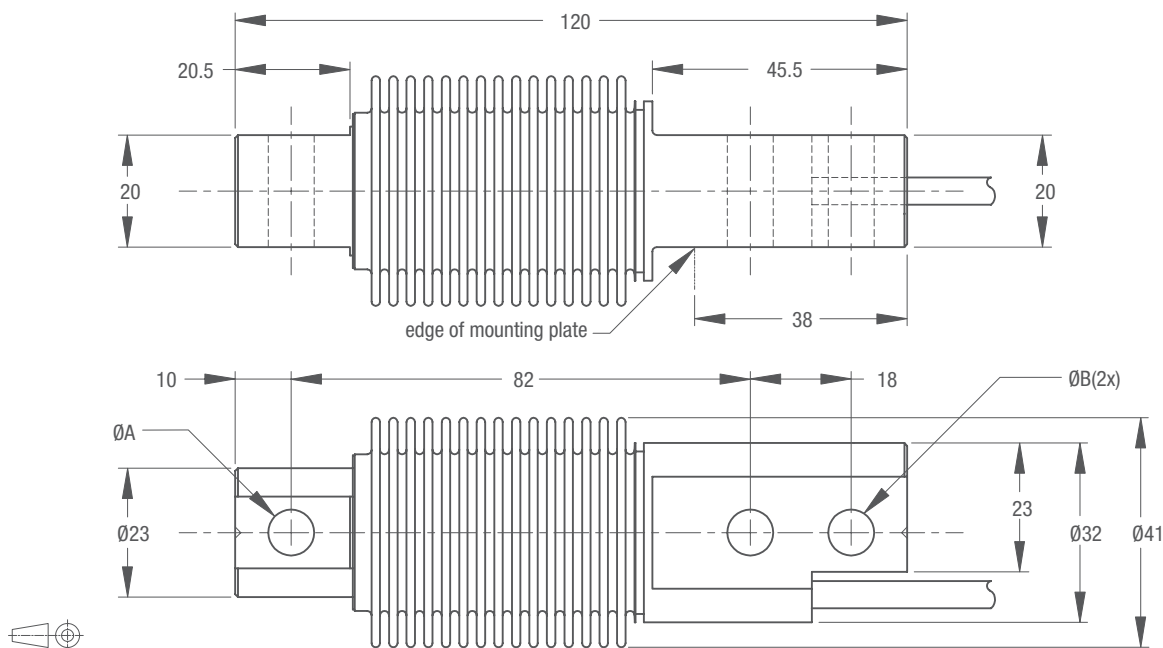
SB8 Specifications

	(E _{max})	kg	10 / 20 / 50 / 100 / 200 / 250 / 500		
			(GP)	C1	C3
Accuracy class according to OIML R60					
Maximum number of verification intervals	(n _{max})		n.a.	1 000	3 000
Minimum load cell verification interval	(v _{min})		n.a.	E _{max} / 5 000	E _{max} / 10 000
Temperature effect on minimum dead load output	(TC ₀)	%*RO/10°C	≤ ± 0.0400	≤ ± 0.0280	≤ ± 0.0140
Temperature effect on sensitivity	(TC _{RO})	%*RO/10°C	≤ ± 0.0200	≤ ± 0.0160	≤ ± 0.0100
Combined error		%*RO	≤ ± 0.0500	≤ ± 0.0300	≤ ± 0.0200
Non-linearity		%*RO	≤ ± 0.0400	≤ ± 0.0300	≤ ± 0.0166
Hysteresis		%*RO	≤ ± 0.0400	≤ ± 0.0300	≤ ± 0.0166
Creep error (30 minutes) / DR		%*RO	≤ ± 0.0600	≤ ± 0.0490	≤ ± 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		380 ± 10	
Output resistance	(R _{out})	Ω		350 ± 3	
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		-40...+80 (ATEX -40...+60)	
Load cell material				stainless steel 17-4 PH (1.4548)	
Protection according DIN 40.050				IP68	

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 p_{LC}=0.7.

Dimensions (in mm)



Type	A	B	Mounting bolts	Torque*
10...250 kg	8.2	8.2	M8 8.8	25 Nm
500 kg	10.5	8.2	M8 10.9	35 Nm

* Torque value assumes oiled thread.

Wiring

- The load cell is provided with a shielded, 6 conductor cable (AWG 26).
Cable jacket polyurethane
- Cable length: 3 m
- Cable diameter: 5.8 mm
- The shield is connected to the load cell body

