

## Type SB8 Load Cell



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

### Packed Weight

■ Capacity (kg)	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



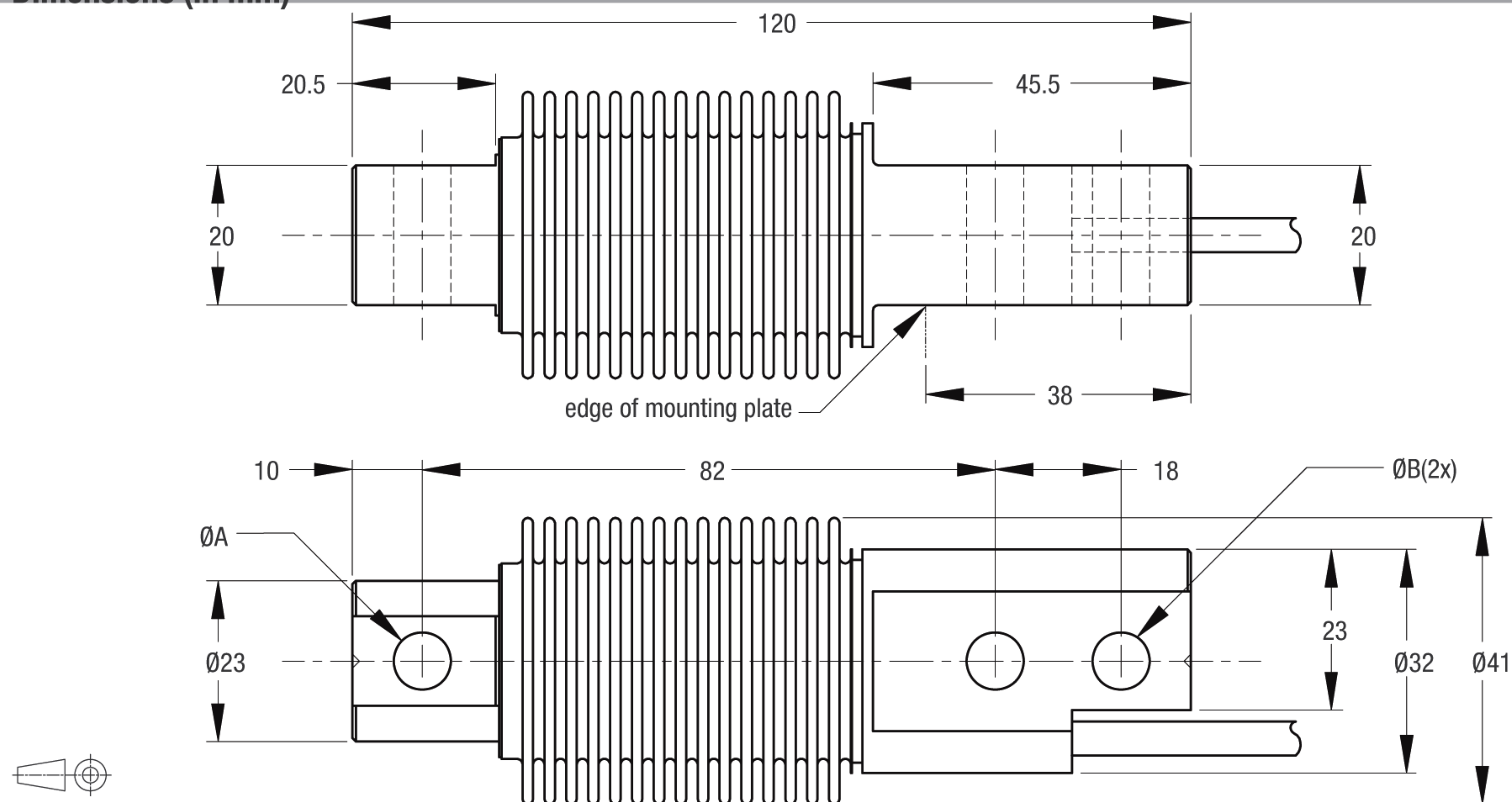
## Specifications

Maximum capacity	(E <sub>max</sub> )	kg	10 / 20 / 50 / 100 / 200 / 250 / 500	
Accuracy class according to OIML R60			(GP)	C3
Maximum number of verification intervals	(n <sub>max</sub> )		n.a.	3 000
Minimum load cell verification interval	(v <sub>min</sub> )		n.a.	E <sub>max</sub> / 10 000
Temperature effect on minimum dead load output	(TC <sub>0</sub> )	%*R <sub>0</sub> /10°C	≤ ± 0.0400	≤ ± 0.0140
Temperature effect on sensitivity	(TC <sub>R0</sub> )	%*R <sub>0</sub> /10°C	≤ ± 0.0200	≤ ± 0.0100
Combined error		%*R <sub>0</sub>	≤ ± 0.0500	≤ ± 0.0200
Non-linearity		%*R <sub>0</sub>	≤ ± 0.0400	≤ ± 0.0166
Hysteresis		%*R <sub>0</sub>	≤ ± 0.0400	≤ ± 0.0166
Creep error (30 minutes) / DR		%*R <sub>0</sub>	≤ ± 0.0600	≤ ± 0.0166
Rated Output	(R <sub>0</sub> )	mV/V	2 ± 0.1%	
Calibration in mV/V/Ω (A...I classified)		%	≤ ± 0.05 (≤ ± 0.005)	
Zero balance		%*R <sub>0</sub>	≤ ± 5	
Excitation voltage		V	5...15	
Input resistance	(R <sub>LC</sub> )	Ω	380 ± 10	
Output resistance	(R <sub>out</sub> )	Ω	350 ± 3	
Insulation resistance (100 V DC)		MΩ	≥ 5 000	
Safe load limit	(E <sub>lim</sub> )	%*E <sub>max</sub>	200	
Ultimate load		%*E <sub>max</sub>	300	
Safe side load		%*E <sub>max</sub>	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 EN 60 529			IP68 (up to 2 m water depth)	

The limits for Non-Linearity, Hysteresis, and TC<sub>R0</sub> are typical values.

The sum of Non-linearity, Hysteresis and TC<sub>R0</sub> meets the requirements according to OIML R60 with p<sub>LC</sub>=0.7.

## Dimensions (in mm)

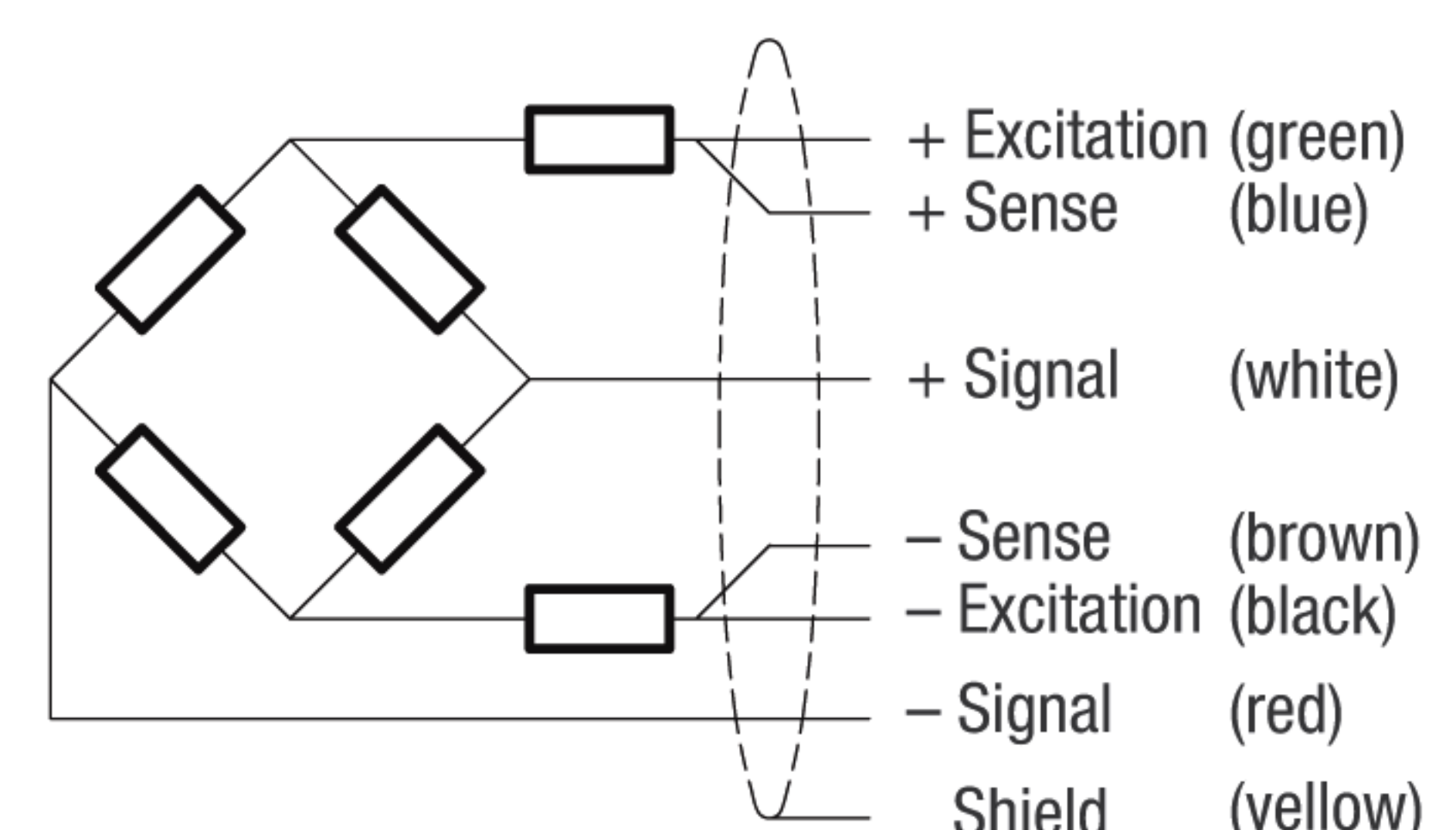


Type	A	B	Mounting bolts	Torque*
10...250 kg	8.2	8.2	M8 8.8	25 Nm
500 kg	10.5	8.2	M8 10.9	35 Nm

\* 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



A103-Rev7-GB-2(2) Dimensions and specifications are subject to change without notice.