

## Type SB8 Load Cell



Flintec load cells are designed to meet the most stringent accuracy requirements. Certifications have been obtained from Weights & Measures Authorities, worldwide.

SB8 load cells are available in the capacities 10 kg to 500 kg and include Accuracy Classifications GP, C1 and C3 according to OIML R 60.

They offer total stainless steel construction and hermetic sealing, making them suitable for use in the toughest industrial environments.

The Flintec calibration technique (in mV/V/Ω) eliminates time consuming corner calibration in multiple load cell systems.

The SB8 is available for use in hazardous areas zone 0, 1, 2 (gas) and 20, 21, 22 (dust) according to EEx ia IIC T6...T4 T130°C ATEX.

### Important Features

- Capacities: 10 kg to 500 kg.
- High accuracy.
- Total stainless steel construction.
- Hermetic sealing.
- Protection IP 68.
- Low profile.
- W&M certified for 3000 intervals (in preparation).
- Calibration in mV/V/Ω.
- Complete range of loading hardware available.
- Factory Mutual approved.

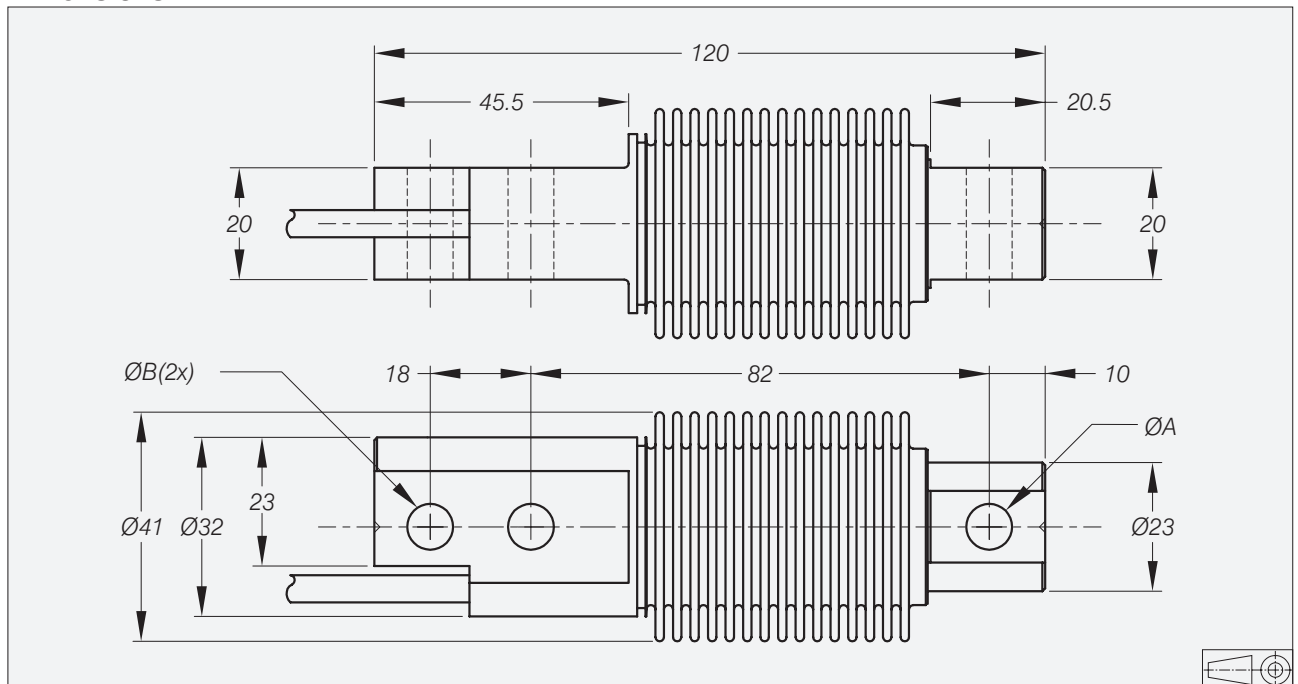
### Option

- Explosion protection zone 0, 1, 2 and 20, 21, 22 ATEX.

## SB8 Specifications

Maximum capacity	(E <sub>max</sub> )	kg	10 / 20 / 50 / 100 / 200 / 500		
Rated Output	(Cn)	mV/V	2 ± 0.1%		
Calibration in mV/V/Ω (A...I classified)		%Cn	≤ ± 0.05 (≤ ± 0.005)		
Accuracy class according to OIML R 60			(GP)	C1	C3
Maximum number of verification intervals	(n <sub>max</sub> )		n.a.	1000	3000
Minimum load cell verification interval	(v <sub>min</sub> )		n.a.	E <sub>max</sub> /5000	E <sub>max</sub> /10000
Combined error		%Cn	≤ ± 0.040	≤ ± 0.030	≤ ± 0.020
Creep error (30 minutes) / DR		%Cn	≤ ± 0.060	≤ ± 0.049	≤ ± 0.016
Temperature effect on minimum dead load output		%Cn/°C	≤ ± 0.0040	≤ ± 0.0028	≤ ± 0.0014
Temperature effect on sensitivity		%/°C	≤ ± 0.0020	≤ ± 0.0016	≤ ± 0.0011
Excitation voltage		V	5...15		
Zero balance		%Cn	≤ ± 5		
Input resistance		Ω	380 ± 10		
Output resistance		Ω	350 ± 3		
Insulation resistance (100 V DC)		MΩ	≥ 5000		
Compensated temperature range		°C	-10...+40		
Operating temperature range		°C	-40...+80		
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		
Load cell material			stainless steel 17-4 PH (1.4548)		
Sealing			hermetic sealing		
Protection according to DIN 40.050			IP 68		

## Dimensions



Type	A	B	Mounting bolts	Torque*
10...200 kg	8.2	8.2	M8 8.8	25 Nm
500 kg	10.5	10.5	M10 8.8	50 Nm

\* Torque value assumes oiled thread.

All dimensions in mm. Dimensions and specifications are subject to change without notice.

## Wiring

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

