

## Type SB5 Load Cell



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

SB5 load cells are available in the capacities 5 kN to 50 kN (510 kg to 5099 kg) and include Accuracy Classifications GP, C1 and C3 according to OIML R 60; NTEP 5000 d.

They offer stainless steel construction and improved potting, making them suitable for use in tough industrial environments.

The unique “blind” loading hole combined with the available Flintec loading hardware provides an excellent price-performance ratio.

It allows very low profile platform design and offers advantages in all kinds of weighing applications.

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

### Important Features

- Capacities: 5 kN to 50 kN
- High accuracy.
- Stainless steel construction.
- Protection IP 67.
- Low profile.
- High input resistance: 1100 Ω.
- W&M certified for 3000 intervals.
- Unique “blind” loading hole.
- Calibration in mV/V/Ω.
- Easy cable replacement.
- Complete range of loading hardware available.
- Fully compatible with load cell type SB4.
- Factory mutual approved.

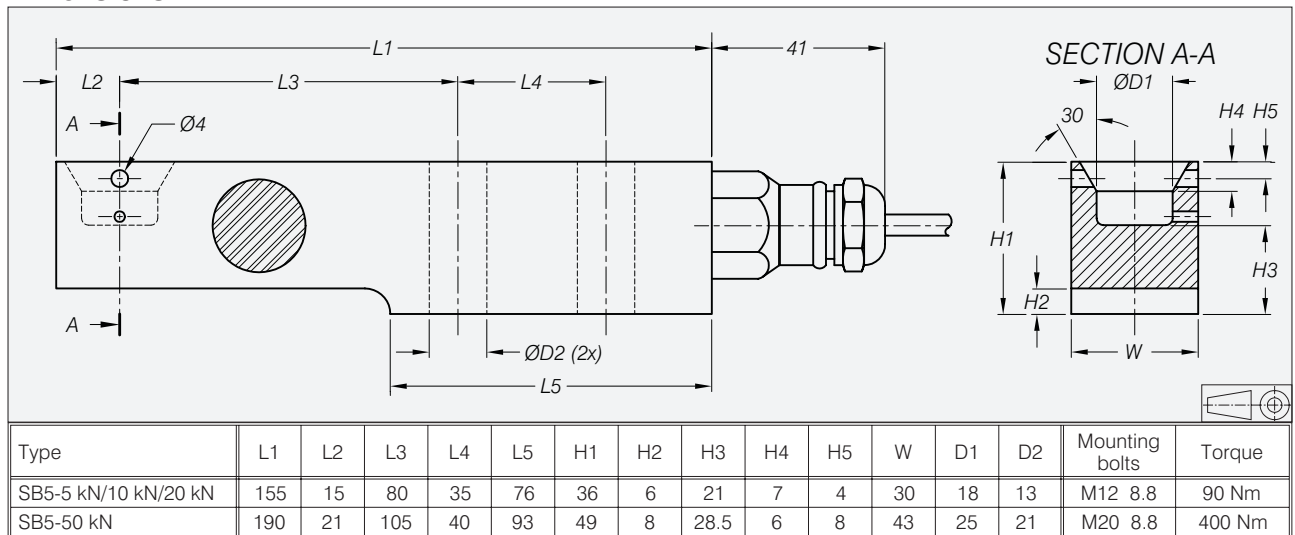
### Option

- Explosion proof EEx ia IIC T6...T4.

## SB5 Specifications

Maximum capacity (=E <sub>max</sub> )	kN	5 / 10 / 20 / 50		
Metric equivalents (1 N=0.10197 kg)	kg	510 / 1020 / 2039 / 5099		
Rated Output (=RO)	mV/V	2 ± 0.1%		
Calibration in mV/V/Ω (A...I classified)	%RO	≤ ± 0.05 (≤ ± 0.005)		
Accuracy class according to OIML R 60		(GP)	C1	C3
Maximum number of verification intervals (n)		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	%RO	≤ ± 0.040	≤ ± 0.030	≤ ± 0.020
Creep error (30 minutes)	%RO	≤ ± 0.060	≤ ± 0.049	≤ ± 0.024
Temperature effect on minimum dead load output	%RO/°C	≤ ± 0.0040	≤ ± 0.0028	≤ ± 0.0012
Temperature effect on sensitivity	%/°C	≤ ± 0.0020	≤ ± 0.0016	≤ ± 0.0011
Excitation voltage	V	5...15		
Zero balance	%RO	≤ ± 1.0		
Input resistance	Ω	1106 ± 5		
Output resistance	Ω	1000 ± 1		
Insulation resistance	MΩ	≥ 5000		
Compensated temperature range	°C	-10...+40		
Operating temperature range	°C	-20...+65		
Safe load limit	%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		potted		
Protection according DIN 40.050		IP 67		

## Dimensions



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

## Wiring

- The load cell is provided with a shielded, 4 conductor cable.
- Cable length: 3 m for SB5-5 kN/10 kN/20 kN, 4.5 m for SB5-50 kN.
- Cable diameter: 5 mm.
- The shield is floating.

