

## Type SB6 Load Cell



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

SB6 load cells are available in the capacities 0.2 kN to 2 kN (20.4 kg to 204 kg) and include Accuracy Classifications GP, C1, C3 and C4 according to OIML R 60. Optionally C3 and C4 with  $Y=20400$ .

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

The special 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  $mV/V/\Omega$ ) eliminates time consuming corner calibration in multiple load cell systems.

The SB6 is available for use in hazardous areas zone 1, 2 (gas) and 21, 22 (dust) according to EEx ia IIC T6...T4 T130°C ATEX.

### Important Features

- Capacities: 0.2 kN to 2 kN.
- High accuracy.
- Total stainless steel construction.
- Complete hermetic sealing.
- Protection IP 68.
- Low profile.
- High input resistance: 1100  $\Omega$ .
- W&M certified for 4000 intervals.
- Multi range accuracy.
- Calibration in  $mV/V/\Omega$ .
- Easy cable replacement.
- Complete range of loading hardware available.
- Factory mutual approved.

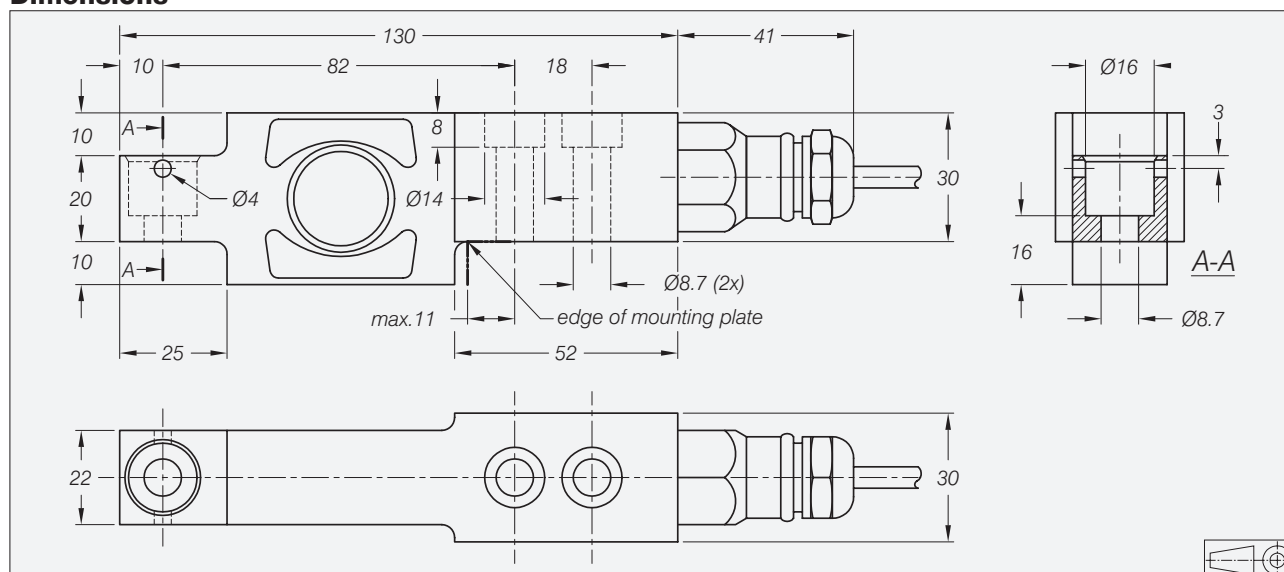
### Option

- Explosion protection zone 1, 2, 21 and 22 ATEX.
- C3 and C4 with  $Y=20400$ .

## SB6 Specifications

Maximum capacity (=E <sub>max</sub> )	kN	0.2 / 0.5 / 1 / 2				0.2 / 0.5 / 1
Metric equivalents (1 N=0.10197 kg)	kg	20.4 / 51 / 102 / 204				20.4 / 51 / 102
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	C4	
Maximum number of verification intervals (n)		n.a.	1000	3000	4000	
Minimum load cell verification interval (v <sub>min</sub> )		n.a.	E <sub>max</sub> /5100	E <sub>max</sub> /10200	E <sub>max</sub> /10200	
Temperature effect on minimum dead load output	%RO/°C	≤ ± 0.0040	≤ ± 0.0028	≤ ± 0.0012	≤ ± 0.0012	
Option	Min. load cell verification interval (v <sub>min</sub> )	n.a.	n.a.	E <sub>max</sub> /20400	E <sub>max</sub> /20400	
	Temp. effect on min. dead load output	%RO/°C	n.a.	≤ ± 0.006	≤ ± 0.006	
Combined error	%RO	≤ ± 0.040	≤ ± 0.030	≤ ± 0.020	≤ ± 0.018	
Creep error (30 minutes) / DR	%RO	≤ ± 0.060	≤ ± 0.049	≤ ± 0.016	≤ ± 0.012	
Temperature effect on sensitivity	%/°C	≤ ± 0.0020	≤ ± 0.0016	≤ ± 0.0011	≤ ± 0.0008	
Excitation voltage	V	5...15				
Zero balance	%RO	≤ ± 1.0				
Input resistance	Ω	1106 ± 5				
Output resistance	Ω	1000 ± 1				
Insulation resistance (100 V DC)	MΩ	≥ 5000				
Compensated temperature range	°C	-10...+40				
Operating temperature range	°C	-40...+80				
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		complete hermetic sealing; cable entry sealed by glass to metal header				
Protection according DIN 40.050		IP 68				

## Dimensions



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

Mounting bolts M8 8.8; torque: 25 Nm. Torque value assumes oiled threads.

## Wiring

- The load cell is provided with a shielded, 4 conductor cable (AWG 24).
- Cable length: 3 m.
- Cable diameter: 5 mm.
- The shield is floating.

