



## Product Description

The type SB6 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 and many other low capacity beam applications

## Key Features

- Wide range of capacities from 20 kg to 2 kN (204 kg)
- Stainless steel construction
- Environmental Protection IP68 with complete hermetic sealing
- High input resistance
- Calibration in mV/V/Ω

## Options

- Y = 20 400 for C3 and C4
- Stainless steel cable gland

## Approvals

- OIML approval to C1 (Y = 5 100), C3 and C4 (Y = 10 200)
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

## Packed Weight

- 1.0 kg

## Available Accessories

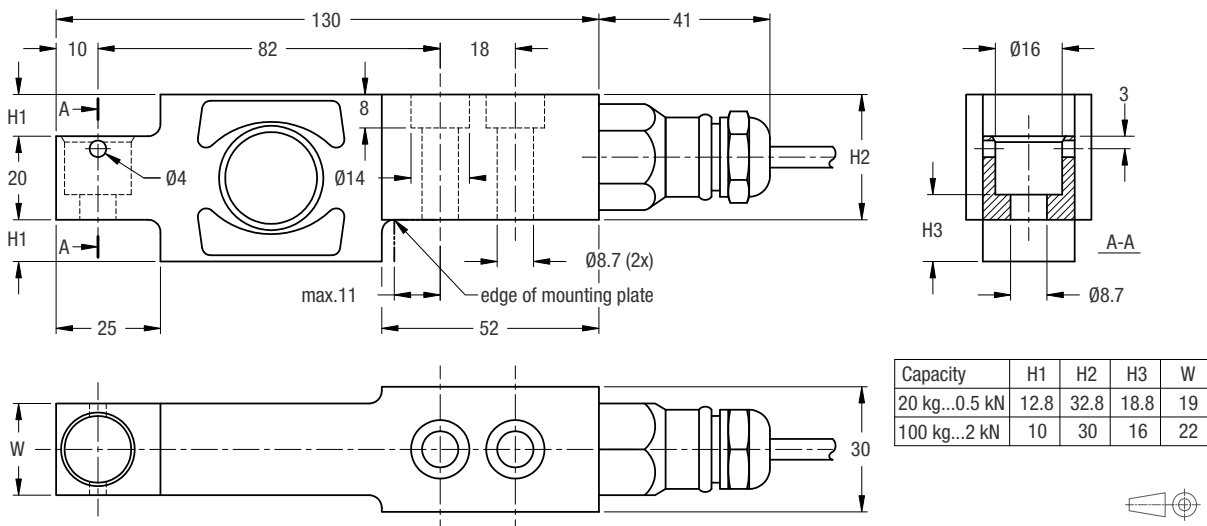
- Compatible range of application hardware
- Compatible range of electronics

## Specifications

Maximum capacity	$(E_{max})$	kN	0.2 / 0.5 / 1 / 2			0.2 / 0.5 / 1
		kg	20 / 50 / 100 / 200			20 / 50 / 100
Metric equivalents (1 N=0.10197 kg)		kg	20 / 20.4 / 50 / 51 / 100 / 102 / 200 / 204			20 / 20.4 / 50 / 51 / 100 / 102
Accuracy class according to OIML R60			(GP)	C1	C3	C4
Maximum number of verification intervals	$(n_{max})$		n.a.	1 000	3 000	4 000
Minimum load cell verification interval	$(v_{min})$		n.a.	$E_{max}/5 100$	$E_{max}/10 200$	
Temperature effect on minimum dead load output	$(TC_0)$	$\% \cdot RO/10^{\circ}C$	$\leq \pm 0.0400$	$\leq \pm 0.0275$	$\leq \pm 0.0137$	
Temperature effect on sensitivity	$(TC_{RO})$	$\% \cdot RO/10^{\circ}C$	$\leq \pm 0.0200$	$\leq \pm 0.0160$	$\leq \pm 0.0100$	$\leq \pm 0.0080$
Combined error		$\% \cdot RO$	$\leq \pm 0.0500$	$\leq \pm 0.0300$	$\leq \pm 0.0200$	$\leq \pm 0.0180$
Non-linearity		$\% \cdot RO$	$\leq \pm 0.0400$	$\leq \pm 0.0300$	$\leq \pm 0.0166$	$\leq \pm 0.0125$
Hysteresis		$\% \cdot RO$	$\leq \pm 0.0400$	$\leq \pm 0.0300$	$\leq \pm 0.0166$	$\leq \pm 0.0125$
Creep error (30 minutes) / DR		$\% \cdot RO$	$\leq \pm 0.0600$	$\leq \pm 0.0490$	$\leq \pm 0.0166$	$\leq \pm 0.0125$
Option	Min. load cell verification interval	$(v_{min opt})$	n.a.	n.a.	$E_{max}/20 400$	
	Temp. effect on min. dead load output	$(TC_{0 opt})$	$\% \cdot RO/10^{\circ}C$	n.a.	n.a.	$\leq \pm 0.0069$
Rated Output	$(RO)$	mV/V	$2 \pm 0.1\%$			
Calibration in mV/V/ $\Omega$ (A...I classified)		%	$\leq \pm 0.05 (\leq \pm 0.005)$			
Zero balance		$\% \cdot RO$	$\leq \pm 5$			
Excitation voltage		V	5...15			
Input resistance	$(R_{LC})$	$\Omega$	$1 100 \pm 50$			
Output resistance	$(R_{out})$	$\Omega$	$1 000 \pm 2$			
Insulation resistance (100 V DC)		M $\Omega$	$\geq 5 000$			
Safe load limit	$(E_{lim})$	$\% \cdot E_{max}$	200			
Ultimate load		$\% \cdot E_{max}$	300			
Safe side load		$\% \cdot E_{max}$	100			
Compensated temperature range		$^{\circ}C$	-10...+40			
Operating temperature range		$^{\circ}C$	-40...+80 (ATEX -40...+60)			
Load cell material			stainless steel 17-4 PH (1.4548)			
Sealing			complete hermetic sealing; cable entry sealed by glass to metal header			
Protection according EN 60 529			IP68 (up to 2 m water depth) / IP69K			

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)



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 jacket polyurethane
- Cable length: 3 m
- Cable diameter: 5 mm
- The shield is floating  
(On request the shield can be connected to the load cell body)

