

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 0.2 kN to 2 kN (20.4 kg to 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
- 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

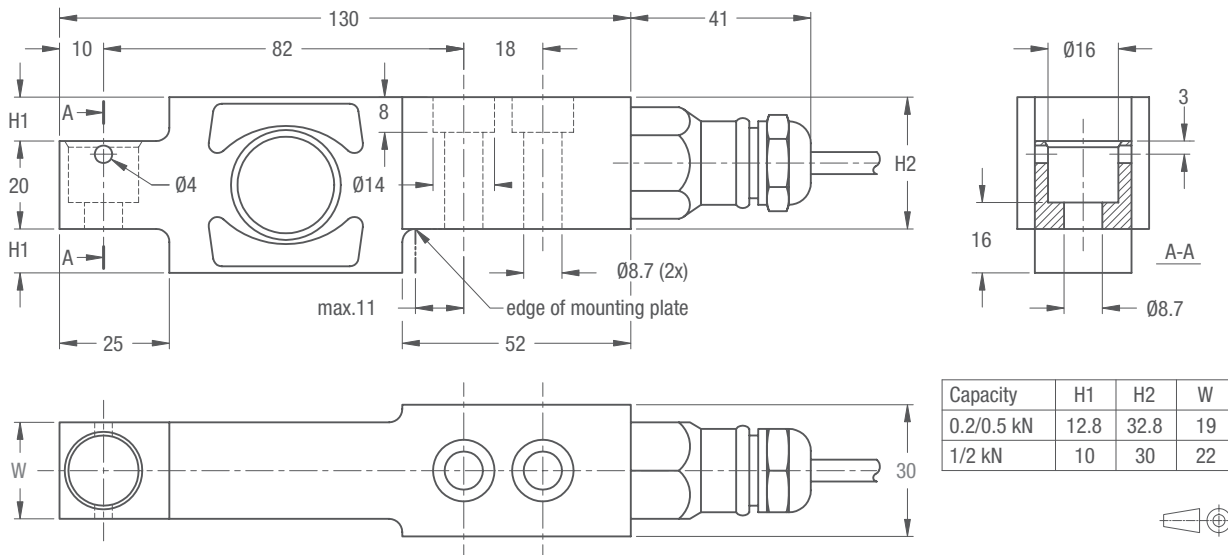
- Compatible range of application hardware
- Compatible range of electronics

SB6 Specifications

		(E _{max})	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
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)	%*RO/10°C	≤ ± 0.0400	≤ ± 0.0275	≤ ± 0.0137	
Temperature effect on sensitivity		(TC _{RO})	%*RO/10°C	≤ ± 0.0200	≤ ± 0.0160	≤ ± 0.0100	≤ ± 0.0080
Combined error			%*RO	≤ ± 0.0500	≤ ± 0.0300	≤ ± 0.0200	≤ ± 0.0180
Non-linearity			%*RO	≤ ± 0.0400	≤ ± 0.0300	≤ ± 0.0166	≤ ± 0.0125
Hysteresis			%*RO	≤ ± 0.0400	≤ ± 0.0300	≤ ± 0.0166	≤ ± 0.0125
Creep error (30 minutes) / DR			%*RO	≤ ± 0.0600	≤ ± 0.0490	≤ ± 0.0166	≤ ± 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})	%*RO/10°C	n.a.	n.a.	≤ ± 0.0069	
Rated Output		(RO)	mV/V	2 ± 0.1%			
Calibration in mV/V/Ω (A...I classified)			%	≤ ± 0.05 (≤ ± 0.005)			
Zero balance			%*RO	≤ ± 5			
Excitation voltage			V	5...15			
Input resistance		(R _{LC})	Ω	1 100 ± 50			
Output resistance		(R _{out})	Ω	1 000 ± 2			
Insulation resistance (100 V DC)			MΩ	≥ 5 000			
Safe load limit		(E _{lim})	%*E _{max}	200			
Ultimate load			%*E _{max}	300			
Safe side load			%*E _{max}	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)			
Sealing				complete hermetic sealing; cable entry sealed by glass to metal header			
Protection according to DIN 40.050				IP68			

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)

