

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, C3 MI6 and C4
- Stainless steel cable gland

Approvals

- OIML approval to C1 (Y = 5 100), C3, C3 MI6 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

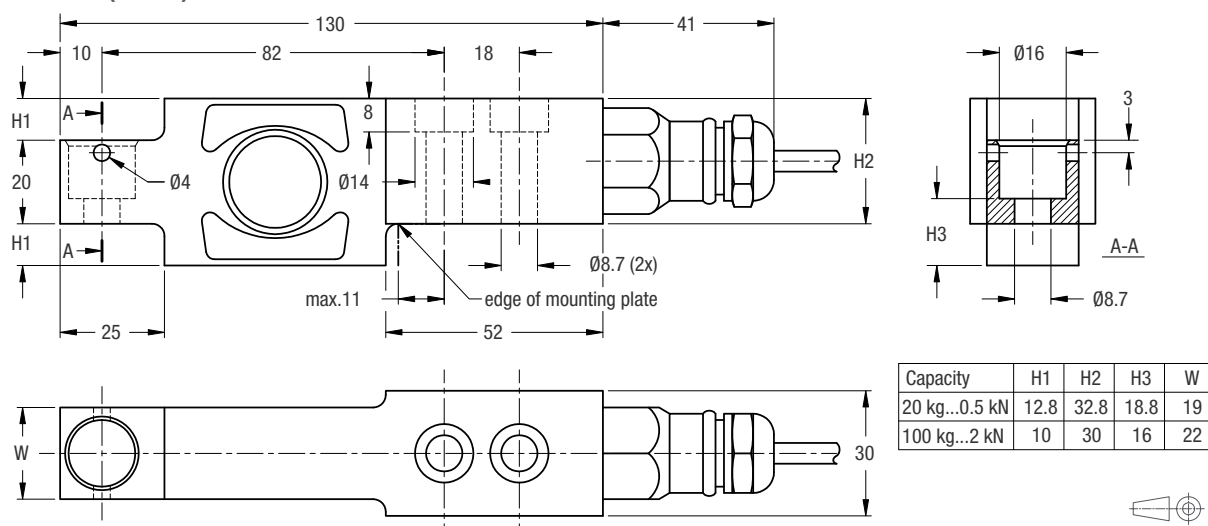
Specifications

				0.2 / 0.5 / 1 / 2			0.5 / 1 / 2		0.2 / 0.5 / 1	
Maximum capacity		(E _{max})	kN							
			kg	20 / 50 / 100 / 200			50 / 100 / 200		20 / 50 / 100	
Metric equivalents (1 N=0.10197 kg)			kg	20 / 20.4 / 50 / 51 / 100 / 102 / 200 / 204			50 / 51 / 100 / 102 / 200 / 204		20 / 20.4 / 50 / 51 / 100 / 102	
Accuracy class according to OIML R60				(GP)	C1	C3	C3 M16		C4	
Maximum number of verification intervals		(n _{max})		n.a.	1 000	3 000	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	± 0.0083		± 0.0125	
Creep error (30 minutes) / DR			%*RO	± 0.0600	± 0.0490	± 0.0166	± 0.0083		± 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		(R ₀)	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 EN 60 529				IP68 (up to 2 m water depth) / IP69K						

The limits for Non-Linearity, Hysteresis, and TC_{R0} are typical values.

The sum of Non-linearity, Hysteresis and TC_{R0} 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)

