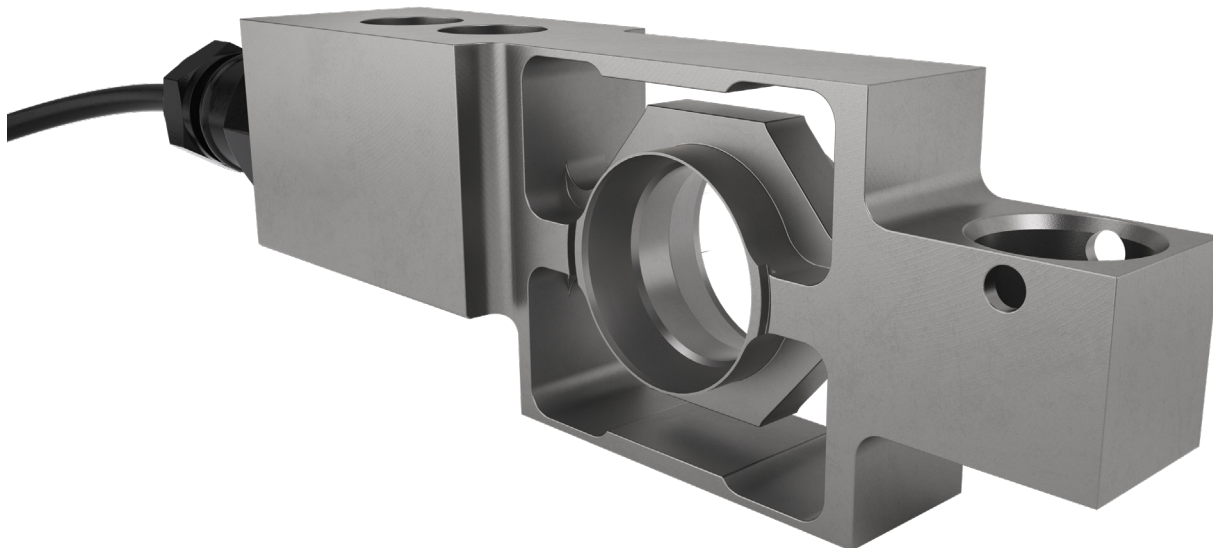


SB6 beam load cell



product description

All stainless steel and hermetically sealed unique bending beam for a wide variety of high accuracy weighing applications. The SB6 is available in a wide range of capacities and accuracy grades. The blind hole load introduction ensures optimum weighing performance in conjunction with Flintec self-aligning feet.

applications

Bagging machinery, conveyor scales, vessel weighing systems.

key features

Stainless steel construction

Hermetically sealed to IP68

Low capacity range

High accuracy

High input resistance

Calibration in mV/V/Ω

approvals

OIML approval to C1 (Y = 5 100),
C3, C3 MI6 and C4 (Y = 10,200)

ATEX hazardous area approval for
zones 0, 1, 2, 20, 21 and 22

FM hazardous area approval

accessories

Compatible range of hardware

Compatible range of electronics

options

Y = 20,400 for C3, C3 MI6 and C4

Stainless steel cable gland



RoHS
compliant



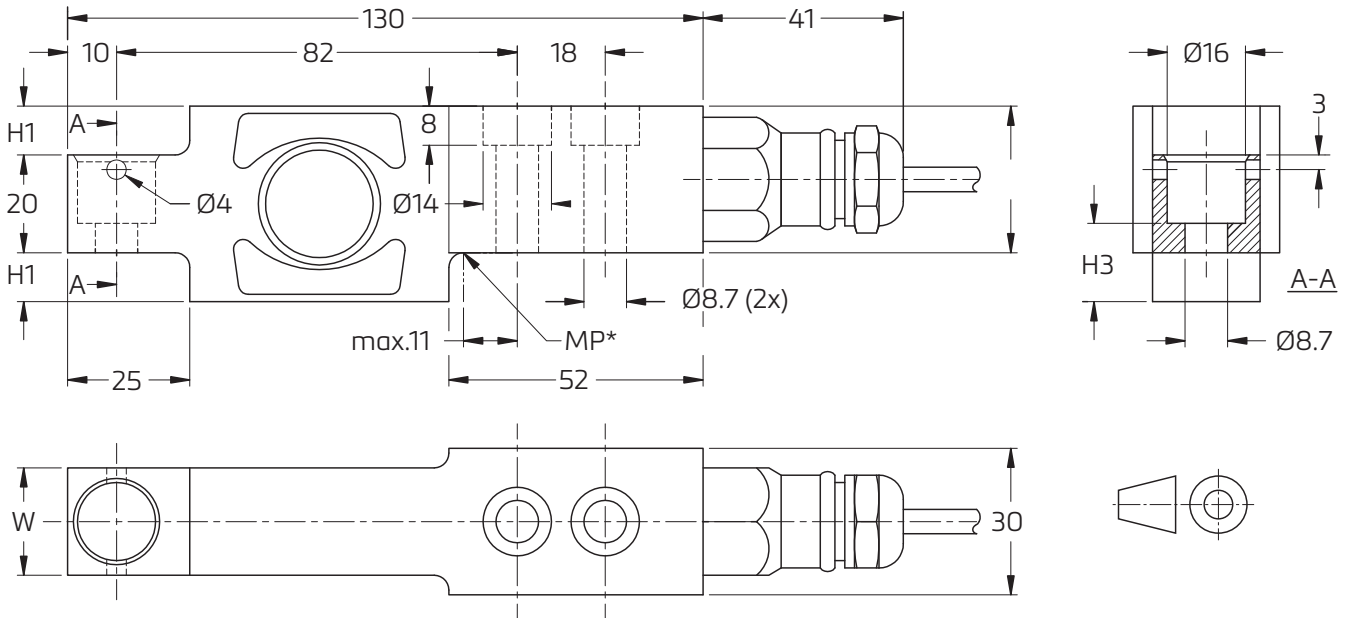
specifications

Maximum capacity (E_{max})	kN	0.2 / 0.5 / 1 / 2			0.5 / 1 / 2	0.2 / 0.5 / 1
	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 MI6	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.	$E_{max} / 20,400$		
Option - 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 EN 60 529		IP68 (up to 2 m water depth) / IP69K				
Packet weight	kg	1.0				

The limits for Non-Linearity, Hysteresis, and TCRO are typical values.

The sum of Non-linearity, Hysteresis and TCRO meets the requirements according to OIML R60 with pLC=0.7.

product dimensions (mm)



Capacity

	H1	H2	H3	W
20kg...0.5kN	12.8	32.8	18.8	19
100kg..2kN	10	30	16	22

**As it has in no way influence on the functionality and accuracy of the load cell, this dimension might be in singular cases shorter.

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

MP* - Edge of mounting plate

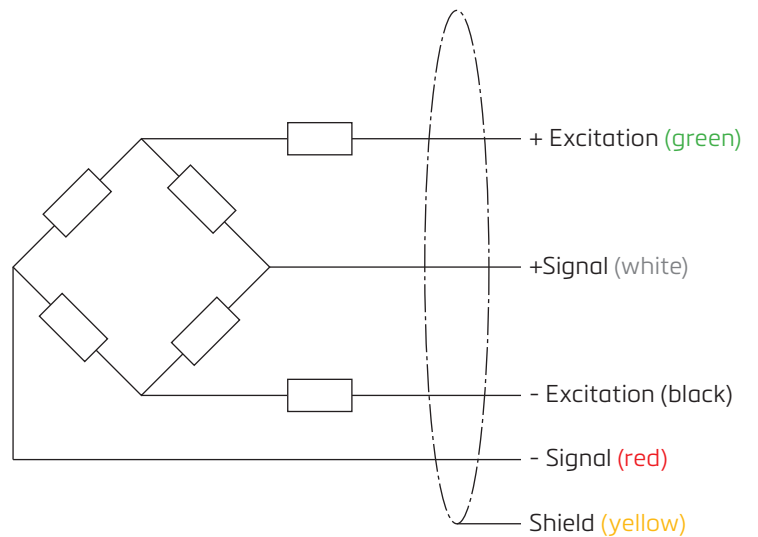
wiring

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)



Specifications and dimensions are subject to change without notice.