
SB9 beam load cell



product description

Industry standard size, bolt-hole centres and wiring for industrial platform scales that do not require full hermetically sealed load cells. The 250kg capacity SB9 is particularly useful for manufacturing low capacity and yet rugged industrial weighing equipment such as platform scales or pallet truck weighing systems. The stainless-steel construction is a more robust solution compared to alloy steel potted load cells.

applications

Industrial platform scales, IBC bagging machinery, pallet truck scales, vessel and tank weighing systems.

key features

Stainless steel construction

Environmentally sealed by potting to IP67

High accuracy, calibration in mV/V/Ω

Low profile design ideal for industrial platform scales

Capacities from 250kg to 2,000kg

approvals

OIML approval to C3 (Y = 10,000)

ATEX and FM hazardous area approval in preparation

accessories

Compatible range of hardware

Compatible range of electronics

options

Blind-hole or through-hole version



RoHS
compliant



specifications

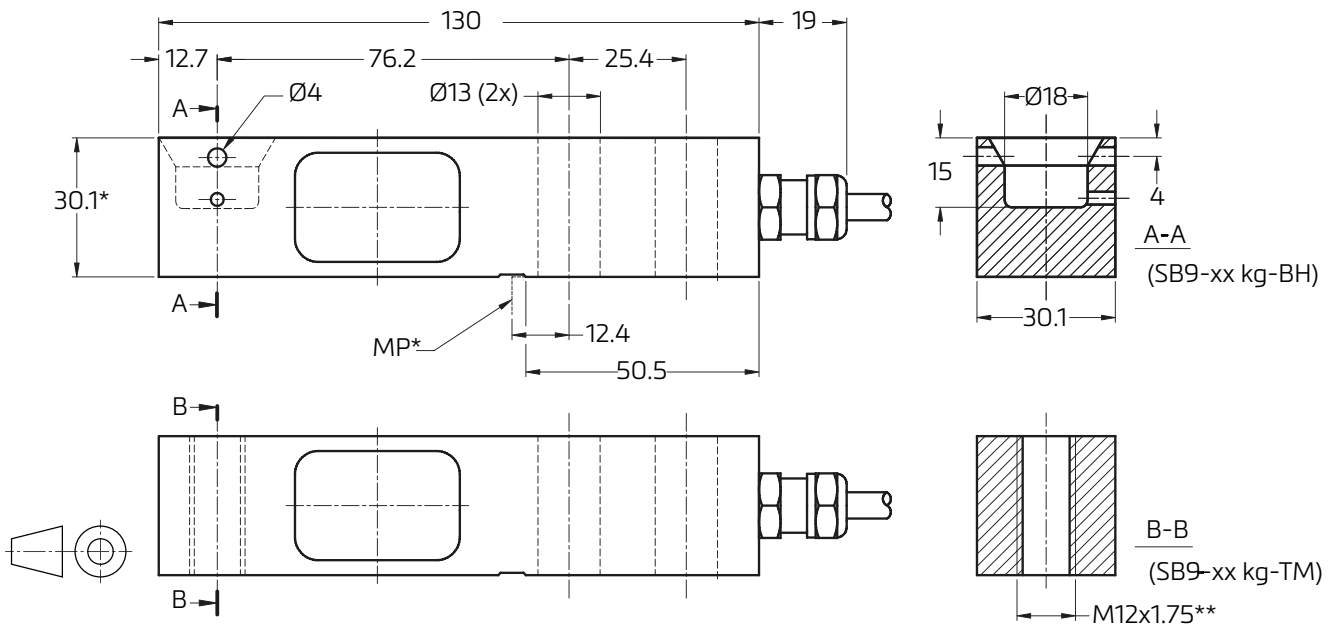
Maximum capacity (E_{max})	kg	250 / 500 / 1,000 / 2,000	
Accuracy class according to OIML R60		(GP)	C3
Maximum number of verification intervals (n_{max})		n.a.	3,000
Minimum load cell verification interval (v_{min})		n.a.	$E_{max} / 10,000$
Temperature effect on minimum dead load output (TC_0)	%*RO/10°C	± 0.0400	± 0.0140
Temperature effect on sensitivity (TC_{RO})	%*RO/10°C	± 0.0200	± 0.0100
Combined error	%*RO	± 0.0500	± 0.0200
Non-linearity	%*RO	± 0.0400	± 0.0166
Hysteresis	%*RO	± 0.0400	± 0.0166
Creep error (30 minutes) / DR	%*RO	± 0.0600	± 0.0166
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	380 ± 10	
Output resistance (R_{out})	Ω	350 ± 3	
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...+65 (ATEX -40...+60)	
Load cell material	-	stainless steel 17-4 PH (1.4548)	
Sealing	-	potted	
Protection according EN 60 529	-	IP67	
Packet weight	kg	Approx. 1.2	

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 $p_{LC}=0.7$.



product dimensions (mm)



For maximum capacity from 250kg to 1,000kg: Mounting bolts M12 8.8; torque 90Nm
 For maximum capacity of 2,000kg: Mounting bolts M12 10.9; torque 120 Nm
 Torque values assume oiled thread.

* Capacity 2000kg: height = 36mm

** Unified thread 1/2-20 UNF is available. Type designation SB9-xx kg-TU

MP* - Edge of mounting plate

wiring

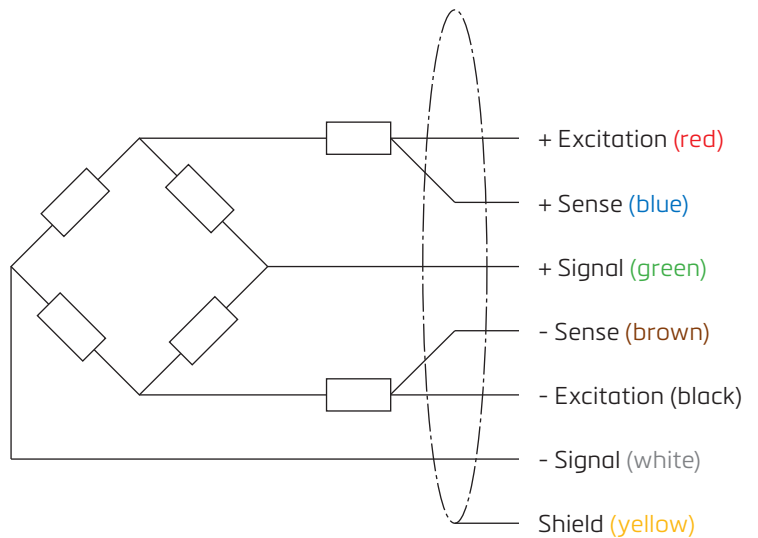
The load cell is provided with a shielded, 6 conductor cable (AWG 26).

Cable jacket polyurethane

Cable length: 3m

Cable diameter: 5.8mm

The shield is connected to the load cell body



Specifications and dimensions are subject to change without notice.