

SB8 beam load cell



product description

The SB8 bending beam is available in a wide range of capacities from 50kg through to 500kg allowing for a multitude of applications. All stainless steel and hermetically sealed the compact size of the SB8 makes it the ideal choice for multi-head weighing equipment and low capacity vessel and hopper weighing systems.

applications

Bagging machinery, conveyor scales, vessel and hopper weighing systems.

key features

Stainless steel construction

Hermetically sealed to IP68

Wide capacity range from 10kg to 500kg

High accuracy

Calibration in mV/V/Ω

approvals

OIML approval to C3 (Y = 10,000)

NTEP 5,000, Single Cell, Class III
NTEP 10,000, Single Cell, Class III L

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



RoHS
compliant



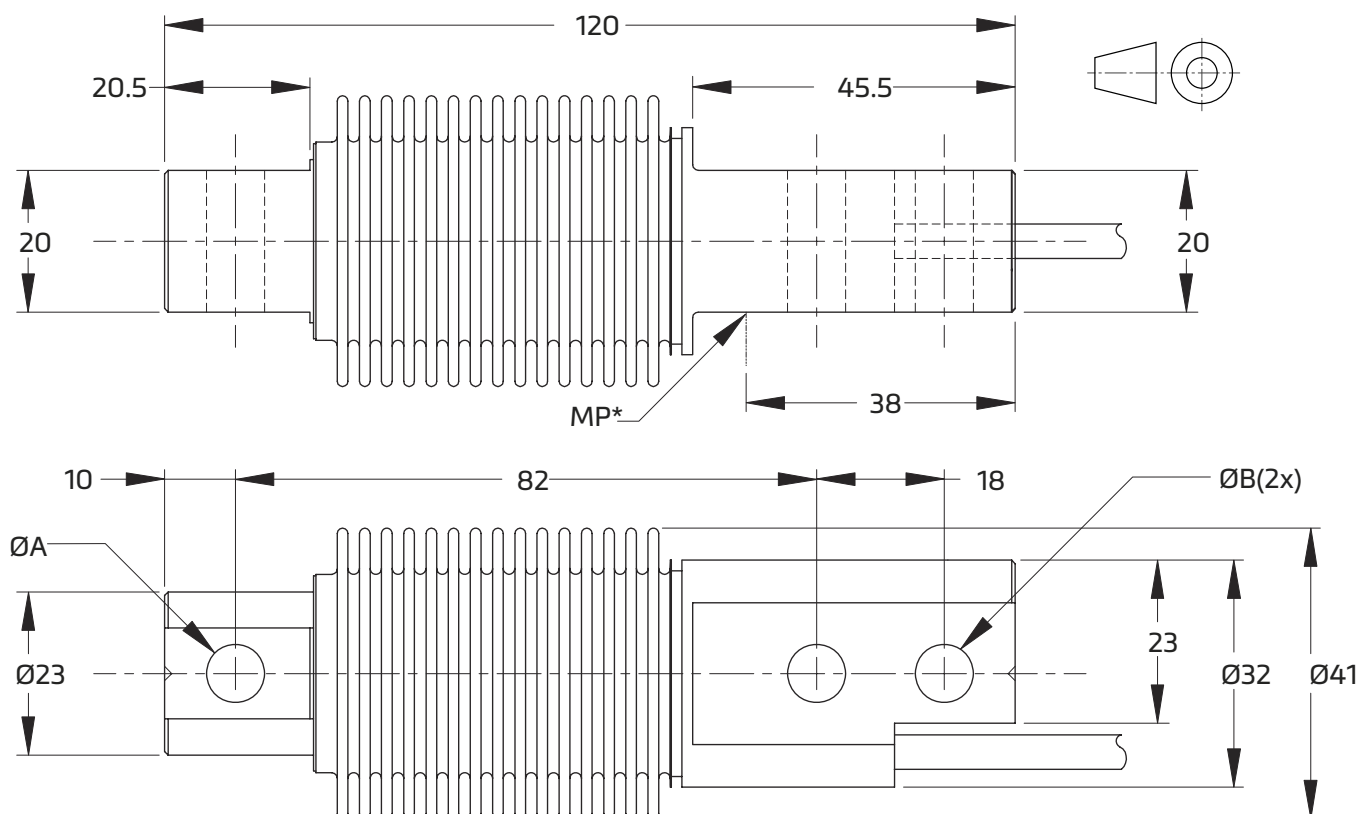
specifications

Maximum capacity ($E_{\max}$)	kg	10 / 20 / 30 / 50 / 100 / 200 / 250 / 500	
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	385 ± 15	
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...+80 (ATEX -40...+60)	
Load cell material		stainless steel 17-4 PH (1.4548)	
Protection according EN 60 529		IP68 (up to 2 m water depth)	
Packet weight	kg	0.62 (10-20kg), 0.64 (50-250kg), 0.8 (500kg)	

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 pLC=0.7.

product dimensions (mm)



Type	A	B	Mounting bolts	Torque*
10...250 kg	8.2	8.2	M8 8.8	25 Nm
500 kg	10.5	8.2	M8 10.9	35 Nm

Torque* - values assume oiled threads.

MP* - Edge of mounting plage

wiring

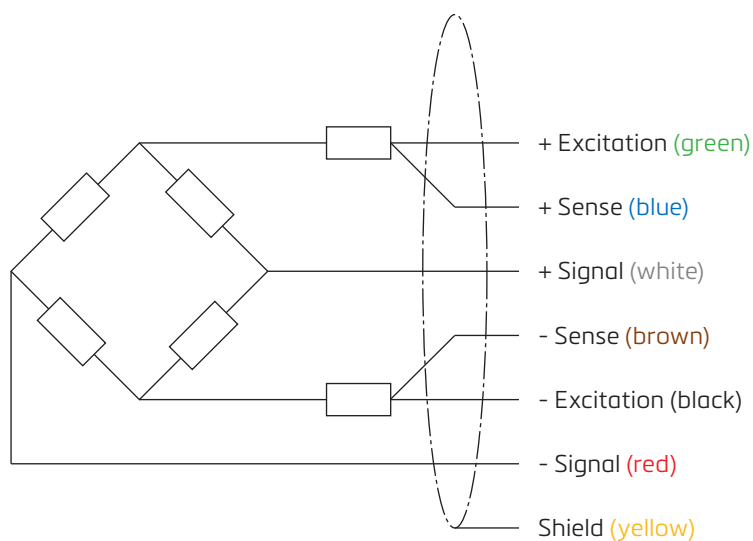
The load cell is provided with a shielded, 6 conductor cable (AWG 26).

Cable jacket polyurethane

Cable length: 3 m

Cable diameter: 5.8 mm

The shield is connected to the load cell body



Specifications and dimensions are subject to change without notice.