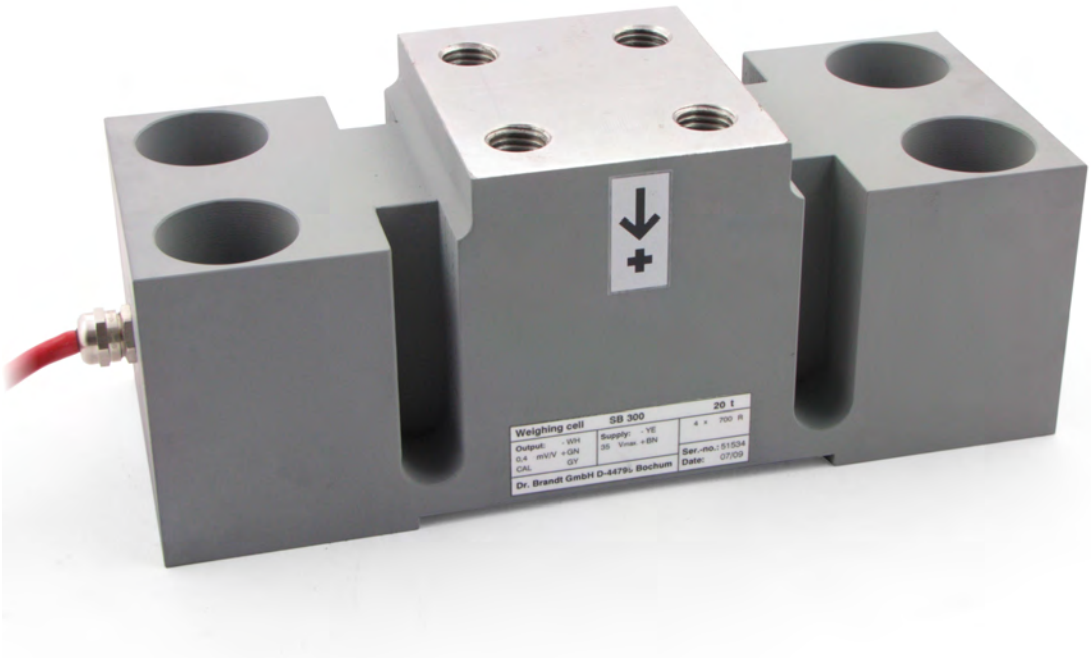
Load bars for high overload

SB-201 / 5 / 10 t; **SB-301** / 20…50 t



Purpose

Weighing and measuring of pressing force.

Operating

Strain gauges measure deformation of a bar loaded in its centre, supported at the ends

Advantages

- Flat, robust, non corroding
- Simple mounting
- Very high overload and lateral stability especially in bar direction
- Nevertheless: small combined error
- CAL-tolerance 0.25 %
- Options: CAL-resistance; 2 systems

Applications

Scales allowing high overload, e.g. for bunkers, platforms, ladle cars.
Measuring of machine force: at presses or stamps or of band tension.
Overload protection with our "LMS-System".

Construction

A rectangular bar from stainless steel has two holes at each end for screwing it on the plane foundation plate.

Middle part (not supported below) has a plane top side with 4 tap holes for fastening the load plate.

Between the fastening areas and the load area there are measuring areas with holes applied with strain gauges measuring bending or shearing.

The strain gauges are connected with adjusting elements for ZERO, GAIN and drift to a full bridge and to a connection box with cable-outlet. Option: plug-in-connector.

Compounded measuring areas are tightened and protected by O-ring-covers. Output signal is 0.5 mV/V only (allowing high overload).

Electrical Data

Resistance .....4 x 700 Ω nominal
" actual value.....see test certificate
Connecting cable.....2m LiYCY 6 x o.5
Exciting voltage.....max. 35 V

Outp. signal(full load). .0.5 mV/V nominal
" Tolerance(20°C).....0.25%

Combined error.....< o.3% f.s.
ZERO signal(20°C).....< 1% f.s.
= Output signal at.....ZERO load
" Temp.-Drift/10K.....< o.1% f.s.
Output " " .....< o.1% f.s.

Nominal temp.-range…- 20°C…+ 60°C
Tolerated range.....- 50°C…+120°C
(special cable)

Mechanical Data

Working load.....4 x nominal load
Limiting load.....5 x nominal load
Breaking load.....> 7 x nominal load
Lateral load.....< o.3 x nominal oad
" in bar direction..... 1 x nominal load
Calibration.....t; Option kN

Dimensions (mm)

(Modified dimensions reserved)

SB-201/5t		/10t	**SB-301**/20t	/50t
a	200	200	300	300
b	170	170	240	240
c	90	90	100	110
d	60	60	60	60
e	80	80	120	150
f	50	50	70	70
g	50	50	70	80
h	60	60	120	120
i	50	50	100	115
j	26	26	43	43
k	17,5	17,5	30,5	30,5
l	18	18	26	26
m	16	16	20	24
n	20	20	25	25