

Model 159B

Miniature Single-bending-beam Load Cells



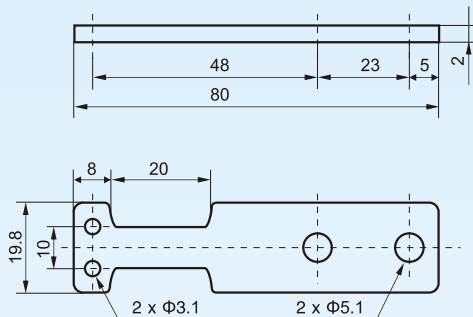
Based on BCM advanced strain gauge technology, model159B (made from stainless steel) load cells are designed for low-cost application to measure vertical force or load with 0.1 %fso (fso= full scale output) measuring accuracy. Thanks to the mass production and the small dimensions, the 159B load cells are cost-effective and offer a good performance in application.

Featuring a single-bending-beam, now days these 15-series miniature load cells are widely used to build postage scales, kitchen scales, and other small-sized portable scales.

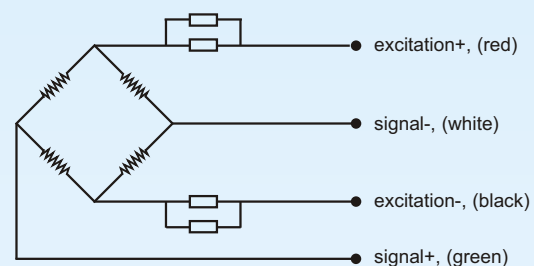


type: single-bending-beam load cells
material: stainless steel
protection: IP 65
application: postage-, kitchen- and portable-scales

Dimensions:



Electrical connection:



Specifications:

capacity	kg	0.5, 0.7, 1, 2, 3, 5, 7, 10, 20, 30, 50
safe overload	%FS	120
ultimate overload	%FS	150
output sensitivity	mV/V	0.6 ± 0.1
combined error	%FSO	± 0.1
non-linearity	%FSO	± 0.1
hysteresis	%FSO	± 0.1
repeatability	%FSO	± 0.1
creep	%FSO/30 min.	± 0.07
zero unbalance	%FSO	± 1.5
excitation voltage	Vdc	5
maximum excitation	Vdc	6
input resistance	Ω	1000 ± 100 (standard), 350 ± 50
output resistance	Ω	1000 ± 100 (standard), 350 ± 50
insulation resistance	MΩ	≥ 2000 @ 50 Vdc
operating temperature range	°C	-20 ~ +65
compensated temperature range	°C	-10 ~ +40
temperature coefficient of SPAN	%FSO/°C	± 0.02
temperature coefficient of ZERO	%FSO/°C	± 0.02
electrical interface	cable	4 PVC skinned flying wires; wire dia.: Φ0.6 mm; length: 300 mm

The listed specifications are subject to change without prior notice.

BCM SENSOR TECHNOLOGIES BVBA

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Miniature Single-bending-beam Load Cells



Ordering code:

example: 159B - KE1 - UB - BA - R1 - EFW - IP65 - AL000 - C*

code	model
159B	159B

code	capacity
KC5	0.5 kg
KC7	0.7 kg
KD1	1 kg
KD2	2 kg
KD3	3 kg
KD5	5 kg
KD7	7 kg
KE1	10 kg
KE2	20 kg
KE3	30 kg
KE5	50 kg

code	output sensitivity
UB	0.6 mV/V

code	combined error
BA	0.1%fso

code	input and output resistances
R1	$R_{in}=1000\pm 100\Omega$, $R_{out}=1000\pm 100\Omega$ (standard)
R2	$R_{in}=350\pm 50\Omega$, $R_{out}=350\pm 50\Omega$

code	electrical connection
EFW	4 PVC skinned wires, wire dia.: $\Phi 0.6$ mm; length: 300 mm

code	special requests information
C*	<p>This code "C*" only applies when customer has special requests which are not included in the standard ordering code.</p> <p>With this code, customer can define specifications or requests in separate lines with "C*" added to the end of the ordering code.</p> <p>These requests must be confirmed by a BCM sales personnel before the official order is placed.</p>

code	accessories
AL000	none

code	ingress protection grade
IP65	IP 65

Ordering Code Example: 159B - KE1 - UB - BA - R1 - IP65 - EFW - AL000 - C*
wire length = 500 mm

Explanations of the Ordering Code

159B force sensor, cap. = 10 kg, output sensitivity = 0.6 mV/V, combined error = 0.1%fso, input resistance = $1000 \pm 100 \Omega$, output resistance = $1000 \pm 10 \Omega$. The electrical connection is 4 PVC skinned flying wires with the length of 500 mm instead of the standard 300 mm. No accessories is available for this product.

The change of the cable length is confirmed by a BCM sales personnel, and is indicated clearly in the <<order conformation>>.



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