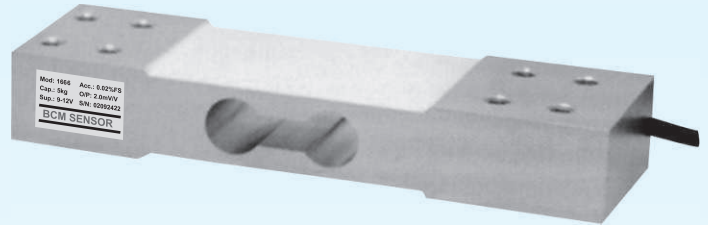


Model 1666 Heavy Duty Single Point Load Cells

Features

- parallel bending beam
- low profile
- heavy duty
- capacity: 50, ..., 500 kg
- accuracy: 0.02 %fs
- recommended platform size: 450 X 450 mm
- aluminum construction with surface anodized
- environment protection class: IP 65



Applications

- counting scales
- hopper scales
- overhead track scales

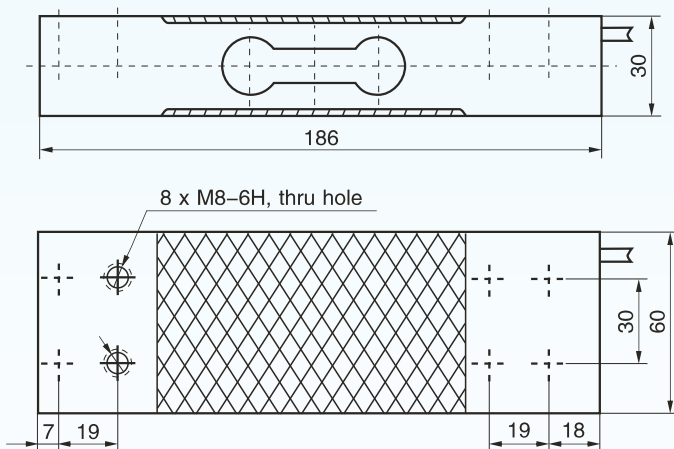
Description

The "single point" load cells are made of parallel bending beam working principle. Only one unit is sufficient to build up a scale. These load cells are moment insensitive. That is, when installed in a platform scale, it reads the same regardless of the position of the load applied to the upper platform.

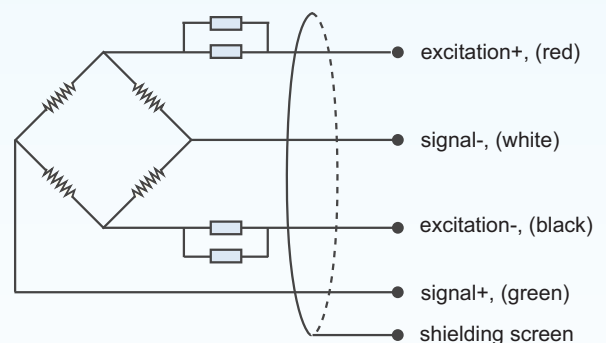
Model 1666 load cells are designed to this "single point" type and are manufactured from high quality aluminum alloy of aviation standard. 1666 load cells can be used to measure loads ranging from 50 kg to 500 kg with the measuring accuracy of 0.02%fs (fs = full scale).

1666 load cells are widely used to manufacture retail, bench, and counting scales.

Dimensions



Electrical Connection



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Model 1666

Heavy Duty Single Point Load Cells



Technical Data

parameters	units	specifications
capacity	kg	50, 70, 100, 200, 300, 500
safe load limit	%fs	120
ultimate overload	%fs	150
output sensitivity at fs	mV/V	2.0 ± 0.1
zero unbalance	%fso	± 1.5
non-linearity	%fs	± 0.02
hysteresis	%fs	± 0.02
repeatability	%fs	± 0.02
creep error (30 min.)	%fs	± 0.02
excitation (supply voltage)	Vdc	10 (recommended), 9, ..., 12
max. excitation voltage	Vdc	15
input resistance	Ω	400 ± 10
output resistance	Ω	350 ± 10
insulation resistance	MΩ	≥ 5000 @ 50 Vdc
storage temp. range	°C	-35 ~ +80
operating temp. range	°C	-20 ~ +65
compensated temp. range	°C	-10 ~ +40
temp. coefficient of sensitivity	%fs/°C	± 0.003
temp. coefficient of zero	%fs/°C	± 0.003
load cell body material		aluminum alloy
sealing		potted
mechanical interface		refer to the dimensions on the datasheets
electrical interface		Φ5.7 mm, 4-conductor shielded, PVC jacket, 3.5 m length
environment protection		IP 65
unit weight	g	~100

The listed specifications are subject to change without prior notice.

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Model 1666 Heavy Duty Single Point Load Cells



Ordering Information

position (pos.) 1: model									
1666: made from aluminum alloy									
pos. 2: capacities									
50 kg		100 kg		70 kg		200 kg		300 kg	
		500 kg							
pos. 3: output sensitivity									
2 mV/V									
pos. 4: non-linearity or accuracy class									
0.02 %fs									
pos. 5: bridge resistance									
350 Ω (R _{in} = 400±10Ω, R _{out} = 350±10 Ω)									
pos. 6: threads (live end/fixed end)									
4xM8/4xM8 : four M8 threads at the live end, four M8 threads at the fixed end									
pos. 7: electrical interface									
cable, code = diameter(Φ)/number of conductors/cable jacket/cable length 5.7/4/PVC/3.5 = Φ5.7 mm, 4-conductors shielded, PVC, length = 3.5* m									
pos. 8: environment protection									
IP 65									
pos. 9: accessories for installation									
NA**. In case of "NA", pos.9 can be omitted.									
pos. 10: customized spec's									
<p>When any customized spec's are required, the customer needs to add "C" as the last parameter in the ordering code, and specifies the wished spec's on his order clearly.</p> <p>The customized spec's needs to be confirmed in advance by BCM's sales representative.</p> <p>Code "C" can be omitted if no customized spec's are required.</p>									
pos.1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6	pos. 7	pos. 8	pos. 9	pos. 10

*: This value can also be a customized value.

** : NA = not available or not applicable

example: 1666-50kg-2mV/V-0.02%fs-350Ω-4xM8/4xM8-5.7/4/PVC/3.5-IP65-C



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