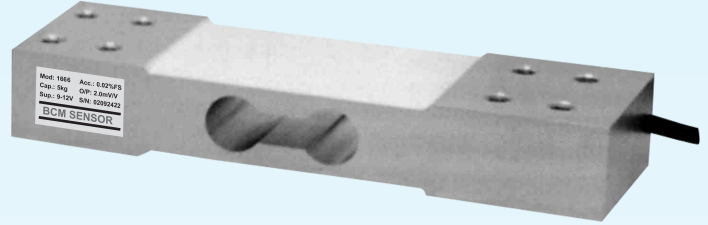


# Model 1666 Heavy Duty Single Point Load Cells

## 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

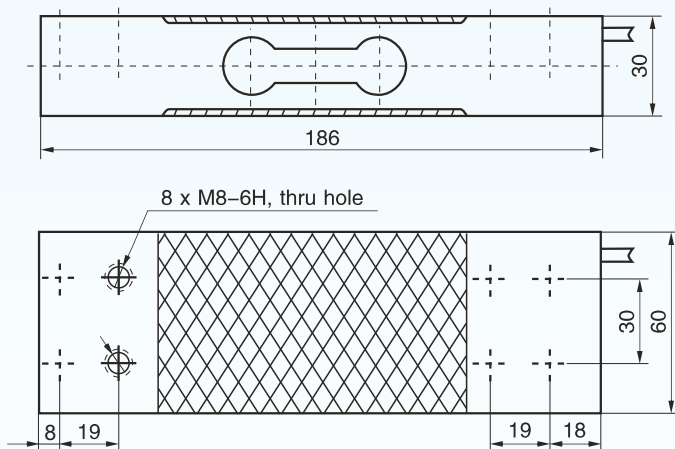
## Description

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.

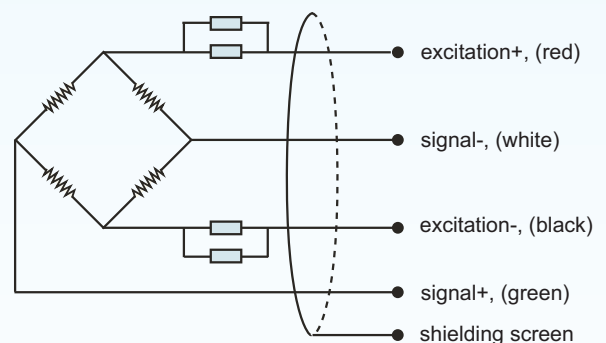
Model 1666 load cells are designed to this "single point" type and are manufactured from high quality aluminum alloy of aviation standard. 1666 load cells can be used to measure loads ranging from 50 kg to 500 kg with the measuring accuracy of 0.02%fs (fs = full scale).

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

## Dimensions



## Electrical Connection



# 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	≥ 1.8 (typically 2mV/V)
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@50Vdc
storage temp. range	°C	-35 ~ +80
operating temp. range	°C	-20 ~ +65
compensated temp. range	°C	-10 ~ +40
temp. coefficient of sensitivity	%fso/°C	±0.003
temp. coefficient of zero	%fso/°C	±0.003
load cell body material		aluminum alloy
sealing		potted
mechanical interface		refer to the dimensions on the datasheets
electrical interface		Φ5mm, 4-conductor shielded, PVC jacket, 3.5m length
environment protection		IP 65
unit weight	g	~100

The listed specifications are subject to change without prior notice.

**BCM SENSOR TECHNOLOGIES BVBA**

# Model 1666 Heavy Duty Single Point Load Cells



## Ordering Information

<b>position (pos.) 1: model</b>									
1666: made from aluminum alloy									
<b>pos. 2: capacities</b>									
50kg      100kg 70kg      200kg 300kg 500kg									
<b>pos. 3: output sensitivity</b>									
2mV/V									
<b>pos. 4: non-linearity or accuracy class</b>									
0.02%fs									
<b>pos. 5: bridge resistance</b>									
350Ω (Rin = 400±10Ω, Rout = 350±10Ω)									
<b>pos. 6: threads (live end/fixed end)</b>									
4xM8/4xM8 : four M8 threads at the live end, four M8 threads at the fixed end									
<b>pos. 7: electrical interface</b>									
cable, code = diameter(Φ)/number of conductors/cable jacket/cable length 5/4/PVC/3.5 = Φ5mm, 4-conductors shielded, PVC, length = 3.5* m									
<b>pos. 8: environment protection</b>									
IP65									
<b>pos. 9: accessories for installation</b>									
NA**. In case of "NA", pos.9 can be omitted.									
<b>pos. 10: customized spec's</b>									
"(*)" is necessary only if any customized parameter is required, otherwise it is neglectable.									
<b>pos.1</b>	<b>pos. 2</b>	<b>pos. 3</b>	<b>pos. 4</b>	<b>pos. 5</b>	<b>pos. 6</b>	<b>pos. 7</b>	<b>pos. 8</b>	<b>pos. 9</b>	<b>pos. 10</b>

\*: This value can also be a customized value.

\*\* : NA = not available or not applicable

**example:** 1666-50kg-2mV/V-0.02%fs-350Ω-4xM8/4xM8-5/4/PVC/3.5-IP65-(\* )

