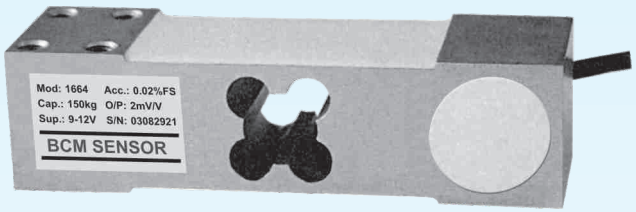
Model 1664(I)
Single Point Load Cells

Features

- parallel bending beam
- capacity: 50kg, …, 500kg
- accuracy: 0.02%fs
- recommended platform size: 450 x 550 mm
- aluminum construction with surface anodized
- environment protection class: IP 65



Applications

- retail scales
- bench scales
- counting scales

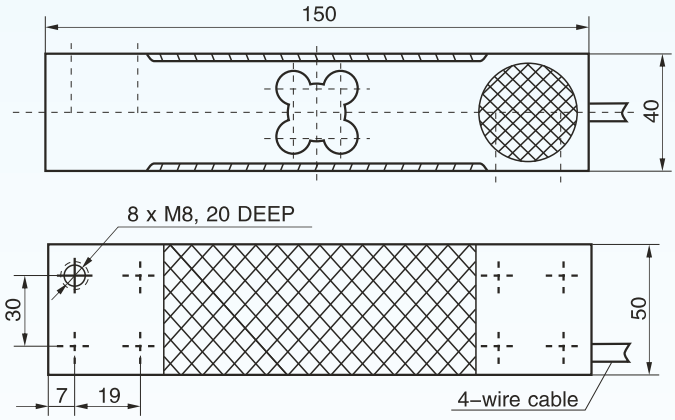
Description

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.

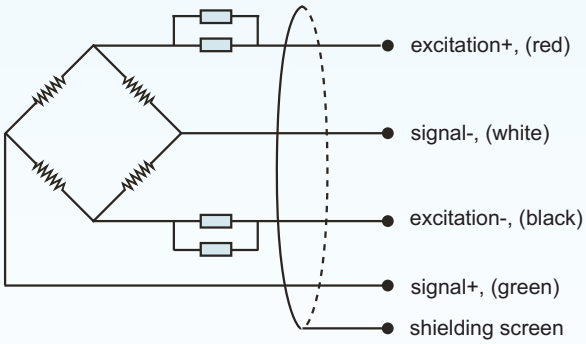
Model 1664(I) load cells are designed to this "single point" type and are manufactured from high quality aluminum alloy of aviation standard. 1664(I) load cells can be used to measure loads ranging from 50kg to 500kg with the measuring accuracy of 0.02%fs (fs = full scale).

1664(I) load cells are widely used to manufacture retail, bench, and counting scales.

Dimensions



Electrical Connection



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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	±0.03
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	-35 ~ +65
compensated temp. range	°C	-10 ~ +40
temp. coefficient of sensitivity	%fso/°C	±0.002
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, 2m length
environment protection		IP 65
unit weight	g	~ 450

The listed specifications are subject to change without prior notice.

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Ordering Information

pos.1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6	pos. 7	pos. 8	pos. 9	pos. 10
position (pos.) 1: model									
1664(I): made from aluminum alloy									
	pos. 2: capacities								
	50kg 70kg 100kg 200kg 300kg 500kg								
		pos. 3: output sensitivity							
		2mV/V							
			pos. 4: non-linearity or accuracy class						
			0.02%fs						
				pos. 5: bridge resistance					
				350Ω (Rin = 400±10Ω, Rout = 350±10Ω)					
					pos. 6: threads (live end/fixed end)				
					4xM6/4xM6 : four M6 threads at the live end, four M6 threads at the fixed end				
						pos. 7: electrical interface			
						cable, code = diameter(Φ)/number of conductors/cable jacket/cable length 5/4/PVC/2 = Φ5 mm, 4-conductors shielded, PVC, length = 2* m			
							pos. 8: environment protection		
							IP65		
								pos. 9: accessories for installation	
								NA**. In case of "NA", pos.9 can be omitted.	
									pos. 10: customized spec's
									"(*)" is necessary only if any customized parameter is required, otherwise it is neglectable.

*: This value can also be a customized value.
**: NA = not available or not applicable

example: 1664(I)-50kg-2mV/V-0.02%fs-350Ω-4xM6/4xM6-5/4/PVC/2-IP65-C

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