Model 1669 Single Point Load Cells



Features

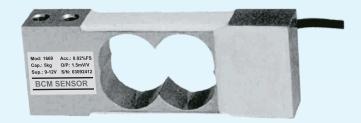
- parallel bending beam

capacity: 5, ..., 30 kgaccuracy: 0.02 %fs

- recommended platform size: 200 X 200 mm

- aluminum construction with surface anodized

- environment protection class: IP 65



Applications

- retail scales
- counting scales
- balances

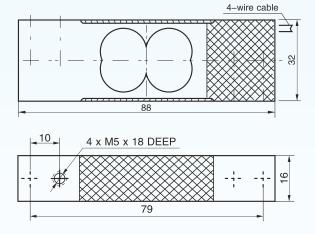
Description

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.

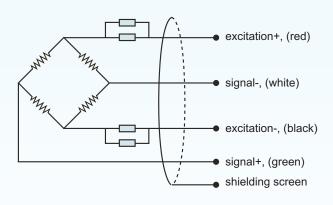
Model 1669 load cells are designed to this "single point" type and are manufactured from high quality aluminum alloy of aviation standard. 1669 load cells can be used to measure loads ranging from 5 kg to 30 kg with the measuring accuracy of 0.02%fs (fs = full scale).

1669 load cells are widely used to manufacture balances and counting scales.

Dimensions



Electrical connection



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Model 1669 Single Point Load Cells



Technical Data

parameters	units	specifications			
capacity	kg	5, 7, 10, 20, 30			
safe load limit	%fs	120			
ultimate overload	%fs	150			
output sensitivity at fs	mV/V	≥ 1.3 (typically 1.5mV/V)			
zero unbalance	%fso	± 2			
non-linearity	%fs	± 0.02			
hysteresis	%fs	± 0.02			
repeatability	%fs	± 0.02			
creep error (30 min.)	%fs	± 0.02			
excitation (supply voltage)	Vdc	5,, 10			
max. excitation voltage	Vdc	15			
input resistance	Ω	400 ± 10			
output resistance	Ω	350 ± 10			
insulation resistance	ΜΩ	≥ 5000@50 Vdc			
torage temp. range °C		-35 ~ +80			
operating temp. range °C		-35 ~ +65			
compensated temp. range	°C	-10 ~ +40			
temp. coefficient of sensitivity	%fs/°C	± 0.002			
temp. coefficient of zero	%fs/°C	± 0.002			
load cell body material		aluminum alloy			
sealing		potted			
mechanical interface		refer to the dimensions on the datasheets			
electrical interface		Φ 4.2 mm, 4-conductor shielded, PVC jacket, 0.35 m length			
environment protection		IP 65			
unit weight	g	~ 120			

The listed specifications are subject to change without prior notice.

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Model 1669 Single Point Load Cells



Ordering Information

position	(pos.) 1: m	odel									
1669: ma	de from alumir	num alloy									
	pos. 2: 0	capacities									
	5 kg 7 kg	10 kg 20 kg 30 kg									
		pos. 3: output sensitivity									
		1.5 mV/V									
			pos. 4: non-linearity or accuracy class								
			0.02 %fs								
				pos. 5: bridge resistance							
				350 Ω (Rir	$n = 410\pm20\Omega, F$	Rout = 350±10	0 Ω)				
					pos. 6: threads (live end/fixed end)						
					2xM5/2xM	5 : two M5 thi	reads at the liv	ve end, two M	5 threads at the fixed end		
						pos. 7: electrical interface					
							 e, code = diameter(Φ)/number of conductors/cable jacket/cable leng //4/PVC/0.35 = Φ4.2 mm, 4-conductors shielded, PVC, length = 0.35 				
						1.2/1//		environment protection			
					IP 65				· Proteonen		
								pos. 9: a	ccessories for installation		
								•	ase of "NA", pos.9 can be omitted.		
									pos. 10: customized spec's		
									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.		
									The customized spec's needs to be confirmed in advance by BCM's sales representative.		
									Code "C" can be omitted if no customized spec's are required.		
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.

example: 1669-20kg-1.5mV/V-0.02%fs-350Ω-2xM5/2xM5-4.2/4/PVC/0.35-IP65-C



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^{**:} NA = not available or not applicable