

Model 1191

Miniature Compression Load Cells

Features

- low profile
- capacity range from 0.1 kN to 20 kN
- 17-4PH stainless steel construction
- IP 67

Applications

- flat mounting weighing systems

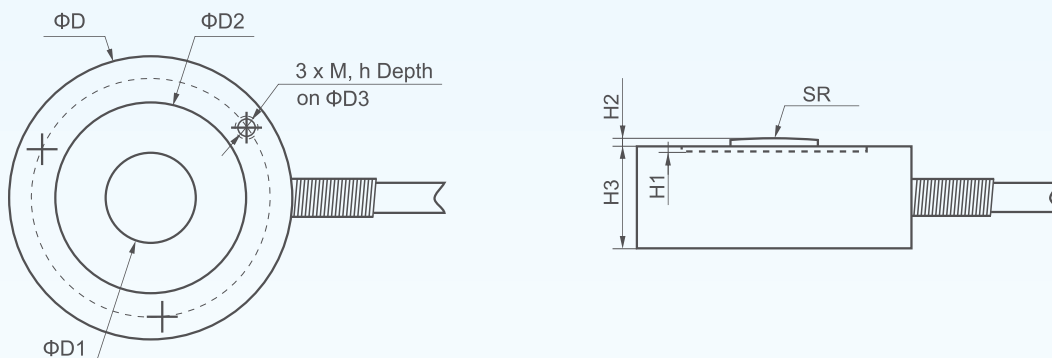


Description

1191 miniature compression load cells are made of BCM advanced strain gauge technology. These load cells are designed for applications in a space limited area.

The capacities of 1191 load cells start from 0.1 kN to 20 kN. The measuring accuracy is 1 %fs (fs = full scale, 0.5%fs accuracy is available on request). These load cells are made from 17-4PH stainless steel, and thanks to BCM's leading technology in sealing, 1191 load cells can be sealed to have environment protection level of IP 67.

Dimensions:



force range (kN)	D1	D2	D3	D	M	h	H1	H2	H3	SR
0.1, 0.2, 0.3, 0.5, 0.7	2.8	15	18	25	M2.5	thru	0.5	1.3	7.7	SR40
1, 2, 3, 5, 7	8	18.5	24	31.3	M2.5	6	0.5	1.3	8.5	SR50
10, 20	12	25.4	32	37.7	M3	8	0.7	1.7	14	SR60

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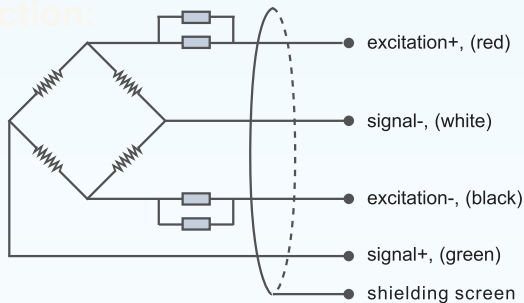
Technical Data

parameters	units	specifications
capacity	kN	0.1, 0.2, 0.3, 0.5, 0.7, 1, 2, 3, 5, 7, 10, 20
safe load limit	%fs	120
ultimate overload	%fs	150
output sensitivity at fs	mV/V	1 ± 0.1 (cap.=0.1 kN), 1.5 ± 0.1 (cap. > 0.1 kN)
zero unbalance	%fso	± 2
non-linearity	%fs	± 1 (standard), ± 0.5
hysteresis	%fs	± 1
repeatability	%fs	± 0.2
creep error (30 min.)	%fs	± 0.5
excitation (supply voltage)	Vdc	10
max. excitation voltage	Vdc	15
input resistance	Ω	1000 ± 100 (standard), 410 ± 10
output resistance	Ω	1000 ± 30 (standard), 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 span	%fs/°C	± 0.01
temp. coefficient of zero	%fs/°C	± 0.02
load cell body material		17-4PH stainless steel
sealing		potted
mechanical interface		refer to the dimensions on the datasheets
electrical interface		χ 3.5 mm, 4-conductor shielded, PVC jacket, 1.5 m cable length
environment protection		IP 66 (standard), IP 67
unit weight	g	~ 60

The listed specifications are subject to change without prior notice.

Electrical connection:

Electrical connection:



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Ordering Information

position (pos.) 1: model																																																											
1191: made from 17-4PH stainless steel																																																											
pos. 2: capacities																																																											
<table border="0"> <tr> <td>0.1 kN</td> <td>1 kN</td> <td>10 kN</td> <td colspan="7"></td> </tr> <tr> <td>0.2 kN</td> <td>2 kN</td> <td>20 kN</td> <td colspan="7"></td> </tr> <tr> <td>0.3 kN</td> <td>3 kN</td> <td colspan="8"></td> </tr> <tr> <td>0.5 kN</td> <td>5 kN</td> <td colspan="8"></td> </tr> <tr> <td>0.7 kN</td> <td>7 kN</td> <td colspan="8"></td> </tr> </table>										0.1 kN	1 kN	10 kN								0.2 kN	2 kN	20 kN								0.3 kN	3 kN									0.5 kN	5 kN									0.7 kN	7 kN								
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pos. 3: output sensitivity																																																											
1 mV/V (cap=0.1 kN) 1.5 mV/V (other capacities)																																																											
pos. 4: non-linearity or accuracy class																																																											
0.5 %fs 1 %fs (standard)																																																											
pos. 5: bridge resistance																																																											
1000 Ω (Rin = 1000±100 Ω, Rout = 1000±30 Ω) 350 Ω (Rin = 410±10 Ω, Rout = 350±10 Ω)																																																											
pos. 6: threads																																																											
3xMd (for value d, refer to the dimensions on datasheets)																																																											
pos. 7: electrical interface																																																											
cable, code = diameter(Φ)/number of conductors/cable jacket/cable length 3.5/4/PVC/L = Φ3.5 mm, 4-conductor shielded, PVC, length = 1.5* m																																																											
pos. 8: environment protection																																																											
IP 66 (standard) IP 67																																																											
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: 1191-10kN-1.5mV/V-1%fs-1000Ω-3xM3-3.5/4/PVC/1.5-IP66-C



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ISO9001 Certified Company