

Model 1191 Miniature Compression Load Cells

Features

- low profile
- capacity range from 0.1kN to 20kN
- 17-4ph stainless steel construction
- IP67

Applications

- flat mounting weighing systems

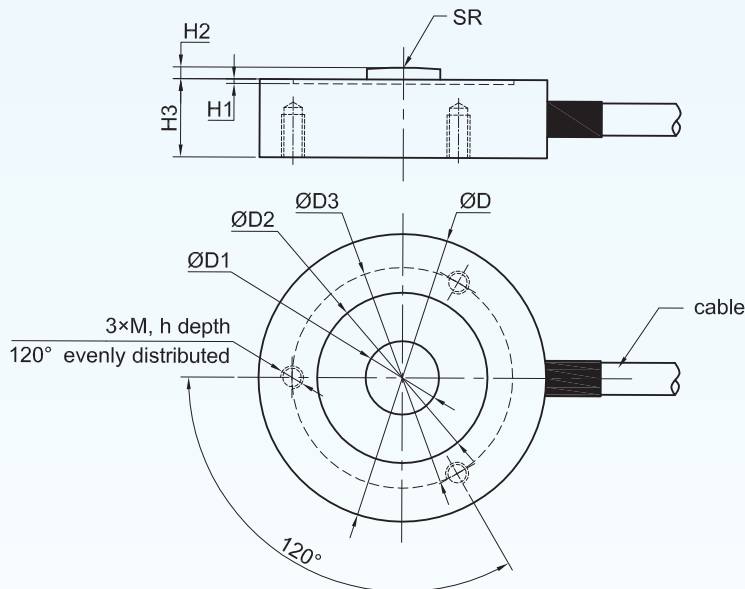


Description

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

The capacities of 1191 load cells start from 0.1kN to 20kN. The measuring accuracy is 1%fs (fs = full scale, 0.5%fs accuracy is available on request). Made from 17-4ph stainless steel and sealed to have protection level up to IP67, 1191 load cells are also suitable for applications under harsh industrial environment.

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	M2x0.4	5	0.5	1.3	7.7	SR40
1, 2, 3, 5, 7	8	18.5	25	31.5	M2.5x0.45	6	0.6	1.5	8.5	SR50
10, 20	12	25.5	31.5	37.5	M3x0.5	8	0.7	1.7	14.3	SR60

Note: All dimensions are in mm.

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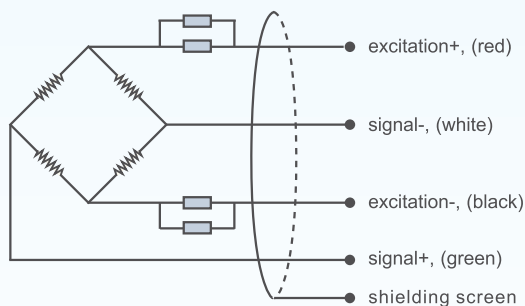
Miniature Compression Load Cells

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. = 0.1kN), 1.5 ±0.1 (cap. > 0.1kN)
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	%fso/°C	±0.01
temp. coefficient of zero	%fso/°C	±0.02
load cell body material		17-4ph stainless steel
sealing		potted
mechanical interface		refer to Dimensions on the 1st page
electrical interface		Φ3.5 mm, 4-core shielded, PVC jacket, 1.5m cable length
environment protection		IP66 (standard), IP67
unit weight	g	~ 60

The listed specifications are subject to change without prior notice.

Electrical connection:



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Ordering Information

position (pos.) 1: model									
1191: stainless steel									
pos. 2: capacities									
0.1kN 1kN 10kN 0.2kN 2kN 20kN 0.3kN 3kN 0.5kN 5kN 0.7kN 7kN									
pos. 3: output sensitivity									
1mV/V (cap. = 0.1kN) 1.5mV/V (other capacities)									
pos. 4: non-linearity or accuracy class									
0.5%fs 1%fs (standard)									
pos. 5: bridge resistance									
350Ω (Rin = 410±10Ω, Rout = 350±10Ω) 1000Ω (Rin = 1000±100Ω, Rout = 1000±30Ω)									
pos. 6: threads									
3xMd (for value d, refer to Dimensions on the 1st page)									
pos. 7: electrical interface									
3.5/4/PVC/1.5 = Φ3.5mm, 4-core shielded, PVC, length = 0.35*m									
pos. 8: environment protection									
IP66 (standard) IP67									
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.									
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

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