

Model 3418/3498 General Purpose Single-ended Shear-beam Load Cells

Features

- single-ended shear-beam
- capacity from 0.3 to 10 t
- accuracy of 0.02 %fs (option: OIMLC3 for 3418)
- mild steel construction with nickel plated treatment (3418)
17-4PH construction (3498)
- environment protection up to IP 68 (3498)
- available accessories (option): load foot



load foot (optional)

Applications

- tank and hopper scales
- platform scales

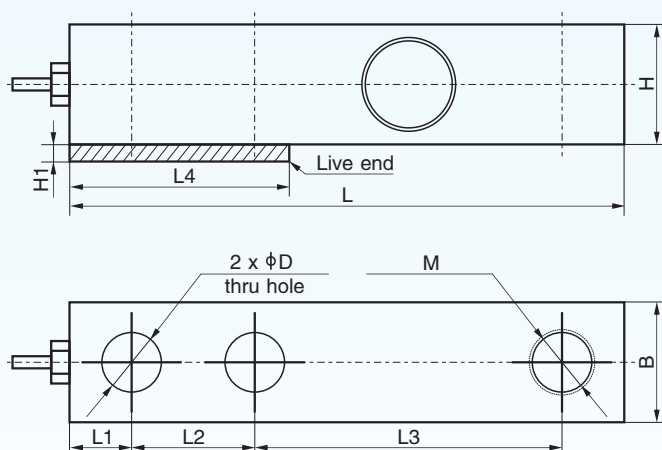
Description

Based on BCM advanced metal foil strain gauge technology, model 3418/3498 load cells are made of shear-beam working principle in low profile. These load cells are of good side load resistance and relatively insensitive to the point of loading.

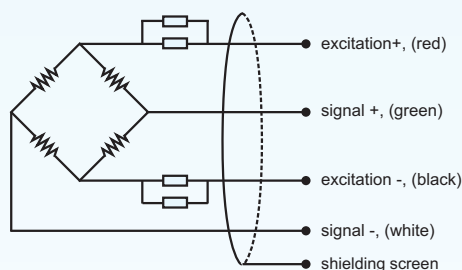
The capacities of 3418/3498 load cells ranges from 0.3 t to 10t with an accuracy of 0.02%fs (fs = full scale). On request, these load cells can be supplied with an accuracy class of OIML C3 . Thanks to BCM leading technology in sealing, 3418/3498 load cells can be made to a higher protection grade of IP68, and fit to harsh industrial conditions.

Featuring simple construction and excellent performance, 3418/3498 load cells are widely used in applications of platform-scales, hopper-scales weighing systems, or applications need to measure beam bending loads.

Dimensions



Electrical Connection



capacity	L	L1	L2	L3	L4	H1(min)	H	B	D	M
0.5~2 t	130.0	15.8	25.4	76.2	57	4	31.8	31.8	13.5	M12 x 1.75
3~5 t	171.5	19.1	38.1	95.3	76	6	38.1	38.1	19.8	M20 x 1.50
7.5~10 t	222.2	25.4	50.8	120.6	108	6	50.8	50.8	26.2	M24 x 2.0

BCM SENSOR TECHNOLOGIES BVBA

Model 3418/3498 General Purpose Single-ended Shear-beam Load Cells



Technical Data

parameters	units	specifications
capacity	t	0.3, 0.5, 0.7, 1, 2, 3, 5, 7, 10
safe load limit	%fs	150
ultimate overload	%fs	200
output sensitivity at fs	mV/V	3.0 ± 0.03
zero unbalance	%fso	± 1
non-linearity	%fs	± 0.02
hysteresis	%fs	± 0.02
repeatability	%fs	± 0.01
creep error (30 min.)	%fs	± 0.02
excitation (supply voltage)	Vdc	10
max. excitation voltage	Vdc	15
input resistance	Ω	360 ± 10
output resistance	Ω	350 ± 10
insulation resistance	MΩ	≥ 5000@50 Vdc
storage temp. range	°C	-35 ~ +80
operating temp. range	°C	-35 ~ +80
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		mild steel (3418), 17-4PH stainless steel (3498)
sealing		potted
mechanical interface		refer to the dimensions on the datasheets
electrical interface		Φ 5.7 mm, 4-conductor shielded PVC cable, 4 m
environment protection		IP 66 (standard), IP 67, IP 68 (only for 3498)
unit weight	kg	1.2, ..., 3.9 (capacity dependent, to be confirmed in case of order)

The listed specifications are subject to change without prior notice.

BCM SENSOR TECHNOLOGIES BVBA

Model 3418/3498 General Purpose Single-ended Shear-beam Load Cells



Ordering Information

position (pos.) 1: model									
3418: made from mild steel 3498: made from 17-4PH stainless steel									
pos. 2: capacities									
0.5 t 1 t 10 t 0.7 t 2 t 3 t 5 t 7 t									
pos. 3: output sensitivity									
3 mV/V									
pos. 4: non-linearity or accuracy class									
0.02 %fs (standard) OIMLC3 (available for 3418)									
pos. 5: bridge resistance									
350 Ω (Rin = 360±10 Ω, Rout = 350±10 Ω)									
pos. 6: threads (live end/fixed end)									
1xM* / 2xΦD*									
pos. 7: electrical interface									
cable, code = diameter(Φ)/number of conductors/cable jacket/cable length 5/4/PVC/L = Φ5 mm,4-conductors shielded, PVC, length = 4* m									
pos. 8: environment protection									
IP 66 IP 67 IP 68 (only for 3498)									
pos. 9: accessories for installation									
N = NA**. In case of "NA", pos.9 can be omitted. load foot									
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

*: Refer to the dimensions on the datasheet for values of M and D.

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

***: NA = not available or not applicable

example: 3418-2t-3mV/V-0.02%fs-350Ω-1xM12xΦ13.5-5/4/PVC/4-IP66-loadFoot-C



BCM SENSOR TECHNOLOGIES BVBA

ISO9001 Certified Company

Industriepark Zone 4, Brechtsebaan 2
B-2900 Schoten - Antwerpen, BELGIUM

Tel.: +32-3-238 6469
Fax: +32-3-238 4171

website: www.bcmsensor.com
email: sales@bcmsensor.com