

# Model 3418/3498 Single-ended Shear Beam Load Cells

## Features

- single-ended shear-beam
- capacity from 0.3t to 5t
- accuracy of OIMLC3
- mild steel construction with nickel plated treatment (3418)  
17-4PH construction (3498)
- environment protection up to IP68 (3498)
- available accessories (option): load foot



load foot (optional)

## Applications

- tank and hopper scales
- platform scales

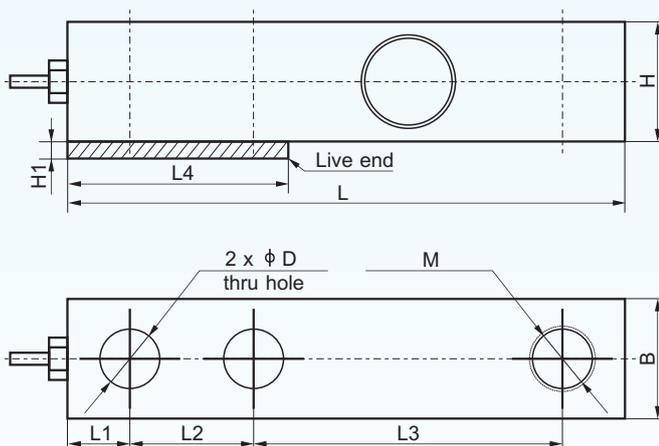
## Description

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.

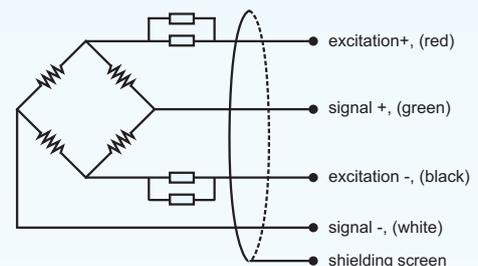
The capacities of 3418/3498 load cells ranges from 0.3t to 5t with accuracy class of OIML C3. Thanks to BCM leading technology in sealing, 3418/3498 load cells can be made to a higher protection grade of IP68, and fit to harsh industrial conditions.

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
0.3~2 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 1.5
7~10 t	222.2	25.4	50.8	120.6	108	6	50.8	50.8	26	M24 x 2

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### Technical Data

Parameters	Units	Specifications	Notes
capacity	t	0.3, 0.5, 0.75, 1, 2, 3, 5, 7, 10	
safe load limit	%fs	150	1
ultimate overload	%fs	200	
output sensitivity at fs	mV/V	3.0 ±0.03	
zero unbalance	%fso	≤ ±1	
accuracy		OIML C3	
excitation (supply voltage)	Vdc	10	
max. excitation voltage	Vdc	15	
input resistance	Ω	360 ±10	
output resistance	Ω	350 ±10	
insulation resistance	MΩ	≥ 5000 @50Vdc	
storage temp. range	°C	-35 ~ +80	
operating temp. range	°C	-35 ~ +80	
compensated temp. range	°C	-10 ~ +40	
temp. coefficient of sensitivity	%fso/°C	≤ ±0.002	2
temp. coefficient of zero	%fso/°C	≤ ±0.002	2
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		Φ5.7mm, 4-conductor shielded PVC cable, 4m	
environment protection		IP66 (standard), IP67, IP68 (only for 3498)	3
unit weight	kg	1.2, ..., 3.9 (capacity dependent, to be confirmed in case of order)	

- Notes:
1. "fs" refers to full scale pressure.
  2. Calculated as a rate of output change between -10°C and +40°C, and normalized by the output at room temperature (25°C).
  3. In case IP68 is selected, one must specify the following test conditions for the transducer in the purchasing order:
    - 1) How deep under water will the installed transducer be located?
    - 2) How long will the installed transducer continuously stay under water of that depth?

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### Ordering Information

<b>position (pos.) 1: model</b>									
3418									
3498									
<b>pos. 2: capacities</b>									
0.3t      3t									
0.5t      5t									
0.7t      7t									
1t        10t									
2t									
<b>pos. 3: output sensitivity</b>									
3 mV/V									
<b>pos. 4: non-linearity or accuracy class</b>									
OIMLC3									
<b>pos. 5: bridge resistance</b>									
350Ω (R <sub>in</sub> = 360±10Ω, R <sub>out</sub> = 350±10Ω)									
<b>pos. 6: threads (live end/fixed end)</b>									
1xM/2xΦD: Refer M and D to Dimensions, e.g., 1xM24/2xΦ26 for 7t capacity.									
<b>pos. 7: electrical interface</b>									
5/4/PVC/4 = Φ5mm,4-conductor shielded PVC cable, length = 4m(#) #: Cable length can be customized on request.									
<b>pos. 8: environment protection</b>									
IP66 (standard)									
IP67									
IP68 (only for 3498)									
<b>pos. 9: accessories for installation</b>									
NA: no accessory (standard)									
loadFoot: one load foot									
<b>pos. 10: customized spec's</b>									
“(*)” is necessary only if any customized parameter is required, otherwise it is neglectable.									
<b>pos.1</b>	<b>pos. 2</b>	<b>pos. 3</b>	<b>pos. 4</b>	<b>pos. 5</b>	<b>pos. 6</b>	<b>pos. 7</b>	<b>pos. 8</b>	<b>pos. 9</b>	<b>pos. 10</b>

**example:** 3418-2t-3mV/V-OIMLC3-350Ω-1xM12/2xΦ13.5-5/4/PVC/4-IP66-loadFoot

The listed dimensions, specifications and ordering information are subject to change without prior notice.

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

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

website: [www.bcmsensor.com](http://www.bcmsensor.com)  
email: [sales@bcmsensor.com](mailto:sales@bcmsensor.com)