

Model 1415 Column Compression Load Cells

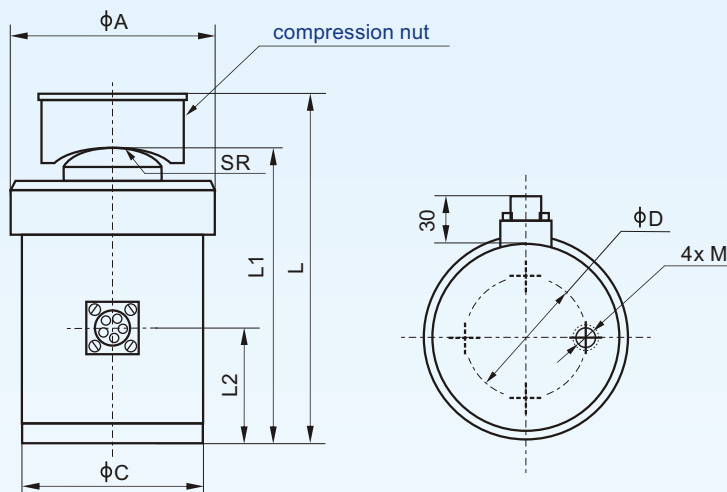
Based on BCM advanced metal foil strain gauges technology and made of alloy steel single ball-ended constructions, model 1415 compression load cells are widely used in truck scales, vessel weighing scales, hopper scales, and some areas need to measure compression loads or forces, the load cells feature nice long-term stability and reliability in severe operating conditions.

Model 1415 compression load cells have very wide load capacities from 0.5 t to 500 t, possess optional accuracies of 0.05 ~ 0.2 %fso (fso = full scale output). Load cell must be put on a smooth flat surface and properly mounted on it, the installation or replacement load cell in this process is easy.



type: column compression load cell
material: mild steel
surface: nickel plated treatment
protection: IP 66, IP 67
application: truck scales, vessel weighing and hopper scales

Dimensions:



Electrical connection:

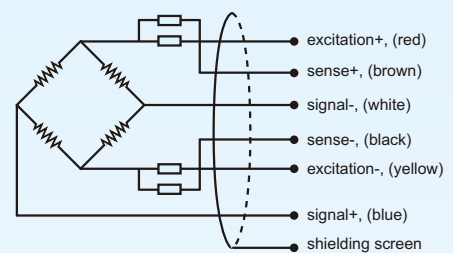


Table 1:

capacity (t)	L	L1	L2	SR	C	D	M	cable length (m)
0.5, 0.7, 1, 2	108	88	33	15	60	38	4xM6	6
3, 5, 7	123	97	45	15	60	38	4xM6	6
10	159	108	50	15	60	40	4xM8	8
20	159	120	56	15	75	56	4xM8	8
30	228	130	61	30	75	56	4xM8	8
50, 70	228	178	70	80	118	90	4xM10	8
100	228	178	70	60	125	90	4xM10	12
200, 300	310	255	125	200	183	110	4xM16	12
500	310	255	125	200	193	120	4xM24	12

Model 1415

Column Compression Load Cells



Specifications:

rated load capacity	t	0.5, 0.7, 1, 2, 3, 5, 7,10, 20	30, 50, 70	100, 200, 300, 500
safe overload	%FS	150		
ultimate overload	%FS	200		
rated output sensitivity	mV/V	1.0, ..., 2.0		
combined error	%fso	± 0.05	± 0.1	± 0.2
nonlinearity	%fso	± 0.05	± 0.1	± 0.2
hysteresis	%fso	± 0.05	± 0.1	± 0.2
repeatability	%fso	± 0.05	± 0.1	± 0.2
creep	%fso/30min	± 0.05	± 0.1	± 0.2
zero unbalance	%fso	± 1		
excitation voltage recommended	Vdc	6, ..., 15		
maximum excitation voltage	Vdc	16		
input resistance	Ω	560 ± 30 (standard), 1100 ± 30		
output resistance	Ω	500 ± 3 (standard), 1000 ± 5		
insulation resistance	MΩ	≥5000@50 VDC		
storage temperature range	°C	-40 ~ +80		
operating temperature range	°C	-20 ~ +65		
compensated temperature range	°C	-10 ~ +60		
temperature coefficient of span	%fso/°C	± 0.003	± 0.005	
temperature coefficient of zero	%fso/°C	± 0.003	± 0.005	
ingress protection	IP rating	IP 66 (standard), IP 67		
housing material		mild steel, nickel plated surface treatment		
electrical cable	spec's	6-core shielded PVC cable , Φ 6.2 mm option: 4-core shielded PVC cable		
	length,m	refer to the cable length in table 1		
	color code	red = exc+; yellow = exc-; blue = sig+; white = sig-; brown = sense+; black = sense-		

The listed specifications are subject to change without prior notice.



BCM SENSOR TECHNOLOGIES BVBA

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Model 1415 Column Compression Load Cells



Ordering code:

example: 1415 - K05 - UB - AE - R1000 - P6 - EA6 - AL 001 - C*

code	model
1415	1415

code	capacity
K05, K07	0.5t, 0.7t
K1, K2, K3, K5, K7	1t, 2t, 3t, 5t, 7t
K10, K20	10t, 20t
K30, K50, K70	30t, 50t, 70t
K100	100t
K200	200t
K300	300t
K500	500t

code	output sensitivity
UA	1 mV/V
UB	1.5 mV/V
UC	2 mV/V

code	combined error
AE	0.05 %fso
BA	0.1 %fso
BB	0.2 %fso

code	bridge resistance
R500	Rin = 560 ± 30; Rout = 500 ± 3
R1000	Rin = 1100 ± 30; Rout = 1000 ± 5

code	environment protection
P6	IP 66 (standard)
P7	IP 67

code	special requests information
C*	<p>This code "C*" only applies when customer has special requests which are not included in the standard ordering code.</p> <p>With this code, customer can define specifications or requests in separate lines with "C*" added to the end of the ordering code.</p> <p>These requests must be confirmed by a BCM sales personnel before the official order is placed.</p>

code	accessories
AL 001	compression nut (standard)
AL 000	none

code	electrical connection
EA 4	cable (4-conductor shielded PVC skin, Φ 5.7 mm), cable length: refer to the cable length in table 1
EA 6	cable (6-conductor shielded PVC skin, Φ 5.7 mm) cable length: refer to the cable length in table 1, (standard)

Ordering Code Example: 1415 - K05 - UB - AE - R1000 - P6 - EA6 - AL 001 - C*
cable length = 10 m

Explanations of the Ordering Code:

Model 1415, cap. = 500 kg; output sensitivity = 1.5 mV/V; combined error = 0.05 %fso; Rin = 1100 ± 30 Ω; Rout = 1000 ± 5 Ω; Ingress protection grading is IP 66; 6-core shielded PVC cable with length = 10 m instead of standard 6 m; and a compression nut.

The change of the cable length is confirmed by BCM's sales personnel, and this customized specification is clearly indicated on the <<Order Confirmation>>.



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