

# Type BM14C Load Cell



## Short description

Stainless steel IP68 compression load cell  
Hermetically sealed  
Suitable for vehicle and hopper scales and vehicle testing facilities  
Built in surge arrestors  
High accuracy  
Current calibrated (sc-option)



## Available models

Capacity	Accuracy	Full article description
0.5t	C3 Excluded from OIML	BM14C-C3-0.5t-15B-SC
1t	C3 Excluded from OIML	BM14C-C3-1t-15B-SC
2t	C3 Excluded from OIML	BM14C-C3-2t-15B-SC
3t	C3 Excluded from OIML	BM14C-C3-3t-15B-SC
5t	C3 Excluded from OIML	BM14C-C3-5t-15B-SC
10t	C3/C4	BM14C-C3/C4-10t-15B-SC
20t	C3/C4	BM14C-C3/C4-20t-15B-SC
25t	C3/C4	BM14C-C3/C4-25t-15B-SC
30t	C3/C4	BM14C-C3/C4-30t-15/18B-SC
40t	C3/C4	BM14C-C3/C4-40t-15/18B-SC
50t	C3/C4	BM14C-C3/C4-50t-15/18B-SC

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## Detailed specifications BM14C

Accuracy class		C3	OIML R60 C3	OIML R60 C4
Output sensitivity ( = FS )	mV/V	2.0 ± 0.002		
Maximum capacity ( E <sub>max</sub> )	t	0.5, 1, 2, 3, 5	10, 20, 25, 30, 40, 50	
Max.number of load cell intervals	n <sub>LC</sub>	3000		4000
Ratio of min. LC verification interval	Y = E <sub>max</sub> / V <sub>min</sub>	10000		15000
Combined Error	%FS	≤± 0.023		≤± 0.0174
Minimum dead load	Of E <sub>max</sub>	0%		
Safe overload	of E <sub>max</sub>	150 %		
Ultimate overload	of E <sub>max</sub>	300 %		
Zero balance	of FS	< ± 1.0 %		
Excitation, recommended voltage	V	5 ~ 12		
Excitation maximum	V	18		
Input resistance	Ω	700 ± 7		
Output resistance	Ω	703 ± 4		
Insulation resistance	MΩ	≥5000 ( at 50VDC )		
Compensated temperature	°C	-10 ~ +40		
Operating temperature	°C	-35 ~ +65		
Storage temperature	°C	-40 ~ +70		
Element material		Stainless steel		
Ingress Protection (acc. to EN 60529)		IP68		
Recommended torque on fixation	Nm	-		
ATEX classification (optional)		II3G Ex nA IIC T4 Gc		II3D Ex tc IIIC T73°C Dc
		II1G Ex ia II1C T4		II1D Ex iaD 20 T73°C

## Wiring

### Wiring:

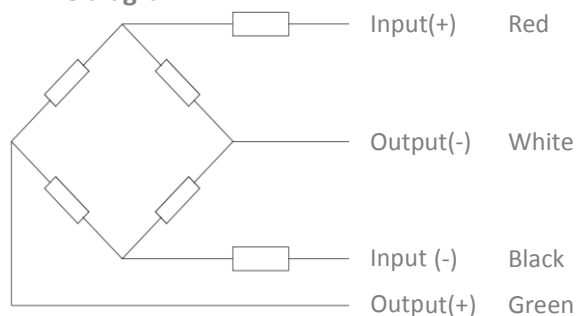
Shielded, 4 conductor cable.

Cable diameter: Ø5mm

Standard cable length for all C3: 15m and for C4 above 30t: 18m.

Shield not connected to element

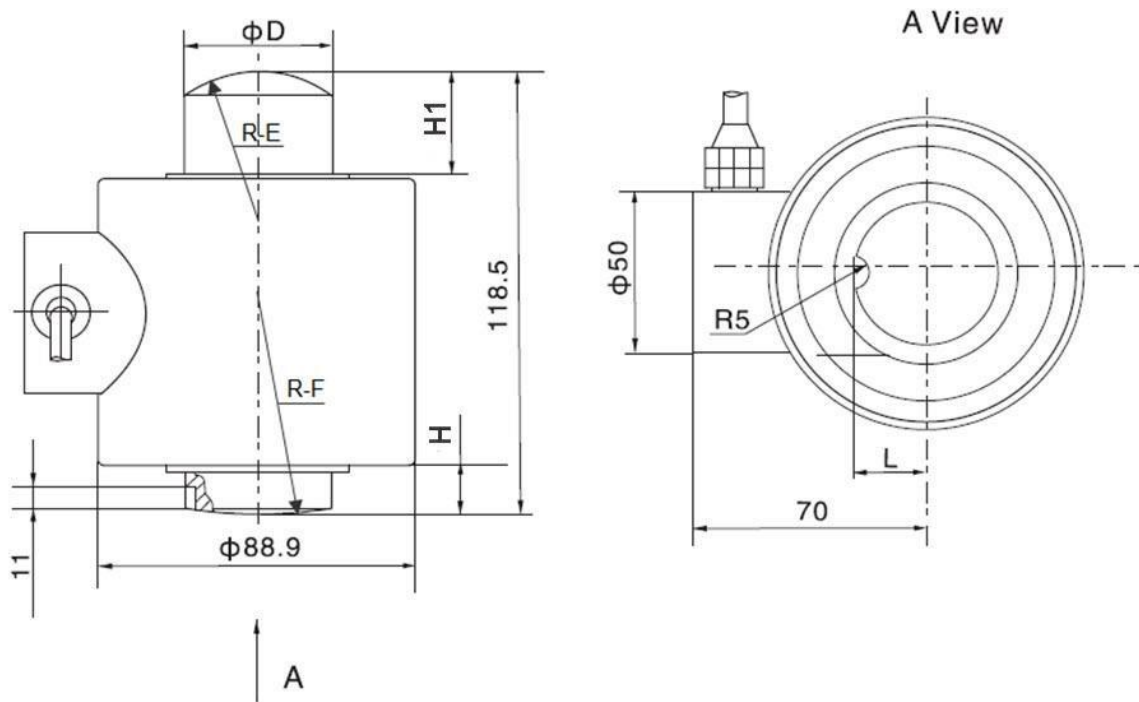
### 4-wire diagram



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Dimensions in mm

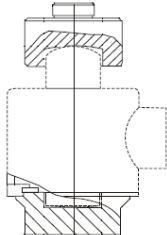
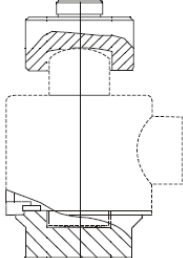
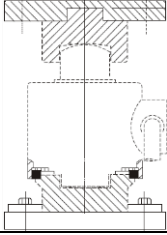
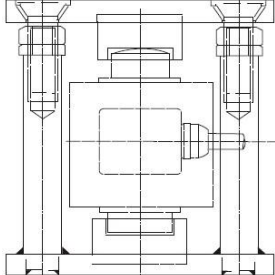
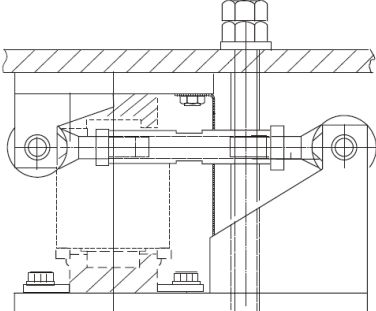
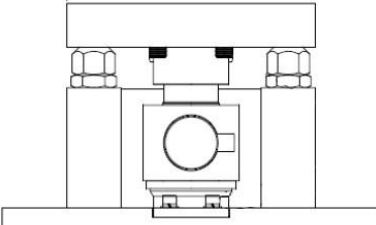


Dimension Capacity	$\phi D$	L	R-E	R-F	H	H1
0.5-30t	40	22	37.5	150	14	31.5
40-50t	50	27	200	200	21	24.5

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## Available accessories

<p><b>BY-14-103-10-50t</b></p> <ul style="list-style-type: none"> <li>Easy installation</li> <li>Good self-aligning ability</li> <li>Stainless steel</li> <li>Anti-reversal ability</li> <li>Can be used under hazardous environments</li> </ul>	
<p><b>HY-14-104-10-30t</b></p> <ul style="list-style-type: none"> <li>Easy installation</li> <li>Good self-aligning ability</li> <li>Nickel plated alloy steel</li> <li>Anti-reversal ability</li> </ul>	
<p><b>HM-14-403-10-50t</b></p> <ul style="list-style-type: none"> <li>Compact construction</li> <li>Easy installation</li> <li>Self aligning construction</li> <li>Nickel plated alloy steel</li> </ul>	
<p><b>BM-14-414-0.5-50t Mount</b></p> <ul style="list-style-type: none"> <li>Stainless steel mount</li> <li>Easy load cell access</li> <li>Lift-off protection</li> <li>Controlled horizontal movement</li> <li>Rocker support included with mount delivery</li> </ul>	
<p><b>HM-14-401-10-50t Mount</b></p> <ul style="list-style-type: none"> <li>Compact construction</li> <li>Easy installation</li> <li>Self aligning construction</li> <li>Horizontal locating ability</li> <li>Anti-reversal ability</li> <li>Nickel plated alloy steel</li> </ul>	
<p><b>HM-14-434 10-50t Tank mount</b></p> <ul style="list-style-type: none"> <li>Nickel plated alloy steel</li> <li>Easy load cell access</li> <li>Lift-off protection</li> <li>Controlled horizontal movement</li> </ul>	

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