



## 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)



Test Certificate no. D09-07.03 Revision 1

## 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-15B-SC
40t	C3/C4	BM14C-C3/C4-40t-15B-SC
50t	C3/C4	BM14C-C3/C4-50t-15B-SC

Specifications and dimensions are subject to change without notice and do not constitute any liability whatsoever.

## Technical Specifications BM14C

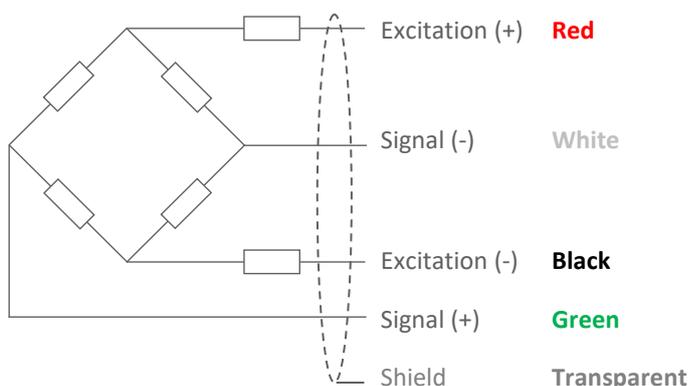
Accuracy Class		C3	OIML R60 C3	OIML R60 C4
Output Sensitivity (= FS)	mV/V	2.0 ± 0.002		
Maximum Capacity ( E <sub>max</sub> )	t	0.5, 1, 2, 3, 5	10, 20, 25, 30, 40, 50	
Max. Number of Load Cell Intervals	n <sub>LC</sub>	3000		4000
Ratio of min. LC Verification Interval	$Y = E_{max} / V_{min}$	10000		15000
Combined Error	%FS	≤ ± 0.023		≤ ± 0.0174
Creep Error (30 minutes)	%FS	≤ ± 0.016		≤ ± 0.012
Temperature Effect on Zero (ZTC)	%FS/10°C	≤ ± 0.015		≤ ± 0.010
Temperature Effect on Sensitivity (STC)	%FS/10°C	≤ ± 0.011		≤ ± 0.009
Zero Balance	%FS	≤ ± 1.0		
Safe Overload	%FS	150		
Ultimate Overload	%FS	300		
Excitation, Recommended Voltage	V	5 ~ 12		
Excitation, Maximum Voltage	V	18		
Input Resistance	Ω	700 ± 7		
Output Resistance	Ω	703 ± 4		
Insulation Resistance (50V)	MΩ	≥ 5000		
Compensated Temperature	°C	-10 ~ +40		
Operating Temperature	°C	-35 ~ +65		
Storage Temperature	°C	-40 ~ +70		
Package Weight	kg	0.5t – 5t: 2.4	10t – 25t: 2.9	30t – 50t: 3.4
Element Material		Stainless steel		
Ingress Protection (acc. to EN 60529)		IP68		
ATEX Classification (optional)		II 1G Ex ia IIC T4 Ga	II 1D Ex ia IIIC T <sub>200</sub> 135°C Da	II 3G Ex ic IIC T4 Gc

## Wiring

### Features:

Cable type: Shielded, 4 conductor cable, conductor AWG 22  
 Cable diameter: Ø 5mm  
 Cable length: 15m for C3 / 18m for C4 above 30t  
 Cable jacket: Polyurethane  
 Shield not connected to element

### 4-Wire Connection Diagram

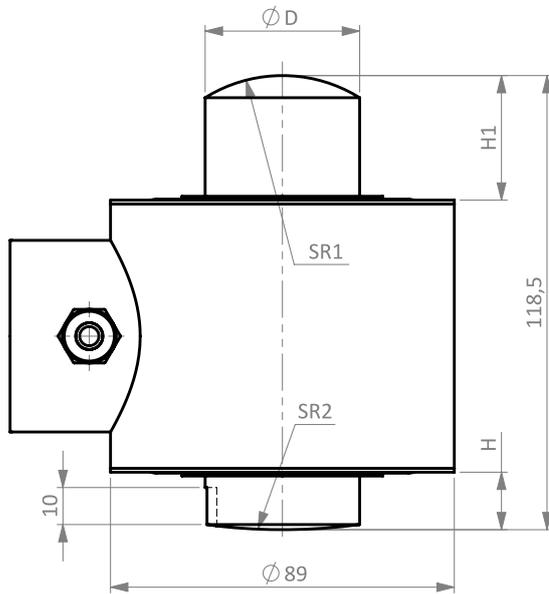


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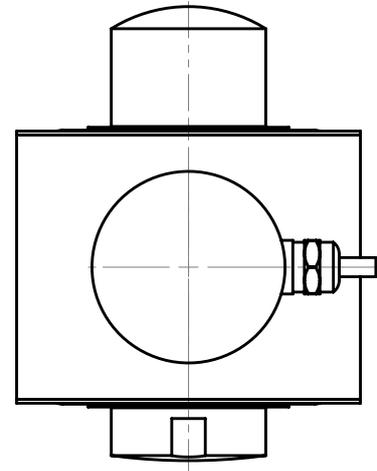
# Type BM14C Load Cell

## Dimensions in mm

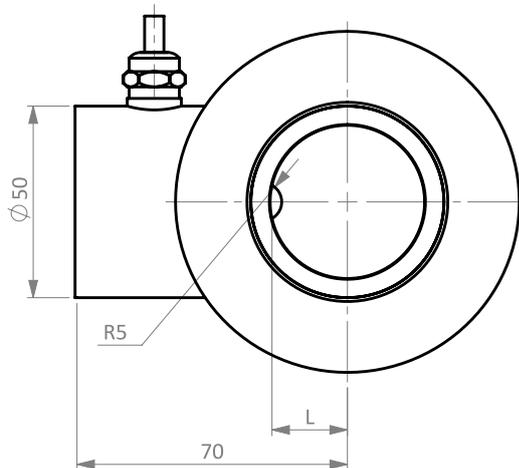
Front View



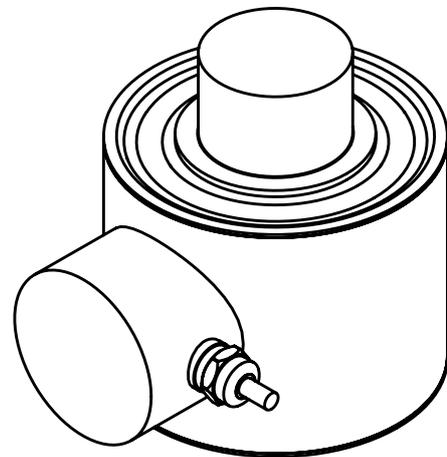
Side View



Bottom View



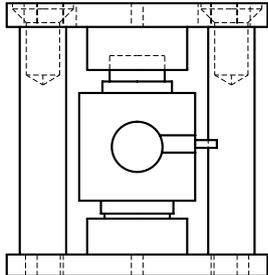
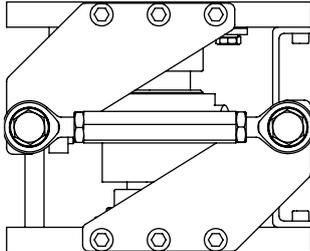
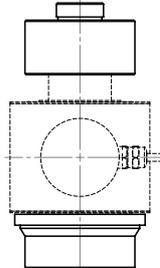
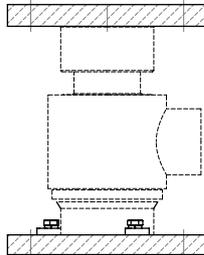
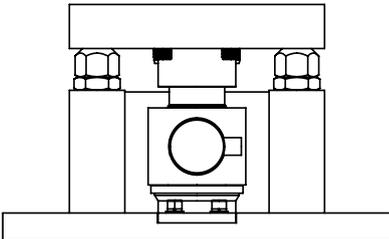
Isometric View



Dimension Capacity	ØD	L	SR1	SR2	H	H1
0.5 – 5t	40	20	25	150	14	31.5
10 – 30t	40	20	37.5	150	14	31.5
40 – 50t	50	25	200	200	22	24.5

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## Available Accessories

<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>BM-14-910 0.5t – 30t Mounting Set</b></p> <ul style="list-style-type: none"> <li>• Complete mounting set with LC dummy</li> <li>• Stainless steel</li> <li>• Easy installation due to transport plate</li> <li>• Self-aligning construction</li> <li>• Lift-off protection</li> <li>• Optional stay-rod available</li> </ul>	
<p><b>BY-14-103 10 – 50t Rocker Support Set</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> <li>• Also available in alloy steel version (part: HY-14-104-10-30t)</li> </ul>	
<p><b>HM-14-403 10 – 50t Support Plates</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> <li>• To be used with BY-14-103 &amp; HY-14-104 Rocker Support sets</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>	
<p><b>HM-14-911 0.5t – 30t Mounting Set</b></p> <ul style="list-style-type: none"> <li>• Complete mounting set with LC dummy</li> <li>• Nickel plated alloy steel</li> <li>• Easy installation due to transport plate</li> <li>• Self-aligning construction</li> <li>• Optional stay-rod available</li> <li>• Lift-off protection</li> </ul>	