Type BM14G4 Load Cell

SCALE-TEC
MEASUREMENT WITH CONFIDENCE



Short Description

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

Test certificate no. TC7815 Revision 0
Cof C no R60/2000-NL1-10.10

Certificate no. 11-087

Available Models

Capacity	Accuracy	Full Article Description
10t	C3/C4	BM14G4-C3/C4-10t-15B-SC-W1
20t	C3/C4	BM14G4-C3/C4-20t-15B/20B-SC-W1
30t	C3/C4	BM14G4-C3/C4-30t-18B/20B-SC-W1
40t	C3/C4	BM14G4-C3/C4-40t-18B-SC-W1
50t	C3/C4	BM14G4-C3/C4-50t-20B-SC-W1

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Technical Specifications BM14G4

Accuracy Class		OIML R60 C3	OIML R60 C4
Output Sensitivity (= FS)	mV/V	2.0 ± 0.02	
Maximum Capacity (E_{max})	t	10, 20, 30, 40, 50	
Max. Number of Load Cell Intervals	nLC	3000	4000
Ratio of min. LC Verification Interval	$Y = E_{max}/v^{min}$	8800	
Combined Error	%FS	≤± 0.0230	≤± 0.0175
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	
Maximum Deflection	mm	0.006 ~ 0.011	
Excitation, Recommended Voltage	VDC	5 ~ 12	
Excitation, Maximum Voltage	VDC	18	
Input Resistance	Ω	700 ± 7	
Output Resistance	Ω	700 ± 7	
Insulation Resistance (@ $50V_{DC}$)	MΩ	≥5000	
Compensated Temperature	°C	-10 ~ + 40	
Operating Temperature	°C	-35 ~ + 65	
Storage Temperature	°C	-40 ~ + 70	
Load Cell Weight	kg	4.0 ~ 4.5	
Element Material		Stainless Steel	
Ingress Protection (acc. to EN 60529)		IP68	
ATEX Classification (optional)		II 1GExiaIICT4Ga	II 1D Ex ia IIIC T_{200} 135°C Da / II3GExicIIC T4 Gc

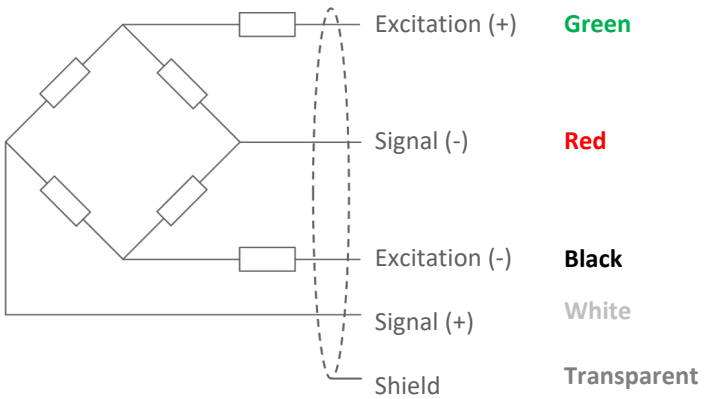
Wiring

Features:

Cable type: Shielded, 4 conductor cable , conductor AWG 22
Cable diameter: Ø 5.0mm
Cable lengths: (10t/20t) 15m, (20t/30t/50t) 20m, (30t/40t) 18m
Cable jacket: Polyurethane

Shield not connected to element

4-Wire Connection Diagram

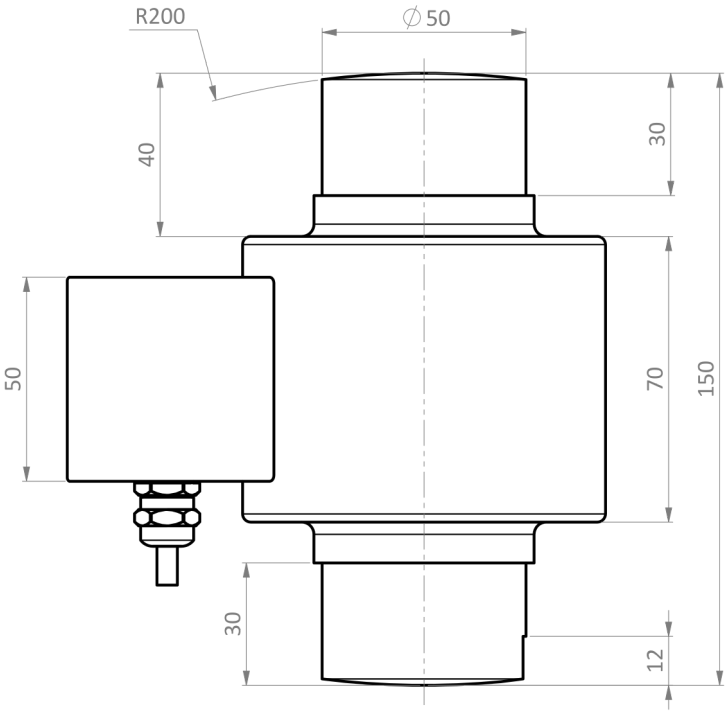


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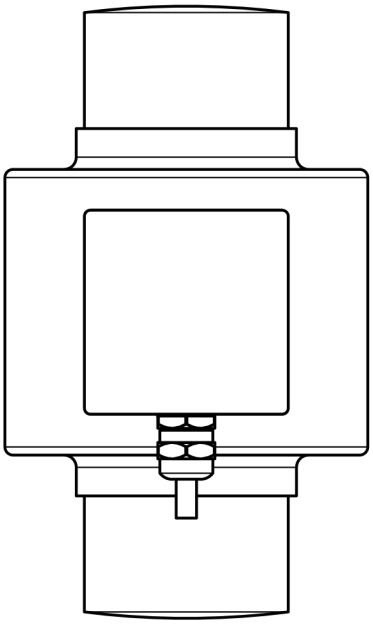
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Dimensions in mm

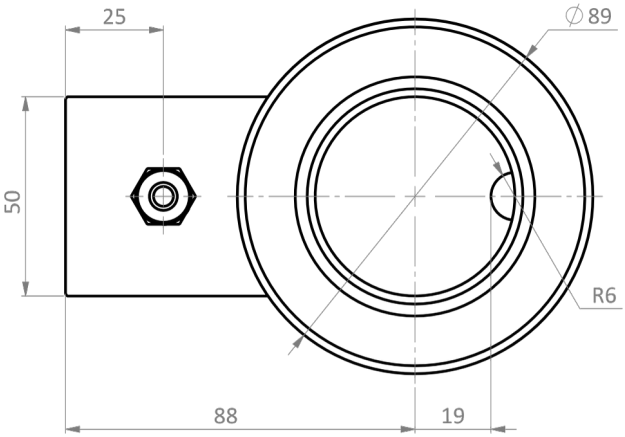
Front View



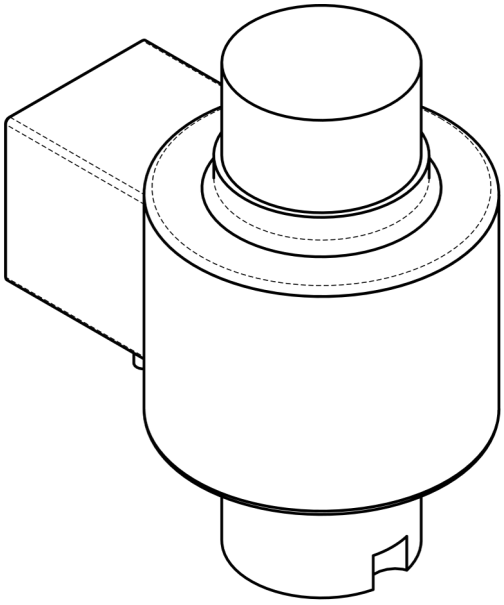
Side View



Bottom View



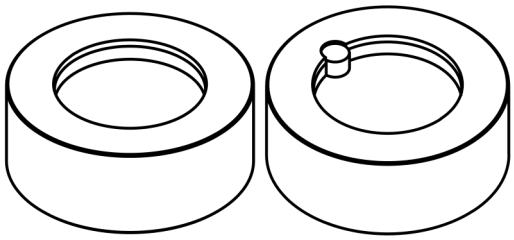
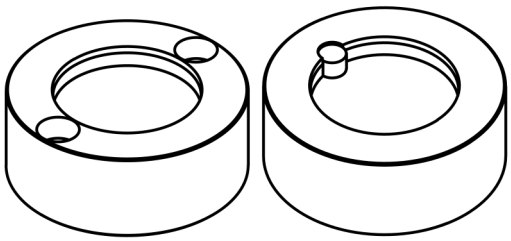
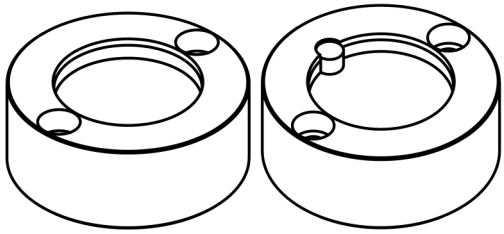
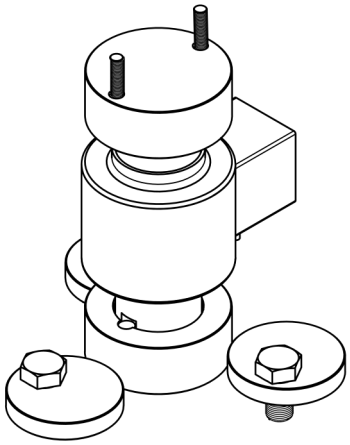
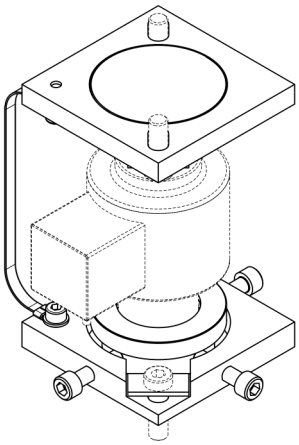
Isometric View



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Available Accessories

BY-14-108-10-50t Rocker Support • Stainless steel rocker support set • 1 piece, top, without mounting holes • 1 piece, bottom, without mounting holes • Anti-rotation pin in the bottom base	
BY-14-125-10-50t Rocker Support • Stainless steel rocker support set • 1 piece, top, with Ø9mm mounting holes • 1 piece, bottom, without mounting holes • Anti-rotation pin in the bottom base	
BY-14-126-10-50t Rocker Support • Stainless steel rocker support set • 1 piece, top, with Ø9mm mounting holes • 1 piece, bottom, with Ø9mm mounting holes • Anti-rotation pin in the bottom base	
BM14G4-W1 Mounting Kit • Stainless steel complete mounting kit • Incl. **BY-14-125**-10-50t Rocker Support set • Anti-rotation pin in the bottom base • 3 pcs. Eccentric washers Ø68mm, 12mm high • 2 pcs. Socket head cap screw (M8 × 50) • 2 pcs. Hexagon Bolt (M10 × 20) • 3 pcs. Hexagon Bolt (M16 × 30) • Earthing Strap HY-14-123 300mm length	
HM-14-441-10/50t Alloy Steel Tank Mount • Rocker support for weighing bridges • Nickel plated alloy steel • Controlled horizontal movement • Earthing Strap 250mm length included • Easy load cell access	

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