

# Type BM24R Load Cell



## Short description

Stainless steel IP68 low profile load cell  
Hermetically sealed  
Suitable for hopper, platform and pallet scales  
Integrated static overload protection up to 13t



test certificate no. TC7865 Revision 1  
C of C no R60/2000-NL1-11.21

Certificate no. 11-103A1



## Available models

Capacity	Accuracy	Full article description
60kg	C3/C4/C5	BM24R-C3/C4/C5-60kg-3G
130kg	C3/C4/C5	BM24R-C3/C4/C5-130kg-3G
250kg	C3/C4/C5	BM24R-C3/C4/C5-250kg-3G
280kg	C3/C4/C5	BM24R-C3/C4/C5-280kg-3G
500kg	C3/C4/C5	BM24R-C3/C4/C5-500kg-3G
1t	C3/C4/C5	BM24R-C3/C4/C5-1t-3G
2t	C3/C4/C5	BM24R-C3/C4/C5-2t-6G
3.5t	C3/C4/C5	BM24R-C3/C4/C5-3.5t-6G
5t	C3/C4/C5	BM24R-C3/C4/C5-5t-6G
10t	C3/C4/C5	BM24R-C3/C4/C5-10t-15G
13t	C3/C4/C5	BM24R-C3/C4/C5-13t-15G
28t	C3/C4/C5	BM24R-C3/C4/C5-28t-15G
60t	C3/C4/C5	BM24R-C3/C4/C5-60t-15G

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## Detailed specifications BM24R

Accuracy class		OIML R60 C3 / OIML R60 C4 / OIML R60 C5					
Output sensitivity ( = FS )	mV/V	1.0±0.01	1.75±0.2	2.0±0.1	2.0±0.1	2.0±0.1	2.0±0.1
Maximum capacity ( E <sub>max</sub> )	t	0.06, 0.13, 0.28	0.25	0.5,1, 2, 3.5, 5, 10	13	28	60
Max.number of load cell intervals	n <sub>LC</sub>	C3= 3000 / C4= 4000 / C5= 5000					
Ratio of min. LC verification interval	Y = E <sub>max</sub> / v <sub>min</sub>	C3 = 10000 / C4= 16000 / C5= 16000					
Combined Error	%FS	C3= ≤± 0.0230 / C4= ≤± 0.0174 / C5= ≤± 0.0140					
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	10 ~ 15					
Excitation maximum	V	30					
Input resistance	Ω	1260 ± 100	1100 ± 100	1100 ± 100	1200 ± 100	1075 ± 100	1350 ± 200
Output resistance	Ω	1020 ± 0.5	1025 ± 25	1025 ± 25	1000 ± 0.5	930 ± 0.5	1175 ± 0.5
Insulation resistance	MΩ	≥5000 ( at 50VDC )					
Compensated temperature	°C	-10 ~ +40					
Operating temperature	°C	-35 ~ +70					
Storage temperature	°C	-50 ~ +90					
Element material		Stainless steel					
Ingress Protection (acc. to EN 60529)		IP68					
Recommended torque on fixation	Nm	M5: 3.5		M6:10			
ATEX classification (optional)		IECEx, II 1 G Ex ia IIC T4 Ga, II 1 D Ex ia IIIC T73 °C Da, II 3 G Ex ic IIC T4 Gc, II 3 G Ex nA IIC T4 Gc, II 3D Ex tc IIIC T63 °C Dc					

## Wiring

### Wiring:

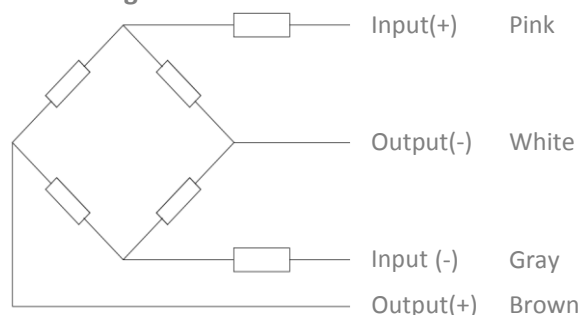
Shielded, 4 conductor cable.

Cable diameter: Ø6mm.

Standard cable length for 60kg – 1t: 3m, for 2t – 5t: 6m and for 10t – 60t: 15m.

Shield connected to element.

### 4-wire diagram

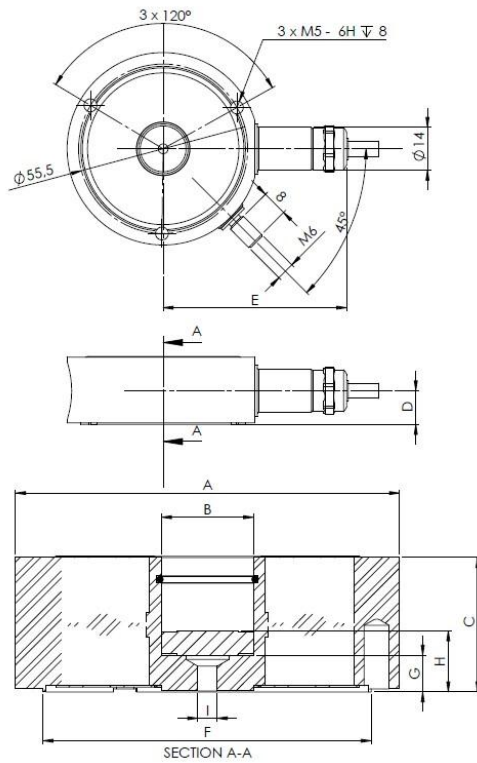


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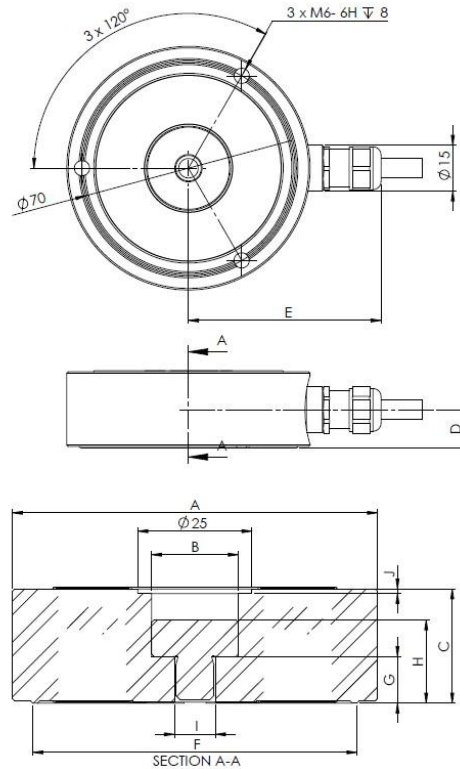
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Dimensions in mm

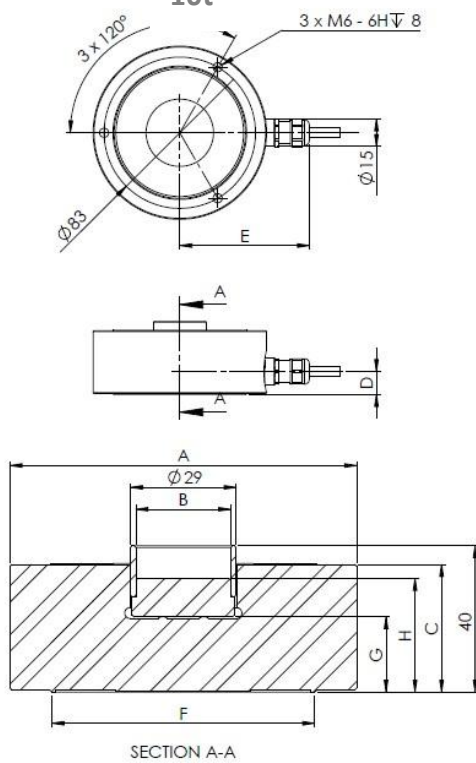
0.06, 0.13, 0.28t



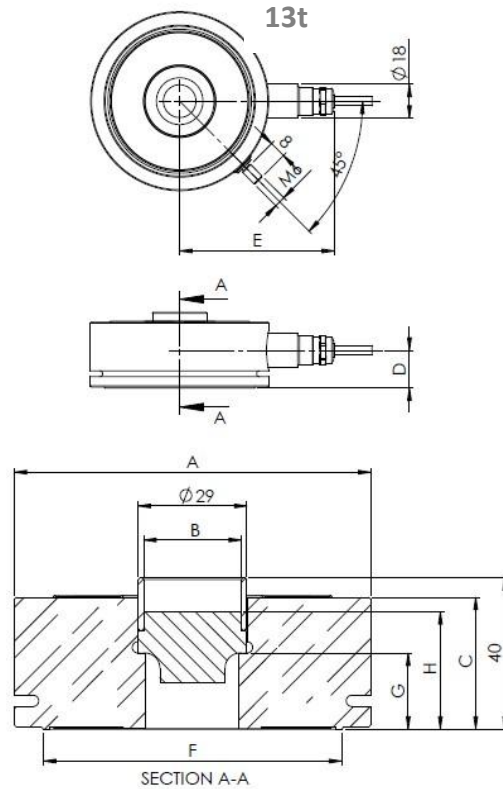
0.25, 1, 2, 3.5, 5t



10t



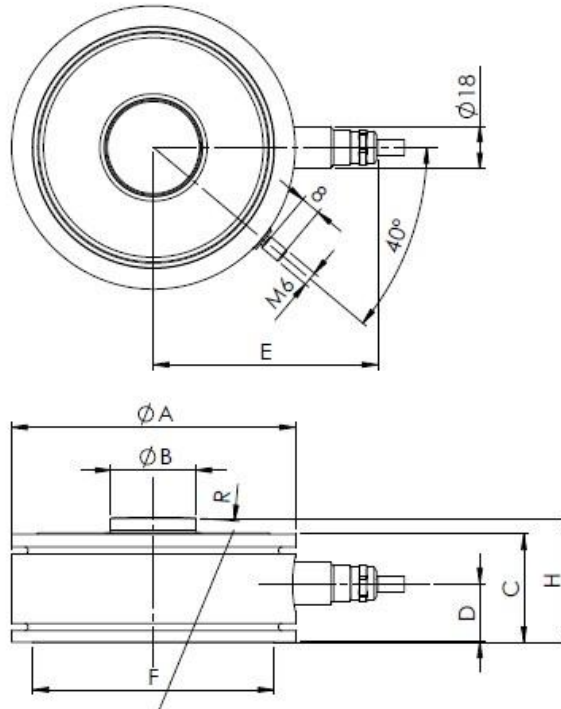
13t



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28, 60t



Dimension Capacity	ØA	ØB	C	D	E	ØF	G	H	I	J	R
0.06t, 0.13t, 0.28t	63	15.1	22	11	60	54	6	10	Ø3.2	-	-
0.25t, 0.5t, 1t	80	19	25	12.5	65	71	10	18	M10	1	-
2t, 3.5t, 5t	80	19	30	12.5	65	71	10	18	Ø15	6	-
10t	95	26	35	12.5	72	75	20.7	31.2	-	-	-
13t	95	26	35	20	85	79.5	20	31	-	-	-
28t	120	35.9	46	25	94	102	-	53	-	-	400
60t	140	47.9	62	34	104	124	-	69	-	-	600

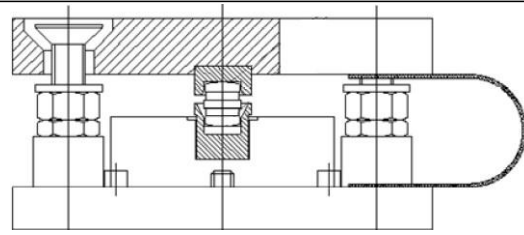
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## Available accessories

### BM-24-401/402/403-0.25-13t tankmount

- Stainless steel mount
- Easy load cell access
- Easy installation
- Lift-off protection
- Controlled horizontal movement



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