


# Type BM6G Load Cell



## Short description



- Stainless steel IP68/IP69k single point load cell
- Suitable for platform, belt scales and other weighing devices
- Maximum platform size 800 x 800mm (for 100 – 500 kg)
- Maximum platform size 400 x 400mm (for 10 – 50 kg)
- 10kg only available with PTB certificate D09-10.06 Revision 1 of C R60/2000 DE1-10.02
- 10kg, 20 kg, 50 kg also available with C4MR approval with PTB certificate D09-10.06 revision 1, C of C R60/2000 DE1-10.02 (Y=40000 Z=6000)

 test certificate no. TC8040 revision 0  
C of C no R60/2000-NL1-11.29

 Certificate no. 12-017

## Available models

| Capacity | Accuracy       | Full article description    |
|----------|----------------|-----------------------------|
| 10kg     | C3/C4MR        | BM6G-C3/C4MR-10kg-3B6       |
| 20kg     | C3/C4 /C5/C4MR | BM6G-C3/C4/C5/C4MR-20kg-3B6 |
| 50kg     | C3/C4 /C5/C4MR | BM6G-C3/C4/C5/C4MR-50kg-3B6 |
| 75kg     | C3/C4/C5       | BM6G-C3/C4/C5-75kg-SE-3B6   |
| 100kg    | C3/C4/C5       | BM6G-C3/C4/C5-100kg-SE-3B6  |
| 100kg    | C3/C4/C5       | BM6G-C3/C4/C5-100kg-3B      |
| 150kg    | C3/C4/C5       | BM6G-C3/C4/C5-150kg-3B      |
| 200kg    | C3/C4/C5       | BM6G-C3/C4/C5-200kg-3B      |
| 300kg    | C3/C4/C5       | BM6G-C3/C4/C5-300kg-3B      |
| 400kg    | C3/C4/C5       | BM6G-C3/C4/C5-400kg-3B      |
| 500kg    | C3/C4/C5       | BM6G-C3/C4/C5-500kg-3B      |

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

## Detailed specifications BM6G

|  |                        |  |   |   |
|--|------------------------|--|---|---|
| Accuracy class                         |                        | OIML R60 C3                                  | OIML R60 C4                               | OIML R60 C5                                   |
| Output sensitivity ( = FS )            | mV/V                   | 2.0 ± 0.2                                    |   |   |
| Maximum capacity ( E <sub>max</sub> )  | kg                     | 10, 20, 50, 75, 100, 150, 200, 300, 400, 500 |   | 20, 50, 75, 100, 150, 200, 250, 300, 400, 500 |
| Max.number of load cell intervals      | n <sub>LC</sub>        | 3000   | 4000                                      | 5000  |
| Ratio of min. LC verification interval | Y = E <sub>max</sub> / | 10000  | 15000                                     | 20000   |
| Combined Error                         | %FS                    | ≤± 0.0230                                    | ≤± 0.0175                                 | ≤± 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                  | < ± 2.0 %                                    |   |   |
| Excitation, recommended voltage        | V                      | 5 ~ 12                                       |   |   |
| Excitation maximum                     | V                      | 18   |   |   |
| Input resistance                       | Ω                      | 10, 20, 50<br>380 ± 15                       | 100, 150, 200, 300, 400, 500<br>350 ± 3.5 |   |
| Output resistance                      | Ω                      | 350 ± 10                                     |   |   |
| 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/IP69K                                   |   |   |
| Recommended torque on fixation         | Nm                     | M6: 10                                       |   | M8:25   |
| ATEX classification (optional)         |                        | II1G Ex ia II1C T4                           | II1D Ex iaD 20 T73°C                      | II3G nL IIC T4                                |

## Wiring

### Wiring:

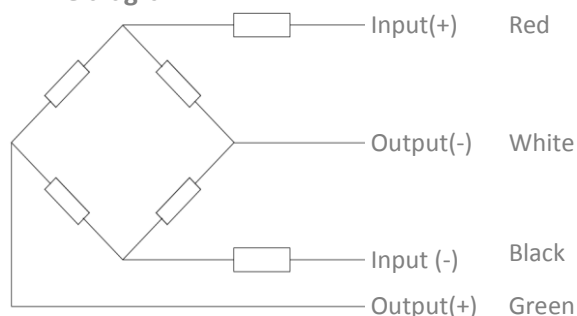
Shielded cable, 6 conductor cable for 10-50kg and 4 conductor cable for 100-500kg.

Cable diameter: Ø5mm

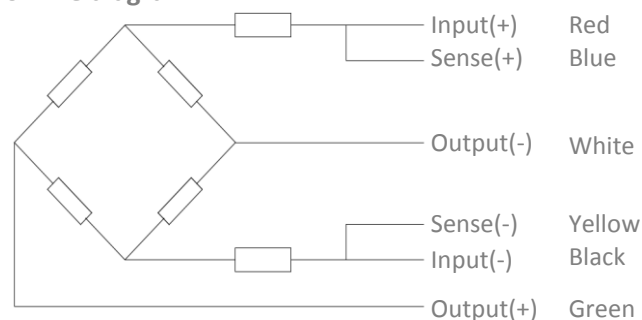
Standard cable length: 3m

Shield not connected to element

### 4-wire diagram



### 6-wire diagram

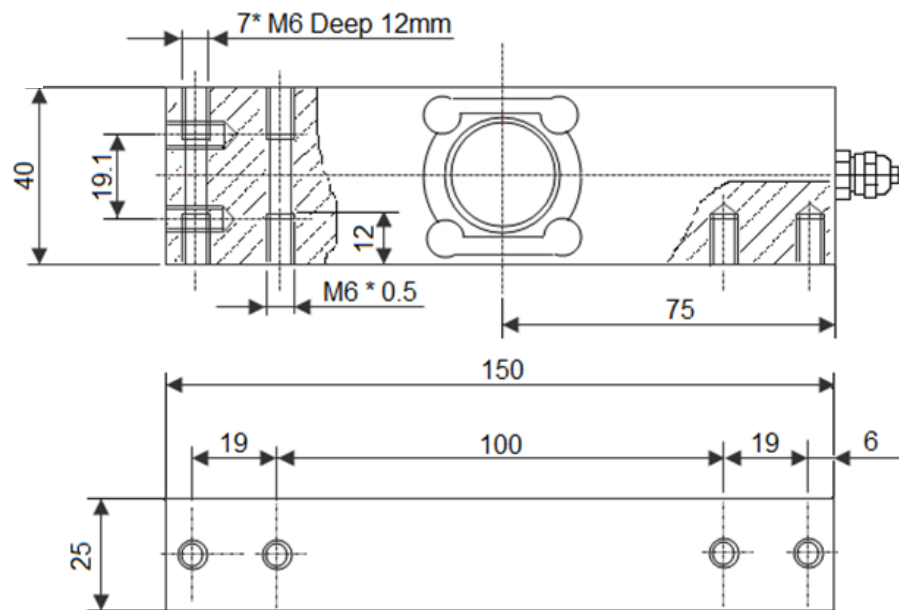


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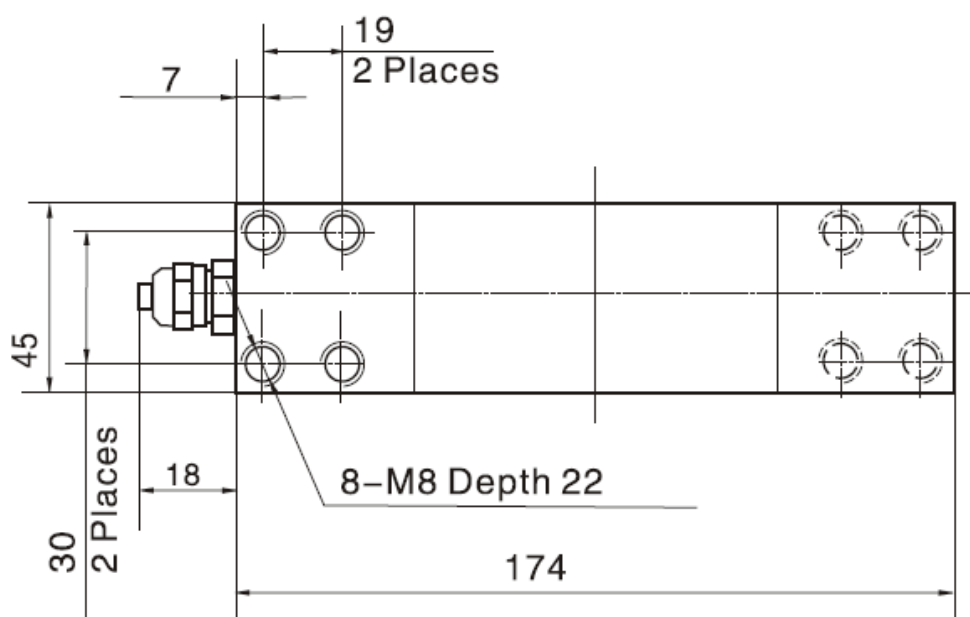
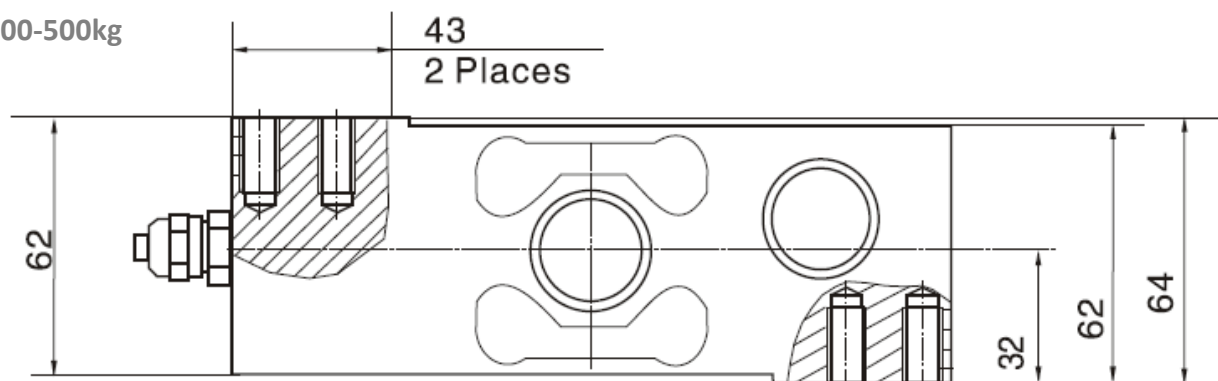
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Dimensions in mm

10-50kg



100-500kg



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