



## Short Description



- Stainless steel micro tension-compression sensor
- IP67 Ingress protection
- High precision
- High reliability
- Suitable for robotics, incl. linear actuators,
- Easy integration; various communication protocols available

Non-OIML approved

## Available Models

| Capacity | Accuracy | Full Article Description |
|----------|----------|--------------------------|
| 200N     | 0.2%     | BM24F-0.2-200N-1B        |
| 500N     | 0.2%     | BM24F-0.2-500N-1B        |
| 1000N    | 0.2%     | BM24F-0.2-1000N-1B       |
| 2000N    | 0.2%     | BM24F-0.2-2000N-1B       |
| 5000N    | 0.2%     | BM24F-0.2-5000N-1B       |
| 8000N    | 0.2%     | BM24F-0.2-8000N-1B       |

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

## Technical Specifications BM24F-0.2-xxxN-1B

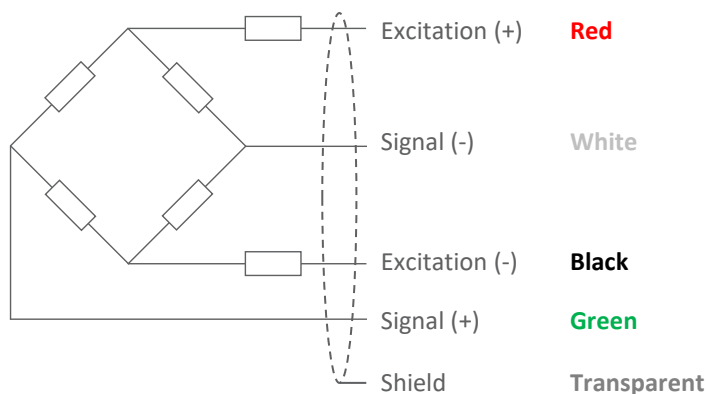
|  |            |                                  |
|--|------------|----------------------------------|
| Accuracy Class                             |            | 0.2%                             |
| Maximum Capacity ( $E_{max}$ )             | N          | 200, 500, 1000, 2000, 5000, 8000 |
| Output Sensitivity ( = FS )                | mV/V       | $2.0 \pm 0.1$                    |
| Non-Linearity                              | %FS        | $\leq \pm 0.2$                   |
| Repeatability                              | %FS        | $\leq \pm 0.1$                   |
| Hysteresis                                 | %FS        | $\leq \pm 0.2$                   |
| Creep Error (30 minutes)                   | %FS        | $\leq \pm 0.1$                   |
| Temperature Effect on Zero (ZTC)           | %FS/10°C   | $\leq \pm 0.1$                   |
| Temperature Effect on Sensitivity (STC)    | %FS/10°C   | $\leq \pm 0.1$                   |
| Zero Balance                               | %FS        | $\leq \pm 1.0$                   |
| Safe Overload                              | %FS        | 150                              |
| Ultimate Overload                          | %FS        | 200                              |
| Excitation, Recommended Voltage            | $V_{DC}$   | 5 ~ 12                           |
| Excitation, Maximum Voltage                | $V_{DC}$   | $\leq 18$                        |
| Input Resistance                           | $\Omega$   | $730 \pm 20$                     |
| Output Resistance                          | $\Omega$   | $700 \pm 10$                     |
| Insulation Resistance (50V <sub>DC</sub> ) | M $\Omega$ | $\geq 5000$                      |
| Compensated Temperature                    | °C         | -10 ~ + 40                       |
| Operating Temperature                      | °C         | -20 ~ + 80                       |
| Load Cell Weight                           | g          | 53                               |
| Element Material                           |            | Stainless Steel                  |
| Ingress Protection (acc. to EN 60529)      |            | IP67                             |

## Wiring

### Features:

Cable type: Shielded, 4 conductor cable , conductor AWG 30  
 Cable diameter:  $\varnothing$  3.0mm  
 Cable length: 1000mm (*Customized lengths are available upon request*)  
 Cable jacket: PVC (black)  
 Shield not connected to element

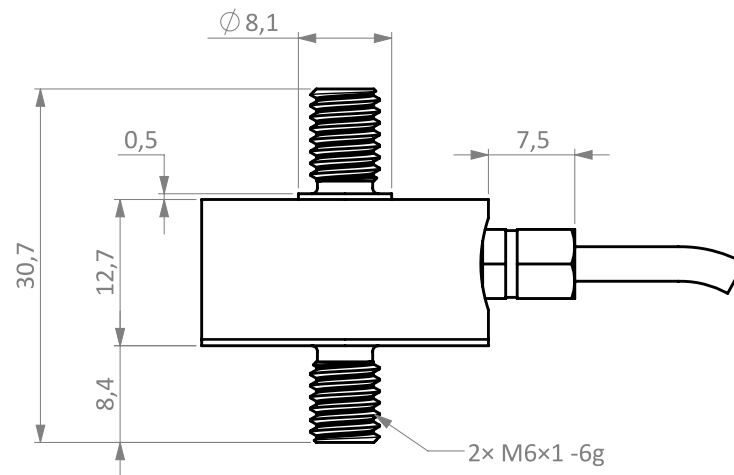
### 4-Wire Connection Diagram



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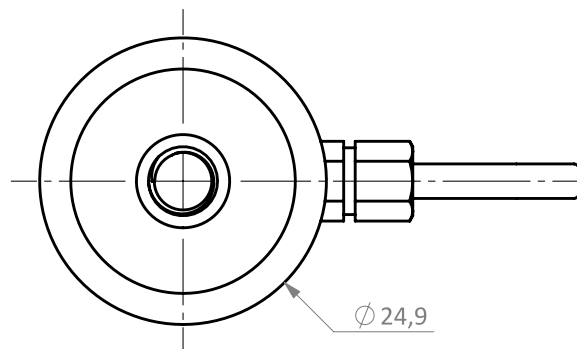
## Dimensions in mm

### Front View



Note: the 8000N version uses 2x M8 threading

### Top View



### Isometric View

