

# MB504

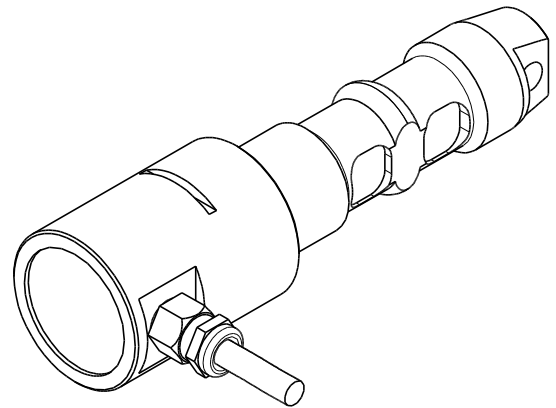
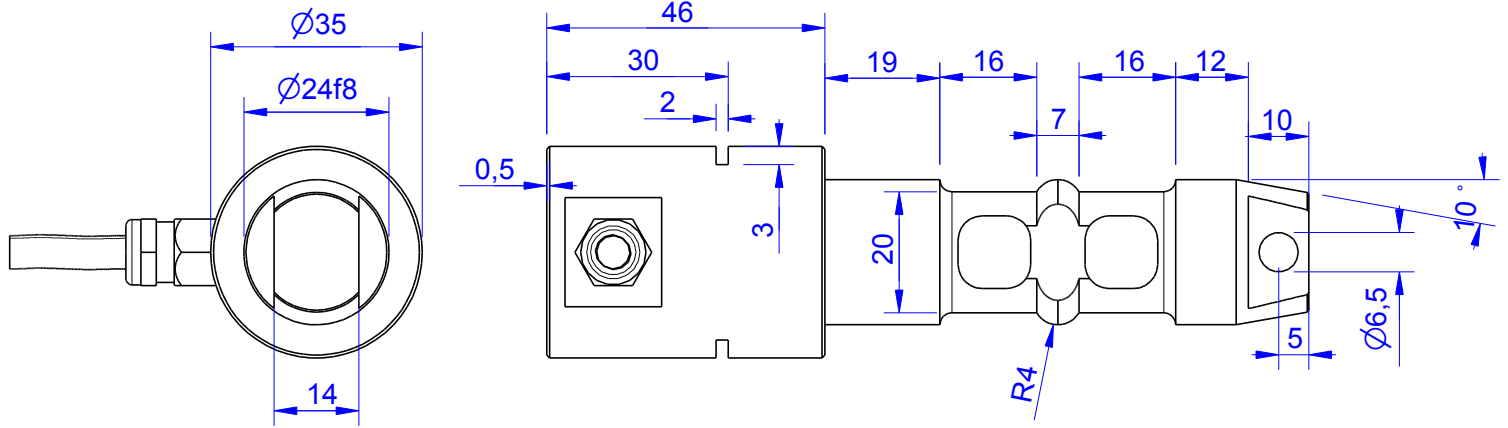
Load Pin

## Content of Loadpin Datasheet

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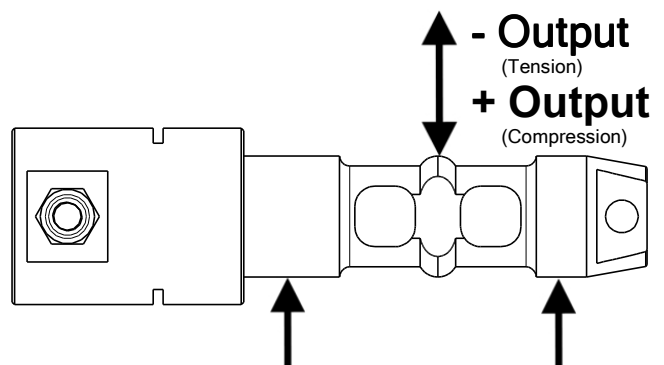
| Order-number | Capacity (F.S.) | Uncertainty (k=2) | Review |
|--------------|-----------------|-------------------|--------|
| MB504-1-x-B  | 1 kN            | ±0,005kN          | B      |
| MB504-2-x-B  | 2 kN            | ±0,1 kN           | B      |
| MB504-6-x-B* | 6 kN            | ±0,03 kN          | B      |
| MB504-10-x-B | 10 kN           | ±0,5 kN           | B      |
| MB504-20-x-B | 20 kN           | ±0,10kN           | B      |

\* above showed version

The fixed dimensions don't change at the other capacity.

### Specifications: (Customizing on request)

| Dimension / Material   |              |                 |
|------------------------|--------------|-----------------|
| Material               |              | Stainless Steel |
| Protection class       |              | IP 66           |
| Hardness (load area)   | HRC          | 38              |
| <b>Mechanical Data</b> |              |                 |
| Safe Load Limit        | % of F.S.    | 150             |
| Breaking Load          | % of F.S.    | 300             |
| <b>Precision</b>       |              |                 |
| Nonlinearity           | % of F.S.    | ±0,5            |
| Nonrepeatability       | % of F.S.    | ±0,25           |
| Hysteresis             | % of F.S.    | ±0,2            |
| Temp. Shift Zero       | % of F.S./K. | ±0,05           |
| Temp. Shift Span       | % of F.S./K. | ±0,05           |
| <b>Temperature</b>     |              |                 |
| Compensated Temp.      | °C           | -10...+60       |
| Operating Temp.        | °C           | -20...+70       |



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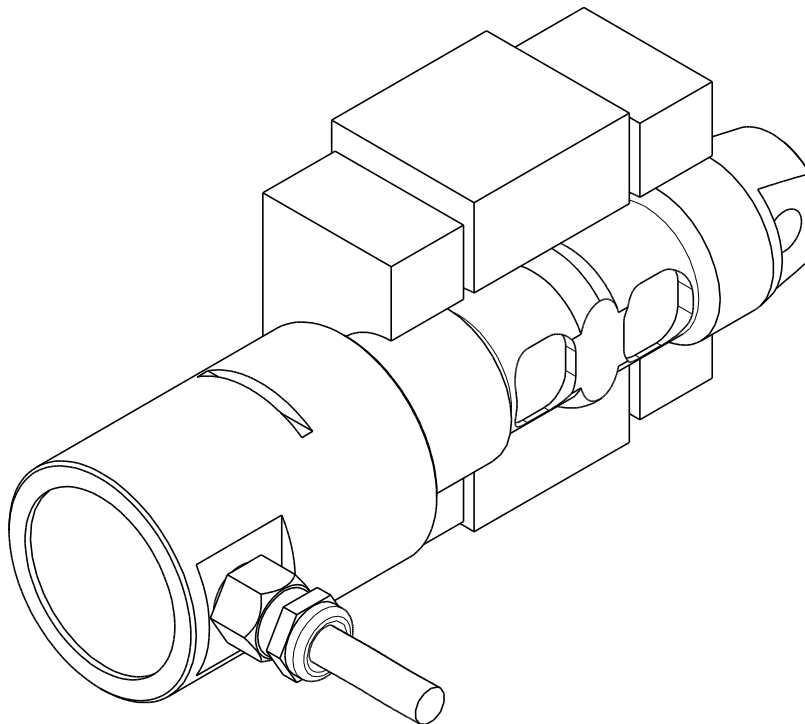
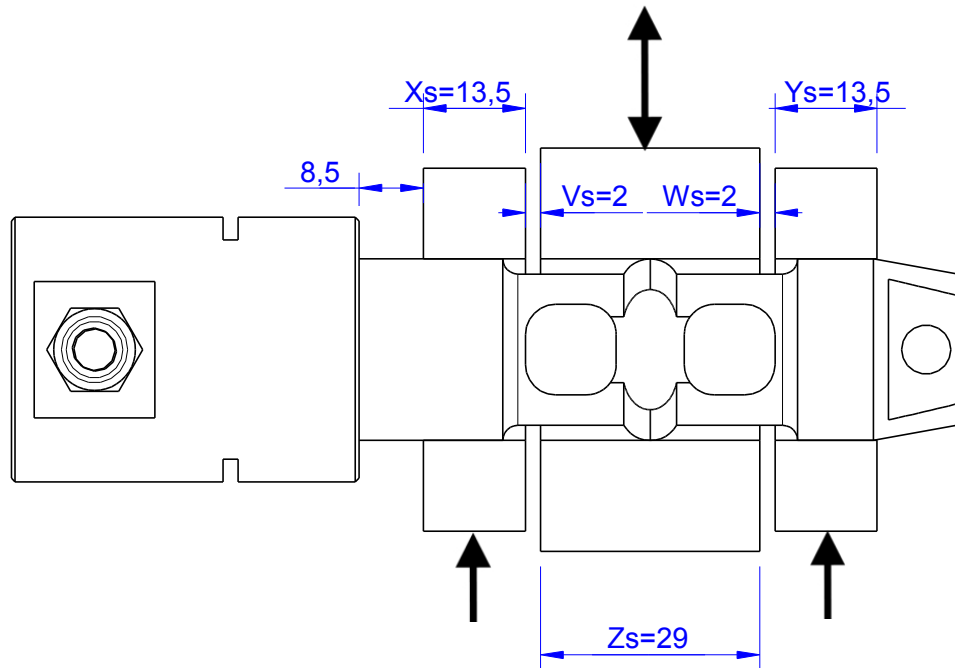
# Mounting Situation

MB504 Review: B

## Configuration 1 (Standard)

possible Mounting Situation / Customer Mounting could vary

(Please describe Mounting situation with Vs,Ws,Xs,Ys and Zs for best possible calibration)



# Output Signal & Wiring

Loadpin: MB504

Review: B

## Analog Output mV/V (S1)


| Electrical Data       |           |         |
|-----------------------|-----------|---------|
| Rated Output          | mV/V@F.S. | 2       |
| Zero Balance          | mV/V      | ±0,05   |
| Excitation (Maximum)  | Volt      | 10      |
| Input Resistance      | Ohm       | 450±100 |
| Output Resistance     | Ohm       | 352±2   |
| Insulating Resistance | GOhm      | >5      |

|                  |                |                 |            |            |
|------------------|----------------|-----------------|------------|------------|
| Wiringcode: WC52 |                | Cabletype: 24-4 |            |            |
| Cable Length     | Excitation (+) | Excitation (-)  | Bridge (+) | Bridge (-) |
| 3 m              | brown          | white           | green      | yellow     |

**Ordernumber Add on:**  
**MB504-x-S1-x**

## Analog Output 1..10V (U1)


| Electrical Data U1  |     |            |
|---------------------|-----|------------|
| Output @ 0kN        | V   | 1±0,2      |
| Output @ F.S.       | V   | 10±0,2     |
| Supply Voltage      | V   | 24±2       |
| Current Consumption | mA  | 25 (@ 24V) |
| Bandwidth           | kHz | 2,2±0,2    |

|  |            |                           |        |
|--|------------|---------------------------|--------|
| Wiringcode: WC36   |            | Connectortype: M12 (male) |        |
|  | Supply (+) | GND                       | Output |
|  | Pin 1      | Pin 3                     | Pin 4  |

**Ordernumber Add on:**  
**MB504-x-U1-x**

## Analog & Digital Output 0..10V (U20)


| Electrical Data U20    |    |                |
|------------------------|----|----------------|
| Output @ 0kN           | V  | 0              |
| Output @ F.S.          | V  | 10             |
| Supply Voltage         | V  | 11..30         |
| Current Consumption    | mA | 15 (@ 24V)     |
| Bandwidth              | Hz | 105            |
| Switching Output       |    | Open Collector |
| max. Switching current | mA | 100            |

|  |       |               |       |  |
|--|-------|---------------|-------|--|
| Wiringcode: WC39                               |       |               |       |  |
| Integrated Amplifier: GSV-15                   |       |               |       |  |
| Cabeling: M12 Male Socket / Flanschdose (male) |       |               |       |  |
| Supply(+)                                      | Pin 1 | Scale         | Pin 5 |  |
| Ground (-)                                     | Pin 3 | Threshold     | Pin 6 |  |
| Output   | Pin 4 | Output Ground | Pin 7 |  |
| Tare   | Pin 2 |               |       |  |

**Ordernumber Add on:**  
**MB504-x-U20-x**

## Analog Output 4..20mA (I1)\*


| Electrical Data I1  |     |            |
|---------------------|-----|------------|
| Output @ 0kN        | mA  | 4±0,5      |
| Output @ F.S.       | mA  | 20±0,5     |
| Supply Voltage      | V   | 24±2       |
| Current Consumption | mA  | 45 (@ 24V) |
| Bandwidth           | kHz | 2,2±0,2    |

|  |            |                           |        |
|--|------------|---------------------------|--------|
| Wiringcode: WC36   |            | Connectortype: M12 (male) |        |
|  | Supply (+) | GND                       | Output |
|  | Pin 1      | Pin 3                     | Pin 4  |

**Ordernumber Add on:**  
**MB504-x-I1-x**

## Analog & Digital Output 4..20mA (I20)\*

| Electrical Data I20    |    |                |
|------------------------|----|----------------|
| Output @ 0kN           | mA | 4              |
| Output @ F.S.          | mA | 20             |
| Supply Voltage         | V  | 11..30         |
| Current Consumption    | mA | 15 (@ 24V)     |
| Bandwidth              | Hz | 105            |
| Switching Output       |    | Open Collector |
| max. Switching current | mA | 100            |

|  |       |               |       |   |
|--|-------|---------------|-------|---|
| Wiringcode: WC39                               |       |               |       |  |
| Integrated Amplifier: GSV-15                   |       |               |       |   |
| Cabeling: M12 Male Socket / Flanschdose (male) |       |               |       |   |
| Supply(+)                                      | Pin 1 | Scale         | Pin 5 |   |
| Ground (-)                                     | Pin 3 | Threshold     | Pin 6 |   |
| Output   | Pin 4 | Output Ground | Pin 7 |   |
| Tare   | Pin 2 |               |       |   |

**Ordernumber Add on:**  
**MB504-x-I20-x**