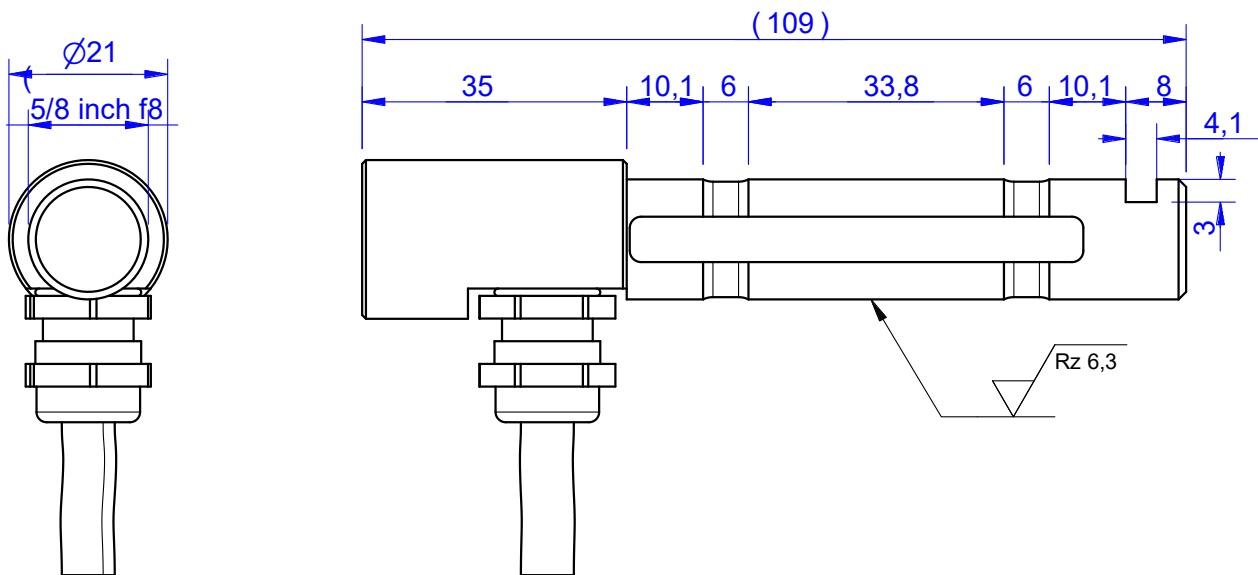


# MB2133

Load Pin

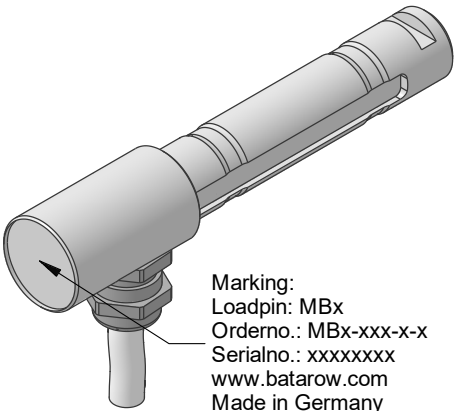
## Content of Loadpin Datasheet

Page 1 ... General  
Page 2 ... Mounting Situation  
Page 3 ... Output Signal & Wiring



| Ordernumber    | Capacity [kN]<br>(F.S.) | Uncertainty [kN]<br>(k=2) | Review |
|----------------|-------------------------|---------------------------|--------|
| MB2133-4-x-D   | 4                       | ± 0,020                   | D      |
| MB2133-5-x-D   | 5                       | ± 0,025                   | D      |
| MB2133-6-x-D   | 6                       | ± 0,030                   | D      |
| MB2133-10-x-D* | 10                      | ± 0,050                   | D      |
| MB2133-12-x-D  | 12                      | ± 0,060                   | D      |

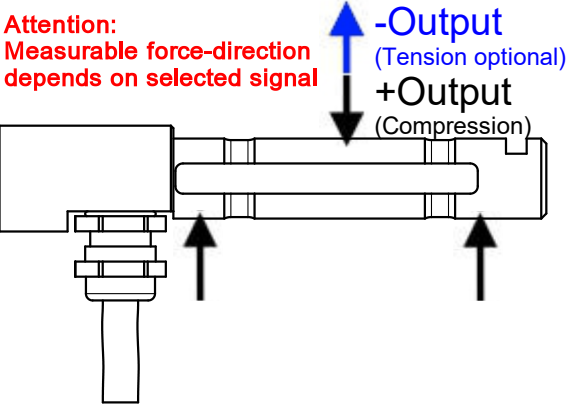
\* above showed version  
fixed dimensions don't change at other capacity



Marking:  
Loadpin: MBx  
Orderno.: MBx-xxx-x-x  
Serialno.: xxxxxxxx  
www.batarow.com  
Made in Germany

### Specifications:

| Dimension / Material   |              |                 |
|------------------------|--------------|-----------------|
| Material               |              | Stainless Steel |
| Protection class       |              | IP 66           |
| Hardness (load area)   | HRC          | 40..45          |
| <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       |



# Mounting Situation

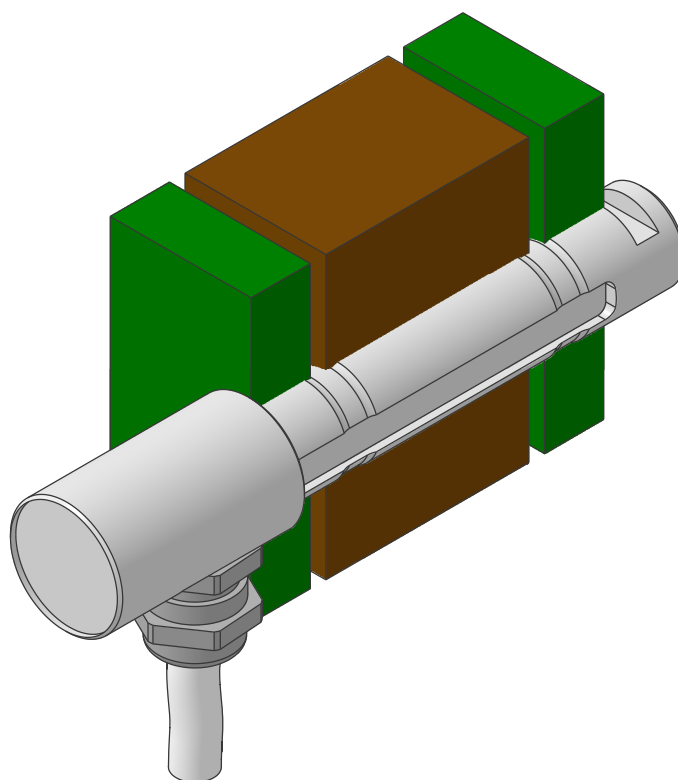
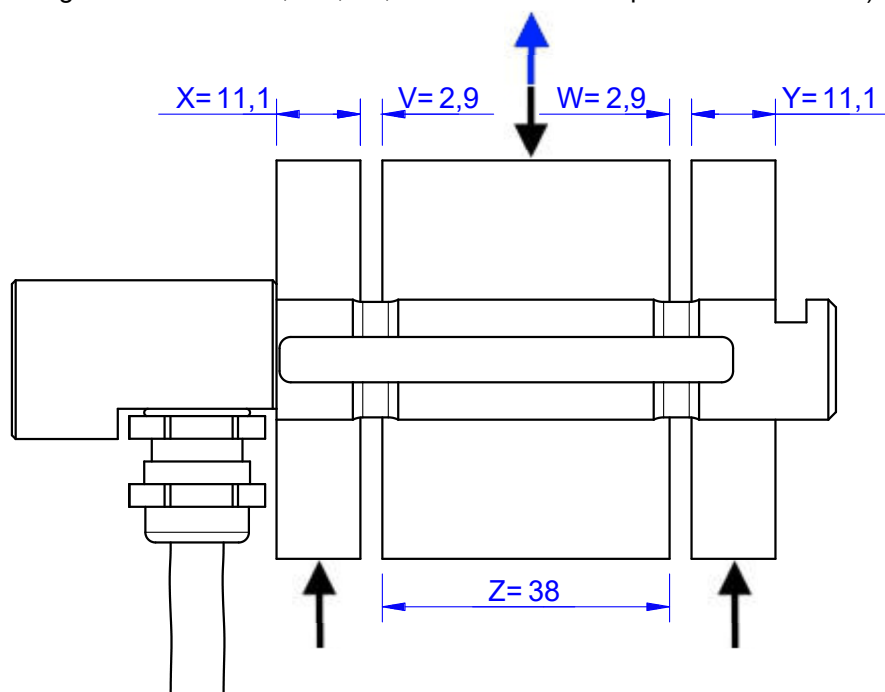
MB2133 Review: D

Bore fit of mounting situation: H7

## Configuration

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

MB2133 Review: D

## Analog Output mV/V (S1)

| Electrical Data       |           |         |
|-----------------------|-----------|---------|
| Rated Output          | mV/V@F.S. | 1       |
| 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 PUR (4x0,14) |            |            |
| Cable Length     | Excitation (+) | Excitation (-)               | Bridge (+) | Bridge (-) |
| 3 m              | brown          | white                        | green      | yellow     |

Ordernumber Add-On:  
MBxxx-x-S1-x

## Analog Output 0V..10V (U1) (only + output compression\*)

| Electrical Data U1  |     |            |
|---------------------|-----|------------|
| Output @ 0kN        | V   | 0          |
| Output @ F.S.       | V   | 10         |
| Supply Voltage      | V   | 14..28     |
| Current Consumption | mA  | 25 (@ 24V) |
| Bandwidth           | kHz | 1          |

|                                           |            |        |        |       |
|-------------------------------------------|------------|--------|--------|-------|
| Wiringcode: WC514                         |            |        |        |       |
| Integrated Amplifier GSV                  |            |        |        |       |
| Cabeling: 3 m 5x0,14 Unitronic FD CP Plus |            |        |        |       |
| Supply(+)                                 | GND Supply | Output | Tare   | Scale |
| brown                                     | white      | green  | yellow | gray  |

Ordernumber Add-On:  
MBxxx-x-U1-x

## Analog Output 4..20mA (I1) (only + output compression\*)

| Electrical Data I1  |     |            |
|---------------------|-----|------------|
| Output @ 0kN        | mA  | 4          |
| Output @ F.S.       | mA  | 20         |
| Supply Voltage      | V   | 9..28      |
| Current Consumption | mA  | 45 (@ 24V) |
| Bandwidth           | kHz | 1          |

|                                           |            |        |        |       |
|-------------------------------------------|------------|--------|--------|-------|
| Wiringcode: WC514                         |            |        |        |       |
| Integrated Amplifier GSV                  |            |        |        |       |
| Cabeling: 3 m 5x0,14 Unitronic FD CP Plus |            |        |        |       |
| Supply(+)                                 | GND Supply | Output | Tare   | Scale |
| brown                                     | white      | green  | yellow | gray  |

Ordernumber Add-On:  
MBxxx-x-I1-x

Attention: Nipple orientation of connector is not fixed. In case of 90° connector - it is necessary to set by customer.

\*Attention: With this output configuration is no negative signal (Tension) possible. Please ask our engineering for 4..12..20mA; 1..5..9V or ±10V versions.

**Batarow**  
Made in Germany

Batarow Sensorik GmbH  
Gewerbegebiet 4  
18276 Lüssow OT Karow

Mail: [info@batarow.com](mailto:info@batarow.com)  
Phone: +49 (0) 3843-855555  
Fax : +49 (0) 3843-855556

Internet:  
[www.batarow.com](http://www.batarow.com)