

# MB1663

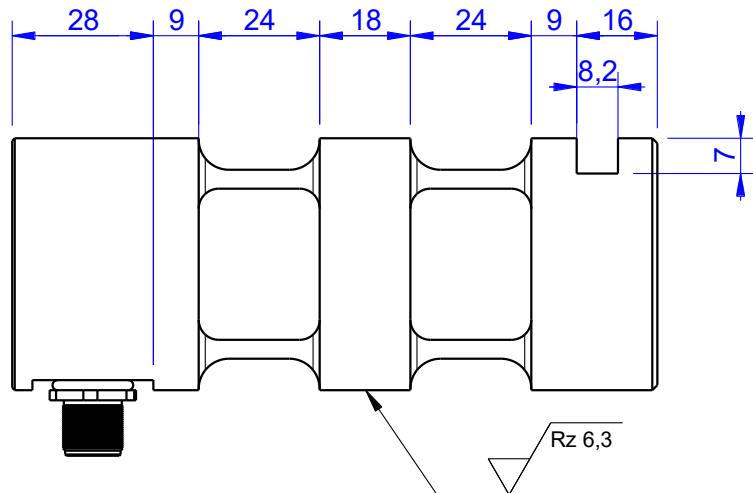
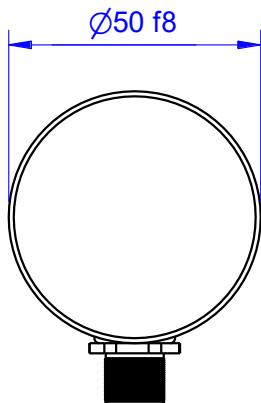
Load Pin

## Content of Loadpin Datasheet

Page 1 ... General

Page 2 ... Mounting Situation

Page 3 ... Output Signal & Wiring

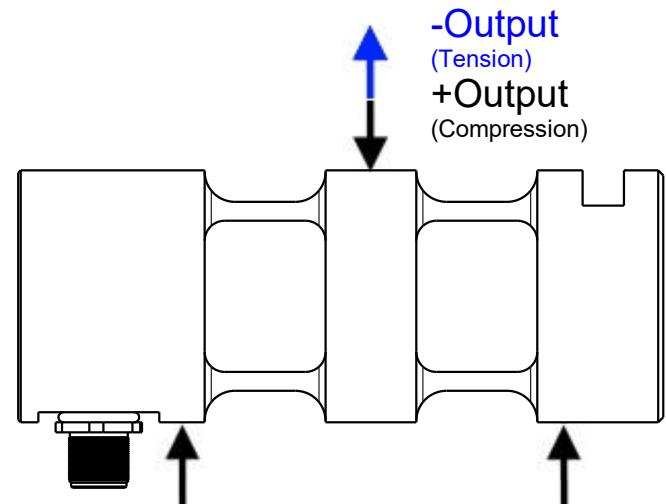
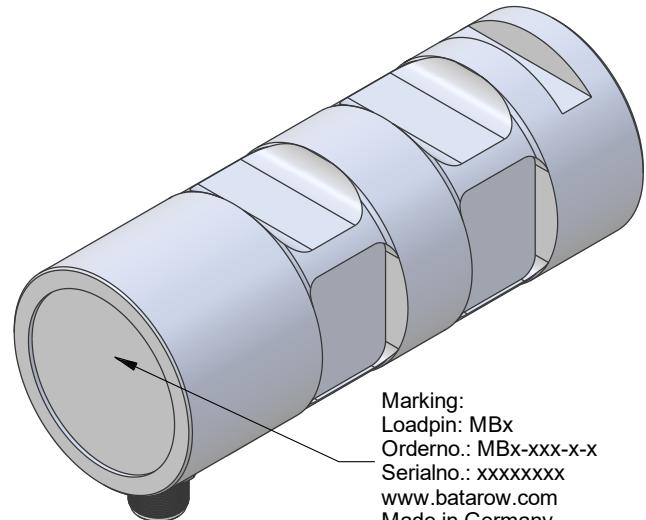


Ordernumber	Capacity [kN] (F.S.)	Uncertainty [kN] (k=2)	Review
MB1663-20-x-A	20	± 0,10	A
MB1663-50-x-A	50	± 0,25	A
MB1663-100-x-A*	100	± 0,50	A
MB1663-140-x-A	140	± 0,70	A
MB1663-200-x-A	200	± 1,00	A

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

## Specifications:

Dimension / Material		
Material		
Protection class		
Hardness (load area)	HRC	Stainless Steel IP 66 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

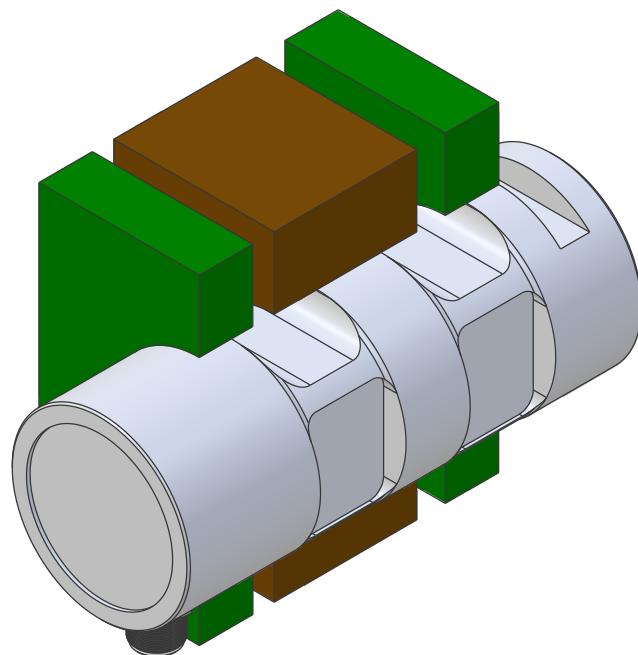
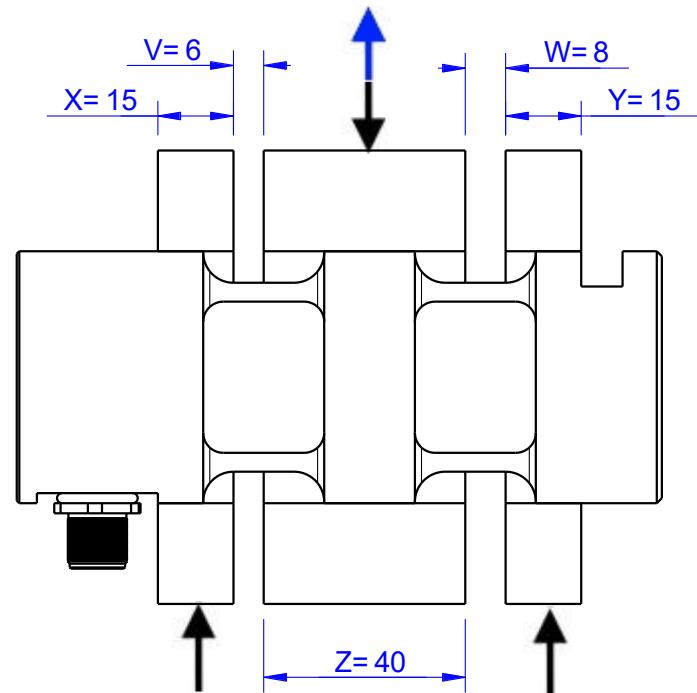
MB1663 Review: A

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

MB1663 Review: A

## Analog Output mV/V (S1)\*

Electrical Data		
Rated Output	mV/V@F.S.	1
Zero Balance	mV/V	$\pm 0,05$
Excitation (Maximum)	Volt	10
Input Resistance	Ohm	$450 \pm 100$
Output Resistance	Ohm	$352 \pm 2$
Insulating Resistance	GOhm	>5

Wiringcode: WC58	Connectortype: M12 (male)			
2 3 4	Excitation (+) Pin 1	Excitation (-) Pin 2	Bridge (+) Pin 3	Bridge (-) Pin 4

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

## Analog Output 0V..10V (U1)\*

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: WC46	Connectortype: M12 (male plug)					
2 3 4 5 6	View: plug side	Supply (+) Pin 1	Output Pin 4	GND Pin 3	Tara Pin 2	Scale Pin 5

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

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

Electrical Data I1		
Output @ 0kN	mA	4
Output @ F.S.	mA	20
Supply Voltage	V	14..28
Current Consumption	mA	45 (@ 24V)
Bandwidth	kHz	1

Wiringcode: WC46	Connectortype: M12 (male plug)					
2 3 4 5 6	View: plug side	Supply (+) Pin 1	Output Pin 4	GND Pin 3	Tara Pin 2	Scale Pin 5

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

## Analog & Switch Output 0V..10V (U20)\*

Electrical Data U20		
Output @ 0kN	V	0
Output @ F.S.	V	10
Supply Voltage	V	9..28
Current Consumption	mA	15 (@ 24V)
Bandwidth	Hz	2000
Switching Output		Open Collector
max. Switching current	mA	100

Wiringcode: WC39	Integrated Amplifier: GSV-6
Cabling: M12 Male Socket / Flanschstecker (male)	
Supply(+)	Pin 1
Ground (-)	Pin 3
Output	Pin 4
Tare	Pin 2

Ordernumber Add-On:  
MBxxx-x-U20-x

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

Electrical Data I20		
Output @ 0kN	mA	4
Output @ F.S.	mA	20
Supply Voltage	V	9..28
Current Consumption	mA	35 (@ 24V)
Bandwidth	Hz	2000
Switching Output		Open Collector
max. Switching current	mA	100

Wiringcode: WC39	Integrated Amplifier: GSV-6
Cabling: M12 Male Socket / Flanschstecker (male)	
Supply(+)	Pin 1
Ground (-)	Pin 3
Output	Pin 4
Tare	Pin 2

Ordernumber Add-On:  
MBxxx-x-I20-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.

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# Performance Level

MB1663 Review: A

## 1. Identification:

ISO 13849-1: 2008 Category 1 PL c

## 2. Classification:

Used standard: DIN EN ISO 13849-1: 2008

Performance Level: Plc

Category: 1

Diagnostic coverage: Low

MTTFd-value: 85,7 years

## 3. Limits for the operation:

All technical information from datasheet have to be considered.

Deviations lead to loss of safety functions: Attention

Only use the loadpin within the temperature limits of -20° C to +70 ° C

Use the right range of supply voltage

Protect the loadpin of mechanical overload

## 4. Lifetime

The calculations are based on a lifetime of 20 years in continuous operation with a maximum duty cycles of from 5,000 cycles per year.

## 5. Error display:

The error display is performed by the undershoot and overshoot of the signal.

### Output signal:

Error 1: the output signal is less -0,05 mV/V

Error 2: the output signal is greater +1,05 mV/V

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