

# MB1903

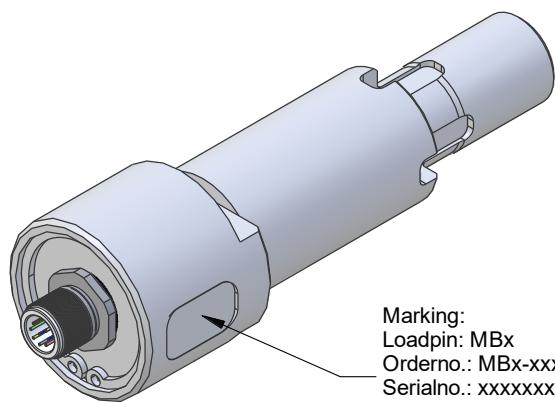
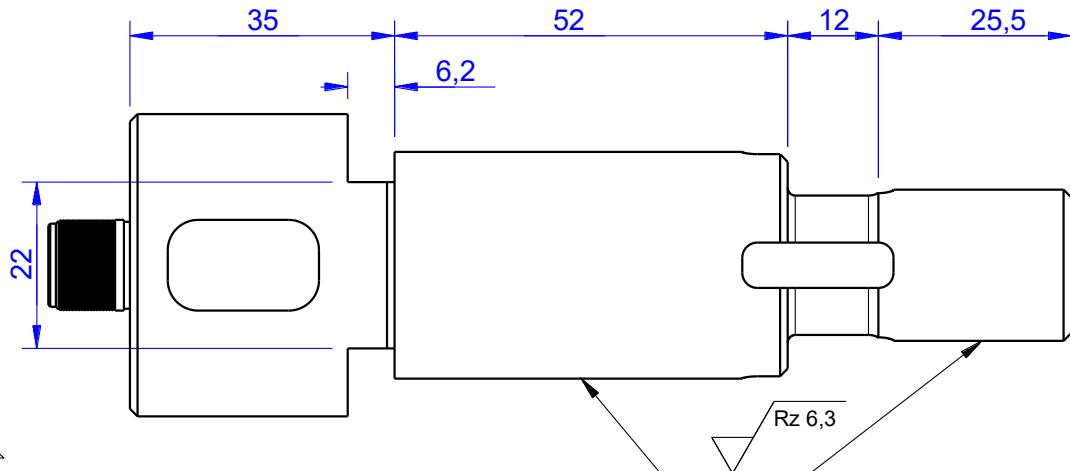
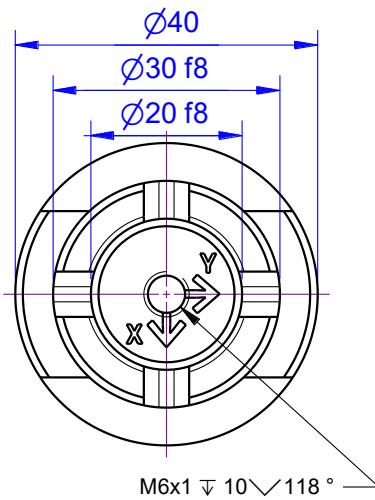
X-Y-Axis Load Pin

## Content of Loadpin Datasheet

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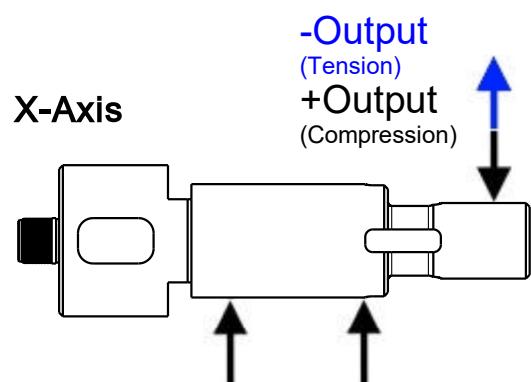
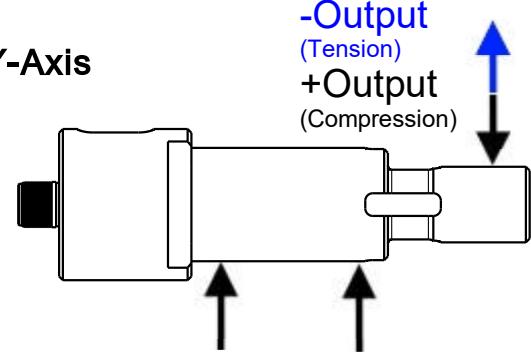
Marking:  
Loadpin: MBx  
Orderno.: MBx-xxx-x-x  
Serialno.: xxxxxxxx  
www.batarow.com  
Made in Germany

Ordernumber	Capacity [kN] (F.S.)	Uncertainty [kN] (k=2)	Review
MB1903-1-x-B	1	± 0,005	B
MB1903-2-x-B	2	± 0,010	B
MB1903-4-x-B	4	± 0,020	B
MB1903-5-x-B	5	± 0,025	B
MB1903-5,5-x-B*	5,5	± 0,028	B

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

## Specifications:

Dimension / Material		
Material		
Protection class		
Hardness (load area)	HRC	
<b>Mechanical Data</b>		
Safe Load Limit	% of F.S.	Stainless Steel
Breaking Load	% of F.S.	IP 66
<b>Precision</b>		40..45
Nonlinearity	% of F.S.	120
Nonrepeatability	% of F.S.	250
Hysteresis	% of F.S.	±0,5
Temp. Shift Zero	% of F.S./K.	±0,25
Temp. Shift Span	% of F.S./K.	±0,2
<b>Temperature</b>		±0,05
Compensated Temp.	°C	±0,05
Operating Temp.	°C	-10...+60
		-20...+70



# Mounting Situation

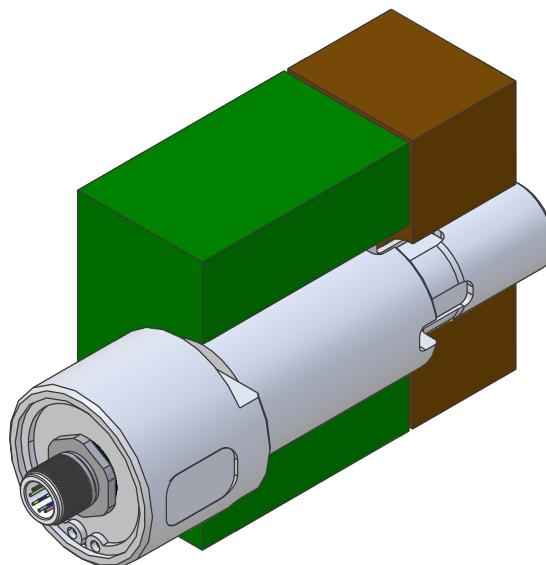
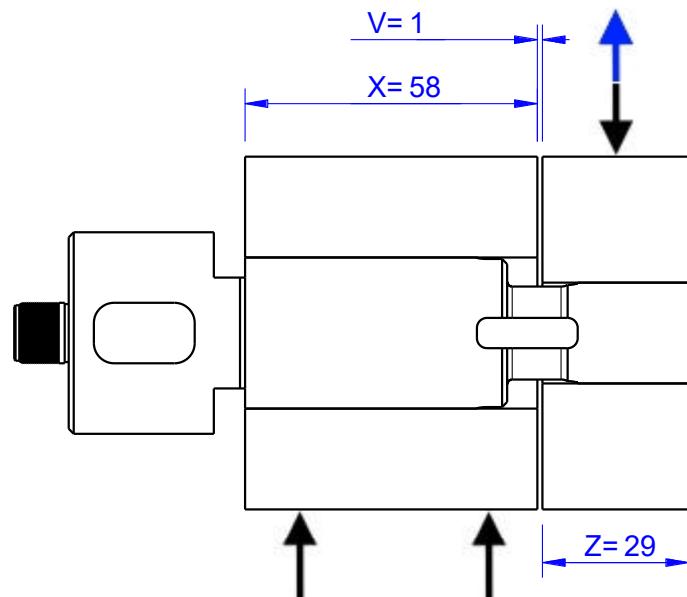
MB1903 Review: B

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)



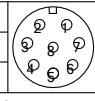
# Output Signal & Wiring

MB1903 Review: B

## 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: WC65 (Channel 1 & 2)			
Cabling: M12 Male Socket / Flanschdose (male)			
+Us (1)	Pin 2 / brown	+Us (2)	Pin 6 / pink
-Us (1)	Pin 1 / white	-Us (2)	Pin 5 / grey
+Ud (1)	Pin 3 / green	+Ud (2)	Pin 7 / blue
-Ud (1)	Pin 4 / yellow	-Ud (2)	Pin 8 / red

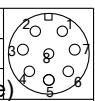


Ordernumber Add-On:  
MBxxx-x-S1-x

## Analog Output 0V..10V (U4)

Electrical Data U4		
Output @ -F.S.	V	0
Output @ 0kN	V	5
Output @ +F.S.	V	10
Supply Voltage	V	14..28
Current Consumption	mA	25 (@ 24V)
Bandwidth	kHz	1

Wiringcode: WC510			
Integrated Amplifier: GSV			
Cabling: M12 Male Socket / Flanschstecker (male)			
Supply(+)	Pin 1	Output X-Axis	Pin 4
Ground(-)	Pin 3	Output Y-Axis	Pin 6
Tare X	Pin 2	Tare Y	Pin 7
Scale X	Pin 5	Scale Y	Pin 8

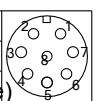


Ordernumber Add-On:  
MBxxx-x-U4-x

## Analog Output 4..20mA (I4)

Electrical Data I4		
Output @ -F.S.	mA	4
Output @ 0kN	mA	12
Output @ +F.S.	mA	20
Supply Voltage	V	9..28
Current Consumption	mA	25 (@ 24V)
Bandwidth	kHz	1

Wiringcode: WC510			
Integrated Amplifier: GSV			
Cabling: M12 Male Socket / Flanschstecker (male)			
Supply(+)	Pin 1	Output X-Axis	Pin 4
Ground(-)	Pin 3	Output Y-Axis	Pin 6
Tare X	Pin 2	Tare Y	Pin 7
Scale X	Pin 5	Scale Y	Pin 8



Ordernumber Add-On:  
MBxxx-x-I4-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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