

# MB977

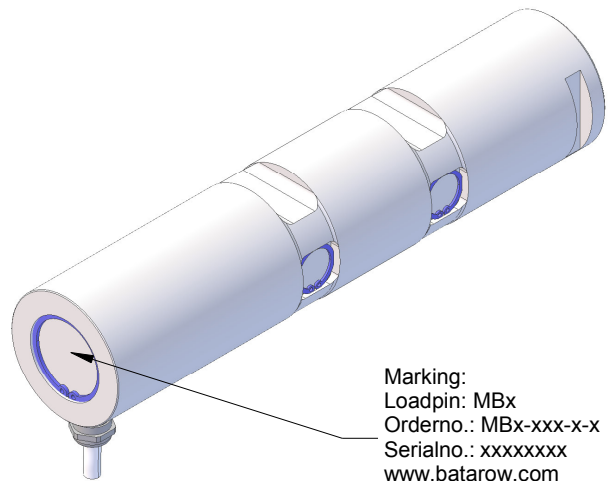
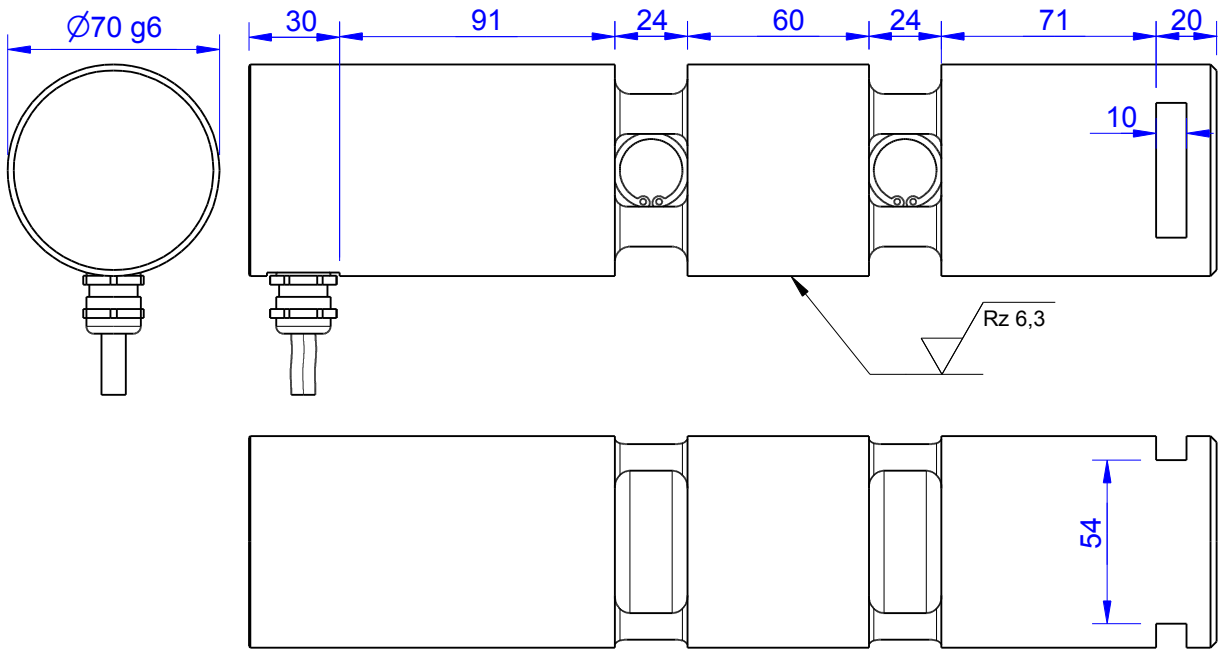
Load Pin

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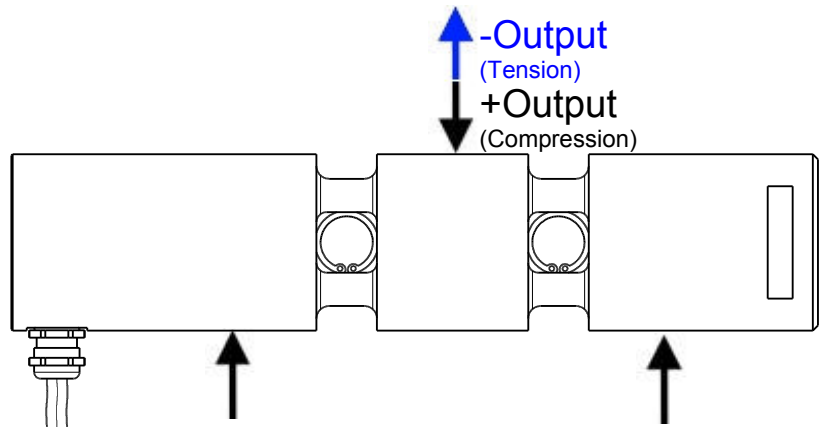
Marking:  
 Loadpin: MBx  
 Orderno.: MBx-xxx-x-x  
 Serialno.: xxxxxxxx  
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Order-number	Capacity (F.S.)	Uncertainty (k=2)	Review
MB977-10-x-C	10 kN	$\pm 0,05$ kN	C
MB977-20-x-C	20 kN	$\pm 0,10$ kN	C
MB977-50-x-C	50 kN	$\pm 0,20$ kN	C
MB977-100-x-C*	100 kN	$\pm 0,50$ kN	C
MB977-500-x-C	500 kN	$\pm 2,50$ kN	C

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

### Specifications:

Dimension / Material		
Material		Stainless Steel
Protection class		IP 68
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.	$\pm 0,5$
Nonrepeatability	% of F.S.	$\pm 0,25$
Hysteresis	% of F.S.	$\pm 0,2$
Temp. Shift Zero	% of F.S./K.	$\pm 0,05$
Temp. Shift Span	% of F.S./K.	$\pm 0,05$
<b>Temperature</b>		
Compensated Temp.	$^{\circ}$ C	-10...+60
Operating Temp.	$^{\circ}$ C	-20...+70



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# Mounting Situation

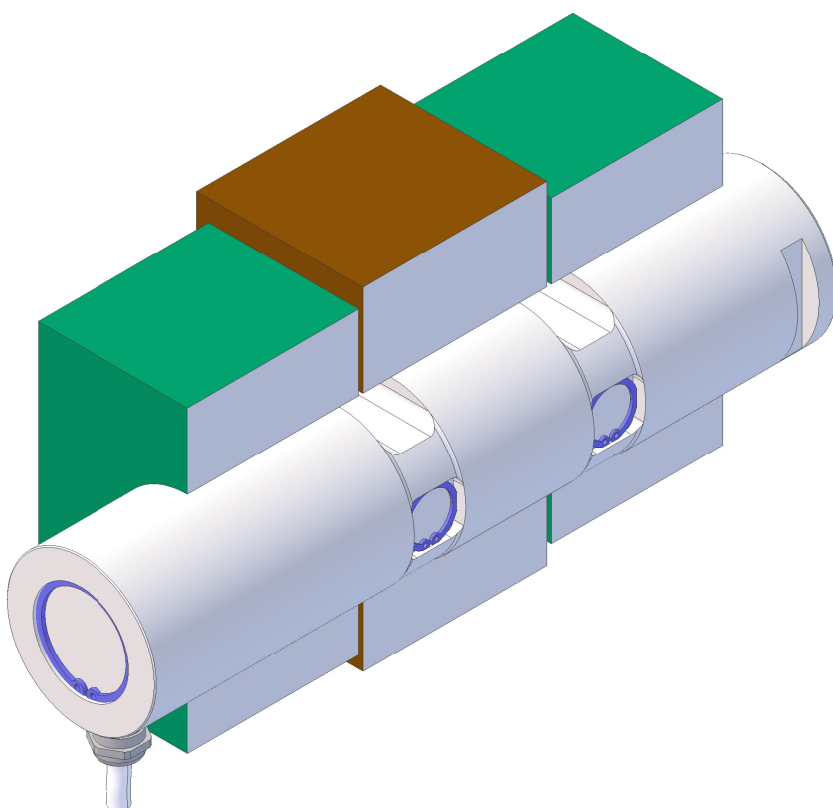
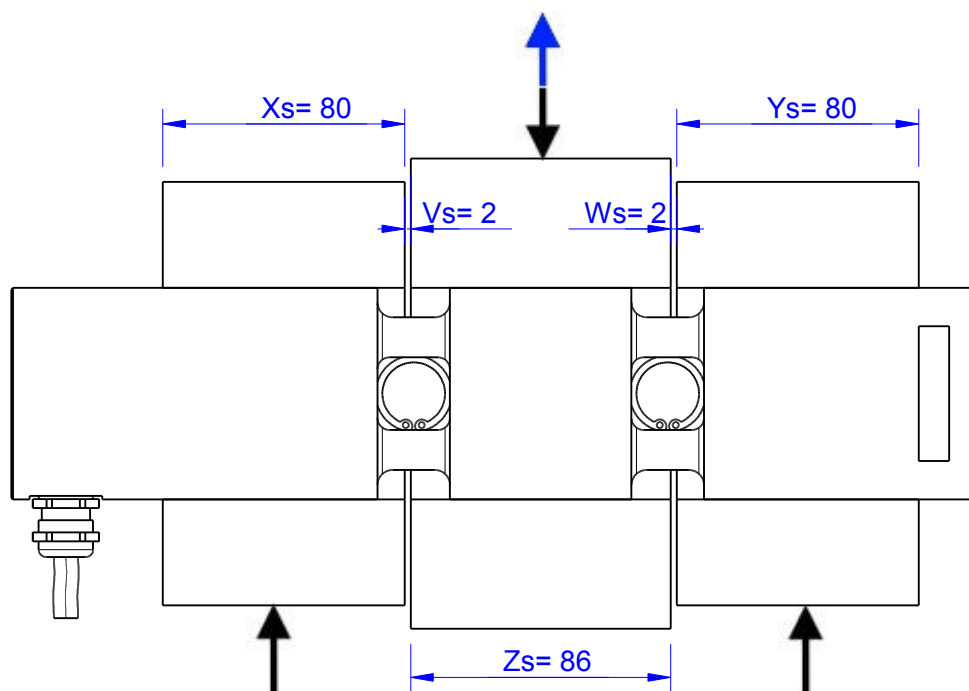
MB977 Review: C

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)



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# Output Signal & Wiring

MB977 Review: C

## 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: 2x2x0,25 PUR		
Cable Length	Excitation (+)	Excitation (-)	Bridge (+)	Bridge (-)
3 m	brown	white	green	yellow

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

## Analog Output 1V..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: WC23			
Cabeling: 3 m 2x2x0,25 PUR			
Supply(+)	Ground (-)	Output	n.c.
brown	white	green	yellow

Ordernumber Add-On:  
MBxxx-x-U1-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: WC23			
Cabeling: 3 m 2x2x0,25 PUR			
Supply(+)	Ground (-)	Output	n.c.
brown	white	green	yellow

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	11..30
Current Consumption	mA	15 (@ 24V)
Bandwidth	Hz	105
Switching Output		Open Collector
max. Switching current	mA	100

Wiringcode: WC24					
Integrated Amplifier GSV-15AL					
Cabeling: 3 m 3x2x0,25					
Supply(+)	Ground (-)	Output	Tare	Scale	Threshold
brown	white	green	yellow	grey	pink

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	11..30
Current Consumption	mA	15 (@ 24V)
Bandwidth	Hz	105
Switching Output		Open Collector
max. Switching current	mA	100

Wiringcode: WC24					
Integrated Amplifier GSV-15AL					
Cabeling: 3 m 3x2x0,25					
Supply(+)	Ground (-)	Output	Tare	Scale	Threshold
brown	white	green	yellow	grey	pink

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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