

MB1421

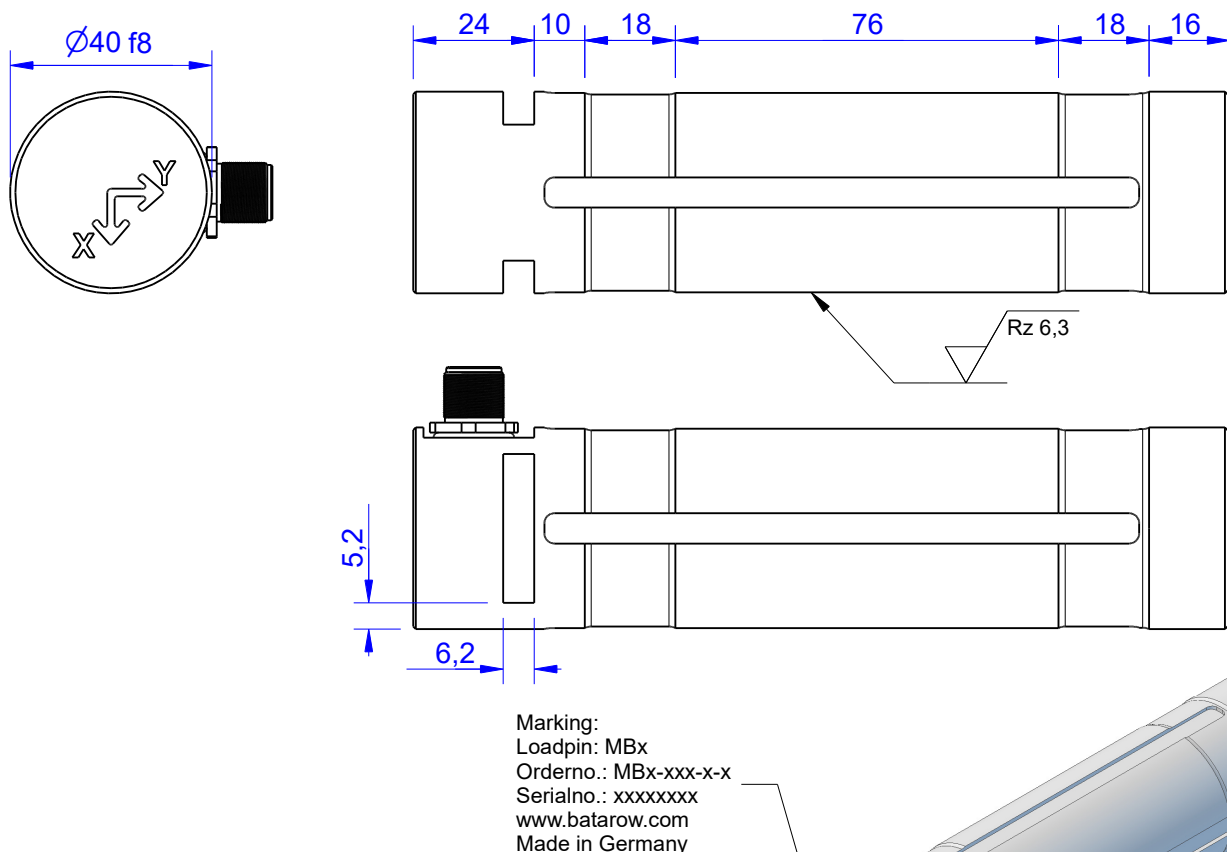
X-Y-Axis Load Pin

Content of Loadpin Datasheet

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Ordernumber	Capacity [kN] (F.S.)	Uncertainty [kN] (k=2)	Review
MB1421-20-x-C	20	± 0,01	C
MB1421-50-x-C	50	± 0,25	C
MB1421-100-x-C	100	± 0,50	C
MB1421-150-x-C	150	± 0,75	C
MB1421-250-x-C*	250	± 1,25	C

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

Specifications:

Dimension / Material		
Material		Steel**
Protection class		IP 64
Hardness (load area)	HRC	55..62
Mechanical Data		
Safe Load Limit	% of F.S.	105
Breaking Load	% of F.S.	150
Precision		
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
Temperature		
Compensated Temp.	°C	-10...+60
Operating Temp.	°C	-20...+70

Y-Axis:

-Output
(Tension)
+Output
(Compression)

X-Axis:

-Output
(Tension)
+Output
(Compression)

** Attention surface of the loadpin can corrode.

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Made in Germany

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Mounting Situation

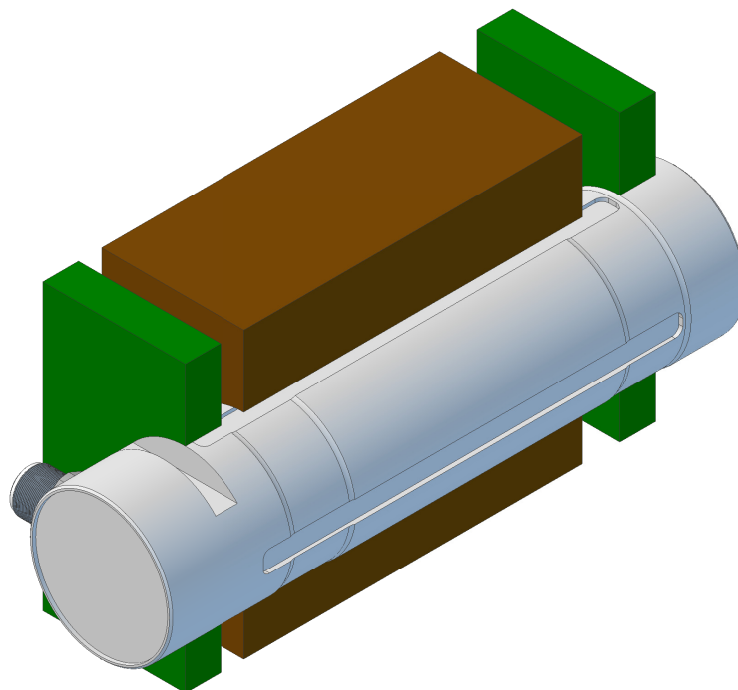
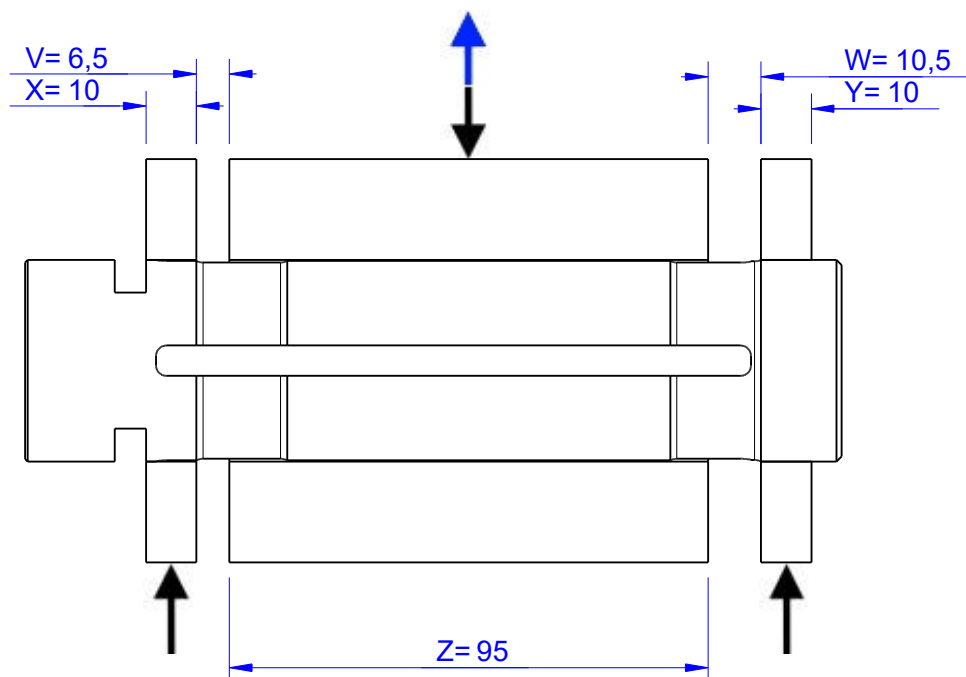
MB1421 Review: C

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)



Output Signal & Wiring

MB1421 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: WC56			
Cabeling: M12 Male Socket / Flanschdose (male)			
+Us (Fx)	Pin 2 / brown	+Us (Fy)	Pin 6 / pink
-Us (Fx)	Pin 1 / white	-Us (Fy)	Pin 5 / grey
+Ud (Fx)	Pin 3 / green	+Ud (Fy)	Pin 7 / blue
-Ud (Fx)	Pin 4 / yellow	-Ud (Fy)	Pin 8 / red



Ordernumber Add-On:

MBxxx-x-S1-x

Analog Output 1V..9V (U4)*

Electrical Data U4		
Output @ -F.S.	V	1±0,2
Output @ 0kN	V	5±0,2
Output @ +F.S.	V	9±0,2
Supply Voltage	V	24±2
Current Consumption	mA	25 (@ 24V)
Bandwidth	kHz	2,2±0,2

Wiringcode: WC48		Connectortype: M12 (male, code A)		
	Supply (+)	GND	Output 1	Output 2
	Pin 1	Pin 2	Pin 3	Pin 4

Ordernumber Add-On:

MBxxx-x-U4-x

Analog Output 4..20mA (I2)*

Electrical Data I2		
Output @ -F.S.	mA	4±0,3
Output @ 0kN	mA	12±0,3
Output @ +F.S.	mA	20±0,3
Supply Voltage	V	24±2
Current Consumption	mA	45 (@ 24V)
Bandwidth	kHz	2,2±0,2

Wiringcode: WC48		Connectortype: M12 (male, code A)		
	Supply (+)	GND	Output 1	Output 2
	Pin 1	Pin 2	Pin 3	Pin 4

Ordernumber Add-On:

MBxxx-x-I2-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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