

MB1643

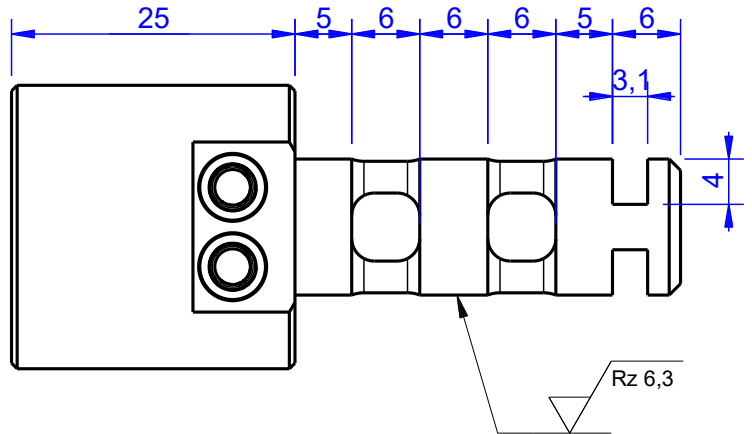
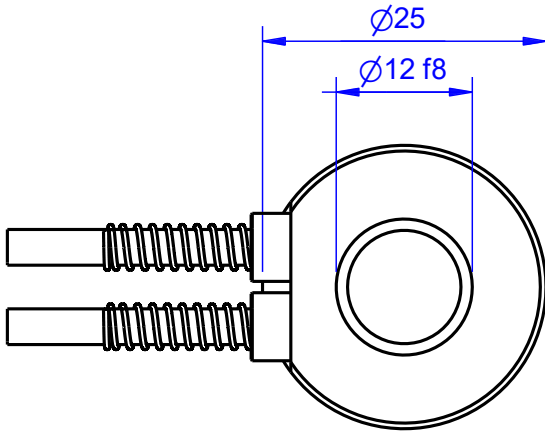
Redundant Load Pin

Content of Loadpin Datasheet

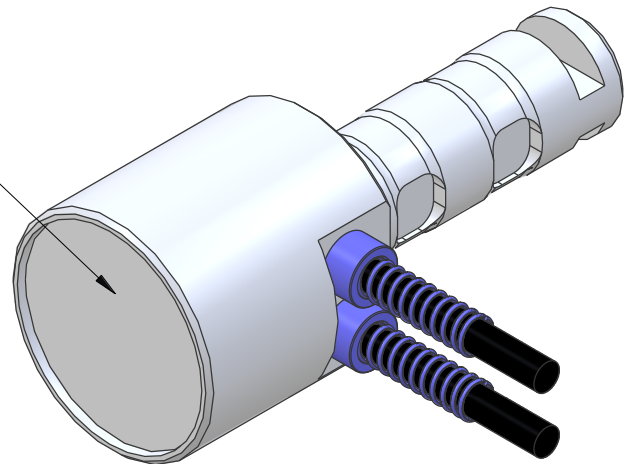
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Marking:
Loadpin: MBx
Orderno.: MBx-xxx-x-x
Serialno.: xxxxxxxx
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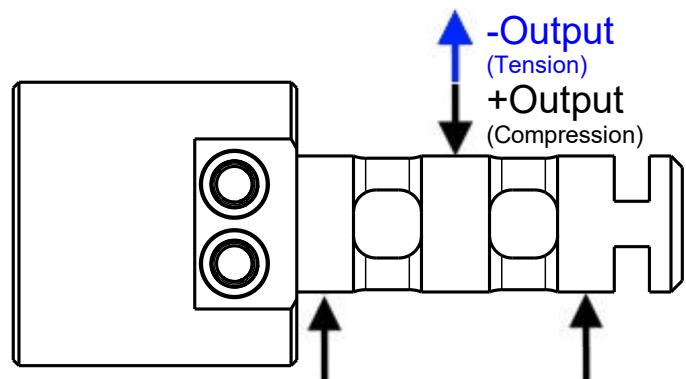


Ordernumber	Capacity [kN] (F.S.)	Uncertainty [kN] (k=2)	Review
MB1643-1-x-A	1	± 0,005	A
MB1643-2-x-A	2	± 0,010	A
MB1643-5-x-A*	5	± 0,025	A
MB1643-10-x-A	10	± 0,050	A

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

Specifications:

Dimension / Material		
Material		Stainless Steel
Protection class		IP 66
Hardness (load area)	HRC	40..45
Mechanical Data		
Safe Load Limit	% of F.S.	150
Breaking Load	% of F.S.	300
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



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Mounting Situation

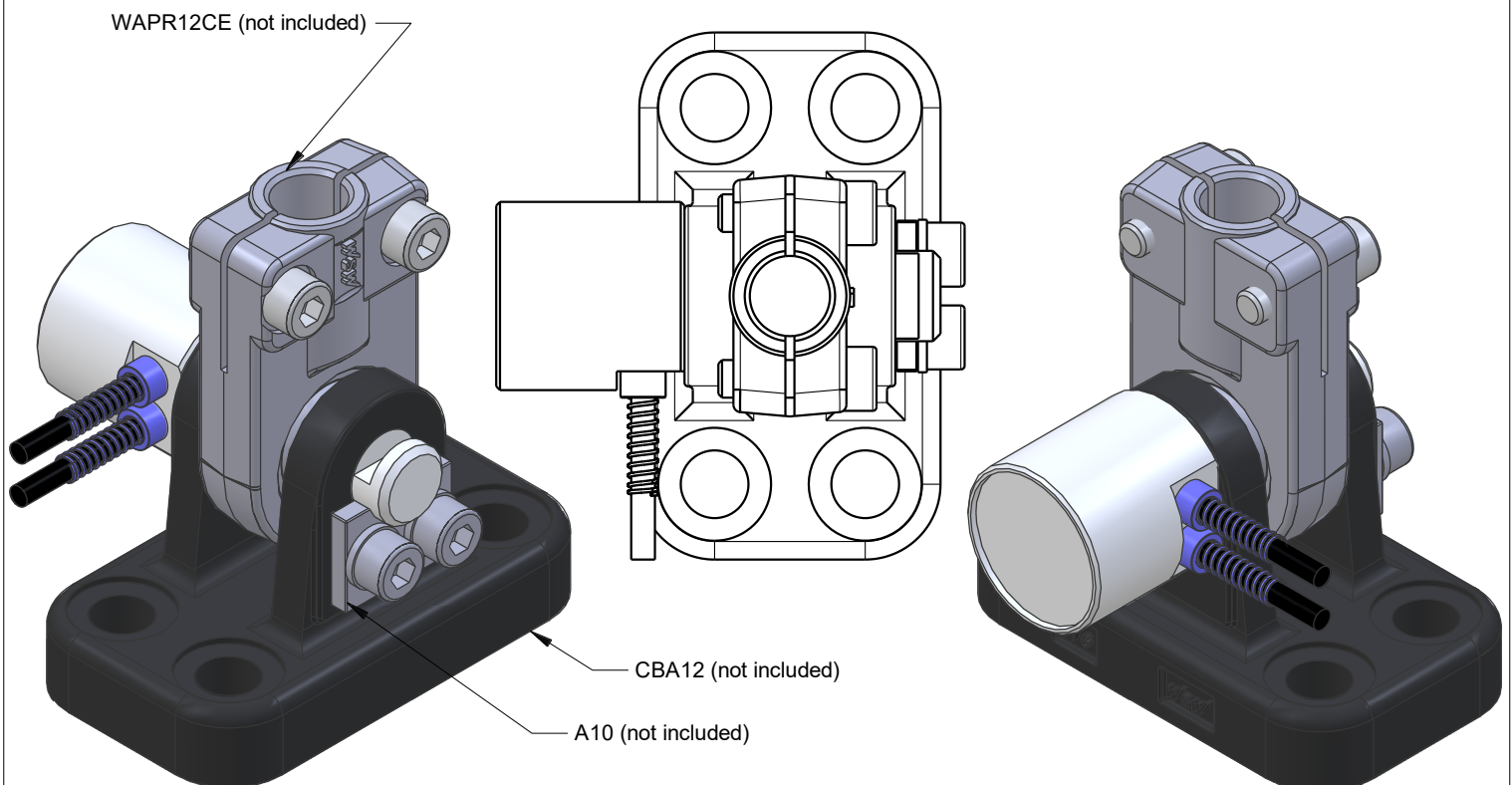
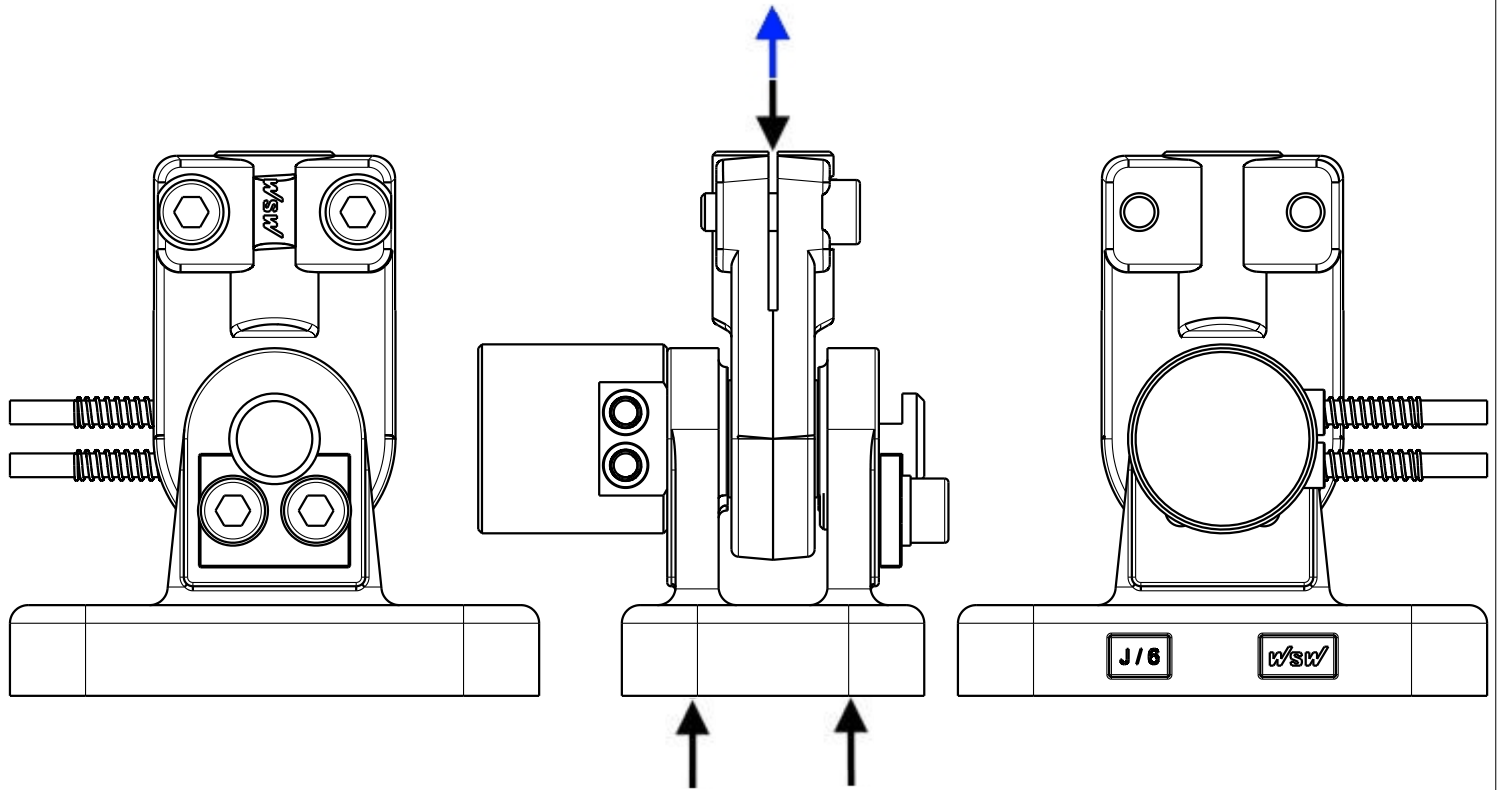
MB1643 Review: A

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)



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Output Signal & Wiring

MB1643 Review: A

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 2x		Cabletype: 24-4		
Cable Length	Excitation (+)	Excitation (-)	Bridge (+)	Bridge (-)
3 m	brown	white	green	yellow

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: WC23 2x			
Cabeling: 3 m 24-4			
Supply(+)	Ground (-)	Output	n.c.
brown	white	green	

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: WC23 2x			
Cabeling: 3 m 24-4			
Supply(+)	Ground (-)	Output	n.c.
brown	white	green	

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.

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Performance Level

MB1643 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: 38,6 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 $+70^{\circ}\text{C}$

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 500,000 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 3,5 mA

Error 2: the output signal is greater 20,5 mA