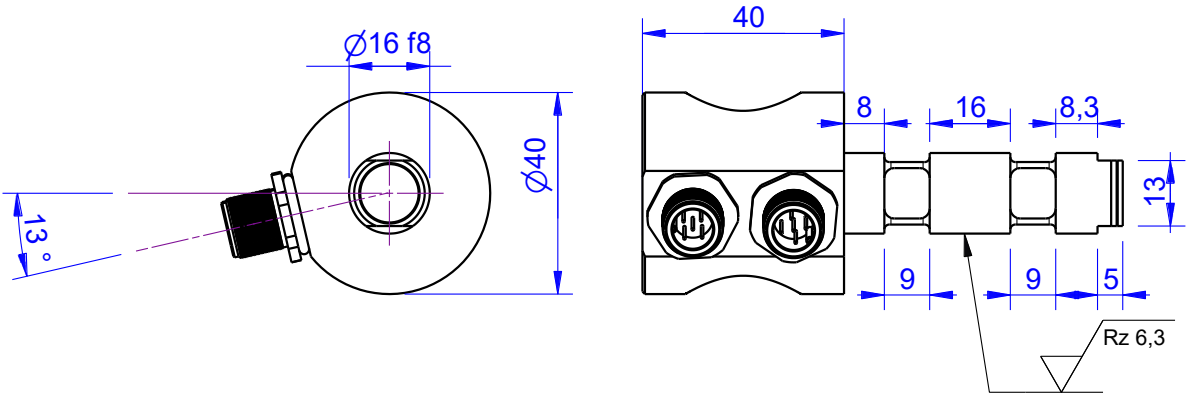
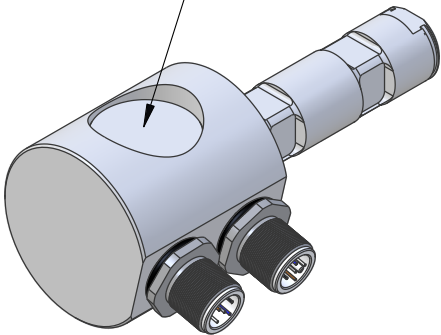


MB1677

Redundant Load Pin



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

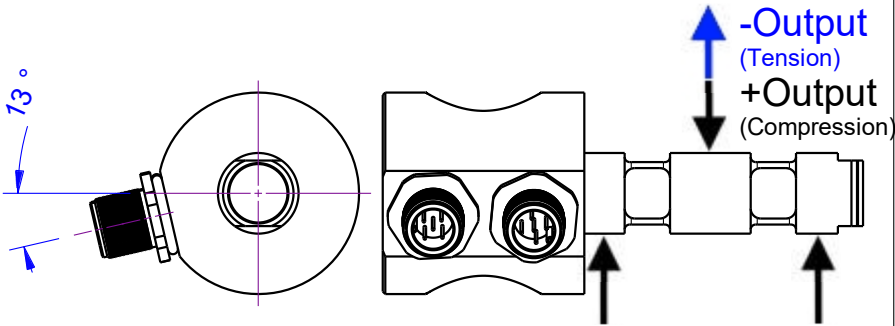


Ordernumber	Capacity [kN] (F.S.)	Uncertainty [kN] (k=2)	Review
MB1677-1-x-A	1	± 0,01	A
MB1677-2-x-A	2	± 0,01	A
MB1677-3-x-A	3	± 0,02	A
MB1677-5-x-A*	5	± 0,03	A
MB1677-10-x-A	10	± 0,05	A

* 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



Mounting Situation

MB1677 Review: A

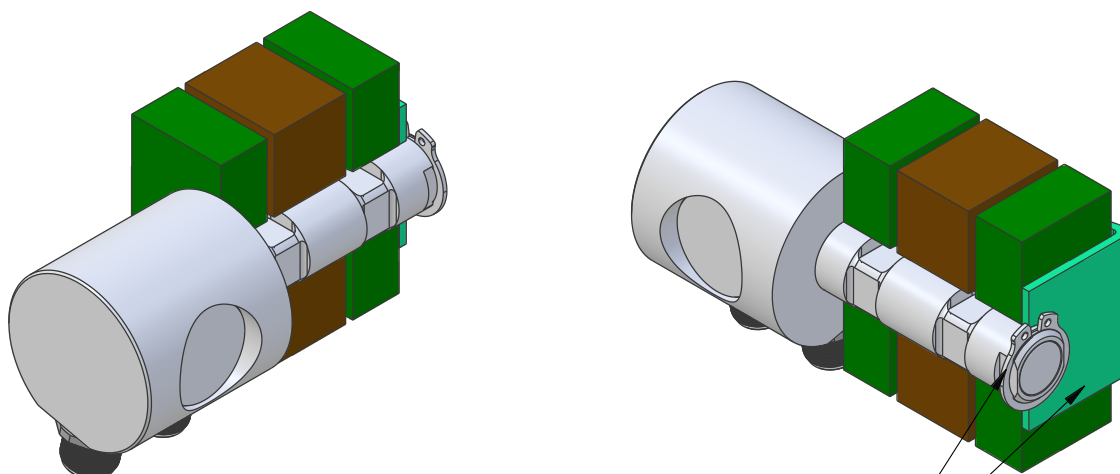
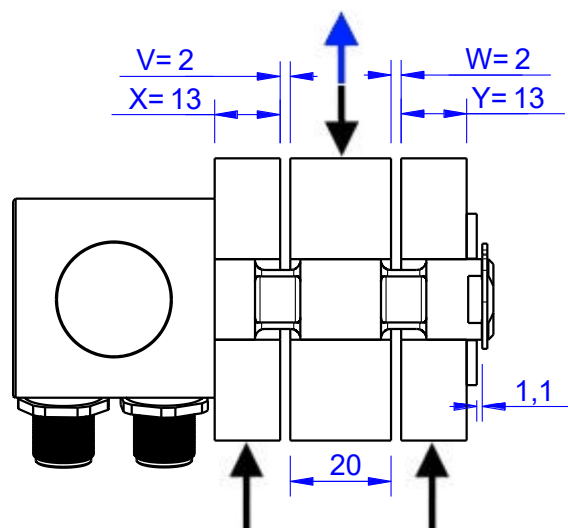
Bore fit of mounting situation: H7

Configuration

possible mounting situation / customer mounting could vary

(Please describe mounting situation with Vs, Ws, Xs, Ys and Zs for best possible calibration)

Customer information: Attention! When installing the Loadpin, the plugs have to be oriented vertically downwards.



Key and external circlip for protection against axial displacement and rotation (not included)

Output Signal & Wiring

MB1677 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: WC58		Connectortype: 2xM12 (male)			
	Exitation (+)	Exitation (-)	Bridge (+)	Bridge (-)	
	Pin 1	Pin 2	Pin 3	Pin 4	

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: WC46		Connectortype: 2xM12 (male plug)			
	Supply (+)	Output	GND	Tara	Scale
Pin 1	Pin 4	Pin 3	Pin 2	Pin 5	

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: WC46		Connectortype: 2xM12 (male plug)			
	Supply (+)	Output	GND	Tara	Scale
Pin 1	Pin 4	Pin 3	Pin 2	Pin 5	

Ordernumber Add-On:
MBxxx-x-I4-x

Performance Level

MB1677 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 ° 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 250,000 cycles per year.

5. Error display:

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

Voltage output:

Error 1: the output voltage is less 0,5V

Error 2: the output voltage is greater 10,5V

Current output:

Error 1: the output current is less 3.5mA

Error 2: the output current is greater 20.5mA