

MB MINIATURE BEAM LOAD CELL (U.S. & METRIC)

FEATURES & BENEFITS

- Capacities from 5 to 250 lbf (22.2 to 1.11 kN)
- Proprietary Interface temperature compensated strain gages
- Performance to 0.03%
- Low height – 1 in (25.4 mm)
- 0.0008%/°F temp. effect on output

STANDARD CONFIGURATION



Model MB (Shown)

OPTIONS

- Cable length
- Standardized output
- Custom calibration
- Add connector to cable
- Special temperature range
- Transducer Electronic Data Sheet (TEDS)

ACCESSORIES

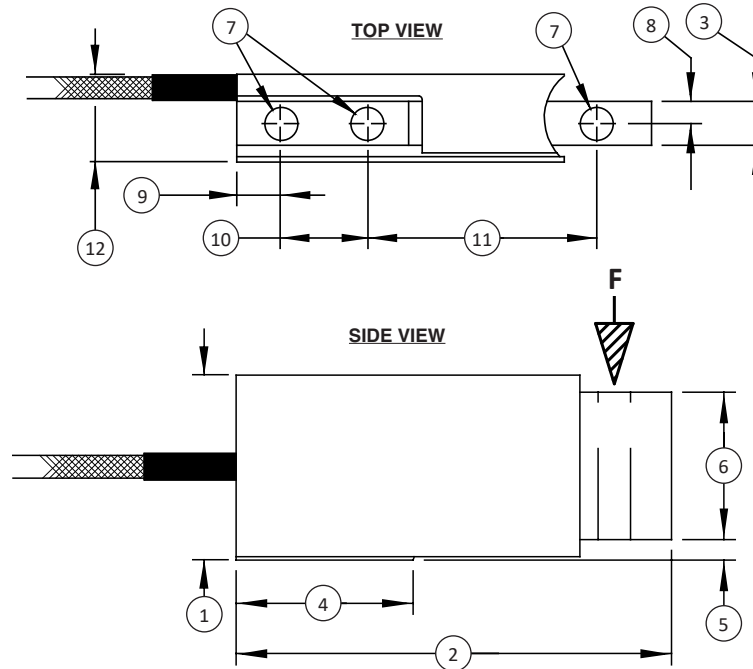
- Instrumentation

SPECIFICATIONS

ACCURACY – (MAX ERROR)				
Nonlinearity – %FS			±0.03	
Hysteresis – %FS			±0.02	
Nonrepeatability – %RO			±0.01	
Creep, in 20 min – %			±0.025	
TEMPERATURE				
Compensated Range		°F	0 to 150	
		°C	-17 to 65	
Operating Range		°F	-65 to 200	
		°C	-53 to 93	
Effect On Output – % / °F MAX			±0.0008	
Effect On Zero – %RO / °F MAX			±0.0015	
ELECTRICAL				
Rated Output – mV/V (Nominal)			3.0	
Zero Balance – %RO			±1.0	
Bridge Resistance – Ohm (Nominal)			350	
Excitation Voltage – VDC MAX			15	
Insulation Resistance – Megohm			5000	
MECHANICAL				
Calibration			Compression	
Safe Overload – %CAP			±150	
Material			Aluminum	
Cable Length		ft	5	
		m	1.5	
NATURAL FREQUENCY/DEFLECTION				
lbf	N	Deflection (in)	Deflection (mm)	Nat. Freq. (Hz)
5	22.2	0.005	0.127	950
10	44.5	0.005	0.127	1300
25	111	0.005	0.127	2250
50	222	0.004	0.102	3300
75	334	0.004	0.102	3900
100	445	0.005	0.127	4000
150	667	0.005	0.127	4750
250	1.11K	0.005	0.127	4400

* Metric dimensions and capacities are provided for conversion only. Standard product will be sold in lbf and U.S. dimensions. Metric capacities available upon special request and at an additional cost.

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DIMENSIONS

See Drawing	CAPACITY													
	U.S. (lbf)	Metric (N)	U.S. (lbf)	Metric (N)	U.S. (lbf)	Metric (N)	U.S. (lbf)	Metric (N)	U.S. (lbf)	Metric (N)	U.S. (lbf)	Metric (N)	U.S. (lbf)	Metric (N)
	5, 10	22.2, 44.5	25	111	50	222	75	334	100	445	150	667	250	1.11K
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
(1)	1.01	25.7	1.01	25.7	1.01	25.7	1.01	25.7	1.01	25.7	1.01	25.7	1.02	25.9
(2)	2.38	60.5	2.38	60.5	2.38	60.5	2.38	60.5	2.38	60.5	2.38	60.5	2.38	60.5
(3)	0.25	6.4	0.25	6.4	0.25	6.4	0.25	6.4	0.25	6.4	0.25	6.4	0.5	12.8
(4)	0.97	24.6	0.97	24.6	0.97	24.6	0.97	24.6	0.97	24.6	0.97	24.6	0.97	24.6
(5)	0.14	3.6	0.11	2.8	0.15	3.8	0.14	3.6	0.13	3.3	0.1	2.5	0.12	3.0
(6)	0.75	19.1	0.81	20.6	0.72	18.3	0.75	19.1	0.78	19.8	0.82	20.8	0.79	20.1
(7)	0.17	4.3	0.17	4.3	0.17	4.3	0.17	4.3	0.17	4.3	0.17	4.3	0.17	4.3
(8)	0.13	3.3	0.13	3.3	0.13	3.3	0.13	3.3	0.13	3.3	0.13	3.3	0.25	6.4
(9)	0.25	6.4	0.25	6.4	0.25	6.4	0.25	6.4	0.25	6.4	0.25	6.4	0.25	6.4
(10)	0.50	12.7	0.50	12.7	0.50	12.7	0.50	12.7	0.50	12.7	0.50	12.7	0.50	12.7
(11)	1.31	33.3	1.31	33.3	1.31	33.3	1.31	33.3	1.31	33.3	1.31	33.3	1.31	33.3
(12)	0.50	12.7	0.50	12.7	0.50	12.7	0.50	12.7	0.50	12.7	0.50	12.7	0.75	19.1

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