

MBP MINIATURE BEAM OVERLOAD PROTECTED LOAD CELL (U.S. & METRIC)

FEATURES & BENEFITS

- Capacities from 2.5 to 10 lbf (5 to 100 N & 0.5 to 5 kg)
- Proprietary Interface temperature compensated strain gages
- 10X overload protection
- Low height – 0.99 in (25.1 mm)
- 0.0008% °F temperature effect on output

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 – % / deg	°F	±0.0008
Effect on Zero – %RO / deg	°F	±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	2.5 - 10 lbf	±1000
	10 - 50 N	
	0.5 - 5 kg	
	100 N	
Deflection @RO	in	0.005
	mm	0.13
Material		Aluminum
Cable Length	ft	5
	m	1.5

STANDARD CONFIGURATION



Model MBP-5 (Shown)

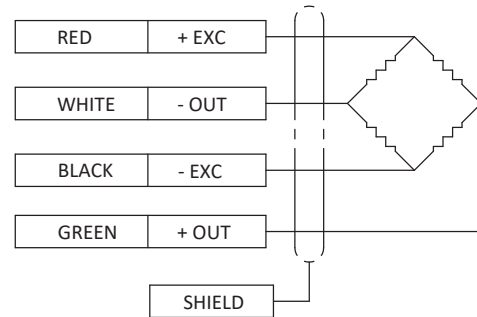
OPTIONS

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

ACCESSORIES

- Instrumentation

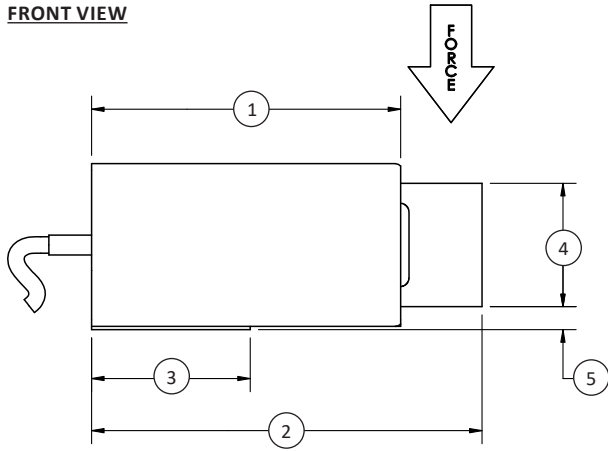
WIRING DIAGRAM



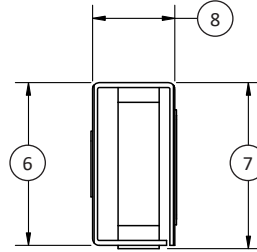
COMPRESSION UPSCALE

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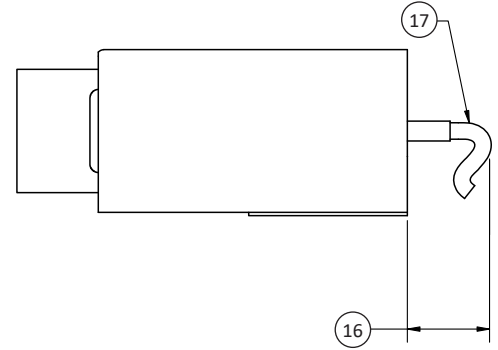
FRONT VIEW



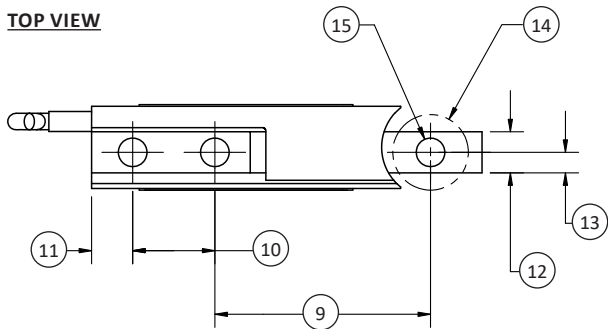
SIDE VIEW



BACK VIEW



TOP VIEW



DIMENSIONS

See Drawing	CAPACITY		
	U.S. (lbf)	Metric (N)	Metric (kg)
	2.5, 5, 10	5, 10, 20, 50, 100	0.5, 1, 2, 4, 5
	in	mm	mm
(1)	1.88	47.8	47.8
(2)	2.38	60.3	60.3
(3)	0.97	24.5	24.5
(4)	0.75	19.1	19.1
(5)	0.14	3.6	3.6
(6)	0.99	25.1	25.1
(7)	1.01	25.7	25.7
(8)	0.50	12.7	12.7
(9)	1.31	33.3	33.3
(10)	0.50	12.7	12.7
(11)	0.25	6.4	6.4
(12)	0.25	6.4	6.4
(13)	0.13	3.2	3.2
(14)	R0.23 Radial Clearance Around Load Hole	R5.8 Radial Clearance Around Load Hole	R5.8 Radial Clearance Around Load Hole
(15)	3x \varnothing 0.17	3x \varnothing 4.4	3x \varnothing 4.4
(16)	0.50 Integral Cable Bend Clearance	12.7 Integral Cable Bend Clearance	12.7 Integral Cable Bend Clearance
(17)	Shielded Cable 0.13 O.D. 4 Conductor 28 Gage 5 FT Length	Shielded Cable 3.3 O.D. 4 Conductor 28 Gage 1.5M Length	Shielded Cable 3.3 O.D. 4 Conductor 28 Gage 1.5M Length

MBPmini v2.4 05-07-2021