

## 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)

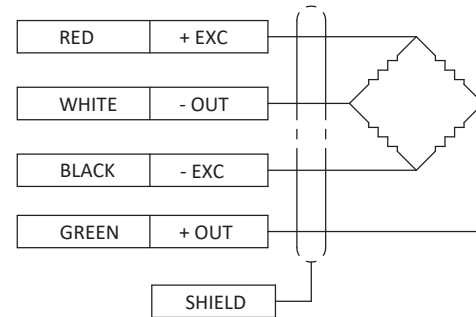
### OPTIONS

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

### ACCESSORIES

- Instrumentation

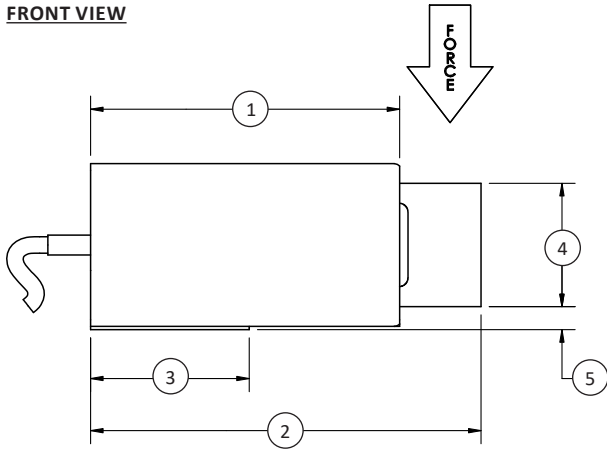
### WIRING DIAGRAM



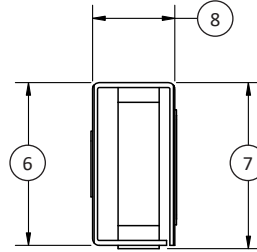
COMPRESSION UPSCALE

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

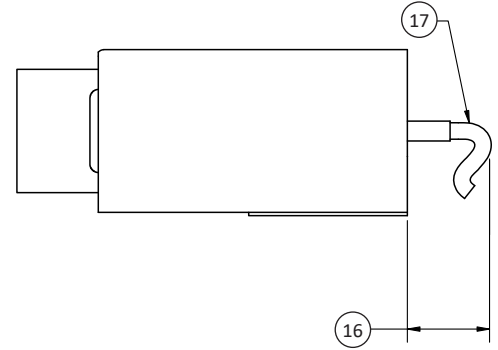
**FRONT VIEW**



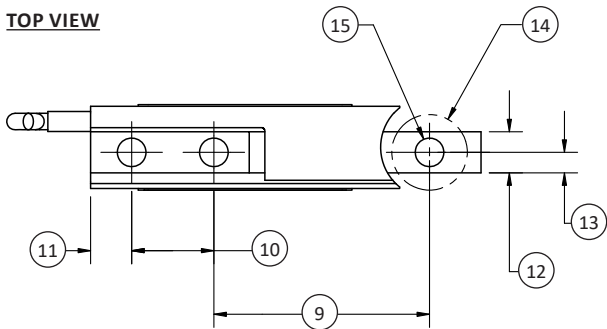
**SIDE VIEW**



**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

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