

Morehouse Ultra Precision Calibration Grade Load Cells

FEATURES

Designed for Metrology Lab Use

Meets ASTM E74 Requirements

Class AA to 10% of Range (Most Models)

Class A to 2% of Range

Lowest Creep

Lowest Sensitivity to Rotation Error

Lowest Sensitivity to Reproducibility Errors

Calibrated Directly with Dead Weight Primary Standards



SPECIFICATIONS

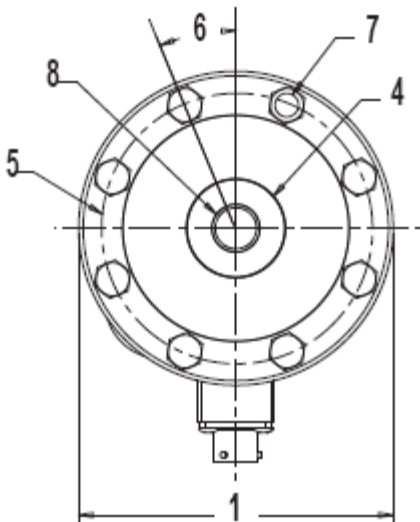
PARAMETERS	CAPACITY (lbf)			
	300, 500, 1K, 2K	5K, 10K	25K, 50K	100K
Accuracy				
Static Error Band, % R.O.	+/-0.02	+/- 0.03	+/- 0.03	+/- 0.03
Non linearity, % R.O..	+/-0.02	+/-0.03	+/-0.03	+/-0.03
Hysteresis, % R.O.	+/-0.02	+/-0.04	+/-0.04	+/-0.04
Non-Repeatability, % R.O.	+/- 0.005	+/- 0.005	+/- 0.005	+/- 0.005
Creep, % Reading in 20 Minutes	+/- 0.015	+/- 0.015	+/- 0.015	+/- 0.015
Off-Center Load Sensitivity, % /inch	+/- 0.05	+/- 0.05	+/- 0.05	+/- 0.05
Side Load Sensitivity, %	+/- 0.05	+/- 0.05	+/- 0.05	+/- 0.05
Zero Balance, % R.O.	+/- 1.0	+/- 1.0	+/- 1.0	+/- 1.0
Temperature				
Range, Compensated, °F	+15 to +115	+15 to +115	+15 to +115	+15 to +115
Range, Operating, °F	-65 to +200	-65 to +200	-65 to +200	-65 to +200
Effect on Sensitivity, % Rdg/100 °F	0.08	0.08	0.08	0.08
Effect on Zero, %R.O./100 °F	0.08	0.08	0.08	0.08
Electrical				
Excitation Voltage, Recommended, Vdc	10	10	10	10
Input resistance, Ohms	350 +40/-3.5	350 +40/-3.5	350 +40/-3.5	350 +40/-3.5
Output Resistance, Ohms	350 +/- 3.5	350 +/- 3.5	350 +/- 3.5	350 +/- 3.5
Sensitivity (Rated Output), mV/V, Nominal	2	4	4	4
Insulation Resist., Bridge/Case, Meg Ohm	5000 @ 50 VDC	5000 @ 50 VDC	5000 @ 50 VDC	5000 @ 50 VDC
Mechanical				
Safe Overload Range, % R.O.	150	150	150	150
Weight (lbs.)	1.3	3.3	11.1	28.7
Weight w/Base (lbs.)	2.8	6.9	23.6	57.8
Flexure Material	Aluminum	Steel	Steel	Steel

TO ORDER CALL: 717-843-0081

www.mhforce.com

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Review Drawing (in inches)	CAPACITY (lbf)			
	300, 500, 1K, 2K	5K, 10K	25K, 50K	100K
1-CELL & BASE DIAMETER	4.12	4.12	6.06	8.00
2-CELL HEIGHT TO HUB	1.38	1.38	1.75	2.50
3-CELL BODY HEIGHT	1.25	1.25	1.63	2.25
4-HUB DIAMETER	1.29	1.29	2.34 25K/2.58 50K	3.76
5-MOUNTING B.C. DIAMETER	3.50	3.50	5.13	6.50
6-SYMMETRIC B.C. OFFSET	22.5 Degrees	22.5 Degrees	15 Degrees	11.25 Degrees
7-MTG. HOLE DIAMETER	0.28	0.28	0.41	0.53
8-HUB THREAD	1/2 - 20, 1.12 Dp.	5/8 - 18, 1.12 Dp.	1 1/4 - 12, 1.50 Dp.	1 3/4 - 12, 2.20 Dp.
9-BOLT HEAD PROTRUSION	0.20	0.20	0.30	0.4
10-BASE THICKNESS, TOTAL	1.13	1.13	1.75	2.00
11-BASE STEP HEIGHT	0.03	0.03	0.03	0.03
12-BASE STEP DIAMETER	1.25	1.25	2.25	3.00
13-BASE THREAD	1/2 - 20, 0.88 Dp.	5/8 - 18, 0.88 Dp.	1 1/4 - 12, 1.50 Dp.	1 3/4 - 12, 1.75 Dp.
14-HEIGHT, TOTAL	4.19	4.19	6.44	7.88
15-ADAPTOR THREAD LENGTH	0.75	0.75	1.50	1.75
16-ADAPTOR END RADIUS	6.00	6.00	6.00	12.00
17-ADAPTOR THREAD	1/2 - 20	5/8 - 18	1 1/4 - 12	1 3/4 - 12

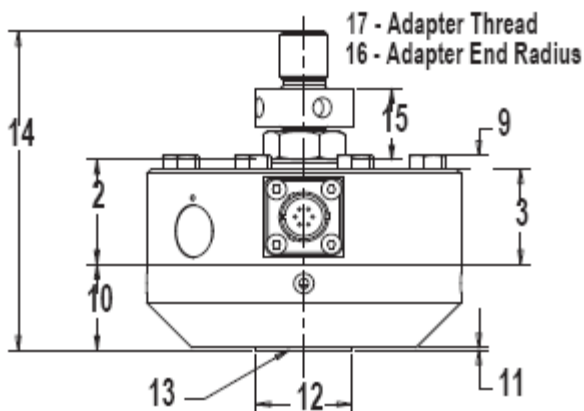


Options

- Additional bridges
- Output adjustment to standard
- Compression overload protection
- Integral cable
- Custom connectors

Accessories

- Mating Connector
- Loading Fixtures
- Interconnect Cable
- Morehouse Model 4215 Meter
- Instrumentation
- Custom Cases



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