

# HIGH CAPACITY CALIBRATION STANDARD (CS) SERIES LOAD

## FEATURES

- Designed for Metrology Lab Use
- Meets ASTM E74 Class A to 4% of Range, Class AA to 20% of Range (When Calibrated with Primary Standards)
- Guaranteed Maximum Off-Center Load & Moment Error
- Low Creep
- Lowest Reproducibility Errors
- Includes ASTM E74 Tension & Compression Transfer Standard Calibration
- Temperature Compensated
- Proprietary Modulus Compensated Strain Gages



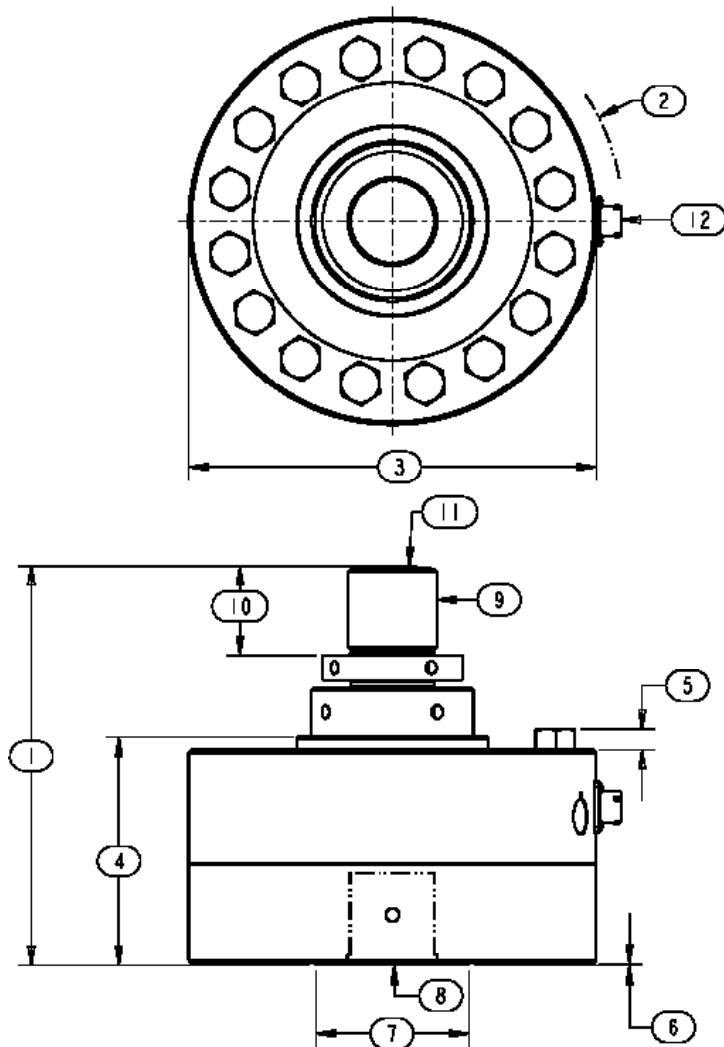
## SPECIFICATIONS

Model	CS40	CS42	CS45	CS62	CS80
Capacity U.S. lbf.	200K	270K	300K, 400K	500K, 600K	750K, 1000K
PARAMETERS Metric kN	1000	1200	1400, 1800	2200, 2700	3300, 4500
<b>ACCURACY</b>					
Lower Load Limit % Rated Output	4.000	4.000	4.000	4.000	4.000
Static Error Band, % Rated Output	+/-0.050	+/-0.060	+/-0.100	+/-0.100	+/-0.120
Nonlinearity, % Rated Output	+/-0.050	+/-0.060	+/-0.100	+/-0.100	+/-0.120
Hysteresis, % Rated Output	+/-0.050	+/-0.060	+/-0.100	+/-0.100	+/-0.120
Nonrepeatability, % Rated Output	+/-0.005	+/-0.005	+/-0.010	+/-0.010	+/-0.010
Creep, % in 20 minutes	+/-0.010	+/-0.015	+/-0.015	+/-0.015	+/-0.015
Off-Center Load Sensitivity, %/inch	+/-0.100	+/-0.100	+/-0.200	+/-0.200	+/-0.200
Side Load Sensitivity, %	+/-0.100	+/-0.100	+/-0.200	+/-0.200	+/-0.200
Zero Balance, % Rated Output	+/-1.0	+/-1.0	+/-1.0	+/-1.0	+/-1.0
<b>TEMPERATURE</b>					
Range, Compensated, °F	+15 to +115	+15 to +115	+15 to +115	+15 to +115	+15 to +115
Range, Compensated, °C	-10 to +45	-10 to +45	-10 to +45	-10 to +45	-10 to +45
Range, Operating, °F	-65 to +200	-65 to +200	-65 to +200	-65 to +200	-65 to +200
Range, Operating, °C	-55 to +90	-55 to +90	-55 to +90	-55 to +90	-55 to +90
Effect on Sensitivity, % Rdg/ °F	+/-0.0008	+/-0.0008	+/-0.0008	+/-0.0008	+/-0.0008
Effect on Sensitivity, % Rdg/ °C	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015
Effect on Zero, % Rated Output/ ° F	+/-0.0008	+/-0.0008	+/-0.0008	+/-0.0008	+/-0.0008
Effect on Zero, % Rated Output/ ° C	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015	+/-0.0015
<b>ELECTRICAL</b>					
Rated Output, mV/V, Nominal	4	4	4	4	4
Excitation Voltage, VDC Maximum	20	20	20	20	20
Input Resistance, Ohms	350	350	350	350	350
Output Resistance, Ohms	350	350	350	350	350
Insulation Resistance, Megohm	5000	5000	5000	5000	5000
Bayonet Connector	PT02E-10-6P (MS3112E-10-6P) Included Protector				
<b>MECHANICAL</b>					
Safe Overload Range, % Rated Capacity	+/-150	+/-150	+/-150	+/-150	+/-150
Weight lb	166	176	277	519	660
Weight kg	75	80	125	235	300
Flexure Material	Steel	Steel	Steel	Steel	Steel

# HIGH CAPACITY CALIBRATION STANDARD (CS) SERIES LOAD CELLS

## DIMENSIONS

Model	CS40	CS40M	CS42	CS42M	CS45	CS45M	CS62	CS62M	CS80	CS80M
Capacity	200K lbf	1000 kN	270K lbf	1200 kN	300K, 400K lbf	1400, 1800 kN	500K, 600K lbf	2200, 2700 kN	750K, 1000K lbf	3300, 4500 kN
Dimensions	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
1.	11.58	290.6	13.08	332.2	13.87	352.3	17.53	445.3	24.29	616.9
2.	R 6.16	R 156.5	R 6.16	R 156.5	R 6.78	172.2	R 8.65	R 219.7	R 10.89	R 276.6
3.	11.00	279.4	11.00	279.4	12.25	311.2	16.00	406.4	20.50	520.7
4.	6.50	165.1	8.00	203.2	8.75	222.3	10.25	260.4	13.00	330.2
5.	0.60	15.2	0.60	15.2	0.60	15.2	0.92	23.4	.77	19.5
6.	0.03	0.8	0.03	0.8	0.03	0.8	0.03	0.8	0.03	0.8
7.	4.83	122.7	4.83	122.7	5.70	144.8	7.89	200.4	10.00	254
8.	2 ¾ - 8 2.70 Deep	M72 x 2 68.6 Deep	2 ¾ - 8 3.70 Deep	M72 x 2 94.0 Deep	3-12 3.90 Deep	M76 x 2 99.1 Deep	4 - 8 3.65 Deep	M100 x 3 92.7 Deep	6 - 8 5.4 Deep	M150 x 3 137.1 Deep
9.	2 ¾ - 8	M72 x 2	2 ¾ - 8	M72 x 2	3-12	M76 x 2	4 - 8	M100 x 3	6 - 8	M150 x 3
10.	2.50	63.5	2.50	63.5	2.50	63.5	3.50	88.9	4.7	119.3
11.	12	305	12	305	12	305	20	508	20	508



### OPTIONS

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

### ACCESSORIES

- Mating connector
- Loading fixtures
- Interconnect cable
- Shunt calibration resistor
- Instrumentation