

SHEAR WEB LOAD CELLS

HIGH CAPACITY CALIBRATION STANDARD METRIC (CS - M) SERIES FORCE TRANSDUCERS

FEATURES

- Designed for Metrology Lab Use
- Meets ASTM E74 Requirements
 - Class A to 4% of Range
- Guaranteed Maximum Off-Center Load and Moment Error
- Low Creep
- Low Sensitivity to Rotation Error
- Low Sensitivity to Reproducibility Errors
- Low Susceptibility to Magnetic Fields



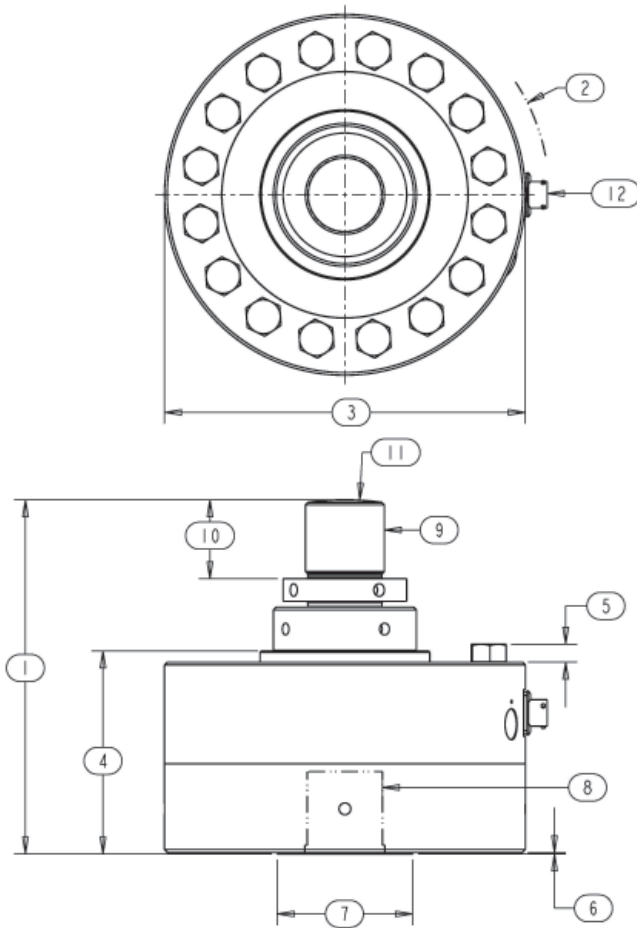
SPECIFICATIONS

PARAMETERS	MODEL			
	CS40M	CS42M	CS60M	CS60M
	CAPACITY (kN)			
	1000	1200	2200	2700
Accuracy				
Lower Load Limit % of R.O.	4.0	4.0	4.0	4.0
Static Error Band, % R.O.	+/- .05	+/- .06	+/- .10	+/- .10
Hysteresis, % R.O.	+/- .05	+/- .06	+/- .10	+/- .10
Nonlinearity, % R.O.	+/- .05	+/- .06	+/- .10	+/- .10
Nonrepeatability, % R.O.	+/- .005	+/- .005	+/- .01	+/- .01
Creep, % in 20 minutes	+/- .01	+/- .015	+/- .025	+/- .025
Off-Center Load Sensitivity, %/inch	+/- .1	+/- .1	+/- .2	+/- .2
Side Load Sensitivity, %	+/- .1	+/- .1	+/- .2	+/- .2
Zero Balance, % R.O.	+/- 1.0	+/- 1.0	+/- 1.0	+/- 1.0
Temperature				
Range, Compensated, °C	-10 to +45	-10 to +45	-10 to +45	-10 to +45
Range, Operating, °C	-55 to +90	-55 to +90	-55 to +90	-55 to +90
Effect on Sensitivity, % Rdg/100°C	+/- .15	+/- .15	+/- .15	+/- .15
Effect on Zero, % R.O./100°C	+/- .30	+/- .30	+/- .30	+/- .30
Electrical				
Rated Output, mV/V, Nominal	4.0	4.0	4.0	4.0
Excitation Voltage, VDC	10	10	10	10
Input Resistance, Ohms	350	350	350	350
Output Resistance, Ohms	350	350	350	350
Insulation Resistance, Megohm	5000	5000	5000	5000
Mechanical				
Safe Overload Range, % R.O.	+/- 150	+/- 150	+/- 150	+/- 150
Weight (kg)	75	80	235	235
Flexure Material	Aluminum	Steel	Steel	Steel

SHEAR WEB LOAD CELLS

DIMENSIONS

Review Drawing (in mm)	MODEL			
	CS40M	CS42M	CS60M	CS60M
	CAPACITY (kN)			
	1000	1200	2200	2700
1. Height Total	294.1	306.8	422.4	422.4
2. Max. Clearance Radius	156.5	156.5	219.7	219.7
3. Cell and Base Diameter	279.4	279.4	406.4	406.4
4. Cell and Base Height (to Hub)	165.1	177.8	234.9	234.9
5. Bolt Head Protrusion	15.2	15.2	20.8	20.8
6. Base Step Height	.8	.8	.8	.8
7. Base Step Diameter	122.7	122.7	200.4	200.4
8. Base Thread	M72 x 2, 68.6 Dp.	M72 x 2, 68.6 Dp.	M100 x 3, 92.7 Dp.	M100 x 3, 92.7 Dp.
9. Adapter Thread	M72 x 2	M72 x 2	M100 x 3	M100 x 3
10. Adapter Thread Depth	63.5	63.5	88.9	88.9
11. Adapter End Radius	304.8	304.8	508.0	508.0
12. Connector	MS3112_E10 w/protector	MS3112_E10 w/protector	MS3112_E10 w/protector	MS3112_E10 w/protector



OPTIONS

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

ACCESSORIES

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

THE TECHNICAL LEADER IN LOAD CELLS AND FORCE MEASUREMENT