

SHEAR WEB LOAD CELLS

SHEAR WEB (SW) SERIES FORCE TRANSDUCERS

FEATURES

- First Choice for Structural and Materials Testing
- Low Height
- Guaranteed Maximum Off-Center Load and Moment Error
- Low Creep
- Low Susceptibility to Magnetic Fields
- Barometric Pressure Compensation
- Output to 4mV/V
- Bayonet Connector



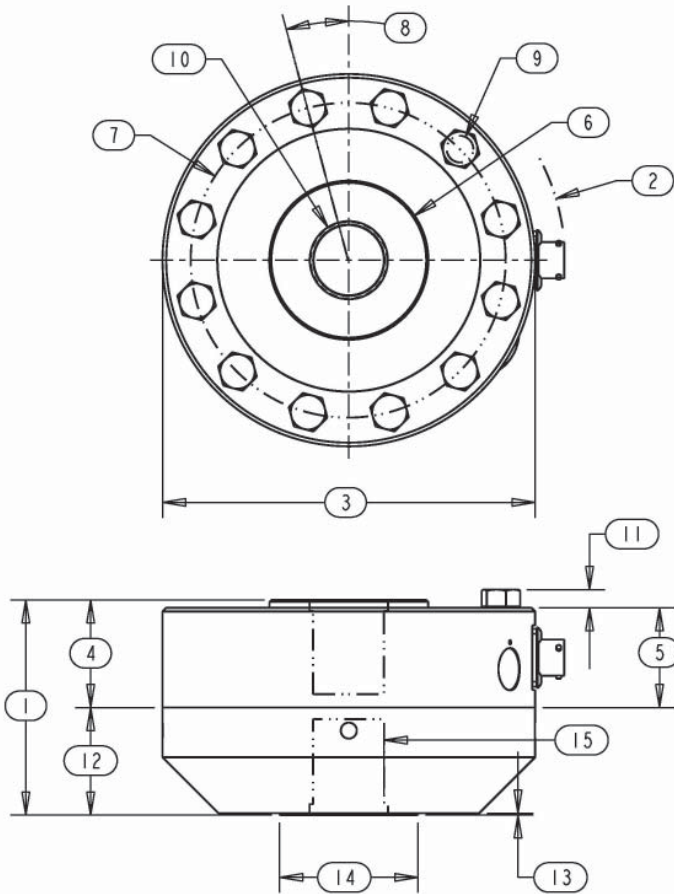
SPECIFICATIONS

PARAMETERS	MODEL			
	SW10	SW10	SW20	SW30
	CAPACITY (lbf)			
	300, 500 1K, 2K	5K, 10K	25K, 50K	100K
Accuracy				
Static Error Band, % R.O.	+/- .04	+/- .05	+/- .05	+/- .05
Nonlinearity, % R.O.	+/- .04	+/- .05	+/- .05	+/- .05
Hysteresis, % R.O.	+/- .03	+/- .05	+/- .05	+/.05
Nonrepeatability, % R.O.	+/- .01	+/- .01	+/- .01	+/- .01
Creep, % in 20 minutes	+/- .025	+/- .025	+/- .025	+/- .025
Off-Center Load Sensitivity, %/inch	+/- .25	+/- .25	+/- .25	+/- .25
Side Load Sensitivity, %	+/- .25	+/- .25	+/- .25	+/- .25
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	+/- .08	+/- .08	+/- .08	+/- .08
Effect on Zero, % R.O./100°F	+/- .15	+/- .15	+/- .15	+/- .15
Electrical				
Rated Output, mV/V, Nominal	2.0	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 (lbs.)	1.0	2.9	9.1	23.5
Weight w/base (lbs.)	2.5	6.5	21.5	52.5
Flexure Material	Aluminum	Steel	Steel	Steel

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DIMENSIONS

Review Drawing (in inches)	MODEL			
	SW10 300, 500 1K, 2K	SW10 5K, 10K	SW20 25K, 50K	SW30 100K
	CAPACITY (lbf)			
1. Height Total	2.56	2.56	3.67	4.65
2. Max. Clearance Radius	2.53	2.53	3.50	4.50
3. Cell and Base Diameter	4.12	4.12	6.06	8.00
4. Cell Height to Hub	1.38	1.38	1.75	2.50
5. Cell Body Height	1.25	1.25	1.63	2.25
6. Hub Diameter	1.29	1.29	2.34 25K/2.58 50K	3.76
7. Mounting B.C. Diameter	3.50	3.50	5.13	6.50
8. Symmetric B.C. Offset	22.5 Degrees	22.5 Degrees	15 Degrees	11.25 Degrees
9. Mounting Hole Diameter	.28	.28	.41	.53
10. 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.
11. Bolt Head Protrusion	.18	.18	.29	.40
12. Base Thickness	1.13	1.13	1.75	2.00
13. Base Step Height	.03	.03	.03	.03
14. Base Step Diameter	1.25	1.25	2.25	3.00
15. Base Thread	1/2 20, .88 Dp.	5/8 - 18, .88 Dp.	1 1/4 - 12, 1.50 Dp.	1 3/4 - 12, 1.75 Dp.



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