

# SHEAR WEB (SW) SERIES LOAD CELLS

## FEATURES

- First Choice for Structural and Materials Testing
- Low Height
- Guaranteed Maximum Off-Center Load & Moment Error
- Low Creep
- Low Susceptibility to Magnetic Fields
- Barometric Pressure Compensation
- Output to 4mV/V
- 5pt Tension & Compression Calibration
- Proprietary Modulus Compensated Strain Gages



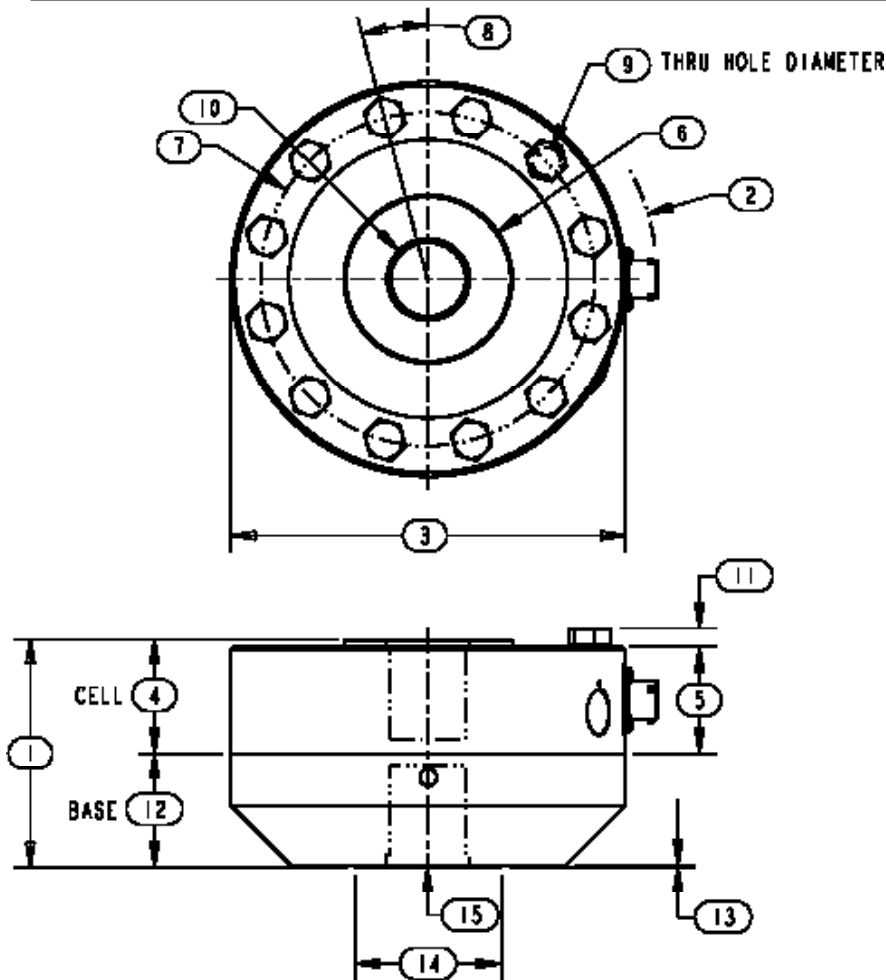
## SPECIFICATIONS

Model	SW10 300, 500, 1K, 2K	SW10 5K, 10K	SW20 25K, 50K	SW22 60K	SW30 100K
Capacity U.S. lbf.					
Capacity Metric kN	1.5, 2.5, 5, 10	25, 50	100, 250	270	300, 500
<b>PARAMETERS</b>					
<b>ACCURACY</b>					
Static Error Band, % Rated Output	+/-0.040	+/-0.040	+/-0.040	+/-0.050	+/-0.050
Nonlinearity, % Rated Output	+/-0.040	+/-0.040	+/-0.040	+/-0.050	+/-0.050
Hysteresis, % Rated Output	+/-0.030	+/-0.040	+/-0.050	+/-0.050	+/-0.050
Nonrepeatability, % Rated Output	+/-0.010	+/-0.010	+/-0.010	+/-0.010	+/-0.010
Creep, % in 20 minutes	+/-0.025	+/-0.025	+/-0.025	+/-0.025	+/-0.025
Off-Center Load Sensitivity, %/inch	+/-0.250	+/-0.250	+/-0.250	+/-0.250	+/-0.250
Side Load Sensitivity, %	+/-0.250	+/-0.250	+/-0.250	+/-0.250	+/-0.250
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	2	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)				
<b>MECHANICAL</b>					
Safe Overload Range, % Rated Capacity	+/-150	+/-150	+/-150	+/-150	+/-150
Weight lb	1.0	2.9	9.1	13.5	23.5
Weight kg	0.5	1.3	4.1	6.1	10.7
Weight w/base lb	2.5	6.5	21.5	27.5	52.5
Weight w/base kg	1.1	3.0	9.8	12.5	23.8
Flexure Material	Aluminum	Steel	Steel	Steel	Steel

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## DIMENSIONS

Model	SW10	SW10M	SW10	SW10M	SW20	SW20M	SW22	SW22M	SW30	SW30M
Capacity	300, 500, 1K, 2K lbf	1.5, 2.5, 5, 10 kN	5K, 10K lbf	25, 50 kN	25K, 50K lbf	100, 250 kN	60K lbf	270 kN	100K lbf	300,500 kN
Dimensions	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
1.	2.51	63.5	2.51	63.5	3.51	88.9	4.50	114.3	4.50	114.3
2.	R 2.53	R 64.3	R 2.53	R 64.3	R 3.50	R 88.9	R 3.50	R 88.9	R 4.50	R 114.3
3.	4.12	104.8	4.12	104.8	6.06	154.0	6.06	154.0	8.00	203.2
4.	1.38	34.9	1.38	34.9	1.75	44.5	2.25	57.2	2.50	63.5
5.	1.25	31.8	1.25	31.8	1.63	41.3	2.13	54.1	2.25	57.2
6.	1.29	32.8	1.29	32.8	2.34 25K 2.58 50K	59.4 100kN 65.6 250kN	2.58	65.6	3.76	95.6
7.	3.50	88.9	3.50	88.9	5.13	130.3	5.13	130.3	6.50	165.1
8.	22.5°	22.5°	22.5°	22.5°	15°	15°	15°	15°	11.25°	11.25°
9.	.28 8 Places	7.1 8 Places	.28 8 Places	7.1 8 Places	.41 12 Places	10.3 12 Places	.47 12 Places	11.9 12 Places	.53 16 Places	13.5 16 Places
10.	1/2-20 1.12 Deep	M12 x 1.25 28.5 Deep	5/8 - 18 1.12 Deep	M16 x 2 28.5 Deep.	1 1/4 - 12 1.50 Deep	M33x 2 38.1 Deep	1 1/2 - 12 2.0 Deep	M36x 2 50.8 Deep	1 3/4-12 2.20 Deep	M42 x 2 55.9 Deep
11.	0.18	4.7	0.18	4.7	0.29	7.5	0.31	7.9	.40	10.2
12.	1.13	28.6	1.13	28.6	1.75	44.5	2.25	57.2	2.00	50.8
13.	0.03	0.8	0.03	0.8	0.03	0.8	0.03	0.8	0.03	0.8
14.	1.25	31.8	1.25	31.8	2.25	57.2	3.00	76.2	3.00	76.2
15.	1/2-20 .88 Deep	M12 x 1.25 22.4 Deep	5/8 - 18 .88 Deep	M16 x 2 22.4 Deep	1 1/4 - 12 1.50 Deep	M33 x 2 38.1 Deep	1 1/2 - 12 2.00 Deep	M36 x 2 50.8 Deep	1 3/4-12 1.75 Deep	M42 x 2 44.5 Deep



### OPTIONS

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

### ACCESSORIES

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