

# **SHEAR WEB COMPRESSION ONLY (SW) SERIES LOAD CELLS**

## FEATURES

- Low Height
- Guaranteed Maximum Off-Center Load and Moment Error
- Low Creep
- Low Susceptibility to Magnetic Fields
- Counterbored Mounting Holes (w/out Base)
- Output to 4mV/V
- Integral Compression Interface (above 5K)
- 5pt Compression Calibration
- Proprietary Modulus Compensated Strain Gages



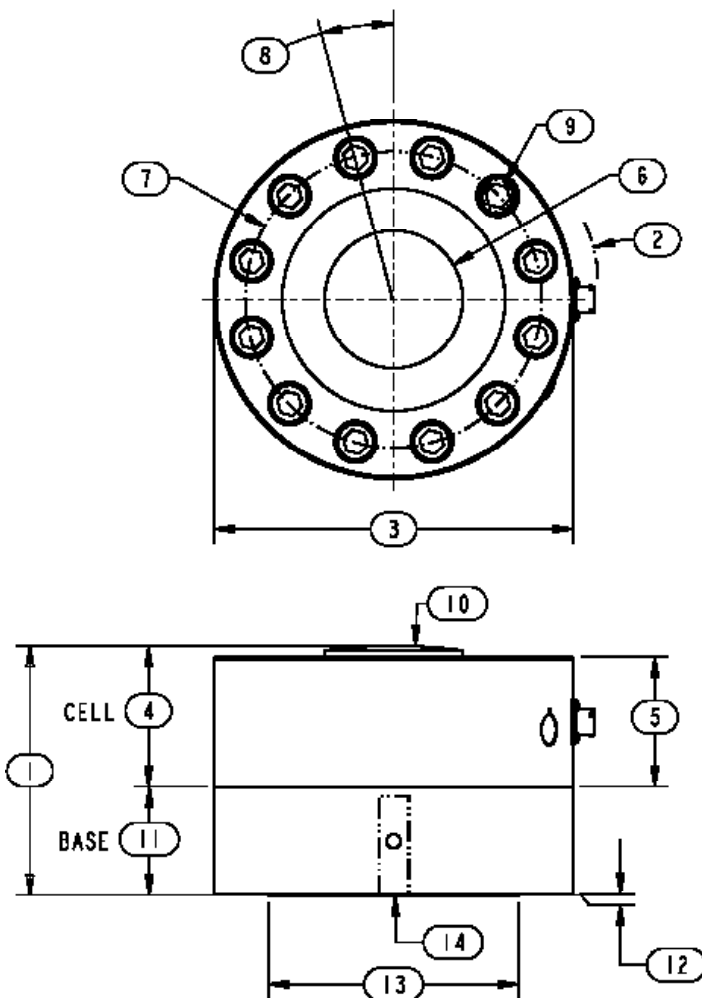
## SPECIFICATIONS

Model	SW11 300, 500, 1K, 2K	SW11 5K, 10K	SW21 25K, 50K	SW31 100K	SW41 200K	
Capacity U.S. lbf.						
Capacity Metric kN	1.5, 2.5, 5, 10	25, 50	100, 250	500	1000	
<b>PARAMETERS</b>						
<b>ACCURACY</b>						
Static Error Band, % Rated Output	+/-0.030	+/-0.040	+/-0.040	+/-0.040	+/-0.050	
Nonlinearity, % Rated Output	+/-0.030	+/-0.040	+/-0.050	+/-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	1.1	3.1	5.1	12	33	
Weight kg	0.5	1.4	2.3	5.4	15	
Weight w/base lb	2.6	6.7	12.1	30.3	70	
Weight w/base kg	1.2	3.0	5.5	13.7	32	
Flexure Material	Aluminum	Steel	Steel	Steel	Steel	

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## DIMENSIONS

Model	SW11	SW11M	SW11	SW11M	SW21	SW21M	SW31	SW31M	SW41	SW41M
Capacity	300, 500, 2K, 5K lbf	1.5, 2.5, 5, 10, 25 kN	10K lbf	50 kN	25K, 50K lbf	100, 250kN	100K lbf	500 kN	200K lbf	1000 kN
Dimensions	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
1.			2.50	63.50	3.00	76.2	4.49	114	5.75	146.1
2.			R 2.53	R 64.30	R 2.84	R 72.1	R 3.51	R 89.1	4.61	117.1
3.			4.12	104.65	4.75	120.7	6.06	154	8.25	209.6
4.			1.38	35.00	1.75	44.5	2.50	63.5	3.25	82.6
5.			1.25	31.75	1.63	41.4	2.25	57.2	3.00	76.2
6.			1.29	32.8	1.56	39.6	2.58	65.5	3.16	80.3
7.			3.50	88.90	4.00	101.6	5.13	130.3	6.75	171.5
8.		See SW for dimensions add compatible Load Button	22.5°	22.5°	45°	45°	15°	15°	15°	15°
9.			C'Bore for 1/4-28 8 Places	C'Bore for M6 8 Places	C'Bore for 5/16-24 4 Places	C'Bore for M8 4 Places	C'Bore for 3/8-24 12 Places	C'Bore for M10 12 Places	C'Bore for 5/8-18 12 Places	C'Bore for M16 12 Places
10.			R 4.00	R 101.6	R 6.00	R 152.4	R 8.00	R 203.2	R 12.00	304.8
11.			1.13	28.7	1.25	31.8	1.99	50.5	2.50	63.5
12.			0.03	.80	0.03	.80	0.03	.80	0.03	.80
13.			1.25	31.75	2.00	50.8	4.38	111.3	5.75	146.1
14.			5/8-18 .88 Deep	M12 x 1.25 22.4 Deep	1/2-20 1.00 Deep	M12 x 1.25 26 Deep	3/4 -16 1.50 Deep	M27 x 2 38 Deep	3/4 -16 1.50 Deep	M27 x 2 38 Deep



### 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