

# 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



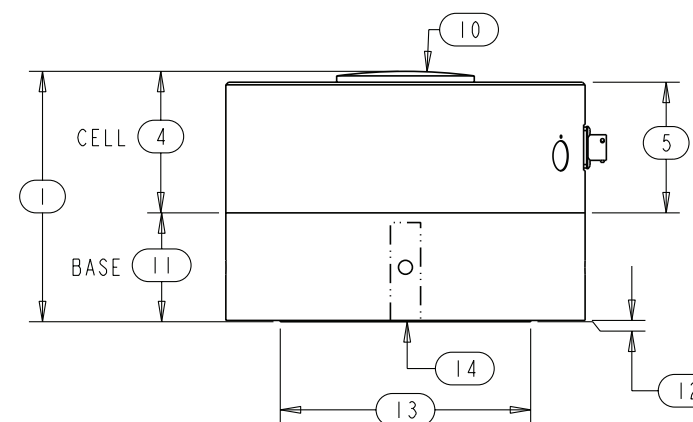
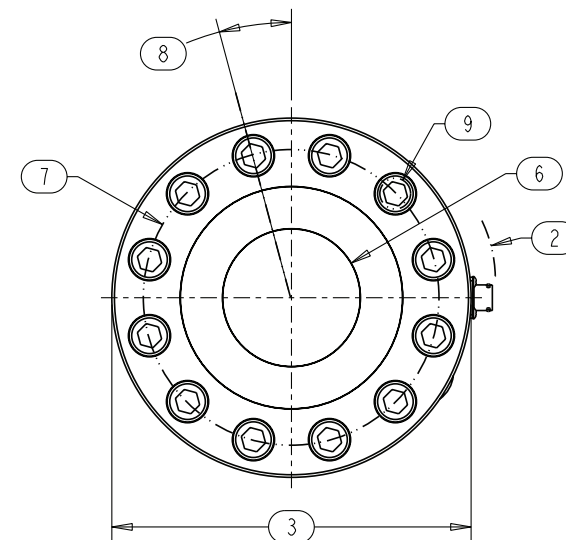
## SPECIFICATIONS

Model	SW11 300, 500, 1K, 2K	SW11 5K, 10K	SW21 25K, 50K	SW31 100K	SW41 200K
Capacity U.S. lbf.	300, 500, 1K, 2K	5K, 10K	25K, 50K	100K	200K
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 300, 500, 2K, 5K lbf	SW11M 1.5, 2.5, 5, 10, 25 kN	SW11 10K lbf	SW11M 50 kN	SW21 25K, 50K lbf	SW21M 100, 250kN	SW31 100K lbf	SW31M 500 kN	SW41 200K lbf	SW41M 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.			22.5°	22.5°	45°	45°	15°	15°	15°	15°
9.	See SW for dimensions add compatible Load Button		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