

SHEAR WEB LOAD CELLS

SHEAR WEB (SW) SERIES COMPRESSION ONLY FORCE TRANSDUCERS

FEATURES

- Compact Size
- 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 10K)



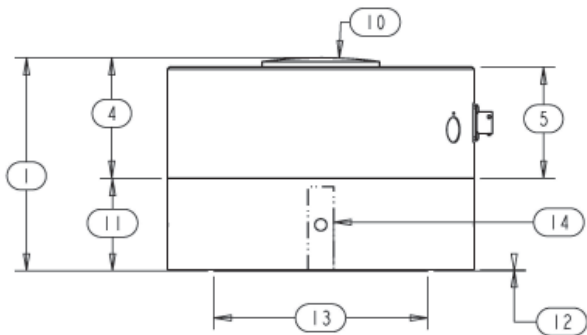
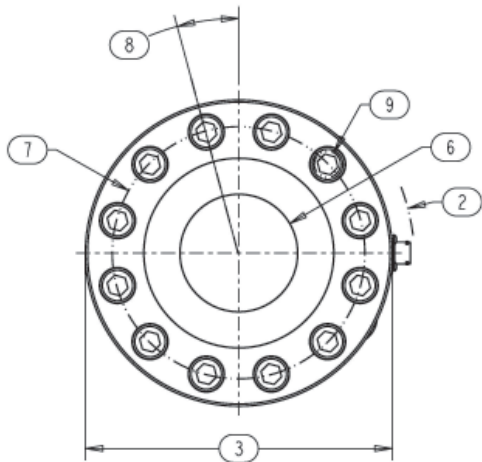
SPECIFICATIONS

PARAMETERS	MODEL				
	SW11	SW11	SW21	SW31	SW41
	300, 500, 1K, 2K	5K, 10K	25K, 50K	100K	200K
	CAPACITY (lbf)				
Accuracy					
Static Error Band, % R.O.	+/- .03	+/- .04	+/- .04	+/- .04	+/- .05
Nonlinearity, % R.O.	+/- .03	+/- .04	+/- .05	+/- .05	+/- .05
Hysteresis, % R.O.	+/- .03	+/- .04	+/- .05	+/- .05	+/- .05
Nonrepeatability, % R.O.	+/- .01	+/- .01	+/- .01	+/- .01	+/- .01
Creep, % in 20 minutes	+/- .025	+/- .025	+/- .025	+/- .025	+/- .025
Off-Center Load Sensitivity, %/inch	+/- .25	+/- .25	+/- .25	+/- .25	+/- .25
Side Load Sensitivity, %	+/- .25	+/- .25	+/- .25	+/- .25	+/- .25
Zero Balance, % R.O.	+/- 1.0	+/- 1.0	+/- 1.0	+/- 1.0	+/- 1.0
Temperature					
Range, Compensated, °F	+15 to +115	+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	-65 to +200
Effect on Sensitivity, % Rdg/100°F	+/- .08	+/- .08	+/- .08	+/- .08	+/- .08
Effect on Zero, % R.O./100°F	+/- .15	+/- .15	+/- .15	+/- .15	+/- .15
Electrical					
Rated Output, mV/V, Nominal	2.0	4.0	4.0	4.0	4.0
Excitation Voltage, VDC	10	10	10	10	10
Input Resistance, Ohms	350	350	350	350	350
Output Resistance, Ohms	350	350	350	350	350
Insulation Resistance, Megohm	5000	5000	5000	5000	5000
Mechanical					
Safe Overload Range, % R.O.	+/- 150	+/- 150	+/- 150	+/- 150	+/- 150
Weight (lbs.)	1.1	3.1	5.1	9	33
Weight w/base (lbs.)	2.6	6.7	11	21	70
Flexure Material	Aluminum	Steel	Steel	Steel	Steel

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DIMENSIONS

Review Drawing (in inches)	MODEL			
	SW11	SW21	SW31	SW41
	CAPACITY (lbf)			
	300, 500, 1K 2K, 5K, 10K	25K, 50K	100K	200K
1. Height Total	See SW	3.00	4.49	5.75
2. Max. Clearance Radius	Add Compatible	2.84	3.51	4.61
3. Cell and Base Diameter	Load Button	4.75	6.06	8.25
4. Cell Height to Button		1.75	2.50	3.25
5. Cell Body Height		1.63	2.25	3.00
6. Compression Button Diameter		1.56	2.58	3.16
7. Mounting B.C. Diameter		4.00	5.13	6.75
8. Symmetric B.C. Offset		45 Degrees	15 Degrees	15 Degrees
9. Mounting Hole Dia. (w/out Base)		C'Bore for 5/16-24	C'Bore for 3/8-24	C'Bore for 5/8-18
10. Comp. Button Sph. Radius		6	8	12
11. Base Thickness		1.25	2.00	2.50
12. Base Step Height		.03	.03	.03
13. Base Step Diameter		3.38	4.38	5.75
14. Base Thread		1/2- 20, 1.00 Dp.	3/4-16, 2.25 Dp.	3/4 - 16, 2.25 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