

SHEAR WEB LOAD CELLS

SHEAR WEB METRIC (SW - M) 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 50 kN)



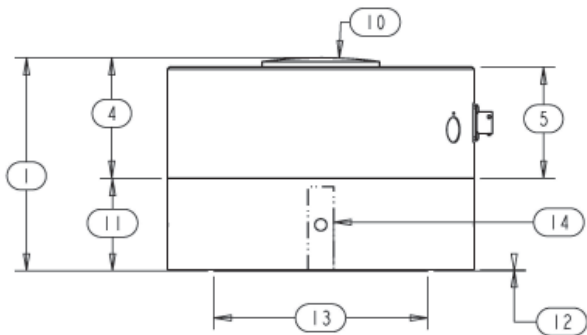
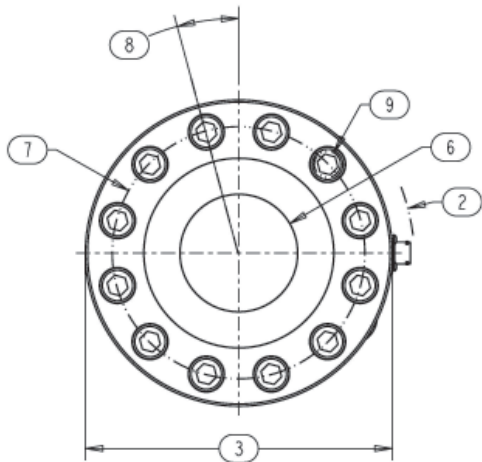
SPECIFICATIONS

PARAMETERS	MODEL				
	SW11M	SW11M	SW21M	SW31M	SW41M
	CAPACITY (kN)				
	1.5, 2.5, 5, 10	25, 50	100, 250	500	1000
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, °C	-10 to +45	-10 to +45	-10 to +45	-10 to +45	-10 to +45
Range, Operating, °C	-55 to +90	-55 to +90	-55 to +90	-55 to +90	-55 to +90
Effect on Sensitivity, % Rdg/100°C	+/- .15	+/- .15	+/- .15	+/- .15	+/- .15
Effect on Zero, % R.O./100°C	+/- .27	+/- .27	+/- .27	+/- .27	+/- .27
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 (kg)	0.5	1.4	2.3	4	15
Weight w/base (kg)	1.2	3.0	5.0	10	32
Flexure Material	Aluminum	Steel	Steel	Steel	Steel

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DIMENSIONS

Review Drawing (in mm)	MODEL			
	SW11M	SW21M	SW31M	SW41M
	1.25, 2.5, 5 10, 25, 50	CAPACITY (kN) 100, 250		500 1000
1. Height Total	See SW - M	76.2	4.49	5.75
2. Max. Clearance Radius	Add Compatible	72.1	3.51	4.61
3. Cell and Base Diameter	Load Button	120.7	6.06	8.25
4. Cell Height to Button		44.5	2.50	3.25
5. Cell Body Height		41.4	2.25	3.00
6. Compression Button Diameter		39.6	2.58	3.16
7. Mounting B.C. Diameter		101.6	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 M8	C'Bore for M10	C'Bore for M16
10. Comp. Button Sph. Radius		150	300	300
11. Base Thickness		31.8	50.8	63.5
12. Base Step Height		.8	.8	.8
13. Base Step Diameter		85.9	111.3	146.1
14. Base Thread		M12 x 1.25 , 25 Dp.	M27 x 2, 56 Dp.	M27 x 2, 56 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