

STAINLESS STEEL LOAD CELLS

FATIGUE RATED STAINLESS STEEL (FRS SERIES) FORCE TRANSDUCERS

FEATURES

- Stainless Steel Construction
- Welded Diaphragm
- Optional Hermetically Sealed Connector
- Guaranteed Maximum Off-Center Load and Moment Error
- Low Creep
- Temperature Compensated
- Barometric Pressure Compensation



Note: Shown with Optional Connector and Connector Box.

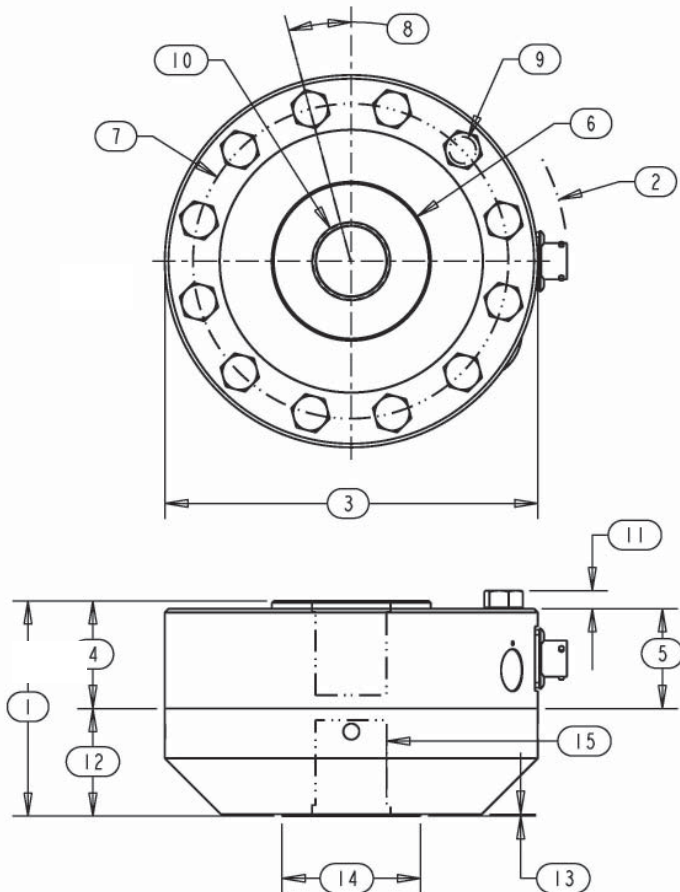
SPECIFICATIONS

PARAMETERS	MODEL	
	FRS10	FRS20
	CAPACITY (lbf)	
	2.5K, 5K	12.5K, 25K
Accuracy		
Static Error Band, % R.O.	+/-0.05	+/-0.05
Nonlinearity, % R.O.	+/-0.05	+/-0.05
Hysteresis, % R.O.	+/-0.06	+/-0.06
Nonrepeatability, % R.O.	+/-0.01	+/-0.01
Creep, % in 20 minutes	+/-0.025	+/-0.025
Off-Center Load Sensitivity, % /inch	+/-0.25	+/-0.25
Side Load Sensitivity, % /inch	+/-0.25	+/-0.25
Zero Balance, % R.O.	+/-1.0	+/-1.0
Temperature		
Range, Compensated, °F	+15 to +115	+15 to +115
Range, Operating, °F	-65 to +200	-65 to +200
Effect on Sensitivity, % Rdg/100°F	+/-0.08	+/-0.08
Effect on Zero, % R.O./100°F	+/-0.15	+/-0.15
Electrical		
Rated Output, mV/V, Nominal	2.0	2.0
Excitation Voltage, VDC, Recommended	10	10
Input Resistance, Ohms	350 +40/-3.5	350 +40/-3.5
Output Resistance, Ohms	350 +/-3.5	350 +/-3.5
Insulation Resistance, Megohm	5000 @ 50 VDC	5000 @ 50 VDC
Mechanical		
Safe Overload Range, % R.O.	+/-300	+/-300
Flexure Material	Stainless Steel	Stainless Steel

STAINLESS STEEL LOAD CELLS

DIMENSIONS

Review Drawing (in inches)	MODEL	
	FRS10	FRS20
	CAPACITY (lbf)	
	2.5K, 5K	12.5K, 25K
1. Height Total	2.56	3.67
2. Max. Clearance Radius	2.53	3.50
3. Cell and Base Diameter	4.12	6.06
4. Cell Height to Hub	1.38	1.75
5. Cell Body Height	1.25	1.63
6. Hub Diameter	1.29	2.34 25K/2.58 50K
7. Mounting B.C. Diameter	3.50	5.13
8. Symmetric B.C. Offset	22.5 Degrees	15 Degrees
9. Mounting Hole Diameter	.28	.41
10. Hub Thread	5/8 - 18, 1.12 Dp.	1 1/4 - 12, 1.50 Dp.
11. Bolt Head Protrusion	.18	.29
12. Base Thickness	1.13	1.75
13. Base Step Height	.03	.03
14. Base Step Diameter	1.25	2.25
15. Base Thread	5/8 - 18, .88 Dp.	1 1/4 - 12, 1.50 Dp.



OPTIONS

- Additional bridges
- Output adjustment to standard
- Compression overload protection
- Hermetically sealed connector
- Connector protection
- Integral cable

ACCESSORIES

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

THE TECHNICAL LEADER IN LOAD CELLS AND FORCE MEASUREMENT