

Model 616

S-Type Load Cells



Features

- Capacities: 100 - 1000 kg (220 - 1100 lbs)
- Stainless steel construction
- Tension or compression applications
- Suitable for hanging scales
- Ideal for conversion of mechanical to electronic scales
- Meets Handbook 44, OIML R60 and other international standards

Model 616 tension compression load cells are available in stainless steel.

Model 616 features stainless steel construction, IP67 environmental protection, 6 wire (sense) circuit, and a unique humidity-resistant protective coating. It is ideal for harsh environmental, high accuracy applications.

Ideally suited for lever conversions, hopper/tanks and vibratory feeders general process weighing and force measurement applications.

Tedea-Huntleigh, with models ranging from 2 to 50,000 is the world's largest manufacturer of precision load cells.



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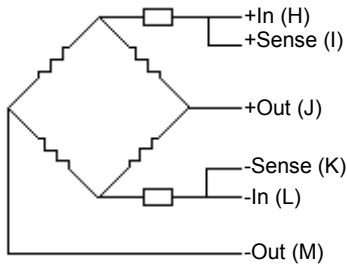
GRADE	E	F	G*	UNITS
Rated Capacity	100, 150, 200, 300, 500, 750, 1000			kg
Rated Output**	2 ± 0.10%			mV/V
Total Error***	1500	2000	3000	Divisions
Total Error	0.050	0.030	0.020	±% of Load
Creep at Rated Capacity / Zero Return After 30 Minutes	0.050	0.030	0.016	±% of Load
Zero Balance	10			±% of Rated Output
Temperature Range: Operating	-30 to +70			°C
Temperature Range: Compensated	-10 to +45			°C
Temperature Effect: On Output	0.0040	0.0015	0.0012	±% of Load / °C
Temperature Effect: On Zero	0.0080	0.0030	0.0027	±% of Rated Output / °C
Maximum Overload at the Center Loading Point	150			% of Rated Capacity
Ultimate Overload at the Center Loading Point	300			% of Rated Capacity
Excitation: Recommended	10			Volts AC or DC
Excitation: Maximum	15			Volts AC or DC
Input Impedance	385 ± 15			Ohms
Output Impedance	350 ± 3			Ohms
Insulation Resistance	>5000			Mega Ohms
Deflection at Rated Capacity	<0.4			mm
Weight	0.58			kg
Construction	Stainless Steel			
Cable	3 Meter, 6 Conductor, Polyurethane Jacket, Dual Floating Shield			
Environmental Protection	IP 67			
Approvals	OIML R60			

* G Class available on Model 616 > 300 kg only

** All accuracy specifications maintained when 150% of nominal load is applied for 3 mV/V output

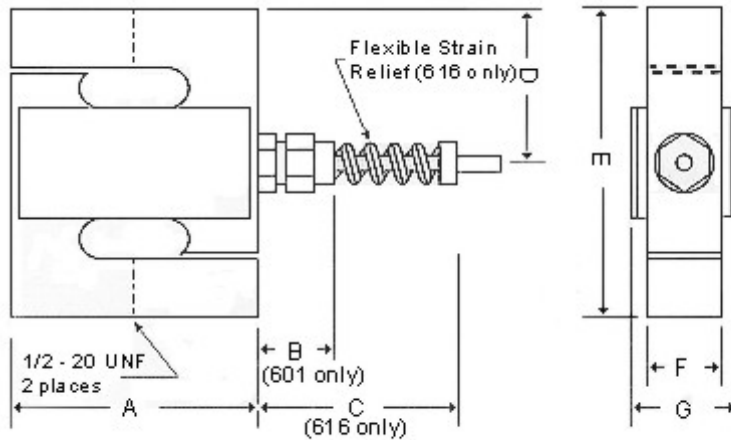
*** Nonlinearity, hysteresis, repeatability, and output temperature effect according to OIML R60 and NIST H-44

Balanced Temperature Compensation



The two "sense" wires (616 only) sample the bridge supply voltage at the load cell. Complete compensation of change in the lead wire resistance, due to temperature change and/or cable extension, is achieved by feeding this voltage into appropriate electronics.

Outline Dimensions All Capacities (in mm)



Dimensions

Model	616
A	60.35
B	--
C	50.81
D	39.87
E	80
F	19.05
G	27.43

Wiring Diagram

Model	601	616
H	Red	Green
I	--	Blue
J	Green	Red
K	--	Brown
L	Blue	Black
M	Yellow	White