

# TEDEA - HUNTLEIGH Model 600 Series 'S' Type Load Cells



- **Capacities: 50 - 100 kg (110.23 - 220.46 lbs)**
- **Stainless steel (616) or aluminum (601)**
- **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 601 and 616 tension compression load cells are available in aluminum alloy (601) or stainless steel (616).

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.

Model 616 features aluminum alloy construction, IP 65 environmental protection and 4 wire circuit. It is ideal for lower cost, high accuracy 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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LOS ANGELES, USA DARMSTADT-EBERSTADT, GERMANY BEIJING, CHINA CARDIFF, UK NETANYA, ISRAEL KARMIEL, ISRAEL CHARTRES, FRANCE

**TEDEA** **th**  
**HUNTLEIGH**  
EXCELLENCE IN LOAD CELLS

# 601 / 616 SPECIFICATIONS

GRADE	E	F	G*	UNITS
Accuracy Class	50, 100, 250, 500			kg
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
: Compensated	-10 to +45			°C
Temperature Effect : On Output	0.0040	0.0015	0.0012	±% of Load / °C
: 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
: Maximum	15			Volts AC or DC
Input Impedance : 601 / 616	415 ± 15 / 385 ± 15			Ohms
Output Impedance	350 ± 3			Ohms
Insulation Resistance : 601 / 616	>1000 / >5000			Mega Ohms
Deflection at Rated Capacity	<0.4			mm
Weight : 601 / 616	0.41 / 0.58			kg
Construction : 601 / 616	Aluminum / Stainless Steel			
Cable : 601	3 Meter, 4 Conductor, PVC Jacket, Floating Shield			
: 616	3 Meter, 6 Conductor, Polyurethane Jacket, Dual Floating Shield			
Environmental Protection	IP 65 / IP 67			
Approvals	OIML R60			

\* G Class available on Model 616 > 300 kg only

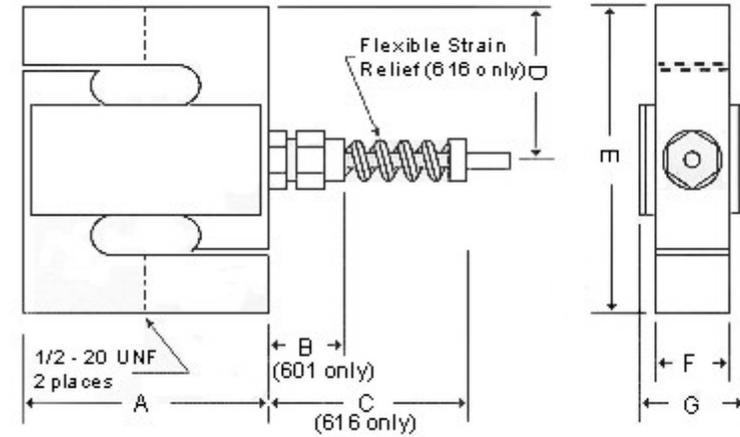
\*\* All accuracy specifications maintained when 150% of nominal load is applied for 3 mV/V output

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

## Wiring Diagram and Dimensions

### Dimensions

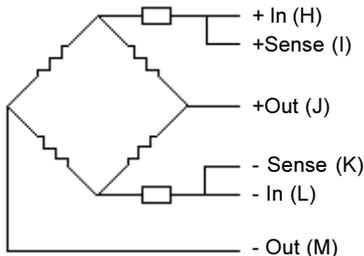
Model	601	616
A	2.75	2.50
B	0.80	--
C	--	2.04
D	1.50	1.57
E	3.00	3.15
F	1.00	0.75
G	1.35	1.08



### Wiring Diagram

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

### 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.



Due to TedeA-Huntleigh's policy of continuous development, these specifications are subject to change without notice.

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DSU 600, 1.95

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