

## Low Profile Universal Load Cell

### FEATURES

- Capacity: 0.5–100 t
- Alloy steel construction
- Universal load cell
- Integrated overload protection (in compression)
- Tension and compression loading
- **Optional**
  - Model 98005 without base mounting plate (for compression applications only)
  - Metric and imperial threads

### APPLICATIONS

- Universal testing machines

### DESCRIPTION

Model 98001 is a universal alloy steel shear beam load cell ideal for testing machine applications employing both tension and compression loading. This shear beam design

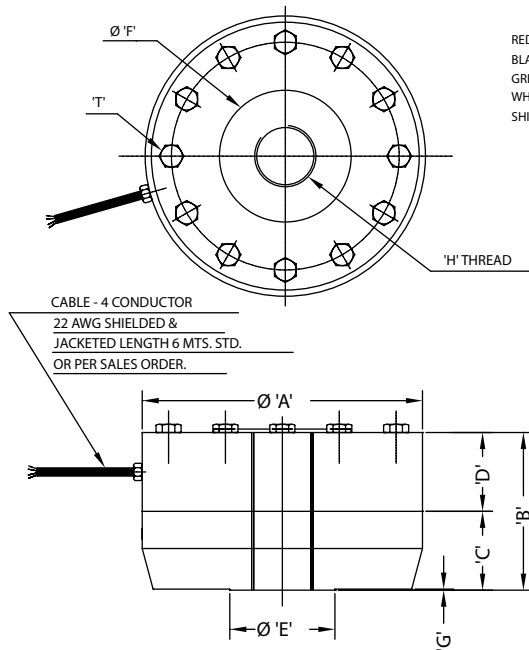


load cell provides excellent immunity to impact and side forces. This load cell includes integrated overload protection for compression loading applications.

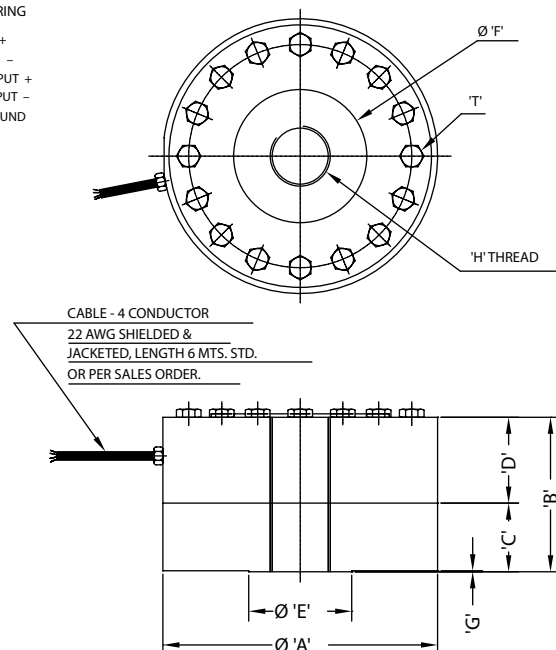
### OUTLINE DIMENSIONS in millimeters

CAPACITY	Ø A	B	C	D	Ø E	Ø F	G	HTHREAD	T
500 kg, 1.0, 2.0, 3.0, 5.0 t	105.0	66.40	35.00	31.4	34.0	34.0	7.80	M16 × 1.5	M8, 12 PLCS ON PCD 90.0
10, 15, 20, 25, 30 t	154.0	89.00	44.50	44.5	57.0	63.0	0.76	M30 × 2.0	M10, 12 PLCS ON PCD 130.0
40, 50, 60 t	203.0	115.06	51.56	63.5	76.0	95.5	0.76	1 3/4"-12 UNF-2B	M12, 16 PLCS ON PCD 165.0
100 t	279.0	166.10	77.20	88.9	114.0	122.0	0.80	M72 × 2.0	M16, 16 PLCS ON PCD 221.4

#### 500 kg–30.0 t



#### 40.0–100.0 t



WIRING  
RED EXC. +  
BLACK EXC. -  
GREEN OUTPUT +  
WHITE OUTPUT -  
SHIELD GROUND

Low Profile Universal Load Cell

<b>SPECIFICATIONS</b>		
<b>PARAMETER</b>	<b>VALUE</b>	<b>UNIT</b>
Rated output—R.O.	2.0	mV/V
Rated output tolerance	10	±% FSO
Zero balance	1	±% FSO
Combined error	<0.10	±% FSO
Non-linearity	<0.050	±% FSO
Hysteresis	<0.050	±% FSO
Non-repeatability	<0.020	±% FSO
Creep error (30 minutes)	<0.002	±% FSO
Temperature effect on zero	<0.001	± %/°C
Temperature effect on output	0.001	± %/°C
Operating temperature range	-20 to +70	°C
Maximum safe central overload	150	% FSO
Ultimate central overload	300	% FSO
Excitation, recommended	10	VDC
Excitation, maximum	15	VDC
Input impedance	699–750	Ω
Output impedance	699–750	Ω
Insulation resistance at 50 VDC	>1000	MΩ
Material	Alloy steel with electroless nickel-plated	
Environmental protection	IP67	

Specifications also apply for optional Model 98005 (for compression only)  
All specifications subject to change without notice.

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