

ULC ULTRA LOW CAPACITY LOAD CELL (U.S. & METRIC)

SPECIFICATIONS

ACCURACY – (MAX ERROR)				
Nonlinearity – %FS			±0.05	
Hysteresis – %FS			±0.05	
Nonrepeatability – %RO			±0.05	
Creep, in 20 min – %	0.1, 0.5 N		±0.1	
	0.02, 0.11 lbf			
	1, 2, 5 N		±0.05	
	0.22, 0.45, 1.12 lbf			
TEMPERATURE				
Compensated Range	°C		-10 to +45	
	°F		+15 to +115	
Operating Range	°C		-55 to +90	
	°F		-65 to +200	
Effect on Output – % / deg	°C		±0.002	
	°F		±0.001	
Effect on Zero – %RO / deg	°C		±0.004	
	°F		±0.002	
ELECTRICAL				
Rated Output – mV/V (Nominal)	0.1 N		±0.5	
	0.02 lbf			
	0.5 N		±1.5	
	0.11 lbf			
	1, 2, 5 N		±2.0	
	0.22, 0.45, 1.12 lbf			
Zero Balance – %RO (horiz.)			±2.0	
Input Resistance – Ohms			350 (+35/-3.5)	
Output Resistance – Ohms			350 (±3.5)	
Excitation Voltage – VDC MAX			12	
Insulation Resistance – Megohms			> 5000	
MECHANICAL				
Calibration			Tension	
Safe Axial Overload – %CAP			±1000	
Safe Side Overload – %CAP			±500	
Safe Load Axis Moment – %CAP x 1 in			±500	
NATURAL FREQUENCY/DEFLECTION				
N	lbf	Deflection		Nat. Freq. (Hz)
		mm	in	
0.1	0.02	0.08	0.003	65
0.5	0.11	0.23	0.011	90
1	0.22	0.23	0.011	125
2	0.45	0.20	0.008	200
5	1.12	.15	0.006	290
Material			Aluminum	
Weight			kg	0.13
			lb	0.28

STANDARD CONFIGURATION



Model ULC-1N (Shown)

FEATURES & BENEFITS

- Proprietary Interface temperature compensated strain gages
- Highest performance gram cell in the world
- Overload protected
- Safe side load overload to 5X capacity
- Low extraneous load sensitivity
- Low temperature effect on zero (0.002%/°F)
- Capacity down to 50 grams
- Tension and compression

OPTIONS

- Cable length
- Transducer Electronic Data Sheets (TEDS)
- Custom calibration
- Standardized output
- Special temperature range

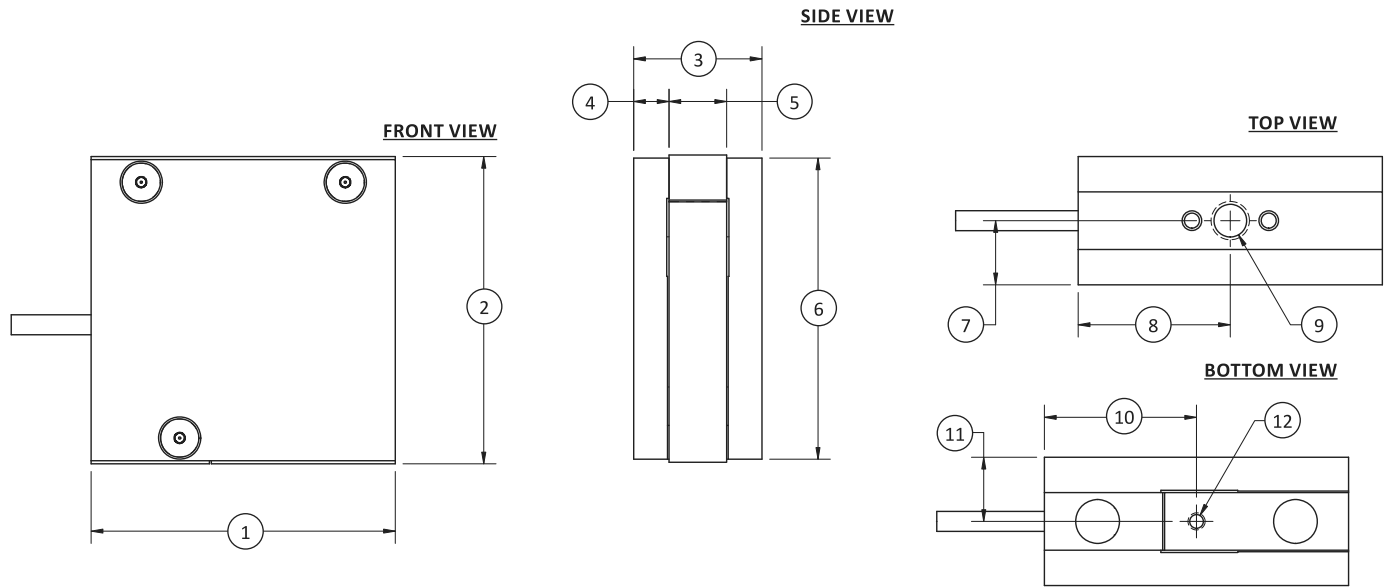
ACCESSORIES

- Instrumentation

CONNECTOR OPTIONS

- 1.5 m (5 ft) cable

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DIMENSIONS

See Drawing	CAPACITY	
	Metric (N*)	U.S. (lbf)
	0.1, 0.5, 1, 2, 5	0.02, 0.11, 0.22, 0.45, 1.12
	mm	in
(1)	50.3	1.98
(2)	50.8	2.00
(3)	21.2	0.84
(4)	5.8	0.23
(5)	9.5	0.38
(6)	49.8	1.96
(7)	10.6	0.42
(8)	25.1	0.99
(9)	¼-28 UNF ↓ 8.1	¼-28 UNF ↓ 0.32
(10)	25.1	0.99
(11)	10.6	0.42
(12)	4-40 UNC-2B ↓ 4.8	4-40 UNC-2B ↓ 0.19

* 1 Newton = 102 gram force

Note: Other sizes are available – contact factory