

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

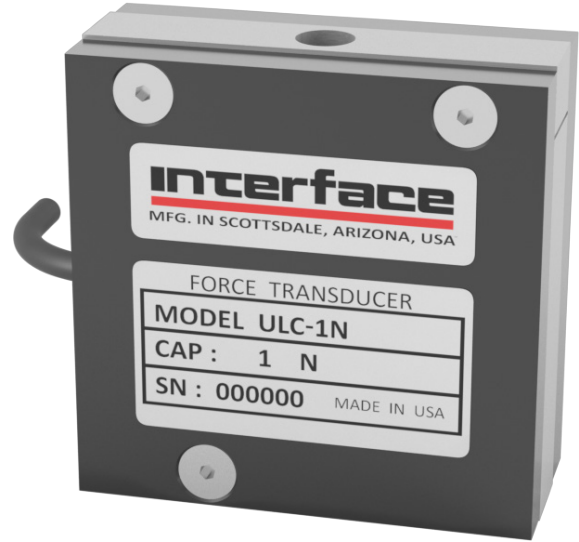
### FEATURES & BENEFITS

- 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

### SPECIFICATIONS

ACCURACY – (MAX ERROR)				
Nonlinearity – %FS				±0.05
Hysteresis – %FS				±0.05
Nonrepeatability – %RO				±0.05
Creep, in 20 min – %	(0.5 N)			±0.1
	(0.11 lbf)			
	(All others)			±0.05
TEMPERATURE				
Compensated Range	°C			-10 to +45
	°F			+15 to +115
Operating Range	°C			-55 to +90
	°F			-65 to +200
Effect on Output – % MAX	°C			±0.002
	°F			±0.001
Effect on Zero – %RO MAX	°C			±0.004
	°F			±0.002
ELECTRICAL				
Rated Output – mV/V (Nominal)	(0.5 N)			±1.5
	(0.11 lbf)			
	(All others)			
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	
0.5	0.11	0.2794	0.011	120
1	0.22	0.2794	0.011	125
2	0.45	0.2032	0.008	200
Material		Aluminum		

### STANDARD CONFIGURATION



Model ULC-1N (Shown)

### OPTIONS

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

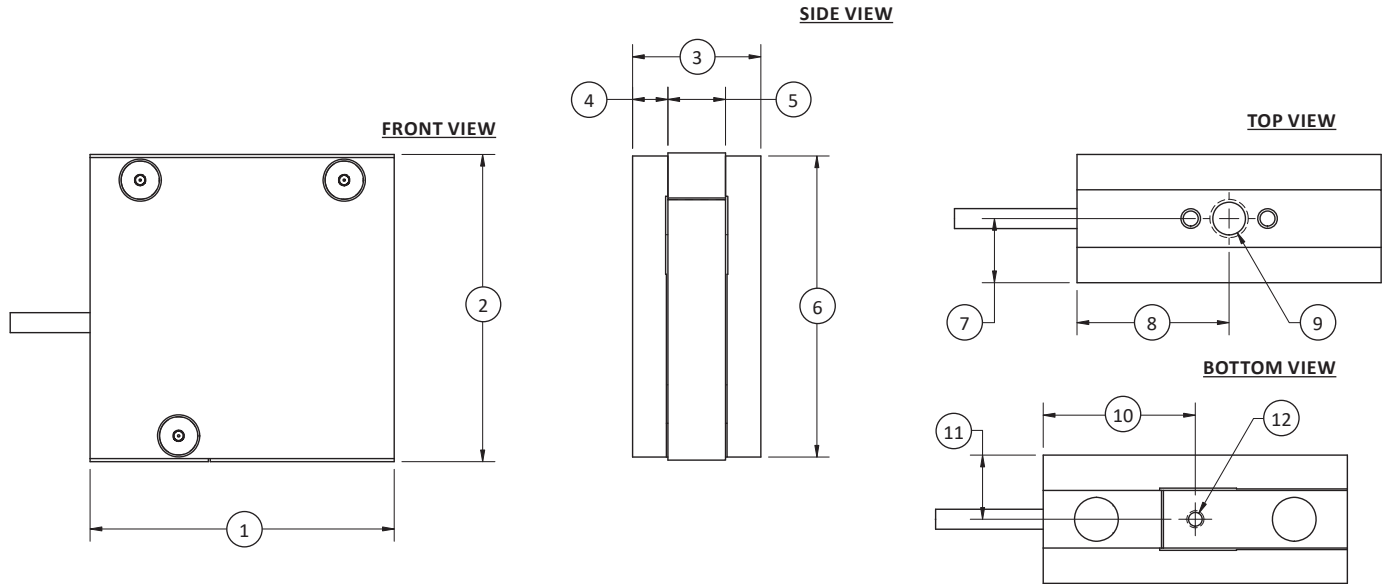
### ACCESSORIES

- Instrumentation

### CONNECTOR OPTIONS

- 1.5 m (5 ft) cable

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



### DIMENSIONS

See Drawing	CAPACITY	
	Metric (N*)	U.S. (lbf)
	0.1, 0.5, 1, 2	0.02, 0.11, 0.22, 0.45
	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