

## FEATURES

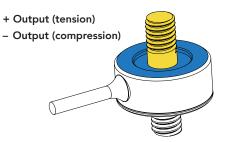
- High speed, low deflection
- Minimal mounting clearance
- Lightweight and ultra miniature solution
- Outer diameter of 0.38" [9.5 mm]
- 17-4 PH stainless-steel construction
- For use, both in-line tension and compression
- Utilizes metal foil strain gauge technology
- Adheres to RoHS directive 2015/63/EU

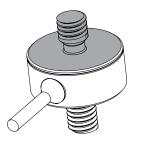
Non-loading surface

Active End

Fixed end

www.futek.com





Sensor Solution Source Load · Torque · Pressure · Multi-Axis · Calibration · Instruments · Software MODEL LCM100 Miniature In Line Load Cell

SPECIFICATIONS			
PERFORMANCE			
Nonlinearity	±0.5% of RO		
Hysteresis	±0.5% of RO		
Nonrepeatability	±0.1% of RO		
ELECTRICAL			
Rated Output (RO)	1 mV/V (1000 g, 5 lb) 2 mV/V (10 lb, 25 lb)		
Excitation (VDC or VAC)	7 max		
Bridge Resistance	350 Ohm nom		
Insulation Resistance	≥500 MOhm @ 50 VDC		
Connection	#34 Awg 4 conductor braided shielded cable 5 ft [1.5 m] long #34 Awg 4 conductor braided shielded polyester cable 5 ft [1.5 m] long		
Wiring/Connector Code	WC1 - Braided Polyester Jacketed Cable WC1s - Non-Jacketed Braided Cable		
MECHANICAL			
Weight (approximate)	0.3 oz [8.5 g]		
Safe Overload	150% of RO		
Material	17-4 PH stainless-steel		
IP Rating	IP64 (Non-Jacketed Braided Cable) IP65 (Braided Polyester Jacketed Cable)		
TEMPERATURE			
Operating Temperature	–60 to 200°F (–51 to 93°C)		
Compensated Temperature	60 to 160°F (16 to 71°C)		
Temperature Shift Zero	±0.02% of RO/°F (±0.036 of RO/°C)		
Temperature Shift Span	±0.02% of load/°F (±0.036 of load/°C)		
CALIBRATION			
Calibration Test Excitation	5 VDC		
Calibration (standard)	5-pt Tension		
Calibration (available)	Compression		
Shunt Calibration Value	100 kOhm (1000 g, 5 lb), 60.4 kOhm (10 lb, 25 lb)		
CONFORMITY			
RoHS	EU 2015/863		
CE	EN55011; EN61326-1		





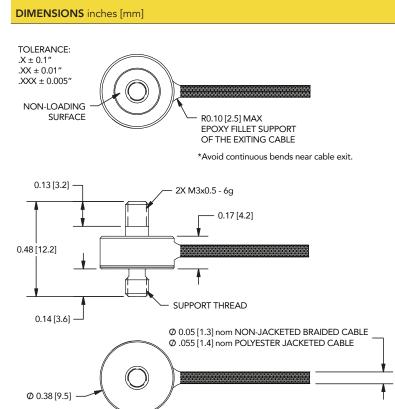








## Model LCM100



Note: Static one time bends are not to exceed 2-3 times the diameter of the cable. Continuous bends should not exceed a radius of 10 times the diameter of the sensor cable. Polyester Cable versions are available to offer support for applications with cable movement.

## CAPACITIES

ITEM #	Cable Type	lb	N	Deflection (in)	Natural Frequency (kHz)
FSH03842	Braided	1000 g	9.8	0.0001	19
FSH04397	Polyester				
FSH03829	Braided	5 lb	22.2	0.0001	26
FSH04398	Polyester				
FSH03828	Braided	10 lb	44.5	0.0002	26
FSH04399	Polyester				
FSH03827	Braided	25 lb	111.2	0.0002	42
FSH04400	Polyester				

\*\*In-line sensors are sensitive to off-axis or extraneous forces, please refer to Extraneous Load Factor sheet.

CE

**R**ØHS

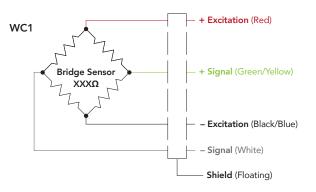
لی رو

7540-1

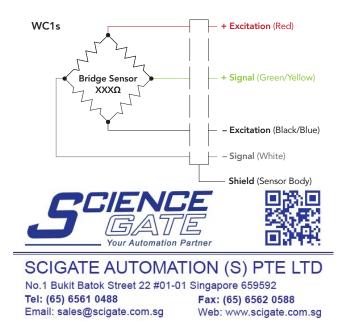
りべ

17025

## WIRING CODE WC1s WC1 RED + EXCITATION + EXCITATION BLACK - EXCITATION - EXCITATION GREEN + SIGNAL + SIGNAL WHITE - SIGNAL - SIGNAL SHIELDED SENSOR BODY FLOATING



For units with Braided Polyester Jacket Cables



Business Hours: Monday - Friday 8.30am - 6.15pm

9001

13485

Drawing Number: FI1367-H

FUTEK reserves the right to modify its design and specifications without notice. Please visit <u>http://www.futek.com/salesterms</u> for complete terms and conditions.

10 Thomas, Irvine, CA 92618 USA Tel: (949) 465-0900

www.futek.com

