# **Load Washers** for Measuring Bolt Compressional Forces

# **LCMWD Series**

Compression 0-1000 N to 0-200 kN

1 Newton = 0.2248 lb 1 kgf = 10 Newtons 1 kg = 2.204 lb1 t = 1000 kg = 2204 lb

Starts at





- Ranges to 200 kN
- ✓ Compact Design
- ✓ Spherical Washers Included
- Load Buttons Included
- Use of Spherical Washers **Recommended When Used with Bolts**
- ✓ Use of Load Button **Recommended When Used** as Compression Load Cell

# WIRING CODE RED +EXC BLACK -EXC GREEN +OUT WHITE -OUT OD I.D. CABLE

Dimensions: mm

CAPACITY (N)	ID	OD	Н
≤50,000	10.2	25	9.0
100,000	12.7	30	10
200,000	19.3	44	13

#### Caution

This unit is not field serviceable. Modifying and/or tampering will forfeit the warranty and may be dangerous. Use appropriate protective equipment and/or garments when testing or installing, including safety glasses.

#### **SPECIFICATIONS**

Excitation: 10 Vdc (15 V max) Output: 2 mV/V ± 20%

Accuracy (Linearity, Hysteresis and Repeatability Combined): ≤50 kN: ±0.5% BFSL

>50 kN: ±0.75% BFSL Zero Balance: ±4.0% FSO Operating Temp Range: -40 to 127°C

**Compensated Temp Range:** 

16 to 71°C

**Thermal Effects:** 

**Zero:** ±0.018% FSO/°C **Span:** ±0.018% FSO/°C

Safe Overload: 120% of capacity Ultimate Overload: 200% of capacity

Bridge Resistance: 350  $\Omega$  min <200 kN; 700  $\Omega$  = 200 kN

Full Scale Deflection: 0.025 mm typical

Construction: Stainless steel Electrical: 1.5 m insulated

shielded cable

#### **MOST POPULAR MODELS HIGHLIGHTED!**

To Order <i>(Specify Model Number)</i>									
CAPACITY		CAPA	MODEL		COMPATIBLE	SPHERICAL WASHERS**			
N lb	NO.	lb	PRICE ME	TERS*	MODEL	ID	PRICE		
1000	225	1000	LCMWD-1KN	£252	DPiS, DP41-S, DP25B-S	SPW-2	8.7	£7	
2000	450	2000	LCMWD-2KN	252	DPiS, DP41-S, DP25B-S	SPW-2	8.7	7	
5000	1124	5000	LCMWD-5KN	252	DPiS, DP41-S, DP25B-S	SPW-2	8.7	7	
10,000	2248	0,000	LCMWD-10KN	252	DPiS, DP41-S, DP25B-S	SPW-2	8.7	7	
20,000	4496	0,000	LCMWD-20KN	252	DPiS, DP41-S, DP25B-S	SPW-2	8.7	7	
50,000	11,240	0,000	LCMWD-50KN	299	DPiS, DP41-S, DP25B-S	SPW-2	8.7	7	
100,000	22,481	00,000	LCMWD-100KN	332	DPiS, DP41-S, DP25B-S	SPW-3	10	7	
200,000	44,962	00,000	LCMWD-200KN	359	DPiS <sup>†</sup> , DP41-S, DP25B-S	SPW-5	17	10	
200,000	44,962	00,000		359	-, -,	01 11 0			

Comes with 5-point traceable calibration.

\* See page 80 for compatible meters. † 4-digit meter.

\*\* One set of spherical washers and one set of load buttons supplied with each load cell. Ordering Examples: LCMWD-10KN, 10 kN capacity load washer supplied with 2 load

buttons and a set of spherical washers, £252. LCMWD-200KN, 200 kN capacity load washer supplied with 2 load buttons and a set of spherical washers, £359.

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622

Fax +44(0) 161 777 6622

Sales@omega.co.uk

## www.omega.co.uk



## **UNITED STATES**

www.omega.com 1-800-TC-OMEGA Stamford, CT.

#### **CANADA**

www.omega.ca Laval(Quebec) 1-800-TC-OMEGA

#### **GERMANY**

www.omega.de Deckenpfronn, Germany 0800-8266342

#### UNITED KINGDOM

www. omega.co.uk Manchester, England 0800-488-488

#### **FRANCE**

www.omega.fr 088-466-342

#### **CZECH REPUBLIC**

www.omegaeng.cz Karviná, Czech Republic 596-311-899

#### **BENELUX**

www.omega.nl 0800-099-33-44



# More than 100,000 Products Available!

### Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

#### Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

# pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

# Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

## Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

#### Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters