

## Description

The LCM Systems DCE load cell has been developed for applications that require the measurement of tensile and compressive forces, where space is limited.

As with most LCM products there are special variants that are available for this product. Popular variants include different thread sizes, integral connectors and high temperature versions.

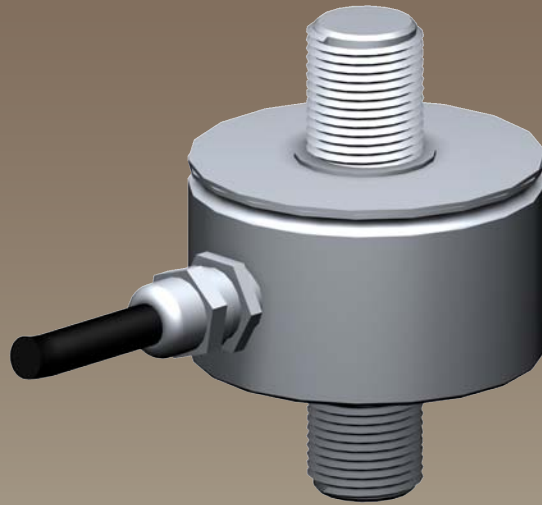
The DCE can be supplied on its own or integrated with any of the wide range of instrumentation products available from LCM Systems.

Typical applications include component testing, weighing systems.

## Typical Applications

- General Force Measurement
- Wire Tension Measurement
- Tensile Testing

## DCE Tension/Compression Load Cell



## Features

- Ranges 100N to 50kN
- Stainless Steel construction
- Environmentally Sealed to IP65
- Special Sizes and ranges available
- Different mounting options available
- Rationalised Output Option Available

# Tension/Compression Load Cell

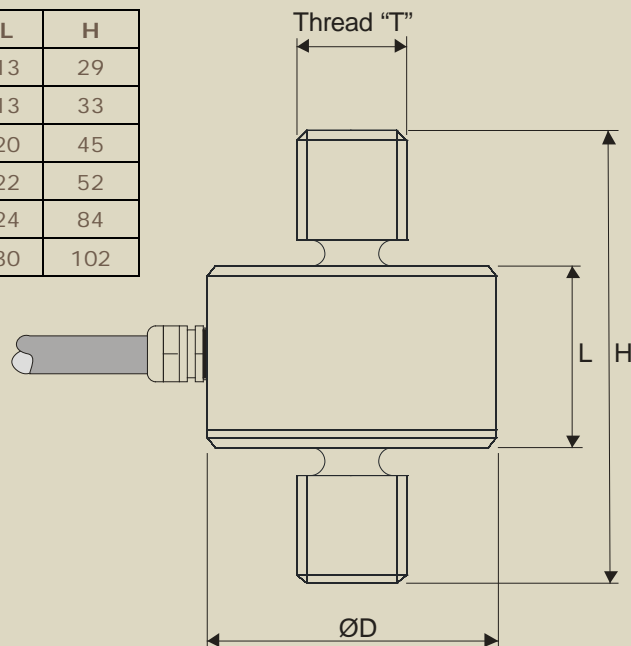
## Specification

Rated Load:	100, 250, 500, 750N 1, 2.5, 5, 7.5, 10, 25, 50kN
Proof Load:	150% of Rated Load
Ultimate Breaking Load:	>300% of Rated Load
Maximum Side Load:	10% of Rated Load
Output:	1.5 mV/V at Rated Load (nominal)
Non-Linearity:	< ±0.25% of Rated Load
Non-Repeatability:	< ±0.10% of Rated Load
Excitation Voltage:	10vdc recommended, 15vdc maximum
Bridge Resistance:	350Ω
Insulation Resistance:	>500MΩ @ 500vdc
Operating Temperature Range:	-20 to +70°C
Compensated Temperature Range:	-10 to +50°C
Zero Temperature Coefficient:	< ±0.010% of Rated Load/°C
Span Temperature Coefficient:	< ±0.010% of Rated Load/°C
Environmental Protection Level:	IP65
Connection Type:	2 metres 4-core screened PVC cable
Wiring Connections:	Red +ve supply    Blue -ve supply Green +ve signal    Yellow -ve signal
Options Available:	Special ranges and sizes available Rationalised output available

## Mechanical Dimensions

All dimensions in millimeters

Range	Thread "T"	ØD	L	H
100, 250, 500, 750N	M4 x 0.7	Ø20	13	29
1, 2.5kN	M5 x 0.8	Ø20	13	33
5, 7.5kN	M10 x 1.0	Ø32	20	45
10kN	M12 x 1.75	Ø38	22	52
25kN	M20 x 1.5	Ø38	24	84
50kN	M24 x 2.0	Ø38	30	102



Due to continual product development, LCM Systems Ltd. reserves the right to alter product specifications without prior notice.

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**LCM**  
SYSTEMS

TYPE: DCE

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