

## Tension / Compression / Bi-Directional Calibration

**Function:** The LC-259 is a very versatile small button load cell that is specially designed for force measurement in confined spaces. It is ideally suited to measurements for the control of critical parameters in all kinds of industrial processes. The versatility of the LC-259 means that it is also suited to measurements in scientific and engineering test work, mobile as well as workshop. The LC-259 can work in compression and / or tension. Note that the output signal differs in compression from tension, the values being stated on each test certificate. **Applications:** Automotive; Aerospace; Medical; Dental; Robotic; Machinery Control; and Mobile Installations. **Ranges: 20, 50 and 100 Kg.**

### SPECIFICATIONS

Please note that the following are typical ranges. We also manufacture sensors to cater for other ranges, within limitations detailed below.

#### RANGES:

**Rated Load**

25, 50 and 100 Kg

**Safe Overload**

50% of Rated Load

**Mechanical Failure**

100% of Rated Load

Other special ranges are available if required - please contact our internal sales department for further details

#### OUTPUT:

**Rated Output**

1.6mV / V - nominal

**Optional Extra:**

**Rated Output - Rationalised**

1.5mV / V  $\pm 0.5\%$  of Rated Load

**Non-Linearity**

$\pm 0.5\%$  of Rated Load

**Hysteresis**

$\pm 0.5\%$  of Rated Load

**Repeatability**

$\pm 0.05\%$  of Rated Load

**Zero Return, Creep (20 mins)**

$\pm 0.2\%$  of Actual Load

**Zero Load Output**

$\pm 4\%$  of Rated Load

#### SUPPLY:

**Excitation Voltage Recommended**

5 Volt DC

**Maximum**

10 Volt DC

**Terminal Resistance**

350 ohms nominal

**Insulation Resistance Bridge / Case @ 50V DC**

> 500 Mohms

#### GENERAL:

**Temperature effect :-**

**On Span**

$\pm 0.05\%$  of Actual Load /  $\Delta 10^\circ\text{C}$

**On Zero**

$\pm 0.3\%$  of Rated Load /  $\Delta 10^\circ\text{C}$

**Temperature Range:-**

**Compensated**

-10 to  $+50^\circ\text{C}$

**Safe**

-10 to  $+80^\circ\text{C}$

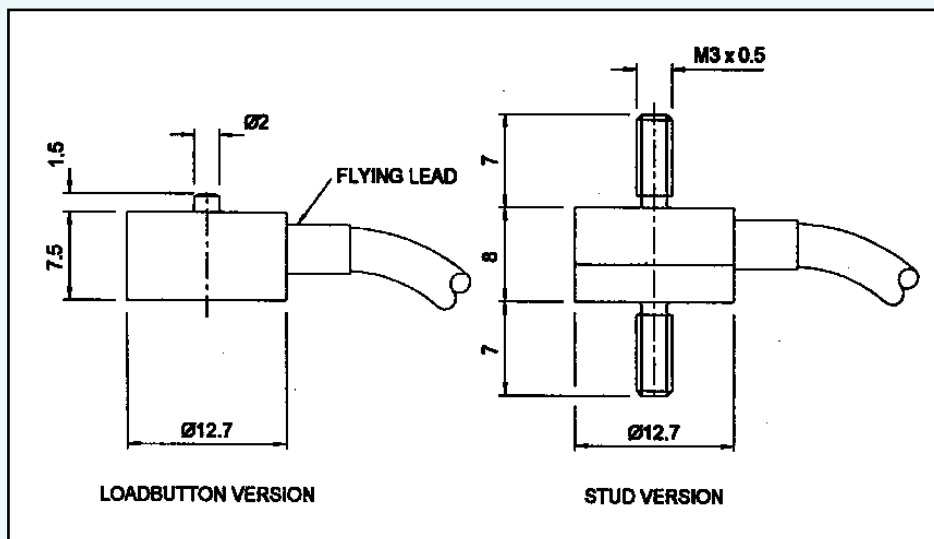
**Body Material**

Hardened Stainless Steel

**Cable Length**

2m of PVC insulated 4 core screened cable

### MECHANICAL DETAILS



Dimensions in mm

### ORDERING DETAILS

- (a) Give identification code, i.e. LC-259
- (b) Give details of input range, i.e. 0 to 50kg

- (c) Specify if Load Button or Stud type required

