

# Tension-Compression Load-Cell, LC-AC Series



The LC series force transducer is an LVDT type, featuring practically unlimited life time, making it suitable for fast automatic weighing machines. Internal springs construction include damping properties, thus limiting overshoot. And shortening the response time.

This Load-Cell contains an AC LVDT and therefore requires a signal conditioner electronics to operate, if such as LVDT Signal Conditioner model EL-10 or LVDT Signal Conditioner model EL-15, or LVDT Control Box CB-100 Series, or USB-10 Unit, manufactured by Singer Instruments & Control.

## Specifications:

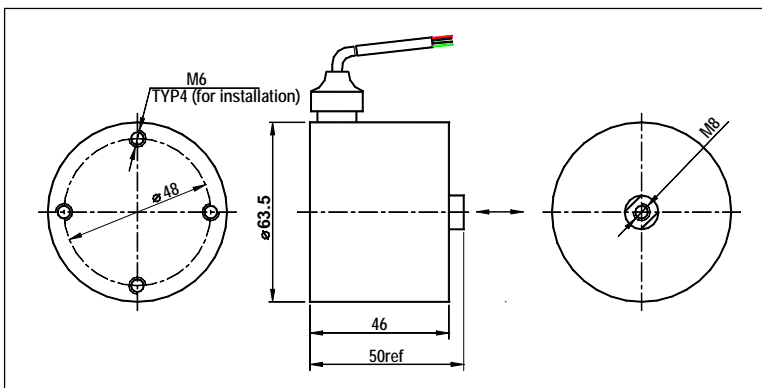
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| <b>Measuring range</b> . . . . .             | 1 Kg. (LC-1AC); 2 Kg. (LC-2AC);<br>5 Kg. (LC-5AC); 10 Kg. (LC-10AC); |
| <b>Measuring frequency</b> . . . .           | DC to 20 Hz  |
| <b>Linearity error</b> . . . . .             | 0.15% F. S.  |
| <b>Hysteresis error</b>                      | 0.02% F. S.  |
| <b>Input voltage</b> . . . . .               | 3V rms (nominal)   |
| <b>Input Frequency</b> . . . . .             | 6kHz (nominal)   |
| <b>Output</b> . . . . .                      | 150 to 300 mV rms F. S.  |
| <b>Deflection</b> . . . . .                  | 0.1 mm typ.  |
| <b>Overload capability</b> . . . . .         | 200% to 1000%, depending on range                                    |
| <b>Side load capability</b> . . . . .        | 100% typ.  |
| <b>T.C. of sensitivity</b> . . . . .         | 0.01% / °C typ.  |
| <b>T.C. of zero</b> . . . . .                | 0.01% FS / °C typ.   |
| <b>Operating temperature range</b> . . . . . | -20°C to + 70°C  |
| <b>Resistance:</b>                           |  |
| <b>Prim.</b> . . . . .                       | 190 Ω  |
| <b>Sec.</b> . . . . .                        | 190 Ω  |
| <b>Impedance:</b>                            |  |
| <b>Prim.</b> . . . . .                       | 250 Ω  |
| <b>Sec.</b> . . . . .                        | 350 Ω  |
| <b>Shock Survival</b> . . . . .              | 500g for 11 msec   |
| <b>Vibration Survival</b> . . . . .          | 20 g up to 500 Hz  |
| <b>Lead wires</b> . . . . .                  | Shielded 6 wire Cable 500 mm long                                    |
| <b>Housing material</b> . . . . .            | Anodized Aluminum alloy  |
| <b>Weight</b> . . . . .                      | 550 grams  |



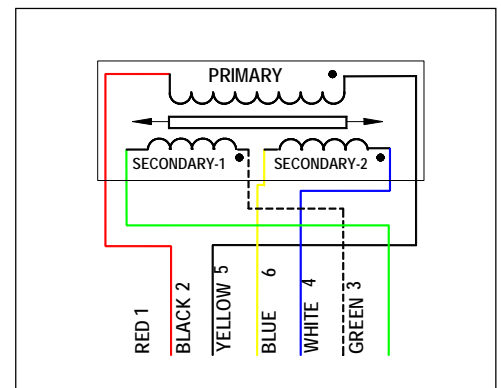
## How to order

Ordering example:  
Model number: LC – 1AC. (for measuring range 1kg )

## Dimensions (mm):



## Wiring



Rev. F

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