

# LVDT Control Box CB-100 Series



The CB-100 Series Boxes are ideal for operating low impedance LVDTs for industrial and test applications.

The CB-100A Control Box includes Signal Conditioner Card model EL-10. It is full function Signal Conditioner for 5 or 6 wire LVDTs and analog output  $\pm 10$  VDC max and 10mA max.

The CB-100B Control Box includes Signal Conditioner Card model EL-35. It is a full function Signal Conditioner for 4, 5 or 6 wire LVDTs and analog output  $\pm 5$  VDC max and 10mA max.

The front panel features: ON/OFF button and signal lamp, ZERO and GAIN adjustment trimmers, LVDT and Output voltage connectors.

The CB-100 Series Control Boxes are compatible with all LVDTs and LVDT based transducers manufactured by Singer Instruments & Control Ltd.

In additions to the standard CB-100 Control Box, there are a variety of custom made Control Boxes, such as CB-100 with 3.5 to 4.5 voltage display, multi channel (2 to 12) LVDTs, wide band frequency response and other versions by request.



## Specifications

| Name                                     | CB-100A                               | CB-100B                               |
|------------------------------------------|---------------------------------------|---------------------------------------|
| <b>LVDT excitation</b>                   |                                       |                                       |
| Voltage .....                            | 3.5 V rms @ 60 mA max                 | 1.7 V rms @ 30 mA max                 |
| Frequency .....                          | 7 kHz                                 | 5 kHz                                 |
| <b>Output</b>                            |                                       |                                       |
| Voltage .....                            | $\pm 10$ V DC max                     | $\pm 7$ V DC max                      |
| Current .....                            | 10 mA max                             | 10 mA max                             |
| <b>Trimmer Adjustments</b>               |                                       |                                       |
| Zero .....                               | $\pm 20\%$ of full scale reading      | $\pm 0.8$ V total                     |
| Gain .....                               | up to x5, trimmer adjustable          | up to x8, trimmer adjustable          |
| <b>Non linearity</b> .....               | $\leq 0.05\%$ of F.S.                 | $\leq 0.01\%$ of F.S.                 |
| <b>Operating temperature range</b> ..... | 0° to +70°C                           | 0° to +70°C                           |
| <b>Temperature Coefficient</b> .....     | $< 0.01\%$ of FS / °C                 | $< 0.01\%$ of FS / °C                 |
| <b>Warm up time</b> .....                | 10 minutes max                        | 5 minutes max                         |
| <b>Operating</b> .....                   | 5 or 6 wire LVDT                      | 4, 5 or 6 wire LVDT                   |
| <b>Isolation</b> .....                   | 500 V DC / Peak AC                    | 500 V DC / Peak AC                    |
| <b>LVDT connector</b> .....              | Female Lumberg socket KFV-50 (5 pins) | Female Lumberg socket KFV-50 (5 pins) |
| <b>Power requirements</b> .....          | 220 $\pm 5\%$ VAC, 50 Hz.             | 220 $\pm 5\%$ VAC, 50 Hz.             |
| <b>Dimensions (mm)</b> .....             | 245 x 155 x 70                        | 245 x 155 x 70                        |

## How To Order

Ordering example: Model number: CB-100A

Rev. F

© Singer Instruments & Control Ltd., 2012

WWW.SINGER-INSTRUMENTS.COM

Information furnished by Singer Instruments & Control is believed to be accurate and reliable. However, no responsibility is assumed by Singer Instruments & Control for its use, nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Singer Instruments & Control Ltd.

**Singer Instruments & Control Ltd.**

2 Yozma St., Tirat Carmel 39032, ISRAEL  
yuval@singer-instruments.com

Tel: 972-4-857-8880  
Fax: 972-4-857-8881