

TEACHING GUIDE

Amplifier LVA2 for LVDT

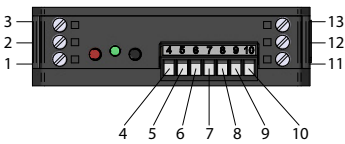
For further information please see the data sheet at www.waycon.biz/products/inductive-sensors-lvdt/

GENERAL NOTES

- Please note that the devices in question are precise electronic equipment. Installation and calibration must only be carried out by trained specialists.
- Mount the sensor before connecting the amplifier.
- Do not use the sensors near strong magnetic fields.
- Protect the electronics from moisture and humidity.
- Use the shortest possible cables between the sensor and the electronics.

ELECTRICAL CONNECTION ELECTRONICS LVA2

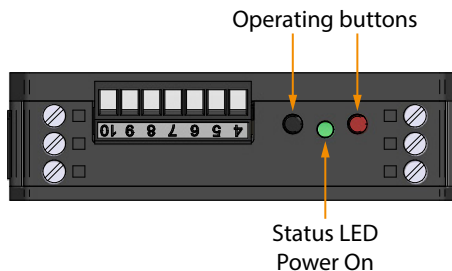
Function	Terminal	Function	Terminal
Shield	1	Primary 1	8
GND _{Supply}	2	Primary 2	9
+V	3	Shield	10
Secondary 1	4	GND _{Signal}	11
Center 1, 2	5	Signal 0...10 V	12
Secondary 2	6	Signal 4...20 mA	13
n. c.	7		



OUTPUT SIGNAL

LVA2 series measurement amplifiers are available with output signals of 0...10 V or 4...20 mA. Please select the required output using the order code in the data sheet. It is not possible to change the output signal at a later time.

TEACHING THE MEASUREMENT RANGE



Teaching mode:

The LVA2 measurement amplifier allows you to teach the measurement range in order to calibrate the electronics and the sensor.

To do this, proceed as follows:

1. To enter teaching mode, press and hold the red button before switching on the power supply, then switch on the power supply. Now release the red button.
2. Set Teach Point 1:
Move the sensor to the desired position and hold down the black button for more than 1 s.
3. Set Teach Point 2:
Move the sensor to the desired position and hold down the black button for more than 1 s.
4. To save, press and hold the red button for more than 1 s.

Note:

The order in which you set the teach points does not matter. The electronics will output the higher signal (10 V or 20 mA) when the sensor is retracted.

Once calibration is complete, the output signal value may exhibit sudden jumps outside the calibrated measurement range. This behaviour is normal and does not affect measurements within the calibrated measurement range.

The teach points are not recorded as exactly 0.0 / 10.0 V or 4.0 / 20.0 mA. This is normal behaviour. Fine adjustment is carried out in the next step.

Fine adjustment of the measurement signal:

1. Move the sensor to your previously set teach point 1. Use the black button to lower the measured value (Signal Down) and the red button to raise the measured value (Signal Up).
2. Move the sensor to your previously set teach point 2. Use the black button to lower the measured value (Signal Down) and the red button to raise the measured value (Signal Up).
3. For a more accurate measurement, we also recommend fine adjusting the measurement centre point. To do this, move the sensor to the centre of the calibrated measurement range and adjust it, as before, using the black button (Signal Down) and the red button (Signal Up).
4. Save the fine adjusted values by pressing the black and red buttons simultaneously (>1 s).

Note:

The fine tuning mode is always active, even when not in teaching mode.