INSTALLATION GUIDE

LVDT series LV, LVIT, LVIG, LVISM, LVPH

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

FIRST STEPS

WayCon Positionsmesstechnik GmbH would like to thank you for the trust you have placed in us and our products. This manual will make you familiar with the installation and operation of our inductive sensors LVDT. Please read this manual carefully before initial operation!

Unpacking and checking:
Carefully lift the device out of the box by grabbing the housing. After unpacking the device, check it for any visible damage as a result of rough handling during the shipment. Check the delivery for completeness.
If necessary consult the transportation company, or contact WayCon directly for further assistance.

GENERAL NOTES

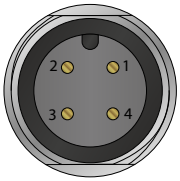
- Mount the sensor before connecting the external electronics.
- The LV series can optionally be mounted with flange or foot clamps.
- Do not use the sensors near strong magnetic fields.
- Protect the electronics from moisture and humidity.
- Avoid lateral forces on the push rod.
- Do not press in the push rod beyond the specified total mechanical stroke.
- For a measuring range of 100 mm or more, the sensor housing must be additionally stabilised. Otherwise the sensor may bend due to its own weight. In this case, we recommend using three mounting brackets.
- For sensors without WayCon electronics, the minimum of the output signal is at the electrical centre position. From there, half of the entire measuring range is in plus and half in minus (measuring range start and measuring range end).
- The sensor is calibrated to the electronics supplied. The calibration protocol supplied loses its validity as soon as the electronics are readjusted.
- Use the shortest possible cables between the sensor and the electronics.

ELECTRICAL CONNECTION LV

Sensor LV for external electronics LVA

Function	Cable output	Connector output	Connection cable K4P...
Primary 1	BN	Pin 1	BN
Primary 2	WH	Pin 2	WH
Secondary 2	BU	Pin 3	BU
Secondary 1	BK	Pin 4	BK

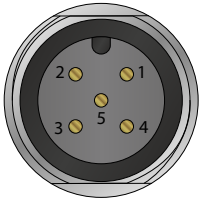
Connector output M12, male



Sensor LV for cable electronics LVC

Function	Cable output	Connector output	Connection cable K5P...
Primary 1	BN	Pin 1	BN
Primary 2	WH	Pin 2	WH
Secondary 2	BU	Pin 3	BU
Secondary 1	BK	Pin 4	BK
Secondary 1, 2 Centre	RD	Pin 5	GY

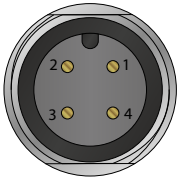
Connector output M12, male



ELECTRICAL CONNECTION LVIT

Function	Cable output	Connector output	Connection cable K4P...
+24 VDC	BN	Pin 1	BN
Signal	GN	Pin 2	WH
GND_{Supply}	GY	Pin 3	BU
GND_{Signal}	WH	Pin 4	BK
Shield	Shield	Housing	Shield

Connector output M12, male



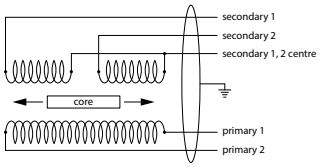
ELECTRICAL CONNECTION LVIG

Sensor with internal electronics

Function	Cable output
+24 VDC	BN
GND_{Supply}	GY
Signal	GN
GND_{Signal}	WH
n.c.	YE

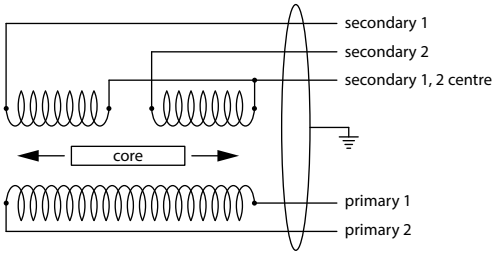
Sensor for external electronics

Function	Cable output
Primary 1	RD
Primary 2	BK
Secondary 2	OG
Secondary 1	YE
Secondary 1, 2 Centre	WH
Shield	Housing



ELECTRICAL CONNECTION LVISM

Function	Cable output
Primary 1	BK
Primary 2	BU
Secondary 2	YE
Secondary 1	GN
Secondary 1, 2 Centre	WH
Shield	Housing



ELECTRICAL CONNECTION LVPH

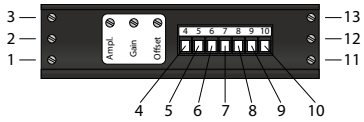
Function	Connector output	Connection cable K5P...
Primary 1	Pin 1	BN
n. c.	Pin 2	WH
Secondary 2	Pin 3	BU
Secondary 1	Pin 4	BK
Primary 2	Pin 5	GY

Connector output M12, male

ELECTRICAL CONNECTION ELECTRONICS LVA

Function	Terminal
Shield	1
GND_{Supply}	2
+V	3
n. c.	4
Primary 2	5
Secondary 2	6
Shield	7

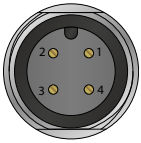
Function	Terminal
Secondary 1	8
Primary 1	9
n. c.	10
GND_{Signal}	11
Signal	12
Shield	13

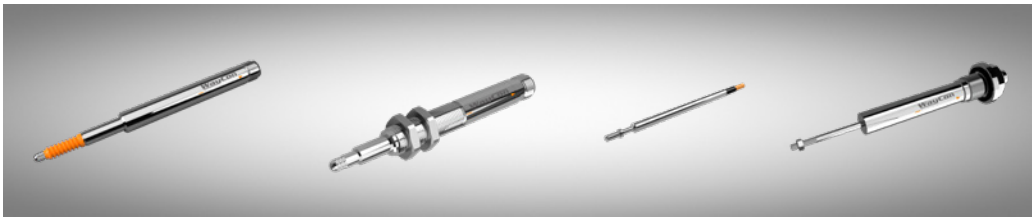


ELECTRICAL CONNECTION CABLE ELECTRONICS LVC

Function	Connector output	Connection cable K4P...
+V	Pin 1	BN
Signal	Pin 2	WH
GND_{Supply}	Pin 3	BU
GND_{Signal}	Pin 4	BK

Connector output M12, male





WARNING NOTICES

- Do not open the device.
- Do not touch the push rod during operation.
- Protect the push rod from ice formation.
- In humid environments, install the sensor with the push rod outlet to the floor, otherwise water may collect inside the sensor.

MAINTENANCE

The devices are maintenance-free. However, if the push rod becomes soiled due to adverse environmental conditions, clean it with a cloth as required.

DECLARATION OF EU-CONFORMITY

WayCon Positionsmesstechnik GmbH
Mehlbeerenstraße 4
82024 Taufkirchen / Germany

This is to certify that the products

Classification	Inductive Sensors LVDT
Series	LVA, LVC, LVIT, LVIG

fulfill the current request of the following EU-directives:

directive	2014/30/EU
	2011/65/EU

The declaration of conformity loses its validity if the product is misused or modified without proper authorisation.

Taufkirchen, 14.07.2021

Andreas Täger
CEO