

AMPLIFIER FOR LVDT

Links to compatible sensors:

LV Series

LVIG Series

LVISM Series

LVPH Series



LVA SERIES

Key-Features:

- Amplifier for LVDTs
- Output signal: 0...10 V, 4...20 mA
- Sensitivity: 200 mV, 500 mV, 1000 mV, 1500 mV, 1900 mV (further on request)
- Sensor supply: 3 V (further on request)
- Carrier frequency: 2.5 kHz, 5 kHz, 20 kHz (further on request)
- DIN rail mounting
- Protection class IP40
- Temperature range -25...+85 °C

Content

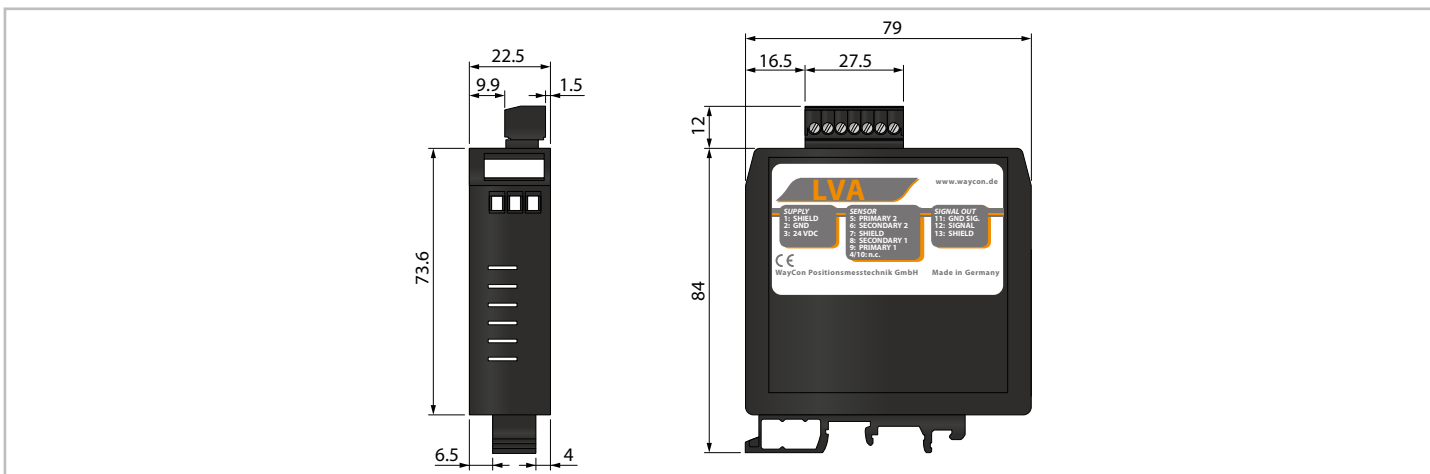
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TECHNICAL DATA

Output		0...10 V / 4...20 mA
Linearity ¹⁾	[% F.S.]	<±0.01
Noise	[mV _{RMS}]	<20
Supply	[VDC]	18...36
Current consumption (without load)	[mA]	<80 (at 24 V) / <100 (at 18 V)
Isolation voltage	[VDC]	500
Isolation resistance		1 GΩ at 500 VDC
Cut-off frequency		max. 10 % of excitation frequency
Sensor supply	[V _{RMS}]	3
Carrier frequency	[kHz]	2.5 / 5 / 20
Protection class		IP40
Operating temperature	[°C]	-25...+85
Storage temperature	[°C]	-25...+85
Temperature coefficient sensitivity	[% F.S./K]	<±0.04
Temperature coefficient zero point	[% F.S./K]	<±0.015
Mounting		DIN rail
Housing		Polyamide PA6.6

¹⁾ To achieve an optimal measuring result, it is recommended to power up the electronics for 10 minutes before the measurement.

TECHNICAL DRAWING



ELECTRICAL CONNECTION

Function	Terminal
Shield	1
GND _{supply}	2
+V	3
n. c.	4
Primary 2	5
Secondary 2	6
Shield	7
Secondary 1	8
Primary 1	9
n. c.	10
GND _{signal}	11
Signal	12
Shield	13

The diagram shows the electrical connection terminals of the LVA sensor module. It features a 13-pin connector with terminals numbered 1 through 13. Terminals 1, 2, and 3 are at the top, and terminals 11, 12, and 13 are at the bottom. Terminals 4 through 10 are in the middle. The diagram also shows three control buttons: 'Ampl.', 'Gain', and 'Offset'. The terminal numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 are labeled on the connector.

ORDER CODE

LVA - - - -

Supply 24 VDC	24
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Output signal Voltage 0...10 V Current 4...20 mA	10V 420A
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Sensor supply ¹⁾ 3 V	3
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2 5 10 15 19	Sensitivity ¹⁾ 200 mV 500 mV 1000 mV 1500 mV 1900 mV ²⁾
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2.5 5 20	Carrier frequency ¹⁾ 2.5 kHz ²⁾ 5 kHz 20 kHz
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¹⁾ Further on request

²⁾ Sensitivity 1900 mV only in combination with carrier frequency 2.5 kHz.
Carrier frequency 2.5 kHz only in combination with sensitivity 1900 mV.

Subject to change without prior notice.

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