

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

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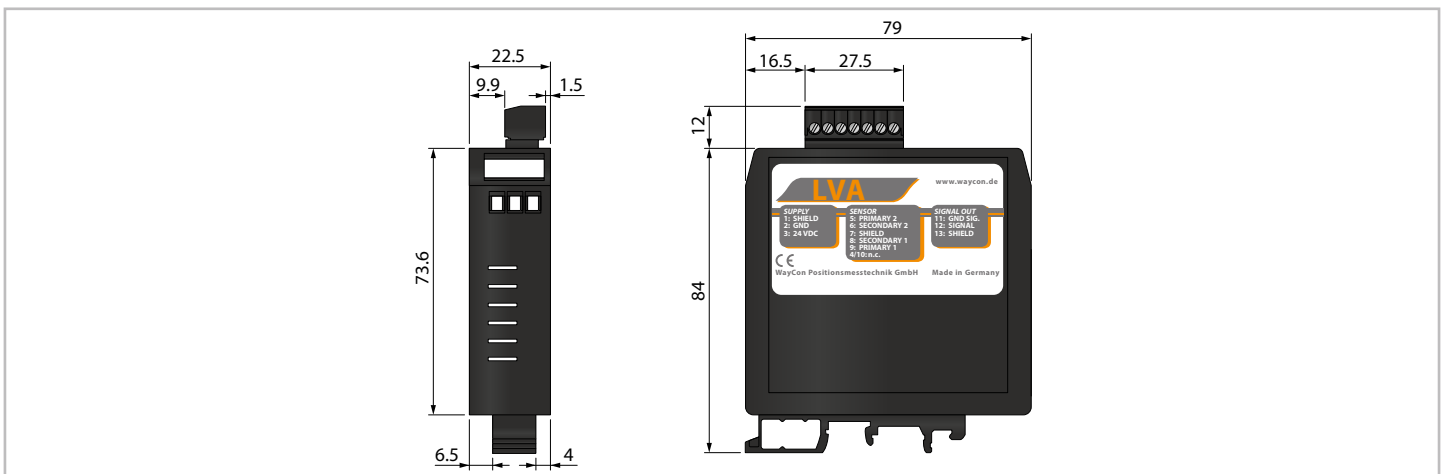
Order Code.....3

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

Diagram of the terminal block showing the connection points for the 13 terminals. The terminals are numbered 1 to 13. The top three terminals (1, 2, 3) are labeled 1, 2, 3. The middle terminals (4-10) are labeled 4, 5, 6, 7, 8, 9, 10. The bottom three terminals (11, 12, 13) are labeled 11, 12, 13. The terminals are connected to the sensor module's internal circuitry.

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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