INDUCTIVE SENSORS LVDT



Series LVPH

Key-Features:

- *LVDT for hydraulic applications*
- *Free moving rod with M5 thread*
- *Measurement ranges from 25 to 500 mm*
- *Linearity up to ≤0.1 %*
- *Output with external electronics: 0...10 V, 4...20 mA*
- *Operating temperature -20...+120 °C*
- *Operating pressure up to 350 bar*
- *Protection class IP67*

Content:

Technical Data	***....2***
Technical Drawing	***....3***
Electrical Connection	***....3***
Order Code	***....4***

04.06.20

WayCon
Positionsmesstechnik

TECHNICAL DATA SENSOR LVPH

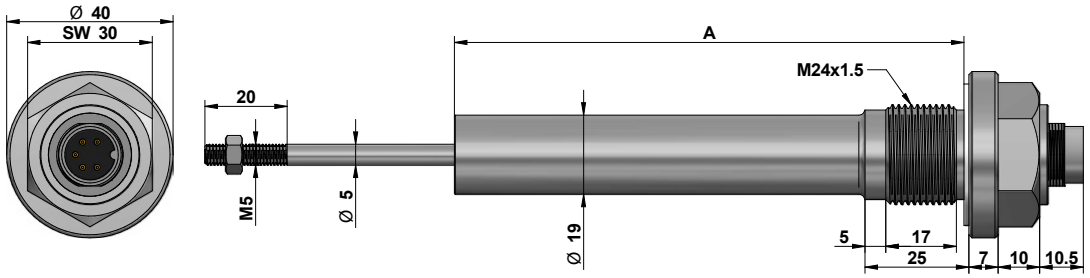
Measurement range	[mm]	25 / 50 / 100 / 150 / 200 / 500
Linearity [1)]	[%]	≤0.5 / optional: ≤0.25 or ≤0.1
Output signal	[V_{RMS}]	1 ±10 %
Excitation voltage	[V_{RMS}]	2
Excitation frequency	[kHz]	5
Protection class		IP67
Operating temperature	[°C]	-20...+120 [2)]
Operating pressure max.	[bar]	350
Pressure max.	[bar]	450
Vibration resistance		20 g up to 2 kHz
Shock resistance		100 g, 11 ms
Connection		connector output M16, axial, 5 poles
Housing		stainless steel AISI 304

[1)] based on the measurement range
[2)] connector area -20...+100 °C

TECHNICAL DATA ELECTRONICS LVA

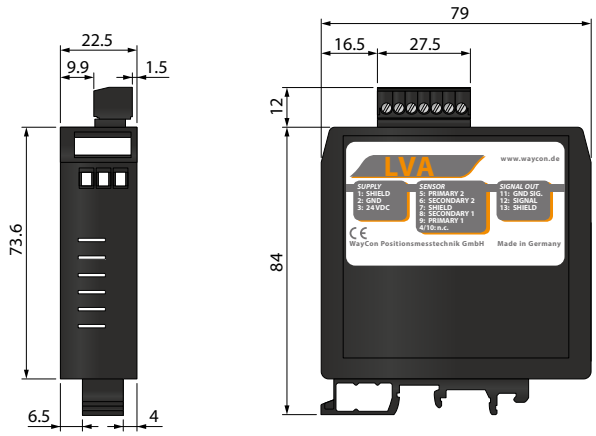
Output		0...10 V / 4...20 mA
Linearity	[% F.S.]	< ±0.01
Noise	[mV_{RMS}]	<20
Supply	[VDC]	18...36
Current consumption (without load)	[mA]	<50
Isolation voltage	[VDC]	500
Isolation resistance		1 GΩ at 500 VDC
Cut-off frequency		max. 10 % of excitation frequency
Sensor supply	[V_{RMS}]	3
Carrier frequency	[kHz]	5
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		Polyamid PA6.6

TECHNICAL DRAWING SENSOR LVPH



Measurement range	25	50	100	150	200	500
Housing length A	122.5	188	273	295	373	701
Rod length	120	175	245	310	324	670

TECHNICAL DRAWING ELECTRONICS LVA



ELECTRICAL CONNECTION

Sensor LVPH

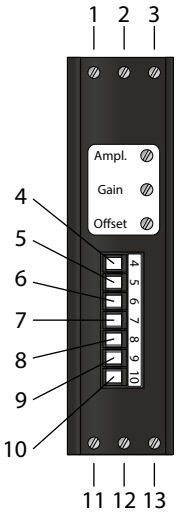
Function	Connector output
Primary 1	Pin 1
n. c.	Pin 2
Secondary 1	Pin 3
Secondary 2	Pin 4
Primary 2	Pin 5

Connector M16, male



DIN rail electronics LVA

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



ORDER CODE SENSOR

LVPH – □ – □ – □ – □

Measurement range MR [mm]	
25 / 50 / 100 / 150 / 200 / 500	

Electronics code number	
Sensor without external electronics	000
For LVA with output 4...20 mA	300
For LVA with output 0...10 V	310

	Options
-	Standard without options
L10	Improved linearity ≤0.1 %
L25	Improved linearity ≤0.25 %

	Connection
SA16	connector output M16, axial, 5 pins

ORDER CODE ELECTRONICS

LVA – □ – □ – □ □ – □

Supply	
24 VDC	24

Output signal	
Voltage 0...10 V	10V
Current 4...20 mA	420A

	Sensitivity
15	1500 mV

	Carrier frequency
5	5 kHz

	Sensor supply
3	3 V

ACCESSORIES

Mating connector M16 (female), 5 poles, for self assembly	
D5-G-M16-F	connector straight

Subject to change without prior notice.

WayCon Positionsmesstechnik GmbH
email: info@waycon.de
internet: www.waycon.biz

Head Office
Mehlbeerenstr. 4
82024 Taufkirchen
Tel. +49 (0)89 67 97 13-0
Fax +49 (0)89 67 97 13-250

Office Köln
Auf der Pehle 1
50321 Brühl
Tel. +49 (0)2232 56 79 44
Fax +49 (0)2232 56 79 45