

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 $\leq 0.1\%$
- Output with external electronics: 0...10 V, 4...20 mA
- Operating temperature -20...+120 °C
- Operating pressure up to 350 bar
- Protection class IP67

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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	[mV]	1500 ±10 %
Excitation voltage	[V _{RMS}]	3
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

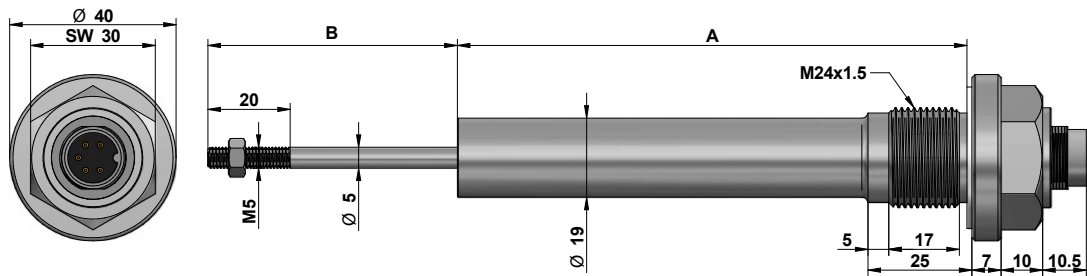
¹⁾ based on the measurement range

²⁾ connector area -20...+100 °C

TECHNICAL DATA ELECTRONICS LVA

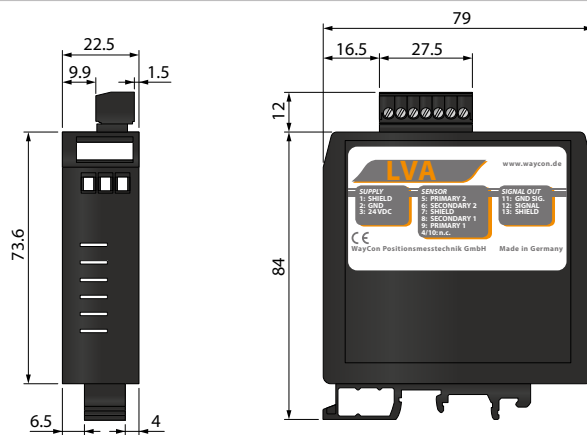
Output		0...10 V / 4...20 mA
Linearity	[% F.S.]	< ±0.01
Noise	[mV _{RMS}]	<20
Supply	[VDC]	18...36
Current consumption (without load)	[mA]	<50
Isolation voltage	[VDC]	500
Isolation resistance		1 GΩ at 500 VDC
Cut-off frequency		max. 10 % of excitation frequency
Sensor supply	[V _{RMS}]	3
Carrier frequency	[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
Centre measuring position	B	59	82	98	105	125	268
Rod length		120	175	245	310	324	670

TECHNICAL DRAWING ELECTRONICS LVA

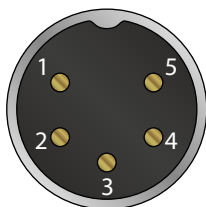


ELECTRICAL CONNECTION

Sensor LVPH

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

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

