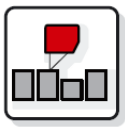
Laser distance sensor

OPTI*mess* LC-H CCD

- High measuring rate
- High accuracy
- Digital processing of measured values
- Analog output or CAN bus

The opto-electronic sensor **OPTI*mess* LC-H** is a device for no-contact distance measurement especially for test drive. This sensor distinguishes itself by a great independence of the measurement accuracy on different material surfaces and of the ambient light.

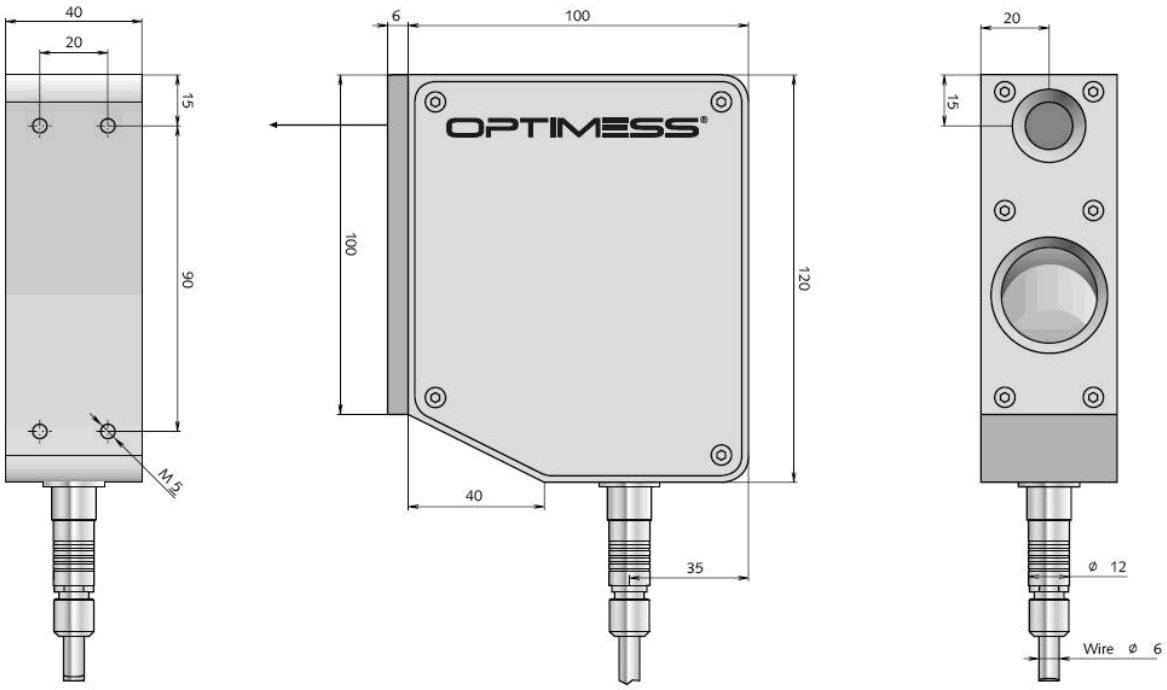
The **OPTI*mess* LC-H** works according to the triangulation principle. The laser spot projected by a laser diode via an optical system is represented at an angle on a CCD line by a receiving optical system. The processor integrated in the sensor processes the optical distance information and outputs them as an analogue value or via the CAN bus.



Distance measurement, position control

Car industry, test drive

Dr. D. Wehrhahn
Meßsysteme für die Qualitätssicherung



Measuring range [mm]	600	800
Stand off [mm]	530	800
Resolution [mm] [1]	0.6	0.8
Linearity	≤ ±0.2% FSO	
Reproducibility	≤ ±0.08% FSO	
Bandwidth [2]	100Hz max.	
Filter [2]	Digital averaging	
Measuring rate [2]	2 kHz max.	
Light source	Laser diode	
Spot diameter [2]	0.5 - 2mm	
Wave-length [2]	660nm	
Laser safety class [2]	3a	
Photo detector	CCD linear image sensor	
Supply voltage	± 15V / 150mA, ± 5% or 10 - 30V (only 0...5V output)	
Output [2]	± 5V / ± 10V / 0 - 5V / 0 - 10V / 0 - 20mA / 4 - 20mA / CAN - Bus	
Operating temperature	-20°C to 50°C non condensation	
Dimensions	120 x 100 x 40	
Weight	ca. 820g	
Protection class	IP 65 (without protection unit IP54)	

[1] Standard settings with filter 20Hz [2] Factory-set depending on the application