Laser distance sensor

OPTImess MC



- Minimum size and weight
- Digital processing of measured values
- Analog output or CAN bus

The opto-electronic sensor OPTIMESS MC is a device for no-contact distance measurement. This sensor distinguishes itself by a great independence of the measurement accuracy on different material surfaces and from the ambient light.

The OPTIMESS MC 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



Thickness measurement

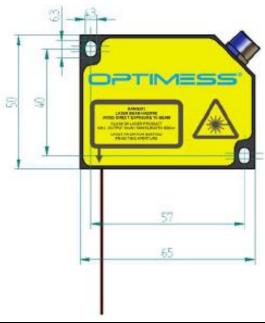


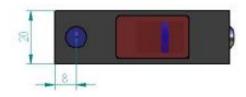
Steel industry, industrial automation



Car industry







Туре	OMS 4108	OMS 4120	OMS 4122	OMS 4123	OMS 4125	OMS 4140
Measuring range [mm] [3]	80	200	200	200	250	400
Stand off [mm] [3]	70	150	300	340	225	300
Resolution [mm] [1]	0,04	0,08	0,1	0,1	0,08	0,1
Spot size (SO) [mm] [2]	0,4	0,6	1,0	1,0	1,0	1,3
Linearity	≤ ± 0.3% FSO					
Reproducibility	≤±0.1% FSO.					
Bandwidth [2]	1 kHz max.					
Filter [2]	Digital averaging					
Measuring rate [2]	2 kHz					
Light source	Laser diode					
Spot diameter [2]	0.05 - 2mm					
Wave length [2]	660 nm					
Laser safety class [2]	2 / 3R					
Photo detector	CMOS linear image sensor					
Supply voltage	10 - 30V / 100mA					
Output [2]	0 - 5V / CAN - Bus					
Operating temperature	-20°C up to 60°C – no condensation					
Dimensions	65 x 50 x 20mm					
Weight	approx. 95g					
Protection class	IP 65					

[1] Standard settings with filter 200Hz [2] Factory-set depending on the application [3] Other types upon request

