

Distance Sensor M3

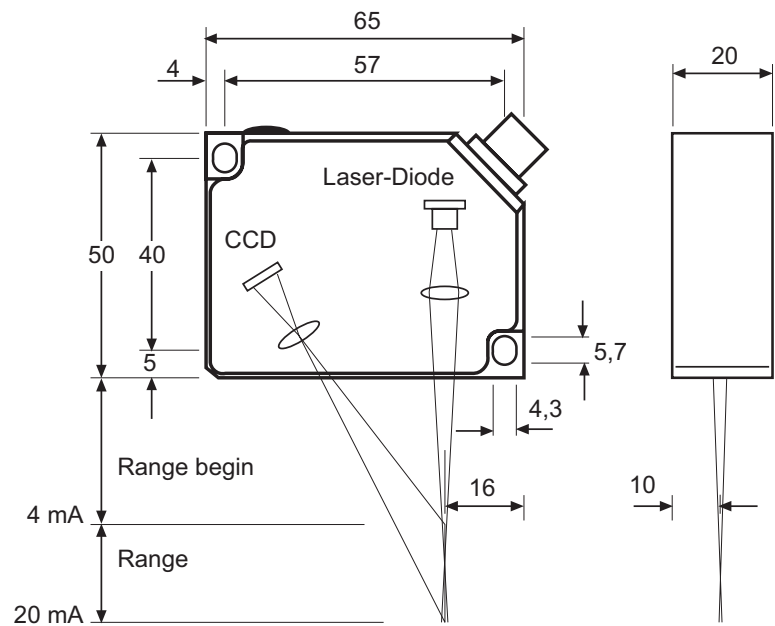
- Measuring
- Controlling
- Monitoring

Clever, with laser switch off
1000 values / s

Triangulation digital



Sensor head M3 /5 /10 /20 /50 /100 /200
Weight 90 g



- no additional electronic module
- measurement on many different surfaces up to 1 kHz: black rubber, polished metal
- automatic adjusting of measuring frequency depending on measuring object

Laser Sensor M3

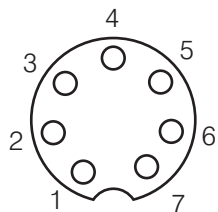
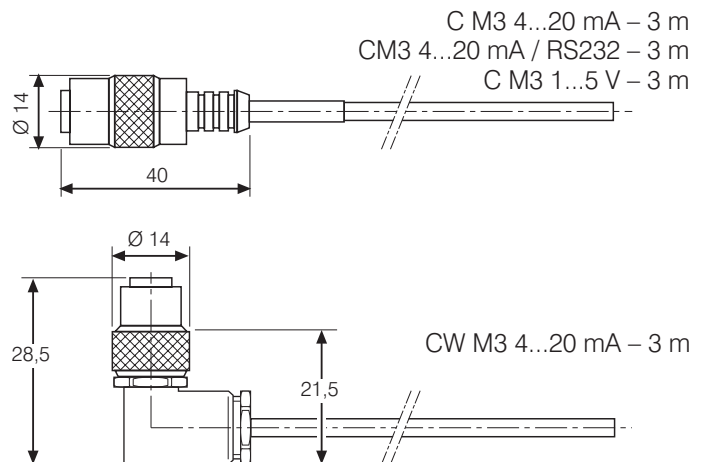
Sensor	M3L/ 5	M3L/ 10	M3L/ 20	M3L/ 50	M3L/ 100	M3L/ 200	M3L/ 250
Range [mm]	5	10	20	50	100	200	250
Range begin [mm]	20	20	30	45	50	60	100
Linearity* ± [mm]	0,01	0,02	0,04	0,1	0,2	0,8	1,2
Resolution* [mm]	0,005	0,01	0,02	0,05	0,2	0,3	0,3
Light spot diameter [mm]	1	1	1	1	1	2	4

Light source	Laser 670 nm, red visible	
Laser protection class	2	
Distance output	4 ... 20 mA / RS 232 / optional 1 ...5 V with connection cable CM3	
Reaction time	4 ms	
Bandwith	max. 1 kHz (-3 dB)	
Temperature drift	0,03% of range / K	0,08% of range / K
not enough light	PNP 100 mA	
Ambient light	5.000 Lux	7.000 Lux
max. Vibration	15 g ... 1 kHz	20 g
Operation time	50.000 h for Laser diode	
Operation temperature	0° ... +50°C	
Storage temperature	-20° ... +70°C	
Humidity	<90% RH	
Protection class	IP 67	
Supply	12 ... 28 VDC / <150 mA	

* Measurement on object color white

Delivery:

- Sensor without connection cable
- connector for soldered joint
- Manual
- Calibration report



7 pin Subminiatur circular plug-in connector (Binder)

Pin	Meaning	Attributes	Color
1	Error output	Open collector, Type: NPN, switching to GND, U _{Cmax} 30 VDC, I _{Cmax} 100 mA, short circuit proof	green
2	Laser ON/OFF	turn off laser	yellow
3	RX	RS 232	blue
4	TX	RS 232	pink
5	Current output	4 ... 20 mA, short circuit proof	grey
6	GND	Reference potential of outputs, turn off laser and supply	
7	Supply	11... 30 VDC, reverse battery protection	white