

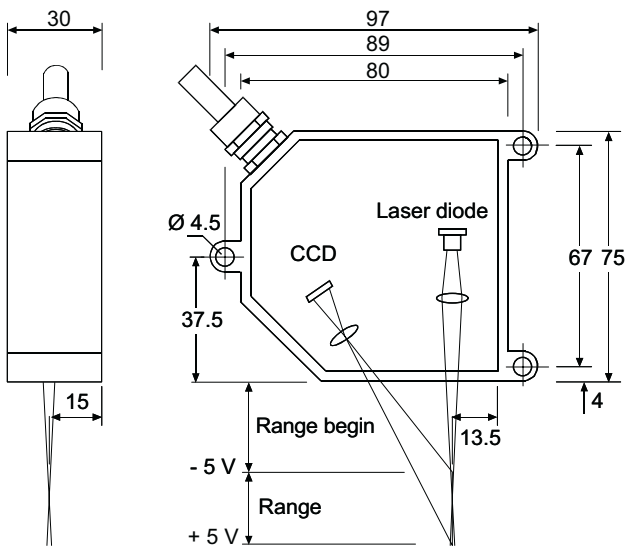
M17 Distance sensor

Laser sensor
with integrated electronic system
Triangulation digital
Measurement on many
different surfaces possible



Sensor head

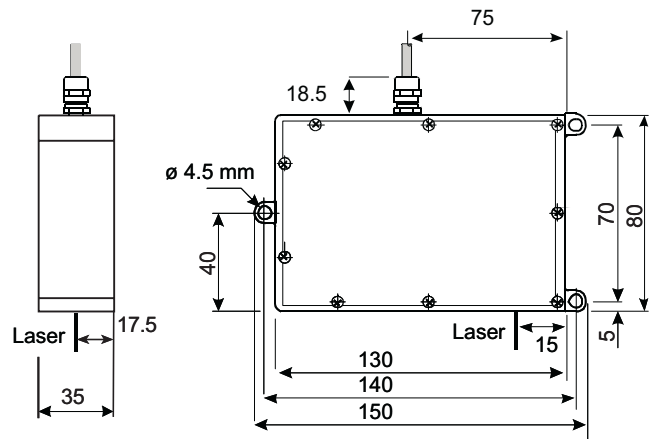
weight 550 g, cable length 0.25 m



drawing not to scale!

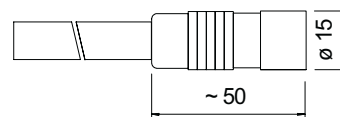
Sensor head

weight 600 g, cable length 0.25 m



drawing not to scale!

Cable connector



Technical data

Model	M17-2	M17-10	M17-20	M17-50	M17-100	M17-200	M17-500	M17-750	
Measuring range	2 mm	10 mm	20 mm	50 mm	100 mm	200 mm	500 mm	750 mm	
Start measuring range	24 mm	30 mm	40 mm	45 mm	70 mm	70 mm	200 mm	200 mm	
Midrange	25 mm	35 mm	50 mm	70 mm	120 mm	170 mm	450 mm	575 mm	
End measuring range	26 mm	40 mm	60 mm	95 mm	170 mm	270 mm	700 mm	950 mm	
Linearity	<0.1% FSO	<0.08% FSO				<0.1% FSO	<0.08% FSO	<0.1% FSO	
	2 μm	8 μm	16 μm	40 μm	80 μm	200 μm	400 μm	750 μm	
Resolution (at 2.5 kHz without averaging)	14 bit								
	0.1 μm	0.5 μm	1.5 μm	3 μm	6 μm	12 μm	30 μm	50 μm	
Measuring rate	2.5 kHz / 1.25 kHz / 625 Hz / 312.5 Hz (adjustable)								
Light source	semiconductor laser 1 mW, 670 nm (red)								
Permissible ambient light	10,000 lx (at 2.5 kHz measuring rate)								
Laser safety class	class 2 acc. DIN EN 60825-1 : 2001-11								
Spot diameter	SMR	80 μm	110 μm	320 μm	570 μm	740 μm	1300 μm	1500 μm	1500 μm
	MR	35 μm	50 μm	45 μm	55 μm	60 μm	1300 μm	1500 μm	1500 μm
	EMR	80 μm	110 μm	320 μm	570 μm	700 μm	1300 μm	1500 μm	1500 μm
Operating temperature	0 ... 50 °C								
Storage temperature	-20 °C ... 70 °C								
Output	measurements	selectable: 4 ... 20 mA / 0 ... 10 V / RS 422							
	switching outputs	1 x error or 2x limit (each programmable)							
Switch Input	laser ON-OFF / zero								
Operation	via touch screen on sensor or via PC with sensorCONFIG								
Power supply	24 VDC (11 ... 30 VDC), max. 150 mA								
Electromagnetic compatibility	EN 61000-6-3 EN 61000-6-2								
Sensor cable length	0.25 m (integrated cable with connector) option: 3 m or 10 m								
Synchronization	possible for simultaneous or alternating measurements								
Protection class	IP 65								
Vibration	2 g / 20 ... 500 Hz								
Shock	15 g / 6 ms								
Weight (with 0.25 cm cable)	appr. 550 g					appr. 600 g			

All specifications apply for a diffusely reflecting white ceramic target

FSO = Full Scale Output SMR = Start of measuring range MMR = Midrange EMR = End of measuring range

Delivery:

- Sensor with connecting cable (0.25 m) and cable connector
- Manual

Accessories:

- Sensor cable extension* (3 or 10 m)
 - Interface and supply cable (RS 422)
 - USB supply and output cable (3 m), including power supply unit
 - Power supply
 - Interface card RS 422
 - Protection housing
- * necessary at first order