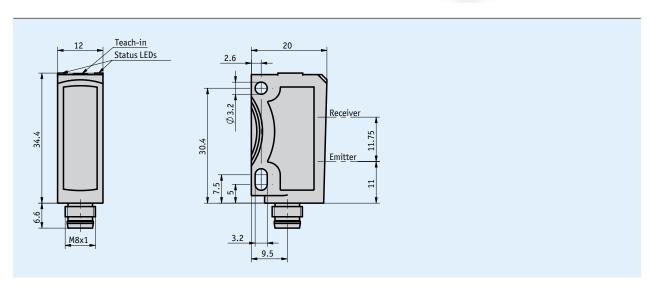
Optical distance sensors for the near zone

Profile

- Measuring range 30 ... 200 mm
- Analog output 1 ... 10 V
- Ultra-compact ABS housing
- Capable of being integrated easily
- High precision and high repeat accuracy especially for feedback control problems
- Resolution 0.68mm
- Two adjustable switching points as window mode for 2-point controls
- Teach-in operation





Mechanical data

Feature	Technical data	Additional information
Housing	plastic, ABS	
Sight window	plasticPMMA	
Weight	~0.01 kg	

Electrical data

Feature	Technical data	Additional information
Operating voltage	13 30 V DC	
No-load current	≤30 mA	
Analog outputs	1 10 V	≤3 mA
Output current	≤100 mA	
Linearity	±2 mm	with gray reflecting surface, 18 % remission
Temperature drift	<0.2 mm/K	
Switching outputs	PNP	
	NPN	
Light type	0.632 μm	LED, red
Warm-up time	10 min	
Starting time	<300 ms	
Settling time	3.4 ms	
Type of connection	M8x plug connector	4-pole, pin



System data

Feature	Technical data	Additional information
Resolution	0.68 mm (12-bit)	
Repeat accuracy	1 mm	with gray reflecting surface, 18 % remission

Ambient conditions

Feature	Technical data	Additional information
Ambient temperature	-20 60 °C	
Storage temperature	-20 80 °C	
EMC		EN 60947-5-2
Protection category	IP67, IP69K	
Shock resistance	300 m/s ² , 11 ms	EN 60068-2-27
Vibration resistance	2 mm, 10 55 Hz	EN 60068-2-6

Order

Ordering table

Feature	Ordering data	Specification	Additional information
Switching output	NPN		
	PNP		

Order key

Scope of delivery: LA170, Mounting instructions