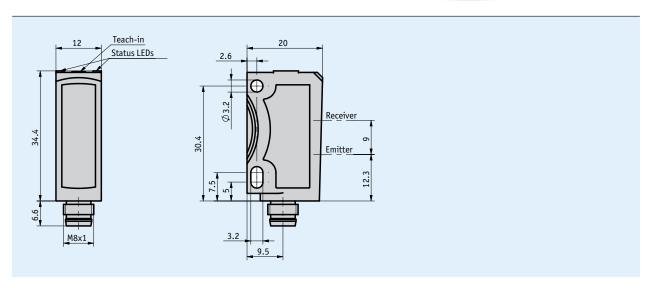
Optical distance sensors for the near zone

Profile

- Measuring range 20 ... 80 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 from 0.12 mm onwards
- 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	plastic, PMMA	
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	±0.4 mm	with gray reflecting surface, 18 % remission	
Temperature drift	<0.1 mm/K		
Switching outputs	PNP		
	NPN		
Light type	0.632 μm	LED, red	
Warm-up time	10 min		
Starting time	<300 ms		
Settling time	0.4 ms		
Type of connection	M8x plug connector	4-pole, pin	



System data

Feature	Technical data	Additional information
Resolution	0.12 mm (12-bit)	
Repeat accuracy	<0.4 mm	with gray reflecting surface, 18 % remission

Ambient conditions

Feature	Technical data	Additional information
Operating 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: LA60, Mounting instructions