

- Measuring range 0 – 10 m
- Accuracy +/- 5 mm
- Parameterization with RS 485 + Software
- Analog output 4 – 20 mA
- 2 switching outputs (can be parameterized)



## Product Characteristics

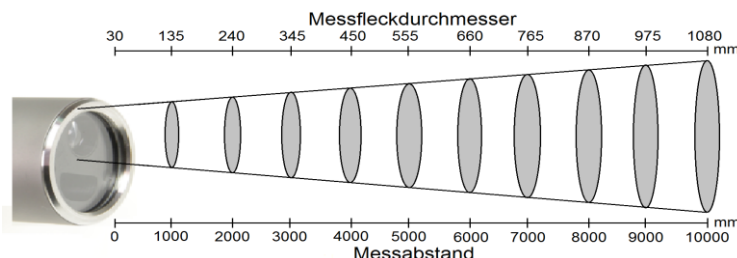
Type	LIA 010
Art.-No.	5201A
Application	distance measuring on hot objects, positioning in furnaces, hot rolling, pressing, forging, heat treatment

## Technical Data

Measuring range* on surfaces (20%)	0 – 10 m* (can be parameterized)
On reflector (90%)	0 – 40 m* (can be parameterized)
Measurement error, depending on the setting and the object reflectivity	max. +/- 50 mm
Viewing angle	6°
Resolution	1 mm
Accuracy / reproducibility	+/- 5 mm
Supply voltage	24 V DC (12-30 V DC)
Ripple	max. 10 %
Current consumption	< 100 mA (12 V < 250mA)
Analog output	4 – 20 mA (10-Bit resolution)
Load impedance	< 500 Ω (12 V < 150Ω)
Digital communication	RS 485 MODBUS RTU
Output	2 x PNP normally open / normally closed (can be parameterized)
Continuous current	0 - 200 mA
Short-circuit protection	yes, pulsing
Voltage drop	< 2,5 V
Switching frequency	2,2 – 140 Hz
Readiness time	300 ms
Ambient temperature	-25 ... +75 °C
Protection class	IP 67
Housing material	1.4301
Functional display	Duo-LED red/green
Status display	RGB-LED
Connection device	plug S8 (M12 x 1 A)
Weight	

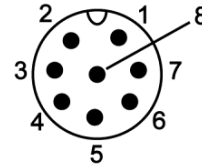
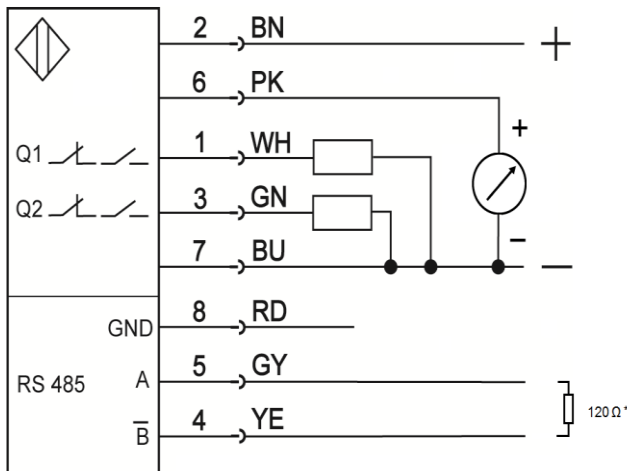
\* depending on target reflectivity, surface quality, extraneous light influence and atmospheric conditions

## Optik



Smallest detectable object	
object reflection	Covering the measuring spot
10 % reflection	15 % cover
90 % reflection	10 % cover

## Connection



\* If the ports of interface PIN 4 and 5 are not used, they MUST be terminated at the cable end with a 120 Ω resistor.

## Dimension (mm)

### Accessories (not in scope of supply)

	Type	Art.-No.
Connection cable with female straight plug S8 (M12 x 1 A) 2 m PVC cable 8 x 0,25 mm <sup>2</sup> up to 80 °C	ST S8-2	98500
Connection cable with female straight plug S8 (M12 x 1 A) 5 m PCV cable 8 x 0,25 mm <sup>2</sup> up to 80 °C	ST S8-5	9850N
Connection cable with female straight plug S8 (M12 x 1 A) 10 m PCV cable 8 x 0,25 mm <sup>2</sup> up to 80 °C	ST S8-10	9850S
Connection cable with female straight plug S8 (M12 x 1 A) 5 m PUR cable 8 x 0,25 mm <sup>2</sup> up to 90 °C	ST S8-5PUR	9844W
Connection cable with female straight plug S8 (M12 x 1 A) 10 m PUR cable 8 x 0,25 mm <sup>2</sup> up to 90 °C	ST S8-10PUR	9843D
Connection cable with female straight plug S8 (M12 x 1 A) 5 m PTFE cable 8 x 0,25 mm <sup>2</sup> up to 150 °C	ST S8-5PTFE	9844X
Swivel stand	HM 2	9816B
Adapter for mounting of accessory	OL 42	9828Y
Air purge unit	OL 43	9828Z
Adapter for protection hose connection (suitable protection hoses available)	HG 2	9855B
Interface converter RS485, female plug S4 (M12 x 1 A) 5-pole to USB	SIC 485U	9861B
Adapter cable S8 (M12 x 1 A) female plug 8-pole to S4 (M12 x 1 A) plug 5-pole, 2 m cable (suitable for SIC 485U)	ST S8/4 S4/5-2	9851E
Connection box for splitting the connections control system / RS 485 interface	CBA 104	9859C
Power supply 90-260 VAC, 24 VDC / 1 A	PPS 2	9853B
Interface converter RS485, plug Sub D 9-pole to USB (External power supply necessary)	SIC 485UD	9861E

## Further Information

	Document
Manual	BDA_LMB100_D_E