LIDAR-Sensor
LIB 010

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

Product Characteristics

<table>
<thead>
<tr>
<th>Type</th>
<th>LIB 010</th>
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<tbody>
<tr>
<td>Art.-No.</td>
<td>5201B</td>
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<tr>
<td>Application</td>
<td>distance measuring on hot objects, positioning in furnaces, hot rolling, pressing, forging, heat treatment</td>
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</tbody>
</table>

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 without cooling
up to 200 °C with cooling
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

<table>
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<tr>
<th>Smallest detectable object</th>
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<tr>
<td>object reflection</td>
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<tr>
<td>10 % reflection</td>
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<tr>
<td>90 % reflection</td>
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**Connection**

![Diagram of LIDAR-Sensor LIB 010 connection]

**Dimension (mm)**

**Accessories (not in scope of supply)**

<table>
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<th>Type</th>
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<tr>
<td>Swivel stand</td>
<td>HM 2 9816B</td>
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<tr>
<td>Adapter for protection hose connection (suitable protection hoses available)</td>
<td>HG 2 9855B</td>
</tr>
<tr>
<td>Interface converter RS485, female plug S4 (M12 x 1 A) 5-pole to USB</td>
<td>SIC 485U 9861B</td>
</tr>
<tr>
<td>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)</td>
<td>ST S8/4 S4/5-2 9851E</td>
</tr>
<tr>
<td>Connection box for splitting the connections control system / RS 485 interface</td>
<td>CBA 104 9859C</td>
</tr>
<tr>
<td>Power supply 90-260 VAC, 24 VDC / 1 A</td>
<td>PPS 2 9853B</td>
</tr>
<tr>
<td>Interface converter RS485, plug Sub D 9-pole to USB (External power supply necessary)</td>
<td>SIC 485UD 9861E</td>
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**Further Information**

<table>
<thead>
<tr>
<th>Document</th>
<th>BDA_LMB100_D_E</th>
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Details are subject to change without notice.