



Laser scanners  
JEF3xx / JEF300 / Indoor / Short Range

JEF300-60000



**Model Name** > **JEF300-60000**  
**Part No.** > **1056364**



**At a glance**

- 2D and 3D fill level control
- Simple download of new configurations
- Multiple I/O and interfacing
- Cloning functions for parameters are available

**Your benefits**

- One sensor solution reduces setup costs
- Downloadable configuration options in the machine reduce setup time and save money
- No additional illumination needed



**Features**

|                                    |   |
|------------------------------------|---|
| Field of application:              | Indoor                                    |
| Version:                           | Short Range                               |
| Connection type:                   | Ethernet                                  |
| Reading field:                     | Oscillating mirror                        |
| Light source:                      | Visible red light (650 nm)                |
| MTBF:                              | 40,000 h                                  |
| Laser class:                       | 2 (EN 60825-1 (A2:2001-03))               |
| Field of view:                     | ≤ 45 °                                    |
| Scanning frequency:                | 600 Hz ... 700 Hz                         |
| Angular resolution:                | 1 °                                       |
| Operating range:                   | 0.4 m ... 2 m                             |
| Max. range with 10 % reflectivity: | 1.2 m                                     |
| Oscillating mirror functions:      | Oscillating (variable or fixed amplitude) |
| Oscillation frequency:             | 0.5 Hz ... 6.25 Hz                        |
| Angle of deflection:               | -5 ° ... 35 °                             |

**Performance**

|                                   |               |
|-----------------------------------|---------------|
| Response time:                    | ≥ 1.4 ms      |
| Detectable object shape:          | Almost any    |
| Systematic error <sup>1)</sup> :  | ± 25 mm       |
| Statistical error <sup>2)</sup> : | ± 25 mm       |
| Integrated application:           | Level Control |

1) 2) Typical value; actual value depends on environmental conditions.

## Interfaces

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|   |   |
|---|---|
| Serial (RS-232, RS-422/485):                          | ✓   |
| Remark (Serial (RS-232, RS-422/485)):                 | AUX (only RS-232)                                 |
| Function (Serial (RS-232, RS-422/485)):               | Host, AUX   |
| Data transmission rate (Serial (RS-232, RS-422/485)): | 2,400 Baud ... 115 kBaud, AUX: 57.6 kBaud         |
| Ethernet:   | ✓   |
| Function (Ethernet):                                  | Host, AUX   |
| Data transmission rate (Ethernet):                    | 10/100 Mbit                                       |
| Protocol (Ethernet):                                  | TCP/IP  |
| CAN bus:  | -   |
| PROFIBUS DP:  | -   |
| PROFINET:   | -   |
| DeviceNet:  | -   |
| Switching inputs:                                     | 2   |
| Switching outputs:                                    | 2   |
| Optical indicators:                                   | 6 LEDs (Ready, laser, Data, CAN, LNK TX)          |
| Memory card:  | MicroSD memory card (flash card) 512 MB, optional |

## Mechanics/electronics

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|                        |  |
|------------------------|--|
| Electrical connection: | 2 x M12 cylindrical connectors (17-pin plug, 4-pin socket) on swivel connector |
| Operating voltage:     | 18 V DC ... 30 V DC  |
| Power consumption:     | 9.5 W  |
| Housing:               | Die-cast aluminum  |
| Housing color:         | Light blue (RAL 5012)  |
| Enclosure rating:      | IP 65 (EN 60529)   |
| Protection class:      | III (EN 61140)   |
| Weight:                | 320 g  |
| Dimensions:            | 95 mm x 96 mm x 41 mm <sup>1)</sup>  |

<sup>1)</sup> Swivel connector is 15 mm longer

## Ambient data

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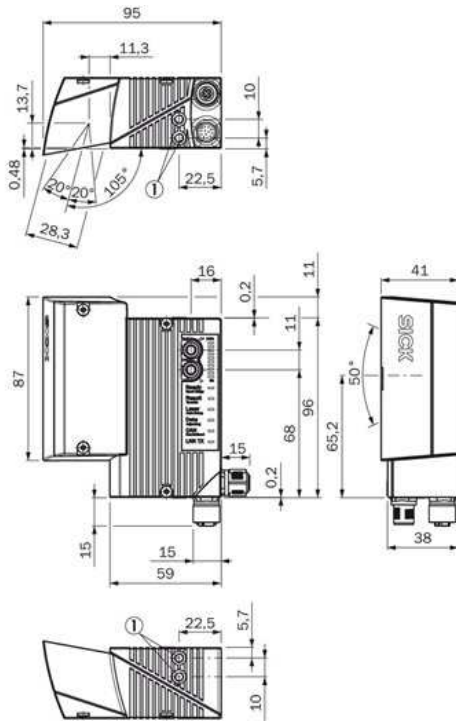
|                                      |                                     |
|--------------------------------------|-------------------------------------|
| Electromagnetic compatibility (EMC): | EN 61000G6G2:2001/EN 61000G6G4:2001 |
| Vibration resistance:                | EN 60068-2-6 (1995)                 |
| Shock resistance:                    | EN 60068-2-27 (1993)                |
| Ambient operating temperature:       | 0 °C ... +40 °C                     |
| Storage temperature:                 | -20 °C ... +70 °C                   |
| Permissible relative humidity:       | ± 90 %, non-condensing              |
| Ambient light immunity:              | 2,000 lx                            |

## General notes

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|              |                                       |
|--------------|---------------------------------------|
| Note on use: | Not suitable for personnel protection |
|--------------|---------------------------------------|

## Dimensional drawing



[1] M5 threaded mounting hole, 5.5 mm deep

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