

Technical data sheet

Fork photoelectric sensor

Part no.: 50115806
GS 754B/D3-27-S12

Contents

- Technical data
- Dimensioned drawings
- Electrical connection
- Operation and display
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Figure can vary



Technical data

Basic data

| | |
|--------|-----|
| Series | 754 |
|--------|-----|

Optical data

| | |
|--------------------------|--|
| Measurement field length | 25 mm |
| Light source | LED, Infrared |
| Wavelength | 850 nm |
| LED group | Exempt group (in acc. with EN 62471) |
| Object position | Objects \leq 1 mm should be detected in front of the receiver. |

Measurement data

| | |
|-------------------------|--|
| Minimum object diameter | 0.5 mm |
| System resolution | a: 0.1 mm (mode 1 ... 5) b: 0.014 mm (Mode 7) |
| Linearity error | 0 ... 0.36 mm |

Electrical data

| | |
|--------------------|---|
| Protective circuit | Overvoltage protection Polarity reversal protection Short circuit protected |
|--------------------|---|

Performance data

| | |
|----------------------|------------------|
| Supply voltage U_B | 10 ... 30 V, DC |
| Residual ripple | 15 %, From U_B |
| Open-circuit current | 60 mA |

Inputs

Activation inputs

| | |
|--------------------------|------|
| Activation/disable delay | 1 ms |
|--------------------------|------|

Time behavior

| | |
|-----------------|---------------|
| Response time | 12 ms |
| Readiness delay | 300 ms |
| Output cycle | 0.012 ... 3 s |

Interface

| | |
|------|--------|
| Type | RS 422 |
|------|--------|

Connection

Connection 1

| | |
|--------------------|------------------------------|
| Function | Signal OUT Voltage supply |
| Type of connection | Connector |
| Thread size | M12 |
| Material | Metal |
| No. of pins | 5 -pin |

Mechanical data

| | |
|-----------------------|---------------------------|
| Mouth width | 27 mm |
| Mouth depth | 42 mm |
| Dimension (W x H x L) | 19.4 mm x 82.1 mm x 91 mm |
| Housing material | Metal |
| Metal housing | Diecast zinc |
| Lens cover material | Plastic / PMMA |
| Net weight | 270 g |

Operation and display

| | |
|-----------------------|------------|
| Number of LEDs | 1 Piece(s) |
| Type of configuration | Software |

Environmental data

| | |
|--------------------------------|---------------|
| Ambient temperature, operation | -20 ... 50 °C |
| Ambient temperature, storage | -30 ... 70 °C |

Certifications

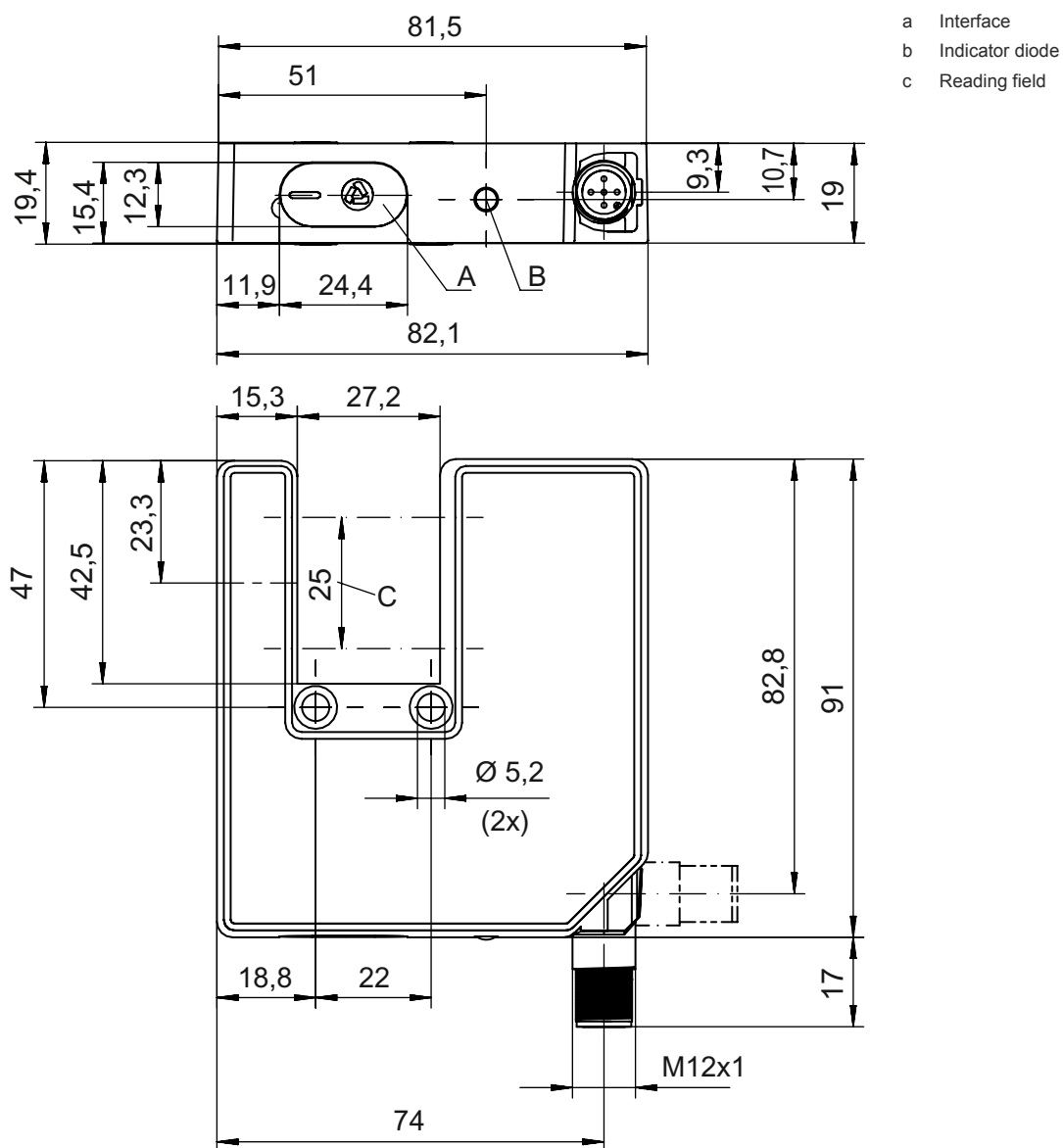
| | |
|----------------------|---------------|
| Degree of protection | IP 67 |
| Protection class | III |
| Certifications | c UL US |
| Standards applied | IEC 60947-5-2 |

Classification

| | |
|-----------------------|----------|
| Customs tariff number | 85365019 |
| ECLASS 5.1.4 | 27270909 |
| ECLASS 8.0 | 27270909 |
| ECLASS 9.0 | 27270909 |
| ECLASS 10.0 | 27270909 |
| ECLASS 11.0 | 27270909 |
| ECLASS 12.0 | 27270909 |
| ECLASS 13.0 | 27270909 |
| ETIM 5.0 | EC002720 |
| ETIM 6.0 | EC002720 |
| ETIM 7.0 | EC002720 |
| ETIM 8.0 | EC002720 |

Dimensioned drawings

All dimensions in millimeters



- a Interface
- b Indicator diode
- c Reading field

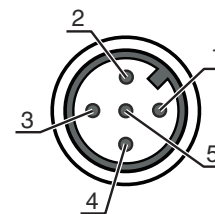
Electrical connection

Connection 1

| | |
|--------------------|----------------|
| Function | Signal OUT |
| | Voltage supply |
| Type of connection | Connector |
| Thread size | M12 |
| Type | Male |
| Material | Metal |
| No. of pins | 5 -pin |
| Encoding | A-coded |

Electrical connection

| Pin | Pin assignment | Conductor color |
|-----|----------------|-----------------|
| 1 | +10...30 V DC | Brown |
| 2 | Tx- | White |
| 3 | GND | Blue |
| 4 | Tx+ | Black |
| 5 | FE | Shield |



Operation and display

| LED | Display | Meaning |
|-----|-------------------------|---------|
| 1 | Green, continuous light | Ready |
| | Green, flashing | Fault |

Notes

Observe intended use!

This product is not a safety sensor and is not intended as personnel protection.

The product may only be put into operation by competent persons.

Only use the product in accordance with its intended use.

Accessories

Connection technology - Connection cables

| | Part no. | Designation | Article | Description |
|--|----------|--------------------|------------------|---|
| | 50132079 | KD U-M12-5A-V1-050 | Connection cable | Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5.000 mm Sheathing material: PVC |

Note

A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.