

## Technical data sheet RFID read/write device

Part no.: 50150661

RDH 202 00

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For illustration purposes only



## Technical data

### Basic data

|                   |           |
|-------------------|-----------|
| Series            | RDH 200   |
| Working frequency | 13.56 MHz |

### Functions

|           |                              |
|-----------|------------------------------|
| Functions | Configurable operating modes |
|           | I/O                          |
|           | LED indicator                |
|           | Reading gate control         |

### Read data

|                             |                  |
|-----------------------------|------------------|
| Reading/writing range, max. | 120 mm           |
| Transponder, readable       | ISO/IEC 14443A/B |
|                             | ISO/IEC 15693    |
|                             | NFC Types 2, 5   |

### Electrical data

#### Performance data

|                         |                 |
|-------------------------|-----------------|
| Supply voltage $U_B$    | 18 ... 36 V, DC |
| Power consumption, max. | 2 W             |
| Memory access           | Read/Write      |

#### Inputs

|                                    |            |
|------------------------------------|------------|
| Number of digital switching inputs | 1 Piece(s) |
|------------------------------------|------------|

#### Outputs

|                                     |            |
|-------------------------------------|------------|
| Number of digital switching outputs | 1 Piece(s) |
|-------------------------------------|------------|

### Interface

|               |         |
|---------------|---------|
| Type          | RS 232  |
| <b>RS 232</b> |         |
| Function      | Process |

### Connection

|                       |            |
|-----------------------|------------|
| Number of connections | 1 Piece(s) |
| <b>Connection 1</b>   |            |
| Function              | I/O        |
|                       | PWR        |
|                       | RS 232     |
| Type of connection    | Connector  |
| Thread size           | M12        |

### Mechanical data

|                       |                       |
|-----------------------|-----------------------|
| Design                | Cubic                 |
| Dimension (W x H x L) | 99 mm x 42 mm x 68 mm |
| Housing material      | Plastic               |
| Net weight            | 120 g                 |
| Housing color         | Red                   |
|                       | Silver                |
| Type of fastening     | Through-hole mounting |

### Environmental data

|                                    |               |
|------------------------------------|---------------|
| Ambient temperature, operation     | -32 ... 60 °C |
| Ambient temperature, storage       | -40 ... 85 °C |
| Relative humidity (non-condensing) | 0 ... 90 %    |

### Certifications

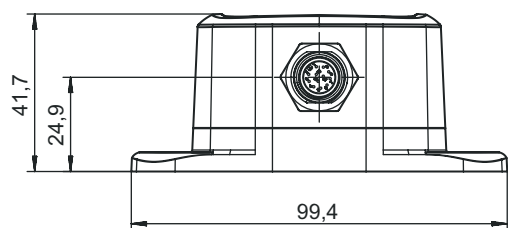
|                      |       |
|----------------------|-------|
| Degree of protection | IP 67 |
| Approvals            | EU    |

### Classification

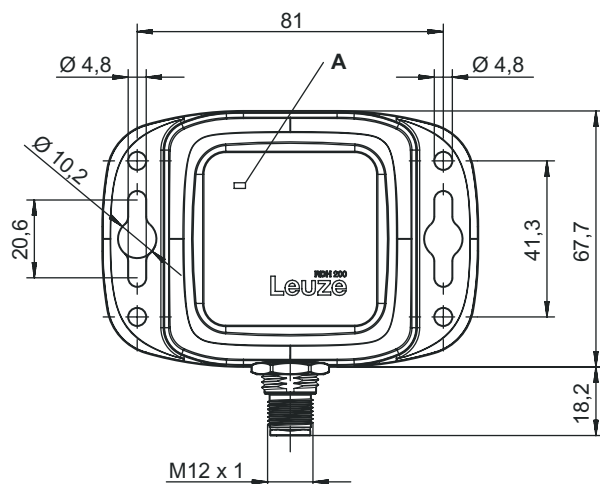
|                       |          |
|-----------------------|----------|
| Customs tariff number | 84719000 |
| ECLASS 5.1.4          | 27280401 |
| ECLASS 8.0            | 27280401 |
| ECLASS 9.0            | 27280401 |
| ECLASS 10.0           | 27280401 |
| ECLASS 11.0           | 27280401 |
| ECLASS 12.0           | 27280401 |
| ECLASS 13.0           | 27280401 |
| ECLASS 14.0           | 27280401 |
| ECLASS 15.0           | 27280401 |
| ECLASS 16.0           | 27280401 |
| ETIM 5.0              | EC001825 |
| ETIM 6.0              | EC002998 |
| ETIM 7.0              | EC002998 |
| ETIM 8.0              | EC002998 |
| ETIM 9.0              | EC002998 |
| ETIM 10.0             | EC002998 |
| UNSPSC 26.08          | 43211710 |

# Dimensioned drawings

All dimensions in millimeters



A LED indicator



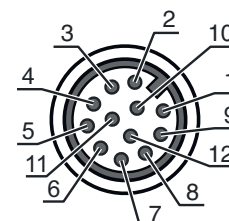
## Electrical connection

### Connection 1

|                    |                      |
|--------------------|----------------------|
| Function           | I/O<br>PWR<br>RS 232 |
| Type of connection | Connector            |
| Thread size        | M12                  |
| Type               | Male                 |
| Material           | Metal                |
| No. of pins        | 12 -pin              |
| Encoding           | A-coded              |

### Pin Pin assignment


| Pin | Pin assignment |
|-----|----------------|
| 1   | VCC            |
| 2   | GND            |
| 3   | SWIN 1         |
| 4   | SWOUT 1        |
| 5   | PE             |
| 6   | n.c.           |
| 7   | n.c.           |
| 8   | n.c.           |
| 9   | RxD            |
| 10  | TxD            |
| 11  | SWIN 2         |
| 12  | SWOUT 2        |




# Operation and display

| LED | Display                  | Meaning                                    |
|-----|--------------------------|--|
| 1   | Red, continuous light    | Error / Initialization                     |
|     | Green, continuous light  | Operational readiness / Antenna not active |
|     | Yellow, flashing, 4 Hz   | Antenna active / Tag detected              |
|     | Yellow, continuous light | Antenna active / No tag detected           |
|     | Off                      | No power supply / Hardware defective       |

## 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.

## Further information





- Under certain circumstances, metal in the reading field reduces the operating range considerably.

## Accessories




### Connection technology - Connection cables

|  | Part no. | Designation        | Article          | Description  |
|--|----------|--------------------|------------------|--|
|  | 50143725 | KD S-M12-CA-P1-003 | Connection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: Yes<br>Cable length: 300 mm<br>Sheathing material: PUR    |
|  | 50130281 | KD S-M12-CA-P1-020 | Connection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: Yes<br>Cable length: 2,000 mm<br>Sheathing material: PUR  |
|  | 50130282 | KD S-M12-CA-P1-050 | Connection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: Yes<br>Cable length: 5,000 mm<br>Sheathing material: PUR  |
|  | 50130283 | KD S-M12-CA-P1-100 | Connection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: Yes<br>Cable length: 10,000 mm<br>Sheathing material: PUR |

## Accessories


|   | Part no. | Designation        | Article          | Description  |
|---|----------|--------------------|------------------|--|
|   | 50134943 | KD S-M12-CW-P1-050 | Connection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Angled, Female, A-coded, 12 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: Yes<br>Cable length: 5,000 mm<br>Sheathing material: PUR |
|   | 50139769 | KD U-M12-CA-P1-020 | Connection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: No<br>Cable length: 2,000 mm<br>Sheathing material: PUR   |
|   | 50139770 | KD U-M12-CA-P1-050 | Connection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: No<br>Cable length: 5,000 mm<br>Sheathing material: PUR   |
|  | 50139771 | KD U-M12-CA-P1-100 | Connection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connector, LED: No<br>Connection 2: Open end<br>Shielded: No<br>Cable length: 10,000 mm<br>Sheathing material: PUR  |

## Connection technology - Interconnection cables

|  | Part no. | Designation                | Article               | Description   |
|--|----------|----------------------------|-----------------------|---|
|  | 50130284 | KDS S-M12-CA-M12-CA-P1-020 | Interconnection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connection 2: Connector, M12, Axial, Male, A-coded, 12 -pin<br>Shielded: Yes<br>Cable length: 2,000 mm<br>Sheathing material: PUR  |
|  | 50130285 | KDS S-M12-CA-M12-CA-P1-050 | Interconnection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connection 2: Connector, M12, Axial, Male, A-coded, 12 -pin<br>Shielded: Yes<br>Cable length: 5,000 mm<br>Sheathing material: PUR  |
|  | 50130286 | KDS S-M12-CA-M12-CA-P1-100 | Interconnection cable | Application: Oil and lubricant resistant<br>Connection 1: Connector, M12, Axial, Female, A-coded, 12 -pin<br>Connection 2: Connector, M12, Axial, Male, A-coded, 12 -pin<br>Shielded: Yes<br>Cable length: 10,000 mm<br>Sheathing material: PUR |

## Accessories

### Connection technology - Connectors

|  | Part no. | Designation | Article   | Description   |
|--|----------|-------------|-----------|---|
|  | 50132254 | D M12A-12P  | Connector | Connection: Connector, M12, Axial, Female, A-coded, 12 -pin |

#### Note



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