



Figure can vary

**Part no.: 50136772**  
**DCR55M2/R2**  
**Stationary 2D-code reader**



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## Technical data

| <b>Basic data</b>                   |                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Series                              | DCR 55                                                                                                                                                                                                                                                                                                                           |
| <b>Functions</b>                    |                                                                                                                                                                                                                                                                                                                                  |
| Software functions                  | Reading of 1D codes<br>Reading of 2D codes                                                                                                                                                                                                                                                                                       |
| <b>Read data</b>                    |                                                                                                                                                                                                                                                                                                                                  |
| Code types, readable                | 2/5 Hong Kong<br>2/5 Interleaved<br>2/5 NEC<br>2/5 Straight<br>Australian Post<br>Aztec<br>BC412<br>Canada Post<br>Codabar<br>Codablock F<br>Code 11<br>Code 128<br>Code 32<br>Code 39<br>Code 49<br>Code 93<br>Data Matrix Code<br>EAN/UPC<br>GS1 Databar<br>HanXin<br>Intelligent Mail<br>Japan Post<br>KIX Code<br>Korea Post |
| <b>Optical data</b>                 |                                                                                                                                                                                                                                                                                                                                  |
| Reading distance                    | 30 ... 425 mm                                                                                                                                                                                                                                                                                                                    |
| LED group                           | Exempt group (in acc. with EN 62471:2006)                                                                                                                                                                                                                                                                                        |
| Camera resolution, horizontal       | 1,280 px                                                                                                                                                                                                                                                                                                                         |
| Camera resolution, vertical         | 960 px                                                                                                                                                                                                                                                                                                                           |
| Module size                         | 0.127 ... 0.528 mm                                                                                                                                                                                                                                                                                                               |
| <b>Electrical data</b>              |                                                                                                                                                                                                                                                                                                                                  |
| Protective circuit                  |                                                                                                                                                                                                                                                                                                                                  |
| <b>Performance data</b>             |                                                                                                                                                                                                                                                                                                                                  |
| Supply voltage $U_b$                | 4.75 ... 5.25 V , DC                                                                                                                                                                                                                                                                                                             |
| Current consumption, max.           | 425 mA                                                                                                                                                                                                                                                                                                                           |
| <b>Inputs</b>                       |                                                                                                                                                                                                                                                                                                                                  |
| Number of digital switching inputs  | 1 Piece(s)                                                                                                                                                                                                                                                                                                                       |
| <b>Switching inputs</b>             |                                                                                                                                                                                                                                                                                                                                  |
| <b>Digital switching input 1</b>    |                                                                                                                                                                                                                                                                                                                                  |
| Function                            | Reading gate                                                                                                                                                                                                                                                                                                                     |
| <b>Outputs</b>                      |                                                                                                                                                                                                                                                                                                                                  |
| Number of digital switching outputs | 1 Piece(s)                                                                                                                                                                                                                                                                                                                       |
| <b>Switching outputs</b>            |                                                                                                                                                                                                                                                                                                                                  |
| Voltage type                        | DC                                                                                                                                                                                                                                                                                                                               |
| <b>Switching output 1</b>           |                                                                                                                                                                                                                                                                                                                                  |
| Switching element                   | Transistor , NPN                                                                                                                                                                                                                                                                                                                 |

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### Interface

|                    |                      |
|--------------------|----------------------|
| Type               | RS 232               |
| <b>RS 232</b>      |                      |
| Function           | Process              |
| Transmission speed | 9,600 ... 115,200 Bd |
| Data format        | configurable         |

### Connection

|                       |            |
|-----------------------|------------|
| Number of connections | 1 Piece(s) |
|-----------------------|------------|

#### Connection 1

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| Type of connection   | Cable                                                       |
| Function             | Data interface<br>Signal IN<br>Signal OUT<br>Voltage supply |
| Cable length         | 2,000 mm                                                    |
| Sheathing material   | PUR                                                         |
| Cable color          | Black                                                       |
| Number of conductors | 6 -wire                                                     |

### Mechanical data

|                       |                           |
|-----------------------|---------------------------|
| Design                | Cubic                     |
| Dimension (W x H x L) | 31.5 mm x 20 mm x 40.3 mm |
| Housing material      | Metal , Diecast aluminum  |
| Lens cover material   | Plastic                   |
| Net weight            | 89 g                      |
| Housing color         | Red<br>Silver             |
| Type of fastening     | Mounting thread           |

### Operation and display

|                       |          |
|-----------------------|----------|
| Type of display       | LED      |
| Type of configuration | Software |

### Environmental data

|                                    |               |
|------------------------------------|---------------|
| Ambient temperature, operation     | 0 ... 50 °C   |
| Ambient temperature, storage       | -20 ... 60 °C |
| Relative humidity (non-condensing) | 10 ... 90 %   |

### Certifications

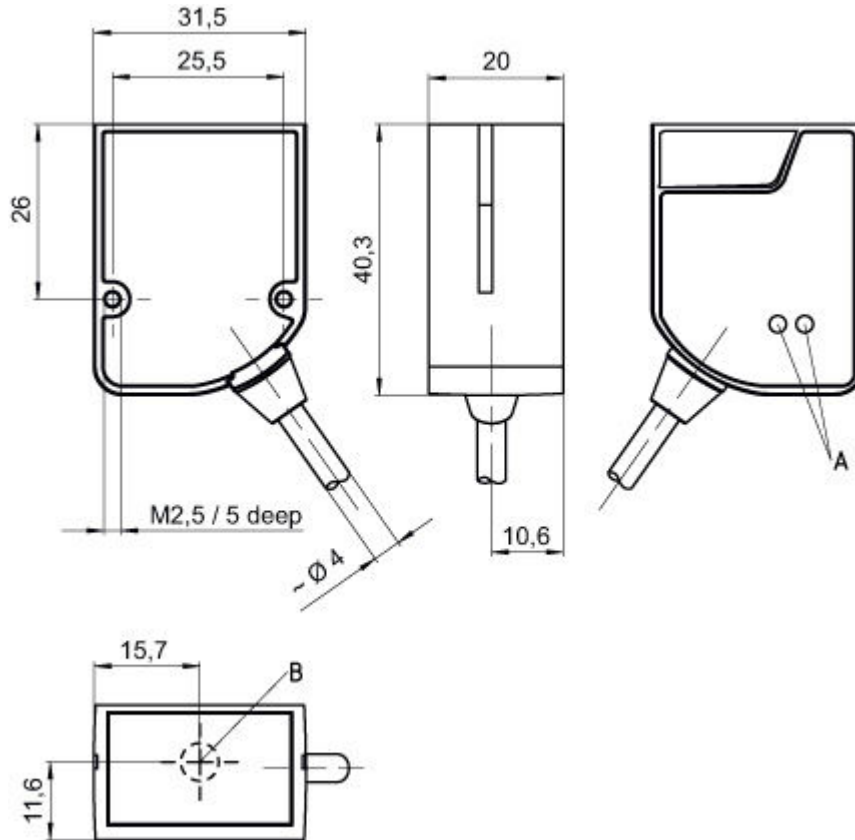
|                                                    |                        |
|----------------------------------------------------|------------------------|
| Degree of protection                               | IP 54                  |
| Certifications                                     | c UL US<br>FCC<br>RoHS |
| Test procedure for EMC in accordance with standard | EN 61326-1             |

### Classification

|                       |          |
|-----------------------|----------|
| Customs tariff number | 84719000 |
| eCl@ss 8.0            | 27280103 |
| eCl@ss 9.0            | 27280103 |
| ETIM 5.0              | EC002999 |

## Dimensioned drawings

All dimensions in millimeters



A LED indicator  
B Optical axis

## Electrical connection

| Connection 1         |                                                             |
|----------------------|-------------------------------------------------------------|
| Type of connection   | Cable                                                       |
| Function             | Data interface<br>Signal IN<br>Signal OUT<br>Voltage supply |
| Cable length         | 2,000 mm                                                    |
| Sheathing material   | PUR                                                         |
| Cable color          | Black                                                       |
| Number of conductors | 6 -wire                                                     |
| Wire cross section   |                                                             |

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| Conductor color | Conductor assignment |
|-----------------|----------------------|
| Red             | V+                   |
| Violet          | GND                  |
| Black           | OUT 1                |
| Orange          | IN 1                 |
| White           | RS 232 RxD           |
| Green           | RS 232 TxD           |

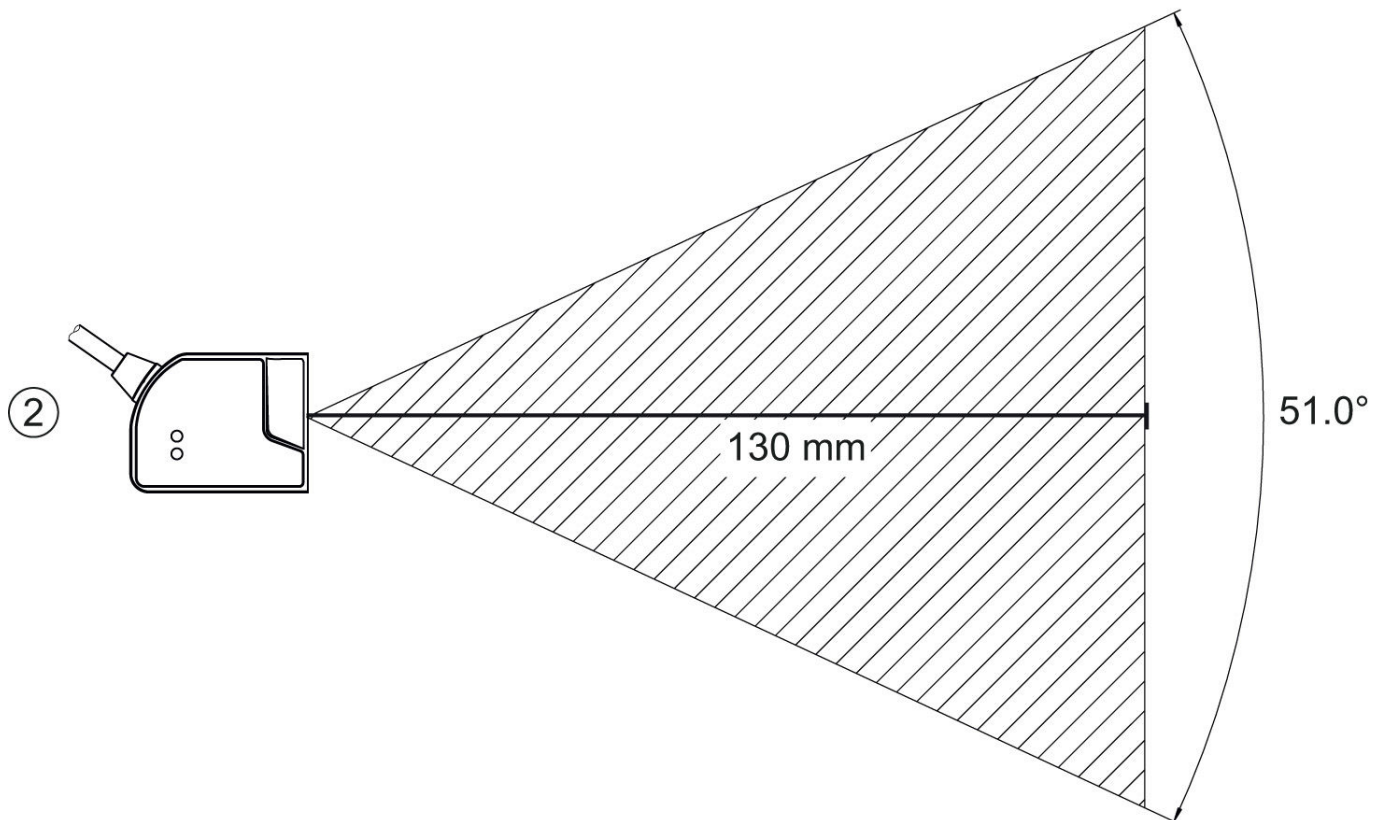
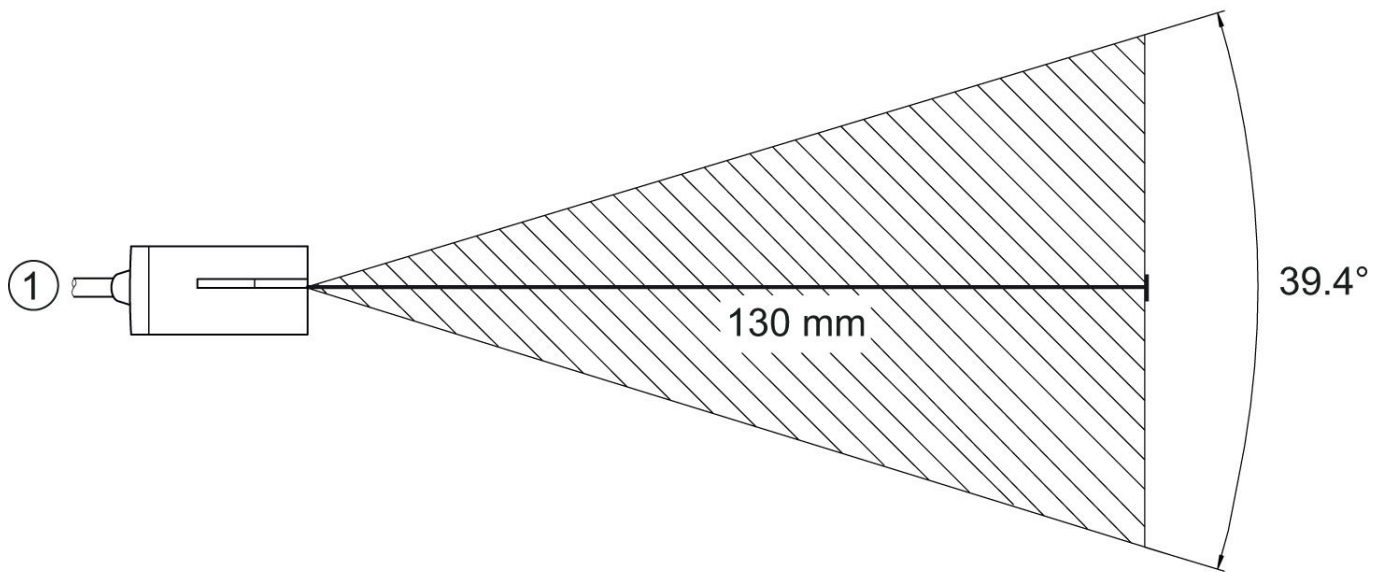
## Diagrams

### Reading distances

| A                                      | B               |                   |
|----------------------------------------|-----------------|-------------------|
| <b>Code 39</b> / 0,190mm (7,5mil)      | <b>50 (2,0)</b> | <b>245 (9,6)</b>  |
| <b>GS1 Databar</b> / 0,267mm (10,5mil) | <b>35 (1,4)</b> | <b>225 (8,9)</b>  |
| <b>UPC</b> / 0,330mm (13mil)           | <b>40 (1,5)</b> | <b>370 (14,6)</b> |
| <b>PDF417</b> / 0,147mm (5,8mil)       | <b>85 (3,3)</b> | <b>155 (6,1)</b>  |
| <b>PDF417</b> / 0,170mm (6,7mil)       | <b>65 (2,6)</b> | <b>175 (6,9)</b>  |
| <b>Data Matrix</b> / 0,127mm (5mil)    | <b>75 (3,0)</b> | <b>90 (3,5)</b>   |
| <b>Data Matrix</b> / 0,160mm (6,3mil)  | <b>70 (2,8)</b> | <b>135 (5,3)</b>  |
| <b>Data Matrix</b> / 0,254mm (10mil)   | <b>50 (2,0)</b> | <b>205 (8,1)</b>  |
| <b>Data Matrix</b> / 0,528mm (20,8mil) | <b>30 (1,2)</b> | <b>425 (16,7)</b> |

- A Code type / resolution mm  
B Reading distance [mm] ([inch])

## Reading field



- 1 Reading field, lateral
- 2 Reading field, top view

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## 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.