

Technical data sheet Stationary 2D-code reader

Part no.: 50136784

DCR55M2/R2-150-M12.8

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For illustration purposes only



Technical data

Basic data

| | |
|--------|------------------------|
| Series | DCR 55 |
| Chip | CMOS (Rolling Shutter) |

Functions

| | |
|--------------------|---------------------|
| Software functions | Reading of 1D codes |
| | Reading of 2D codes |

Read data

| | |
|----------------------|------------------|
| Code types, readable | 2/5 Hong Kong |
| | 2/5 Interleaved |
| | 2/5 NEC |
| | 2/5 Straight |
| | Australian Post |
| | Aztec |
| | BC412 |
| | Canada Post |
| | Codabar |
| | Codablock F |
| | Code 11 |
| | Code 128 |
| | Code 32 |
| | Code 39 |
| | Code 49 |
| | Code 93 |
| | Data Matrix Code |
| | EAN/UPC |
| | GS1 Databar |
| | HanXin |
| | Intelligent Mail |
| | Japan Post |
| | KIX Code |
| | Korea Post |
| | QR code |

Optical data

| | |
|-------------------------------|---|
| Reading distance | 30 ... 425 mm |
| LED group | Exempt group (in acc. with EN 62471:2008) |
| Camera resolution, horizontal | 1,280 px |
| Camera resolution, vertical | 960 px |
| Modulus size | 0.127 ... 0.528 mm |

Electrical data

| | |
|-------------------------------------|-------------------------|
| Performance data | |
| Supply voltage U_b | 4.75 ... 5.25 V, DC |
| Current consumption, max. | 425 mA |
| Inputs | |
| Number of digital switching inputs | 1 Piece(s) |
| Switching inputs | |
| Type | Digital switching input |
| Digital switching input 1 | |
| Function | Reading gate |
| Outputs | |
| Number of digital switching outputs | 1 Piece(s) |

Switching outputs

| | |
|--------------|--------------------------|
| Type | Digital switching output |
| Voltage type | DC |

Switching output 1

| | |
|-------------------|-----------------|
| Switching element | Transistor, NPN |
|-------------------|-----------------|

Interface

| | |
|------|--------|
| Type | RS 232 |
|------|--------|

RS 232

| | |
|--------------------|----------------------|
| Function | Process |
| Transmission speed | 9,600 ... 115,200 Bd |
| Data format | configurable |

Connection

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

Connection 1

| | |
|--------------------|----------------------|
| Function | Data interface |
| | Signal IN |
| | Signal OUT |
| | Voltage supply |
| Type of connection | Cable with connector |
| Cable length | 150 mm |
| Sheathing material | PUR |
| Cable color | Black |
| Thread size | M12 |
| Type | Male |
| Material | Plastic |
| No. of pins | 8 -pin |
| Encoding | A-coded |

Mechanical data

| | |
|-----------------------|---------------------------|
| Design | Cubic |
| Dimension (W x H x L) | 31.5 mm x 20 mm x 40.3 mm |
| Housing material | Metal |
| Metal housing | Diecast aluminum |
| Lens cover material | Plastic |
| Net weight | 89 g |
| Housing color | Red |
| | 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

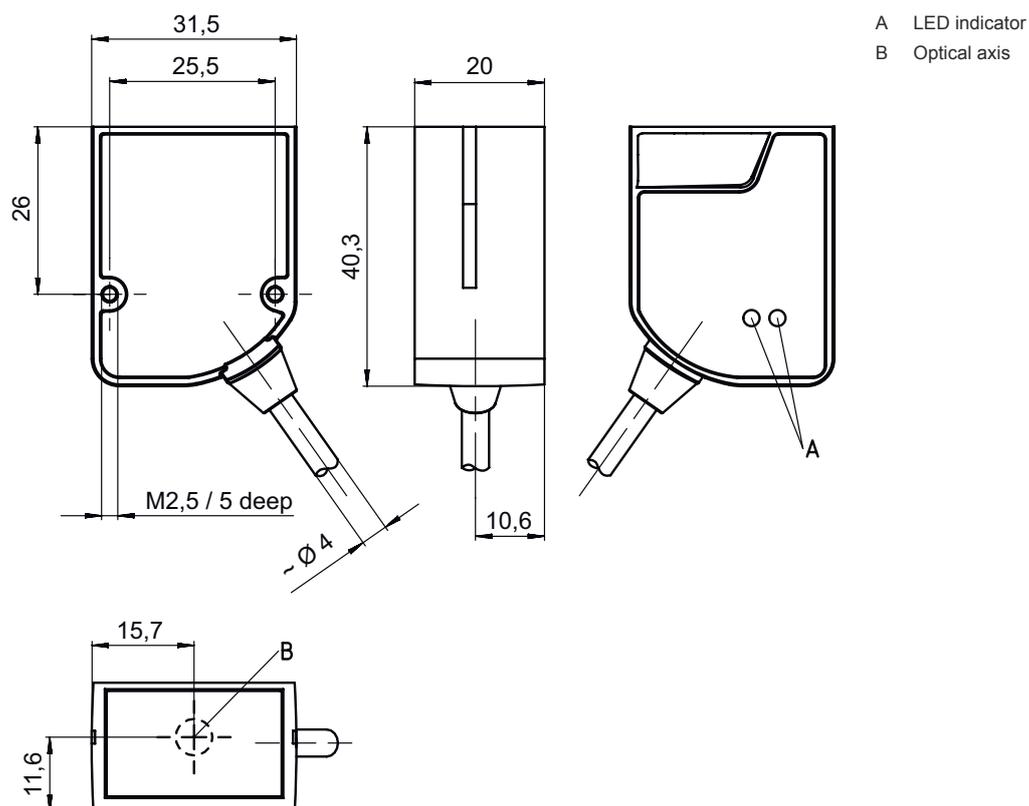
| | |
|--|------------|
| Degree of protection | IP 54 |
| Approvals | c UL US |
| | FCC |
| | RoHS |
| Test procedure for EMC in accordance with standard | EN 61326-1 |

Technical data

| | |
|-----------------------|----------|
| Customs tariff number | 84719000 |
| ECLASS 5.1.4 | 27280103 |
| ECLASS 8.0 | 27280103 |
| ECLASS 9.0 | 27280103 |
| ECLASS 10.0 | 27280103 |
| ECLASS 11.0 | 27280103 |
| ECLASS 12.0 | 27280103 |
| ECLASS 13.0 | 27280103 |
| ECLASS 14.0 | 27280103 |
| ECLASS 15.0 | 27280103 |
| ECLASS 16.0 | 27280103 |
| ETIM 5.0 | EC002550 |
| ETIM 6.0 | EC002999 |
| ETIM 7.0 | EC002999 |
| ETIM 8.0 | EC002999 |
| ETIM 9.0 | EC002999 |
| ETIM 10.0 | EC002999 |

Dimensioned drawings

All dimensions in millimeters

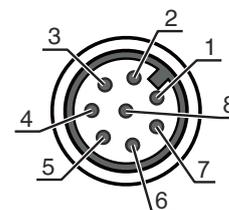


Electrical connection

Connection 1

| | |
|---------------------------|---|
| Function | Data interface Signal IN Signal OUT Voltage supply |
| Type of connection | Cable with connector |
| Cable length | 150 mm |
| Sheathing material | PUR |
| Cable color | Black |
| Thread size | M12 |
| Type | Male |
| Material | Plastic |
| No. of pins | 8 -pin |
| Encoding | A-coded |

| Pin | Pin assignment |
|-----|----------------|
| 1 | V+ |
| 2 | IN 1 |
| 3 | GND |
| 4 | OUT 1 |
| 5 | n.c. |
| 6 | RS 232 RxD |
| 7 | RS 232 TxD |
| 8 | FE/SHIELD |



Diagrams

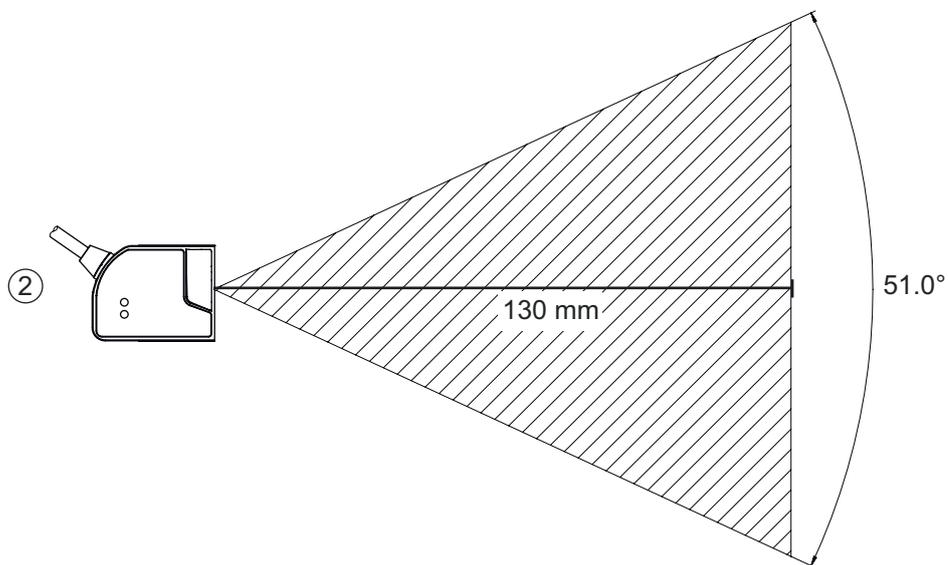
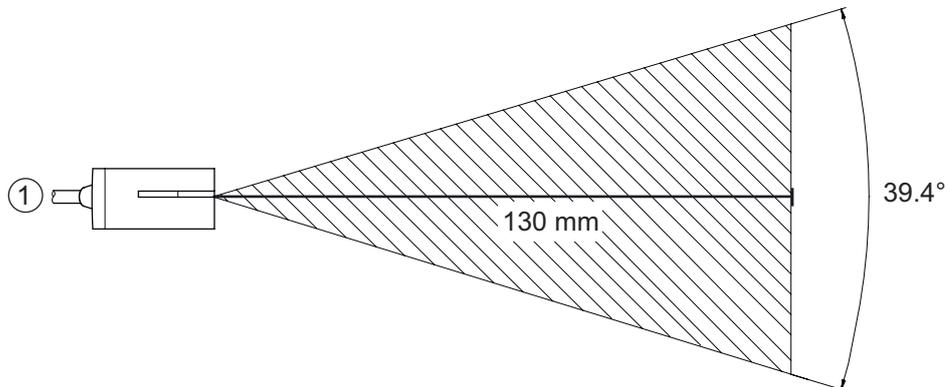
Reading distances

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

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

Diagrams

Reading field



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

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.