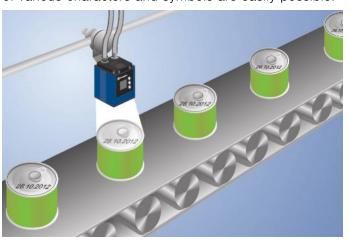
## **B50R100**

Part Number



- MultiCore technology
- OCR reading

The OCR reader is based on the wenglor MultiCore technology and reads up to 100 characters simultaneously. The functions autofocus, region of interest and tracking are available for improved plain text reading. Reliable reading, comparing and good/bad-evaluation of various characters and symbols are easily possible.



## **we**QubeOCR

| Technical Data                     |                      |
|------------------------------------|----------------------|
| Optical Data                       |                      |
| Working Range                      | ≥ 20 mm              |
| Resolution                         | 736 × 480 Pixel      |
| Image Chip                         | monochrome           |
| Light Source                       | White Light          |
| Service Life (T = +25 °C)          | 100000 h             |
| Visual Field                       | see Table 1          |
| Frame Rate                         | 25 Hz                |
| Electrical Data                    |                      |
| Supply Voltage                     | 1830 V DC            |
| Current Consumption (Ub = 24 V)    | < 200 mA             |
| Response Time                      | 40 ms                |
| Temperature Range                  | -2555 °C*            |
| Inputs/Outputs                     | 6                    |
| Switching Output Voltage Drop      | < 2,5 V              |
| Switching Output/Switching Current | 100 mA               |
| Short Circuit Protection           | yes                  |
| Reverse Polarity Protection        | yes                  |
| Interface                          | RS-232/Ethernet      |
| Protection Class                   | III                  |
| Mechanical Data                    |                      |
| Setting Method                     | Ethernet             |
| Housing Material                   | Aluminum             |
| Degree of Protection               | IP67                 |
| Connection                         | M12 × 1; 12-pin      |
| Type of Connection Ethernet        | M12 × 1; 8-pin, X-co |
| Safety-relevant Data               | 7.7.7.               |
| MTTFd (EN ISO 13849-1)             | 227,7 a              |
| Function                           |                      |
| OCR                                | yes                  |
| Tracking                           | yes                  |
| Web server                         |                      |
|                                    | yes                  |
| Configurable as PNP/NPN/Push-Pull  |                      |
| Switchable to NC/NO                |                      |
| Illumination Output                |                      |
| RS-232 Interface                   |                      |
| Ethernet                           |                      |
| PROFINET                           |                      |
| EtherNet/IP™                       |                      |
| Connection Diagram No.             | 002 1008             |
| Control Panel No.                  | X2                   |
| Suitable Connection Technology No. | 50 87                |
| Suitable Mounting Technology No.   | 560                  |

Display brightness may decrease with age. This does not result in any impairment of the sensor function.

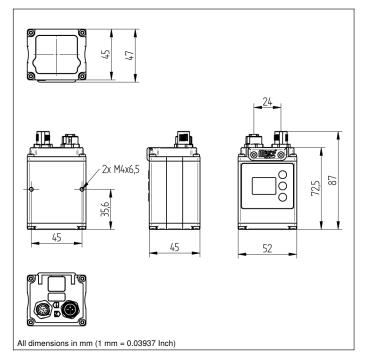
\* -25° C: Ambient conditions should not result in condensation; avoid the formation of ice on the front panel!

55° C: Continuous illumination at max. 1% or flash mode at 100% brightness with an exposure time of ≤ 5 ms; may affect the service life of the product.

## **Complementary Products**

| Disk with Polarization Filter ZNNG004 |
|---------------------------------------|
| Fieldbus Gateway ZAGxxxN01, EPGG001   |
| Illumination Technology               |
| Protective Housing ZNNS001, ZNNS002   |
| Software                              |
| weQubeDecode License Upgrade DNNL002  |
| weQubeVision License Upgrade DNNL001  |





## Ctrl. Panel

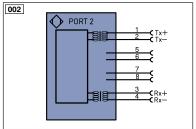


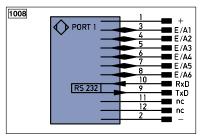
20 = Enter Button

22 = UP Button

23 = Down Button

60 = Display





| Leger   | na   | PT       | Platinum measuring resistor  | ENA                      | Encoder A           |
|---------|--|----------|------------------------------|--------------------------|---------------------|
| +       | Supply Voltage +                             | nc       | not connected                | ENB                      | Encoder B           |
| -       | Supply Voltage 0 V                           | U        | Test Input                   | Amin                     | Digital output MIN  |
| ~       | Supply Voltage (AC Voltage)                  | Ū        | Test Input inverted          | Амах                     | Digital output MAX  |
| Α       | Switching Output (NO)                        | W        | Trigger Input                | Аок                      | Digital output OK   |
| Ā       | Switching Output (NC)                        | 0        | Analog Output                | SY In                    | Synchronization In  |
| V       | Contamination/Error Output (NO)              | 0-       | Ground for the Analog Output | SY OUT                   | Synchronization OUT |
| V       | Contamination/Error Output (NC)              | BZ       | Block Discharge              | OLT                      | Brightness output   |
| E       | Input (analog or digital)                    | Awv      | Valve Output                 | М                        | Maintenance         |
| Т       | Teach Input                                  | а        | Valve Control Output +       |                          |                     |
| Z       | Time Delay (activation)                      | b        | Valve Control Output 0 V     |                          |                     |
| S       | Shielding                                    | SY       | Synchronization              | Wire Colors according to |                     |
| RxD     | Interface Receive Path                       | E+       | Receiver-Line                | DIN IEC 757              |                     |
| TxD     | Interface Send Path                          | S+       | Emitter-Line                 | BK                       | Black               |
| RDY     | Ready  | +        | Grounding                    | BN                       | Brown               |
| GND     | Ground                                       | SnR      | Switching Distance Reduction | RD                       | Red                 |
| CL      | Clock  | Rx+/-    | Ethernet Receive Path        | OG                       | Orange              |
| E/A     | Output/Input programmable                    | Tx+/-    | Ethernet Send Path           | YE                       | Yellow              |
| 0       | IO-Link                                      | Bus      | Interfaces-Bus A(+)/B(-)     | GN                       | Green               |
| PoE     | Power over Ethernet                          | La       | Emitted Light disengageable  | BU                       | Blue                |
| IN      | Safety Input                                 | Mag      | Magnet activation            | VT                       | Violet              |
| OSSD    | Safety Output                                | RES      | Input confirmation           | GY                       | Grey                |
| Signal  | Signal Output                                | EDM      | Contactor Monitoring         | WH                       | White               |
| BI_D+/- | - Ethernet Gigabit bidirect. data line (A-D) | ENARS422 | Encoder A/Ā (TTL)            | PK                       | Pink                |
|         | Encoder 0-pulse 0-0 (TTL)                    |          | Encoder B/B (TTL)            | GNYE                     | Green/Yellow        |

Table 1

| Working Distance | 20 mm      | 200 mm      | 1000 mm      |
|------------------|------------|-------------|--------------|
| Visual Field     | 16 × 12 mm | 120 × 90 mm | 600 × 450 mm |









