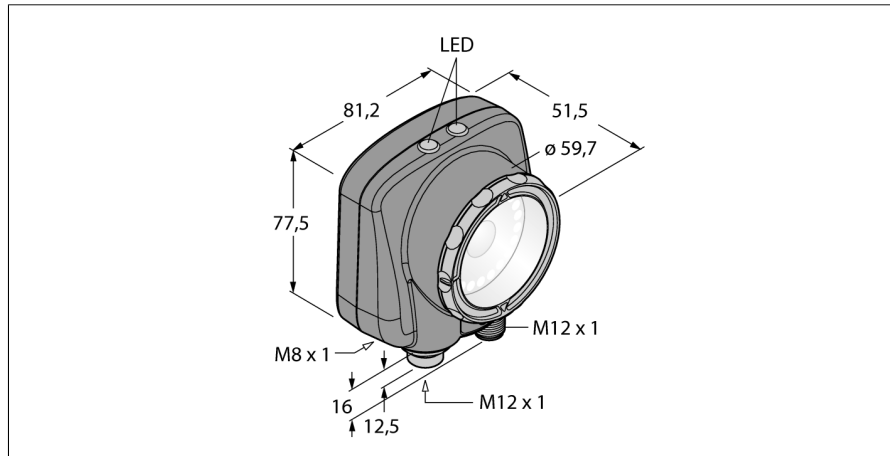


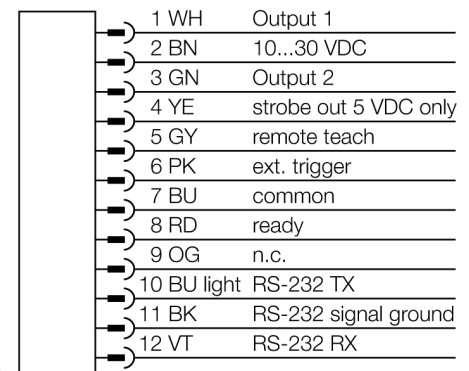
**Vision systems**  
**area, blemish, match**  
**IVURGPI04**



- 1/3" CMOS, 752x480 pixels
- Integrated ring light: Infrared
- Protection class IP67
- External strobe output + 5 VDC
- External trigger input
- Lens, 4.3mm, M12x1
- External display RD35 required
- Operating voltage: 10...30 VDC
- M12 x 1 male, 12-pole
- 2xPNP switching output
- 1x RS232 data communication
- USB-2.0 host: M8 female, 4-pole

|                              |                       |
|------------------------------|-----------------------|
| <b>Type code</b>             | IVURGPI04             |
| Ident no.                    | 3082348               |
| <b>Design</b>                | rectangular, iVu      |
| Dimensions                   | 51.5 x 81.2 x 95.3 mm |
| Housing material             | plastic, PBT          |
| Window material              | Acrylic, clear        |
| Connection                   | male, M12 x 1, 8-wire |
| Protection class             | IP67                  |
| Ambient temperature          | 0...+50 °C            |
| <b>Power on display</b>      | LED, green            |
| Switching state              | LED green             |
| Error indication             | LED red               |
| <b>Operating voltage</b>     | 10...30VDC            |
| DC rated operational current | ≤ 500 mA              |
| Short-circuit protection     | yes/ cyclic           |
| Reverse polarity protection  | yes                   |
| Switch element function      | NO contact, PNP       |
| Output current               | ≥ 150 mA              |
| <b>Operating mode</b>        | gray value            |
| Bildsensor                   | CMOS                  |
| Auflösung                    | 752 x 480 Pixel       |
| Bildfrequenz                 | 100 fps               |
| Light type                   | IR                    |
| Brennweite                   | 4.3 mm                |

**Wiring diagram**



**Functional principle**

Sensor with 3 integrated operation modes:

1. Pattern recognition, checks if a pattern on a target is identical to the reference pattern.
2. BLOB recognition, for recognition of one or more features.
3. BLOB and location tool for motion control.

Sensor configuration via PC is not required!  
Transmission of log files and firmware updates via USB interface.



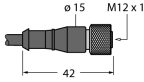
**Selecting the focal length**

With known object size or scan field the matching vision sensor is found simply by determining the ratio between the sensing range and the focal length. Use the graphics for selection. Here, the sensing ranges are put in relation to the field view and the lens focal length.

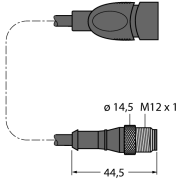
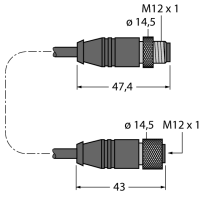
**Accessories**

| Type code | Ident no. | Description   | Dimension drawing  |
|-----------|-----------|---|--|
| SMBIVURAR | 3082547   | Brackets for mounting on right side                   |  <p>Technical drawing of a bracket for mounting on the right side. Dimensions include: 16.8, 29.3, 49, 78.1, 36.4, 27, 1/4-20, 25, 7, 44, 4.4, 4.4, 22.5.</p> |
| SMBIVURAL | 3082546   | Brackets for mounting on left side                    |  <p>Technical drawing of a bracket for mounting on the left side. Dimensions include: 36.4, 49, 78.1, 16.8, 29.3, 27, 1/4-20, 25, 7, 44, 4.4, 4.4, 22.5.</p>  |
| SMBIVUU   | 3082549   | U-bracket for base mounting (incl. SMBIVUB baseplate) |  <p>Technical drawing of a U-bracket for base mounting. Dimensions include: 54, 30, 61.2, 42, 6.25, 25.4, 5.35 (8x).</p>                                    |
| SMBIVUB   | 3082548   | Baseplate to extend the installation                  |  <p>Technical drawing of a baseplate to extend the installation. Dimensions include: 33.1, 29, 56.8, 23.8, 5.8, 1/4-20 UNC, M5 x 0.8 (2x).</p>              |

**Wiring accessories**

| Type code   | Ident no. | Description                                | Dimension drawing  |
|-------------|-----------|--|--|
| MQDC2S-1206 | 3011420   | Power supply, M12x1 female, 12-pole, 1.83m |  <p>Technical drawing of a power supply connector. Dimensions include: 42, 15, M12 x 1.</p> |

**Wiring accessories**

| Type code     | Ident no. | Description                                 | Dimension drawing   |
|---------------|-----------|---|---|
| MQDEC-801-USB | 3081158   | USB adapter cable, M12x1 male, 8-pole, 0.3m |  |
| IVURDM-QD-803 | 3028673   | Remote Display, M12 x 1, 8-pin, 0.91 m      |  |

**Function accessories**

| Type code | Ident no. | Description | Dimension drawing   |
|-----------|-----------|-------------|---|
| RDM35     | 3029512   |             |  |