

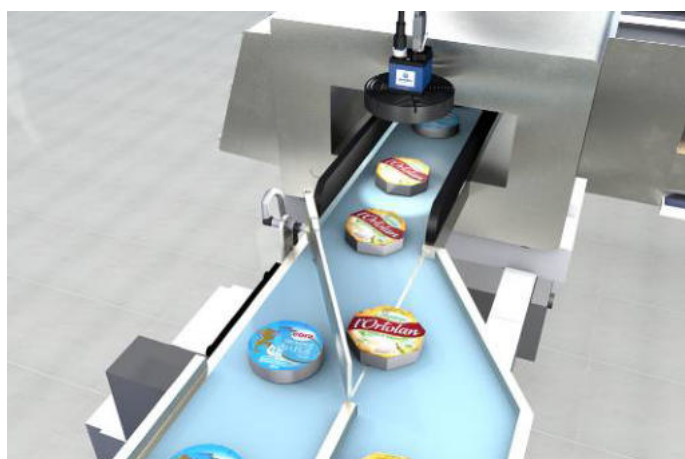
# BB6K001

Part Number



- **Compact and robust aluminum housing in 29 × 49.1 × 29 mm format**
- **Different lenses can be adapted thanks to standard thread**
- **Image chip with Global Shutter for dynamic applications**

Digital cameras make it possible to record images in vision applications. The images are output via a 1-giga-bit Ethernet interface. The camera can be connected via a PoE port so that only one cable is required. The small and rugged aluminum housing, as well as the C mount threaded connection, can be easily and flexibly integrated. The high-performance Sony Pregius image chip ensures high frame rates, optimum image quality without noise under difficult lighting conditions and extremely sharp images even in dynamic applications thanks to Global Shutter.



## Technical Data

| Optical Data       |                   |
|--------------------|-------------------|
| Resolution         | 1456 × 1088 Pixel |
| Resolution         | 1,58 MPixel       |
| Aspect Ratio       | 4:3               |
| Pixel Size         | 3,45 × 3,45 µm    |
| Sensor Type        | CMOS              |
| Sensor Designation | Sony IMX273LLR-C  |
| Image Chip         | monochrome        |
| Image chip size    | 1/3"              |
| Frame Rate         | < 76 fps          |

| Electrical Data                        |                         |
|----------------------------------------|-------------------------|
| Supply Voltage                         | 12...24 V DC            |
| Current Consumption (Ub = 24 V)        | < 130 mA                |
| Temperature Range                      | 0...55 °C               |
| Storage temperature                    | -20...60 °C             |
| Atmospheric humidity                   | 20...80 %               |
| Number of GPIOs (general purpose I/Os) | 2                       |
| GPIO voltage range                     | 0...3,3 V DC            |
| GPIO maximum output current            | 8 mA                    |
| GPIO protective circuit                | no                      |
| Number of Flash Outputs                | 1                       |
| Flash Output                           | Optoisolator            |
| Number of trigger inputs               | 1                       |
| Trigger Input                          | Optoisolator            |
| Short Circuit Protection               | no                      |
| Overload Protection                    | no                      |
| Supported PoE Classes                  | 2                       |
| Supported PoE Standard                 | IEEE802.3af, IEEE802.at |
| Protection Class                       | III                     |

| Mechanical Data             |             |
|-----------------------------|-------------|
| Lens thread                 | C-Mount     |
| Housing Material            | Aluminum    |
| Weight                      | 49 g        |
| Degree of Protection        | IP30        |
| Connection                  | HR25, 8-pin |
| Type of Connection Ethernet | RJ45, 8-pin |

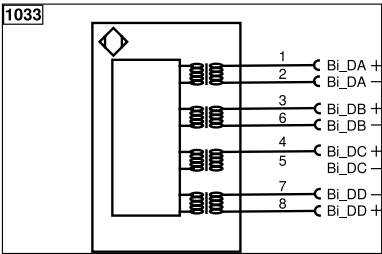
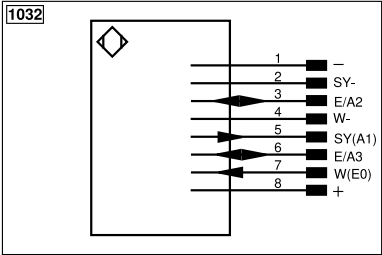
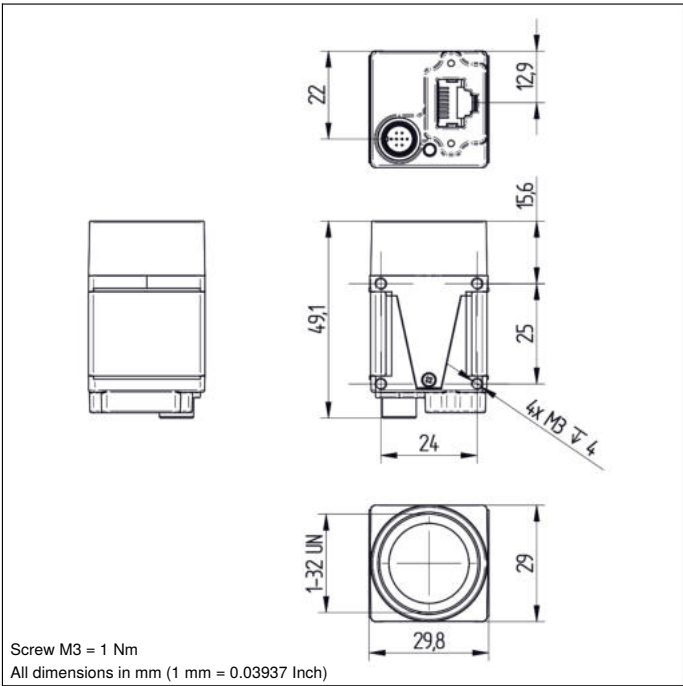
| Safety-relevant Data             |         |
|----------------------------------|---------|
| Diagnostic Coverage (DC)         | 0 %     |
| MTTFd (EN ISO 13849-1)           | 90,29 a |
| Mission Time TM (EN ISO 13849-1) | 20 a    |

| Function       |     |
|----------------|-----|
| Global Shutter | yes |
| Subsampling    | yes |

|                                   |           |
|-----------------------------------|-----------|
| PoE                               |           |
| Connection Diagram No.            | 1032 1033 |
| Suitable Connection Equipment No. | 85 47     |
| Suitable Mounting Technology No.  | 580       |

## Complementary Products

|                         |
|-------------------------|
| Control Unit BB1C       |
| Illumination Technology |
| Lens                    |
| Software                |
| Switch EHSS001          |



| Legend    |                                            |          |                                |                                        |                     |
|-----------|--------------------------------------------|----------|--------------------------------|----------------------------------------|---------------------|
| +         | Supply Voltage +                           | nc       | Not connected                  | ENBRS422                               | Encoder B/B (TTL)   |
| -         | Supply Voltage 0 V                         | U        | Test Input                     | ENA                                    | Encoder A           |
| ~         | Supply Voltage (AC Voltage)                | Ü        | Test Input inverted            | ENB                                    | Encoder B           |
| A         | Switching Output (NO)                      | W        | Trigger Input                  | AMIN                                   | Digital output MIN  |
| Ä         | Switching Output (NC)                      | W-       | Ground for the Trigger Input   | AMAX                                   | Digital output MAX  |
| V         | Contamination/Error Output (NO)            | O        | Analog Output                  | AOK                                    | Digital output OK   |
| Ÿ         | Contamination/Error Output (NC)            | O-       | Ground for the Analog Output   | SY In                                  | Synchronization In  |
| E         | Input (analog or digital)                  | BZ       | Block Discharge                | SY OUT                                 | Synchronization OUT |
| T         | Teach Input                                | Amv      | Valve Output                   | OLT                                    | Brightness output   |
| Z         | Time Delay (activation)                    | a        | Valve Control Output +         | M                                      | Maintenance         |
| S         | Shielding                                  | b        | Valve Control Output 0 V       | rsv                                    | Reserved            |
| RxD       | Interface Receive Path                     | SY       | Synchronization                | Wire Colors according to DIN IEC 60757 |                     |
| TxD       | Interface Send Path                        | SY-      | Ground for the Synchronization | BK                                     | Black               |
| RDY       | Ready                                      | E+       | Receiver-Line                  | BN                                     | Brown               |
| GND       | Ground                                     | S+       | Emitter-Line                   | RD                                     | Red                 |
| CL        | Clock                                      | ±        | Grounding                      | OG                                     | Orange              |
| E/A       | Output/Input programmable                  | SnR      | Switching Distance Reduction   | YE                                     | Yellow              |
| IO-Link   | IO-Link                                    | Rx+/-    | Ethernet Receive Path          | GN                                     | Green               |
| PoE       | Power over Ethernet                        | Tx+/-    | Ethernet Send Path             | BU                                     | Blue                |
| IN        | Safety Input                               | Bus      | Interfaces-Bus A(+)/B(-)       | VT                                     | Violet              |
| OSSD      | Safety Output                              | La       | Emitted Light disengageable    | GY                                     | Grey                |
| Signal    | Signal Output                              | Mag      | Magnet activation              | WH                                     | White               |
| BI_DA+/-  | Ethernet Gigabit bidirect. data line (A-D) | RES      | Input confirmation             | PK                                     | Pink                |
| ENo RS422 | Encoder 0-pulse 0/Ü (TTL)                  | EDM      | Contact Monitoring             | GNYE                                   | Green/Yellow        |
| PT        | Platinum measuring resistor                | ENARS422 | Encoder A/A (TTL)              |                                        |                     |