

# Machine Vision Camera

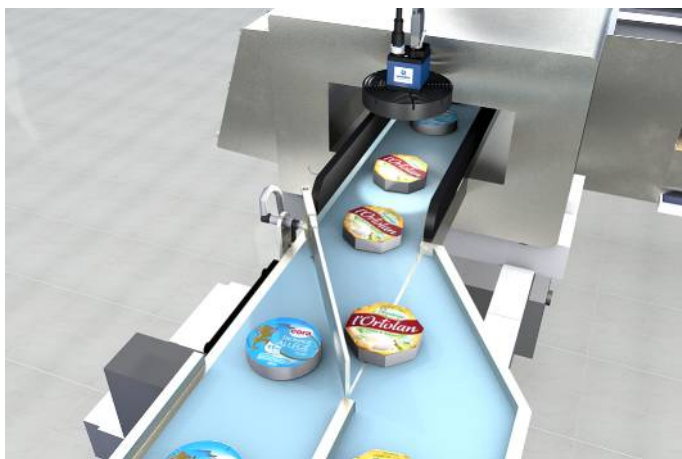
## BB6K002

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

Machine Vision Cameras make it possible to record images in vision applications. The images are read out via a 1-gigabit 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	1,6 MP
Aspect Ratio	4:3
Pixel Size	3,45 × 3,45 μm
Sensor Type	CMOS
Sensor Designation	Sony IMX273LQR-C
Image Chip	color
Image chip size	1/3"
Frame rate (fullframe)	< 76 fps

Electrical Data	
Supply Voltage	12...24 V DC
Current Consumption (U <sub>b</sub> = 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, powder-coated
Optic Cover	Glass
Degree of Protection	IP30
Connection	HR25, 8-pin
Type of Connection Ethernet	RJ45, 8-pin

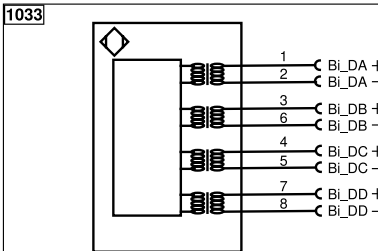
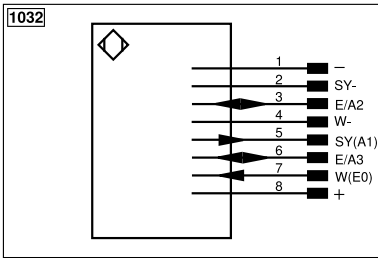
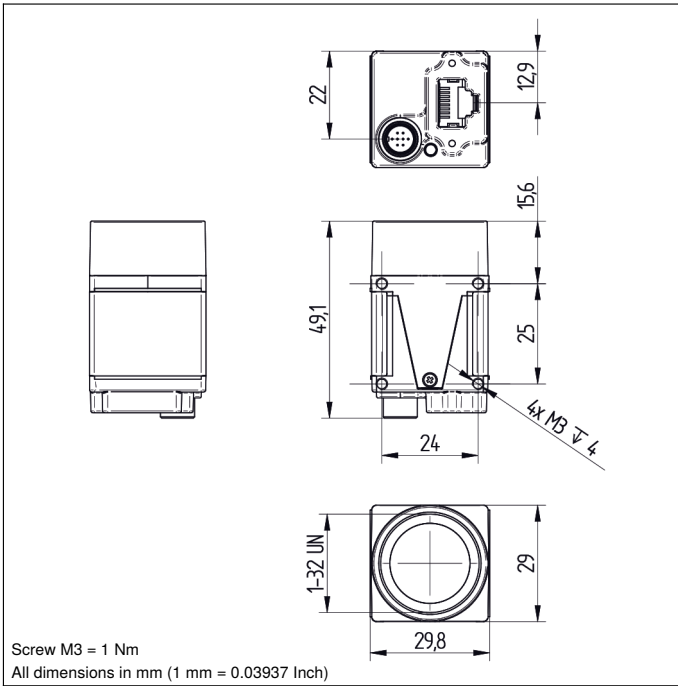
Safety-relevant Data	
Diagnostic Coverage (DC)	0 %
MTTFd (EN ISO 13849-1)	90,29 a
Mission Time TM (EN ISO 13849-1)	20 a

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
EHSS001 Switch
Illumination Technology
Lens
Software



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
ṽ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
IO-Link		Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
Bi_DA+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contactor Monitoring
PT	Platinum measuring resistor	ENARs422	Encoder A/Ā (TTL)
			Encoder B/B̄ (TTL)
			Encoder A
			Encoder B
			Digital output MIN
			Digital output MAX
			Digital output OK
			Synchronization In
			Synchronization OUT
			Brightness output
			Maintenance
			Reserved
			Wire Colors according to DIN IEC 60757
			BK Black
			BN Brown
			RD Red
			OG Orange
			YE Yellow
			GN Green
			BU Blue
			VT Violet
			GY Grey
			WH White
			PK Pink
			GNYE Green/Yellow

