

Machine Vision Camera

BBZK005

Part Number



- Compact and robust housing in 29 × 57.7 × 29 mm format
- Different lenses can be adapted thanks to standard thread
- Flexible mounting options from 4 sides
- High-resolution 4024 x 3036-pixel image chip

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 housing and the C mount threaded connection can be easily and flexibly integrated. State-of-the-art CMOS sensor technology ensures high resolution and optimum image quality without noise even in difficult lighting conditions.

Technical Data

Optical Data

Resolution	4024 × 3036 Pixel
Resolution	12 MP
Aspect Ratio	4:3
Pixel Size	1,85 × 1,85 μm
Sensor Type	CMOS
Sensor Designation	IMX226
Image Chip	monochrome
Image chip size	1/1,7"
Frame rate (fullframe)	< 9,7 fps

Electrical Data

Supply Voltage	9...24 V DC
Current Consumption (Ub = 24 V)	< 100 mA
Temperature Range	0...50 °C
Storage temperature	-30...70 °C
Atmospheric humidity	20...95 %
Number of GPIOs (general purpose I/Os)	1
GPIO voltage range	0...24 V DC
GPIO maximum output current	25 mA
GPIO protective circuit	no
Number of Flash Outputs	1
Flash Output	non-isolated
Number of trigger inputs	1
Trigger Input	non-isolated
Short Circuit Protection	no
Overload Protection	no
Supported PoE Classes	2
Supported PoE Standard	IEEE802.3af
Protection Class	III

Mechanical Data

Lens thread	C-Mount
Housing Material	Aluminum, powder-coated
Optic Cover	Glass
Degree of Protection	IP30
Connection	HR10; 6-pin
Type of Connection Ethernet	RJ45, 8-pin

Function

Rolling shutter	yes
-----------------	-----

PoE

Suitable Connection Equipment No.

84 | 47

Suitable Mounting Technology No.

590

Complementary Products

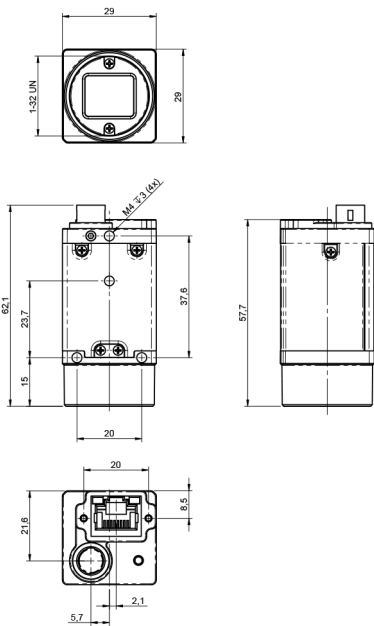
Control Unit BB1C

EHSS001 Switch

Illumination Technology

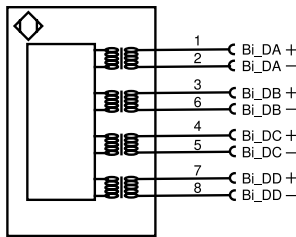
Lens

Software

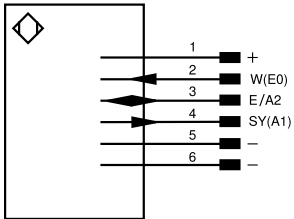


All dimensions in mm (1 mm = 0.03937 Inch)

1033



1041



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
V̄	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_D+/-	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	ENARIS422	Encoder A/A (TTL)		

