Machine Vision Camera

BBVK004

Part Number

- **Compact and robust housing in 29 × 64.4 × 29 mm format**
- **Different lenses can be adapted thanks to standard thread**
- **Flexible mounting options from 4 sides**
- **Image chip with Global Shutter for dynamic applications**

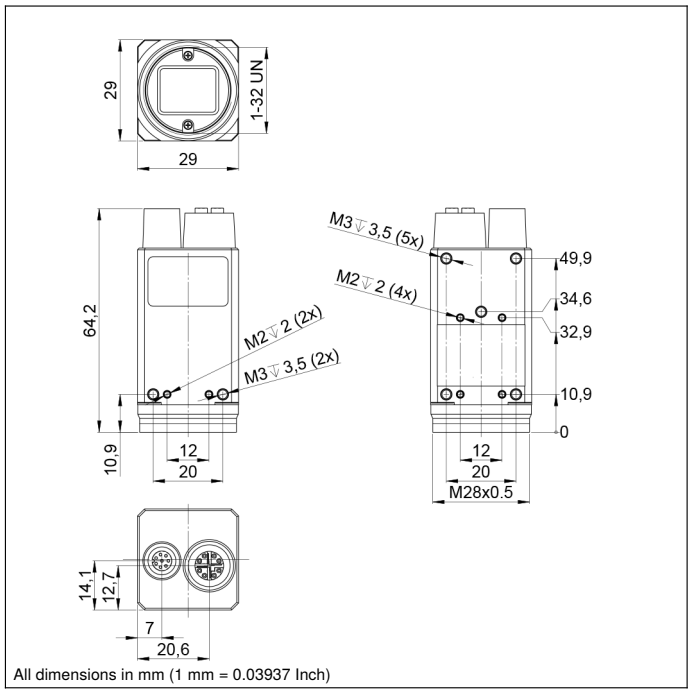
Machine Vision Cameras make it possible to record images in vision applications. The images are read out via a 1-gigabit Ethernet interface. The camera can be connected via a PoE port so that only one cable is required. The small and rugged housing and the C mount threaded connection can be easily and 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

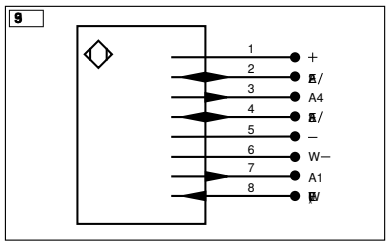
Optical Data	
Resolution	2448 × 2048 Pixel
Resolution	5 MP
Pixel Size	2,74 × 2,74 µm
Sensor Type	CMOS
Sensor Designation	Sony IMX547
Image Chip	color
Image chip size	1/1,8"
Frame rate (fullframe)	< 22 fps
Electrical Data	
Supply Voltage	12...24 V DC
Current Consumption (Ub = 24 V)	< 130 mA
Temperature Range	-20...55 °C
Storage temperature	-30...60 °C
Atmospheric humidity	20...95 %
Number of GPIOs (general purpose I/Os)	2
Number of Flash Outputs	1
Flash Output	Optoisolator
Number of trigger inputs	1
Trigger Input	Optoisolator
Supported PoE Standard	IEEE802.3af
Mechanical Data	
Lens thread	C-Mount
Housing Material	Aluminum, powder-coated
Optic Cover	Glass
Degree of Protection	IP67
Connection	M8 × 1; 8-pin
Type of Connection Ethernet	M12 × 1; 8-pin, X-cod.
Function	
Global Shutter	yes
PoE	yes

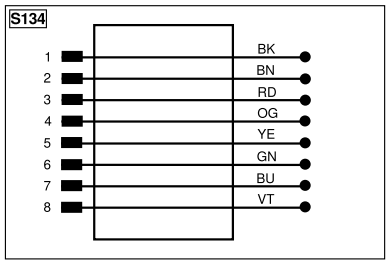
Complementary Products

EHSS001 Switch
Illumination Technology
Lens
Machine Vision Controller MVC
Software
ZBVG protective tube



All dimensions in mm (1 mm = 0.03937 Inch)





Legend					
+	Supply Voltage +	PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)
–	Supply Voltage 0 V	nc	Not connected	ENBRS422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	ENA	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	ENB	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W–	Ground for the Trigger Input	AMAX	Digital output MAX
V̄	Contamination/Error Output (NC)	O	Analog Output	AOK	Digital output OK
E	Input (analog or digital)	O–	Ground for the Analog Output	SY In	Synchronization In
T	Teach Input	BZ	Block Discharge	SY OUT	Synchronization OUT
R	Reset 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	Rx+/–	Ethernet Receive Path	GN	Green
PoE	ower 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
EN0 RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow

Connection options

for L series illumination