Baumer



Quick Start Guide LXC cameras (Camera Link®)

Latest software version and technical documentation are available at:

vt.baumer.com

Conformity / Safety

Conformity: CE, RoHS



CE

CE

We declare, under our sole responsibility, that the previously described Baumer LXC cameras conform with the directives of the CE.

RoHS

All LXC cameras comply with the recommendation of the European Union concerning RoHS Rules.

For further information about our products, please visit www.baumer.com For technical issues, please contact our technical support: support.cameras@baumer.com - Phone +49 (0)3528 4386-845 - Fax +49 (0)3528 4386-86

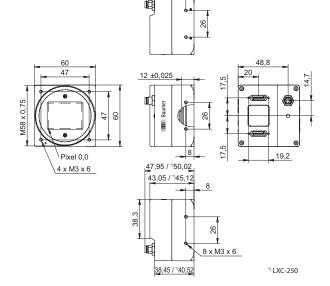
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· Protect the sensor from dirt and moisture. · Never open the camera housing. Avoid camera contamination by foreign objects.

Safety Precautions

Environmental requirements:

Storage temp. -10 °C ... +70 °C Operating temp. +5 °C ... +50 °C max. +50 °C Housing temp. Humidity 10 % ... 90 % Non-condensing



Lens Adapter for M58-Mount

- Adapter M58 / F-mount (Art. No.: 11117852)
- Adapter M58 / M42x1-mount (26.8mm) (Art. No.: 11127232)
- Adapter M58 / M42x1-mount (45.5 mm) (Art. No.: 11137781)

Notice

suitable for Zeiss (e.g. Distagon T* 2/25 Z-M42-I, Planar T* 1.4/50 Z-M42-I, Makro-Planar T* 2/50 Z-M42-I) and KOWA M42 lenses (e.g. LM28LF P-Mount, LM35LF P-Mount)

 Adapter M58 / C-mount (Art. No: 11115198)

Product Specification

LXC cameras – Extremely high resolution and speed

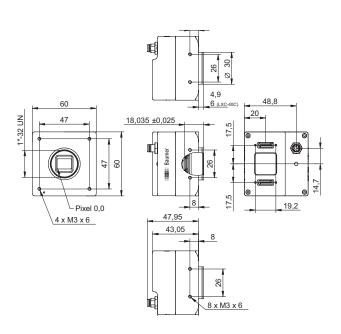
- Camera Link[®] progressive scan CMOS camera
- Excellent image quality
- Global shutter architecture for minimized motion blur
- · Binning and true partial scan function (ROI) for increased frame rates
- High Dynamic Range (HDR) image acquisition
- · External synchronization via industrial compliant process interface (trigger / flash)
- Power over Camera Link[®] (PoCL) support

Dimensions Camera with M58-Mount

- Two standard 26 pin Mini-Camera Link® connectors
- Support for Camera Link[®] Base, Medium, Full and EightyBit configurations
- Camera parameter programmable via GenCP protocol

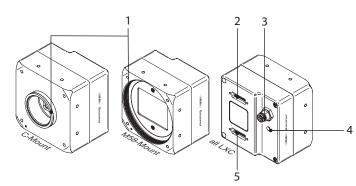
Notice

Further technical details are available in the respective data sheet.



Dimensions Camera with C-Mount

Further Information



No.	Description	No.	Description
1	C-Mount C-mount only M58-Mount lens mount (M58), adapter for other lens mounts available	4	Signaling-LED
2	Camera Link [®] socket (Base)	5	Camera Link [®] socket (Medium / Full / EightyBit)
3	Power Supply / Digital-IO		

Camera Link® sockets

Notice

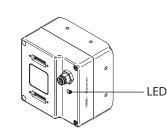
The camera has two Camera Link[®] sockets. To differentiate between Camera Link[®] socket, please look at the label. You can not use the CL Medium / Full / EightyBit socket alone!

Notice

To use Power over Camera Link® (PoCL, 12V DC \pm 20%), both Camera Link® sockets must be used.

	Camera Link [®]			Camera Link [®]			
	(Base)			(Medium / Full / EightyBit)			
Pin	Signal	Pin	Signal	Pin	Signal	Pin	Signal
1	GND	14	GND	1	GND	14	GND
2	X0-	15	X0+	2	Y0-	15	Y0+
3	X1-	16	X1+	3	Y1-	16	Y1+
4	X2-	17	X2+	4	Y2-	17	Y2+
5	XCLK-	18	XCLK+	5	YCLK-	18	YCLK+
6	X3-	19	X3+	6	Y3-	19	Y3+
7	SERTC+	20	SERTC-	7	100 Ωterm.	20	100 Ω term.
8	SERTFG-	21	SERTFG+	8	Z0-	21	Z0+
9	CC1-	22	CC1+	9	Z1-	22	Z1+
10	CC2+	23	CC2-	10	Z2-	23	Z2+
11	CC3-	24	CC3+	11	ZCLK-	24	ZCLK+
12	CC4+	25	CC4-	12	Z3-	25	Z3+
13	GND	26	GND	13	GND	26	GND

LED Signaling



	Signal	Meaning
	green on	Power on, link good
	green blinking	Power on, no link
LED	red on	Error / Overtemperature
	red blinking	Boot process or Warning (update in progress, don't switch off)
	yellow	Readout active

Power Supply and Process Interface

A Caution

A power supply with electrical isolation is required for proper operation of the camera. Otherwise the device may be damaged!

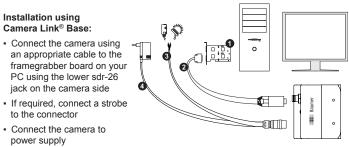
Power Supply / Digital-IO

M8 / 8 pins wire colors of the connecting cable $4 \frac{3}{2}$

	5	8	
1	white	not in use	
2	brown	Power VCC+	
3	green	IN 1 (line 0)	
4	yellow	IO GND	
5	grey	IO Power VCC	
6	pink	OUT 1 (line 1)	
7	blue	Power GND	
8	red	not in use	

Power Supply				
Power VCC	12 VDC 24 VDC ± 20%			

Installation



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Installation sample 1 - Framegrabber board; 2 - CameraLink[®] cable; 3 - Process interface cable; 4 - Power cable

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Installation using Camera Link[®] Medium / Full / EightyBit:

- Connect the camera using two appropriate cables to the framegrabber board on your PC.
- If required, connect a strobe to the connector
- Connect the camera to power supply

Installation sample 1 - Framegrabber board; 2 - CameraLink[®] cable; 3 - Process interface cable; 4 - Power cable

Heat Transmission

A Caution

Provide adequate dissipation of heat, to ensure that the temperature does not exceed +50 $^\circ$ C (+122 $^\circ$ F).

The surface of the camera may be hot during operation and immediately after use. Be careful when handling the camera and avoid contact over a longer period.

As there are numerous possibilities for installation, Baumer do not specifiy a specific method for proper heat dissipation, but suggest the following principles:

- operate the cameras only in mounted condition
- mounting in combination with forced convection may provide proper heat dissipation

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Measure Point	Maximal Temperature
Т	+50 °C (122 °F)