



Quick Start Guide
LXC cameras (Camera Link®)

Latest software version and technical documentation are available at:
www.baumer.com/vision/login

Conformity / Safety

Conformity:
CE, RoHS



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.

Safety Precautions

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

Environmental requirements:

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

Further Information

For further information on our products visit www.baumer.com

For technical issues, please contact our technical support:
support.cameras@baumer.com · Phone +49 (0)3528 4386-0 · Fax +49 (0)3528 4386-86
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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
- Two standard 26 pin Mini-Camera Link® connectors
- Support for Camera Link® Base, Medium, Full and EightyBit configurations
- Camera parameter programmable via GenCP protocol

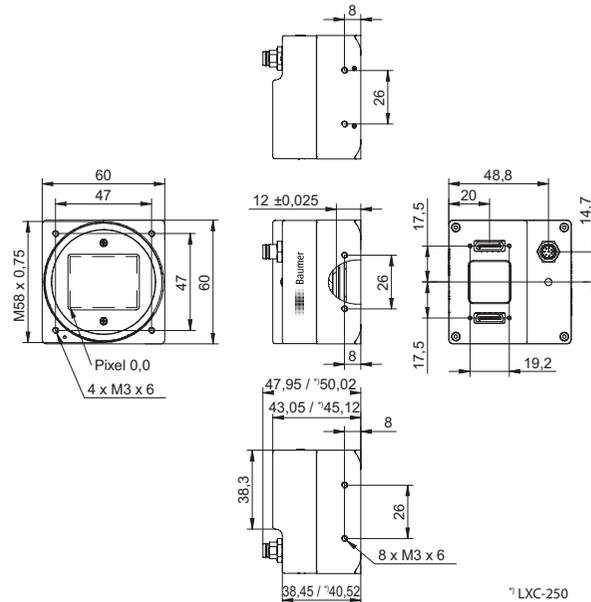
Camera Type	Sensor Size	Resolution	Full Frames [max. fps]
Monochrome / Color			
LXC-20M / C	2/3"	2048 × 1088	337
LXC-40M / C	1"	2048 × 2048	180
LXC-120M / C	APS-C	4096 × 3072	63
LXC-200M / C	35 mm	5120 × 3840	32
LXC-250M / C	APS-H	5120 × 5120	32

Notice

Further technical details are available in the respective data sheet.



Dimensions Camera LXC-120 / 200 / 250

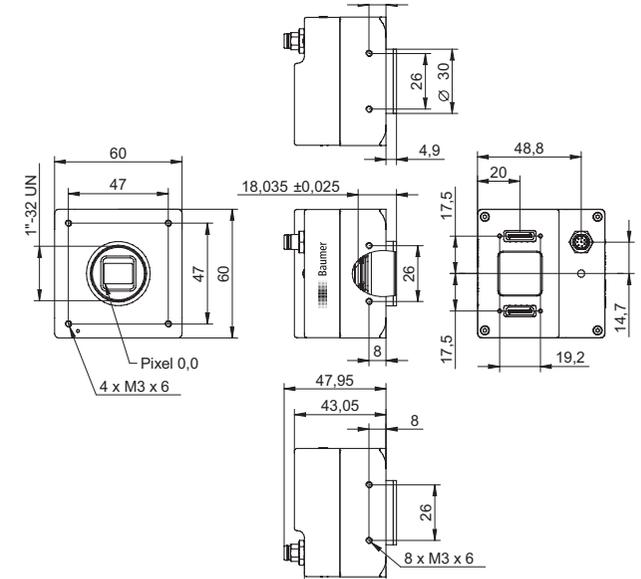


*) LXC-250

Dimensions Camera LXC-20 / 40

Notice

LXC-20 and LXC-40 have a C-mount interface only.



Lens Adapter for LXC-120 / 200

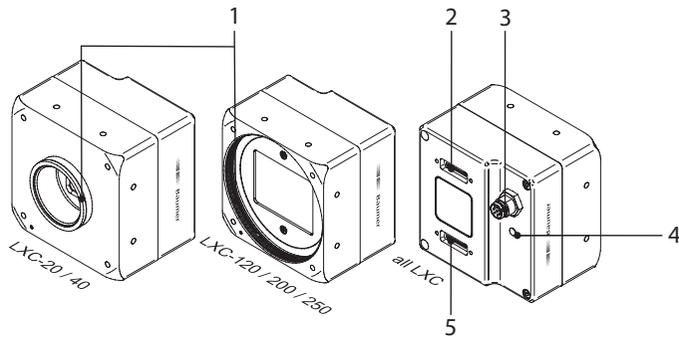
- Adapter M58 / F-mount (Art. No.: 11117852)
- Adapter M58 / M42x1-mount (26.8mm) (Art. No.: 11127232)
- Adapter M58 / M42x1-mount (45.5 mm) (Art. No.: 11137781)

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)

General Description



No.	Description	No.	Description
1	LXC-20 / 40 C-mount only	4	Signaling-LED
1	LXC-120 / 200 / 250 lens mount (M58), adapter for other lens mounts available	5	Camera Link® socket (Medium / Full / EightyBit)
2	Camera Link® socket (Base)		
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® (Base)



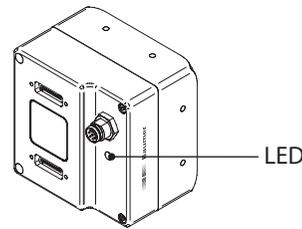
Pin	Signal	Pin	Signal
1	GND	14	GND
2	X0-	15	X0+
3	X1-	16	X1+
4	X2-	17	X2+
5	XCLK-	18	XCLK+
6	X3-	19	X3+
7	SERTC+	20	SERTC-
8	SERTFG-	21	SERTFG+
9	CC1-	22	CC1+
10	CC2+	23	CC2-
11	CC3-	24	CC3+
12	CC4+	25	CC4-
13	GND	26	GND

Camera Link® (Medium / Full / EightyBit)



Pin	Signal	Pin	Signal
1	GND	14	GND
2	X0-	15	X0+
3	X1-	16	X1+
4	X2-	17	X2+
5	XCLK-	18	XCLK+
6	X3-	19	X3+
7	100 Ω term.	20	100 Ω term.
8	Z0-	21	Z0+
9	Z1-	22	Z1+
10	Z2-	23	Z2+
11	ZCLK-	24	ZCLK+
12	Z3-	25	Z3+
13	GND	26	GND

LED Signaling



	Signal	Meaning
LED	green on	Power on, link good
	green blinking	Power on, no link
	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

Power Supply / Digital-IO

M8 / 8 pins wire colors of the connecting cable



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

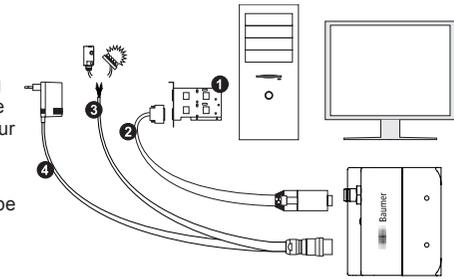
Power Supply

Power VCC	12 VDC ... 24 VDC \pm 20%
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Installation

Installation using Camera Link® Base:

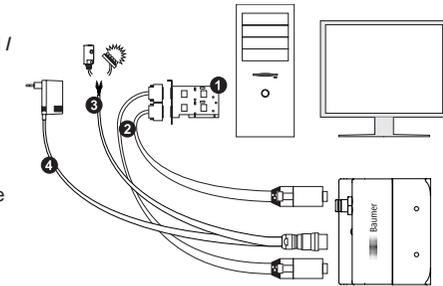
- Connect the camera using an appropriate cable to the framegrabber board on your PC using the lower sdr-26 jack on the camera side
- If required, connect a strobe to the connector
- Connect the camera to power supply



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

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

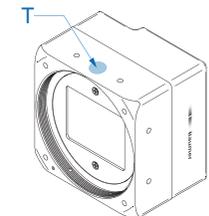
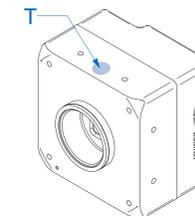
Caution

Provide adequate dissipation of heat, to ensure that the temperature does not exceed +50 °C (+122 °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 specify 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



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