Baumer

Quick Start Guide
LXG cameras (Gigabit Ethernet)

Product Specification

LXG cameras – Extremely high resolution and speed

▪ Dual Gigabit Ethernet progressive scan CMOS camera
▪ GigE Vision™ standard compliant
▪ 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)
▪ Global shutter architecture for minimized motion blur
▪ Power over Ethernet (PoE) support
▪ Standard RJ45 connectors
▪ Excellent image quality
▪ Camera parameter programmable in real-time

Camera Type	Sensor Size	Resolution	Full Frames [max. fps]
Monochrome / Color			
LXG-20M / C / NIR	2/3"	2048 x 1088	111
LXG-40M / C / NIR	1"	2048 x 2048	59
LXG-80M / C	4/3"	3360 x 2496	29
LXG-120M / C	APS-C	4096 x 3072	19
LXG-200M / C	35 mm	5120 x 3840	12

GigE VISION®

Dimensions Camera LXG 20 / 40

Notice
LXG-20 and LXG-40 have a C-Mount interface only.

Bottom View

Front View — Side View — Back View
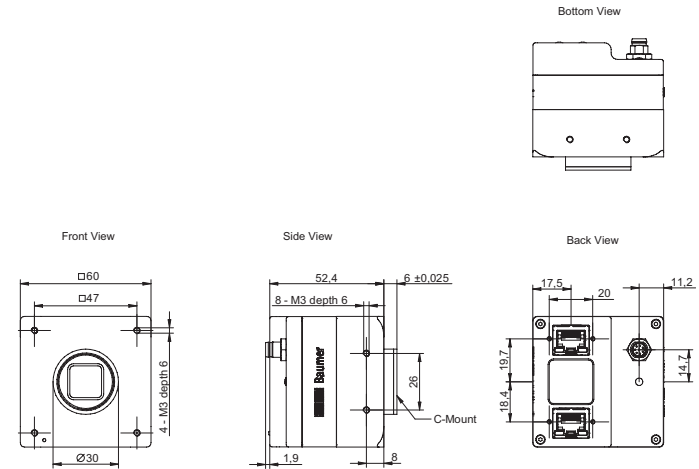
Conformity / Safety

Conformity:
CE, RoHS

RoHS REACh compliant

CE

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

RoHS

All LXG cameras comply with the recommendation of the European Union concerning RoHS Rules.
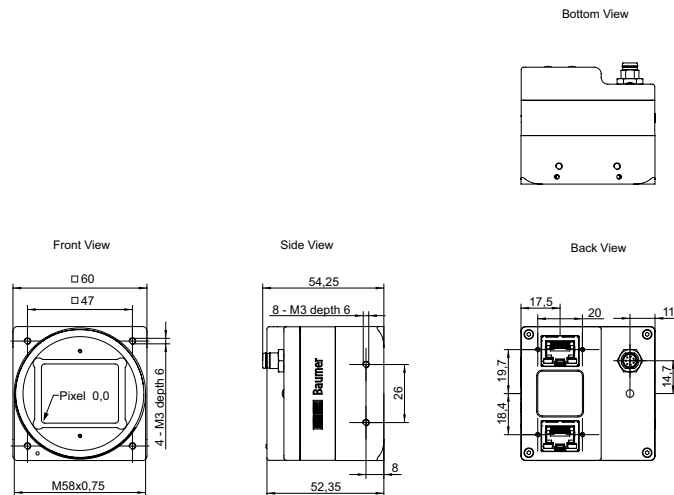
Safety Precautions
▪ Protect the sensor from dirt and moisture.
▪ Never open the camera housing.
▪ Avoid camera contamination by foreign objects.

Environmental requirements:

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

Dimensions Camera LXG 80 / 120 / 200

Bottom View

Front View — Side View — Back View

Lens Adapter for LXG 80 / 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
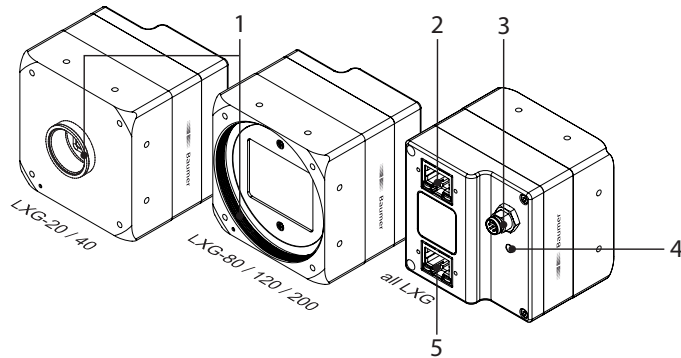
No.	Description	No.	Description
1	**LXG-20 / 40** C-Mount only. **LXG-80 / 120 / 200** lens mount (M58), adapter for other lens mounts available	4	Signaling-LED
2	Data Port 1 (PoE)	5	Data Port 2
3	Power Supply / Digital-IO		

LED Signaling

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

Installation

Installation sample without PoE

1 - network interface card
2 - network cable
3 - Process interface- / Power cable
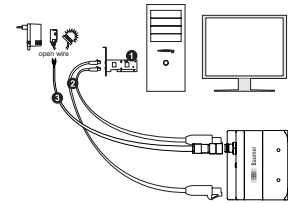
Installation sample with PoE via NIC

1 - PoE network interface card (NIC)
2 - network cable (PoE)
3 - network cable (without PoE)
4 - Process interface cable

Installation sample with PoE via Injector

1 - network interface card (NIC)
2 - network cable (without PoE)
3 - Injector
4 - network cable (with PoE)
5 - Process interface cable

Data Interfaces

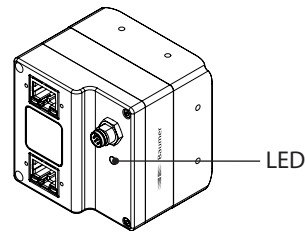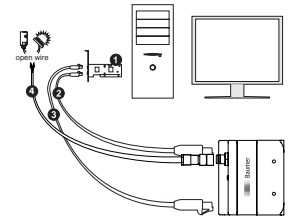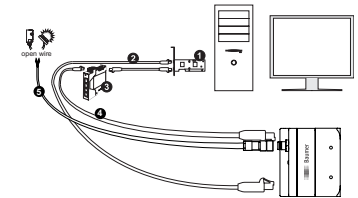|	Data / Control 1000 Base-T (Port 1) wire colors of the connecting cable			Data / Control 1000 Base-T (Port 2) wire colors of the connecting cable	
1	green/white	MX1+	1	green/white	MX1+
2	green	MX1-	2	green	MX1-
3	orange/white	MX2+	3	orangeg/white	MX2+
4	blue	MX3+	4	blue	MX3+
5	blue/white	MX3-	5	blue/white	MX3-
6	orange	MX2-	6	orange	MX2-
7	brown/white	MX4+	7	brown/white	MX4+
8	brown	MX4-	8	brown	MX4-

Notice

Data port 1 supports Power over Ethernet (36 VDC .. 57 VDC).

For the data transfer, the ports are equal. For Single GigE connect one port and for Dual GigE connect the second port additionally. The order does not matter.

Power Supply and Process Interface

Power Supply / Digital-IO

M8 / 8 pins wire colors of the connecting cable

1	white	OUT 3
2	brown	Power VCC+
3	green	IN 1
4	yellow	IO GND
5	grey	IO Power VCC
6	pink	OUT 1
7	blue	Power GND
8	red	OUT 2

| Power Supply	
Power VCC	12 VDC ... 24 VDC

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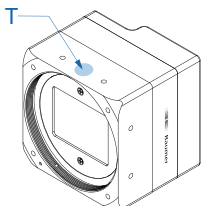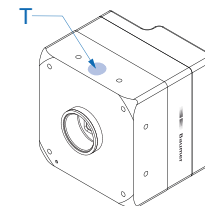
Measure Point	Maximal Temperature
T	+50 °C (122 °F)