

### BVS CA-GX0-xxxxxx-(1)(2)(3)(4)(5)(6)-001

BVS CA-GX0-xxxxxx-(1)(2)(3)(4)(5)(6)-001 /  
mvBlueCOUGAR-X - Industrial with POE  
GigE Vision industrial camera

xxxxxx Model  
See table below

(1) Handling  
1 = standard handling  
2 = extended temperature range test

(2) Lensholder  
1 = C-Mount, Type2, with high durability and factory-set backfocus, fixed square filter  
2 = C-Mount, Type1, with adjustable backfocus, round filter with screw ring, Ø23.2 mm  
4 = CS-Mount, Type1, with adjustable backfocus, round filter glued, Ø20 mm  
5 = C-Mount, Type3 (low cost, factory-set backfocus, Ø23.2 mm Filter)

(3) Filter  
0 = without filter  
1 = IR-Cut  
2 = glass filter  
More filters on request

(4) Housing  
1 = standard housing, black with logo, aluminium

(5) I/O  
4 = opto isolated IN, high side switch Out, M12 connectors

(6) Software  
0 = none

Industrial Cameras  
BVS CA-GX0 - Industrial PoE



Model name	Matrix Vision model name	Resolution	FPS*	Sensor	Pixel size	Power**
BVS CA-GX0-	mvBlueCOUGAR-X					
0003SG/C	100sG/C	0.3 MP (656 x 520)	240.0/240.0	IMX991 (1/4", GS, CMOS)	5 µm	tbd W
0004FG/C	100fG/C	0.4 MP (728 x 544)	436.9/299.8	IMX287 (1/2.9", GS, CMOS)	6.9 µm	3.6 W
0013SG	101sG	1.3 MP (1296 x 1032)	125.0/88.7	IMX990 (1/2", GS, CMOS)	5 µm	2.9 W
0016ZG/C	102fG/C	1.6 MP (1456 x 1088)	126.3/74.9	IMX273 (1/2.9", GS, CMOS)	3.45 µm	3.5 W
0017ZG/C	102mG/C	1.7 MP (1600 x 1104)	115.6/67.2	IMX425 (1.1", GS, CMOS)	9 µm	4.3 W
0017BG/C	102kG/C	1.7 MP (1600 x 1104)	98.4/67.2	IMX432 (1.1", GS, CMOS)	9 µm	3.8 W
0020DG/C	102nG/C	2 MP (1632 x 1248)	88.2/58.3	IMX430 (1/1.7", GS, CMOS)	4.5 µm	3.7 W
0024AG/C	104fG/C	2.4 MP (1936 x 1216)	46.9/46.9	IMX249 (1/1.2", GS, CMOS)	5.86 µm	3.4 W
0032AG/C	104iG/C	3.2 MP (2064 x 1544)	55/37.2	IMX265 (1/1.8", GS, CMOS)	3.45 µm	3.7 W
0051PG/C	105pG/C	5.1 MP (2464 x 2056)	42.4/23.4	IMX250_POL (2/3", GS, CMOS)	3.45 µm	3.7 W
0051AG/C	105bG/C	5.1 MP (2464 x 2056)	35/23.4	IMX264 (2/3", GS, CMOS)	3.45 µm	3.7 W
0051DG/C	105dG/C	5.1 MP (2472 x 2064)	39.0/23.2	IMX547 (1/1.8", GS, CMOS)	2.74 µm	3.1 W
0064ZG/C	106G/C	6.4 MP (3096 x 2080)	34.9/18.4	IMX178 (1/1.8", RS, CMOS)	2.4 µm	3.0 W
0071AG/C	107bG/C	7.1 MP (3216 x 2208)	26/16.7	IMX428 (1.1", GS, CMOS)	4.5 µm	3.9 W
0081UG	108uG	8.1 MP (2848 x 2848)	25.2/14.6	IMX487 (2/3", GS, CMOS)	2.74 µm	3.9 W
0081AG/C	108aG/C	8.1 MP (2856 x 2848)	25.0/14.5	IMX546 (2/3", GS, CMOS)	2.74 µm	3.1 W
0089AG/C	109bG/C	8.9 MP (4096 x 2176)	20.6/13.3	IMX267 (1", GS, CMOS)	3.45 µm	3.9 W
0124AG/C	1012bG/C	12.3 MP (4096 x 3008)	15/9.6	IMX304 (1.1", GS, CMOS)	3.45 µm	4.1 W
0124RG/C	1012rG/C	12.4 MP (4072 x 3044)	15.9/9.5	IMX226 (1/1.7", RS, CMOS)	1.85 µm	3.0 W
0124DG/C	1012dG/C	12.4 MP (4128 x 3008)	17.0/9.5	IMX545 (1/1.1", GS, CMOS)	2.74 µm	3.1 W
0205ZG/C	1020G/C	20.5 MP (5544 x 3692)	10.6/5.8	IMX183 (1", RS, CMOS)	2.4 µm	2.9 W

G/C = Mono and color available

FPS = Frames per Second

GS = Global Shutter

RS = Rolling Shutter

\* = Burst Mode/Streaming

\*\* = Typical value

## Basic features

<b>Standards</b>	IEEE 802.3af EMVA 1288 GigE Vision GenICam
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## Electrical connection

<b>Connection 1</b>	GigE-Bus: M12x1-Female, 8-pin, X-coded
<b>Connection 2</b>	Power/ IO: M12x1-Male, 12-pin, A-coded
<b>Polarity reversal protected</b>	yes
<b>Short-circuit protection</b>	yes

## Electrical data

<b>Current draw peak</b>	1 A
<b>Operating voltage <math>U_b</math></b>	10...28 VDC PoE
<b>Ripple max. (% of <math>U_e</math>)</b>	5 %

## Environmental conditions

<b>Ambient temperature</b>	0...45 °C
<b>EN 60068-2-27, Shock</b>	Half-sinus, 30 g, 11ms, 18 shocks
<b>EN 60068-2-6, Vibration</b>	10 Hz...500 Hz, 3.5 mm pp, 15g, 5h
<b>IP rating</b>	IP40
<b>Relative humidity</b>	20...80%
<b>Storage temperature</b>	-20...60 °C

## Remarks

Not included in scope of delivery: Camera lens, filter, light, connection cable, power supply

\* Refer to manual for exact values

For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

## Functional Characteristics

<b>Binning</b>	1x1...16x16 *
<b>Data storage</b>	64 MB
<b>Decimation</b>	1x1...16x16 *
<b>Exposure time</b>	10 µs...20 s *
<b>Filter</b>	IR cut filter, other filters on request
<b>Image formats</b>	Mono8...Mono16 Bayer8...Bayer16, RGB, YUV *
<b>Trigger Modi</b>	Free run Hardware trigger Software trigger

## Interface

<b>Digital inputs</b>	4x PNP galvanically isolated
<b>Digital outputs</b>	4x PNP high side
<b>Interface</b>	Gigabit Ethernet, POE
<b>Switching function</b>	normally open (NO)

## Material

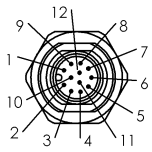
<b>Housing material</b>	Aluminium, Powder coated
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## Mechanical data

<b>Lens mount</b>	C-Mount
<b>Weight</b>	127 g

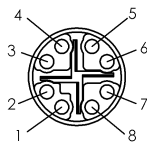
### Connector Diagram

#### Power / IO (M12)



- PIN 1: PWR\_IN
- PIN 2: GND
- PIN 3: DigOut3
- PIN 4: Opto DigIn0
- PIN 5: DigOut2
- PIN 6: DigOut0
- PIN 7: Opto DigIn\_GND
- PIN 8: Opto DigIn2
- PIN 9: Opto DigIn3
- PIN10: DigOut\_PWR\_IN
- PIN11: Opto DigIn1
- PIN12: DigOut1

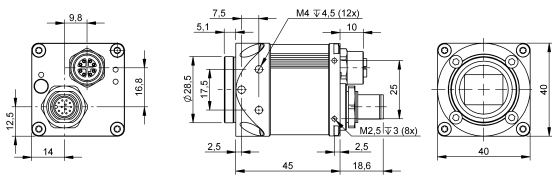
#### GigE-Bus (M12)



- PIN 1: BL\_DA+
- PIN 2: BL\_DA-
- PIN 3: BL\_DB+
- PIN 4: BL\_DB-
- PIN 5: BL\_DD+
- PIN 6: BL\_DD-
- PIN 7: BL\_DC-
- PIN 8: BL\_DC+

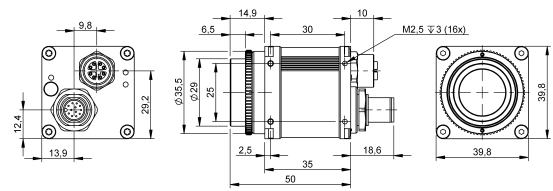
### Product View

#### BVS CA-GX0-xxxxxx-x1x14x / -x5x14x



Threads: 12 (-x1x14x)

#### BVS CA-GX0-xxxxxx-x2x14x / -x4x14x



-x4x14x: 5 mm shorter in LEN