Basler Accessories



Technical Specification

dart MOUNTING COVER

Order Number: 2200000959

Key Features

- Covers back of dart USB camera
- Protects camera against electromagnetic interference (EMI)
- USB 3.0 screw lock connector
- 3 additional mounting tabs
- Compatible with dart I/O boards of the first and second generation

Document Number: DG003191
Version: 01 Language: 000 (English)
Release Date: 11 January 2023

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Product Overview

Order Number	Description
2200000959	dart Mounting Cover

Table 1: Product Information

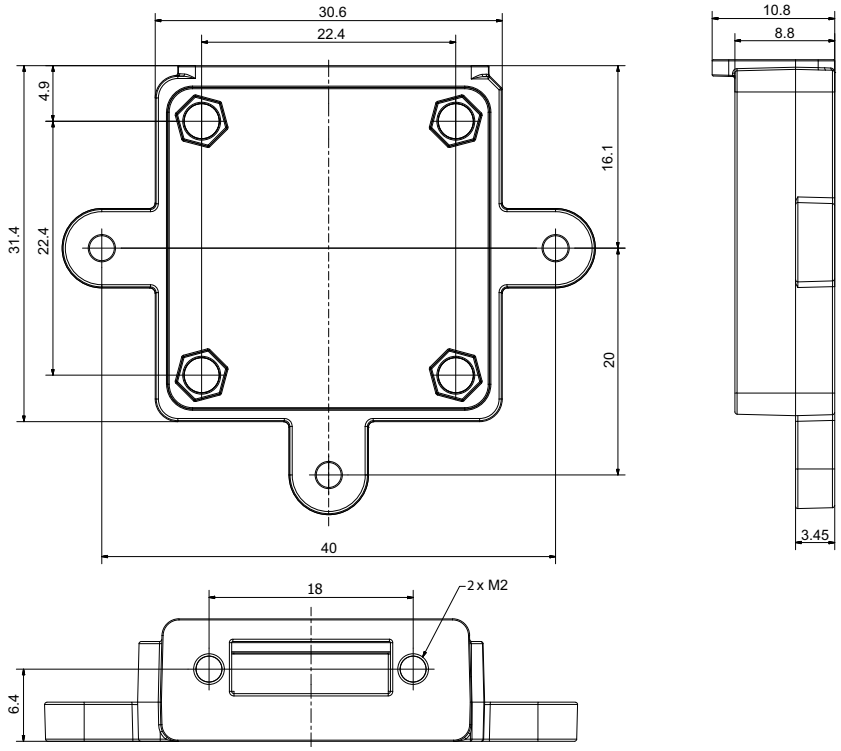


Fig. 1: Basler dart Mounting Cover Dimensions (in mm)

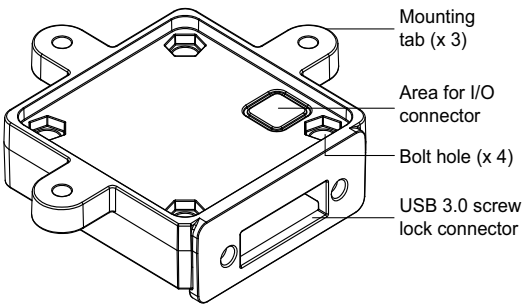


Fig. 2: Mounting Cover Overview

Key Features

The Basler dart Mounting Cover offers a convenient way to protect your Basler dart camera while at the same time giving you a variety of methods to install the camera in your application environment. It has the following key features:

- Covers back of camera
- Protects camera against electromagnetic interference (EMI)
- USB 3.0 screw lock connector
- 3 additional mounting tabs

  If not needed, the mounting tabs can be easily broken off using a pair of pliers.
- Compatible with dart I/O boards (order number 106897 and 108752)

  The dart I/O board offers a convenient way to access the I/O lines of the Basler dart camera. For more information, see the *dart I/O Board Technical Specification* (DG001439), which is available on the Basler website: www.baslerweb.com

Precautions



⚠ CAUTION

Personal Injury Hazard When Breaking off Mounting Tabs

When breaking off the mounting tabs, small plastic shards may become dislodged. This creates a risk of injury to the eyes.

- Basler recommends wearing safety goggles when breaking off the mounting tabs to protect your eyes.
- Basler recommends using a pair of pliers to remove the mounting tabs.



⚠ CAUTION

Personal Injury Hazard When Preparing the Mounting Cover for Use With the dart I/O Board

To include a dart I/O board in the assembly, a hole for the I/O connector has to be punched into the mounting cover. When punching the hole, small plastic shards may become dislodged. This creates a risk of injury to the eyes.

If the mounting cover isn't placed flat on the work surface when punching the hole, stab injuries may occur if the punching tool slips.

- Basler recommends wearing safety goggles when punching through the mounting cover to protect your eyes.
- Basler recommends placing the mounting cover on a flat, nonslip surface when punching the hole.



⚠ CAUTION

Choking Hazard

Keep the mounting cover and any shards out of the reach of children. They might swallow and choke on them.

NOTICE

Attaching the mounting cover while the camera is connected to a power supply may damage or destroy the camera.

Before attaching the mounting cover to the camera, disconnect the power supply.

Installing the Mounting Cover

There are four different ways to attach the mounting cover to the camera and to install this assembly in your application environment. The table below lists the available options and provides information about the additional parts that are required.

	A) Using mounting tabs and including I/O board	B) Using mounting tabs without I/O board	C) Using bolt holes and including I/O board	D) Using bolt holes without I/O board
Additional parts required[a]	▪ 4 bolts (ISO 4762 M2 x 20) ▪ 3 bolts (length depending on thickness of supporting material) ▪ 4 nuts (ISO 4032 M2) ▪ 7 nuts (ISO 4035 M2)	▪ 4 bolts (ISO 4762 M2 x 16) ▪ 3 bolts (length depending on thickness of supporting material) ▪ 7 nuts (ISO 4035 M2)	▪ 4 bolts (ISO 4762 M2 x 20; depending on thickness of supporting material, longer bolts may be required) ▪ 4 nuts (ISO 4032 M2) ▪ 4 nuts (ISO 4035 M2) ▪ 4 washers (ISO 7089 2)	▪ 4 bolts (ISO 4762 M2 x 20; depending on thickness of supporting material, longer bolts may be required) ▪ 4 nuts (ISO 4035 M2)
Additional steps required	▪ hole for I/O connector needs to be punched into mounting cover ▪ opening for I/O board needs to be cut into supporting material		▪ hole for I/O connector needs to be punched into mounting cover ▪ hole for I/O board needs to be cut into supporting material	
Recommended torque	15 Ncm	15 Ncm	15 Ncm	15 Ncm
Mounting instructions	See page 6.	See page 8.	See page 10.	See page 13.

Table 2: Overview of Mounting Options

[a]All additional materials listed here are suggestions only. You'll have to ensure to use materials appropriate for your environment.

	The mounting instructions all assume that the assembly will be attached to the supporting material using nuts and bolts. However, it is also possible to attach the assembly directly to a wall without using the nuts. In this case, you need to prepare the wall in the following way: ■ Cut appropriate threaded holes (M2) into the wall for the bolts. For positions of the bolt holes, see Figure 3 to Figure 6. ■ If you're using the I/O board, you will also need to create a recess in the wall to accommodate the I/O board, especially connector 2. For dimensions of this recess, see Figure 3 and Figure 5.

	If the metal plate has moved or has become dislodged completely during transport, push it back into position.

A) Using Mounting Tabs and Including I/O Board

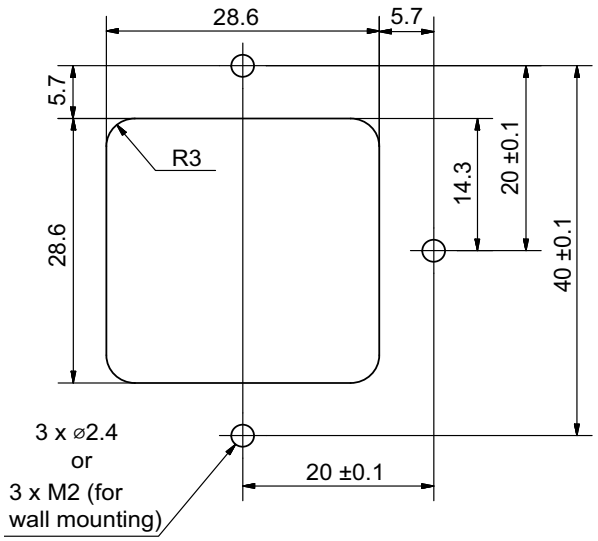


Fig. 3: Overview Drawing (in mm)

To attach the mounting cover:

1. Punch a hole for the I/O connector of the camera into the mounting cover.

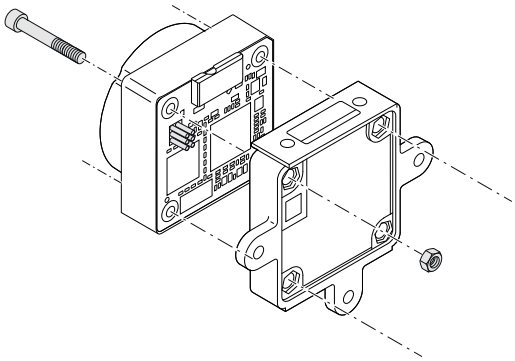
	An area for the I/O connector has been prepared with grooves to ease punching out (see Figure 2). A screwdriver, or similar, and hammer are suitable tools for this. The mounting cover should be placed on a flat, nonslip surface with the mounting tabs facing down. If you place the mounting cover with the mounting tabs facing up, you should make sure that the front plate of the USB connector extends over the edge of your work surface. Otherwise, the mounting cover won't lie flat.

2. Cut an opening the size of the I/O board into the supporting material.
   For dimensions of the opening, see Figure 3.
   Be aware of small shards. See safety warning on page 2.
3. Place the mounting cover over the camera's back.
4. Place a nut in each of the four recesses of the bolt holes.
   This is in order to create a stronger support for the I/O board. The nuts must be at least 1.35 mm high. For recommendations, see Table 2.

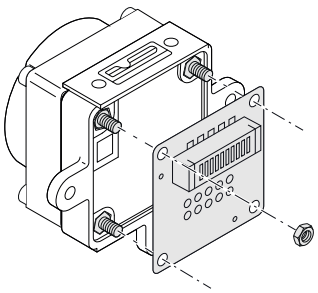
5. From the front end of the camera, push a bolt through each of the 4 bolt holes and the nuts and tighten them.

   M2 x 20 bolts are a good choice for this.

   Don’t exceed the recommended torque (see Table 2 on page 4).



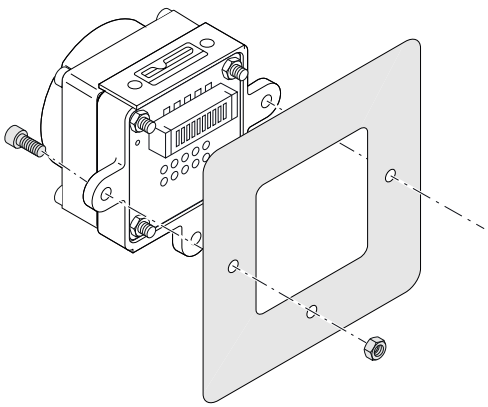
6. Connect the I/O board to the camera by slotting connector 1 of the I/O board into the I/O connector of the camera.
7. Secure the assembly using nuts.



8. Fasten the assembly to the supporting material by pushing bolts through the three mounting tabs.

   Use bolts appropriate for the thickness of the supporting material.
9. Secure the connection by placing a nut onto each of the three bolts.

   Don’t exceed the recommended torque (see Table 2 on page 4).



B) Using Mounting Tabs Without I/O Board

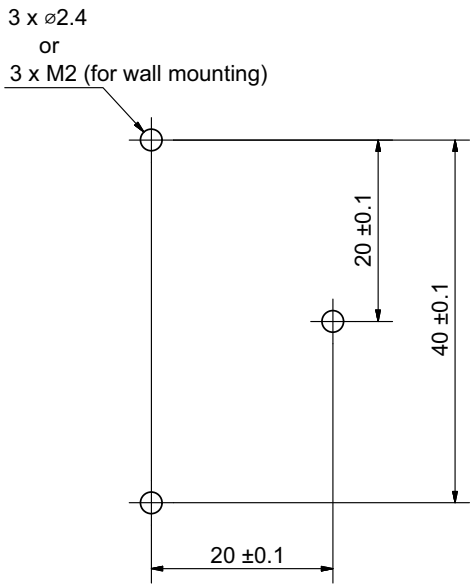


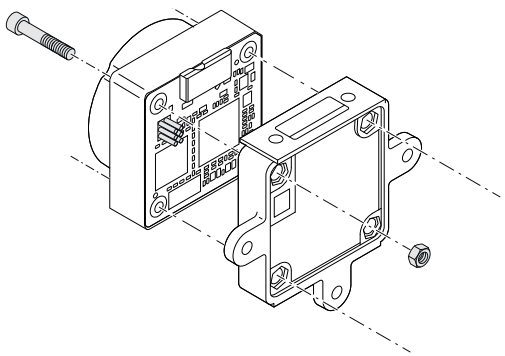
Fig. 4: Overview Drawing (in mm)

To attach the mounting cover:

1. Place the mounting cover over the camera's back.
2. Place a nut in each of the four recesses of the bolt holes.
3. From the front end of the camera, push a bolt through each of the four bolt holes and the nuts and tighten them.

   M2 x 16 bolts are a good choice for this.

   Don't exceed the recommended torque (see Table 2 on page 4).

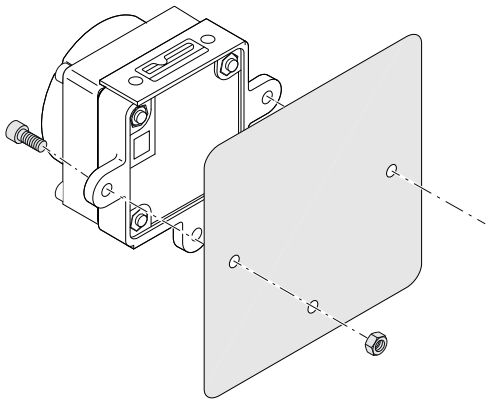


4. Fasten the assembly to the supporting material by pushing bolts through the three mounting tabs.

   Use bolts appropriate for the thickness of the supporting material.

5. Secure the connection by placing a nut onto each of the three bolts.

   Don’t exceed the recommended torque (see Table 2 on page 4).



C) Using Bolt Holes and Including I/O Board

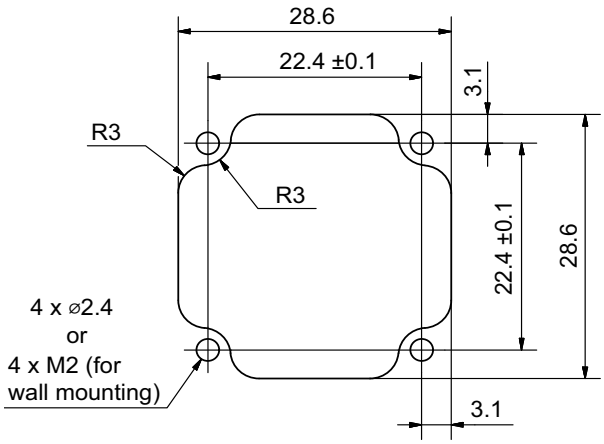


Fig. 5: Overview Drawing (in mm)

To attach the mounting cover:

1. Punch a hole for the I/O connector of the camera into the mounting cover.

	An area for the I/O connector has been prepared with grooves to ease punching out (see Figure 2). A screwdriver, or similar, and hammer are suitable tools for this. The mounting cover should be placed on a flat, nonslip surface with the mounting tabs facing down. If you place the mounting cover with the mounting tabs facing up, you should make sure that the front plate of the USB connector extends over the edge of your work surface. Otherwise, the mounting cover won't lie flat.

2. (Optional) If desired, break off the mounting tabs using a pair of pliers.

   Be aware of small shards. See safety warning on page 2.
3. Cut an opening the size of the I/O board into the supporting material and drill four holes for the mounting bolts.

   For dimensions of the opening and positions of the bolt holes, see Figure 5.

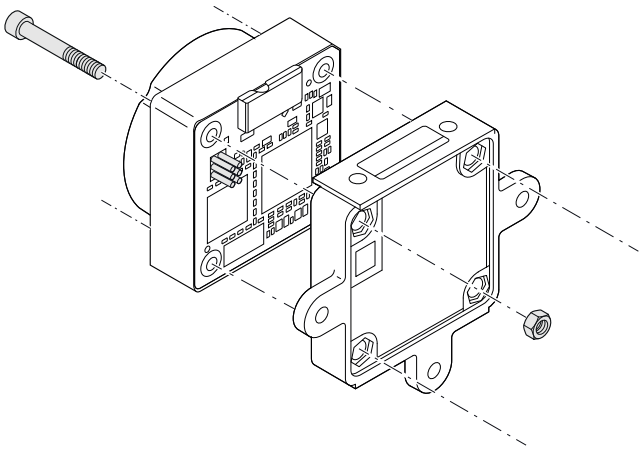
   Be aware of small shards. See safety warning on page 2.
4. Place the mounting cover over the camera's back.
5. Place a nut in each of the four recesses of the bolt holes.

   This is in order to create a stronger support for the I/O board. The nuts must be at least 1.35 mm high. For recommendations, see Table 2.

6. From the front end of the camera, push a bolt through each of the four bolt holes and the nuts and tighten them.

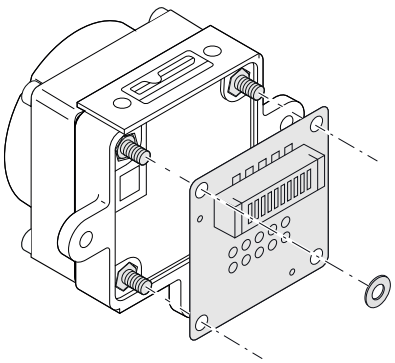
   Use bolts appropriate for the thickness of the supporting material.

   Don’t exceed the recommended torque (see Table 2 on page 4).



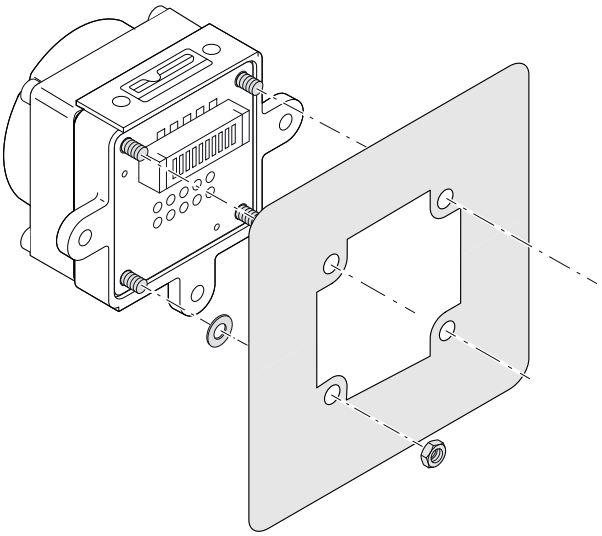
7. Connect the I/O board to the camera by slotting connector 1 of the I/O board into the I/O connector of the camera.
8. Place a washer over each of the four bolts.

   This is necessary because the I/O board sits slightly lower than the mounting cover’s rim. Adding the washer increases the contact area between the mounting cover and the supporting material.



9. Fasten the assembly to the supporting material by pushing the bolts through the four bolt holes.
10. Secure the connection by placing a nut onto each of the four bolts.

    Don’t exceed the recommended torque (see Table 2 on page 4).



D) Using Bolt Holes Without I/O Board

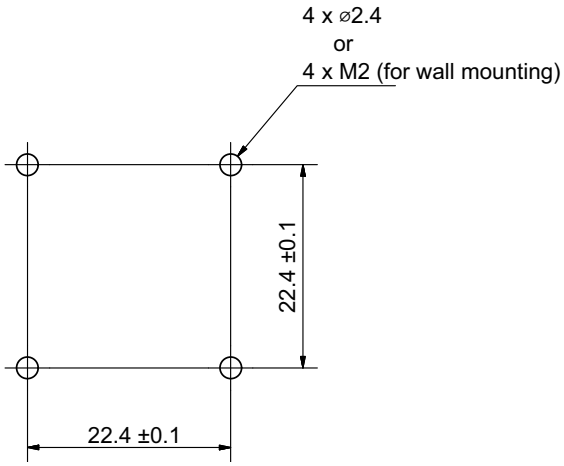
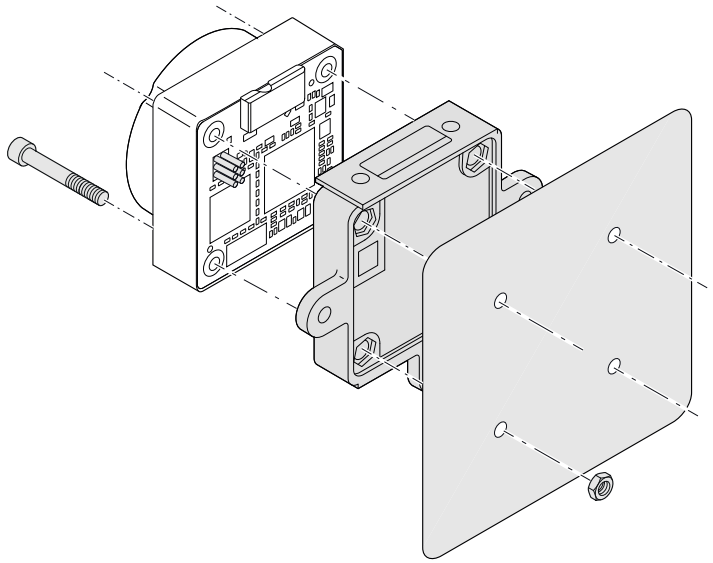


Fig. 6: Overview Drawing (in mm)

To attach the mounting cover:

1. (Optional) If desired, break off the mounting tabs using a pair of pliers.
   Be aware of small shards. See safety warning on page 2.
2. Drill four holes into the supporting material for the four mounting bolts.
   For positions of these holes, see Figure 6.
3. Place the mounting cover over the camera's back.
4. From the front end of the camera, push a bolt through each of the four bolt holes.
   Use bolts appropriate for the thickness of the supporting material.
   Don't exceed the recommended torque (see Table 2 on page 4).
5. Fasten the assembly to the supporting material by pushing the bolts through the four bolt holes.

6. Secure the connection by placing a nut onto each of the four bolts.
   Don’t exceed the recommended torque (see Table 2 on page 4).



General Information

RoHS Compliance	Yes
Warranty	1 year

Table 3: General Information

Read the safety instructions for Basler dart cameras in the *Basler Product Documentation* (AW001406) before using the dart mounting cover. The *Basler Product Documentation* also contains comprehensive information about installing and using the camera.

You may also find the *dart I/O Board Technical Specification* document (DG001439) useful.

You can download these documents free of charge from the Basler website: www.baslerweb.com

Revision History

Doc. ID Number	Date	Changes
DG00319101000	11 January 2023	Initial release of this document. This document replaces DG00190604000.