

1. Supporting documents

NOTICE:



Read through the installation and operating instructions carefully before installing the product! The installation and operating instructions contain important notes for your personal safety. They must be read and understood by all persons who work with or handle the product during any phase of the product life time.



The following listed documents are available for download on our website (www.zimmer-group.com). Only those documents currently available on the website are valid.

- Catalogs, drawings, CAD data, performance data
- Information on accessories
- Detailed installation and operating instructions
- Technical data sheets
- General Terms and Conditions of Business with specifications for the warranty entitlement

2. Safety instructions

CAUTION:



- Non-compliance may result in severe injuries!
1. Installation, commissioning, maintenance and repairs may only be performed by qualified specialists in accordance with these installation and operating instructions.
 2. The gripper is state-of-the-art. It is mounted on industrial machines.
 3. The gripper may be used only in accordance with its proper use and technical data. Zimmer GmbH shall accept no liability for any damage caused by improper use.
 4. Any use other than the intended use requires written approval from Zimmer GmbH.
 5. Do not reach into the operational range of the gripper.
 6. Make sure that the power lines are disconnected before you install, modify, maintain or repair the gripper.
 7. In case of maintenance, conversion or expansion work, remove the gripper from the machine and perform the work outside the danger zone.
 8. When commissioning or testing, make sure that the gripper cannot be actuated by mistake.
 9. Modifications to the gripper, such as adding drilled holes or threads, may be made only with prior approval from Zimmer GmbH.
 10. The specified maintenance intervals and compressed air quality specifications are to be observed; also refer to the Maintenance section. Please contact Customer Service for this purpose.
 11. Use of the gripper under extreme conditions, such as aggressive liquids and abrasive dusts, is subject to prior approval from Zimmer GmbH.
 12. When uninstalling a gripper with an integrated spring, exercise increased caution due to the ever-present spring tension.

3. Proper use

NOTICE:



The gripper is to be used only in its original state with its original accessories, without any unauthorized changes and within the scope of its defined parameters of use. Zimmer GmbH shall accept no liability for any damage caused by improper use.

Use outside of the defined parameters is not permitted. Unauthorized modifications must not be made. The gripper is designed exclusively for pneumatic operation. The gripper is designated for use in enclosed rooms for temporarily gripping, handling and holding parts. The gripper is not suitable for clamping workpieces during a machining process. Direct contact with perishable goods/food is not permitted. It is not suited for operation with other media such as liquids or gases.

4. Personnel qualifications

Installation, commissioning and maintenance may only be performed by specialists. These persons must have read and understood the installation instructions in full.

5. Product description

5.1 Forces and torques

INFORMATION:



For information on forces and torques, please visit our website. Zimmer Customer Service is available to provide you with assistance if you have any further questions.

5.2 Type plate

- A type plate is attached to the housing of the gripper. The Confirmation number and the article number are shown on this type plate.
- The confirmation number should be assigned to the project.
 - ⇒ Article number: 30
 - ⇒ Confirmation number: 31



INFORMATION:

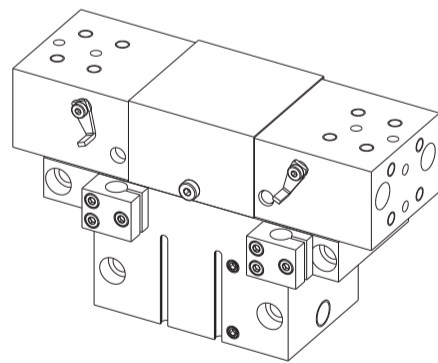


Please state the Confirmation number in the event of damage or a complaint. Zimmer Customer Service is available to provide you with assistance if you have any further questions.

6. Function

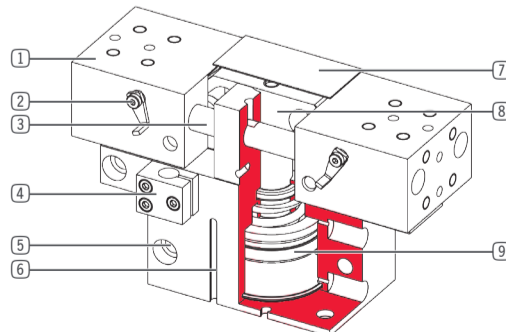
The function relies on the action of a pneumatic piston vented on both sides. Alternating ventilation moves the pneumatic piston up and down. The energy generated in this process is transferred to the gripper jaws by kinematics, producing the gripping force. The spring used in the cylinder chamber for the GP□□S-C design acts as an energy accumulator and gripping force safety device.

Fig. 1: GP gripper series



1	Gripper jaw
2	Adjustable switch cam
3	Round guide
4	Mounting block
5	Mounting and positioning
6	Sensor slot
7	Cover plate
8	Positively driven wedge hook transmission
9	Drive

Fig. 2: GP gripper series



7. Installation

NOTICE:



Switch off the power supply before any assembly, installation or maintenance work.



- Risk of injury in the event of unexpected movement of the gripper when the energy supply is connected.
- Switch off the energy supply before all work.
 - Switch off the power supply to the machine before all work.
 - Secure the power supply against being switched on unintentionally.
 - Check the power supply for any residual energy.



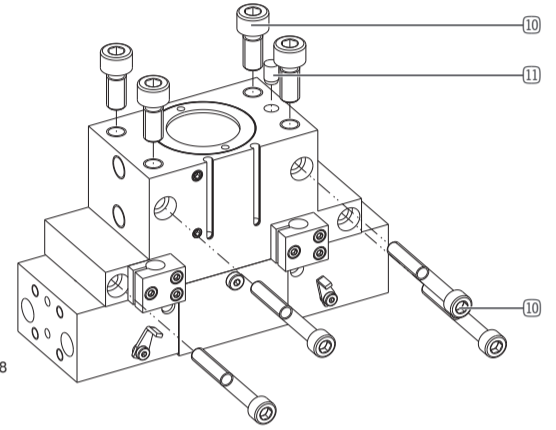
- Risk of injury in case of unexpected movement of the machine or system into which the gripper is to be installed.
- Switch off the power supply to the machine before all work.
 - Secure the machine against being switched on unintentionally.
 - Check the machine for any residual energy.

7.1 Installation of the mechanical system

The gripper must be installed on a mounting surface in accordance with the specifications for flatness.
 Length < 100 mm → permitted non-flatness < 0.02 mm
 Length > 100 mm → permitted non-flatness < 0.05 mm

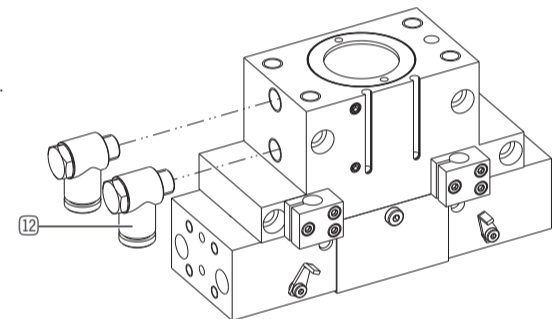
The gripper can be installed from multiple sides on the mounting piece via the threads. The following work steps must be observed during installation:

- Insert the straight pin 10 into the designated fits on the gripper
 - Position the gripper on the mounting piece by means of a straight pin 10
 - Fasten the gripper using cylinder screws 9
- ⇒ The pins and screws are not included in the scope of delivery
 ⇒ Strength class of the mounting screws = at least 8.8 DIN EN ISO 4762
 ⇒ Observe the tightening torque of the mounting screws
 ⇒ Make sure the mounting surface is sufficiently rigid and flat
 ⇒ The exact positions can be found on the technical data sheet on our website.



7.2 Installing the energy supply

Insert the threaded connections 11 in the designated connectors.
 ⇒ There are two alternative connections 12 available.



NOTICE:



Close off any unused pneumatic connections using corresponding dummy plugs. The authorized pneumatic connections that are available can be found in the accessories list, available on our website. The necessary ordering information can also be found there.
 ⇒ Use compressed air in accordance with DIN ISO 8573-1 [4:4:4].

7.3 Installation of accessories

NOTICE:



Before installing an accessory, make sure it is suitable for use with the selected variant. For information on all available accessories, please visit our website.

8. Technical data

INFORMATION:



For technical data, please visit our website. This data varies within the series, depending on the specific design. Zimmer Customer Service is available to provide you with assistance if you have any further questions.

9. Maintenance

Maintenance-free operation of the gripper is guaranteed for up to **10 million cycles**. The maintenance interval may shorten under the following circumstances:

- Operation with compressed air that does not comply with DIN ISO 8573-1 [4:4:4].
- Dirty environment
- Improper use and use that does not comply with the performance data.
- Ambient temperature is too high.

We recommend allowing maintenance and seal replacement to be carried out by Zimmer Customer Service. Dismantling and reassembling the gripper without authorization may result in complications, as special installation equipment is required in some cases. Zimmer GmbH shall not be liable in the event of unauthorized dismantling and reassembling of the gripper or in the event of any malfunction or damage resulting from this.

10. Declaration of Incorporation

In terms of the EU Machinery Directive 2006/42/EC (Annex II 1 B).

Name and address of the manufacturer:
 Zimmer GmbH • Im Salmenkopf 5 • 77866 Rheinau, Germany • +49 7844 9138 0 • +49 7844 9138 80 • www.zimmer-group.com

We hereby declare that the incomplete machine described below
Product designation: 2-jaw parallel gripper, pneumatic
Type designation: GP□□□C
 satisfies the following basic requirements of the Machinery Directive 2006/42/EC:
 No. 1.1.2., No. 1.1.3., No. 1.1.5., No. 1.3.2., No. 1.3.4., No. 1.3.7., No. 1.5.3., No. 1.5.4., No. 1.5.8., No. 1.6.4., No. 1.7.1., No. 1.7.4

We also declare that the specific technical documents were produced in accordance with Annex VII Part B of this Directive. We undertake to provide the market supervisory bodies with electronic versions of special documents for the incomplete machine through our documentation department, should they have reason to request them.

The incomplete machine may only be commissioned if it has been ascertained, if applicable, that the machine or system in which the incomplete machine is to be installed satisfies the requirements of Directive 2006/42/EC on Machinery and an EC Declaration of Conformity has been drawn up in accordance with Annex II 1 A.

Authorized representative for the compilation of relevant technical documents

Kurt Ross	See manufacturer's address	Rheinau, Germany, 2020-01-10	Martin Zimmer, Managing Director
First name, last name	Address	Place and date of issuance	Legally binding signature