

Type 6106

3/2-way rocker solenoid valve



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1 About this document

The document is an important part of the product and guides the user to safe installation and operation. The information and instructions in this document are binding for the use of the product.

- ▶ Before using the product for the first time, read and observe the whole safety chapter.
- ▶ Before starting any work on the product, read and observe the respective sections of the document.
- ▶ Keep the document available for reference and give it to the next user.
- ▶ Contact the Burkert sales office for any questions.



Further information concerning the product at [Products](#).

- ▶ Enter the article number from the type label in the search bar.

The illustrations in these instructions may vary depending on the product variant.

1.1 Symbols



DANGER!

Warns of a danger that leads to death or serious injuries.



WARNING!

Warns of a danger that can lead to death or serious injuries.



CAUTION!

Warns of a danger that can lead to minor injuries.

NOTICE!

Warns of property damage on the product or the installation.



Indicates important additional information, tips and recommendations.



Refers to information in this document or in other documents.

- ▶ Indicates a step to be carried out.

- ✓ Indicates a result.

Menu Indicates a software user-interface text.

1.2 Terms and abbreviations

The terms and abbreviations are used in this document to refer to following definitions.

Product	Solenoid valve Type 6106
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1.3 Manufacturer

Bürkert Fluid Control Systems

Christian-Bürkert-Str. 13-17

74653 Ingelfingen

GERMANY

The contact addresses are available at [Contact](#).



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2 Safety

2.1 Intended use

Improper use of the Type 6106 solenoid valve may be dangerous to people, nearby equipment and the environment.

Type 6106 is designed as a 3/2-way solenoid valve for compressed air.

- ▶ In potentially explosive environments, Type 6106 must only be used in accordance with the specifications on the separate Ex type label. For use, the additional information and safety instructions relating to Ex areas enclosed with the device must be adhered to.
- ▶ Devices without a separate Ex type label must not be used in the potentially explosive atmosphere.

Do not use the device outdoors without the appropriate safeguards.

- ▶
- ▶ Must only be used in conjunction with third-party devices and components recommended or approved by Burkert.
- ▶ Must only be used in perfect condition, with proper storage, transportation, installation and operation ensured at all times.
- ▶ Use only as intended.

2.2 Basic safety instructions

These safety instructions do not take into account any incidents or events that may occur during installation, operation or maintenance.

Danger from high pressure

- ▶ Before loosening lines or valves, switch off the pressure and drain the lines.

Risk of injury from electric shock

- ▶ Before reaching into the device, switch off the power supply and secure against reactivation!
- ▶ Observe the applicable accident prevention and safety regulations for electrical devices.
- ▶ Always connect the protective conductor and check the function.

Hot device surface during continuous operation

- ▶ Keep Type 6106 away from highly flammable substances and media, and do not touch with bare hands.
- ▶ Do not obstruct heat dissipation required for operation.

To prevent injuries, observe the following:

- ▶ Do not make any internal or external changes.
- ▶ Ensure that only trained technicians carry out installation and maintenance work.
- ▶ Observe general engineering standards and rules.

3 Technical data

3.1 Standards and directives

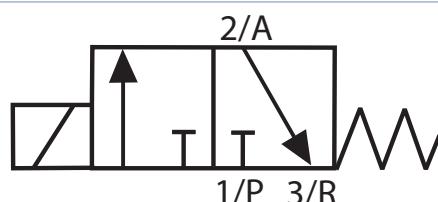
This product complies with the legal requirements applicable at the time of placing on the market and has been developed and tested in accordance with the relevant European directives/regulations and harmonized standards. The conformity is documented and, if necessary, supported by evidence. The EU Declaration of Conformity can be found behind the respective type on the home page country.burkert.com

3.2 Operating conditions

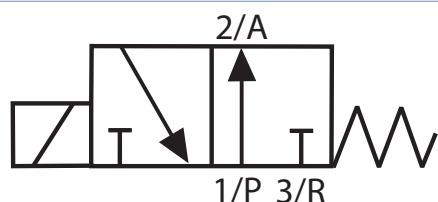
 Observe the data for voltage, current type and pressure listed on the type label.

Media	Compressed air, neutral gases (5 µm filtration), technical vacuum
Medium temperature	-10...+55°C
Ambient temperature	-10...+55°C
Storage temperature	-40...+65°C
Degree of protection	IP 20 with plug contacts, IP 65 with cable plug

Circuit functions



3/2-way valve, direct-acting, de-energised output 2 relieved



3/2-way valve, direct-acting, de-energised output 2 pressurised

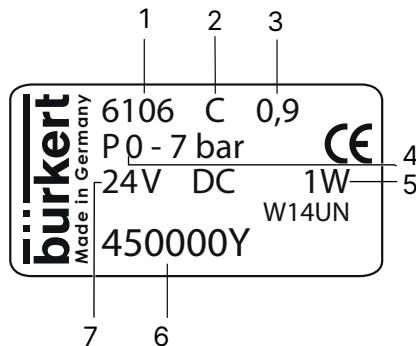
3.3 Mechanical data

Dimensions	see data sheet
Materials	Body: PA FKM seal

3.4 Electrical data

Operating voltage	See type label ($\pm 10\%$) max. residual ripple 10%
Nominal power	see Type label [► 8]
Nominal operating mode	Continuous operation, 100% duty cycle

3.5 Type label



1 Type	2 Circuit function
3 Orifice	4 Pressure range
5 Power	6 Article number
7 Voltage	

4 Installation

4.1 Installation



WARNING!

Danger from high pressure

- Before loosening lines or valves, switch off the pressure and drain the lines.



WARNING!

Risk of injury from electric shock

- Before reaching into the device, switch off the power supply and secure against reactivation!
- Observe the applicable accident prevention and safety regulations for electrical devices.
- Screw the valve body onto the connection manifold (2 screws). Observe the following tightening torque.

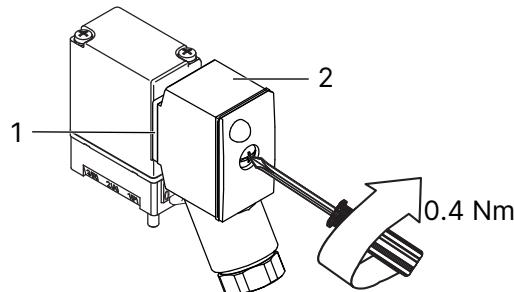
Bürkert flange	CNOMO flange
0.3 Nm (+ 0.1 Nm)	< 0.5 Nm



To ensure functional reliability, operate the valve only with the factory-installed solenoid!

The solenoid can be mounted rotated by 180°.

- Attach the solenoid to the valve body in the direction required for your process.
- Screw the solenoid together crosswise in 2 steps .
Step 1: 0.1 Nm (\pm 0.05 Nm)
Step 2: 0.2 Nm (\pm 0.05 Nm)
- Check the protective conductor function
Resistor max. 0.1 Ω
Test voltage: 12 V
Test current 1 A
- Connect cable plug Type 2506 (always connect the protective conductor!).
- Ensure that the seal between the cable plug and the solenoid is correctly positioned.



1 Seal

2 Type 2506

- When screwing the cable plug to the solenoid, observe the tightening torque of 0.4 Nm.

4.2 Fluidic installation



WARNING!

Risk of injury from high pressure in the system

- Before loosening lines or valves, switch off the pressure and drain the lines.

Installation position: any, preferably solenoid facing upward.

- Clean pipelines and flange connections.
- Install dirt trap in the direction of the current before the valve (recommended mesh width 5 µm).
- For pin assignment, see the labelling on the valve body in the following image.

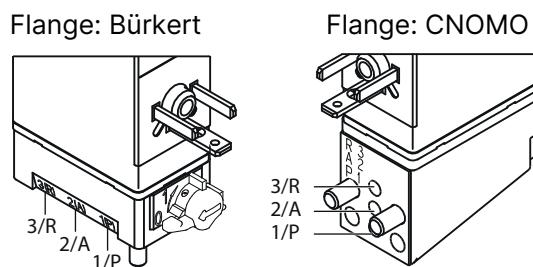
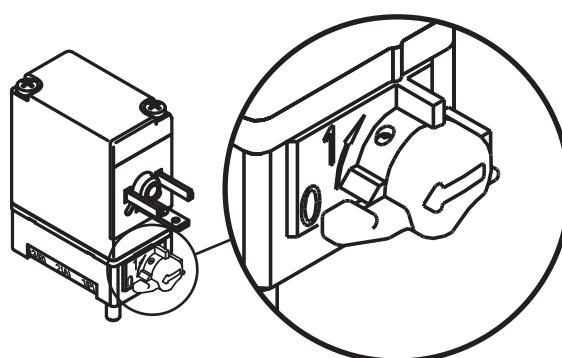


Fig. 1: Fluidic connection

4.3 Manual override

The valve can be manually overridden using the hand lever.



0	AUTO
1	1/P → 2/A 2/A → 3/R

5 Troubleshooting

The valve operates maintenance-free under normal conditions.

In the event of troubleshooting, check the line connections, operating pressure, power supply and valve control.

If the valve still does not actuate, contact your local Burkert Service representative.

6 Logistics

6.1 Transport and storage

- ▶ Protect the device against moisture and dirt in the original packaging during transportation and storage.
- ▶ Avoid UV radiation and direct sunlight.
- ▶ Protect connections, if present, from damage with protective caps.
- ▶ Observe the permitted storage temperature.

6.2 Return



No work or tests will be carried out on the device until a valid Contamination Declaration has been received.

- ▶ To return a used device to Burkert, contact the Burkert sales office. A return number is required.

6.3 Disposal

Environmentally friendly disposal



- ▶ Follow national regulations regarding disposal and the environment.
- ▶ Collect electrical and electronic devices separately and dispose of them as special waste.

Further information at country.burkert.com