MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

Type 6628

2/2 and 3/2-way solenoid valve with media separation

Operating Instructions for all variants

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

Technical documentation 2503/04_GBen_00809559_961026571_18014399470707979 / Original DE

Table of contents

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

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 Bürkert sales office for any questions.

Further information concerning the product at Products.

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

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.

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

1.2 Terms and abbreviations

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

Product	Solenoid valve Type 6628

1.3 Manufacturer

Bürkert Fluid Control Systems

Christian-Bürkert-Str. 13–17

74653 Ingelfingen

GERMANY

The contact addresses are available at Contact.

Need more information or additional products?

- Explore the full range of products on our eShop.

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

2 Safety

2.1 Intended use

The Type 6628 rocker solenoid valve is designed for use in analytical, medical and laboratory technology, in particular for dosing, filling, mixing and distributing liquids and gases.

- Do not use Type 6628 without the appropriate safeguards outdoors.
- Use the device when it is in perfect condition only, and always ensure proper storage, transportation, installation and operation.

Foreseeable misuse

- Do not use Type 6628 in areas where there is a risk of explosions.
- Do not make any internal or external modifications to Type 6628.

2.2 Basic safety instructions

Danger – high pressure

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

Risk of burns or fire from hot device surfaces due to prolonged operation

- Keep Type 6628 away from highly flammable substances and media, and do not touch with bare hands.
- Do not obstruct heat dissipation required for operation.

Medium may leak out if the diaphragm is worn

- Check regularly for any medium leakages.
- If the medium is hazardous, secure the environment against risks.

Ensure the following to prevent injuries:

- Do not make any internal or external modifications to the device and do not subject it to mechanical stress.
- Make sure only trained technicians carry out installation and maintenance work.
- Following an interruption in the power supply, ensure that the process is restarted in a controlled manner.
- Observe general technological rules of thumb.

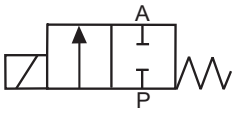
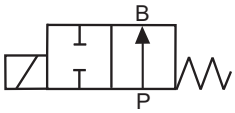
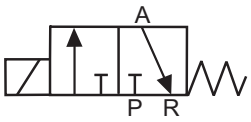
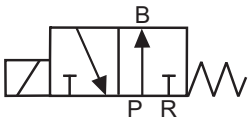
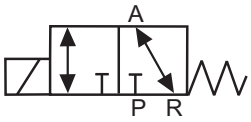
Electrostatically sensitive components/assemblies

Observe the requirements in accordance with EN 61340-5-1 and 5-2 to minimise or avoid the possibility of damage caused by a sudden electrostatic discharge.

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

3 Product description

3.1 Circuit functions

A		2/2-way valve, normally closed
B		2/2-way valve, normally open
C		3/2-way valve, normally closed, output A relieved
D		3/2-way valve, output P normally open, output B pressurised
T		3/2-way valve, can be used universally

3.2 Assignment of the fluidic connections

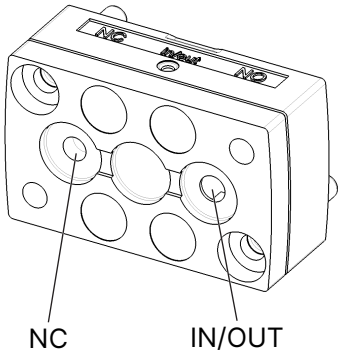


Fig. 1: 2/2-way valve, normally closed

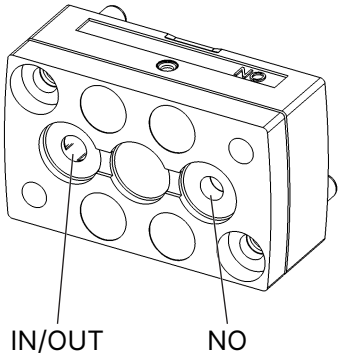


Fig. 2: 2/2-way valve, normally open

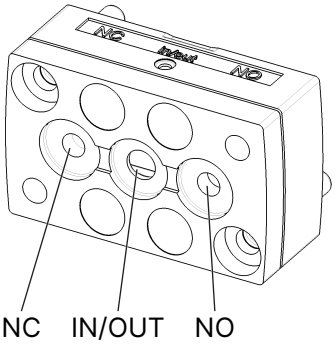


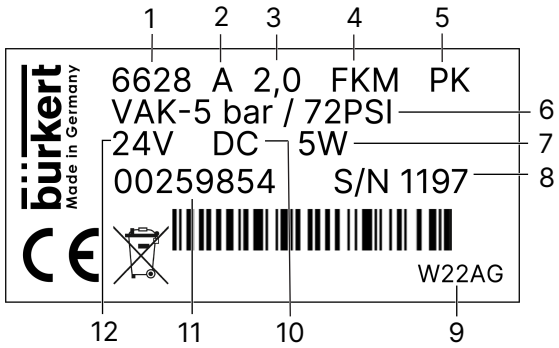
Fig. 3: 3/2-way valve

NC	P	Normally closed, pressure port
IN/OUT	A	Common port, working port
NO	R	Normally open, venting

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

3.3 Type label

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



1	Type	2	Circuit function
3	Orifice	4	Sealing material
5	Body material	6	Pressure range
7	Nominal power	8	Serial number
9	Manufacture code	10	Frequency
11	Article number	12	Operating voltage

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

4 Technical data

4.1 Operating conditions

Allowable temperatures Medium and ambient temperature	0 to +55 °C (FKM) +10 to +55 °C (FFKM) -10 to +55 °C (EPDM)
Storage temperature	-10 to +65 °C
Media	Aggressive, neutral gaseous and liquid media that do not attack the body and seal materials (see resistance table). Check for sufficient resistance in each individual case.
Degree of protection	Rectangular connector IP30 Strand connection and cable plug IP54

4.2 Standards and directives

The device complies with the valid EU harmonisation legislation.

The harmonised standards that have been applied for the conformity assessment procedure are listed in the current version of the EU Declaration of Conformity.

4.3 Electrical data

See Type label [▶ 9]

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

5 Installation/disassembly

5.1 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 with actuator on top.

- Clean pipelines and flange connections.
- Install dirt trap in the direction of the current before the valve (mesh width 5 µm).

WARNING!

Risk of escaping medium if seal is incorrectly fitted

- Ensure that the seals provided fit properly.
- Only use manifolds of sufficient quality and with a flat surface.

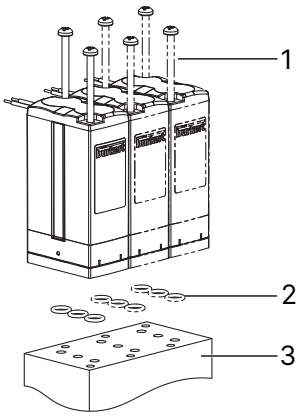


Fig. 4: Hole pattern

1	Screws	2	Seals
3	Manifold		

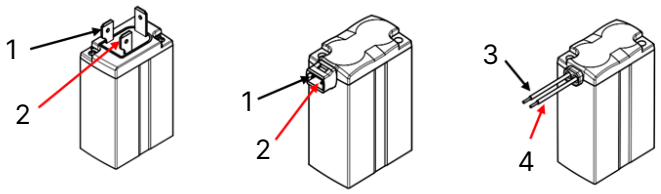
- Drill holes in accordance with the drill diagram (see data sheet for dimensions).
- Check the correct position of the seal in the valve.
- Correctly assign fluid pin assignment 1, 2 and 3 on the valve and manifold.
- Fasten the valve. Tightening torque approx. 0.9 Nm for metric screws.
- Check installation for tightness.

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

5.2 Electrical installation

Power supply	Nominal voltage ±10% tolerance
Maximum permitted residual ripple	±10% of the nominal voltage
Power consumption	Refer to the type label

For versions with integrated power reduction, observe polarity.



1	Negative pole	2	Positive pole
3	Negative pole (black)	4	Positive pole (red)

5.3 Disassembly

WARNING!

Risk of injury from dangerous fluids

- Before loosening lines or valves, flush out hazardous media, depressurise and drain the lines.

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

6 Maintenance

- Check regularly for any medium leakages.

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

7 Faults

If faults occur, check:

- That the fluidics connections are assigned correctly in accordance with the operating principles,
- Whether the operating pressure is within the permissible range,
- The power supply and valve control unit,
- The correct polarity of the electrical connections.

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025

8 Logistics

8.1 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 from damage with protective caps.
- Observe permitted storage temperature.

8.2 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 Bürkert, contact the Bürkert sales office. A return number is required.

8.3 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

MAN 1000653274 EN Version: - Status: RL (released | freigegeben) printed: 14.04.2025