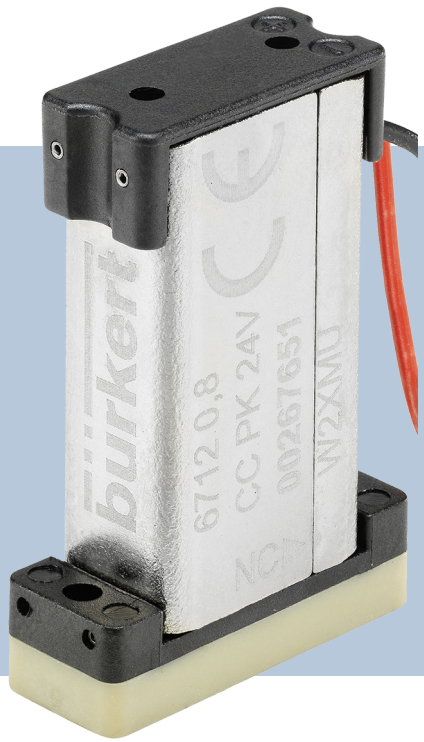
bürkert
FLUID CONTROL SYSTEMS

MAN 1000653270 EN Version: B Status: RL (released | freigegeben) printed: 15.04.2025

Type 6712

WHISPER VALVE

2/2 way solenoid valve with media separation



Operating Instructions for all variants

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Technical documentation 2503/04_GBen_00810426_961911819_27021598726225291 / Original DE

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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 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.

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1.2 Terms and abbreviations

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

Product	Solenoid valve Type 6712

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

The Type 6712 solenoid valve is designed for use in analytical, medical and laboratory technology. It is preferably used for dosing and filling liquids and gases.

- Do not use the device without the appropriate safeguards outdoors.
- Do not use rectified alternating voltage without smoothing as a power supply.
- Use the device when it is in perfect condition only, and always ensure proper storage, transportation, installation and operation.

2.2 Basic safety instructions

Risk of injury from high pressure

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

Risk of burns/fire during continuous operation due to hot device surface.

- Keep the device 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:

- Secure the system/device against unintentional activation.
- Do not use in potentially explosive atmospheres.
- Do not make any internal or external changes.
- Only trained technicians may perform installation and maintenance work.
- After interruption the power supply, ensure that the process is restarted in a controlled manner.
- Observe general technological rules of thumb.

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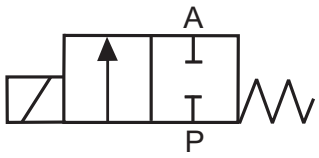
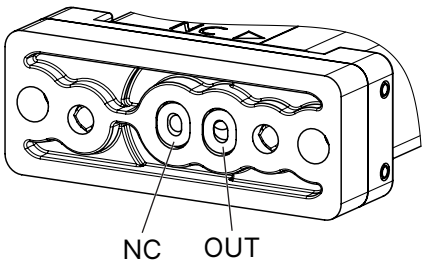
3 Product description

3.1 Circuit function

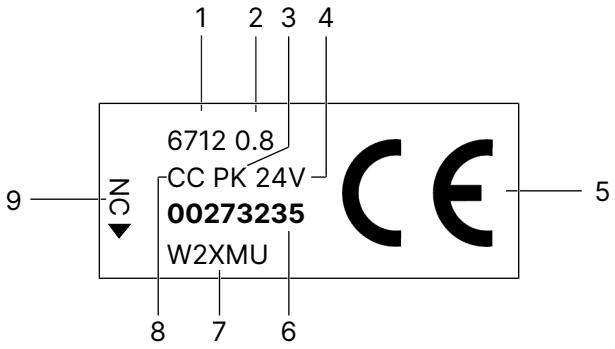
A		2/2-way valve, normally closed.

Assignment of the fluidic connections



NC	P	NC, pressure port.
OUT	A	Common port, working port.

3.2 Type label



1	Type	2	Orifice
3	Body material	4	Operating voltage
5	CE marking	6	Article number
7	Manufacture code	8	Sealing material
9	Pressure port labelling		

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Body material

- PK = PEEK
- PS = PPS

Seal material

- AA = EPDM
- CC = FFKM

Nominal diameter

- 0.8 = 0.8 mm / 3 bar
- 0.4 = 0.4 mm / 5 bar

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4 Technical data

4.1 Operating conditions

Ambient temperature	+10 to +55 °C[1)]
Medium	+10 to +55 °C[1)]
Storage temperature	–10 to +65 °C
Transport temperature	–40 to +70 °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	IP10 with cable plug 2503 IP40 with strand (on request)
Protection class	III as per IEC 61140 or NEC Class II Power Supply

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 [▶ 7].

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1) for diaphragm material FFKM
Expanded temperature ranges: depends on materials (see data sheet at country.burkert.com)

5 Installation

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

WARNING!

Risk of escaping medium if seal is incorrectly fitted

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

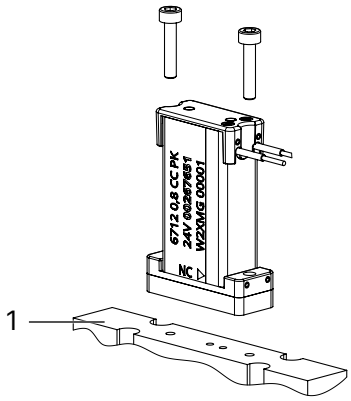

Fig. 1: Mounting the solenoid valve

1	Manifold

- Drill holes in accordance with the drill diagram (see data sheet for dimensions).
- Correctly assign fluid pin assignment 1 and 2 on the valve and manifold.
- Fasten the valve with screws. Recommended tightening torque when using metric screws 0.11 to 0.15 Nm (value differs for PT screws).
- Check installation for tightness.

5.2 Electrical installation

Power supply	DC, tolerance ± 10% (including residual ripple)
Maximum residual voltage	1% of the nominal voltage
Power consumption	0.9 W

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Continuous switching behaviour – the opening of the valve follows the supply voltage. Power reduction is not possible. Correct polarity is a prerequisite for the valve to function (see data sheet).

5.3 Disassembly

WARNING!

Risk of injury from dangerous fluids

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

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6 Maintenance

- Check regularly for any medium leakages.

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7 Faults

If faults occur, check

- that the fluidics connections are assigned correctly in accordance with the circuit function,
- whether the operating pressure is within the permissible range,
- the power supply and valve control unit,
- the correct polarity of the electrical connections.

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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

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