

Type 6026

2/2-way valve
2/2-Wege-Ventil
Vanne 2/2 voies

Operating Instructions

Bedienungsanleitung
Manuel d'utilisation



По вопросам продаж и поддержки обращайтесь:

Архангельск +7 (8182) 45-71-35

Астрахань +7 (8512) 99-46-80

Барнаул +7 (3852) 37-96-76

Белгород +7 (4722) 20-58-80

Брянск +7 (4832) 32-17-25

Владивосток +7 (4232) 49-26-85

Волгоград +7 (8442) 45-94-42

Екатеринбург +7 (343) 302-14-75

Ижевск +7 (3412) 20-90-75

Казань +7 (843) 207-19-05

Калуга +7 (4842) 33-35-03

Кемерово +7 (3842) 21-56-70

Киров +7 (8332) 20-58-70

Краснодар +7 (861) 238-86-59

Красноярск +7 (391) 989-82-67

Курск +7 (4712) 23-80-45

Липецк +7 (4742) 20-01-75

Магнитогорск +7 (3519) 51-02-81

Москва +7 (499) 404-24-72

Мурманск +7 (8152) 65-52-70

Наб.Челны +7 (8552) 91-01-32

Ниж.Новгород +7 (831) 200-34-65

Новосибирск +7 (383) 235-95-48

Омск +7 (381) 299-16-70

Орел +7 (4862) 22-23-86

Оренбург +7 (3532) 48-64-35

Пенза +7 (8412) 23-52-98

Пермь +7 (342) 233-81-65

Ростов-на-Дону +7 (863) 309-14-65

Рязань +7 (4912) 77-61-95

Самара +7 (846) 219-28-25

Санкт-Петербург +7 (812) 660-57-09

Саратов +7 (845) 239-86-35

Сочи +7 (862) 279-22-65

Ставрополь +7 (8652) 57-76-63

Сургут +7 (3462) 77-96-35

Тверь +7 (4822) 39-50-56

Томск +7 (3822) 48-95-05

Тула +7 (4872) 44-05-30

Тюмень +7 (3452) 56-94-75

Ульяновск +7 (8422) 42-51-95

Уфа +7 (347) 258-82-65

Хабаровск +7 (421) 292-95-69

Челябинск +7 (351) 277-89-65

Ярославль +7 (4852) 67-02-35

сайт: burkert.pro-solution.ru | эл. почта: btk@pro-solution.ru

телефон: 8 800 511 88 70

1 OPERATING INSTRUCTIONS

The operating instructions contain important information.

- ▶ Carefully read these instructions and follow the safety instructions.
- ▶ Store the instructions in such a way that they are available to all users.
- ▶ The liability and warranty for the Type 6026 device will be invalidated if the operating instructions are not followed.

1.1 Symbols

- ▶ highlights instructions to avoid a danger.
- highlights a procedure which you must carry out.

Warning of injuries:



DANGER!

Imminent danger! Serious or fatal injuries.



WARNING!

Potential danger! Serious or fatal injuries.



CAUTION!

Danger! Moderate or minor injuries.

Warning of damage:

NOTE!

2 INTENDED USE

Unauthorised use of the Type 6026 solenoid valve may be dangerous to people, nearby equipment and the environment.

The device is designed for blocking, dosing, filling and ventilating gaseous and liquid media.

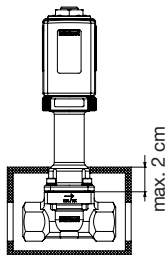
- ▶ When using the device, observe the authorised data, operating conditions and deployment conditions specified in the contract documents and in the operating instructions.
- ▶ Prerequisites for safe and trouble-free operation are correct transportation, correct storage and installation as well as careful operation and maintenance.
- ▶ Only use the device as intended.
- ▶ Check the media resistance.

2.1 Definition of terms

The term “device” used in these instructions always refers to the Type 6026 solenoid valve.

2.2 Isolation

The device must not be isolated more than 2 cm from the body edge upwards to the actuator.



3 BASIC SAFETY INSTRUCTIONS

These safety instructions do not make allowance for any contingencies and events which may arise during installation, operation and maintenance.



Risk of injury from high pressure.

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

Risk of injury due to electric shock.

- ▶ Before reaching into the device or the system, switch off the power supply and secure to prevent reactivation! Observe the applicable accident prevention and safety regulations for electrical devices.

Risk of burns or risk of fire.

Continuous operation or hot media may result in a 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.

Risk of injury due to cold, hot and aggressive media.

Heat sources or temperature fluctuations may cause malfunctions or leaks.

- ▶ Avoid heat sources which may cause the permissible temperature range to be exceeded.
- ▶ Check the media resistance before use.

Danger due to low and high temperatures.

Depending on the media temperature, the device can become extremely cold or extremely hot.

- ▶ Keep the device away from substances sensitive to cold and highly flammable substances and do not touch with bare hands.

Destruction of the coil due to overheating

- ▶ Electrically connect coil with mounted housing only.
- ▶ In the case of alternating voltage, pay attention to movable core.
- ▶ Check media resistance.

General hazardous situations.

To prevent injuries, ensure that:

- ▶ Do not feed in any aggressive or highly flammable media.
- ▶ Do not make any internal or external changes to the device.
- ▶ Secure the system and device against accidental activation.
- ▶ Installation and maintenance may only be performed by authorised technicians only using the appropriate tools.
- ▶ After an interruption in the power or pneumatic supply, ensure that the process is restarted in a defined or controlled manner.
- ▶ Do not mechanically load housing.
- ▶ Observe the general rules of technology.

4 TECHNICAL DATA



The following values are indicated on the type label:

- Voltage, current type, coil power
- Pressure range
- Body material (MS=brass, VA=stainless steel)
- Seal material (PTFE, NBR)

4.1 Conformity

The Type 6026 conforms to the EU directives as per the EU Declaration of Conformity (if applicable).

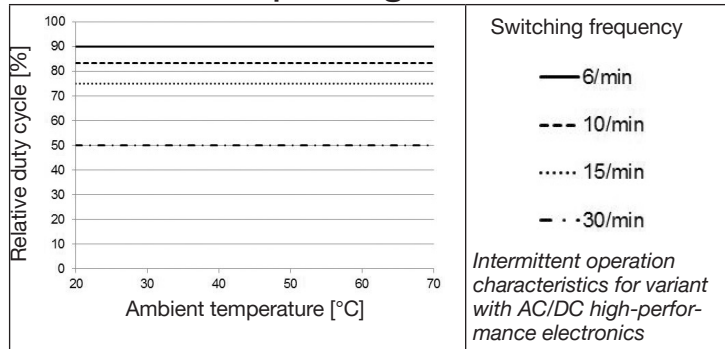
4.2 Standards

The applied standards, which are used to demonstrate conformity with EU directives, are listed in the EU type examination certificate and/or the EU Declaration of Conformity (if applicable).

4.3 Operating conditions

Ambient temperature	max. +50 °C
Degree of protection with cable plug:	IP65 acc. to EN 60529, NEMA 4X

4.4 Electrical operating conditions



	With AC/DC high-performance electronics
Operating mode (acc. to DIN VDE 0580)	Continuous operation Intermittent operation (To determine the permissible operating parameters, see "Chapter 4.4" and "Chapter 4.7")
Minimum duty cycle	1 s
Minimum currentless break	1 s
Switching time	approx. 500 ms

	With AC/DC high-performance electronics
Maximum switching frequency	see "Diagram of electrical operating conditions"
Maximum relative duty cycle	

4.5 Fluidic data

Medium temperature -200...+180 °C

viscosity 21 mm²/s

Circuit function (CF)

Circuit function A (NC)		2/2-way valve, 1 (P) normally closed

4.6 Mechanical data

Port connections G¼, G½, G¾

Materials

Body:

Identification MS Brass body, valve seat 1.4305
 brass body, brass valve seat

Identification VA Body and valve seat 1.4410

Actuator: Epoxide

Seal material: PTFE

Dimensions see data sheet

4.7 Electrical data

Connections DIN EN 175301-803 Form A:
 for cable plug Type 2508

Operating voltage see type label

Voltage tolerance ±10 %

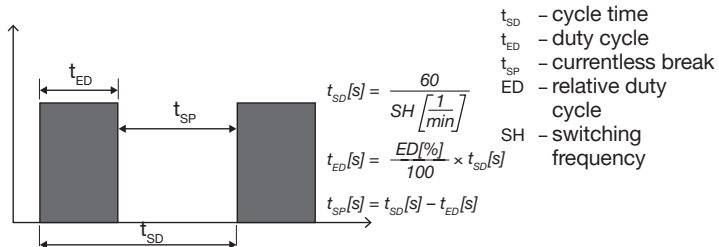
Nominal power 8 W operation, 85 W inrush

Switching frequency max. 10/min

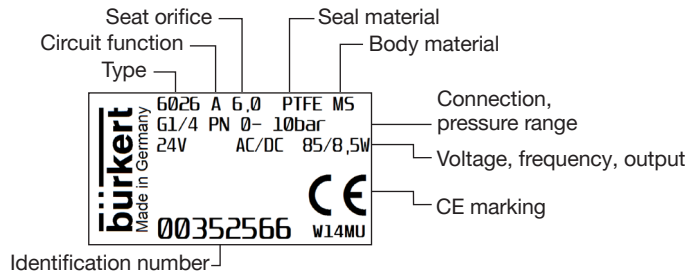
Off time t_{off} between
2 switch-on procedures min. 1 s

Intermittent operation for variant with AC/DC high-performance electronics

Characteristics (acc. to DIN VDE 0580)



4.8 Type label (example)



5 INSTALLATION



DANGER!

Risk of injury from high pressure in the system.

- ▶ Before loosening lines and valves, turn off the pressure and drain the lines!

Risk of injury due to electric shock.

- ▶ Before reaching into the system, switch off the power supply and secure to prevent reactivation.
- ▶ Observe the applicable accident prevention and safety regulations for electrical devices.



WARNING!

Risk of injury due to improper installation.

- ▶ Installation may be carried out by authorised technicians only and with the appropriate tools.

Risk of injury due to unintentional activation of the system and uncontrolled restart.

- ▶ Secure the system against unintentional activation.
- ▶ Following installation, ensure a controlled restart.

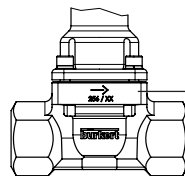
5.1 Fluid installation

Installation position: any, preferably coil or actuator face up.

- Clean pipelines and flange connections.
- Install dirt trap at the valve inlet (0.2...0.4 mm).



Note the flow direction of the valve. The arrow on the body indicates the flow direction.



Arrow indicating
flow direction

NOTE!

Caution: Risk of breakage.

- ▶ Do not use the coil or actuator as a lever arm.

Threaded connection:

- Hold the valve body using a matching open-end wrench and screw into the pipeline.

5.2 Electrical installation



WARNING!

Risk of injury due to electric shock.

- ▶ Before reaching into the system, switch off the power supply and secure to prevent reactivation.
- ▶ Observe the applicable accident prevention and safety regulations for electrical devices.

If there is no protective conductor function between the coil and body, there is a risk of electric shock.

- ▶ Always connect protective conductor.
- ▶ Check electrical continuity between coil and body.

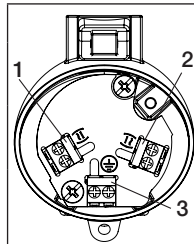


Observe voltage and current type according to type label.

- Check that seal is correctly fitted.
- Screw cable plug tightly onto the coil (max. 1 Nm).

Only for variant with terminal connection box:

- Connect a maximum of one conductor per terminal point
- The maximum connection cable cross-section is 2.5 mm^2 / AWG 14
- Remove insulation on the wires to a maximum length of 6 mm
- Tighten the terminal screws with 0.25 Nm
- Close the housing lid properly and tighten the lock screw with 2 Nm
- Check the consistency of the protective conductor connection



Item	Symbol	Pin assignment			
1		L	N	+	-
2		N	L	-	+
3		PE			

5.3 Rotating the solenoid



WARNING!

Risk of injury due to electric shock.

If there is no protective conductor function between the coil and body, there is a risk of electric shock.

- ▶ Check the protective conductor function after installing the coil.

Overheating, risk of fire.

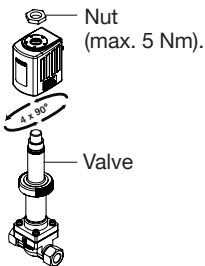
Connecting the coil without first installing the valve will lead to overheating and will destroy the coil.

- ▶ Only connect the coil after the valve has been installed.



The coil can be rotated by 4 x 90°.

- Loosen nut.
- Rotate the solenoid.
- Use a matching open-end wrench to tighten the nut (max. 5 Nm).



6

MAINTENANCE, TROUBLESHOOTING



WARNING!

Risk of injury due to improper maintenance work.

- ▶ Maintenance may be carried out by authorised technicians only and with the appropriate tools.

Risk of injury due to unintentional activation of the system and uncontrolled restart.

- ▶ Secure the system against unintentional activation.
- ▶ Following maintenance, ensure a controlled restart.

Check in case of faults:

- Port connections
- Operating pressure
- Operating voltage

If the valve still does not switch, contact your local Bürkert Service representative.

7 DISASSEMBLY



DANGER!

Risk of injury from high pressure in the system.

- ▶ Before loosening lines and valves, turn off the pressure and drain the lines!

Risk of injury due to electric shock.

- ▶ Before reaching into the system, switch off the power supply and secure to prevent reactivation.
- ▶ Observe the applicable accident prevention and safety regulations for electrical devices.



WARNING!

Risk of injury due to improper removal.

- ▶ Disassembly may only be carried out by authorised technicians using the appropriate tools.

- Switch off pressure and drain lines.
- Switch off electrical voltage.
- Remove cable plug.
- Hold the valve body using a matching open-end wrench and unscrew from the pipeline.

8 TRANSPORTATION, STORAGE, DISPOSAL

NOTE!

Transport damage.

Inadequately protected devices may be damaged during transport.

- ▶ Protect the device against moisture and dirt in shock-resistant packaging during transportation.
- ▶ Avoid exceeding or dropping below the permitted storage temperature.

Incorrect storage may damage the device.

- ▶ Store the device in a dry and dust-free location.
- ▶ Storage temperature: $-20...+70^{\circ}\text{C}$.

Damage to the environment caused by device parts contaminated with media.

- ▶ Dispose of the device and packaging in an environmentally friendly manner.
- ▶ Observe applicable disposal and environmental regulations.

По вопросам продаж и поддержки обращайтесь:

Архангельск +7 (8182) 45-71-35

Астрахань +7 (8512) 99-46-80

Барнаул +7 (3852) 37-96-76

Белгород +7 (4722) 20-58-80

Брянск +7 (4832) 32-17-25

Владивосток +7 (4232) 49-26-85

Волгоград +7 (8442) 45-94-42

Екатеринбург +7 (343) 302-14-75

Ижевск +7 (3412) 20-90-75

Казань +7 (843) 207-19-05

Калуга +7 (4842) 33-35-03

Кемерово +7 (3842) 21-56-70

Киров +7 (8332) 20-58-70

Краснодар +7 (861) 238-86-59

Красноярск +7 (391) 989-82-67

Курск +7 (4712) 23-80-45

Липецк +7 (4742) 20-01-75

Магнитогорск +7 (3519) 51-02-81

Москва +7 (499) 404-24-72

Мурманск +7 (8152) 65-52-70

Наб.Челны +7 (8552) 91-01-32

Ниж.Новгород +7 (831) 200-34-65

Новосибирск +7 (383) 235-95-48

Омск +7 (381) 299-16-70

Орел +7 (4862) 22-23-86

Оренбург +7 (3532) 48-64-35

Пенза +7 (8412) 23-52-98

Пермь +7 (342) 233-81-65

Ростов-на-Дону +7 (863) 309-14-65

Рязань +7 (4912) 77-61-95

Самара +7 (846) 219-28-25

Санкт-Петербург +7 (812) 660-57-09

Саратов +7 (845) 239-86-35

Сочи +7 (862) 279-22-65

Ставрополь +7 (8652) 57-76-63

Сургут +7 (3462) 77-96-35

Тверь +7 (4822) 39-50-56

Томск +7 (3822) 48-95-05

Тула +7 (4872) 44-05-30

Тюмень +7 (3452) 56-94-75

Ульяновск +7 (8422) 42-51-95

Уфа +7 (347) 258-82-65

Хабаровск +7 (421) 292-95-69

Челябинск +7 (351) 277-89-65

Ярославль +7 (4852) 67-02-35

сайт: burkert.pro-solution.ru | эл. почта: btk@pro-solution.ru

телефон: 8 800 511 88 70