

6. TECHNICAL DATA



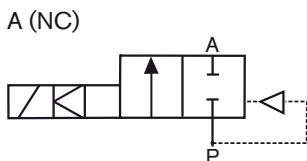
The following values* are indicated on the rating plate:

- **Voltage** (tolerance $\pm 10\%$) / **current type**
- **Coil power consumption** (active power in W - at operating temperature)
- **Pressure range**
- **Housing material** brass (MS) or stainless steel (VA)
- **Seal material** FKM, EPDM, NBR

* see description of rating plate below

Operating principle

2/2-way valve:



Protection class:

IP65

in accordance with DIN EN 60529 / IEC 60529 with correctly connected and installed cable plug, e.g. Bürkert Type 2508

6.1. Application conditions

Allowable temperatures

Ambient temperature: Max. +55 °C

Permitted medium temperature depending on coil and seal material:

Coil housing	Seal material	Medium temperature
Polyamide	FKM	0 ... +90 °C
Epoxy (NA38)	FKM	0 ... +120 °C
Epoxy (NA38)	EPDM	-30 ... +120 °C
Polyamide	NBR	-10 ... +80 °C

Permitted media depending on seal material:

Seal material	Permitted media ¹⁾
FKM	Per-solutions, hot oils without additives, diesel and heating oil without additives, detergent solution
EPDM	Oil and grease-free liquids, cold and hot water
NBR	Cold and warm water

¹⁾ Gaseous media at low differential pressures (e.g. compressed air and vacuum) can also be actuated in consideration (or due to restriction) of a lower tightness. We recommend prior clarification with our sales office regarding the possible application.

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Operating duration

Unless otherwise indicated on the rating plate, the solenoid system is suitable for continuous operation.



Important information for functional reliability during continuous operation!

If switched off for a long period, at least 1-2 activations per day are recommended.

Service life

High switching frequency and high pressures reduce the service life.

6.2. Conformity

CE mark conforms to EMC Directive 2004/108/EC (only if cables, plugs and sockets connected correctly).

6.3. Rating plate description

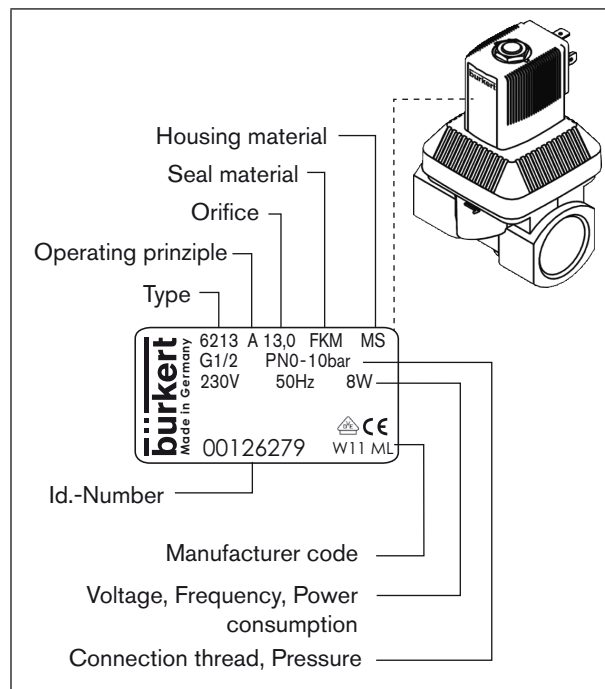


Fig. 1: Example - Rating plate description

7. INSTALLATION

7.1. Safety instructions



DANGER!

Risk of injury from high pressure in the equipment!

- Before loosening the pipes and valves, turn off the pressure and vent the pipes.

Risk of injury due to electrical shock!

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



WARNING!

Risk of injury from improper installation!

- Installation may be carried out by authorized technicians only and with the appropriate tools!

Risk of injury from unintentional activation of the system and an uncontrolled restart!

- Secure system from unintentional activation.
- Following assembly, ensure a controlled restart.

7.2. Before Installation

Installation position:

Installation can be in any position.

Preferably: Actuator upright.

→ Prior to installation check pipelines for dirt and, if required, clean.

Dirt filter: To ensure that the safety shut-off device functions reliably, install a strainer ($\leq 500 \mu\text{m}$) in front of the valve inlet.



7.3. Installation

→ Hold the device with a suitable tool (open-end wrench) on the housing and screw into the pipeline.

NOTE!

Caution risk of breakage!

- Do not use the coil as a lifting arm.

→ Observe direction of flow:

The arrow on the housing indicates the direction of flow.

7.4. Electrical connection of the cable plug



DANGER!

Risk of injury due to electrical shock!

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

If the protective conductor is not connected, there is a risk of electric shock!

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



Note the voltage and current type as specified on the rating plate.

→ Tighten cable plug (for permitted types see data sheet), observing max. torque 1 Nm.

→ Check that seal is fitted correctly.

→ Connect protective conductor and check electrical continuity between coil and housing.

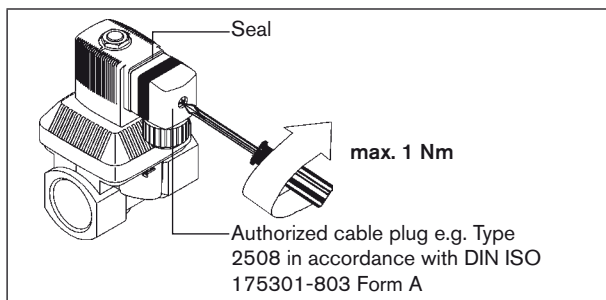


Fig. 2: Electrical connection of the cable plug

8. MAINTENANCE, TROUBLESHOOTING

8.1. Safety instructions



DANGER!

Risk of injury from high pressure in the equipment!

- Before loosening the pipes and valves, turn off the pressure and vent the pipes.

Risk of injury due to electrical shock!

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



WARNING!

Risk of injury from improper maintenance!

- Maintenance may be carried out by authorized technicians only and with the appropriate tools!

Risk of injury from unintentional activation of the system and an uncontrolled restart!

- Secure system from unintentional activation.
- Following maintenance, ensure a controlled restart.

8.2. Installation of coil



WARNING!

Escaping medium!

When a sticking nut is loosened, medium may escape.

- Do not tighten sticking nut any further.

Electric shock!

If the protective conductor is not connected, there is a risk of electric shock!

- Check protective conductor contact after installing the coil.

Overheating, risk of fire!

Connection of the coil without pre-assembled valve will result in overheating and destroy the coil.

- Connect the coil with pre-assembled valve only.

Installing the coil:



WARNING!

Danger due to electrical shock if coil incorrectly installed!

- During installation ensure that the coil is situated firmly on the housing cover so that the protective conductor connection of the coil is connected to the valve housing.

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- Connect coil housing to the core guide pipe.
- Screw on coil with nut. Observe torque according to table on page 23.

NOTE!

Device will be damaged if the wrong tools are used!

Always use a wrench to tighten nut. If other tools are used (e.g. pliers), the device may be damaged.

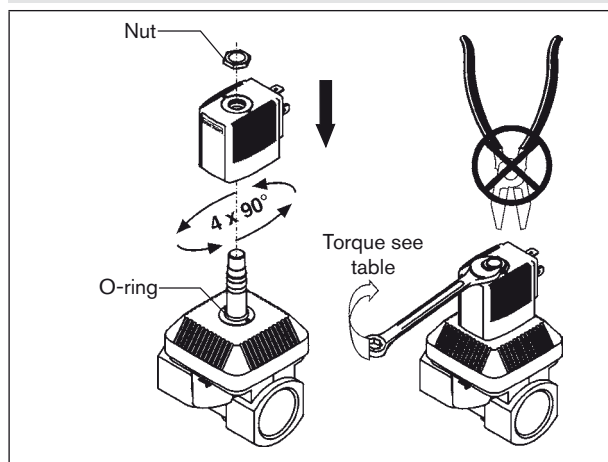


Fig. 3: Installing the coil

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Torque for fastening Nut		
Coil type	Coil width	Torque [Nm]
AC10	32 mm or 40 mm	5 Nm
AC19	42 mm, 43 mm, 49 mm	10 Nm

8.3. Malfunctions

If malfunctions occur, check whether:

- the device has been installed according to the instructions,
- the electrical and fluid connections are correct,
- the device is not damaged,
- all screws have been tightened,
- the voltage and pressure have been switched on,
- the pipelines are clean.

Valve does not switch

Possible cause:

- Short-circuit or coil interrupted.
- Core or core area dirty.
- Medium pressure outside the permitted pressure range.

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Valve does not close

Possible cause:

- Internal space of the valve is dirty.
- Small control bore in the diaphragm blocked.

After occurrence of an external fire

- After an external fire, check the equipment and safety shut-off device.
- If there is visible damage, replace shut-off device!

9. SPARE PARTS**CAUTION!**

Risk of injury and/or damage by the use of incorrect parts!

Incorrect accessories and unsuitable spare parts may cause injuries and damage the device and the surrounding area.

- Use original accessories and original spare parts from Bürkert only.

9.1. Ordering spare parts**Replacement part sets**

When ordering replacement part sets, quote the sets SET1, SET 3 or SET 7 and the identification number of the device.

- See replacement part sets *9.2. Overview of replacement part sets*.
- The identification number of the device can be found on the rating plate. See also chapter *6.3. Rating plate description*.

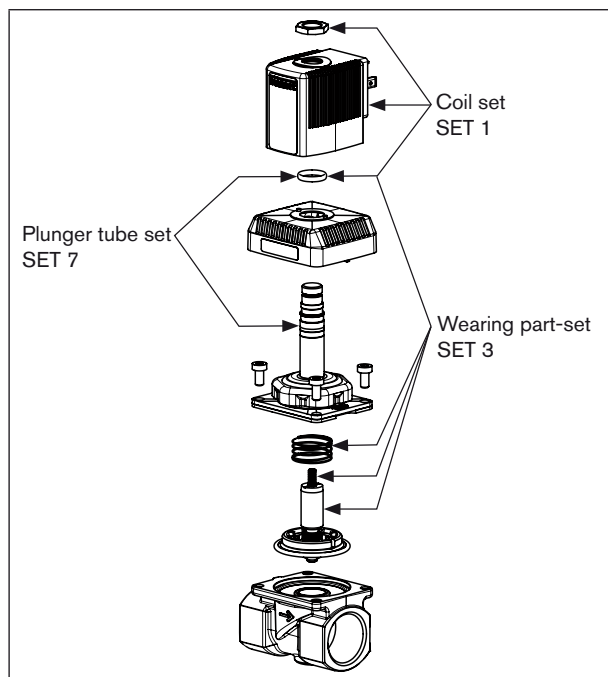
9.2. Overview of replacement part sets

Fig. 4: Overview of replacement part sets

10. PACKAGING, TRANSPORT, STORAGE**NOTE!****Transport damages!**

Inadequately protected equipment may be damaged during transport.

- During transportation protect the device against wet and dirt in shock-resistant packaging.
- Avoid exceeding or dropping below the allowable storage temperature.

Incorrect storage may damage the device.

- Store the device in a dry and dust-free location!
- Storage temperature: -40 ... +80 °C.