# GEMÜ C60 CleanStar

Pneumatically operated diaphragm valve

EN

## Operating instructions

Diaphragm replacement

further information
webcode: GW-C60

## 1 Information

**NOTICE**

- Only use the assembly instructions in conjunction with the operating instructions.

## 2 Warning notes

Wherever possible, warning notes are organised according to the following scheme:

| SIGNAL WORD | |
|---|---|
| Possible symbol for the specific danger | Type and source of the danger<br>▶ Possible consequences of non-observance.<br>● Measures for avoiding danger. |

Warning notes are always marked with a signal word and sometimes also with a symbol for the specific danger.

The following signal words and danger levels are used:

**⚠ DANGER**

**Imminent danger!**

- Non-observance can cause death or severe injury.

**⚠ WARNING**

**Potentially dangerous situation!**

- Non-observance can cause death or severe injury.

**⚠ CAUTION**

**Potentially dangerous situation!**

- Non-observance can cause moderate to light injury.

**NOTICE**

**Potentially dangerous situation!**

- Non-observance can cause damage to property.

The following symbols for the specific dangers can be used within a warning note:

| Symbol | Meaning |
|---|---|
|  | Corrosive chemicals |
|  | Hot plant components! |

## 3 Diaphragm replacement – pneumatic valve

**⚠ WARNING**

**The equipment is subject to pressure!**

► Risk of severe injury or death.
- Depressurize the plant.
- Completely drain the plant.

**⚠ WARNING**

**Corrosive chemicals**

► Risk of caustic burns
- Wear suitable protective gear.
- Completely drain the plant.

**⚠ CAUTION**

**Hot plant components!**

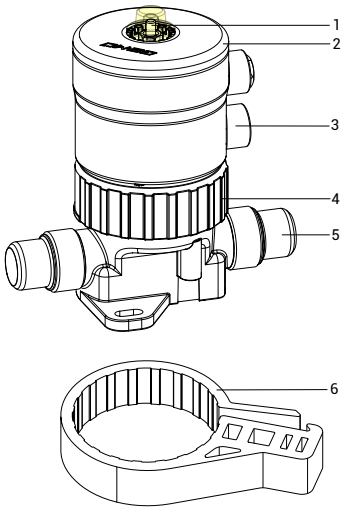
► Risk of burns!
- Only work on plant that has cooled down.

### 3.1 Removing the diaphragm

**⚠ CAUTION**

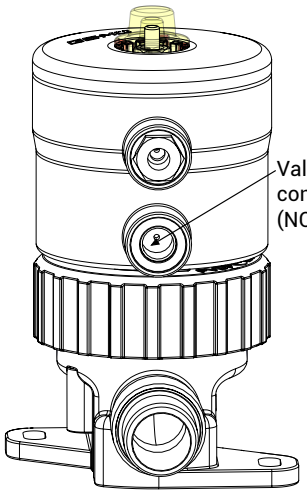
- Check the fixing of the valve when installing it on a device or distribution installation.

1




1 = Position indicator
2 = Actuator
3 = Control medium connector
4 = Central nut
5 = Pipe connections
6 = Service tool

## 2

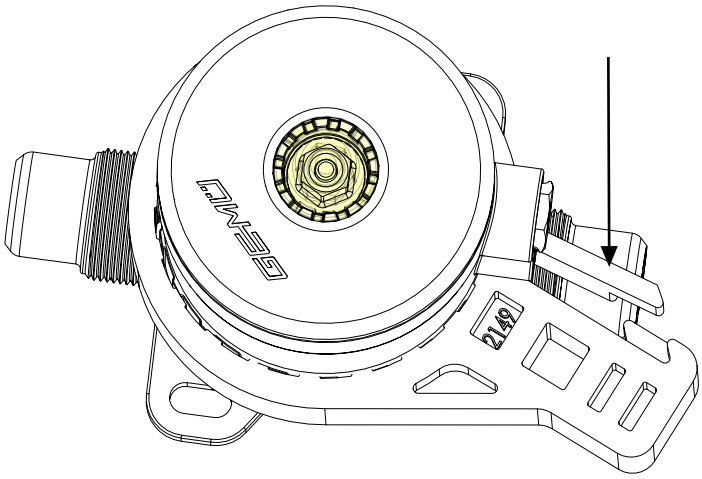



**Valve with control function 1 (NC)**

- Activate the actuator to move it into the open position.
  See the control pressure table in the operating instructions for details of the control pressures.

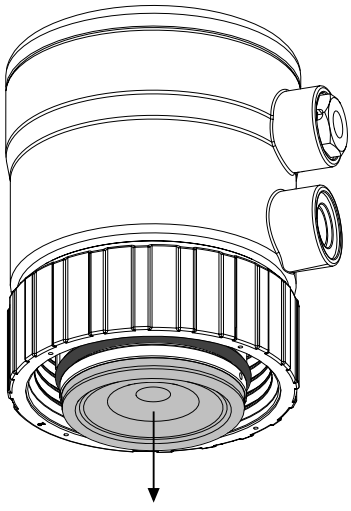
⇨ It has reached the open position when the position indicator can be seen in the transparent cap.

## 3



1. Place the service tool against the central nut.
   The service tool's locking device must be pointing anticlockwise in order to loosen the central nut.
2. Undo the central nut by turning it anticlockwise.
   You can use a torque wrench to do this.

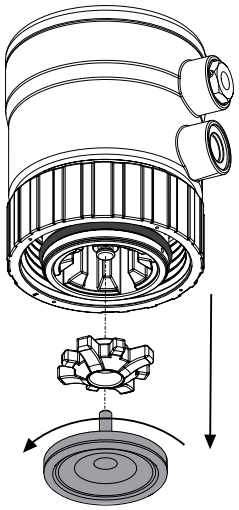
## 4



1. Carefully undo the central nut by hand and lift the actuator off the valve body.
2. Remove the control air.

⇨ The actuator will move to the off position.

5



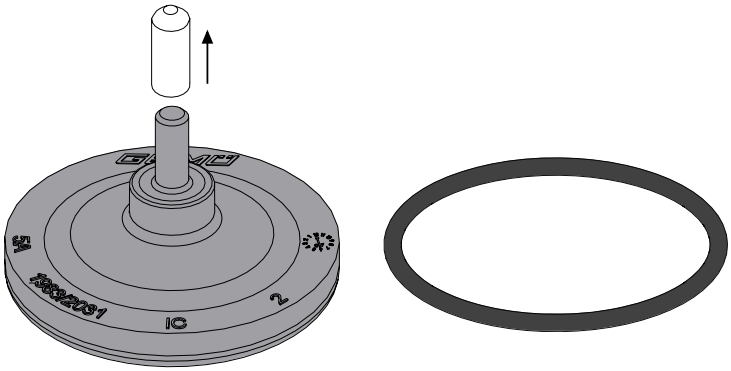
- Remove the diaphragm from the actuator by turning it anticlockwise.

**⚠ CAUTION**

► The diaphragm and the compressor are now loose. Do not lose the compressor.

## 3.2 Mounting the diaphragm

**1**

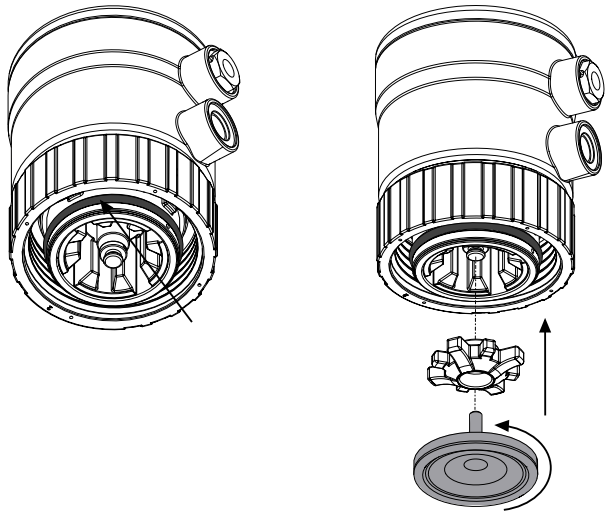


**NOTICE**

► Install a new diaphragm whenever the central nut is loosened.
Observe the information on the packaging (risk of contamination).

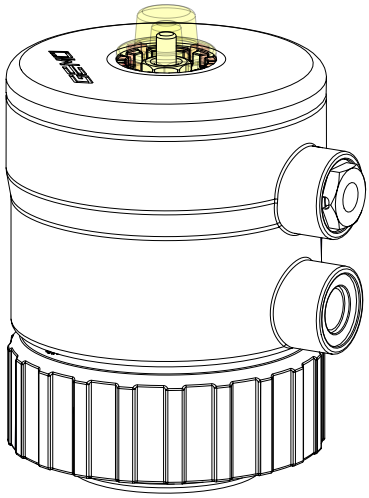
1. Replace the enclosed O-ring if damaged (e.g. mechanical or chemical stress, brittleness).
2. Remove the protection cap from the diaphragm pin.
3. Take care not to scratch the diaphragm face when doing so.

**2**



1. Replace the O-ring using an appropriate tool.
2. Insert the compressor correctly (the back of the compressor is flat and must be facing the actuator) and screw in the new diaphragm, turning it clockwise until hand-tight.

**3**

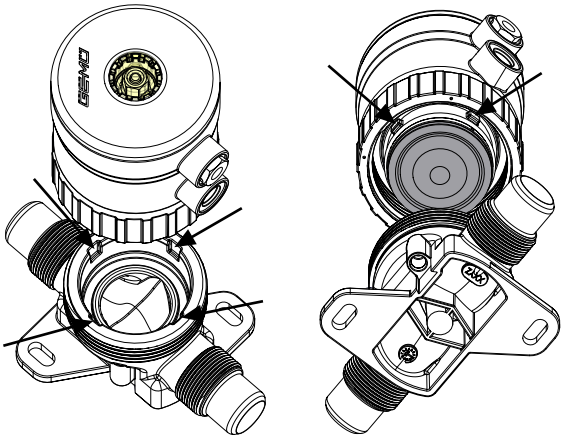


**Valve with control function 1 (NC)**

- Activate the actuator to move it into the open position.
See the control pressure table in the operating instructions for details of the control pressures.

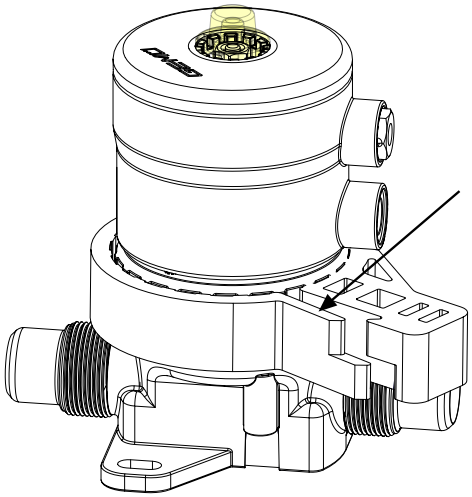
⇨ It has reached the open position when the position indicator can be seen in the transparent cap.

## 4



1. Pay attention to the position of the fixing grooves in the body and the fixing lugs on the actuator. These must fit together exactly.
2. Place the actuator on the valve body.
3. Position the central nut by hand and tighten it clockwise until hand-tight.

## 5



1. Place the service tool against the central nut.
   The service tool's locking device must be pointing clockwise in order to tighten the central nut.
2. Carefully tighten the central nut by turning it clockwise with a torque wrench (see torque table).

| Actuator size | 1 | 2 | 3 |
|---|---|---|---|
| Torque (Nm) | 10–12 | 14–16 | 25–30 |

3. Remove the control air.

⇨ The actuator will move back to the off position.

4. Check the central nut after a week has passed and retighten it if necessary to avoid leakage.

GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
Fritz-Müller-Straße 6-8, 74653 Ingelfingen-Criesbach,
Germany
Tel. +49 (0)7940 123-0 · info@gemue.de
www.gemu-group.com



04.2019 | 88621222