

GEMÜ K415

Butterfly valve with bare shaft

EN

Operating instructions



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Contents

| | | |
|-----------|--|-----------|
| 1 | General information | 4 |
| 1.1 | Information | 4 |
| 1.2 | Symbols used | 4 |
| 1.3 | Definition of terms | 4 |
| 1.4 | Warning notes | 4 |
| 2 | Safety information | 5 |
| 3 | Product description | 5 |
| 3.1 | Construction | 5 |
| 3.2 | Description | 5 |
| 3.3 | Function | 5 |
| 3.4 | Product label | 5 |
| 4 | Intended use | 6 |
| 5 | Order data | 7 |
| 6 | Technical data | 9 |
| 7 | Dimensions | 10 |
| 8 | Manufacturer's information | 14 |
| 8.1 | Delivery | 14 |
| 8.2 | Transport | 14 |
| 8.3 | Storage | 14 |
| 9 | Installation in piping | 14 |
| 9.1 | Preparing for installation | 14 |
| 9.2 | Installation position | 15 |
| 9.3 | Installation with butt weld spigots | 15 |
| 9.4 | Installation with threaded connections | 15 |
| 9.5 | Installation with clamp connections | 15 |
| 10 | Commissioning | 16 |
| 11 | Operation | 16 |
| 12 | Troubleshooting | 17 |
| 13 | Inspection and maintenance | 18 |
| 13.1 | Cleaning the product | 18 |
| 13.2 | Spare parts | 18 |
| 13.3 | Fitting/removing spare parts | 18 |
| 13.4 | Removal from piping | 20 |
| 14 | Disposal | 20 |
| 15 | Returns | 20 |
| 16 | EU Declaration of Conformity | 21 |

1 General information

1.1 Information

- The descriptions and instructions apply to the standard versions. For special versions not described in this document the basic information contained herein applies in combination with any additional special documentation.
- Correct installation, operation, maintenance and repair work ensure faultless operation of the product.
- Should there be any doubts or misunderstandings, the German version is the authoritative document.
- Contact us at the address on the last page for staff training information.
- A supplement to Directive 2014/34/EU (ATEX Directive) is included with the product, provided that it was ordered in accordance with ATEX.

1.2 Symbols used

The following symbols are used in this document:

| Symbol | Meaning |
|--------|-----------------------|
| ● | Tasks to be performed |
| ▶ | Response(s) to tasks |
| - | Lists |

1.3 Definition of terms

Working medium

The medium that flows through the GEMÜ product.

Control function

The possible actuation functions of the GEMÜ product.

Control medium

The medium whose increasing or decreasing pressure causes the GEMÜ product to be actuated and operated.

1.4 Warning notes


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


| SIGNAL WORD | |
|---|--|
| Possible symbol for the specific danger | Type and source of the danger ▶Possible consequences in case of non-compliance ●Measures for avoiding danger |


Warning notes are always labelled 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 |
|---|---|
|  | The equipment is subject to pressure! |
|  | Corrosive chemicals! |
|  | GEMÜ products without an actuating element! |
|  | Hot plant components! |
|  | Leakage! |
|  | Maximum permissible pressure exceeded! |
|  | Use as an end-of-line valve! |
|  | Risk of crushing! |

2 Safety information

The safety information in this document refers only to an individual product. Potentially dangerous conditions can arise in combination with other plant components, which need to be considered on the basis of a risk analysis. The operator is responsible for the production of the risk analysis and for compliance with the resulting precautionary measures and regional safety regulations.

The document contains fundamental safety information that must be observed during commissioning, operation and maintenance. Non-compliance with these instructions may cause:

- Personal hazard due to electrical, mechanical and chemical effects
- Hazard to nearby equipment
- Failure of important functions
- Hazard to the environment due to the leakage of dangerous materials

The safety information does not take into account:

- Unexpected incidents and events, which may occur during installation, operation and maintenance
- Local safety regulations which must be adhered to by the operator and by any additional installation personnel

Prior to commissioning:

1. Transport and store the product correctly.
2. Do not paint the bolts and plastic parts of the product.
3. Carry out installation and commissioning using trained personnel.
4. Provide adequate training for installation and operating personnel.
5. Ensure that the contents of the document have been fully understood by the responsible personnel.
6. Define the areas of responsibility.
7. Observe the safety data sheets.
8. Observe the safety regulations for the media used.

During operation:

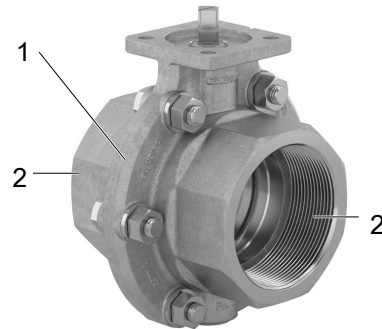
9. Keep this document available at the place of use.
10. Observe the safety information.
11. Operate the product in accordance with this document.
12. Operate the product in accordance with the specifications.
13. Maintain the product correctly.
14. Do not carry out any maintenance work and repairs not described in this document without consulting the manufacturer first.

In cases of uncertainty:

15. Consult the nearest GEMÜ sales office.

3 Product description

3.1 Construction



| Item | Name | Material |
|------|----------------------|-----------------------------|
| 1 | Butterfly valve body | Investment casting (1.4408) |
| 2 | Pipe connections | Investment casting (1.4408) |
| | Washer | Investment casting (1.4408) |

3.2 Description

The GEMÜ K415 soft-seated, centric butterfly valve made of stainless steel has a free shaft end with standardised actuator flange to ISO5211. With its rounded and polished disc edges, the butterfly valve is optimized for frequent cycle duties. The surface of the butterfly valve can still be further finished. The butterfly valve with FDA is available as an option. Thanks to its modular construction, it is also available with a manual, pneumatic or motorized actuator.

3.3 Function

The product controls a flowing medium after a manual, pneumatic or motorized actuator has been mounted.

3.4 Product label

The product label is located on the valve body. Product label data (example):

| | | |
|--------------------------------------|---------------------|---------------------|
| Design in accordance with order data | | |
| | | |
| Device-specific data | | Year of manufacture |
| Item number | Traceability number | Consecutive number |

The operating pressure stated on the product label applies to a media temperature of 20 °C. The product can be used up to the maximum stated media temperature. You can find the pressure/temperature correlation in the technical data.

4 Intended use

WARNING

Improper use of the product!

- ▶ Risk of severe injury or death
- ▶ Manufacturer liability and guarantee will be void.
- Only use the product in accordance with the operating conditions specified in the contract documentation and in this document.

NOTICE

Explosion protection (ATEX)

- ▶ The product is free from potential ignition sources and does not fall under the ATEX Directive 2014/34/EU. It is suitable for use in potentially explosive areas. See the manufacturer's declaration.

The product is intended for use in potentially explosive areas.

The product is designed for installation in piping systems and for controlling a working medium.

- Use the product in accordance with the technical data.

5 Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Products ordered with **bold marked ordering options** are so-called preferred series. Depending on the nominal size, these are available more quickly.

Order codes

| 1 Type | Code |
|-----------------------------|------|
| Butterfly valve body, metal | K415 |

| 2 DN | Code |
|-------|------|
| DN 15 | 15 |
| DN 20 | 20 |
| DN 25 | 25 |
| DN 32 | 32 |
| DN 40 | 40 |
| DN 50 | 50 |

| 3 Body configuration | Code |
|----------------------|------|
| 2/2-way body | D |

| 4 Connection type | Code |
|--|------|
| Spigot | |
| Spigot DIN | 0 |
| Spigot DIN EN 10357 series B (2014 issue; formerly DIN 11850 series 1) | 16 |
| Spigot EN 10357 series A/DIN 11866 series A, formerly DIN 11850 series 2 | 17 |
| Spigot SMS 3008 | 37 |
| Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C | 59 |
| Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B | 60 |
| Threaded socket | |
| Threaded socket DIN ISO 228 | 1 |
| NPT female thread | 31 |
| Clamp | |
| Clamp DIN 32676 series A, face-to-face dimension FTF EN 558 series 14 | 86 |
| Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 14 | 88 |

| 5 Body material | Code |
|----------------------------|------|
| 1.4408, investment casting | 37 |

| 6 Shut-off seal material | Code |
|--------------------------|------|
| FKM | 4 |
| Silicone (MVQ) | 9 |
| EPDM | 14 |

| 7 Type of design | Code |
|---|------|
| Without | |
| Media wetted area cleaned to ensure suitability for paint applications, parts sealed in plastic bag | 0101 |

| 7 Type of design | Code |
|--|------|
| Valve free of oil and grease, media wetted area cleaned and packed in PE bag | 0107 |

| 8 Special version | Code |
|---|------|
| Without | |
| Explosion protection | X |
| Explosion protection (in the piping system) | Y |

Order example

| Ordering option | Code | Description |
|--------------------------|------|-----------------------------|
| 1 Type | K415 | Butterfly valve body, metal |
| 2 DN | 25 | DN 25 |
| 3 Body configuration | D | 2/2-way body |
| 4 Connection type | 1 | Threaded socket DIN ISO 228 |
| 5 Body material | 37 | 1.4408, investment casting |
| 6 Shut-off seal material | 14 | EPDM |
| 7 Type of design | | Without |
| 8 Special version | | Without |

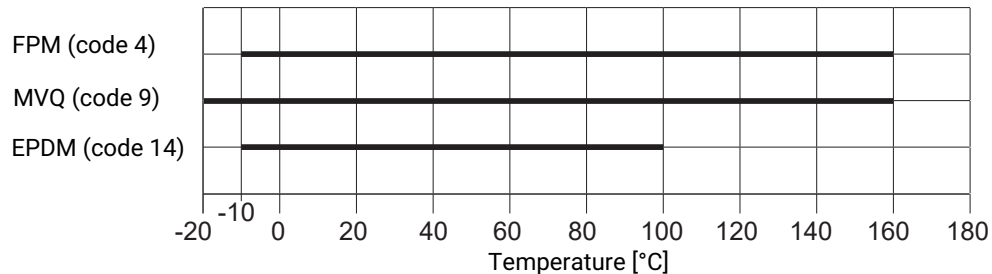
6 Technical data

6.1 Medium

Working medium: Corrosive, inert, gaseous, viscous and liquid media which have no negative impact on the physical and chemical properties of the body, disc and seal material.

6.2 Temperature

Media temperature: Shut-off seal



Ambient temperature: -10 – 60 °C

Storage temperature: -20 – 40 °C

6.3 Pressure

Operating pressure: 0 – 10 bar

Pressure rating: PN 10

Kv values:

| DN | Body material |
|----|---------------|
| | Code 37 |
| 15 | 7 |
| 20 | 15 |
| 25 | 20 |
| 32 | 55 |
| 40 | 90 |
| 50 | 140 |

Kv values in m³/h

6.4 Product compliance

Machinery Directive: 2006/42/EC

Pressure Equipment Directive: 2014/68/EU

Approvals: FDA

Explosion protection: The product does not fall within the scope of Directive 2014/34/EU, as there is no potential ignition source. The basis for this is Section 38 of the ATEX Guideline (5th edition, April 2024).

6.5 Mechanical data**Torques:**

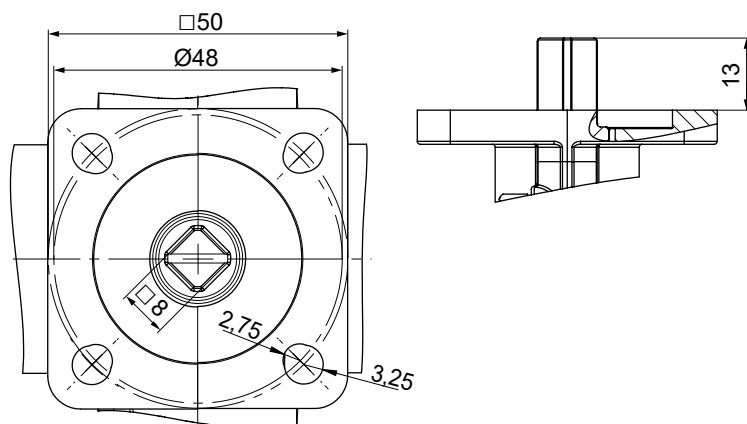
| DN | Torques |
|----|---------|
| 15 | 6.0 |
| 20 | 6.0 |
| 25 | 6.0 |
| 32 | 8.0 |
| 40 | 20.0 |
| 50 | 21.0 |

Torques in Nm

Weight:**Body**

| DN | Body material |
|----|---------------|
| | Code 37 |
| 15 | 900 |
| 20 | 940 |
| 25 | 1020 |
| 32 | 1100 |
| 40 | 1500 |
| 50 | 1950 |

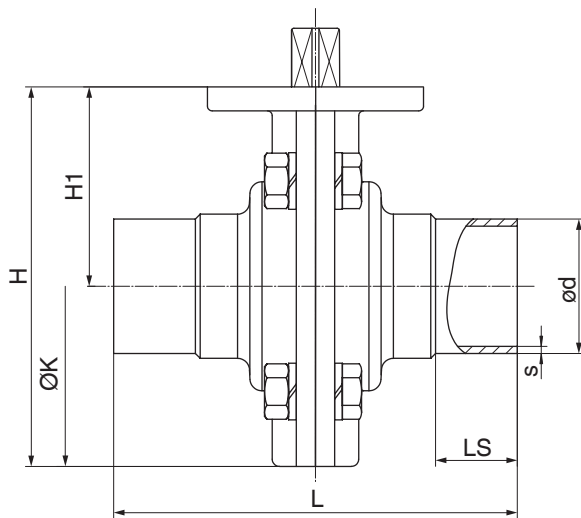
Weight in g

7 Dimensions**7.1 Actuator flange F05/G05**

Dimensions in mm

7.2 Body

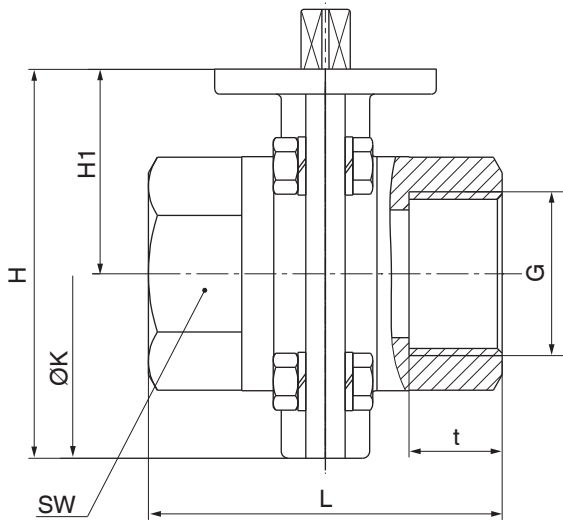
7.2.1 Butt weld spigot (connection type code 0, 16, 17, 37, 59, 60)



| DN | NPS | L | H | H1 | ØK | LS | DIN | | EN 10357 | | | |
|----|------|-------|-------|------|-------|------|--------|-----|----------|-----|---------|-----|
| | | | | | | | Code 0 | s | Code 16 | | Code 17 | |
| | | | | | | | ød | s | ød | s | ød | s |
| 15 | 1/2" | 80.0 | 79.0 | 41.5 | 75.0 | 20.0 | 18.0 | 1.5 | 18.0 | 1.0 | 19.0 | 1.5 |
| 20 | 3/4" | 84.0 | 79.0 | 41.5 | 75.0 | 22.0 | 22.0 | 1.5 | 22.0 | 1.0 | 23.0 | 1.5 |
| 25 | 1" | 84.0 | 79.0 | 41.5 | 75.0 | 22.0 | 28.0 | 1.5 | 28.0 | 1.0 | 29.0 | 1.5 |
| 32 | 1¼" | 88.0 | 91.0 | 48.0 | 85.0 | 25.0 | 34.0 | 1.5 | 34.0 | 1.0 | 35.0 | 1.5 |
| 40 | 1½" | 96.0 | 108.0 | 56.0 | 103.0 | 25.0 | 40.0 | 1.5 | 40.0 | 1.0 | 41.0 | 1.5 |
| 50 | 2" | 110.0 | 123.0 | 65.0 | 116.0 | 30.0 | 52.0 | 1.5 | 52.0 | 1.0 | 53.0 | 1.5 |

| DN | NPS | L | H | H1 | ØK | LS | SMS 3008 | | EN ISO 1127 | | ASME BPE | |
|----|------|-------|-------|------|-------|------|----------|-----|-------------|-----|----------|------|
| | | | | | | | Code 37 | s | Code 60 | | Code 59 | |
| | | | | | | | ød | s | ød | s | ød | s |
| 15 | 1/2" | 80.0 | 79.0 | 41.5 | 75.0 | 20.0 | - | - | 21.3 | 1.6 | 12.7 | 1.65 |
| 20 | 3/4" | 84.0 | 79.0 | 41.5 | 75.0 | 22.0 | - | - | 26.9 | 1.6 | 19.1 | 1.65 |
| 25 | 1" | 84.0 | 79.0 | 41.5 | 75.0 | 22.0 | 25.0 | 1.2 | 33.7 | 2.0 | 25.4 | 1.65 |
| 32 | 1¼" | 88.0 | 91.0 | 48.0 | 85.0 | 25.0 | 33.7 | 1.2 | 42.4 | 2.0 | - | - |
| 40 | 1½" | 96.0 | 108.0 | 56.0 | 103.0 | 25.0 | 38.0 | 1.2 | 48.3 | 2.0 | 38.1 | 1.65 |
| 50 | 2" | 110.0 | 123.0 | 65.0 | 116.0 | 30.0 | 51.0 | 1.2 | 60.3 | 2.0 | 50.8 | 1.65 |

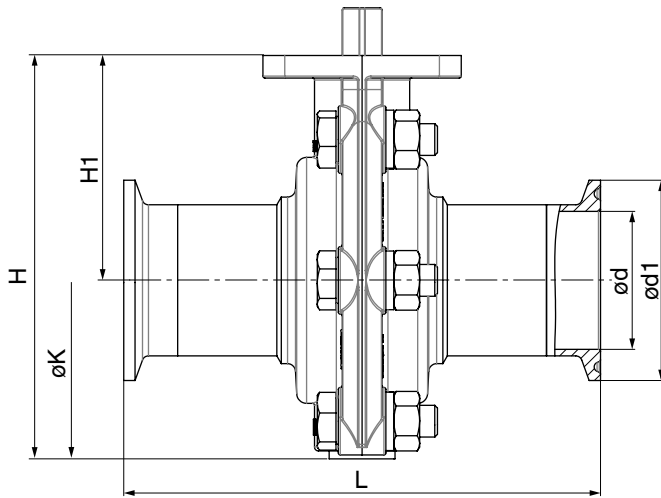
Dimensions in mm

7.2.2 Threaded socket (connection type code 1, 31)

| DN | G/NPT | L | H | H1 | t | øK | SW | n |
|----|-------|------|-------|------|------|-------|------|---|
| 15 | 1/2" | 72.0 | 79.0 | 41.5 | 15.0 | 75.0 | 27.0 | 6 |
| 20 | 3/4" | 72.0 | 79.0 | 41.5 | 16.0 | 75.0 | 32.0 | 6 |
| 25 | 1" | 72.0 | 79.0 | 41.5 | 19.0 | 75.0 | 41.0 | 6 |
| 32 | 1¼" | 72.0 | 91.0 | 48.0 | 21.4 | 85.0 | 50.0 | 8 |
| 40 | 1½" | 83.0 | 108.0 | 56.0 | 21.4 | 103.0 | 55.0 | 8 |
| 50 | 2" | 88.0 | 123.0 | 65.0 | 25.7 | 116.0 | 70.0 | 8 |

Dimensions in mm
n = number of flats

7.2.3 Clamp (connection type code 86, 88)



| DN | NPS | L | H | H1 | øK | DIN 32676 series A | | ASME BPE | |
|----|------|-------|-------|------|-------|--------------------|------|----------|------|
| | | | | | | Code 86 | | Code 88 | |
| | | | | | | ød | ød1 | ød | ød1 |
| 15 | 1/2" | 115.0 | 79.0 | 41.5 | 75.0 | 16.0 | 34.0 | 9.4 | 25.0 |
| 20 | 3/4" | 120.0 | 79.0 | 41.5 | 75.0 | 20.0 | 34.0 | 15.8 | 25.0 |
| 25 | 1" | 125.0 | 79.0 | 41.5 | 75.0 | 26.0 | 50.5 | 22.1 | 50.5 |
| 32 | 1¼" | 130.0 | 91.0 | 48.0 | 85.0 | 32.0 | 50.5 | - | - |
| 40 | 1½" | 140.0 | 108.0 | 56.0 | 103.0 | 38.0 | 50.5 | 34.8 | 50.5 |
| 50 | 2 | 150.0 | 123.0 | 65.0 | 116.0 | 50.0 | 50.5 | 47.5 | 64.0 |

Dimensions in mm

8 Manufacturer's information

8.1 Delivery

- Check that all parts are present and check for any damage immediately upon receipt.

The product's performance is tested at the factory. The scope of delivery is apparent from the dispatch documents and the design from the order number.

8.2 Transport



1. Only transport the product by suitable means. Do not drop. Handle carefully.
2. After the installation dispose of transport packaging material according to relevant local or national disposal regulations / environmental protection laws.



8.3 Storage



1. Store the product free from dust and moisture in its original packaging.
2. Avoid UV rays and direct sunlight.
3. Do not exceed the maximum storage temperature (see chapter "Technical data").
4. Do not store solvents, chemicals, acids, fuels or similar fluids in the same room as GEMÜ products and their spare parts.
5. Close the compressed air connections with protection caps or sealing plugs.



9 Installation in piping



9.1 Preparing for installation



|  WARNING | |
|--|--|
|  | <p>The equipment is subject to pressure!</p> <ul style="list-style-type: none"> ▶ Risk of severe injury or death ● Depressurize the plant or plant component. ● Completely drain the plant or plant component. |



|  WARNING | |
|--|--|
|  | <p>Corrosive chemicals!</p> <ul style="list-style-type: none"> ▶ Risk of caustic burns ● Wear appropriate protective gear. ● Completely drain the plant. |



|  WARNING | |
|--|--|
|  | <p>GEMÜ products without an actuating element!</p> <ul style="list-style-type: none"> ▶ Risk of severe injury or death ● Do not apply pressure to GEMÜ products installed in piping without an actuating element. |

|  CAUTION | |
|--|--|
|  | <p>Hot plant components!</p> <ul style="list-style-type: none"> ▶ Burns ● Only work on plant that has cooled down. ● Wear protective gear. |

|  CAUTION | |
|--|---|
|  | <p>Leakage!</p> <ul style="list-style-type: none"> ▶ Emission of dangerous materials ● Provide for precautionary measures against exceeding the maximum permissible pressure that may be caused by pressure surges (water hammer). |

|  CAUTION | |
|--|--|
|  | <p>Maximum permissible pressure exceeded!</p> <ul style="list-style-type: none"> ▶ Damage to the product! ● Provide for precautionary measures against exceeding the maximum permissible pressure that may be caused by pressure surges (water hammer). |

|  CAUTION | |
|---|---|
|  | <p>Use as an end-of-line valve!</p> <ul style="list-style-type: none"> ▶ Damage to the GEMÜ product ● When using the GEMÜ product as an end-of-line valve, a mating flange must be fitted. |

|  CAUTION | |
|--|---|
|  | <p>Risk of crushing!</p> <ul style="list-style-type: none"> ▶ Severe injury due to crushing of the fingers between the valve body and butterfly disc. ● Depressurize the plant before performing any work on the butterfly valve, and unscrew the control medium line(s) of the butterfly valve. ● Ensure that the butterfly disc is in the respective end position (closed for NC or open for NO). ● Do not reach into the crushing area between the valve body and butterfly disc. |

CAUTION**Risk of crushing!**

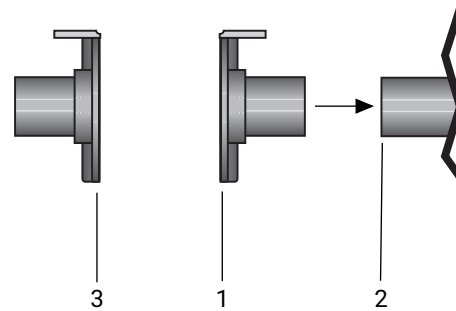
- ▶ There is a risk of crushing when reaching into the valve.
- Installation and removal of the valve may only be performed by suitable/trained personnel.
- Install only if the valve is deenergized (without control energy).
- When used as an end-of-line valve, a mating flange must be used.
- The operator must ensure that the valve is adequately secured by piping, e.g. pipe bends or grids.

NOTICE**Suitability of the product!**

- ▶ The product must be appropriate for the piping system operating conditions (medium, medium concentration, temperature and pressure) and the prevailing ambient conditions.
1. Ensure the product is suitable for the relevant application.
 2. Check the technical data of the product and the materials.
 3. Keep appropriate tools ready.
 4. Wear appropriate protective gear, as specified in the plant operator's guidelines.
 5. Observe appropriate regulations for connections.
 6. Have installation work carried out by trained personnel.
 7. Shut off plant or plant component.
 8. Secure plant or plant component against recommissioning.
 9. Depressurize the plant or plant component.
 10. Completely drain the plant (or plant component) and let it cool down until the temperature is below the media vaporization temperature and cannot cause scalding.
 11. Correctly decontaminate, rinse and ventilate the plant or plant component.
 12. Lay piping so that the product is protected against transverse and bending forces, and also from vibrations and tension.
 13. Only install the product between matching aligned pipes (see chapters below).

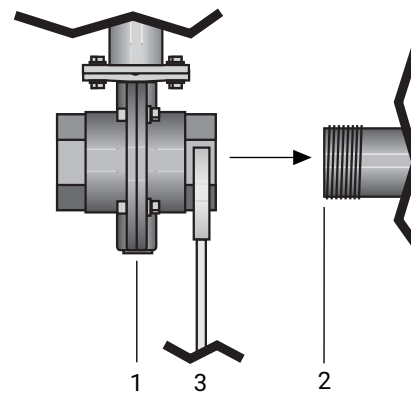
9.2 Installation position

GEMÜ recommends a vertically upright installation position of the actuator.

9.3 Installation with butt weld spigots

Installation - Butt weld spigots

1. Carry out preparations for installation (see chapter "Preparing for installation").
2. Adhere to good welding practices!
3. Disassemble the butterfly valve (see chapter "Butterfly valve disassembly (removing the actuator from the body)").
4. Remove the protection caps.
5. Weld the butterfly body half **1** to the piping **2**.
6. Connect the butterfly body half **3** with the other side of the piping.
7. Reassemble the butterfly valve (see chapter "Assembling the shut-off seal").

9.4 Installation with threaded connections

Installation - Threaded connections

1. Screw the butterfly valve body **1** onto the piping **2** using a suitable thread sealant. The thread sealant is not included in the scope of delivery.
2. Hold with an open-end wrench **3**.
3. Connect the other side of the butterfly valve body **1** with the piping in a like manner.

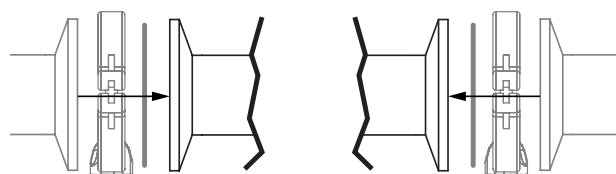
9.5 Installation with clamp connections

Fig. 1: Clamp connection

NOTICE**Gasket and clamp!**

- ▶ The gasket and clamps for clamp connections are not included in the scope of delivery.

1. Keep ready gasket and clamp.
2. Carry out preparation for installation (see chapter "Preparing for installation").
3. Insert the corresponding gasket between the body of the product and the pipe connection.
4. Connect the gasket between the body of the product and the pipe connection using clamps.
5. Re-attach or reactivate all safety and protective devices.

10 Commissioning**⚠ WARNING****Corrosive chemicals!**

- ▶ Risk of caustic burns
- Wear appropriate protective gear.
- Completely drain the plant.

⚠ CAUTION**Leakage!**

- ▶ Emission of dangerous materials
- Provide for precautionary measures against exceeding the maximum permissible pressure that may be caused by pressure surges (water hammer).

⚠ CAUTION**Cleaning agent!**

- ▶ Damage to the GEMÜ product
- The plant operator is responsible for selecting the cleaning material and performing the procedure.

1. Check the tightness and the function of the product (close and reopen the product).
2. Flush the piping system of new plant and following repair work (the product must be fully open).
 - ⇒ Harmful foreign matter has been removed.
 - ⇒ The product is ready for use.
3. Commission the product.
4. Commissioning of actuators in accordance with the enclosed instructions.

11 Operation


The product is operated via manual, pneumatic or motorized actuators.

12 Troubleshooting

| Error | Possible cause | Troubleshooting |
|--|--|--|
| The product does not open or does not open fully | Operating pressure too high | Operate the product with operating pressure specified in datasheet |
| | Foreign matter in the product | Remove and clean the product |
| | The actuator design is not suitable for the operating conditions | Use an actuator that is designed for the operating conditions |
| | Flange dimensions do not comply with specifications | Use correct flange dimensions |
| | Inside diameter of piping too small for nominal size of product | Install product with suitable nominal size |
| The product does not close or does not close fully | Operating pressure too high | Operate the product with operating pressure specified in datasheet |
| | The actuator design is not suitable for the operating conditions | Use an actuator that is designed for the operating conditions |
| | Foreign matter in the product | Remove and clean the product |
| Connection between valve body and piping leaking | Incorrect installation | Check installation of valve body in piping |
| | Threaded connections / unions loose | Tighten threaded connections / unions |
| Valve body leaking | Valve body leaking or corroded | Check valve body for damage, replace valve body if necessary |
| | Incorrect installation | Check installation of valve body in piping |

13 Inspection and maintenance


⚠ WARNING



The equipment is subject to pressure!

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


⚠ CAUTION



Hot plant components!

- ▶ Burns
- Only work on plant that has cooled down.
- Wear protective gear.

⚠ CAUTION



Risk of crushing!

- ▶ There is a risk of crushing when reaching into the valve.
- Installation and removal of the valve may only be performed by suitable/trained personnel.
- Install only if the valve is deenergized (without control energy).
- When used as an end-of-line valve, a mating flange must be used.
- The operator must ensure that the valve is adequately secured by piping, e.g. pipe bends or grids.

⚠ CAUTION

- Servicing and maintenance work must only be performed by trained personnel.
- Do not extend hand lever. GEMÜ shall assume no liability for damages caused by improper handling or third-party actions.
- In case of doubt, contact GEMÜ prior to commissioning.

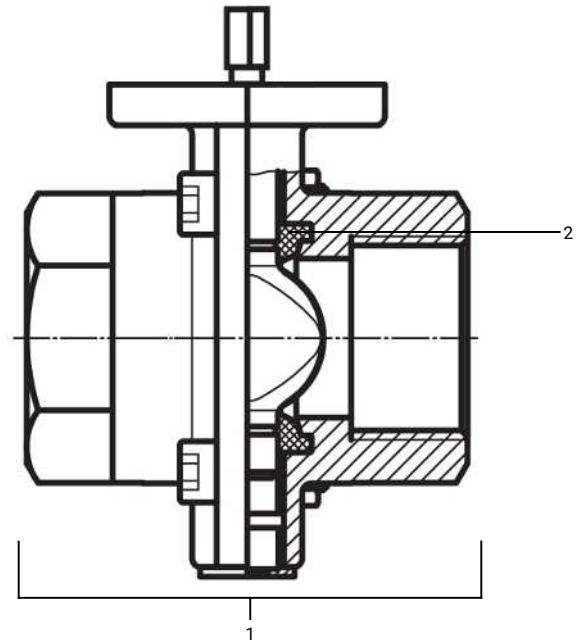
1. Wear appropriate protective gear as specified in the plant operator's guidelines.
2. Shut off plant or plant component.
3. Secure against recommissioning.
4. Depressurize the plant or plant component.

The operator must carry out regular visual examination of the products depending on the operating conditions and the potential danger in order to prevent leakage and damage. The product also has to be disassembled in corresponding intervals and checked for wear (see "Fitting/removing spare parts").

13.1 Cleaning the product

- Clean the product with a damp cloth.
- Do **not** clean the product with a high pressure cleaning device.

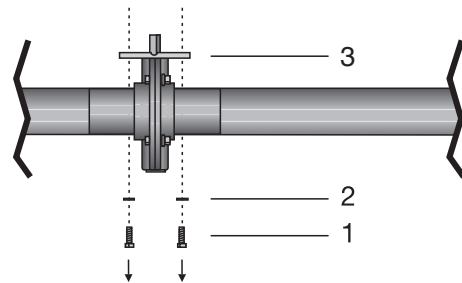
13.2 Spare parts



| Item | Name | Order designation |
|------|---------------|-------------------|
| 1 | Body | K415 |
| 2 | Shut-off seal | 415 SLN |

13.3 Fitting/removing spare parts

13.3.1 Butterfly valve disassembly (removing the actuator from the body)



1. Depressurize and drain the plant or plant component.
2. Move the butterfly valve to the closed position.
3. Disconnect electrical wire(s).
4. Unscrew bolts 1.
5. Do not lose the washers 2.
6. Remove the actuator from the butterfly valve body 3.

NOTICE

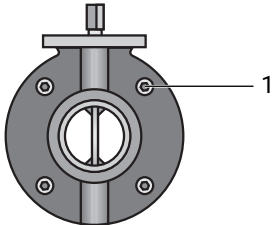
- ▶ Clean all parts of contamination (do not damage the parts during cleaning) following removal. Check parts for potential damage, replace if necessary (only use genuine parts from GEMÜ).

13.3.2 Disassembling the shut-off seal

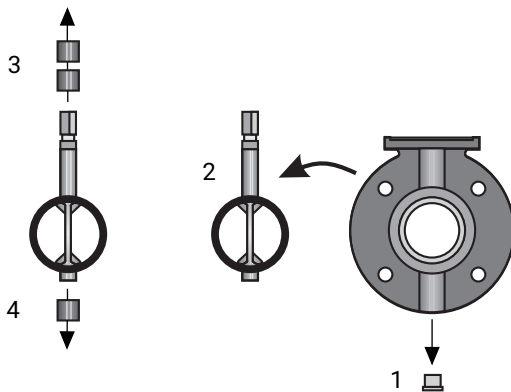
NOTICE

- Before removing the shut-off seal, please remove the actuator, see "Butterfly valve disassembly (removing the actuator from the body)".

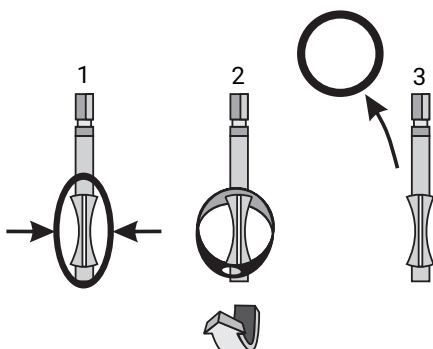
1. Remove the actuator (see chapter "Butterfly valve disassembly")
2. Undo screws **1**.



3. Do not lose nuts and washers.
4. Press open the two halves of the butterfly valve.
5. Do not lose the protective cap **1**.
6. Remove the disc with shut-off seal **2**.

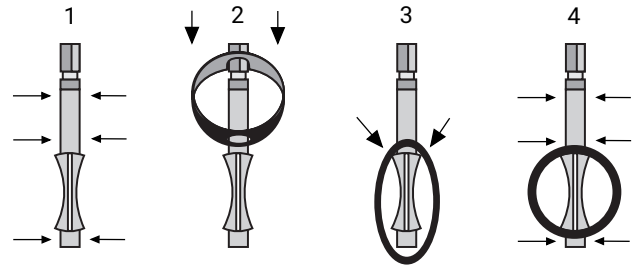


7. Do not use bushings **3** and **4**.
8. Squeeze the shut-off seal (**1**) and pull forward down over the short part of the shaft (**2**).



9. Pull the shut-off seal up over the long part of the shaft (**3**).

13.3.3 Assembling the shut-off seal

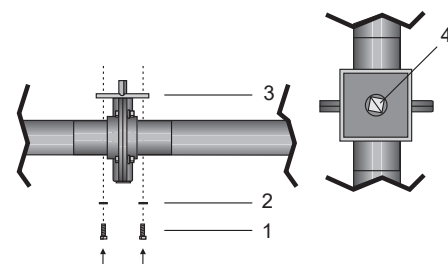


Assembling a new shut-off seal

1. Grease the shaft of the valve disc above and below the disc (**1**).
2. Grease the shut-off seal in the axis and shaft area.
3. Push a new shut-off seal with a hole over the long part of the shaft (**2**).
4. Squeeze the shut-off seal and slip over the short part of the shaft (**3**).
5. Engage the shut-off seal.
6. Grease the shaft of the valve disc above and below the shut-off seal (**4**).
7. Press open the two halves of the butterfly valve.
8. Insert the disc with the shut-off seal between the two halves of the butterfly valve.
9. Press the two halves of the butterfly valve together.
10. Insert the bolts and tighten them diagonally with nuts and washers.

| | |
|---|---|
| 1 | 3 |
| 4 | 2 |
11. Push the protective cap into the bottom of the butterfly valve body.

13.3.4 Actuator mounting on the butterfly valve body



1. Check the position of the butterfly disc indicated by groove **4** and compare it with the position indicator, rotate the butterfly disc to the correct position if necessary.
2. Place the new actuator on the butterfly valve body **3**.
3. Turn the actuator until the bolts can be inserted.
4. Screw the bolts **1** with the washers **2** back in until they are hand tight.
5. Tighten the bolts **1** diagonally.

13.4 Removal from piping

1. Disassemble the product. Observe warning notes and safety information.
2. Remove in reverse order to installation.

14 Disposal

1. Pay attention to adhered residual material and gas diffusion from penetrated media.
2. Dispose of all parts in accordance with the disposal regulations/environmental protection laws.

15 Returns

Legal regulations for the protection of the environment and personnel require that the completed and signed return delivery note is included with the dispatch documents. Returned goods can be processed only when this note is completed. If no return delivery note is included with the product, GEMÜ cannot process credits or repair work but will dispose of the goods at the operator's expense.

1. Clean the product.
2. Request a return delivery note from GEMÜ.
3. Complete the return delivery note.
4. Send the product with a completed return delivery note to GEMÜ.

16 EU Declaration of Conformity



Version 1



EU-Konformitätserklärung

EU Declaration of Conformity

Wir, die Firma

We, the company

GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
Gert-Müller-Platz 1
74635 Kupferzell
Deutschland

erklären hiermit in alleiniger Verantwortung, dass die nachfolgend bezeichneten Produkte den Vorschriften der genannten Richtlinien entspricht.

hereby declare under our sole responsibility that the below-mentioned products complies with the regulations of the mentioned Directives.

Produkt: GEMÜ K415**Product:** GEMÜ K415**Produktname:** Absperrklappe mit freiem Wellenende**Product name:** Butterfly valve with bare shaft**Richtlinien/Verordnungen:****Directives/Regulations:**PED 2014/68/EU¹⁾**Weitere angewandte Normen:****Further applied norms:**

EN ISO 5211; DIN EN 558; AD 2000

¹⁾ PED 2014/68/EU

Notifizierte Stelle:
TÜV Rheinland Industrie Service GmbH
Am Grauen Stein 1
51105 Köln

Kennnummer der notifizierten Stelle: 0035**Nr. des QS-Zertifikats:** 01 202 926/Q-02 0036**Angewandte(s) Konformitätsbewertungsverfahren:** Modul H**Hinweis für Produkte mit einer Nennweite ≤ DN 25:**

Die Produkte werden entwickelt und produziert nach GEMÜ eigenen Verfahrens- anweisungen und Qualitätsstandards, welche die Forderungen der ISO 9001 und der ISO 14001 erfüllen. Die Produkte dürfen gemäß Artikel 4, Absatz 3 der Druckgeräte- richtlinie 2014/68/EU keine CE-Kennzeichnung tragen.

Bemerkungen:

Der Einsatz des Produkts in Kategorie III gemäß Druckgeräterichtlinie 2014/68/EU so- wie die Verwendung mit instabilen Gasen ist nicht zulässig.

¹⁾ PED 2014/68/EU

Notified body:
TÜV Rheinland Industrie Service GmbH
Am Grauen Stein 1
51105 Cologne

Identification number of the notified body: 0035**QA certificate number:** 01 202 926/Q-02 0036**Applied conformity assessment procedures:** Module H**Note for products with a nominal size ≤ DN 25:**

The products are developed and manufactured in accordance with GEMÜ's own pro- cess instructions and quality standards, which meet the requirements of ISO 9001 and ISO 14001. In accordance with Article 4, Paragraph 3 of the Pressure Equipment Di- rective 2014/68/EU, the products are not permitted to bear the CE mark.

Remarks:

The use of the product in category III in accordance with the Pressure Equipment Di- rective 2014/68/EU and its use with unstable gases is not permitted.

i.V. M. Barghoorn
Leiter Globale Technik
Kupferzell, 24.02.2026

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Subject to alteration

04.2026 | 89003955