

GEMÜ B24

Manually operated ball valve



Features

- Checked delta ferrite material < 3% (1.4435)
- Material certificates for media wetted components
- Media wetted surfaces according to ASME SF5 (Ra 0.51 µm)
- Butt weld spigots in extended orbital welding design
- Optionally available with cavity-filled seat
- Suitable for vacuum applications
- Option: ATEX version
- Ball valve body, assembled free of oil/grease

Description

The GEMÜ B24 3-piece body 2/2-way metal ball valve is manually operated. The 1.4435 stainless steel alloy material composition used for the ball valve body (compliant with 316L) with a low delta ferrite proportion of < 3% is particularly suited to applications in the supply sector for the pharmaceutical, foodstuffs processing and biotechnology (such as water treatment and sterile steam generation) industries. Only those plastics which are compliant with FDA, USP Class VI and Regulation (EU) No.10/2011 are used for the seals.

Technical specifications

- **Media temperature:** -10 to 220 °C
- **Ambient temperature:** -20 to 60 °C
- **Operating pressure :** 0 to 63 bar
- **Nominal sizes:** DN 8 to 100
- **Body configurations:** 2/2-way body
- **Connection type:** Clamp | Spigot
- **Connection standards:** ASME | DIN | ISO | SMS
- **Body materials:** 1.4435 (316L), investment casting material
- **Seal materials:** PTFE
- **Conformities:** ATEX | EAC | FDA | Reg. (EU) No. 10/2011 | Regulation (EC) No. 1935/2004 | TA Luft (German Clean Air Act) | USP

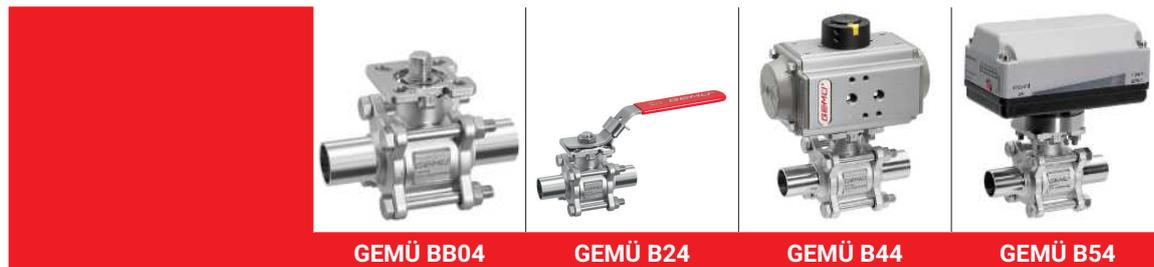
Technical data depends on the respective configuration



further information
webcode: GW-B24



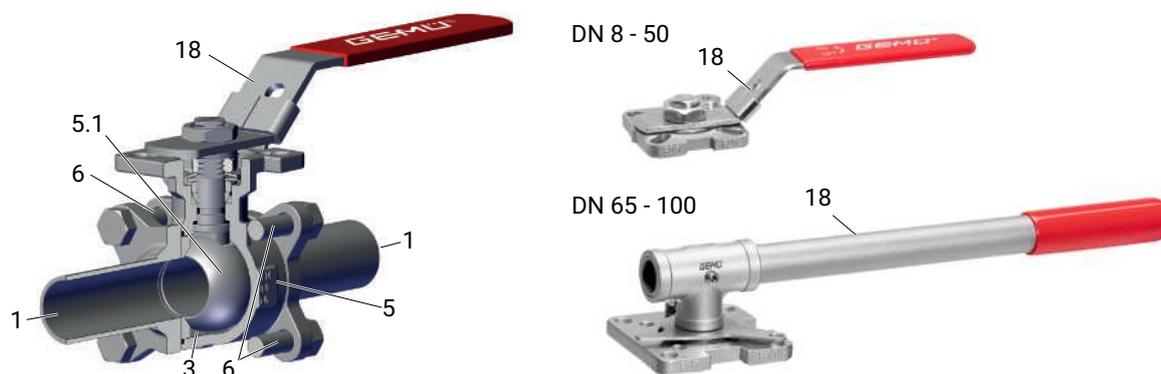
Product line



| | GEMÜ BB04 | GEMÜ B24 | GEMÜ B44 | GEMÜ B54 |
|---------------------------|---------------|---------------|---------------|---------------|
| Operation | | | | |
| With bare shaft | ● | - | - | - |
| Manual | - | ● | - | - |
| Pneumatic | - | - | ● | - |
| Motorized | - | - | - | ● |
| Nominal sizes | DN 8 to 100 |
| Media temperature | -10 to 220 °C |
| Operating pressure | 0 to 63 bar |
| Connection types | | | | |
| Clamp | ● | ● | ● | ● |
| Spigot | ● | ● | ● | ● |

Product description

Construction



| Item | Name | Materials |
|------|------------------|-------------------------|
| 5 | Ball valve body | ASTM A351/1.4435 (316L) |
| 1 | Pipe connections | ASTM A351/1.4435 (316L) |
| 5.1 | Ball | ASTM A351/1.4435 (316L) |
| 18 | Hand lever | 304 |
| 6 | Bolt | A2 70 |
| 3 | Seal | PTFE |

Cavity-filled PTFE seal (Code 5H)

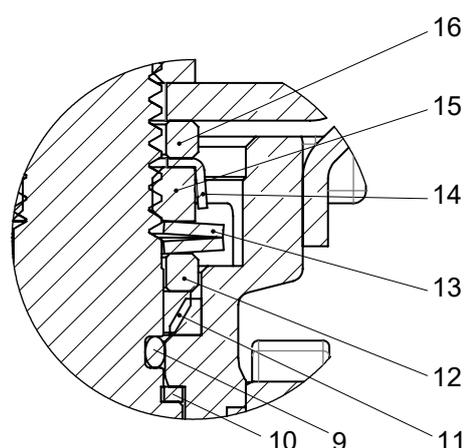


- The cavity-filled seal, which is made of PTFE, is specially designed to reduce excess volumes in the ball cavity.
- Media that remains in the valve's dead spaces is unwanted during food production, for example, and may decontaminate this.
- These deposits accumulate and contaminate the entire process. Thanks to this special seal variant, the volume in the ball cavity is reduced to a minimum.

Application

- Water treatment
- Steam processing
- CIP/SIP
- Waste water treatment
- Storage and distribution
- Drying

The spindle seal system



| Item | Name | Material |
|------|------------------------|--------------|
| 9 | O-ring | Viton |
| 10 | Seal | PTFE |
| 11 | V-ring | PTFE |
| 12 | Stainless steel sleeve | SS304-1.4301 |
| 13 | Spring washer | SS304-1.4301 |
| 14 | Cap | SS304-1.4301 |
| 15 | Spindle nut | A2 70 |
| 16 | Washer | SS304-1.4301 |

Long service life due to double spindle seal

- Conical spindle seal:

The seal **10** arranged at an angle of 45° effectively prevents the leakage of medium when operating the spindle

- Pretensioned self-adjusting spindle seal:

The spindle packing consists of several V-rings **11**, a spring washer **13** and a stainless steel sleeve **12**. The spring washer **13** is pretensioned via the spindle nut **14**. The pretension force is distributed to the V-rings **11** via the stainless steel sleeve **12**, thereby preventing the leakage of media. The pretension provides low maintenance and reliable spindle sealing even after a long service life.

GEMÜ CONEXO

The interaction of valve components that are equipped with RFID chips and an associated IT infrastructure actively increase process reliability.



Thanks to serialization, every valve and every relevant valve component such as the body, actuator or diaphragm, and even automation components, can be clearly traced and read using the CONEXO pen RFID reader. The CONEXO app, which can be installed on mobile devices, not only facilitates and improves the "installation qualification" process, but also makes the maintenance process much more transparent and easier to document. The app actively guides the maintenance technician through the maintenance schedule and directly provides him with all the information assigned to the valve, such as test reports, testing documentation and maintenance histories. The CONEXO portal acts as a central element, helping to collect, manage and process all data.

For further information on GEMÜ CONEXO please visit:

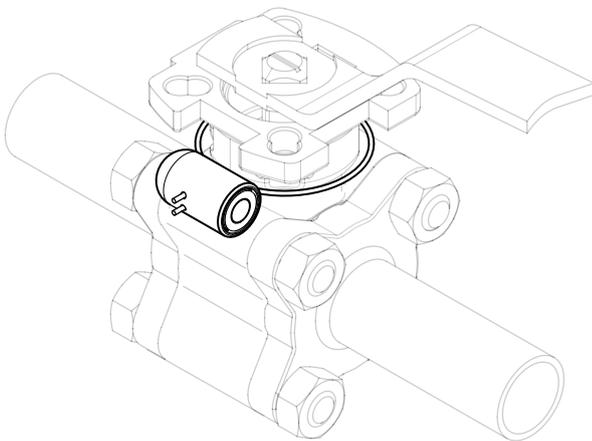
www.gemu-group.com/conexo

Ordering

GEMÜ Conexo must be ordered separately with the ordering option "CONEXO".

Installing the RFID chip

In the corresponding design with CONEXO, this product has an RFID chip for electronic identification purposes. The position of the RFID chip can be seen below.



Availability

| DN | NPS | Connection type code ¹⁾ | | | | | |
|-----|------|------------------------------------|----|----|----|----|----|
| | | 17 | 37 | 59 | 60 | 80 | 93 |
| 8 | 1/4" | - | - | - | X | - | - |
| 10 | 3/8" | X | - | - | X | - | - |
| 15 | 1/2" | X | - | X | X | X | X |
| 20 | 3/4" | X | X | X | X | X | X |
| 25 | 1" | X | X | X | X | X | X |
| 32 | 1¼" | X | - | - | X | - | - |
| 40 | 1½" | X | X | X | X | X | X |
| 50 | 2" | X | X | X | X | X | X |
| 65 | 2½" | X | X | X | X | X | X |
| 80 | 3" | X | X | X | X | X | X |
| 100 | 4" | X | X | X | X | X | X |

1) Connection type

Code 17: Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2

Code 37: Spigot SMS 3008

Code 59: Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C

Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B

Code 80: Clamp ASME BPE

Code 93: On one side, clamp ASME BPE corresponding to code 80, on the other side, butt weld spigot code 59, for pipe ASME BPE

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 |
|--|------|
| Ball valve, metal, manually operated, three-piece body, sanitary, checked delta ferrite material and media wetted surfaces according to ASME SF5, ISO 5211, top flange, lockable hand lever, low maintenance spindle seal and blow-out proof shaft, with antistatic unit | B24 |

| 2 DN | Code |
|--------|------|
| DN 8 | 8 |
| DN 10 | 10 |
| DN 15 | 15 |
| DN 20 | 20 |
| DN 25 | 25 |
| DN 32 | 32 |
| DN 40 | 40 |
| DN 50 | 50 |
| DN 65 | 65 |
| DN 80 | 80 |
| DN 100 | 100 |

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

| 4 Connection type | Code |
|--|-----------|
| 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 |
| Clamp ASME BPE | 80 |
| On one side, clamp ASME BPE corresponding to code 80, on the other side, butt weld spigot code 59, for pipe ASME BPE | 93 |

| 5 Ball valve material | Code |
|--|------|
| 1.4435/ASTM A351, low ferrite <3% (equivalent to 316L Δ Fe<3%) (body, connection, ball), 1.4409/SS316L (spindle) | C3 |

| 6 Seal material | Code |
|---|------|
| PTFE (FDA certification) | 5T |
| PTFE (FDA certification), cavity filled | 5H |

| 7 Control function | Code |
|---|------|
| Manually operated, hand lever, lockable | L |

| 8 Type of design | Code |
|--|------|
| Standard | |
| Ra ≤ 0.4 μm (μin.) for media wetted surfaces *), in accordance with DIN 11866 HE4, electropolished internal/external, *) for inner pipe diameter ≤ 6 mm, in spigot Ra ≤ 0.8 μm | 1537 |
| K-NO SF5, K-NO 5227, K-NO 7056, SF5 – Ra max. 0.51 μm (20 μin.) electropolished internal/external, 5227 – thermal separation by mounting kit, 7056 – drilled shaft, shortened hand lever | 5230 |
| K-NO SF5, K-NO 0101, K-NO 7056, SF5 – Ra max. 0.51 μm (20 μin.) electropolished internal/external, 0101 – media wetted area cleaned to ensure suitability for paint applications, 7056 – drilled shaft, shortened hand lever | 5231 |
| K-NO SF5, K-NO 0104, K-NO 5227, SF5 – Ra max. 0.51 μm (20 μin.) electropolished internal/external, 0104 – media wetted parts cleaned for high-purity media | 5232 |
| K-NO SF5, K-NO 0107, K-NO 7056, SF5 – Ra max. 0.51 μm (20 μin.) electropolished internal/external, 0107 – media wetted area cleaned to ensure suitability for paint applications, 7056 – drilled shaft, shortened hand lever | 5233 |
| K-NO SF5, K-NO 0101, K-NO 5227, SF5 – Ra max. 0.51 μm (20 μin.) electropolished internal/external, 0101 – media wetted area cleaned to ensure suitability for paint applications | 5234 |
| K-NO SF5, K-NO 0107, K-NO 5227, SF5 – Ra max. 0.51 μm (20 μin.) electropolished internal/external, 0107 – media wetted area cleaned to ensure suitability for paint applications | 5235 |
| K-NO SF5, K-NO 0107, K-NO 5227, K-NO 7056, SF5 – Ra max. 0.51 μm (20 μin.) electropolished internal/external, 0107 – media wetted area cleaned to ensure suitability for paint applications, 5227 – thermal separation by mounting kit, 7056 – drilled shaft, shortened hand lever | 5236 |
| K-NO SF5, K-NO 7056, SF5 – Ra max. 0.51 μm (20 μin.) electropolished internal/external, 7056 – drilled shaft, shortened hand lever | 7137 |
| K-NO SF5, K-NO 5227, SF5 – Ra max. 0.51 μm (20 μin.) electropolished internal/external, 5227 – thermal separation by mounting kit | 7138 |

| 8 Type of design | Code |
|--|------|
| K-NO SF5, K-NO 0101, SF5 – Ra max. 0.51 µm (20 µin.) electropolished internal/external, 0101 – media wetted area cleaned to ensure suitability for paint applications | 7140 |
| K-NO SF5, K-NO 0104, SF5 – Ra max. 0.51 µm (20 µin.) electropolished internal/external, 0104 – media wetted parts cleaned for high purity media and packed in plastic bag | 7141 |
| K-NO SF5, K-NO 0107, SF5 – Ra max. 0.51 µm (20 µin.) electropolished internal/external, 0107 – valve free of oil and grease, media wetted area cleaned | 7142 |
| Ra max. 0.38 µm (15 µin.) for media wetted surfaces, in accordance with ASME BPE SF4, electropolished internal/external | SF4 |
| Ra max. 0.51 µm (20 µin.) for media wetted surfaces, in accordance with ASME BPE SF5, electropolished internal/external | SF5 |
| 9 Special version | Code |
| Without | |
| ATEX certification | X |
| 10 CONEXO | Code |
| Without | |
| Integrated RFID chip for electronic identification and traceability | C |

Order example

| Ordering option | Code | Description |
|---------------------------|------|--|
| 1 Type | B24 | Ball valve, metal, manually operated, three-piece body, sanitary, checked delta ferrite material and media wetted surfaces according to ASME SF5, ISO 5211, top flange, lockable hand lever, low maintenance spindle seal and blow-out proof shaft, with antistatic unit |
| 2 DN | 15 | DN 15 |
| 3 Body/ball configuration | D | 2/2-way body |
| 4 Connection type | 59 | Spigot ASME BPE/DIN EN 10357 series C (from 2022 edition)/DIN 11866 series C |
| 5 Ball valve material | C3 | 1.4435/ASTM A351, low ferrite <3% (equivalent to 316L Δ Fe<3%) (body, connection, ball), 1.4409/SS316L (spindle) |
| 6 Seal material | 5T | PTFE (FDA certification) |
| 7 Control function | L | Manually operated, hand lever, lockable |
| 8 Type of design | | Standard |
| 9 Special version | | Without |
| 10 CONEXO | | Without |

Technical data

Medium

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

Temperature

Media temperature: -10 – 220 °C

Ambient temperature: -20 – 60 °C

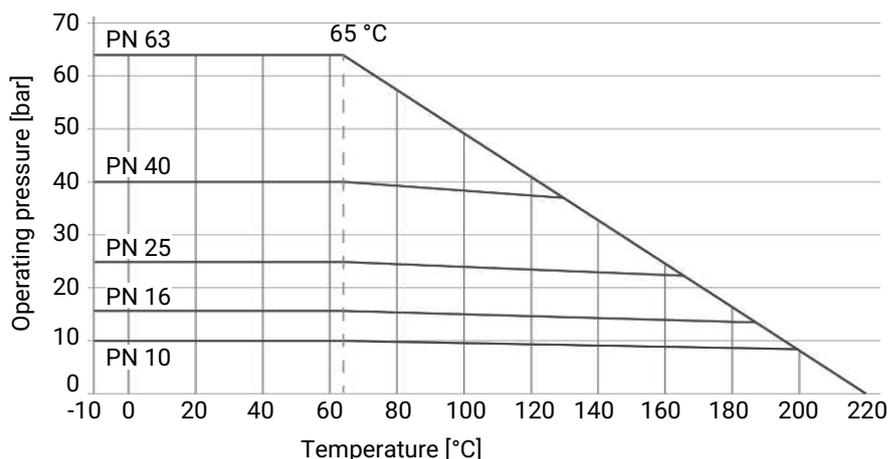
Storage temperature: -60 – 60 °C

Pressure

Operating pressure: 0 – 63 bar

Vacuum: Can be used up to a vacuum of 50 mbar (absolute)
 These values apply to room temperature and air. The values may deviate for other media and other temperatures.

Pressure/temperature diagram:



Pressure/temperature data in accordance with diagram refers to static operating conditions. Strongly fluctuating or fast-changing parameters can lead to a reduction of the service life. Special applications must be talked through with your technical contact person in advance.

Use the clamped union with the correct pressure rating for a safe and correct pipeline design. Pressure ratings of the clamp alone are generally higher, but do not take into account the fully clamped assembly with gasket

Leakage rate: Leakage rate according to ANSI FCI70 – B16.104
 Leakage rate according to EN12266, 6 bar air, leakage rate A

Technical data

Kv values:

| DN | NPS | Connection type (code) | | |
|-----|------|------------------------|----------------|--------|
| | | 17 | 37, 59, 80, 93 | 60 |
| 8 | 1/4" | 7.0 | - | 7.0 |
| 10 | 3/8" | 7.0 | - | 7.0 |
| 15 | 1/2" | 18.0 | 9.0 | 18.0 |
| 20 | 3/4" | 43.0 | 26.0 | 43.0 |
| 25 | 1" | 77.0 | 56.0 | 77.0 |
| 32 | 1¼" | 95.0 | - | 95.0 |
| 40 | 1½" | 206.0 | 172.0 | 206.0 |
| 50 | 2" | 344.0 | 327.0 | 344.0 |
| 65 | 2½" | 602.0 | 516.0 | 602.0 |
| 80 | 3" | 844.0 | 817.0 | 844.0 |
| 100 | 4" | 1462.0 | 1376.0 | 1462.0 |

Kv values in m³/h

Pressure rating:

| DN | Connection type (code) | | | |
|-----|------------------------|--------|------|--------|
| | 17 | 37, 59 | 60 | 80, 93 |
| 8 | - | - | PN63 | - |
| 10 | PN63 | - | PN63 | - |
| 15 | PN63 | PN63 | PN63 | PN25 |
| 20 | PN63 | PN63 | PN63 | PN25 |
| 25 | PN63 | PN63 | PN63 | PN25 |
| 32 | PN63 | - | PN63 | - |
| 40 | PN63 | PN63 | PN63 | PN25 |
| 50 | PN63 | PN63 | PN63 | PN16 |
| 65 | PN40 | PN40 | PN40 | PN16 |
| 80 | PN40 | PN40 | PN40 | PN10 |
| 100 | PN25 | PN25 | PN25 | PN10 |

For clamp connections, the permissible pressures are designed for a temperature of -10 to 140 °C when using suitable clamps and sealing materials.

Product conformities

Pressure Equipment Directive: 2014/68/EU

Food: FDA
Regulation (EC) No. 1935/2004
Regulation (EC) No. 10/2011

Explosion protection: ATEX (2014/34/EU), order code Special version X

ATEX assessment:

External
Gas: Zone 1, 2 IIC
Dust: Zone 21, 22 IIIC

Internal
Up to DN 32
Gas: Zone 1, 2 IIC
Dust: Zone 21, 22 IIIC

DN 40 to 100
Gas: Zone 1, 2 IIB
Dust: Zone 21, 22 IIIB

Mechanical data

Torques:

| DN | NPS | Seal material (code) | |
|-----|------|----------------------|-----|
| | | 5T | 5H |
| 8 | 1/4" | 4 | 4 |
| 10 | 3/8" | 4 | 4 |
| 15 | 1/2" | 8 | 12 |
| 20 | 3/4" | 8 | 12 |
| 25 | 1" | 13 | 19 |
| 32 | 1¼" | 16 | 22 |
| 40 | 1½" | 32 | 47 |
| 50 | 2" | 34 | 51 |
| 65 | 2½" | 91 | 105 |
| 80 | 3" | 104 | 120 |
| 100 | 4" | 140 | 209 |

Free of oil and grease incl. 25% safety
Torques in Nm

Weight:

Ball valve

| DN | NPS | Connection type (code) | | | |
|-----|------|------------------------|--------|------|--------|
| | | 17 | 37, 59 | 60 | 80, 93 |
| 8 | 1/4" | - | - | 0.5 | - |
| 10 | 3/8" | - | - | 0.5 | - |
| 15 | 1/2" | 0.8 | 0.5 | 0.5 | 0.5 |
| 20 | 3/4" | 0.8 | 0.5 | 0.8 | 0.5 |
| 25 | 1" | 1.1 | 1.0 | 1.1 | 1.1 |
| 32 | 1¼" | 1.6 | - | 1.6 | - |
| 40 | 1½" | 2.7 | 2.1 | 2.7 | 2.2 |
| 50 | 2" | 4.2 | 3.5 | 4.2 | 3.5 |
| 65 | 2½" | 8.2 | 7.0 | 8.2 | 7.1 |
| 80 | 3" | 11.6 | 11.0 | 11.6 | 11.8 |
| 100 | 4" | 24.0 | 20.0 | 24.0 | 20.5 |

Weights in kg

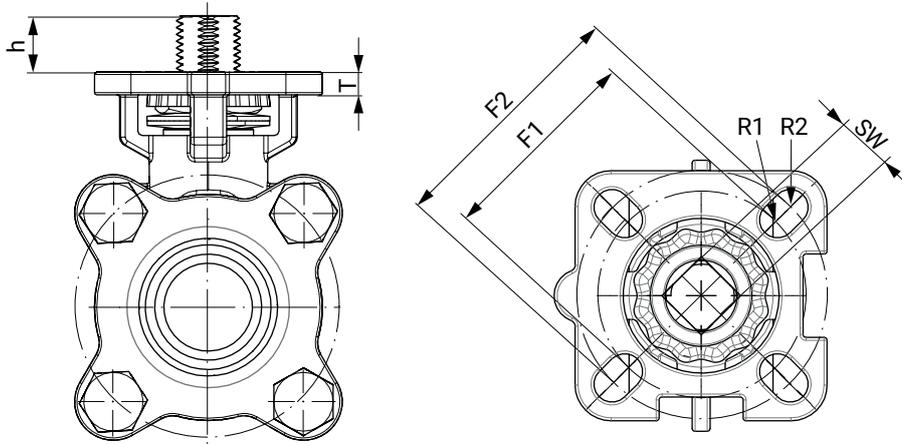
Hand lever

| DN | Designation | Weight |
|---------|-------------|--------|
| 8 - 20 | AB24 20D | 0.122 |
| 25 - 32 | AB24 32D | 0.165 |
| 40 - 50 | AB24 50D | 0.398 |
| 65 - 80 | AB24 80D | 0.78 |
| 100 | AB24100D | 0.96 |

Weights in kg

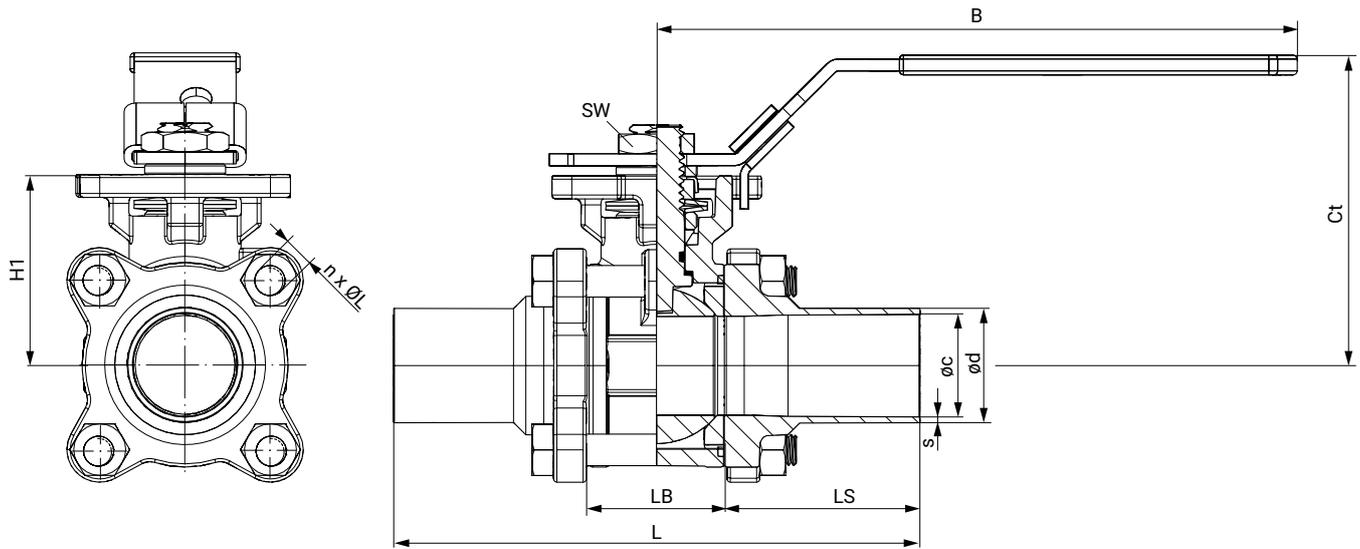
Dimensions

Actuator flange



| DN | G | F1 | ISO 5211 (F1) | R1 | F2 | ISO 5211 (F2) | R2 | SW | h | T |
|-----|--------|-------|---------------|-----|-------|---------------|-----|------|------|------|
| 8 | 1/4" | 36.0 | F03 | 3.0 | 42.0 | F04 | 3.0 | 9.0 | 9.0 | 5.0 |
| 10 | 3/8" | 36.0 | F03 | 3.0 | 42.0 | F04 | 3.0 | 9.0 | 9.0 | 5.0 |
| 15 | 1/2" | 36.0 | F03 | 3.0 | 42.0 | F04 | 3.0 | 9.0 | 9.0 | 5.0 |
| 20 | 3/4" | 36.0 | F03 | 3.0 | 42.0 | F04 | 3.0 | 9.0 | 7.5 | 5.0 |
| 25 | 1" | 42.0 | F04 | 3.0 | 50.0 | F05 | 3.5 | 11.0 | 13.0 | 7.0 |
| 32 | 1 1/4" | 42.0 | F04 | 3.0 | 50.0 | F05 | 3.5 | 11.0 | 13.0 | 7.0 |
| 40 | 1 1/2" | 50.0 | F05 | 3.5 | 70.0 | F07 | 4.5 | 14.0 | 15.0 | 9.0 |
| 50 | 2" | 50.0 | F05 | 3.5 | 70.0 | F07 | 4.5 | 14.0 | 16.0 | 9.0 |
| 65 | 2 1/2" | 50.0 | F07 | 3.5 | 70.0 | F10 | 4.5 | 17.0 | 18.0 | 10.5 |
| 80 | 3" | 70.0 | F07 | 4.5 | 102.0 | F10 | 5.5 | 17.0 | 18.0 | 10.5 |
| 100 | 4" | 102.0 | F10 | 4.5 | 125.0 | F12 | 5.5 | 22.0 | 26.0 | 10.5 |

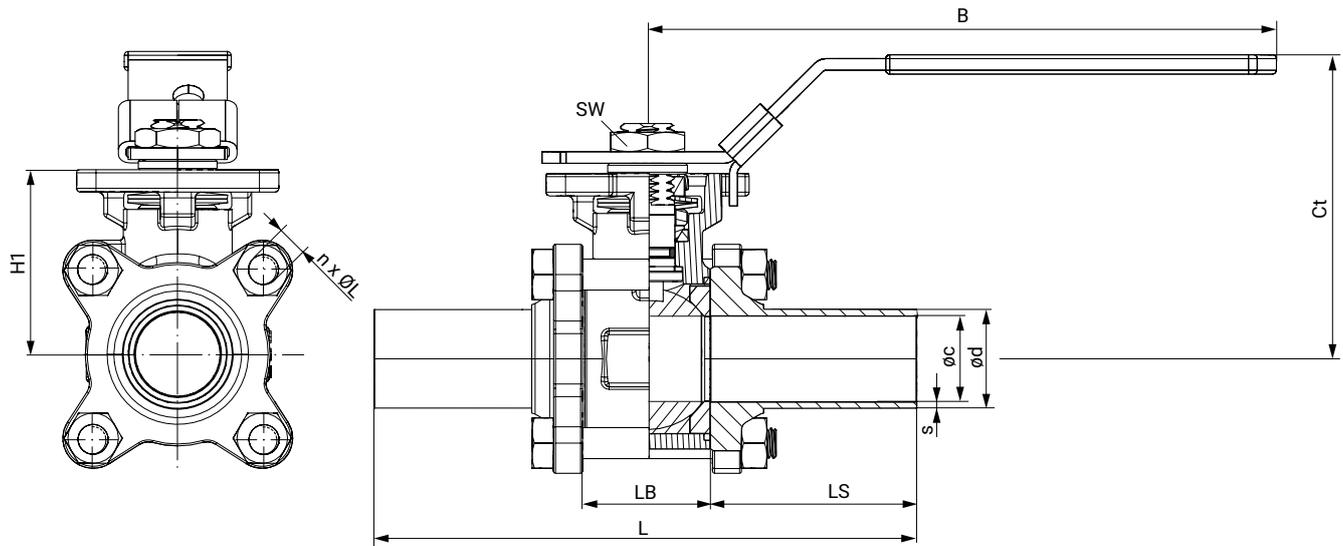
Dimensions in mm

Spigot DIN EN 10357 (connection code 17)

| DN | Øc | Ød | L | LB | LS | H1 | n x ØL | s | SW | Ct | B |
|-----|-------|-------|-------|-------|------|-------|---------|-----|------|-------|-------|
| 10 | 10.0 | 13.0 | 120.1 | 24.3 | 47.9 | 37.0 | 4 x M6 | 1.5 | 19.0 | 66.6 | 125.0 |
| 15 | 16.0 | 19.0 | 140.1 | 24.3 | 57.9 | 37.0 | 4 x M6 | 1.5 | 19.0 | 66.6 | 125.0 |
| 20 | 20.0 | 23.0 | 140.0 | 31.2 | 54.4 | 40.0 | 4 x M8 | 1.5 | 19.0 | 69.5 | 125.0 |
| 25 | 26.0 | 29.0 | 152.0 | 34.0 | 59.0 | 48.0 | 4 x M8 | 1.5 | 22.0 | 78.6 | 160.0 |
| 32 | 32.0 | 35.0 | 165.0 | 44.0 | 60.5 | 53.0 | 4 x M10 | 1.5 | 22.0 | 83.6 | 160.0 |
| 40 | 38.0 | 41.0 | 190.0 | 55.0 | 67.5 | 63.0 | 4 x M12 | 1.5 | 27.0 | 104.0 | 202.0 |
| 50 | 50.0 | 53.0 | 203.0 | 68.9 | 67.0 | 72.0 | 4 x M14 | 1.5 | 27.0 | 113.0 | 202.0 |
| 65 | 66.0 | 70.0 | 254.0 | 82.0 | 86.0 | 92.0 | 4 x M14 | 2.0 | 32.0 | 140.0 | 300.0 |
| 80 | 81.0 | 85.0 | 280.0 | 96.0 | 92.0 | 102.0 | 4 x M16 | 2.0 | 32.0 | 150.0 | 300.0 |
| 100 | 100.0 | 104.0 | 308.0 | 122.0 | 93.0 | 132.0 | 6 x M20 | 2.0 | 38.0 | 187.3 | 350.0 |

Dimensions in mm
n = number of bolts

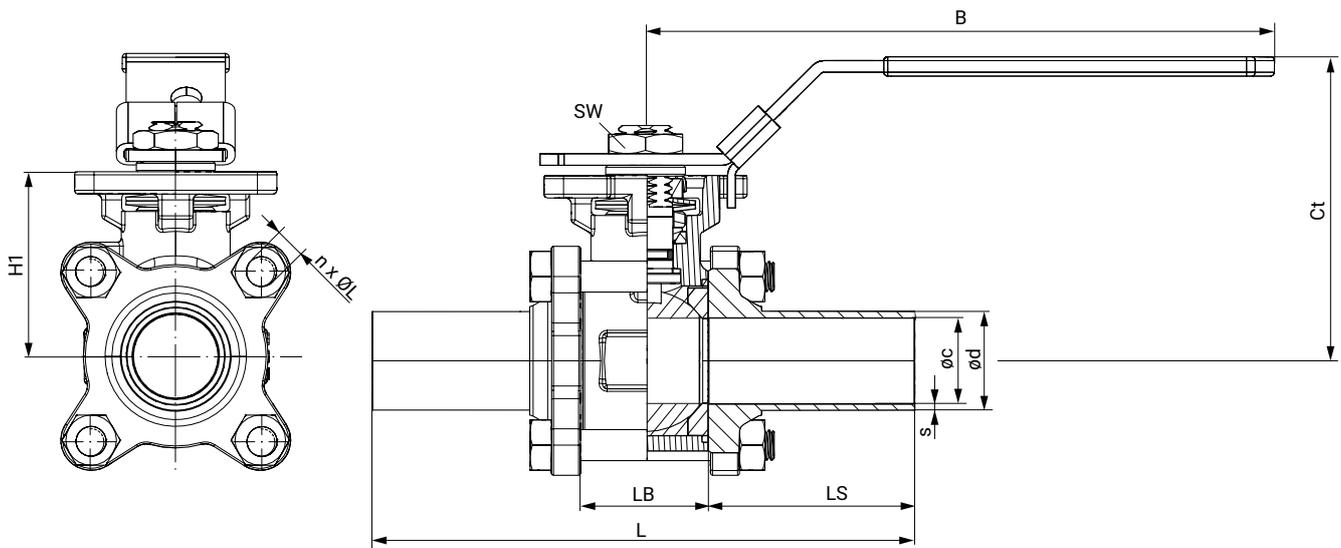
Spigot SMS 3008 (connection code 37)



| DN | øc | ød | s | t | L | LB | LS | H1 | n x ØL | Ct | B | SW |
|-----|------|-------|-----|------|-------|-------|------|-------|---------|-------|-------|------|
| 20 | 16.0 | 18.0 | 1.0 | 6.1 | 142.2 | 28.0 | 58.6 | 38.0 | 4 x M6 | 67.6 | 125.0 | 19.0 |
| 25 | 22.6 | 25.0 | 1.2 | 7.4 | 162.3 | 32.1 | 65.1 | 48.0 | 4 x M8 | 78.4 | 160.0 | 22.0 |
| 40 | 35.6 | 38.0 | 1.2 | 8.3 | 182.2 | 46.0 | 68.1 | 60.0 | 4 x M12 | 100.8 | 202.0 | 27.0 |
| 50 | 48.6 | 51.0 | 1.2 | 10.2 | 193.0 | 59.6 | 66.7 | 69.0 | 4 x M14 | 109.7 | 202.0 | 27.0 |
| 65 | 60.3 | 63.5 | 1.6 | 12.5 | 254.1 | 77.1 | 88.5 | 89.0 | 4 x M14 | 137.2 | 300.0 | 32.0 |
| 80 | 72.9 | 76.1 | 1.6 | 14.0 | 276.9 | 91.7 | 92.6 | 98.0 | 4 x M16 | 146.2 | 300.0 | 32.0 |
| 100 | 97.6 | 101.6 | 2.0 | 14.5 | 304.9 | 118.3 | 93.3 | 130.0 | 6 x M16 | 185.8 | 350.0 | 38.0 |

Dimensions in mm
n = number of bolts

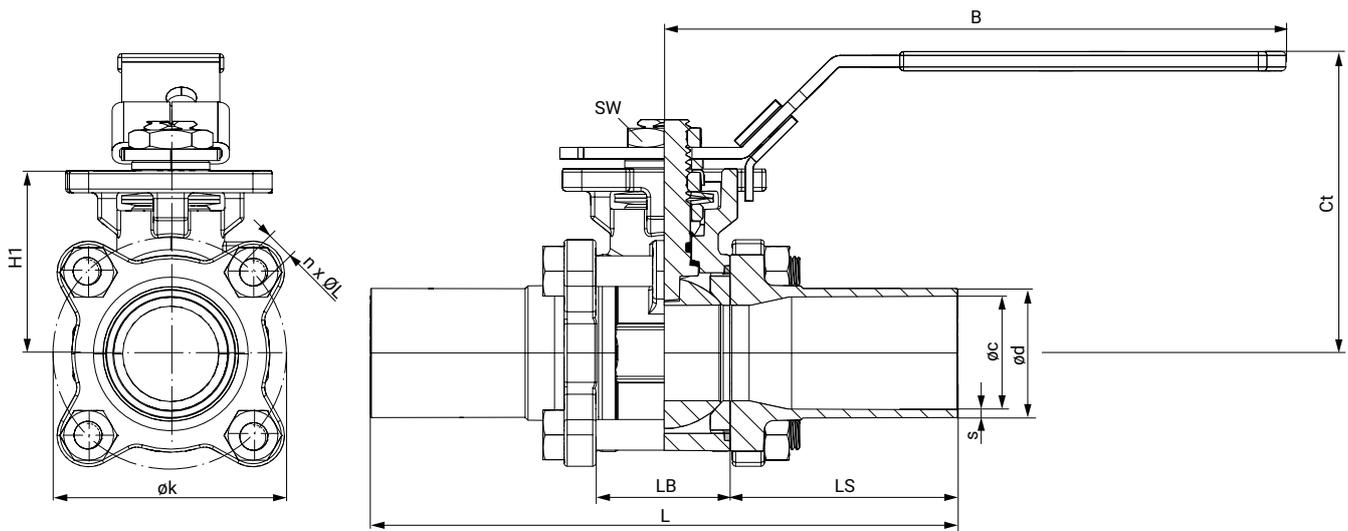
Spigot ASME BPE (connection code 59)



| DN | \varnothing_c | \varnothing_d | s | L | LB | LS | H1 | n x ØL | Ct | B | SW |
|-----|-----------------|-----------------|------|--------|--------|-------|--------|---------|--------|--------|-------|
| 15 | 9.40 | 12.70 | 1.65 | 124.40 | 25.00 | 49.70 | 38.00 | 4 x M6 | 67.60 | 125.00 | 19.00 |
| 20 | 15.70 | 19.05 | 1.65 | 142.20 | 28.00 | 58.60 | 38.00 | 4 x M6 | 67.60 | 125.00 | 19.00 |
| 25 | 22.10 | 25.40 | 1.65 | 162.30 | 32.10 | 65.10 | 48.00 | 4 x M8 | 78.40 | 160.00 | 22.00 |
| 40 | 34.80 | 38.10 | 1.65 | 182.20 | 46.00 | 68.10 | 60.00 | 4 x M12 | 100.80 | 202.00 | 27.00 |
| 50 | 47.50 | 50.80 | 1.65 | 193.00 | 59.60 | 66.70 | 69.00 | 4 x M14 | 109.70 | 202.00 | 27.00 |
| 65 | 60.20 | 63.50 | 1.65 | 254.10 | 77.10 | 88.50 | 89.00 | 4 x M14 | 137.20 | 300.00 | 32.00 |
| 80 | 72.90 | 76.20 | 1.65 | 276.90 | 91.70 | 92.60 | 98.00 | 4 x M16 | 146.20 | 300.00 | 32.00 |
| 100 | 97.40 | 101.60 | 2.10 | 304.90 | 118.30 | 93.30 | 130.00 | 6 x M16 | 185.80 | 350.00 | 38.00 |

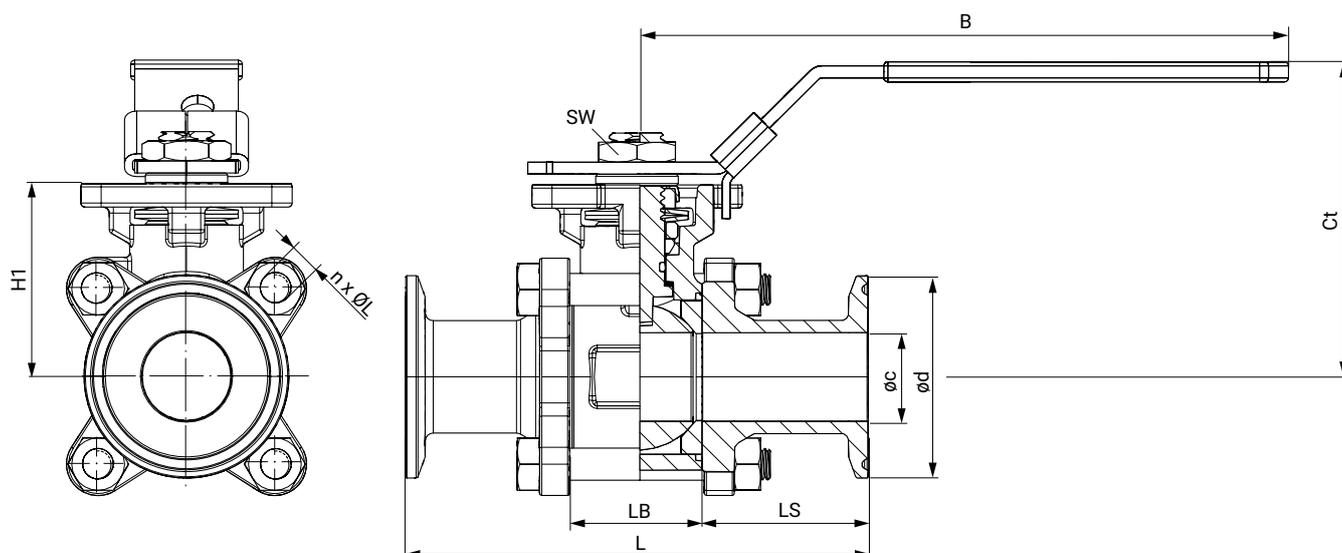
Dimensions in mm
n = number of bolts

Spigot ISO 1127 / EN 10357 (connection code 60)



| DN | øc | ød | s | L | LB | LS | H1 | n x ØL | Ct | B | SW |
|-----|-------|-------|-----|-------|-------|------|-------|---------|-------|-------|------|
| 8 | 10.3 | 13.5 | 1.6 | 120.1 | 24.3 | 47.9 | 37.0 | 4 x M6 | 66.6 | 125.0 | 19.0 |
| 10 | 14.0 | 17.2 | 1.6 | 120.1 | 24.3 | 47.9 | 37.0 | 4 x M6 | 66.6 | 125.0 | 19.0 |
| 15 | 18.1 | 21.3 | 1.6 | 140.1 | 24.3 | 57.9 | 37.0 | 4 x M6 | 66.6 | 125.0 | 19.0 |
| 20 | 23.7 | 26.9 | 1.6 | 140.0 | 31.2 | 54.4 | 40.0 | 4 x M8 | 69.5 | 125.0 | 19.0 |
| 25 | 29.7 | 33.7 | 2.0 | 152.0 | 34.0 | 59.0 | 48.0 | 4 x M8 | 78.6 | 160.0 | 22.0 |
| 32 | 38.4 | 42.4 | 2.0 | 165.0 | 44.0 | 60.5 | 53.0 | 4 x M10 | 83.6 | 160.0 | 22.0 |
| 40 | 44.3 | 48.3 | 2.0 | 190.0 | 55.0 | 67.5 | 63.0 | 4 x M12 | 104.0 | 202.0 | 27.0 |
| 50 | 56.3 | 60.3 | 2.0 | 203.0 | 68.9 | 67.0 | 72.0 | 4 x M14 | 113.0 | 202.0 | 27.0 |
| 65 | 72.1 | 76.1 | 2.0 | 254.0 | 82.0 | 86.0 | 92.0 | 4 x M14 | 140.0 | 300.0 | 32.0 |
| 80 | 84.3 | 88.9 | 2.3 | 280.0 | 96.0 | 92.0 | 102.0 | 4 x M16 | 150.0 | 300.0 | 32.0 |
| 100 | 109.7 | 114.3 | 2.3 | 308.0 | 122.0 | 93.0 | 132.0 | 6 x M20 | 187.3 | 350.0 | 38.0 |

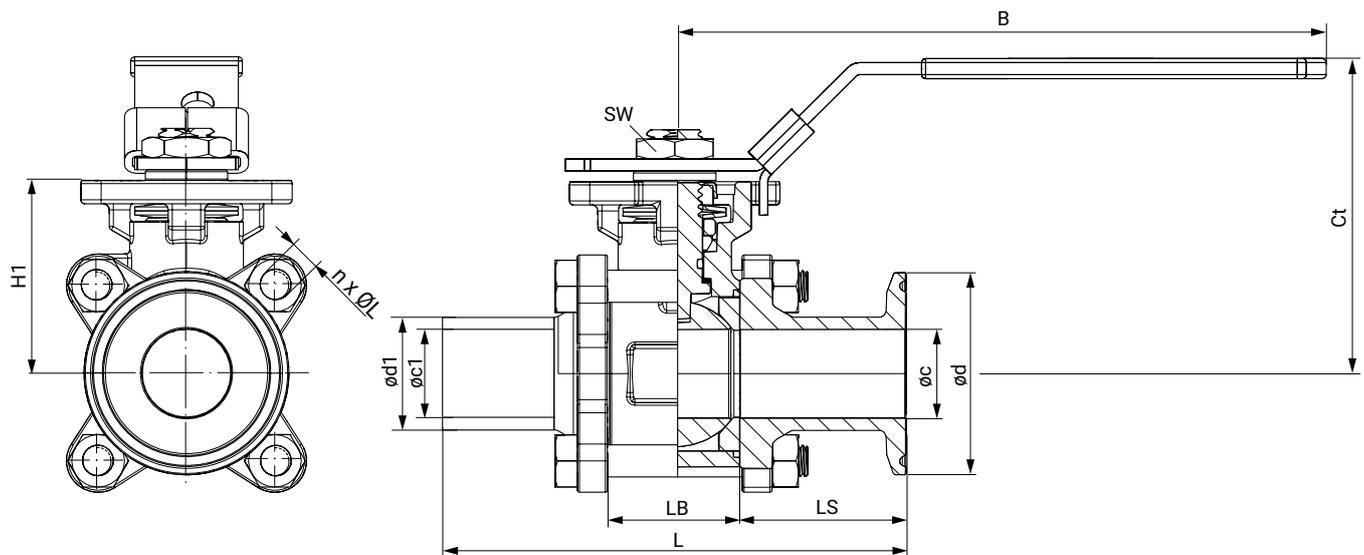
Dimensions in mm
n = number of bolts

Clamp ASME BPE (connection code 80)

| DN | Øc | Ød | s | L | LB | LS | H1 | n x ØL | Ct | B | SW |
|-----|------|-------|------|-------|-------|------|-------|---------|-------|-------|------|
| 15 | 9.4 | 25.0 | 1.65 | 88.8 | 25.0 | 31.9 | 38.0 | 4 x M6 | 67.6 | 125.0 | 19.0 |
| 20 | 15.8 | 25.0 | 1.65 | 101.6 | 25.0 | 38.3 | 38.0 | 4 x M6 | 67.6 | 125.0 | 19.0 |
| 25 | 22.1 | 50.4 | 1.65 | 114.3 | 32.1 | 41.1 | 48.0 | 4 x M8 | 78.4 | 160.0 | 22.0 |
| 40 | 34.8 | 50.4 | 1.65 | 139.8 | 46.0 | 46.9 | 60.0 | 4 x M12 | 100.8 | 202.0 | 27.0 |
| 50 | 47.5 | 63.9 | 1.65 | 158.8 | 59.6 | 49.6 | 69.0 | 4 x M14 | 109.7 | 202.0 | 27.0 |
| 65 | 60.2 | 77.4 | 1.65 | 171.5 | 77.1 | 47.2 | 89.0 | 4 x M14 | 137.2 | 300.0 | 32.0 |
| 80 | 72.9 | 90.9 | 1.65 | 196.3 | 91.7 | 52.3 | 98.0 | 4 x M16 | 146.2 | 300.0 | 32.0 |
| 100 | 97.4 | 118.9 | 2.1 | 241.3 | 118.3 | 61.5 | 130.0 | 6 x M16 | 185.8 | 350.0 | 38.0 |

Dimensions in mm
n = number of bolts

Mixed ends ASME BPE (connection code 93)



| DN | øc | ød | øc1 | ød1 | s | t | L | LB | LS | H1 | n x ØL | Ct | B | SW |
|-----|------|-------|------|-------|------|------|-------|-------|------|-------|---------|-------|-------|------|
| 15 | 9.4 | 25.0 | 9.4 | 12.7 | 1.65 | 6.1 | 106.6 | 25.0 | 49.7 | 38.0 | 4 x M6 | 67.6 | 125.0 | 19.0 |
| 20 | 15.8 | 25.0 | 15.8 | 19.0 | 1.65 | 6.1 | 121.9 | 28.0 | 58.6 | 38.0 | 4 x M6 | 67.6 | 125.0 | 19.0 |
| 25 | 22.1 | 50.4 | 22.1 | 25.4 | 1.65 | 7.4 | 138.3 | 32.1 | 65.1 | 48.0 | 4 x M8 | 78.4 | 160.0 | 22.0 |
| 40 | 34.8 | 50.4 | 34.8 | 38.1 | 1.65 | 8.3 | 161.0 | 46.0 | 68.1 | 60.0 | 4 x M12 | 100.8 | 202.0 | 27.0 |
| 50 | 47.5 | 63.9 | 47.5 | 50.8 | 1.65 | 10.2 | 175.9 | 59.6 | 66.7 | 69.0 | 4 x M14 | 109.7 | 202.0 | 27.0 |
| 65 | 60.2 | 77.4 | 60.2 | 63.5 | 1.65 | 12.5 | 212.8 | 77.1 | 88.5 | 89.0 | 4 x M14 | 137.2 | 300.0 | 32.0 |
| 80 | 72.9 | 90.9 | 72.9 | 76.2 | 1.65 | 14.0 | 236.6 | 91.7 | 92.6 | 98.0 | 4 x M16 | 146.2 | 300.0 | 32.0 |
| 100 | 97.4 | 118.9 | 97.4 | 101.6 | 2.10 | 14.5 | 273.1 | 118.3 | 93.3 | 130.0 | 6 x M16 | 185.8 | 350.0 | 38.0 |

Dimensions in mm
n = number of bolts

Accessories



GEMÜ LSF

Inductive dual sensor for quarter turn valves

The GEMÜ LSF inductive dual sensor is suitable for mounting to manually and pneumatically operated quarter turn valves. It is also fitted with an optical position indicator for visual confirmation of position.

Only permissible with K-no. 7137, 5230, 5231, 5233 or 5236.

| Nominal size | Item no. | Designation |
|--------------|----------|-------------------|
| DN 8–20 | 88470175 | LSFS01Z BV F04 M5 |
| DN 25–32 | 88470177 | LSFS01Z BV F05 M6 |
| DN 40–50 | 88470178 | LSFS01Z BV F07 M6 |
| DN 65–80 | 88836073 | LSFS01Z BV F10 M6 |
| DN 100 | 88836075 | LSFS01Z BV F12 M6 |

Mounting example



LSF (Pepperl & Fuchs) with MSH-EPV mounting kit



GEMÜ LSC

Limit switch box for quarter turn actuators

The GEMÜ LSC limit switch box is suitable for mounting to manually and pneumatically operated quarter turn valves. It is also fitted with an optical position indicator for visual confirmation of position.

Only permissible with K-no. 7137, 5230, 5231, 5233 or 5236.

| Nominal size | Item no. | Designation |
|--------------|----------|-------------------|
| DN 8–20 | 88494998 | LSCS01Z BV F04 M5 |
| DN 25–32 | 88495013 | LSCS01Z BV F05 M6 |
| DN 40–50 | 88495019 | LSCS01Z BV F07 M6 |
| DN 65–80 | 88836072 | LSCS01Z BV F10 M6 |
| DN 100 | 88836074 | LSCS01Z BV F12 M6 |



GEMÜ LSC

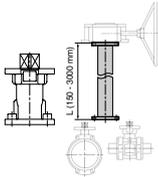
Limit switch box for quarter turn actuators

The GEMÜ LSC limit switch box is suitable for mounting to manually and pneumatically operated quarter turn valves. It is also fitted with an optical position indicator for visual confirmation of position.

Mounting example



Manual ball valve with LSC and MSH-EPV subassembly



GEMÜ RC0

Shaft extension

The RC0 shaft extension for quarter turn valves is a distance piece between manually, pneumatically or electrically operated valves. This means that valves can be protected from flooding or better access for operation of the valve can be ensured (also for manual override).

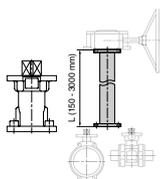
| Nominal size | GEMÜ RC0 shaft extension | | GEMÜ AB22 and AB24 hand lever | |
|--------------|--------------------------|-----------------------------|-------------------------------|---------------|
| | Item no. | Designation | Item no. | Designation |
| DN 8–20 | 88742081 | RC0VAF04 D09KF04 D09 60 M12 | 88658096 | AB22 20D OSET |
| DN 25–32 | 88742082 | RC0VAF05 D11KF05 D11 65 M14 | 88658097 | AB22 32D OSET |
| DN 40–50 | 88742083 | RC0VAF07 D14KF07 D14 80 M18 | 88658099 | AB22 50D OSET |
| DN 65 | 88742085 | RC0VAF07 D17KF07 D17100 M22 | 88660113 | AB26 65D OSET |
| DN 80 | 88742085 | RC0VAF07 D17KF07 D17100 M22 | 88660114 | AB26 80D OSET |
| DN 100 | 88781980 | RC0VAF12 D22KF12 D22 75 M28 | 88660420 | AB24100D OSET |

Ordering information for ball valve with RC0 shaft neck extension for thermal separation (K-no. SF5, 7138)

The manual ball valve is equipped with an RC0 shaft neck extension and a hand lever. The shaft neck height is dependent on the nominal size of the ball valve.

Ordering information for ball valve with RC0 shaft neck extension for thermal separation, media wetted parts cleaned for high-purity media (K-no. 5232 – SF5, 0104, 5227)

The manual ball valve is equipped with an RC0 shaft neck extension and a hand lever. The shaft neck height is dependent on the nominal size of the ball valve. The media wetted area is cleaned for high-purity media



GEMÜ RC0

Shaft extension

The RC0 shaft extension for quarter turn valves is a distance piece between manually, pneumatically or electrically operated valves. This means that valves can be protected from flooding or better access for operation of the valve can be ensured (also for manual override).

Ordering information for ball valve with RC0 shaft neck extension for thermal separation, cleaned so that it's PWIS-free (K-no. 5234 – SF5, 0101, 5227)

The manual ball valve is equipped with an RC0 shaft neck extension and a hand lever.
The shaft neck height is dependent on the nominal size of the ball valve.
The media wetted area is cleaned to ensure suitability for paint applications (PWIS).

Ordering information for ball valve with RC0 shaft neck extension, for thermal separation, degreased (K-no. 5235 – SF5, 0107, 5227)

The manual ball valve is equipped with an RC0 shaft neck extension and a hand lever.
The shaft neck height is dependent on the nominal size of the ball valve.
The media wetted area is degreased.

Mounting example



Preparing for mounting a position indicator. NOTE: The corresponding mounting kit must be entered separately (K-no. 5230, 5231, 5233, 5236)

The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever.
Different limit switches can then be mounted.
These must be ordered separately. See GEMÜ LSF or LSC for this.

Ordering information for ball valve with RC0 shaft neck extension, prepared for mounting a position indicator (K-no. 5230 – SF5, 5227, 7056)

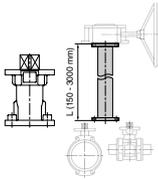
The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever.
Different limit switches can then be mounted.
These must be ordered separately. See GEMÜ LSF or LSC for this.

Ordering information for ball valve with RC0 shaft neck extension, prepared for mounting a position indicator (K-no. 5231 – SF5, 0101, 7056)

The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever.
The media wetted area is cleaned to ensure suitability for paint applications (PWIS).
Different limit switches can then be mounted.
These must be ordered separately. See GEMÜ LSF or LSC for this.

Ordering information for ball valve with RC0 shaft neck extension, prepared for mounting a position indicator (K-no. 5233 – SF5, 0107, 7056)

The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever.
The media wetted area is degreased.
Different limit switches can then be mounted.
These must be ordered separately. See GEMÜ LSF or LSC for this.



GEMÜ RC0

Shaft extension

The RC0 shaft extension for quarter turn valves is a distance piece between manually, pneumatically or electrically operated valves. This means that valves can be protected from flooding or better access for operation of the valve can be ensured (also for manual override).

Ordering information for ball valve with RC0 shaft neck extension, prepared for mounting a position indicator (K-no. 5236 – SF5, 0107, 5227, 7056)

The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever.

The media wetted area is degreased.

Different limit switches can then be mounted.

These must be ordered separately. See GEMÜ LSF or LSC for this.

Mounting example



Certificates

| Certificate | Standard | Item number |
|-----------------------------------|-----------------------|-------------|
| 2.2 Ferrite content measurement | | 88081058 |
| 2.2 Surface roughness measurement | EN10204 - EN ISO 4288 | 88079146 |
| 3.1 Surface roughness measurement | | 88094384 |
| 3.1 Material | EN 10204 | 88333336 |



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