

GEMÜ 615

Pneumatically operated diaphragm valve



Features

- Wide range of adaptation options for add-on components and accessories
- CIP capable
- Compact design (ideal when space is at a premium)
- Wide range of adaptation options for add-on components and accessories

Description

The GEMÜ 615 2/2-way diaphragm valve has a low-maintenance plastic piston actuator and is pneumatically operated. An integrated optical position indicator is standard. Normally Closed (NC), Normally Open (NO) and Double Acting (DA) control functions are available.

Technical specifications

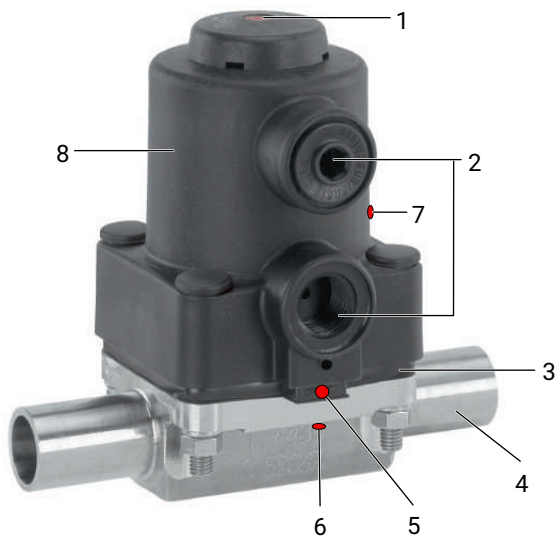
- **Media temperature :** -10 to 80 °C
- **Ambient temperature:** 0 to 60 °C
- **Operating pressure :** 0 to 6 bar
- **Nominal sizes:** DN 10 to 20
- **Body configurations:** 2/2-way body
- **Connection standards:** ANSI | ASME | BS | DIN | EN | JIS
- **Connection types:** Clamp | Spigot | Threaded connection
- **Body materials:** 1.4408, investment casting material | 1.4435 (316L), forged material | 1.4435 (BN2), forged material | 1.4435, investment casting material | 1.4539 (904L), forged material | CW617N, brass
- **Diaphragm materials:** EPDM | PTFE/EPDM | PTFE/FKM
- **Conformities:** Belgaqua | CRN | EAC | FDA | FMEDA | Oxygen | TA Luft (German Clean Air Act)

Technical data depends on the respective configuration



Product description

Construction



| Item | Name | Materials |
|------|--|---|
| 1 | Position indicator | |
| 2 | Control air connectors | |
| 3 | Diaphragm | EPDM FKM PTFE/EPDM (one-piece) |
| 4 | Valve body | 1.4408, investment casting 1.4435, investment casting 1.4435 (F316L), forged body 1.4435 (BN2), forged body, $\Delta Fe < 0.5 \%$ 1.4539, forged body CW614N, CW617N (brass) |
| 5 | CONEXO diaphragm RFID chip (see Conexo information) | |
| 6 | CONEXO body RFID chip (see Conexo information) | |
| 7 | CONEXO actuator RFID chip (see Conexo information) | |
| 8 | Piston actuator | PP, glass fibre reinforced |

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".

Availabilities

Availability of grades of surface finish

Internal surface finishes for forged and block material bodies ¹⁾

| Process contact surfaces | Mechanically polished ²⁾ | | Electropolished | |
|----------------------------|-------------------------------------|------|-------------------------|------|
| | Hygiene class DIN 11866 | Code | Hygiene class DIN 11866 | Code |
| Ra ≤ 0.80 µm | H3 | 1502 | HE3 | 1503 |
| Ra ≤ 0.60 µm | - | 1507 | - | 1508 |
| Ra ≤ 0.40 µm | H4 | 1536 | HE4 | 1537 |
| Ra ≤ 0.25 µm ³⁾ | H5 | 1527 | HE5 | 1516 |

| Media wetted internal surface finishes in accordance with ASME BPE 2016 ⁴⁾ | Mechanically polished ²⁾ | | Electropolished | |
|---|-------------------------------------|------|------------------------------|------|
| | ASME BPE surface designation | Code | ASME BPE surface designation | Code |
| Ra max. = 0.76 µm (30 µinch) | SF3 | SF3 | - | - |
| Ra max. = 0.64 µm (25 µinch) | SF2 | SF2 | SF6 | SF6 |
| Ra max. = 0.51 µm (20 µinch) | SF1 | SF1 | SF5 | SF5 |
| Ra max. = 0.38 µm (15 µinch) | - | - | SF4 | SF4 |

Internal surface finishes for investment cast bodies

| Process contact surfaces | Mechanically polished ²⁾ | |
|----------------------------|-------------------------------------|------|
| | Hygiene class DIN 11866 | Code |
| Ra ≤ 6.30 µm | - | 1500 |
| Ra ≤ 0.80 µm | H3 | 1502 |
| Ra ≤ 0.60 µm ⁵⁾ | - | 1507 |

Ra acc. to DIN EN ISO 4288 and ASME B46.1

- 1) Surface finishes of customized valve bodies may be limited in special cases.
- 2) Or any other finishing method that meets the Ra value (acc. to ASME BPE).
- 3) The smallest possible Ra finish for pipe connections with an internal pipe diameter < 6 mm is 0.38 µm.
- 4) When using these surfaces, the bodies are marked according to the specifications of ASME BPE.
The surfaces are only available for valve bodies which are made of materials (e.g. GEMÜ material codes 40, 41, F4, 44)) and use connections (e.g. GEMÜ connection codes 59, 80, 88) according to ASME BPE.
- 5) Not possible for GEMÜ connection code 59, DN 8 and GEMÜ connection code 0, DN 4.

Availability of valve bodies

Spigot

| MG | DN | Connection type code ¹⁾ | | | | | | | | | | | | | | |
|----|----|------------------------------------|------------|----|------------|------------|------------|------------|------------|----|------------|----|------------|------------|------------|------------|
| | | 0 | 16 | 17 | 18 | 36 | 55 | 59 | 60 | 63 | 64 | 65 | | | | |
| | | Material code ²⁾ | | | | | | | | | | | | | | |
| | | 40, 42, F4 | 40, 42, F4 | C3 | 40, 42, F4 | 40, 42, F4 | 40, 42, F4 | 40, 42, F4 | 40, 42, F4 | C3 | 40, 42, F4 | C3 | 40, 42, F4 | 40, 42, F4 | 40, 42, F4 | 40, 42, F4 |
| 10 | 10 | - | X | X | X | X | X | X | X | - | X | X | X | X | - | X |
| | 15 | X | X | X | X | X | X | X | X | - | X | X | X | X | X | X |
| | 20 | - | - | - | - | - | - | - | X | X | X | - | - | - | - | - |

MG = diaphragm size, X = standard

1) Connection type

Code 0: Spigot DIN

Code 16: Spigot DIN EN 10357 series B (2014 edition; formerly DIN 11850 series 1)

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

Code 18: Spigot DIN 11850 series 3

Code 36: Spigot JIS-G 3459 schedule 10s

Code 55: Spigot BS 4825, Part 1

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

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

Code 63: Spigot ANSI/ASME B36.19M schedule 10s

Code 64: Spigot ANSI/ASME B36.19M schedule 5s

Code 65: Spigot ANSI/ASME B36.19M schedule 40s

2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body, Δ Fe < 0.5%

Code C3: 1.4435, investment casting

Code F4: 1.4539, forged body

Threaded connection

| MG | DN | Connection type code ¹⁾ | | |
|----|----|------------------------------------|----|--------|
| | | 1 | | 6, 6K |
| | | Material code ²⁾ | | |
| | | 12 | 37 | 40, 42 |
| 10 | 10 | - | - | W |
| | 12 | X | X | - |
| | 15 | X | X | W |

MG = diaphragm size, X = standard

W = welded assembly

1) **Anschlussart**

Code 1: Threaded socket DIN ISO 228

Code 6: Threaded spigot DIN 11851

Code 6K: Cone spigot and union nut DIN 11851

2) **Valve body material**

Code 12: CW614N, CW617N (brass)

Code 37: 1.4408, investment casting

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body, Δ Fe < 0.5%

Clamp

| MG | DN | Connection type code ¹⁾ | | | |
|------------|----|------------------------------------|----|--------|----|
| | | 80, 8P | 82 | 88, 8T | 8A |
| | | Material code ²⁾ | | | |
| 40, 42, F4 | | | | | |
| 10 | 10 | - | K | - | K |
| | 15 | K | W | K | K |
| | 20 | K | - | K | - |

MG = diaphragm size

K = connections completely machined (not welded)

W = welded assembly

1) Connection type

Code 80: Clamp ASME BPE, face-to-face dimension FTF ASME BPE, length only for body configuration D

Code 82: Clamp DIN 32676 series B, face-to-face dimension FTF EN 558 series 7, length only for body configuration D

Code 88: Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 7, length only for body configuration D

Code 8A: Clamp DIN 32676 series A, face-to-face dimension FTF acc. to EN 558 series 7, length only for body configuration D

Code 8P: Clamp DIN 32676 series C, face-to-face dimension FTF ASME BPE, length only for body configuration D

Code 8T: Clamp DIN 32676 series C, face-to-face dimension FTF EN 558 series 7, length only for body configuration D

2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body, Δ Fe < 0.5%

Code F4: 1.4539 / UNS N08904, forged body

Availability of product conformity

| | Diaphragm material code ¹⁾ | Body material code ²⁾ |
|----------------|---------------------------------------|----------------------------------|
| Drinking water | | |
| Belgaqua (B) | 28 | 37 |

1) Diaphragm material

Code 28: EPDM

2) Valve body material

Code 37: 1.4408, investment casting

Order data

The order data provide an overview of standard configurations.

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

Order codes

| 1 Type | Code |
|---|------|
| Diaphragm valve, pneumatically operated, plastic piston actuator, optical position indicator | 615 |
| 2 DN | Code |
| DN 10 | 10 |
| DN 12 | 12 |
| DN 15 | 15 |
| DN 20 | 20 |
| 3 Body configuration | Code |
| 2/2-way body | D |
| 4 Connection type | Code |
| Spigot | |
| Spigot DIN | 0 |
| Spigot DIN EN 10357 series B (2014 edition; formerly DIN 11850 series 1) | 16 |
| Spigot EN 10357 series A/DIN 11866 series A, formerly DIN 11850 series 2 | 17 |
| Spigot DIN 11850 series 3 | 18 |
| Spigot JIS-G 3459 schedule 10s | 36 |
| Spigot BS 4825, Part 1 | 55 |
| Spigot ASME BPE/DIN EN 10357 series C (from 2022 issue)/DIN 11866 series C | 59 |
| Spigot ISO 1127/DIN EN 10357 series C (2014 issue)/DIN 11866 series B | 60 |
| Spigot ANSI/ASME B36.19M schedule 10s | 63 |
| Spigot ANSI/ASME B36.19M schedule 5s | 64 |
| Spigot ANSI/ASME B36.19M schedule 40s | 65 |
| Threaded connection | |
| Threaded socket DIN ISO 228 | 1 |
| Threaded spigot DIN 11851 | 6 |
| Cone spigot and union nut DIN 11851 | 6K |
| Clamp | |
| Clamp ASME BPE, face-to-face dimension FTF ASME BPE, length only for body configuration D | 80 |
| Clamp DIN 32676 series B, face-to-face dimension FTF EN 558 series 7, length only for body configuration D | 82 |
| Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 7, length only for body configuration D | 88 |
| Clamp DIN 32676 series A, face-to-face dimension FTF acc. to EN 558 series 7, length only for body configuration D | 8A |

| 4 Connection type | Code |
|--|------|
| Clamp DIN 32676 series C, face-to-face dimension FTF ASME BPE, length only for body configuration D | 8P |
| Clamp DIN 32676 series C, face-to-face dimension FTF EN 558 series 7, length only for body configuration D | 8T |

| 5 Valve body material | Code |
|--|------|
| Investment casting material | |
| 1.4408, investment casting | 37 |
| 1.4435, investment casting | C3 |
| Forged material | |
| 1.4435 (F316L), forged body | 40 |
| 1.4435 (BN2), forged body, $\Delta Fe < 0.5\%$ | 42 |
| 1.4539 / UNS N08904, forged body | F4 |
| Brass | |
| CW614N, CW617N (brass) | 12 |

| 6 Diaphragm material | Code |
|----------------------|------|
| Elastomer | |
| FKM | 4 |
| EPDM | 13 |
| EPDM | 17 |
| EPDM | 19 |
| EPDM | 28 |
| EPDM | 29 |
| PTFE | |
| PTFE/EPDM one-piece | 54 |

| 7 Control function | Code |
|----------------------|------|
| Normally closed (NC) | 1 |
| Normally open (NO) | 2 |
| Double acting (DA) | 3 |

| 8 Actuator version | Code |
|---|------|
| Actuator size 1/N control air connector 90° offset to flow direction | 1/N |

| 9 Surface | Code |
|--|------|
| $Ra \leq 6.3 \mu\text{m}$ for media wetted surfaces, mechanically polished internal | 1500 |
| $Ra \leq 0.8 \mu\text{m}$ for media wetted surfaces, in accordance with DIN 11866 H3, mechanically polished internal | 1502 |
| $Ra \leq 0.8 \mu\text{m}$ for media wetted surfaces, in accordance with DIN 11866 HE3, electropolished internal/external | 1503 |
| $Ra \leq 0.6 \mu\text{m}$ for media wetted surfaces, mechanically polished internal | 1507 |

| 9 Surface | Code |
|---|------|
| Ra ≤ 0.6 µm for media wetted surfaces, electropolished internal/external | 1508 |
| Ra ≤ 0.25 µm for media wetted surfaces *), in accordance with DIN 11866 HE5, electropolished internal/external, *) for inner pipe diameter ≤ 6 mm, in spigot Ra ≤ 0.38 µm | 1516 |
| Ra ≤ 0.25 µm for media wetted surfaces *), in accordance with DIN 11866 H5, mechanically polished internal, *) for inner pipe diameter < 6 mm, in spigots Ra ≤ 0.38 µm | 1527 |
| Ra ≤ 0.4 µm for media wetted surfaces, in accordance with DIN 11866 H4, mechanically polished internal | 1536 |
| Ra ≤ 0.4 µm for media wetted surfaces, in accordance with DIN 11866 HE4, electropolished internal/external | 1537 |
| Ra max. 0.51 µm (20 µin.) for media wetted surfaces, in accordance with ASME BPE SF1, mechanically polished internal | SF1 |
| Ra max. 0.64 µm (25 µin.) for media wetted surfaces, in accordance with ASME BPE SF2, mechanically polished internal | SF2 |

| 9 Surface | Code |
|---|------|
| Ra max. 0.76 µm (30 µin.) for media wetted surfaces, in accordance with ASME BPE SF3, mechanically polished internal | SF3 |
| Ra max. 0.38 (15 µin.) µm 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 |
| Ra max. 0.64 µm (25 µin.) for media wetted surfaces, in accordance with ASME BPE SF6, electropolished internal/external | SF6 |

| 10 Special version | Code |
|---|------|
| Without | |
| BELGAQUA certification | B |
| Special version for oxygen, maximum medium temperature: 60 °C | S |

| 11 CONEXO | Code |
|---|------|
| Without | |
| Integrated RFID chip for electronic identification and traceability | C |

Order example

| Ordering option | Code | Description |
|-----------------------|------|--|
| 1 Type | 615 | Diaphragm valve, pneumatically operated, plastic piston actuator, optical position indicator |
| 2 DN | 15 | DN 15 |
| 3 Body configuration | D | 2/2-way body |
| 4 Connection type | 60 | Spigot ISO 1127/DIN EN 10357 series C (2014 issue)/DIN 11866 series B |
| 5 Valve body material | C3 | 1.4435, investment casting |
| 6 Diaphragm material | 17 | EPDM |
| 7 Control function | 1 | Normally closed (NC) |
| 8 Actuator version | 1/N | Actuator size 1/N control air connector 90° offset to flow direction |
| 9 Surface | 1500 | Ra ≤ 6.3 µm for media wetted surfaces, mechanically polished internal |
| 10 Special version | S | Special version for oxygen, maximum medium temperature: 60 °C |
| 11 CONEXO | | Without |

Technical data

Medium

Working medium: Corrosive, inert, gaseous and liquid media which have no negative impact on the physical and chemical properties of the body and diaphragm material.
For special oxygen version (code S): only gaseous oxygen

Control medium: Inert gases

Temperature

Media temperature:

| Diaphragm material | Standard | Special version for oxygen |
|---------------------|-------------|----------------------------|
| FKM (code 4) | -10 – 80 °C | - |
| EPDM (code 13) | -10 – 80 °C | 0 – 60 °C |
| EPDM (code 17) | -10 – 80 °C | - |
| EPDM (code 19) | -10 – 80 °C | 0 – 60 °C |
| EPDM (code 28) | -10 – 80 °C | - |
| EPDM (code 29) | -10 – 80 °C | - |
| PTFE/EPDM (code 54) | -10 – 80 °C | 0 – 60 °C |

Ambient temperature: 0 – 60 °C

Control medium temperature: 0 – 40 °C

Storage temperature: 0 – 40 °C

Pressure

Operating pressure:

| MG | DN | Diaphragm material | |
|-----------|----------------|--------------------|-------|
| | | Elastomer | PTFE |
| 10 | 10 - 20 | 0 - 6 | 0 - 6 |

MG = diaphragm size

All pressures are gauge pressures. Operating pressure values were determined with static operating pressure applied on one side of a closed valve. Sealing at the valve seat and atmospheric sealing is ensured for the given values.

Information on operating pressures applied on both sides and for high purity media on request.

Pressure rating:

PN 16

Leakage rate:

Leakage rate A to P11/P12 EN 12266-1

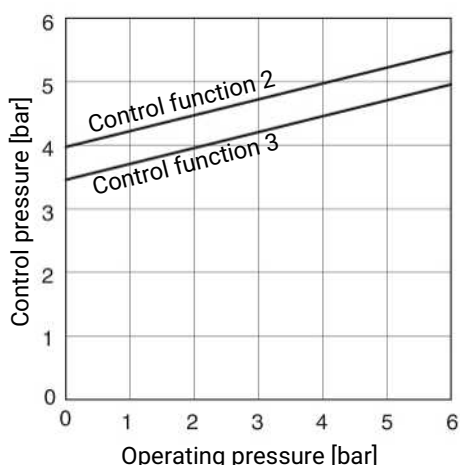
Control pressure:

| MG | DN | Control function 1 | Control function 2 | Control function 3 |
|-----------|----------------|--------------------|--------------------|--------------------|
| 10 | 10 - 20 | 5 - 7 | max. 5.5 | max. 5.0 |

MG = diaphragm size

All pressures are gauge pressures.

Control pressure/operating pressure diagram – Control function 2 and 3



The control pressure depending on the prevailing operating pressure, as shown in the diagram, is intended as a guide for operating the system with low wear on the diaphragm.

Filling volume:

0.02 dm³

Kv values:

| MG | DN | Connection type code | | | | | | |
|-----------|-----------|----------------------|-----|-----|-----|-----|-----|-----|
| | | 0 | 16 | 17 | 18 | 59 | 60 | 1 |
| 10 | 10 | - | 2.4 | 2.4 | 2.4 | 2.2 | 3.3 | - |
| | 12 | - | - | - | - | - | - | 3.2 |
| | 15 | 3.3 | 3.8 | 3.8 | 3.8 | 2.2 | 4.0 | 3.4 |
| | 20 | - | - | - | - | 3.8 | - | - |

MG = diaphragm size

Kv values in m³/h

Kv values determined in accordance with DIN EN 60534 standard, inlet pressure 5 bar, Δp 1 bar, stainless steel valve body and soft elastomer diaphragm. The Kv values for other product configurations (e.g. other diaphragm or body materials) may differ. In general, all diaphragms are subject to the influences of pressure, temperature, the process and their tightening torques. Therefore the Kv values may exceed the tolerance limits of the standard.

Product conformity

Machinery Directive: 2006/42/EC

Pressure Equipment Directive: 2014/68/EU

Food: Regulation (EC) No. 1935/2006
 Regulation (EC) No. 10/2011*
 FDA*
 USP* Class VI

Drinking water: Belgaqua*
 * depending on version and/or operating parameters

Mechanical data

Weight: Actuator
 0.18 kg

Body

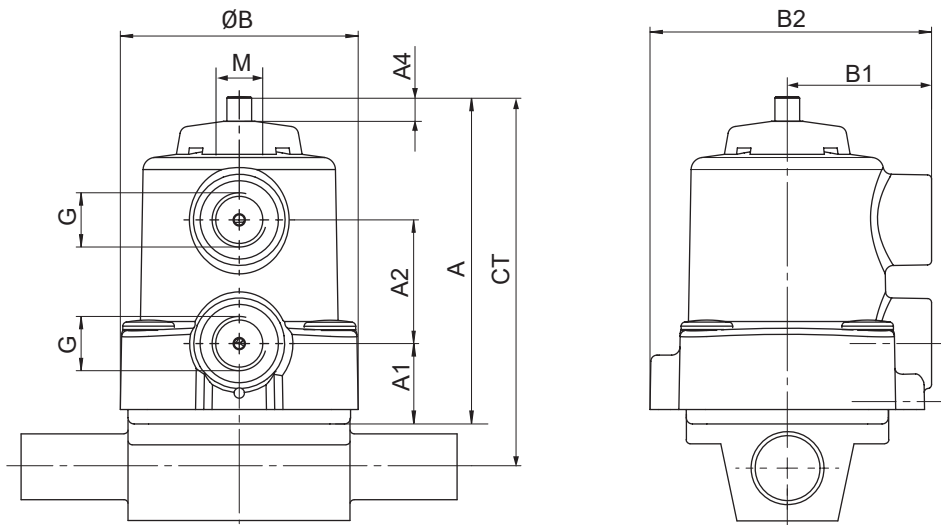
| MG | DN | Spigot | Threaded socket | Threaded spigot | Clamp |
|-----------|-----------|---|-----------------|-----------------|------------------------|
| | | Connection type code | | | |
| | | 0, 16, 17, 18, 36, 55, 59, 60, 63, 64, 65 | 1 | 6, 6K | 80, 82, 88, 8A, 8P, 8T |
| 10 | 10 | 0.30 | - | 0.33 | 0.30 |
| | 12 | - | 0.17 | - | - |
| | 15 | 0.30 | 0.26 | 0.35 | 0.43 |
| | 20 | - | - | - | 0.43 |

Weights in kg
 MG = diaphragm size

Installation position: Optional
 Observe the angle of rotation for optimized draining when it comes to installation.
 See separate document, "Angle of rotation technical information".

Dimensions

Actuator dimensions



| MG | A | A1 | A2 | $\varnothing B$ | B1 | B2 | A4 | G | M |
|----|------|------|------|-----------------|------|------|-----|-------|-------|
| 10 | 80.0 | 21.0 | 30.0 | 57.0 | 35.0 | 68.0 | 4.0 | G 1/4 | M12x1 |

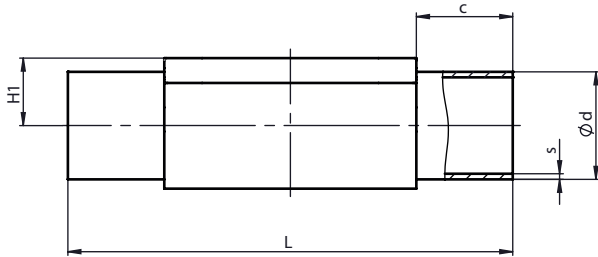
Dimensions in mm

MG = diaphragm size

* CT = A + H1 (see body dimensions)

Body dimensions

Spigot DIN/EN/ISO (code 0, 16, 17, 18, 60)



Connection type spigot DIN/EN/ISO (code 0, 16, 17, 18, 60)¹⁾, forged material (code 40, 42, F4)²⁾

| MG | DN | NPS | c (min) | Ød | | | | | H1 | L | s | | | | |
|----|----|------|---------|-----------------|------|------|------|------|------|-------|-----------------|-----|-----|-----|-----|
| | | | | Connection type | | | | | | | Connection type | | | | |
| | | | | 0 | 16 | 17 | 18 | 60 | | | 0 | 16 | 17 | 18 | 60 |
| 10 | 10 | 3/8" | 25.0 | - | 12.0 | 13.0 | 14.0 | 17.2 | 12.5 | 108.0 | - | 1.0 | 1.5 | 2.0 | 1.6 |
| | 15 | 1/2" | 25.0 | 18.0 | 18.0 | 19.0 | 20.0 | 21.3 | 12.5 | 108.0 | 1.5 | 1.0 | 1.5 | 2.0 | 1.6 |

Dimensions in mm

MG = diaphragm size

1) **Anschlussart**

Code 0: Stutzen DIN

Code 16: Stutzen DIN EN 10357 Serie B (Ausgabe 2014; ehemals DIN 11850 Reihe 1)

Code 17: Stutzen EN 10357 Serie A / DIN 11866 Reihe A ehemals DIN 11850 Reihe 2

Code 18: Spigot DIN 11850 series 3

Code 60: Stutzen ISO 1127 / DIN EN 10357 Serie C (Ausgabe 2014) / DIN 11866 Reihe B

2) **Valve body material**

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body, Δ Fe < 0.5%

Code F4: 1.4539 / UNS N08904, forged body

Connection type spigot DIN/EN/ISO (code 17, 60)¹⁾, investment casting material (code C3)²⁾

| MG | DN | NPS | c (min) | Ød | | H1 | L | s | |
|----|----|------|---------|-----------------|------|------|-------|-----------------|-----|
| | | | | Connection type | | | | Connection type | |
| | | | | 17 | 60 | | | 17 | 60 |
| 10 | 10 | 3/8" | 25.0 | 13.0 | 17.2 | 12.5 | 108.0 | 1.5 | 1.6 |
| | 15 | 1/2" | 25.0 | 19.0 | 21.3 | 12.5 | 108.0 | 1.5 | 1.6 |

Dimensions in mm

MG = diaphragm size

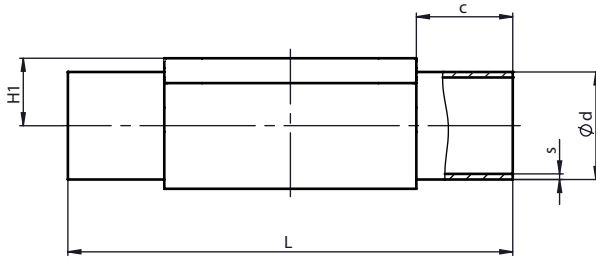
1) **Anschlussart**

Code 17: Stutzen EN 10357 Serie A / DIN 11866 Reihe A ehemals DIN 11850 Reihe 2

Code 60: Stutzen ISO 1127 / DIN EN 10357 Serie C (Ausgabe 2014) / DIN 11866 Reihe B

2) **Valve body material**

Code C3: 1.4435, investment casting

Spigot ASME/BS (code 55, 59, 63, 64, 65)**Connection type spigot ASME/BS (code 55, 59, 63, 64, 65)¹⁾, forged material (code 40, 42, F4)²⁾**

| MG | DN | NPS | c (min) | Ød | | | | | H1 | L | s | | | | |
|----|----|------|---------|-----------------|-------|------|------|------|------|-------|-----------------|------|------|------|------|
| | | | | Connection type | | | | | | | Connection type | | | | |
| | | | | 55 | 59 | 63 | 64 | 65 | | | 55 | 59 | 63 | 64 | 65 |
| 10 | 10 | 3/8" | 25.0 | 9.53 | 9.53 | 17.1 | - | 17.1 | 12.5 | 108.0 | 1.2 | 0.89 | 1.65 | - | 2.31 |
| | 15 | 1/2" | 25.0 | 12.70 | 12.70 | 21.3 | 21.3 | 21.3 | 12.5 | 108.0 | 1.2 | 1.65 | 2.11 | 1.65 | 2.77 |
| | 20 | 3/4" | 25.0 | 19.05 | 19.05 | - | - | - | 12.5 | 108.0 | 1.2 | 1.65 | - | - | - |

Connection type spigot ASME BPE (code 59)¹⁾, investment casting material (code C3)²⁾

| MG | DN | NPS | c (min) | Ød | H1 | L | s |
|----|----|------|---------|-------|------|-------|------|
| 10 | 20 | 3/4" | 25.0 | 19.05 | 12.5 | 108.0 | 1.65 |

Dimensions in mm

MG = diaphragm size

1) Anschlussart

Code 55: Stutzen BS 4825, Part 1

Code 59: Stutzen ASME BPE / DIN EN 10357 Serie C (ab Ausgabe 2022) / DIN 11866 Reihe C

Code 63: Spigot ANSI/ASME B36.19M schedule 10s

Code 64: Spigot ANSI/ASME B36.19M schedule 5s

Code 65: Spigot ANSI/ASME B36.19M schedule 40s

2) Valve body material

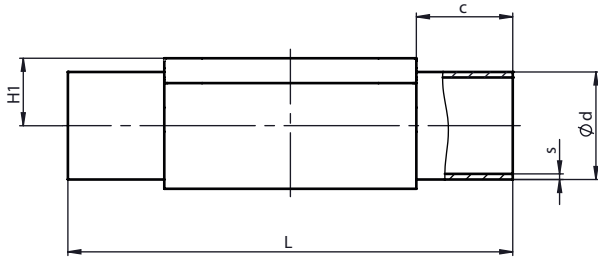
Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body, Δ Fe < 0.5%

Code C3: 1.4435, investment casting

Code F4: 1.4539, forged body

Spigot JIS/SMS (code 36)



Connection type spigot JIS/SMS (code 36)¹⁾, forged material (code 40, 42, F4)²⁾

| MG | DN | NPS | c (min) | Ød | H1 | L | s |
|----|----|------|---------|------|------|-------|------|
| 10 | 10 | 3/8" | 25.0 | 17.3 | 12.5 | 108.0 | 1.65 |
| | 15 | 1/2" | 25.0 | 21.7 | 12.5 | 108.0 | 2.10 |

Dimensions in mm

MG = diaphragm size

1) **Connection type**

Code 36: Spigot JIS-G 3459 schedule 10s

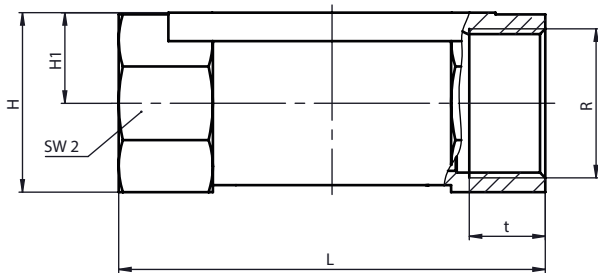
2) **Valve body material**

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body, Δ Fe < 0.5%

Code F4: 1.4539 / UNS N08904, forged body

Threaded socket DIN (code 1)



Connection type threaded socket (code 1)¹⁾, brass material (code 12)

| MG | DN | NPS | H | H1 | L | n | R | SW 2 | t |
|----|----|------|------|------|------|---|-------|------|------|
| 10 | 12 | 3/8" | 23.0 | 11.0 | 55.0 | 2 | G 3/8 | 22.0 | 13.0 |
| | 15 | 1/2" | 29.0 | 14.0 | 75.0 | 2 | G 1/2 | 25.0 | 15.0 |

Connection type threaded socket (code 1)¹⁾, investment casting material (code 37)²⁾

| MG | DN | NPS | H | H1 | L | n | R | SW 2 | t |
|----|----|------|------|------|------|---|-------|------|------|
| 10 | 12 | 3/8" | 25.0 | 13.0 | 55.0 | 2 | G 3/8 | 22.0 | 12.0 |
| | 15 | 1/2" | 30.0 | 15.0 | 68.0 | 2 | G 1/2 | 27.0 | 15.0 |

Dimensions in mm

MG = diaphragm size

n = number of flats

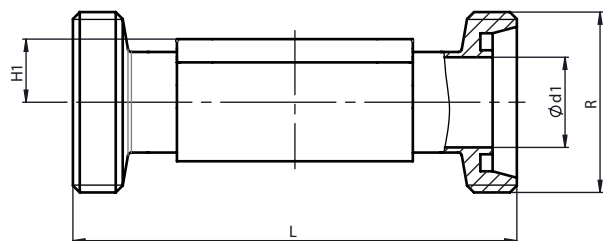
1) **Connection type**

Code 1: Threaded socket DIN ISO 228

2) **Valve body material**

Code 12: CW614N, CW617N (brass)

Code 37: 1.4408, investment casting

Threaded spigot DIN (code 6)**Connection type threaded spigot DIN (code 6)¹⁾, forged material (code 40, 42)²⁾**

| MG | DN | NPS | Ød1 | H1 | L | R |
|----|----|------|------|------|-------|-------------|
| 10 | 10 | 3/8" | 10.0 | 12.5 | 118.0 | Rd 28 x 1/8 |
| | 15 | 1/2" | 16.0 | 12.5 | 118.0 | Rd 34 x 1/8 |

Dimensions in mm

MG = diaphragm size

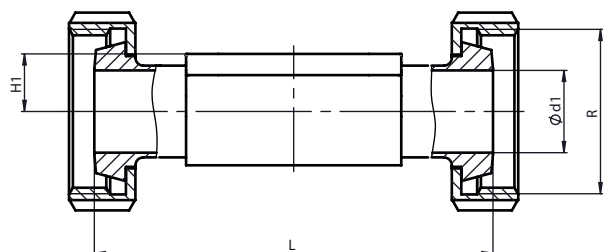
1) Anschlussart

Code 6: Threaded spigot DIN 11851

2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body, Δ Fe < 0.5%

Cone spigot DIN (code 6K)**Connection type cone spigot DIN (code 6K)¹⁾, forged material (code 40, 42)²⁾**

| MG | DN | NPS | Ød1 | H1 | L | R |
|----|----|------|------|------|-------|-------------|
| 10 | 10 | 3/8" | 10.0 | 12.5 | 116.0 | Rd 28 x 1/8 |
| | 15 | 1/2" | 16.0 | 12.5 | 116.0 | Rd 34 x 1/8 |

Dimensions in mm

MG = diaphragm size

1) Anschlussart

Code 6K: Cone spigot and union nut DIN 11851

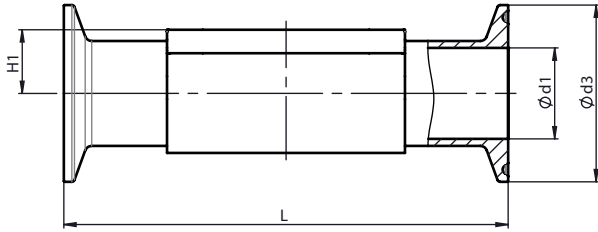
2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body, Δ Fe < 0.5%

Dimensions

Clamp (code 80, 82, 88, 8A, 8E, 8P, 8T)



Connection type clamp DIN/ASME (code 80, 88, 8P, 8T)¹⁾, forged material (code 40, 42, F4)²⁾

| MG | DN | NPS | ød1 | | ød3 | | H1 | L | |
|----|----|------|-----------------|--------|--------|--------|------|-----------------|--------|
| | | | Connection type | | | | | Connection type | |
| | | | 80, 8P | 88, 8T | 80, 8P | 88, 8T | | 80, 8P | 88, 8T |
| 10 | 15 | 1/2" | 9.40 | 9.40 | 25.0 | 25.0 | 12.5 | 88.9 | 108.0 |
| | 20 | 3/4" | 15.75 | 15.75 | 25.0 | 25.0 | 12.5 | 101.6 | 117.0 |

Connection type clamp DIN/ISO (code 82, A, 8E)³⁾, forged material (code 40, 42, F4)²⁾

| Diaphragm size | DN | NPS | ød1 | | ød3 | | H1 | L | |
|----------------|----|------|-----------------|------|------|------|------|-----------------|-------|
| | | | Connection type | | | | | Connection type | |
| | | | 82 | 8A | 82 | 8A | | 82 | 8A |
| 10 | 10 | 3/8" | 14.0 | 10.0 | 25.0 | 34.0 | 12.5 | 108.0 | 108.0 |
| | 15 | 1/2" | 18.1 | 16.0 | 50.5 | 34.0 | 12.5 | 108.0 | 108.0 |

Dimensions in mm

MG = diaphragm size

1) Connection type

Code 80: Clamp ASME BPE, face-to-face dimension FTF ASME BPE, length only for body configuration D

Code 88: Clamp ASME BPE, for pipe ASME BPE, face-to-face dimension FTF EN 558 series 7, length only for body configuration D

Code 8P: Clamp DIN 32676 series C, face-to-face dimension FTF ASME BPE, length only for body configuration D

Code 8T: Clamp DIN 32676 series C, face-to-face dimension FTF EN 558 series 7, length only for body configuration D

2) Valve body material

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body, Δ Fe < 0.5%

Code F4: 1.4539 / UNS N08904, forged body

3) Connection type

Code 82: Clamp DIN 32676 series B, face-to-face dimension FTF EN 558 series 7, length only for body configuration D

Code 8A: Clamp DIN 32676 series A, face-to-face dimension FTF acc. to EN 558 series 7, length only for body configuration D



GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
Fritz-Müller-Straße 6-8, 74653 Ingelfingen-Criesbach, Germany
Phone +49 (0) 7940 1230 · info@gemu.de
www.gemu-group.com