

## GEMÜ 605 / 625

### Pneumatically operated diaphragm valve



#### Features

- Hermetic separation between medium and actuator
- CIP/SIP capable
- Wide range of adaptation options for add-on components and accessories
- Compact design (ideal when space is at a premium)
- Version according to ATEX on request

#### Description

The GEMÜ GEMÜ 605 und 625 und 687 2/2-way diaphragm valves have a low maintenance plastic actuator and are pneumatically operated. The valves have a metal distance piece. An integral 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 100 °C
- **Sterilization temperature:** max. 150 °C
- **Ambient temperature:** 0 to 60 °C
- **Operating pressure :** 0 to 8 bar
- **Nominal sizes:** DN 4 to 20
- **Body configurations:** 2/2-way body | Tank valve body | T-body
- **Connection types:** Clamp | Spigot | Threaded connection
- **Connection standards:** ANSI | ASME | BS | DIN | EN | ISO | JIS | SMS
- **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
- **Body lining:** Hard rubber | PFA | PP
- **Diaphragm materials:** EPDM | FKM | PTFE/EPDM
- **Conformities:** 3A | BSE/TSE | CRN | EAC | EHEDG | FDA | Functional safety | Reg. (EU) No. 10/2011 | Regulation (EC) No. 1935/2004 | Regulation (EC) No. 2023/2006 | TA Luft (German Clean Air Act) | USP

Technical data depends on the respective configuration



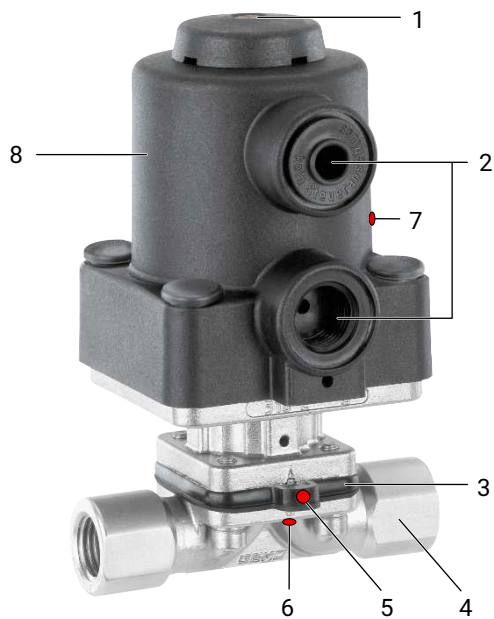
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webcode: GW-605 / 625



## Product description

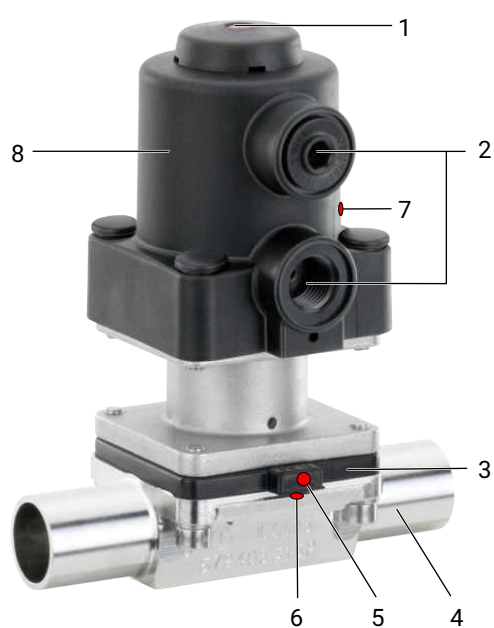
### Construction

GEMÜ 605



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
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 625



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
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](http://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 <sup>1)</sup>

Readings for Process Contact Surfaces	Mechanically polished <sup>2)</sup>		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 <sup>3)</sup>	H5	1527	HE5	1516
Readings for Process Contact Surfaces according to ASME BPE 2016 <sup>4)</sup>	Mechanically polished <sup>2)</sup>		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

Readings for Process Contact Surfaces	Mechanically polished <sup>2)</sup>	
	Hygiene class DIN 11866	Code
Ra ≤ 6.30 µm	-	1500
Ra ≤ 0.80 µm	H3	1502
Ra ≤ 0.60 µm <sup>5)</sup>	-	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

Type	MG	DN	Connection type code <sup>1)</sup>																					
			0		16		17		18		36		55		59		60		63		64		65	
			Material code <sup>2)</sup>																					
			C3	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	40, 42, F4	40, 42, F4	40, 42, F4			
<b>GEMÜ 605</b>	<b>8</b>	<b>4</b>	X	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		<b>6</b>	-	-	-	X	X	-	X	-	-	-	-	-	-	X	X	-	-	-	-	X		
		<b>8</b>	-	-	-	X	X	-	X	X	X	X	X	X	X	X	X	X	-	-	-	-	X	
		<b>10</b>	-	-	X	X	X	X	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-	
		<b>15</b>	-	-	-	-	-	-	-	-	X	X	X	X	-	-	-	-	-	-	-	-	-	
<b>GEMÜ 625</b>	<b>10</b>	<b>10</b>	-	-	X	X	X	X	X	X	X	-	X	X	X	X	X	-	-	-	-	X		
		<b>15</b>	-	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	X	X	X	
		<b>20</b>	-	-	-	-	-	-	-	-	X	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 edition)/DIN 11866 series C

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

Type	MG	DN	Connection type code <sup>1)</sup>	
			1	6, 6K
			Material code <sup>2)</sup>	
			37	40, 42
<b>GEMÜ 605</b>	<b>8</b>	<b>8</b>	X	-
		<b>10</b>	-	W
<b>GEMÜ 625</b>	<b>10</b>	<b>10</b>	-	W
		<b>12</b>	X	-
		<b>15</b>	X	W
		<b>20</b>	-	-

MG = diaphragm size, X = standard

W = welded assembly

1) **Connection type**

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 37: 1.4408, investment casting

Code 40: 1.4435 (F316L), forged body

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

**Clamp**

Type	MG	DN	Connection type code <sup>1)</sup>			
			80, 8P	82	88, 8T	8A
			Material code <sup>2)</sup>			
			40, 42, F4			
<b>GEMÜ 605</b>	<b>8</b>	<b>6</b>	-	K	-	K
		<b>8</b>	K	K	-	K
		<b>10</b>	K	-	-	W
		<b>15</b>	K	-	W	-
<b>GEMÜ 625</b>	<b>10</b>	<b>10</b>	-	K	-	K
		<b>15</b>	K	W	K	K
		<b>20</b>	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, forged body

**Availability of product conformity**

	Diaphragm material code <sup>1)</sup>
Food	
3A	54, 5M

**1) Diaphragm material**

Code 54: PTFE/EPDM one-piece

Code 5M: PTFE/EPDM two-piece



## 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, stainless steel distance piece, optical position indicator	605
Diaphragm valve, pneumatically operated, plastic piston actuator, stainless steel distance piece, optical position indicator	625

2 DN	Code
<b>GEMÜ 605</b>	
DN 4	4
DN 6	6
DN 8	8
DN 10	10
DN 15	15
<b>GEMÜ 625</b>	
DN 10	10
DN 12	12
DN 15	15
DN 20	20

3 Body configuration	Code
Tank bottom valve body	B
Body configuration code B: Dimensions and designs on request	
2/2-way body	D
T-body	T
Body configuration code T: Dimensions on request	

4 Connection type	Code
<b>Spigot</b>	
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 edition)/DIN 11866 series C	59
Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/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
<b>Threaded connection</b>	
Threaded socket DIN ISO 228	1
Threaded spigot DIN 11851	6

4 Connection type	Code
Cone spigot and union nut DIN 11851	6K
<b>Clamp</b>	
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
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
<b>SG iron material</b>	
<b>Investment casting material</b>	
1.4408, investment casting	37
1.4435, investment casting	C3
<b>Forged material</b>	
1.4435 (F316L), forged body	40
1.4435 (BN2), forged body, $\Delta$ Fe < 0.5%	42
1.4539, forged body	F4

6 Diaphragm material	Code
<b>Elastomer</b>	
EPDM	3A
FKM	4
FKM	4A
EPDM	13
EPDM	17
EPDM	19
<b>PTFE</b>	
PTFE/EPDM one-piece	54
<b>Note:</b> The PTFE/EPDM diaphragm (code 5M) is available from diaphragm size 25.	

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

## Order data

8 Actuator version	Code
GEMÜ 605	
Actuator size 0/N	0/N
GEMÜ 625	
Actuator size 1/N	1/N
9 Surface	Code
Ra ≤ 6.3 µm (250 µin.) for media wetted surfaces, mechanically polished internal	1500
Ra ≤ 0.8 µm (30 µin.) for media wetted surfaces, in accordance with DIN 11866 H3, mechanically polished internal	1502
Ra ≤ 0.8 µm (30 µin.) for media wetted surfaces, in accordance with DIN 11866 HE3, electropolished internal/external	1503
Ra ≤ 0.6 µm (25 µin.) for media wetted surfaces, mechanically polished internal	1507
Ra ≤ 0.6 µm (25 µin.) for media wetted surfaces, electropolished internal/external	1508
Ra ≤ 0.25 µm (10 µin.) for media wetted surfaces *), in accordance with DIN 11866 HE5, electropolished internal/external, *) for inner pipe diameters < 6 mm, in the spigot Ra ≤ 0.38 µm	1516
Ra ≤ 0.25 µm (10 µin.) for media wetted surfaces *), in accordance with DIN 11866 H5, mechanically polished internal, *) for inner pipe diameters < 6 mm, in the spigot Ra ≤ 0.38 µm	1527
Ra ≤ 0.4 µm (15 µin.) for media wetted surfaces, in accordance with DIN 11866 H4, mechanically polished internal	1536

9 Surface	Code
Ra ≤ 0.4 µm (15 µin.) 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
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 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
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	
Special version for 3A	M

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

## Order example

Ordering option	Code	Description
1 Type	605	Diaphragm valve, pneumatically operated, plastic piston actuator, stainless steel distance piece, optical position indicator
2 DN	8	DN 8
3 Body configuration	D	2/2-way body
4 Connection type	60	Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B
5 Valve body material	C3	1.4435, investment casting
6 Diaphragm material	54	PTFE/EPDM one-piece
7 Control function	1	Normally closed (NC)
8 Actuator version	0/N	Actuator size 0/N
9 Surface	1500	Ra ≤ 6.3 µm (250 µin.) for media wetted surfaces, mechanically polished internal
10 Special version	M	Special version for 3A
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.

**Control medium:** Inert gases

### Temperature

**Media temperature:**

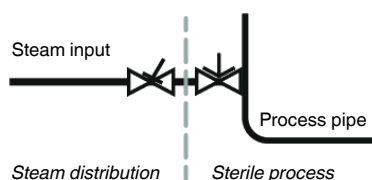
Diaphragm material	Standard
EPDM (code 3A/13)	-10 – 100 °C
FKM (code 4/4A)	-10 – 90 °C
EPDM (code 17)	-10 – 100 °C
EPDM (code 19)	-10 – 100 °C
PTFE/EPDM (code 54)	-10 – 100 °C

**Ambient temperature:** 0 – 60 °C

**Control medium temperature:** 0 – 40 °C

**Storage temperature:** 0 – 40 °C

**Sterilization temperature:** The sterilization temperature is only valid for steam (saturated steam) or superheated water. If the sterilization temperatures listed above are applied to the EPDM diaphragms for longer periods of time, the service life of the diaphragms will be reduced. In these cases, maintenance cycles must be adapted accordingly. PTFE diaphragms can also be used as steam barriers; however, this will reduce their service life. This also applies to PTFE diaphragms exposed to high temperature fluctuations. The maintenance cycles must be adapted accordingly. GEMÜ 555 and 505 globe valves are particularly suitable for use in the area of steam generation and distribution. The following valve arrangement for interfaces between steam pipes and process pipes has proven itself over time: A globe valve for shutting off steam pipes and a diaphragm valve as an interface to the process pipes.



EPDM (code 3A/13)	max. 150 °C, max. 60 min per cycle
FKM (code 4/4A)	not applicable
EPDM (code 17)	max. 150 °C, max. 180 min per cycle
EPDM (code 19)	max. 150 °C, max. 180 min per cycle
PTFE/EPDM (code 54)	max. 150 °C, constant temperature per cycle

### Pressure

**Operating pressure:**

Type	MG	DN	Diaphragm material	
			Elastomer	PTFE
<b>GEMÜ 605</b>	<b>8</b>	<b>4–15</b>	0–8	0–6
<b>GEMÜ 625</b>	<b>10</b>	<b>10–20</b>	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

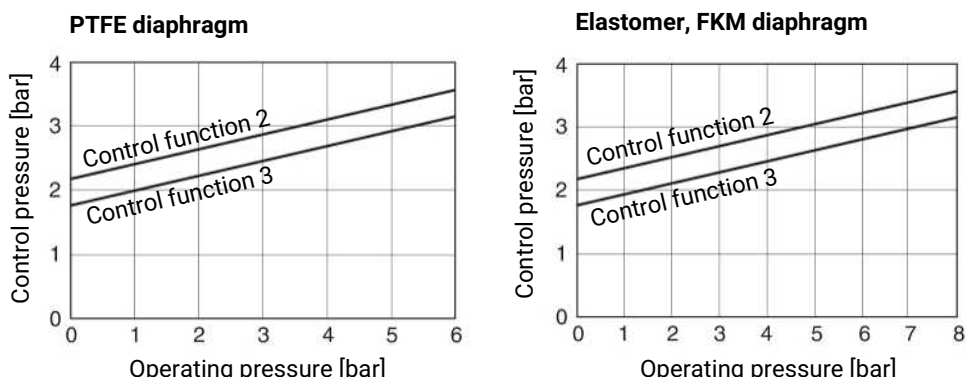
**Leakage rate:** Leakage rate A to P11/P12 EN 12266-1

**Control pressure:**

Type	MG	DN	Control function 1	Control function 2	Control function 3
<b>GEMÜ 605</b>	<b>8</b>	<b>4 - 15</b>	4-7	Max. 4 (see diagram)	Max. 4 (see diagram)
<b>GEMÜ 625</b>	<b>10</b>	<b>10 - 20</b>	5-7	Max. 6.0	Max. 5.0

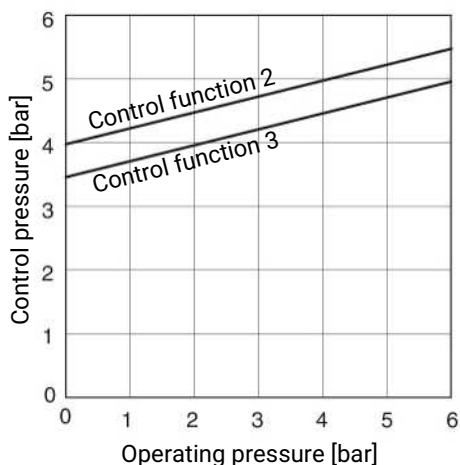
MG = diaphragm size  
All pressures are gauge pressures.

**GEMÜ 605: 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.

**GEMÜ 625: 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 dm<sup>3</sup>

## Cv values:

MG	DN	Connection type code						
		0	16	17	18	59	60	1
<b>8</b>	<b>4</b>	0.5	-	-	-	-	-	-
	<b>6</b>	-	-	1.1	-	-	1.2	-
	<b>8</b>	-	-	1.3	-	0.6	2.2	1.4
	<b>10</b>	-	2.1	2.1	2.1	1.3	-	-
	<b>15</b>	-	-	-	-	2.0	-	-
<b>10</b>	<b>10</b>	-	2.4	2.4	2.4	2.2	3.3	-
	<b>12</b>	-	-	-	-	-	-	3.2
	<b>15</b>	3.3	3.8	3.8	3.8	2.2	4.0	3.4
	<b>20</b>	-	-	-	-	3.8	-	-

MG = diaphragm size

Cv values in m<sup>3</sup>/h

Kv values determined in accordance with DIN EN 60534 standard, inlet pressure 5 bar,  $\Delta p$  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.

The Kv value curve (Kv value dependent on valve stroke) can vary depending on the diaphragm material and duration of use.

## Product conformities

**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

**TA Luft (German Clean Air Act):** The product meets the following requirements under the max. permissible operating conditions:  
-Tightness or compliance with the specific leak rate within the sense of TA-Luft as well as VDI 2440 and VDI 2290  
-Compliance with the requirements in accordance with DIN EN ISO 15848-1, Table C.2, Class BH  
\* depending on version and/or operating parameters

**SIL:**

<b>Product description:</b>	GEMÜ diaphragm valve 605 / 625
<b>Type of valve:</b>	A
<b>Safety function:</b>	Due to the safety function, the diaphragm valve is placed in the closed position (with control function 1) or in the open position (with control function 2).
<b>HFT (Hardware Fault Tolerance):</b>	0
<b>MTTR (Mean Time To Restoration):</b>	24 hours

## Mechanical data

**Weight:**

**GEMÜ 605 actuator**  
0.30 kg

**GEMÜ 625 actuator**  
0.45 kg

### Body

MG	DN	Spigot	Threaded socket	Threaded spigot, cone spigot	Clamp
		Connection type code			
		0, 16, 17, 18, 35, 36, 37, 55, 59, 60, 63, 64, 65	1	6, 6K	80, 82, 88, 8A, 8P, 8T
<b>8</b>	<b>4</b>	0.09	-	-	-
	<b>6</b>	0.09	-	-	-
	<b>8</b>	0.09	0.09	-	0.15
	<b>10</b>	0.09	-	0.21	0.18
	<b>15</b>	0.09	-	-	0.18
<b>10</b>	<b>10</b>	0.30	-	0.33	0.30
	<b>12</b>	-	0.17	-	-
	<b>15</b>	0.30	0.26	0.35	0.43
	<b>20</b>	-	-	-	0.43

Weights in kg  
MG = diaphragm size

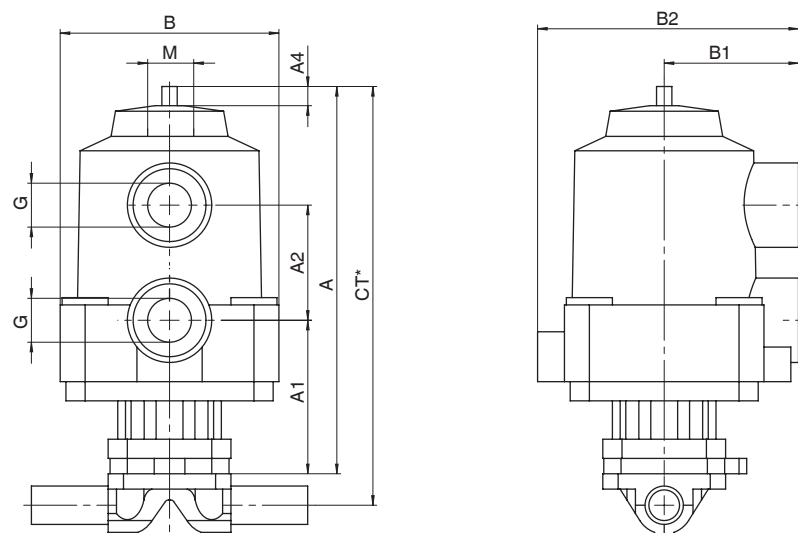
**Installation position:** Optional

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

## Dimensions

### Actuator dimensions

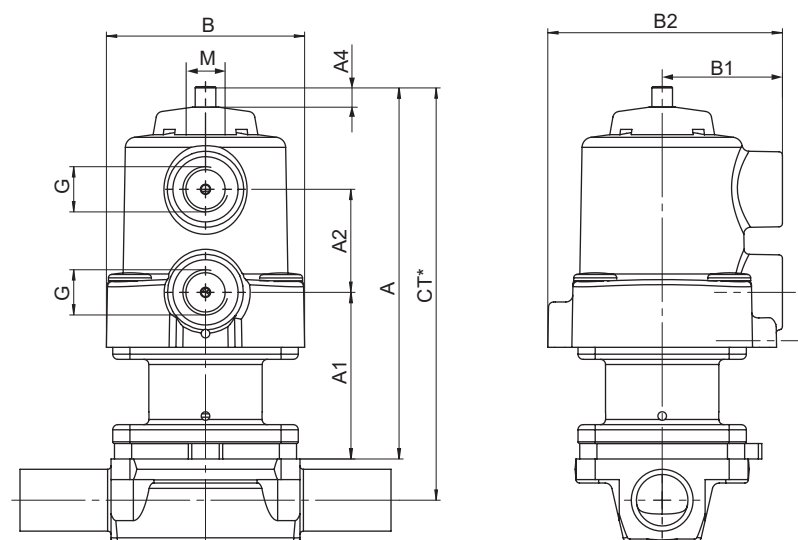
#### GEMÜ 605



MG	A	A1	A2	B	B1	B2	A4	G	M
8	100.0	39.0	30.0	57.0	35.0	68.0	4.0	G 1/4	M12x1

MG = diaphragm size  
 Dimensions in mm  
 \* CT = A + H1 (see body dimensions)

#### GEMÜ 625

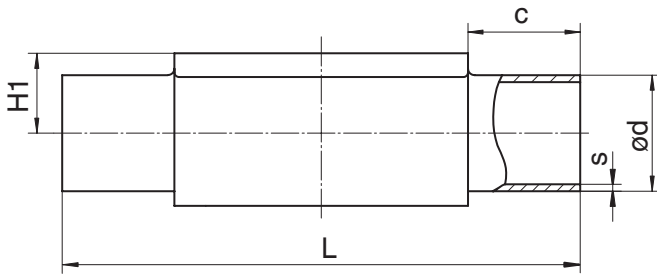


MG	A	A1	A2	B	B1	B2	A4	G	M
10	110.0	49.0	30.0	57.0	35.0	68.0	4.0	G 1/4	M12x1

MG = diaphragm size  
 Dimensions in mm  
 \* 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)<sup>1)</sup>, forged material (code 40, 42, F4)<sup>2)</sup>**

Type	MG	DN	NPS	c (min)	ød					H1	L	s				
					Connection type							Connection type				
					0	16	17	18	60			0	16	17	18	60
<b>GEMÜ 605</b>	<b>8</b>	<b>4</b>	-	20.0	6.0	-	-	-	-	8.5	72.0	1.0	-	-	-	-
		<b>6</b>	-	20.0	-	-	8.0	-	10.2	8.5	72.0	-	-	1.0	-	1.6
		<b>8</b>	<b>1/4"</b>	20.0	-	-	10.0	-	13.5	8.5	72.0	-	-	1.0	-	1.6
		<b>10</b>	<b>3/8"</b>	20.0	-	12.0	13.0	14.0	-	8.5	72.0	-	1.0	1.5	2.0	-
<b>GEMÜ 625</b>	<b>10</b>	<b>10</b>	<b>3/8"</b>	25.0	-	12.0	13.0	14.0	17.2	12.5	108.0	-	1.0	1.5	2.0	1.6
		<b>15</b>	<b>1/2"</b>	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) 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 60: Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series B

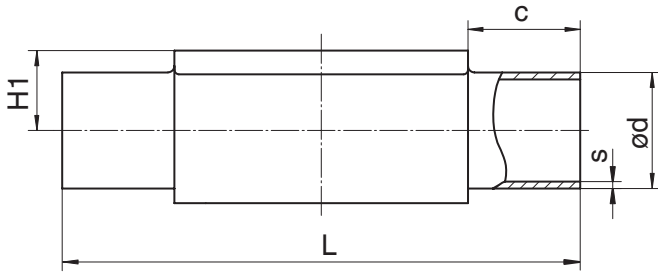
**2) Valve body material**

Code 40: 1.4435 (F316L), forged body

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

Code F4: 1.4539, forged body





Connection type spigot DIN/EN/ISO (code 0, 17, 60)<sup>1)</sup>, investment casting material (code C3)<sup>2)</sup>

Type	MG	DN	NPS	c (min)	ød			H1	L	s		
					Connection type					Connection type		
					0	17	60			0	17	60
GEMÜ 605	8	4	-	20.0	6,0	-	-	8.5	72.0	1,0	-	-
		6	-	20.0	-	8.0	-	8.5	72.0	-	1.0	-
		8	1/4"	20.0	-	10.0	13.5	8.5	72.0	-	1.0	1.6
		10	3/8"	20.0	-	13.0	-	8.5	72.0	-	1.5	-
GEMÜ 625	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) **Connection type**

Code 0: Spigot DIN

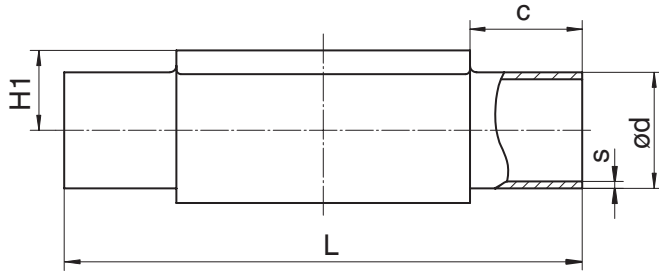
Code 17: Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2

Code 60: Spigot ISO 1127/DIN EN 10357 series C (2014 edition)/DIN 11866 series 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)<sup>1)</sup>, forged material (code 40, 42, F4)<sup>2)</sup>**

Type	MG	DN	NPS	c (min)	ød					H1	L	s				
					Connection type							Connection type				
					55	59	63	64	65			55	59	63	64	65
GEMÜ 605	8	6	-	20.0	-	-	10.3	-	10.3	8.5	72.0	-	-	1.24	-	1.73
		8	1/4"	20.0	6.35	6.35	13.7	-	13.7	8.5	72.0	1.2	0.89	1.65	-	2.24
		10	3/8"	20.0	9.53	9.53	-	-	-	8.5	72.0	1.2	0.89	-	-	-
		15	1/2"	20.0	12.70	12.70	-	-	-	8.5	72.0	1.2	1.65	-	-	-
GEMÜ 625	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	-	-	-

Dimensions in mm

MG = diaphragm size

**1) Connection type**

Code 55: Spigot BS 4825, part 1

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

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

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

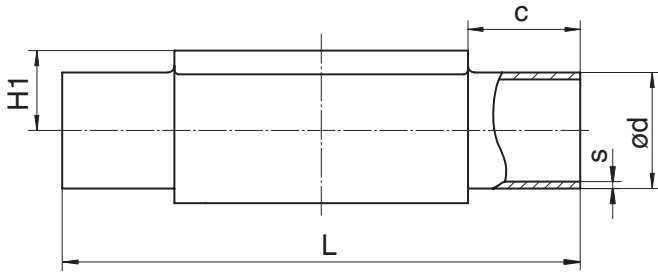
Code 65: Spigot ANSI/ASME B36.19M schedule 40s

**2) Valve body material**

Code 40: 1.4435 (F316L), forged body

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

Code F4: 1.4539, forged body



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

Type	MG	DN	NPS	c (min)	ød	H1	L	s
GEMÜ 605	8	8	1/4"	20.0	6.35	8.5	72.0	0.89
		10	3/8"	20.0	9.53	8.5	72.0	0.89
		15	1/2"	20.0	12.70	8.5	72.0	1.65
GEMÜ 625	10	20	3/4"	25.0	19.05	12.5	108.0	1.65

Dimensions in mm

MG = diaphragm size

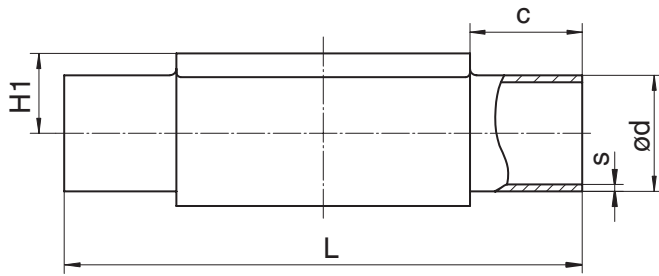
1) **Connection type**

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

2) **Valve body material**

Code C3: 1.4435, investment casting

**Spigot JIS/SMS (code 36)**



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

Type	MG	DN	NPS	c (min)	ød	H1	L	s
<b>GEMÜ 605</b>	<b>8</b>	<b>6</b>	-	20.0	10.5	8.5	72.0	1.20
		<b>8</b>	<b>1/4"</b>	20.0	13.8	8.5	72.0	1.65
<b>GEMÜ 625</b>	<b>10</b>	<b>10</b>	<b>3/8"</b>	25.0	17.3	12.5	108.0	1.65
		<b>15</b>	<b>1/2"</b>	25.0	21.7	12.5	108.0	2.10

Dimensions in mm

MG = diaphragm size

**1) Connection type**

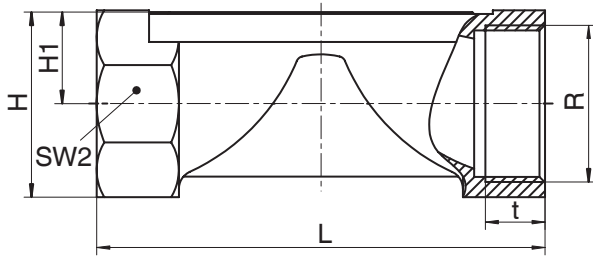
Code 36: Spigot JIS-G 3459 schedule 10s

**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, forged body

**Threaded socket DIN (code 1)****Connection type threaded socket (code 1)<sup>1)</sup>, investment casting material (code 37)<sup>2)</sup>**

Type	MG	DN	NPS	H	H1	L	n	R	SW 2	t
<b>GEMÜ 605</b>	<b>8</b>	<b>8</b>	<b>1/4"</b>	19.0	9.0	72.0	6	G 1/4	18.0	11.0
<b>GEMÜ 625</b>	<b>10</b>	<b>12</b>	<b>3/8"</b>	25.0	13.0	55.0	2	G 3/8	22.0	12.0
		<b>15</b>	<b>1/2"</b>	30.0	15.0	68.0	2	G 1/2	27.0	15.0

Dimensions in mm

MG = diaphragm size

n = number of flats

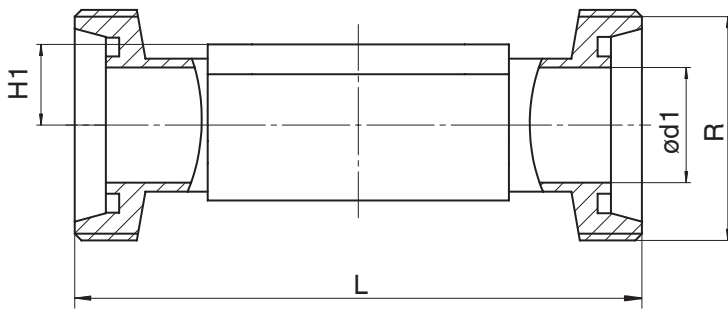
**1) Connection type**

Code 1: Threaded socket DIN ISO 228

**2) Valve body material**

Code 37: 1.4408, investment casting

**Threaded spigot DIN (code 6)**



**Connection type threaded spigot DIN (code 6)<sup>1)</sup>, forged material (code 40, 42)<sup>2)</sup>**

Type	MG	DN	NPS	ød1	H1	L	R
<b>GEMÜ 605</b>	<b>8</b>	<b>10</b>	<b>3/8"</b>	10.0	8.5	92.0	Rd 28 x 1/8
<b>GEMÜ 625</b>	<b>10</b>	<b>10</b>	<b>3/8"</b>	10.0	12.5	118.0	Rd 28 x 1/8
		<b>15</b>	<b>1/2"</b>	16.0	12.5	118.0	Rd 34 x 1/8

Dimensions in mm

MG = diaphragm size

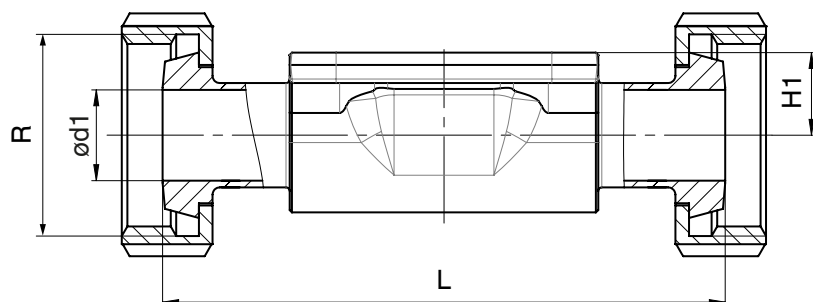
**1) Connection type**

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)****Cone spigot connection type DIN (code 6K)<sup>1)</sup>, forged material (code 40, 42)<sup>2)</sup>**

Type	MG	DN	NPS	ød1	H1	L	R
<b>GEMÜ 605</b>	<b>8</b>	<b>10</b>	<b>3/8"</b>	10.0	8.5	90.0	Rd 28 x 1/8
<b>GEMÜ 625</b>	<b>10</b>	<b>10</b>	<b>3/8"</b>	10.0	12.5	116.0	Rd 28 x 1/8
		<b>15</b>	<b>1/2"</b>	16.0	12.5	116.0	Rd 34 x 1/8

Dimensions in mm

MG = diaphragm size

**1) Connection type**

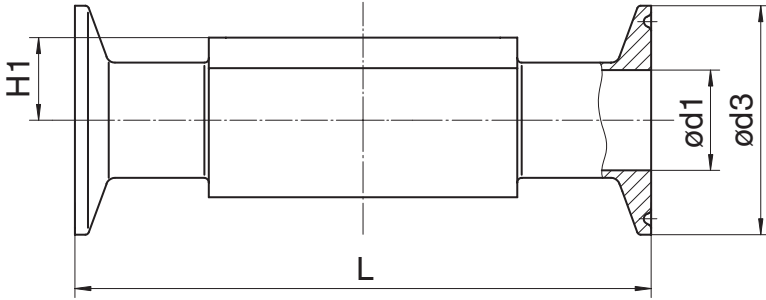
Code 6K: Cone spigot and union nut DIN 11851

**2) Valve body material**

Code 40: 1.4435 (F316L), forged body

Code 42: 1.4435 (BN2), forged body,  $\Delta Fe < 0.5\%$

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



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

Type	MG	DN	NPS	ød1		ød3		H1	L	
				Connection type		Connection type			Connection type	
				80, 8P	88, 8T	80, 8P	88, 8T		80, 8P	88, 8T
<b>GEMÜ 605</b>	8	8	1/4"	4.57	-	25.0	-	8.5	63.5	-
		10	3/8"	7.75	-	25.0	-	8.5	63.5	-
		15	1/2"	9.40	9.40	25.0	25.0	8.5	63.5	108.0
<b>GEMÜ 625</b>	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

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

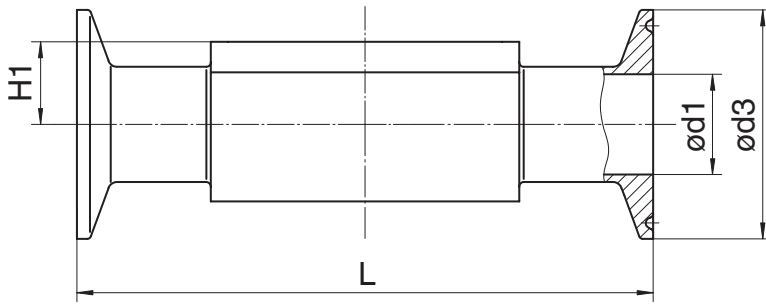
**2) Valve body material**

Code 40: 1.4435 (F316L), forged body

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

Code F4: 1.4539, forged body





Connection type clamp DIN/ISO (code 82, 8A)<sup>1)</sup>, forged material (code 40, 42, F4)<sup>2)</sup>

Type	MG	DN	NPS	ød1		ød3		H1	L	
				Connection type		Connection type			Connection type	
				82	8A	82	8A		82	8A
GEMÜ 605	8	6	1/8"	7.0	6.0	25.0	25.0	8.5	63.5	63.5
		8	1/4"	10.3	8.0	25.0	25.0	8.5	63.5	63.5
		10	3/8"	-	10.0	-	34.0	8.5	-	88.9
GEMÜ 625	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 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

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, forged body



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