

GEMÜ 411

Manually operated butterfly valve



Features

- Suitable for vacuum applications and low temperatures
- High-quality butterfly valve made from stainless steel or brass
- Available in small nominal sizes
- Compact and robust body
- Ergonomically designed hand lever with integrated locking device

Description

The GEMÜ 411 soft seated butterfly valve made from stainless steel or brass has an ergonomically designed, corrosion-resistant plastic hand lever. It is protected against accidental operation by the integrated locking device. With its rounded and polished disc edges, the butterfly valve is optimized for frequent cycle duties. The surface of the butterfly valve can be further finished.

Technical specifications

- **Media temperature :** -20 to 120 °C
- **Ambient temperature:** -10 to 60 °C
- **Operating pressure :** 0 to 10 bar
- **Nominal sizes:** DN 15 to 50
- **Connection types:** Clamp | Spigot | Threaded connection
- **Connection standards:** ASME | DIN | EN | ISO | SMS
- **Housing materials:** 1.4408, investment casting material | CW614N, brass | CW617N, brass
- **Liner materials:** EPDM | FKM | Silicone
- **Disc materials:** 1.4408, investment casting material | CW614N, brass | CW617N, brass
- **Conformities:** ATEX | EAC | FDA

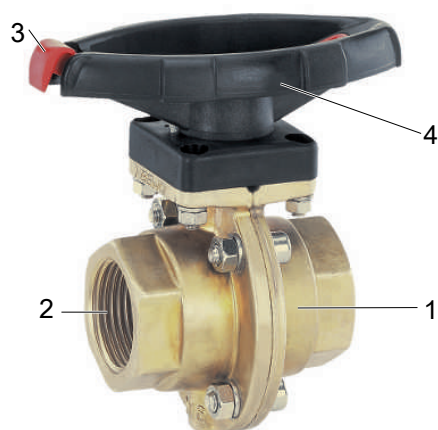
Technical data depends on the respective configuration



Product line

				
	GEMÜ K415	GEMÜ 411	GEMÜ 415	GEMÜ 428
Operation				
With bare shaft	●	-	-	-
Manual	-	●	-	-
Pneumatic	-	-	●	-
Motorized	-	-	-	●
Nominal sizes	DN 15 to 50	DN 15 to 50	DN 15 to 50	DN 15 to 50
Media temperature	-20 to 160 °C	-20 to 120 °C	-20 to 120 °C	-20 to 120 °C
Operating pressure	0 to 10 bar	0 to 10 bar	0 to 10 bar	0 to 10 bar
Connection types				
Clamp	●	●	●	●
Spigot	●	●	●	●
Threaded connection	●	●	●	●
Conformities				
ATEX	●	●	●	●
CSA	-	-	-	●
EAC	●	●	●	●
FDA	●	●	●	●

Product description



Item	Name	Material	Comment
1	Valve body	CW614N, CW617N (brass), investment casting (1.4408)	
2	Pipe connections	CW614N, CW617N (brass), investment casting (1.4408)	
3	Locking device	PP RT 30% glass fibre reinforced	Locking at 0°, 22.5°, 45°, 67.5° and 90°
4	Manual override	PA 6.6 25% glass fibre reinforced, black	

Item	Name	Material	Comment
	Disc	CW614N, CW617N (brass), investment casting (1.4408)	

Availability

Body

DN	NPS	Body material code ¹⁾									
		Brass code 12		Investment casting code 37							
		Connection type code ²⁾									
		Threaded socket		Spigot						Clamp	
		1	31	0	16	17	37	59	60	86	88
15	1/2"	X	X	X	X	X	-	X	X	X	X
20	3/4"	X	X	X	X	X	-	X	X	X	X
25	1"	X	X	X	X	X	X	X	X	X	X
32	1¼"	X	X	X	X	X	X	-	X	X	-
40	1½"	X	X	X	X	X	X	X	X	X	X
50	2"	X	X	X	X	X	X	X	X	X	X

1) Body material

Code 12: CW614N, CW617N (brass)

Code 37: 1.4408, investment casting

2) Connection type

Code 1: Threaded socket DIN ISO 228

Code 31: Threaded socket NPT

Code 0: Spigot DIN

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

Code 17: Spigot EN 10357 series A (formerly DIN 11850 series 2)

Code 37: Spigot SMS 3008

Code 59: Spigot ASME BPE

Code 60: Spigot ISO 1127 / EN 10357 series C

Code 86: Clamp DIN 32676 series A, face-to-face dimension FTF EN 558 series 14

Code 88: Clamp ASME BPE, face-to-face dimension FTF EN 558 series 14

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
Butterfly valve, manually operated	411

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

3 Body configuration	Code
2/2-way body	D

4 Connection type	Code
Spigot	
Spigot DIN	0
Spigot EN 10357 series B (formerly DIN 11850 series 1)	16
Spigot EN 10357 series A (formerly DIN 11850 series 2)	17
Spigot SMS 3008	37
Spigot ASME BPE	59
Spigot ISO 1127 / EN 10357 series C	60
Threaded socket	
Threaded socket DIN ISO 228	1
Threaded socket NPT	31
Clamp	
Clamp DIN 32676 series A, face-to-face dimension FTF EN 558 series 14	86

4 Connection type	Code
Clamp ASME BPE, face-to-face dimension FTF EN 558 series 14	88

5 Body material	Code
CW614N, CW617N (brass)	12
1.4408, investment casting	37

6 Liner	Code
FPM (FKM)	4
Silicone (MVQ)	9
EPDM	14

7 Control function	Code
Manually operated (MO)	0

8 Type of design	Code
Without	
Media wetted area cleaned to ensure suitability for paint applications, parts sealed in plastic bag	0101
Ra ≤ 0.6 µm electropolished internal/external, surface finish data refers to media wetted surfaces	1508
Ra ≤ 0.8 µm mechanically polished internal, blasted external, surface finish data refers to media wetted surfaces	1502
Body Ms (brass) nickel-plated	1524
Disc / spigots polished to 1.6 µm	1590

Order example

Ordering option	Code	Description
1 Type	411	Butterfly valve, manually operated
2 DN	25	DN 25
3 Body configuration	D	2/2-way body
4 Connection type	1	Threaded socket DIN ISO 228
5 Body material	12	CW614N, CW617N (brass)
6 Liner	14	EPDM
7 Control function	0	Manually operated (MO)

Technical data

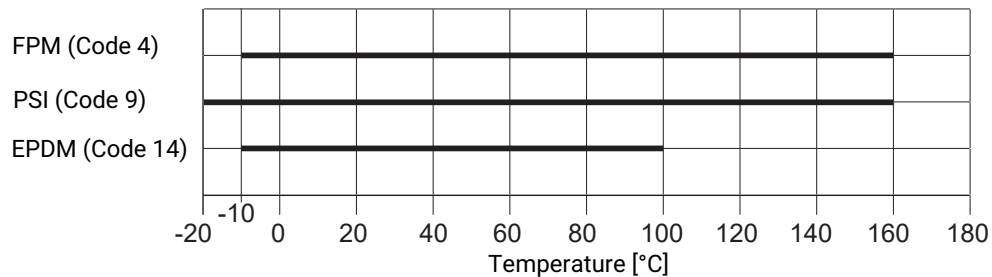
Medium

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

Temperature

Media temperature:

Liner material



For media temperatures above 100 °C additionally use shaft extension GEMÜ RCO (see accessories).

Ambient temperature: -10 – 60 °C

Storage temperature: 0 – 40 °C

Pressure

Operating pressure: 0 – 10 bar

Pressure rating: PN 10

Kv values:

DN	Threaded socket	Butt weld spigot
	Body material	
	Code 12	Code 37
15	7	7
20	12	15
25	17	20
32	40	55
40	60	90
50	100	140

Kv values in m³/h

Product compliance

Pressure Equipment Directive: 2014/68/EU

Approvals: FDA

Mechanical data

Weight:

Butterfly valve with manual operator

DN	Body material ¹⁾	
	Code 12	Code 37
15	800	1050
20	850	1100
25	900	1150
32	1050	1200
40	1600	1400
50	2200	2250

Weight in g

1) Body material

Code 12: CW614N, CW617N (brass)

Code 37: 1.4408, investment casting

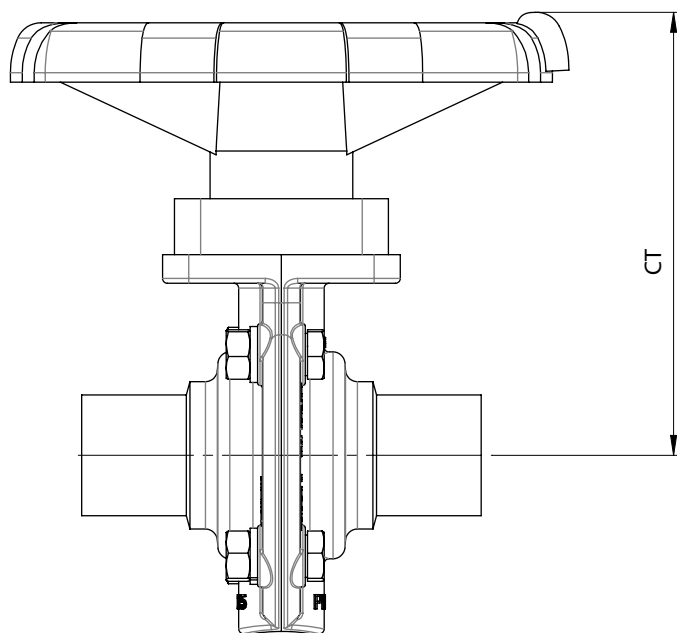
Torques:

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

Torques in Nm

Dimensions

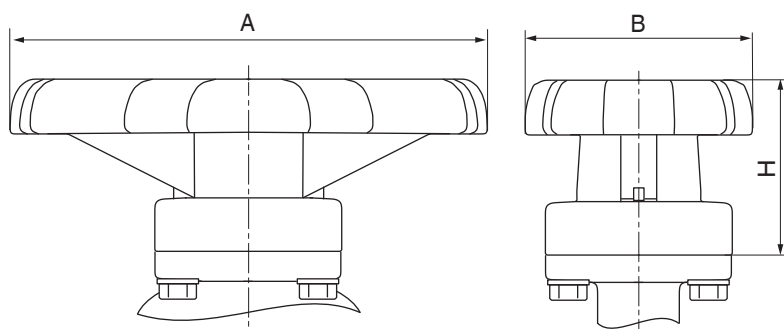
Mounting height



DN	CT
15	83.5
20	83.5
25	83.5
32	111.0
40	119.0
50	128.0

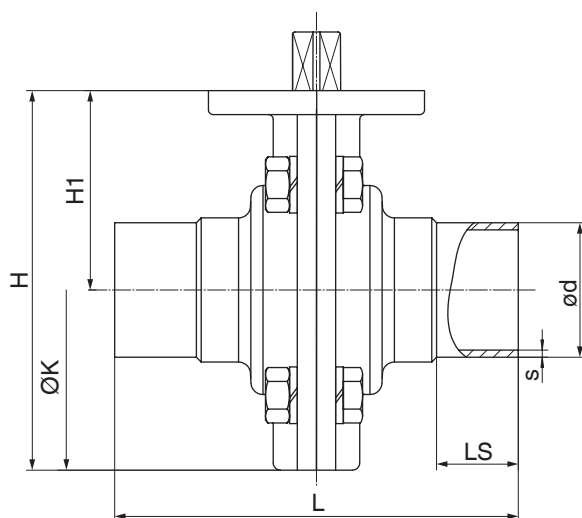
Dimensions in mm

Manual override



DN	A	B	H
15 - 25	118	55	42
32 - 50	160	71	63

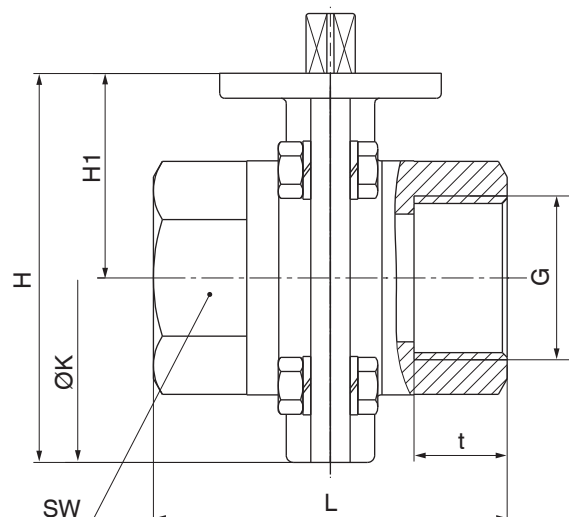
Dimensions in mm

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

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

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

Dimensions in mm

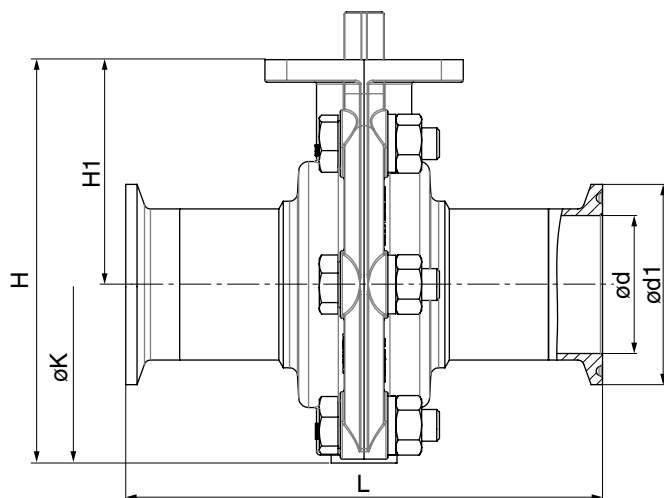
Threaded socket (connection type code 1, 31)

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

Dimensions in mm

n = number of flats

Clamp (connection type code 86, 88)



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

Dimensions in mm

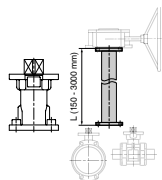
Accessories



GEMÜ 1225

Electrical position indicator

The GEMÜ 1225 electrical position indicator for GEMÜ butterfly valves 410, 411, 415, 417, 423 and 428 has two adjustable trip cams which are non-positively operated by the switching shaft.



GEMÜ RCO

Shaft extension

The RCO 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).



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