

GEMÜ 411

Manually operated butterfly valve



Features

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

Description

The GEMÜ 411 soft-seated, centric butterfly valve made of stainless steel 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 160 °C
- **Ambient temperature:** -10 to 60 °C
- **Operating pressure:** 0 to 10 bar
- **Nominal sizes:** DN 15 to 50
- **Connection types:** Clamp | Spigot | thread
- **Connection standards:** ASME | DIN | EN | ISO | SMS
- **Housing materials:** 1.4408, investment casting material
- **Liner materials:** EPDM | FKM | Silicone
- **Disc materials:** 1.4408, investment casting material
- **Conformities:** EAC | FDA | Functional safety

Technical data depends on the respective configuration



further information
webcode: GW-411

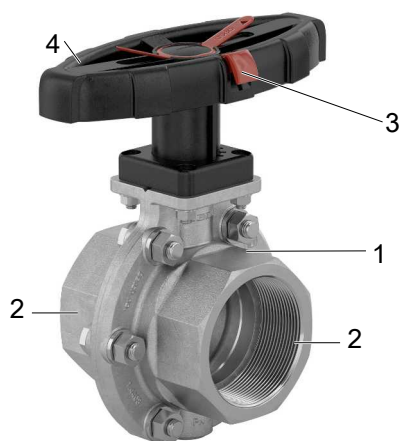


Product line



Operation				
With bare shaft	●	-	-	-
manually	-	●	-	-
Pneumatic	-	-	●	-
Motorized	-	-	-	●
Nominal sizes	DN 15 Up to 50	DN 15 Up to 50	DN 15 Up to 50	DN 15 Up to 50
Media temperature	-20 Up to 160 °C	-20 Up to 160 °C	-20 Up to 160 °C	-20 Up to 160 °C
Operating pressure	0 Up to 10 bar	0 Up to 10 bar	0 Up to 10 bar	0 Up to 10 bar
Connection types				
Clamp	●	●	●	●
Spigot	●	●	●	●
thread	●	●	●	●
Conformities				
ATEX	-	-	●	-
EAC	●	●	●	●
FDA	●	●	●	●
Functional safety	-	●	-	-

Product description



Item	Name	Material	Remark
1	Butterfly valve body	Investment casting (1.4408)	
2	Pipe connections	Investment casting (1.4408)	
3	Locking device	PP RT 30% glass fibre reinforced	Lock at 0°, 22.5°, 45°, 67.5° and 90°
4	Manual operator	PA 6.6 25% glass fibre reinforced, black	
	Disc	Investment casting (1.4408)	

Availability

Body

DN	NPS	Body material ¹⁾ : 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 37: 1.4408, investment casting

2) **Connection type**

Code 0: Spigot DIN

Code 1: Threaded socket DIN ISO 228

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

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

Code 31: NPT female thread

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

Code 88: Clamp ASME BPE, for pipe 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.

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

Order codes

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

5 Body material	Code
1.4408, investment casting	37

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

7 Control function	Code
Manually operated	0

8 Type of design	Code
Without	

8 Type of design	Code
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
Nickel-plated brass body	1524
Disc/spigot polished to 1.6 µm	1590

9 Special version	Code
Without	
Explosion protection (in the piping system)	Y

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	37	1.4408, investment casting
6 Shut-off seal material	14	EPDM
7 Control function	0	Manually operated
8 Type of design		Without
9 Special version		Without

Technical data

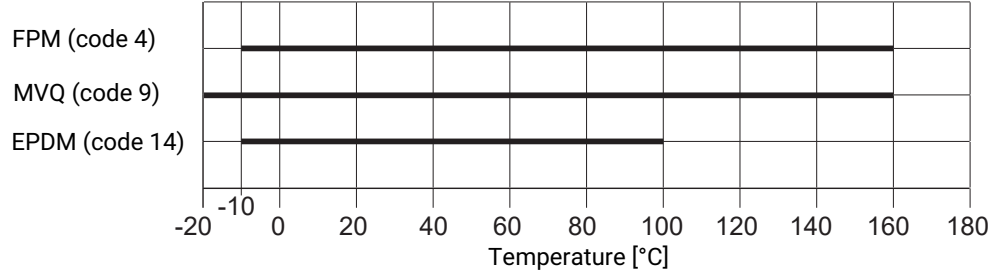
Medium

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:

Shut-off seal



For media temperatures above 100 °C, use the additional shaft extension GEMÜ RC0 (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	Body material
	Code 37
15	7
20	15
25	20
32	55
40	90
50	140

Kv values in m³/h

Product conformities

Machinery Directive: 2006/42/EC

Pressure Equipment Directive: 2014/68/EU

Approvals: FDA

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

Mechanical data

Torques:

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

Torques in Nm

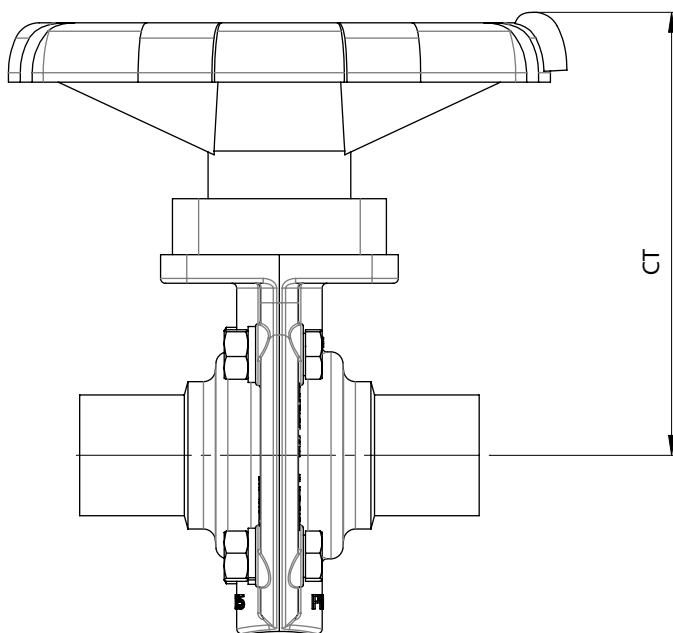
Weight:

DN	Body material
	Code 37
15	1050
20	1100
25	1150
32	1200
40	1400
50	2250

Weight in g

Dimensions

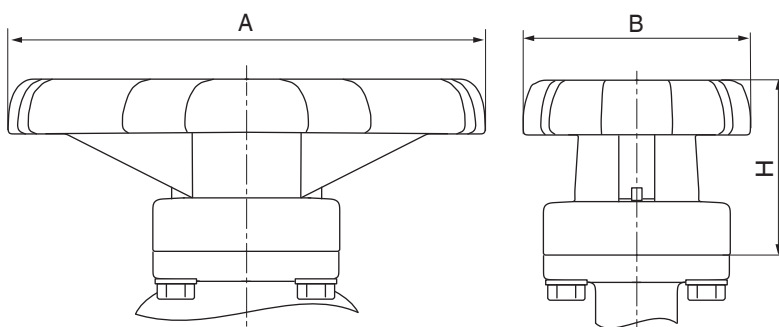
Mounting height



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

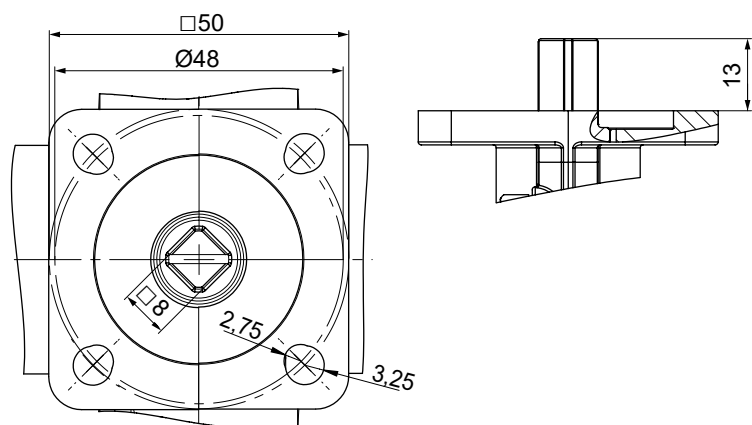
Dimensions in mm

Manual override



DN	A	B	H
15 - 25	118.0	55.0	42.0
32 - 50	160.0	71.0	63.0

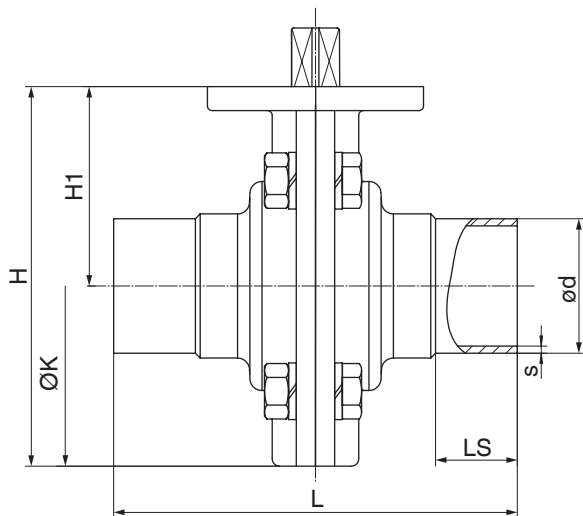
Dimensions in mm

Actuator flange F05/G05

Dimensions in mm

Body

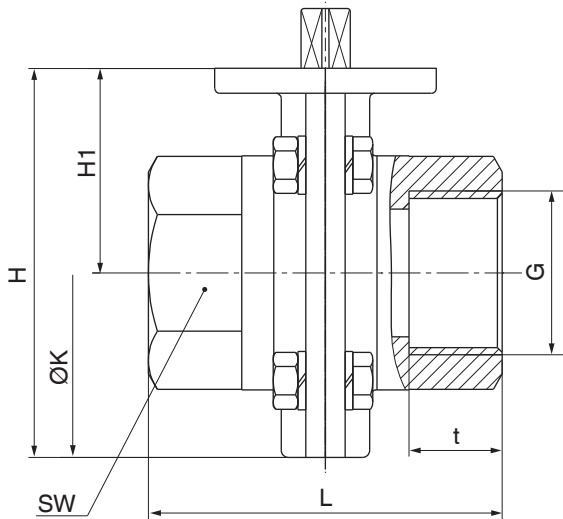
Butt weld spigot (connection type code 0, 16, 17, 37, 59, 60)



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

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

Dimensions in mm

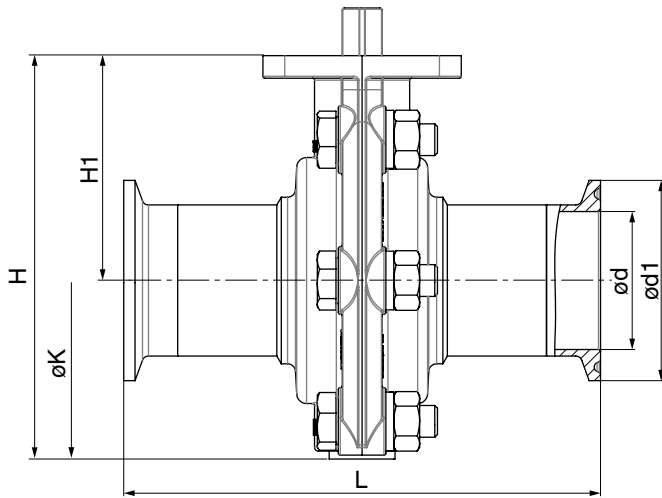
Threaded socket (connection type code 1, 31)

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

Dimensions in mm

n = number of flats

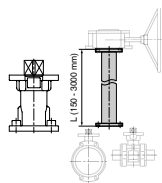
Clamp (connection type code 86, 88)



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

Dimensions in mm

Accessories



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).



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