GEMÜ B44

Pneumatically 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 and grease

Description

The GEMÜ B44 3-piece 2/2-way metal ball valve is pneumatically 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 types:** Clamp I Spigot
- **Connection standards:** ASME I DIN I ISO I SMS
- **Body materials:** 1.4435 (316L), investment casting material
- **Seal materials:** PTFE TFM™
- **Conformities:** ATEX I EAC I FDA I Reg. (EU) No. 10/2011 I Regulation (EC) No. 1935/2004 I USP

Technical data depends on the respective configuration

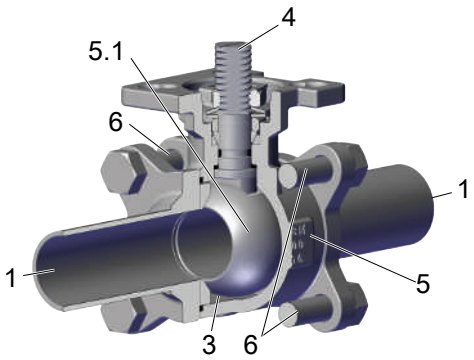
further information
webcode: GW-B44

Product line

				
	GEMÜ BB04	**GEMÜ B24**	**GEMÜ B44**	**GEMÜ B54**
Operation				
With bare shaft	●	-	-	-
Manual	-	●	-	-
Pneumatic	-	-	●	-
Motorized	-	-	-	●
Nominal sizes	DN 8 to 100	DN 8 to 100	DN 8 to 100	DN 8 to 100
Media temperature	-10 to 220 °C	-10 to 220 °C	-10 to 220 °C	-10 to 220 °C
Operating pressure	0 to 63 bar	0 to 63 bar	0 to 63 bar	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)
4	Ball valve shaft	1.4409 (SS316L)
6	Bolt	A2 70
3	Seals	PTFE, TFM

Cavity-filled PTFE TFM seat (code 5H)

- The cavity-filled seat, which is made of PTFE TFM, 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

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.

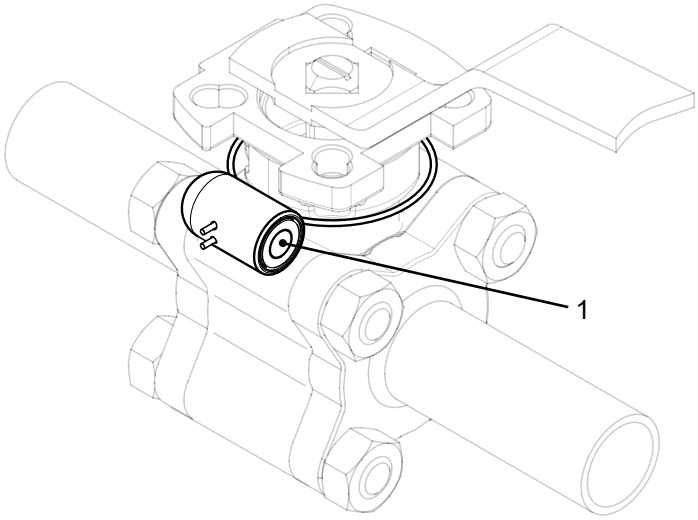
For further information on GEMÜ CONEXO please visit:
www.gemu-group.com/conexo

Ordering

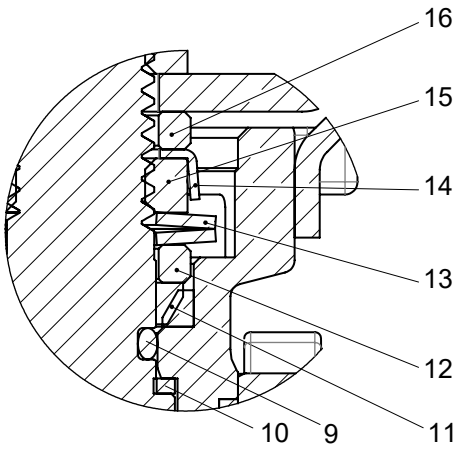
GEMÜ Conexo must be ordered separately with the ordering option "CONEXO" (see order data).

Installing the RFID chip

In the corresponding design with CONEXO, this product has an RFID chip (1) for electronic recognition. The position of the RFID chip can be seen below.



The spindle seal system



Item	Name	Material
9	O-ring	Viton
10	Seal	TFM
11	V-ring	TFM
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.

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 (formerly DIN 11850 series 2)/DIN 11866 series A
Code 37: Spigot SMS 3008
Code 59: Spigot ASME BPE
Code 60: Spigot ISO 1127/EN 10357 series C/DIN 11866 series B
Code 80: Clamp ASME BPE, face-to-face dimension FTF ASME BPE
Code 93: One side clamp ASME BPE corresponding to code 80, other side butt weld spigot code 59, for pipe ASME BPE

Actuator assignment

GEMÜ type DR/SC

Seal material TFM 1600, FDA compliant, cavity-filled seat seal (code 5H)

DN	NPS	Double acting DR	Code		Single acting SC	Code
8	1/4"	DR0015U F04NS11 A	DU01AO0		SC0030U 6 F04NS11 A	SU03KO0
10	3/8"	DR0015U F04NS11 A	DU01AO0		SC0030U 6 F04NS11 A	SU03KO0
15	1/2"	DR0015U F04NS11 A	DU01AO0		SC0030U 6 F04NS11 A	SU03KO0
20	3/4"	DR0015U F04NS11 A	DU01AO0		SC0030U 6 F04NS11 A	SU03KO0
25	1"	DR0015U F04NS11 A	DU01AO0		SC0060U 6F05F07NS14 A	SU06KP0
32	1¼"	DR0015U F04NS11 A	DU01AO0		SC0060U 6F05F07NS14 A	SU06KP0
40	1½"	DR0060U F05F07NS17 A	DU06AC0		SC0150U 6F05F07NS17 A	SU15KC0
50	2"	DR0060U F05F07NS17 A	DU06AC0		SC0150U 6F05F07NS17 A	SU15KC0
65	2½"	DR0150U F07F10NS17 A	DU15AE0		SC0300U 6F07F10NS22 A	SU30KD0
80	3"	DR0150U F07F10NS17 A	DU15AE0		SC0300U 6F07F10NS22 A	SU30KD0
100	4"	DR0220U F07F10NS22 A	DU22AD0		SC0450U 6F10F12NS27 A	SU45KG0

GEMÜ type DR/SC

Seal material TFM 1600, FDA compliant (code 5T)

DN	NPS	Double acting DR	Code		Single acting SC	Code
8	1/4"	DR0015U F04NS11 A	DU01AO0		SC0030U 6 F04NS11 A	SU03KO0
10	3/8"	DR0015U F04NS11 A	DU01AO0		SC0030U 6 F04NS11 A	SU03KO0
15	1/2"	DR0015U F04NS11 A	DU01AO0		SC0030U 6 F04NS11 A	SU03KO0
20	3/4"	DR0015U F04NS11 A	DU01AO0		SC0030U 6 F04NS11 A	SU03KO0
25	1"	DR0015U F04NS11 A	DU01AO0		SC0030U 6 F04NS11 A	SU03KO0
32	1¼"	DR0015U F04NS11 A	DU01AO0		SC0060U 6F05F07NS14 A	SU06KP0
40	1½"	DR0030U F05F07NS14 A	DU03AP0		SC0150U 6F05F07NS17 A	SU15KC0
50	2"	DR0030U F05F07NS14 A	DU03AP0		SC0150U 6F05F07NS17 A	SU15KC0
65	2½"	DR0100U F05F07NS17 A	DU10AC0		SC0220U 6F07F10NS22 A	SU22KD0
80	3"	DR0100U F05F07NS17 A	DU10AC0		SC0220U 6F07F10NS22 A	SU22KD0
100	4"	DR0150U F07F10NS22 A	DU15AD0		SC0300U 6F07F10NS22 A	SU30KD0

GEMÜ type ADA/ASR

Seal material TFM 1600, FDA compliant, cavity-filled seat seal (code 5H)

DN	NPS	Double acting ADA	Code		Single acting ASR	Code
8	1/4"	ADA0020U F04YS14/S11A	BU02AA0		ASR0020US08 F04YS14/S11A	AU02FA0
10	3/8"	ADA0020U F04YS14/S11A	BU02AA0		ASR0020US08 F04YS14/S11A	AU02FA0
15	1/2"	ADA0020U F04YS14/S11A	BU02AA0		ASR0020US08 F04YS14/S11A	AU02FA0
20	3/4"	ADA0020U F04YS14/S11A	BU02AA0		ASR0040US14 F04S14/S11A	AU04KA0
25	1"	ADA0040U F05YS14/S11A	BU04AB0		ASR0040US14 F05YS14/S11A	AU04KB0
32	1¼"	ADA0040U F05YS14/S11A	BU04AB0		ASR0040US14 F05YS14/S11A	AU04KB0
40	1½"	ADA0080U F05F07YS17/S14A	BU08AC0		ASR0130US14F05F07YS17/S14A	AU13KC0
50	2"	ADA0080U F05F07YS17/S14A	BU08AC0		ASR0130US14F05F07YS17/S14A	AU13KC0
65	2½"	ADA0130U F05F07YS17/S14A	BU13AC0		ASR0300US14F07F10YS22 A	AU30KD0
80	3"	ADA0130U F05F07YS17/S14A	BU13AC0		ASR0300US14F07F10YS22 A	AU30KD0
100	4"	ADA0300U F07F10Y/S22 A	BU30AD0		ASR0850US14F10F12YS27 A	AU85KG0

GEMÜ type ADA/ASR

Seal material TFM 1600, FDA compliant (code 5T)

DN	NPS	Double acting ADA	Code		Single acting ASR	Code
8	**1/4"**	ADA0020U F04YS14/S11A	BU02AA0		ASR0020US08 F04YS14/S11A	AU02FA0
10	**3/8"**	ADA0020U F04YS14/S11A	BU02AA0		ASR0020US08 F04YS14/S11A	AU02FA0
15	**1/2"**	ADA0020U F04YS14/S11A	BU02AA0		ASR0020US08 F04YS14/S11A	AU02FA0
20	**3/4"**	ADA0020U F04YS14/S11A	BU02AA0		ASR0040US14 F04S14/S11A	AU04KA0
25	**1"**	ADA0020U F04YS14/S11A	BU02AA0		ASR0040US14 F05YS14/S11A	AU04KB0
32	**1¼"**	ADA0020U F04YS14/S11A	BU02AA0		ASR0040US14 F05YS14/S11A	AU04KB0
40	**1½"**	ADA0040U F05YS14/S11A	BU04AB0		ASR0080US14F05F07YS17/S14A	AU08KC0
50	**2"**	ADA0040U F05YS14/S11A	BU04AB0		ASR0080US14F05F07YS17/S14A	AU08KC0
65	**2½"**	ADA0130U F05F07YS17/S14A	BU13AC0		ASR0300US14F07F10YS22 A	AU30KD0
80	**3"**	ADA0130U F05F07YS17/S14A	BU13AC0		ASR0300US14F07F10YS22 A	AU30KD0
100	**4"**	ADA0300U F07F10Y/S22 A	BU30AD0		ASR0500US14F07F10YS22 A	AU50KD0

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, pneumatically operated, three-piece body, Sanitary, controlled 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 anti-static unit	B44

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 (formerly DIN 11850 series 2)/DIN 11866 series A	17
Spigot SMS 3008	37
Spigot ASME BPE	**59**
Spigot ISO 1127/EN 10357 series C/DIN 11866 series B	60
Clamp ASME BPE, face-to-face dimension FTF ASME BPE	**80**
One side clamp ASME BPE corresponding to code 80, 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
TFM 1600 (FDA certification)	5T
TFM 1600 (FDA certification), cavity-filled	5H

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

8 Actuator version	Code
Actuator GEMÜ ADA	
Actuator, pneumatic, double acting, clockwise rotation, ADA0020U F04 S14S11	BU02AA
Actuator, pneumatic, double acting, clockwise rotation, ADA0040U F05 S14S11	BU04AB
Actuator, pneumatic, double acting, clockwise rotation, ADA0080U F05/07S17S14	BU08AC
Actuator, pneumatic, double acting, clockwise rotation, ADA0130U F05/07S17S14	BU13AC
Actuator, pneumatic, double acting, clockwise rotation, ADA0300U F07/10 S22	BU30AD
Actuator GEMÜ ASR	
Actuator, pneumatic, single acting, clockwise rotation, spring closing, ASR0020US08F04 S14S11	AU02FA
Actuator, pneumatic, single acting, clockwise rotation, spring closing, ASR0040US14F04 S14S11	AU04KA
Actuator, pneumatic, single acting, clockwise rotation, spring closing, ASR0040US14F05 S14S11	AU04KB
Actuator, pneumatic, single acting, clockwise rotation, spring closing, ASR0080US14F05/07S17S14	AU08KC
Actuator, pneumatic, single acting, clockwise rotation, spring closing, ASR0130US14F05/07S17S14	AU13KC
Actuator, pneumatic, single acting, clockwise rotation, spring closing, ASR0300US14F07/10 S22	AU30KD
Actuator, pneumatic, single acting, clockwise rotation, spring closing, ASR0500US14F07/10 S22	AU50KD
Actuator, pneumatic, single acting, clockwise rotation, spring closing, ASR0850US14F10/12 S27	AU85KG
Actuator GEMÜ DR	
Actuator, pneumatic, double acting, clockwise rotation, DR0015U F04 S11	DU01AO
Actuator, pneumatic, double acting, clockwise rotation, DR0030U F05/07 S14	DU03AP
Actuator, pneumatic, double acting, clockwise rotation, DR0060U F05/07 S17	DU06AC
Actuator, pneumatic, double acting, clockwise rotation, DR0100U F05/07 S17	DU10AC
Actuator, pneumatic, double acting, clockwise rotation, DR0150U F07/10 S22	DU15AD
Actuator, pneumatic, double acting, clockwise rotation, DR0220U F07/10 S22	DU22AD

8 Actuator version	Code
Actuator GEMÜ SC	
Actuator, pneumatic, single acting, clockwise rotation, spring closing, SC0030U 6F04 S11	SU03KO
Actuator, pneumatic, single acting, clockwise rotation, spring closing, SC0060U 6F05/07 S14	SU06KP
Actuator, pneumatic, single acting, clockwise rotation, spring closing, SC0150U 6F05/07 S17	SU15KC
Actuator, pneumatic, single acting, clockwise rotation, spring closing, SC0220U 6F07/10 S22	SU22KD
Actuator, pneumatic, single acting, clockwise rotation, spring closing, SC0300U 6F07/10 S22	SU30KD
Actuator, pneumatic, single acting, clockwise rotation, spring closing, SC0450U 6F10/12 S27	SU45KG

9 Actuator particulars	Code
Gen. industrial version, housing alu, anodising layer 25-35µm, end caps alu, powder coated, shaft C steel + ENP, bolts A2	0

10 Type of design	Code
Standard	
Ra ≤ 0.4 µm (15 µin.) for media wetted surfaces *), in accordance with DIN 11866 HE4, electropolished internal/external, *) for inner pipe diameter ≤ 6 mm, in spigots Ra ≤ 0.8 µm	1537
K-no. SF5, K-no. 5227, SF5 - Ra max. 0.51 µm (20 µin.) electropolished internal/external, surface finish data refers to media wetted surfaces 5227 - thermal separation via mounting kit, mounting kit and mounting parts made from stainless steel	7138
Media wetted area cleaned to ensure suitability for paint applications, parts sealed in plastic bag , surface SF5	7140
Media wetted parts cleaned for high purity media and packed in plastic bag, surface SF5	7141
Valve free of oil and grease, media wetted area cleaned and packed in PE bag, surface SF5	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

11 Special version	Code
Without	
ATEX certification	X

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

Order example

Ordering option	Code	Description
1 Type	B44	Ball valve, metal, pneumatically operated, three-piece body, Sanitary, controlled 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 anti-static unit
2 DN	15	DN 15
3 Body/ball configuration	D	2/2-way body
4 Connection type	59	Spigot ASME BPE
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	TFM 1600 (FDA certification)
7 Control function	1	Normally closed (NC)
8 Actuator version	BU02AA	Actuator, pneumatic, double acting, clockwise rotation, ADA0020U F04 S14S11
9 Actuator particulars	0	Gen. industrial version, housing alu, anodising layer 25-35µm, end caps alu, powder coated, shaft C steel + ENP, bolts A2
10 Type of design		Standard
11 Special version		Without
12 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 with note

Media temperature: -10 — 220 °C

For media temperatures > 100 °C , we recommend using a mounting kit with adapter between the ball valve and the actuator.

Ambient temperature: -20 — 60 °C

Storage temperature: -60 — 60 °C

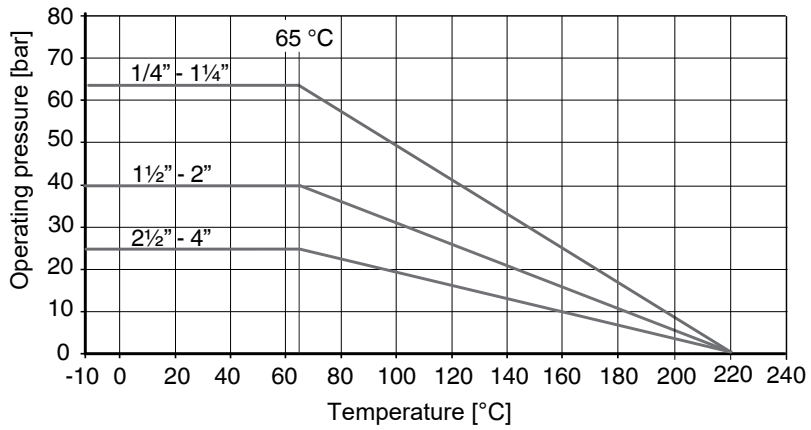
Pressure

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:



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

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 m^3/h

Control pressure: 6 to 8 bar

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

Machinery Directive: 2006/42/EC

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 marking: The ATEX marking of the product depends on the respective product configuration with valve body and actuator. It can be found in the product-specific ATEX documentation and the ATEX type plate.

Mechanical data

90° travel:

GEMÜ ADA /ASR: ±5° adjustable (85° - 95°)
GEMÜ DR /SC: 20° adjustable (75° - 95°)

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"**	56	83
80	**3"**	78	117
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

Actuator type ADA/ASR

Type	ADA double acting	ASR single acting
0020U	1.4	1.5
0040U	2.1	2.3
0080U	3.0	3.7
0130U	3.8	4.8
0200U	5.6	7.3
0300U	8.5	10.8
0500U	11.2	15.4
0850U	16.9	22.2

Weights in kg

Weight:

Actuator type DR/SC

Type	DR double acting	SC single acting
0015U	1.0	1.1
0030U	1.6	1.7
0060U	2.7	3.1
0100U	3.7	4.3
0150U	5.2	6.1
0220U	8.0	9.3
0300U	9.8	12.0
0450U	14.0	17.0

Weights in kg

Dimensions

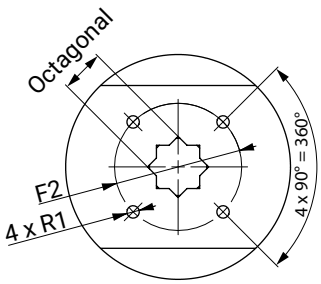
Actuator dimensions

Note on actuator mounting:
Standard mounting orientation – actuator positioned in-line with piping
Only with flanged connections the actuator is mounted across the piping

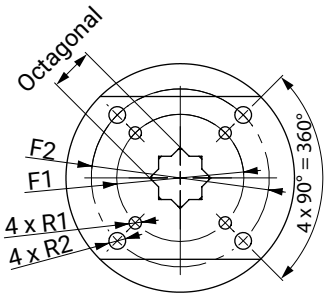
Actuator type ADA/ASR

Actuator flange ISO 5211

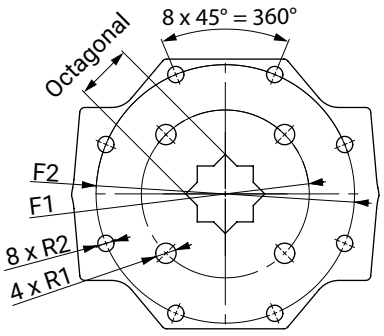
Type 00010, 0020U, 0040U, 0500U, 0750U, 2100U, 2500U



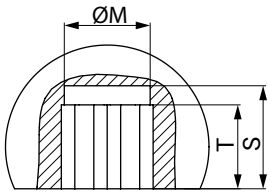
Type 0020U, 0080U, 0130U, 0300U, 0850U, 1200U



Type 4000U

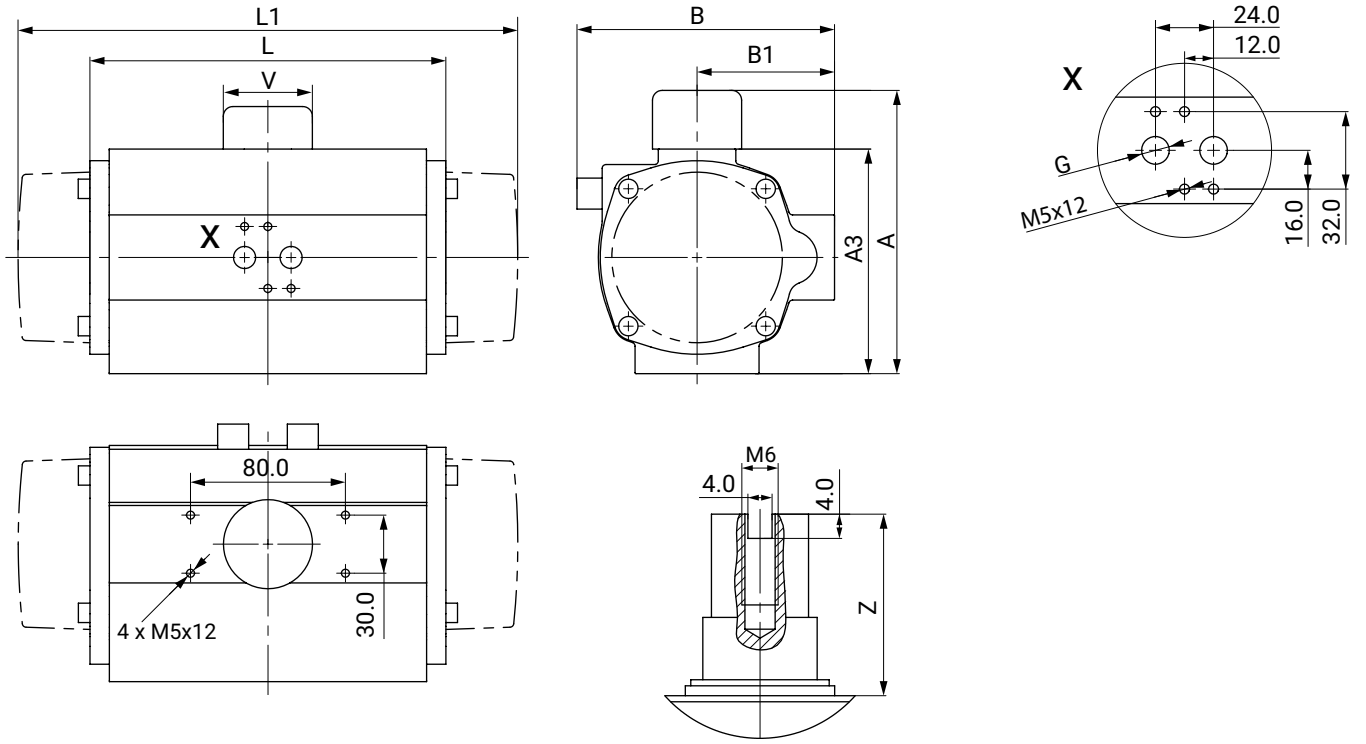


Type 00010 - 4000U



Type	Actuator flange	Octagonal	M	T	S	F1	R1	F2	R2
0020U	F03 / F05	9.0	12.5	10.0	13.0	36.0	M5 x 8.0	50.0	M6 x 10.0
0020U	F04	14.0	18.1	12.0	15.0	42.0	M5 x 8.0	-	-
0020U	F05	14.0	18.1	12.0	16.0	50.0	M6 x 10.0	-	-
0040U	F04	14.0	18.1	12.0	16.0	42.0	M5 x 10.0	-	-
0040U	F05	14.0	18.1	12.0	16.0	50.0	M6 x 10.0	-	-
0080U	F05 / F07	17.0	22.5	19.0	23.0	50.0	M6 x 10.0	70.0	M8 x 16.0
0130U	F05 / F07	17.0	22.5	22.0	27.0	50.0	M6 x 10.0	70.0	M8 x 16.0
0200U	F07 / F10	17.0	22.5	23.0	28.0	70.0	M8 x 16.0	102.0	M10 x 16.0
0300U	F07 / F10	22.0	28.5	24.0	31.0	70.0	M8 x 16.0	102.0	M10 x 16.0
0500U	F10	22.0	28.5	32.0	39.0	102.0	M10 x 16.0	-	-
0850U	F10 / F12	27.0	36.5	39.0	49.0	102.0	M10 x 17.0	125.0	M12 x 20.0

Dimensions in mm



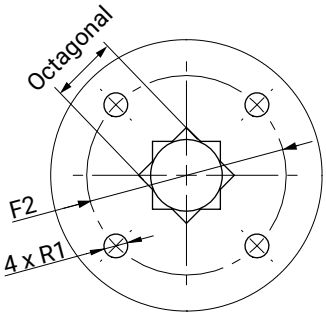
Type	A	A3	B	B1	G	L	L1	V	Z
0020U	96.0	66.0	76.0	48.0	G1/4"	145.0	163.0	40.0	30.0
0040U	115.0	85.0	91.0	56.0	G1/4"	158.0	195.0	40.0	30.0
0200U	165.0	135.0	135.5	78.0	G1/4"	225.0	299.0	40.0	30.0
0500U	199.0	169.0	173.0	96.0	G1/4"	304.0	397.0	40.0	30.0
0850U	221.0	191.0	191.5	106.0	G1/4"	372.0	473.0	40.0	30.0

Dimensions in mm

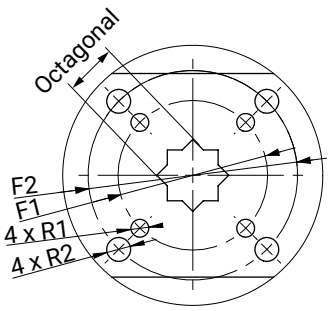
Actuator type DR/SC

Actuator flange ISO5211

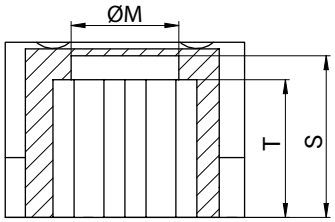
Type 0010U - 0030U
0900U - 4000U



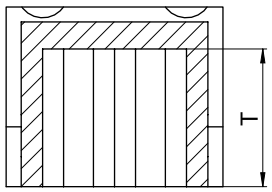
Type 0030U - 1200U, 5000U



Type 0010U - 1200U, 5000U



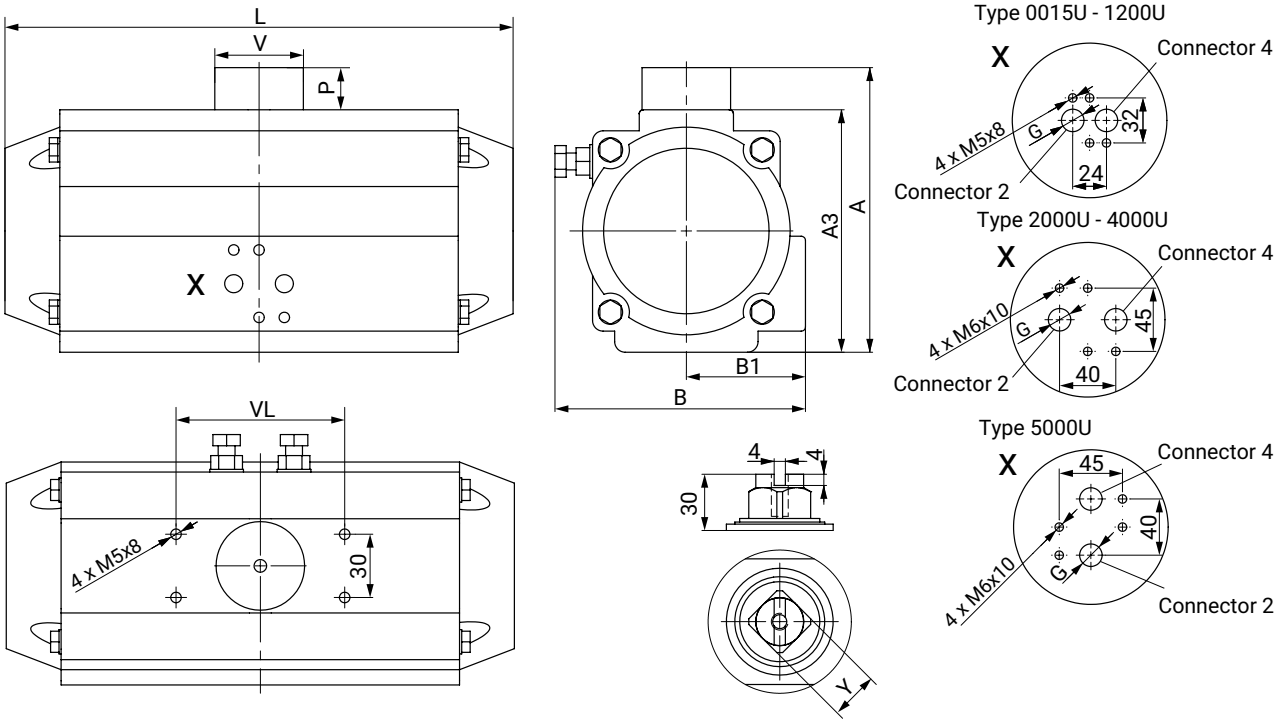
Type 2000U - 4000U



Type	Actuator flange	Octagonal	M	T	S	F1	R1	F2	R2
0015U	F04	11.0	15.5	11.5	13.5	42.0	M5	-	-
0030U	F04	11.0	14.6	14.5	19.0	42.0	M5	-	-
0030U	F05/F07	14.0	18.6	14.5	16.5	50.0	M6	70.0	M8
0060U	F05/F07	14.0	18.6	16.5	19.5	50.0	M6	70.0	M8
0060U	F05/F07	17.0	22.7	17.5	20.0	50.0	M6	70.0	M8
0100U	F05/F07	17.0	23.4	18.5	21.0	50.0	M6	70.0	M8
0150U	F05/F07	17.0	23.4	18.5	25.5	50.0	M6	70.0	M8
0150U	F07/F10	22.0	-	25.0	-	70.0	M8	102.0	M10
0220U	F07/F10	22.0	-	24.0	-	70.0	M8	102.0	M10
0300U	F07/F10	22.0	-	35.0	-	70.0	M8	102.0	M10
0450U	F10/F12	27.0	-	29.0	-	70.0	M10	102.0	M12

Dimensions in mm

Actuator dimensions

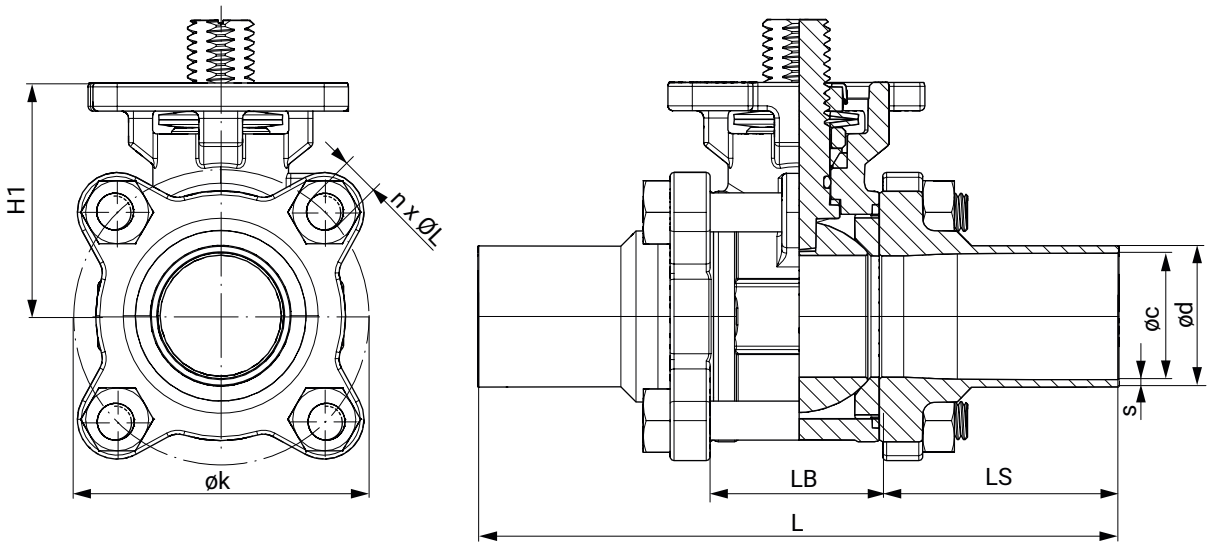


Type	A	A3	B	B1	V	VL	G	P	L	Y
0015U	89.0	69.0	72.0	43.0	42.0	80.0	G1/8"	20.0	136.0	11.0
0030U	105.0	85.0	84.5	48.5	42.0	80.0	G1/8"	20.0	153.5	11.0
0060U	122.0	102.0	93.0	50.5	42.0	80.0	G1/8"	20.0	203.5	17.0
0100U	135.0	115.0	106.0	56.5	42.0	80.0	G1/8"	20.0	241.0	17.0
0150U	147.0	127.0	118.5	63.0	42.0	80.0	G1/4"	20.0	259.0	17.0
0220U	175.0	145.0	136.0	72.0	58.0	80.0	G1/4"	30.0	304.0	27.0
0300U	187.0	157.0	146.5	77.0	58.0	80.0	G1/4"	30.0	333.0	27.0
0450U	207.0	177.0	166.0	86.0	67.5	80.0	G1/4"	30.0	394.5	27.0

Dimensions in mm

Body dimensions

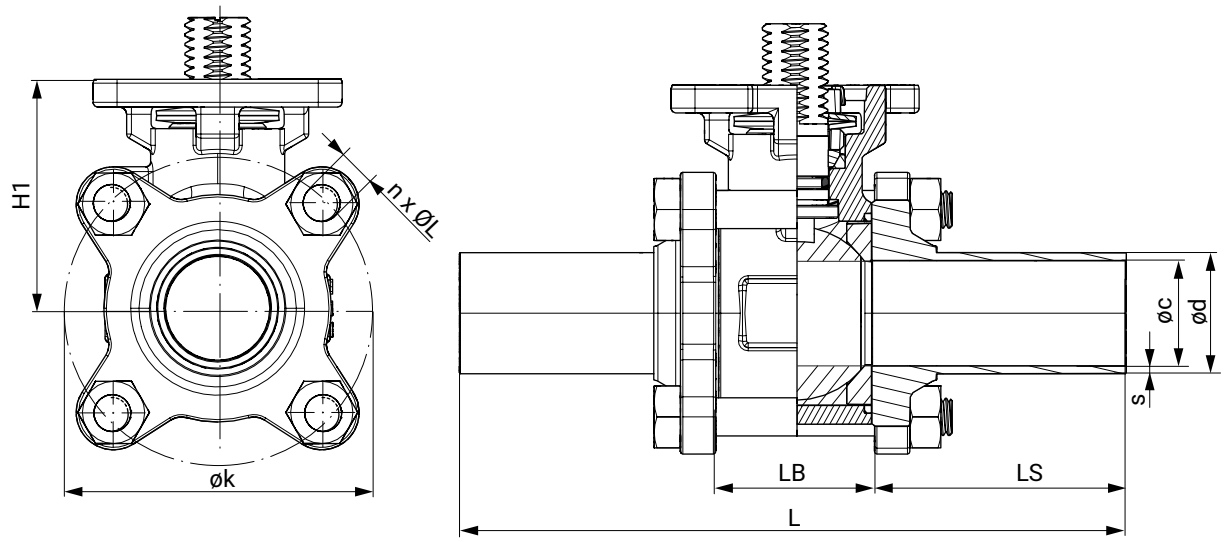
Spigot DIN EN 10357 (connection code 17)



DN	øc	ød	øk	L	LB	LS	H1	n x ØL	s
10	10.0	13.0	42.5	120.1	24.3	47.9	37.0	4 x M6	1.5
15	16.0	19.0	42.5	140.1	24.3	57.9	37.0	4 x M6	1.5
20	20.0	23.0	54.5	140.0	31.2	54.4	40.0	4 x M8	1.5
25	26.0	29.0	60.4	152.0	34.0	59.0	48.0	4 x M8	1.5
32	32.0	35.0	75.0	165.0	44.0	60.5	53.0	4 x M10	1.5
40	38.0	41.0	86.5	190.0	55.0	67.5	63.0	4 x M12	1.5
50	50.0	53.0	107.0	203.0	68.9	67.0	72.0	4 x M14	1.5
65	66.0	70.0	131.5	254.0	82.0	86.0	92.0	4 x M14	2.0
80	81.0	85.0	158.0	280.0	96.0	92.0	102.0	4 x M16	2.0
100	100.0	104.0	198.5	308.0	122.0	93.0	132.0	6 x M20	2.0

Dimensions in mm

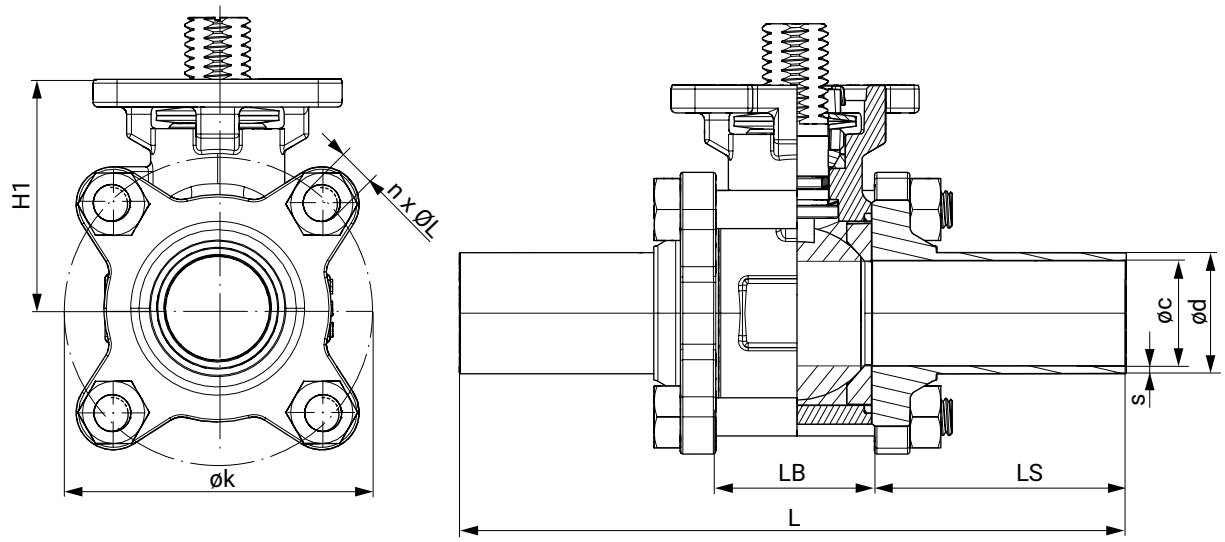
Spigot SMS 3008 (connection code 37)



DN	øc	ød	s	øk	t	L	LB	LS	H1	n x ØL
20	16.0	18.0	1.0	44.6	6.1	142.2	28.0	58.6	38.0	4 x M6
25	22.6	25.0	1.2	61.5	7.4	162.3	32.1	65.1	48.0	4 x M8
40	35.6	38.0	1.2	78.5	8.3	182.2	46.0	68.1	60.0	4 x M12
50	48.6	51.0	1.2	100.4	10.2	193.0	59.6	66.7	69.0	4 x M14
65	60.3	63.5	1.6	126.0	12.5	254.1	77.1	88.5	89.0	4 x M14
80	72.9	76.1	1.6	150.0	14.0	276.9	91.7	92.6	98.0	4 x M16
100	97.6	101.6	2.0	187.5	14.5	304.9	118.3	93.3	130.0	6 x M16

Dimensions in mm

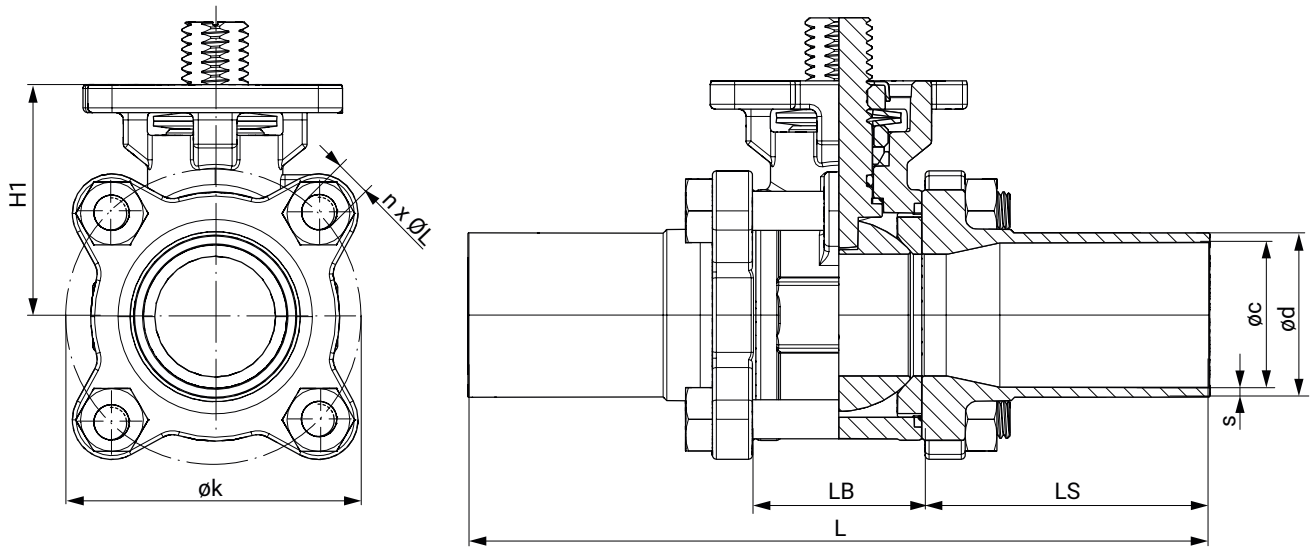
Spigot ASME BPE (connection code 59)



DN	øc	ød	s	øk	L	LB	LS	H1	n x ØL
15	9.4	12.7	1.65	44.6	124.4	25.0	49.7	38.0	4 x M6
20	15.7	19.0	1.65	44.6	142.2	28.0	58.6	38.0	4 x M6
25	22.1	25.4	1.65	61.5	162.3	32.1	65.1	48.0	4 x M8
40	34.8	38.1	1.65	78.5	182.2	46.0	68.1	60.0	4 x M12
50	47.5	50.8	1.65	100.4	193.0	59.6	66.7	69.0	4 x M14
65	60.2	63.5	1.65	126.0	254.1	77.1	88.5	89.0	4 x M14
80	72.9	76.2	1.65	150.0	276.9	91.7	92.6	98.0	4 x M16
100	97.4	101.6	2.1	187.5	304.9	118.3	93.3	130.0	6 x M16

Dimensions in mm

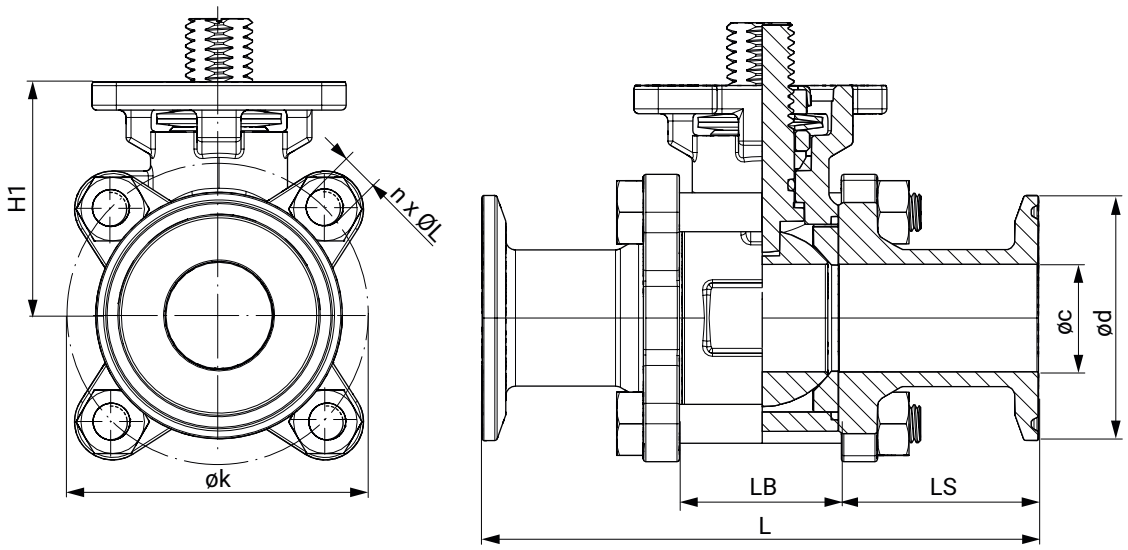
Spigot ISO 1127 / EN 10357 (connection code 60)



DN	øc	ød	s	øk	L	LB	LS	H1	n x ØL
8	10.3	13.5	1.6	42.5	120.1	24.3	47.9	37.0	4 x M6
10	14.0	17.2	1.6	42.5	120.1	24.3	47.9	37.0	4 x M6
15	18.1	21.3	1.6	42.5	140.1	24.3	57.9	37.0	4 x M6
20	23.7	26.9	1.6	54.5	140.0	31.2	54.4	40.0	4 x M8
25	29.7	33.7	2.0	60.4	152.0	34.0	59.0	48.0	4 x M8
32	38.4	42.4	2.0	75.0	165.0	44.0	60.5	53.0	4 x M10
40	44.3	48.3	2.0	86.5	190.0	55.0	67.5	63.0	4 x M12
50	56.3	60.3	2.0	107.0	203.0	68.9	67.0	72.0	4 x M14
65	72.1	76.1	2.0	131.5	254.0	82.0	86.0	92.0	4 x M14
80	84.3	88.9	2.3	158.0	280.0	96.0	92.0	102.0	4 x M16
100	109.7	114.3	2.3	198.5	308.0	122.0	93.0	132.0	6 x M20

Dimensions in mm

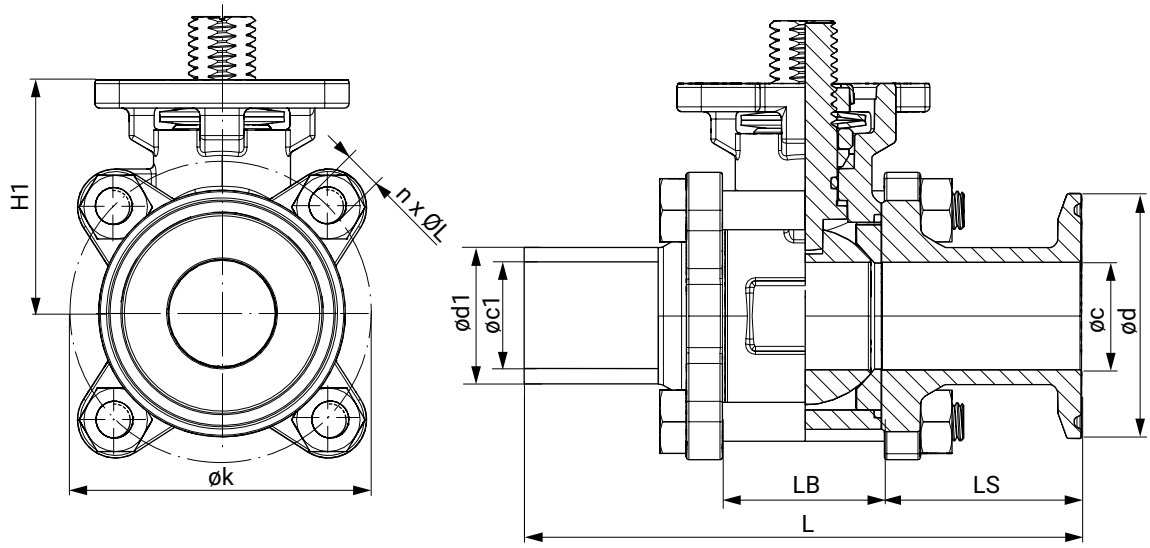
Clamp ASME BPE (connection code 80)



DN	øc	ød	s	øk	L	LB	LS	H1	n x ØL
15	9.4	25.0	1.65	44.6	88.8	25.0	31.9	38.0	4 x M6
20	15.8	25.0	1.65	44.6	101.6	25.0	38.3	38.0	4 x M6
25	22.1	50.4	1.65	61.5	114.3	32.1	41.1	48.0	4 x M8
40	34.8	50.4	1.65	78.5	139.8	46.0	46.9	60.0	4 x M12
50	47.5	63.9	1.65	100.4	158.8	59.6	49.6	69.0	4 x M14
65	60.2	77.4	1.65	126.0	171.5	77.1	47.2	89.0	4 x M14
80	72.9	90.9	1.65	150.0	196.3	91.7	52.3	98.0	4 x M16
100	97.4	118.9	2.1	187.5	241.3	118.3	61.5	130.0	6 x M16

Dimensions in mm

Mixed ends ASME BPE (connection code 93)



DN	øc	ød	øc1	ød1	s	øk	t	L	LB	LS	H1	n x ØL
15	9.4	25.0	9.4	12.7	1.65	44.6	6.1	106.6	25.0	49.7	38.0	4 x M6
20	15.8	25.0	15.8	19.0	1.65	44.6	6.1	121.9	28.0	58.6	38.0	4 x M6
25	22.1	50.4	22.1	25.4	1.65	61.5	7.4	138.3	32.1	65.1	48.0	4 x M8
40	34.8	50.4	34.8	38.1	1.65	78.5	8.3	161.0	46.0	68.1	60.0	4 x M12
50	47.5	63.9	47.5	50.8	1.65	100.4	10.2	175.9	59.6	66.7	69.0	4 x M14
65	60.2	77.4	60.2	63.5	1.65	126.0	12.5	212.8	77.1	88.5	89.0	4 x M14
80	72.9	90.9	72.9	76.2	1.65	150.0	14.0	236.6	91.7	92.6	98.0	4 x M16
100	97.4	118.9	97.4	101.6	2.10	187.5	14.5	273.1	118.3	93.3	130.0	6 x M16

Dimensions in mm

Add-on components

GEMÜ 4221

Combi switchbox with integrated 3/2-way pilot valve

The GEMÜ 4221 combi switchbox with integrated 3/2-way pilot valve for pneumatically operated quarter turn actuators uses a microprocessor controlled intelligent position sensor and an analogue travel sensor system. Electrical activation and position feedback is provided via 24 V DC signals or via fieldbus (AS-Interface, DeviceNet).

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.

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.

GEMÜ 1435 ePos

Intelligent electro-pneumatic positioner

The GEMÜ 1435 ePos digital electro-pneumatic positioner is used to control process valves with single acting or double acting linear or quarter turn actuators, and detects the position of the valve using an external travel sensor. It has a robust aluminium housing with protected operating buttons and an LCD display which allows the product to be individually adapted to the control task. The operating times can be adjusted by integrated throttles. Connection and mounting to NAMUR is also possible. Therefore, the GEMÜ 1435 ePos is an optimal solution for control tasks with high requirements, especially in applications with harsh environmental conditions.

GEMÜ 1436 cPos

Intelligent positioner and integrated process controller

The GEMÜ 1436 cPos digital electro-pneumatic positioner has an optional integrated process controller to control process valves with single acting or double acting linear or quarter turn actuators. When using the optional process controller, the signals from the sensors (e.g. flow, level, pressure, temperature) are detected and the media adjusted according to the specified set value. GEMÜ 1436 cPos has a robust aluminium housing with protected operating buttons and an LCD display which allows the product to be individually adapted to complex control tasks. With additional equipment, the positioner can be used directly in fieldbus environments.

GEMÜ 1436 eco cPos

Intelligent electro-pneumatic positioner

The GEMÜ 1436 eco cPos digital electro-pneumatic positioner is used to control process valves with single acting linear or quarter turn actuators. The positioner, travel sensor, switching valves and status LEDs are integrated into the robust and compact housing. Due to factory preconfiguration, this product does not require a display with operating keys. The pneumatic and electrical connections are arranged in one mounting direction to save space and enable easy access. All these features make this positioner a cost-effective solution for control valves with basic requirements.

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

Subject to alteration | 07.2022 | 88715625

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