

GEMÜ B22

Manually operated 2/2-way ball valve



Features

- Suitable for vacuum applications
- Low maintenance and reliable spindle sealing
- Antistatic device

Description

The GEMÜ B22 3-piece 2/2-way metal ball valve is manually operated. It has a plastic sleeved hand lever with a locking device. The seat seal is made of PTFE.

Technical specifications

- **Media temperature:** -4 to 356 °F
- **Ambient temperature:** -4 to 140 °F
- **Operating pressure:** 0 to 914 psi
- **Nominal sizes:** 1/4" (DN 8) to 4" (DN 100)
- **Body configurations:** 2/2-way body
- **Ball configurations:** Control ball
- **Connection standards:** ASME | DIN | EN | ISO | NPT
- **Body materials:** 1.4408, investment casting material
- **Seal materials:** PTFE
- **Conformities:** ASME GEMÜ B31.3 | ATEX | EAC | FDA | Oxygen | Reg. (EU) No. 10/2011 | Regulation (EC) No. 1935/2004 | Regulation (EC) No. 2023/2006 | TA Luft (German Clean Air Act)

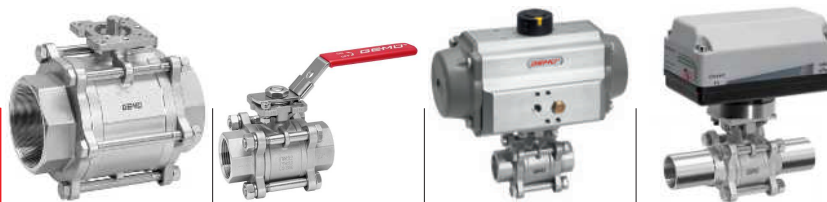
Technical data depends on the respective configuration



further information
webcode: GW-B22



Product line



GEMÜ BB02

GEMÜ B22

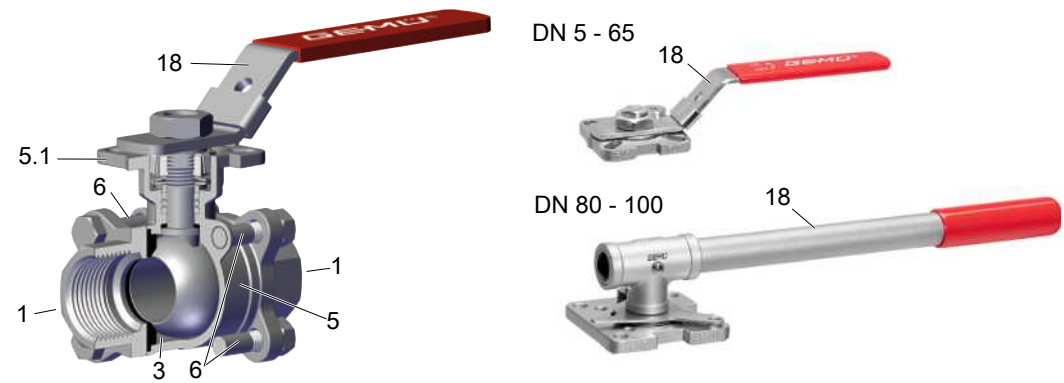
GEMÜ B42

GEMÜ B52

Operation				
With bare shaft	●	-	-	-
Manual	-	●	-	-
pneumatic	-	-	●	-
Motorized	-	-	-	●
Nominal sizes	1/4" (DN 8) to 4" (DN 100)	1/4" (DN 8) to 4" (DN 100)	1/4" (DN 8) to 4" (DN 100)	1/4" (DN 8) to 4" (DN 100)
Media temperature	-4 to 356 °F	-4 to 356 °F	-4 to 356 °F	-4 to 356 °F
Operating pressure	0 to 914 psi	0 to 914 psi	0 to 914 psi	0 to 914 psi
Connection types				
Flange	●	●	●	●
Spigot	●	●	●	●
Threaded connection	●	●	●	●
Conformities				
ASME GEMÜ B31.3	●	●	●	●
ATEX	●	●	●	●
EAC	●	●	●	●
FDA	●	●	●	●
Functional safety	●	-	-	-
Oxygen	●	●	●	●
Reg. (EU) No. 10/2011	●	●	●	●
Regulation (EC) No. 1935/2004	●	●	●	●
Regulation (EC) No. 2023/2006	●	●	●	●
TA Luft (German Clean Air Act)	●	●	●	●

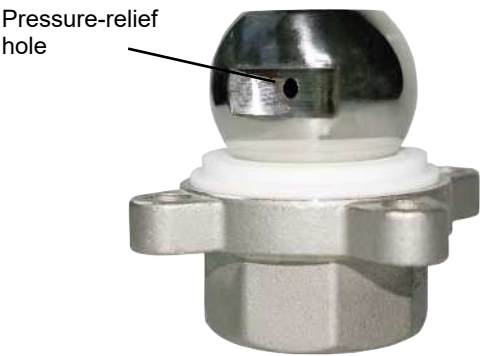
Product description

Construction

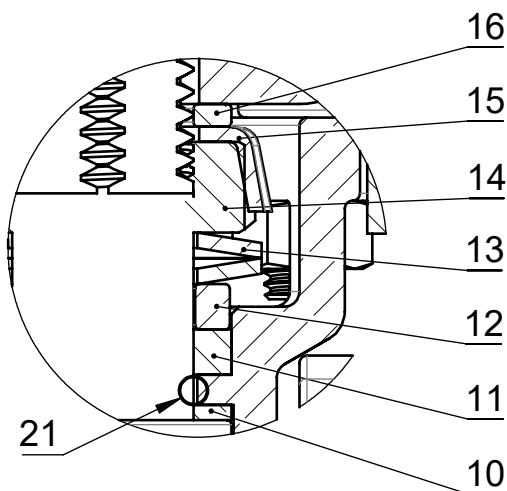


Item	Name	Materials
5	Ball valve body	1.4408 / CF8M
1	Pipe connections	1.4408 / CF8M, 1.4409 / CF3M butt weld connections
5.1	Mounting flange ISO 5211	1.4408 / CF8M
18	Hand lever	304
6	Bolts	A2 70
3	Seal	PTFE

Pressure-relief hole



The spindle seal system



Item	Name	Material
10	Seal	PTFE
11	V-ring	PTFE
12	Stainless steel sleeve	SS304-1.4301
13	Spring washer	SS304-1.4301
14	Spindle nut	A2 70
15	Cap	SS304-1.4301
16	Washer	SS304-1.4301
21	O-ring (spindle seal)	Viton

Long service life due to triple spindle seal

- Conical spindle seal:

The seal **10** arranged at an angle of 45° effectively prevents the leakage of media when operating the spindle

- O-ring:

Stabilising spindle seal **21** with low wear and long service life

- 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.

Application

- Heating systems
- Beverage industry
- Foodstuff industry
- Chemical industry
- Drinking water installations
- Processing industry
- HVAC

Availability

Connection types ¹⁾	Body materials ²⁾	
	Code 37	Code C7
Spigot (code 17, 19, 59, 60)	-	X
Threaded socket (code 1, 31)	X	-
Flange (code 8, 11)	X	-

1) Connection type

Code 1: Threaded socket DIN ISO 228

Code 31: NPT female thread

Code 8: Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1

Code 11: Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1

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

Code 19: Spigot DIN EN 12627

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

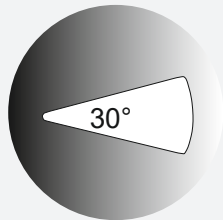
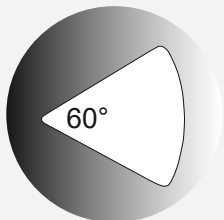
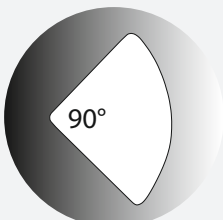
2) Ball valve material

Code 37: 1.4408/CF8M (body, connection), 1.4401/SS316 (ball, shaft)

Code C7: 1.4408 / CF8M (body), 1.4409 / CF3M (connection), 1.4401 / SS316 (ball, shaft)

Control ball

DN 15 to DN 100

Control ball	Code U	Code Y	Code W
			

Note: The control ball cannot be retrofitted to standard 2/2-way bodies at a later date.

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, manually operated, three-piece body, ISO 5211, top flange, lockable hand lever, low-maintenance spindle seal and blow-out proof shaft, with anti-static unit	B22

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
2/2-way body, V-ball 30° (for Kv value see datasheet)	U
2/2-way body, V-ball 90° (for Kv value see datasheet)	W
2/2-way body, V-ball 60° (for Kv value see datasheet)	Y

4 Connection type	Code
Spigot	
Spigot EN 10357 series A/DIN 11866 series A formerly DIN 11850 series 2	17
Spigot DIN EN 12627	19
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
Flange	
Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	8
Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1	11

5 Ball valve material	Code
1.4408 / CF8M (body, connection), 1.4401 / SS316 (ball, shaft)	37
1.4408 / CF8M (body), 1.4409 / CF3M (connection), 1.4401 / SS316 (ball, shaft)	C7

6 Seal material	Code
PTFE	5

7 Control function	Code
Manually operated, hand lever, lockable	L

8 Type of design	Code
Standard	
Media wetted area cleaned to ensure suitability for paint applications, parts sealed in plastic bag	0101
Valve free of oil and grease, media wetted area cleaned and packed in PE bag	0107
Thermal separation between actuator and valve body via mounting kit, mounting kit and mounting parts in stainless steel	5227
K-no. 5227, K-no. 7056, 5227 - Thermal separation via mounting kit, 7056 - Drilled shaft, shortened hand lever	5237
K-no. 0101, K-no. 5227, 0101 - Media wetted area cleaned to ensure suitability for paint applications, 5227 - Thermal separation via mounting kit	5238
K-no. 0107, K-no. 5227, 0107 - Media wetted area cleaned to ensure suitability for paint applications, 5227 - Thermal separation via mounting kit	5239
K-no. 0101, K-no. 5227, K-no. 7056, 0101 - Media wetted area cleaned to ensure suitability for paint applications, 5227 - Thermal separation via mounting kit, 7056 - Drilled shaft, shortened hand lever	5240
K-no. 0107, K-no. 5227, K-no. 7056, 0107 - Media wetted area cleaned to ensure suitability for paint applications, 5227 - Thermal separation via mounting kit, 7056 - Drilled shaft, shortened hand lever	5241
Hand lever shortened for mounting feedback units. Shaft face drilled for mounting kit: DN8-DN20 M5 X 12.5/depth of thread 9.0mm, DN25-DN100 M6 x 15/depth of thread 10.0mm	7056
K-no. 0101, K-no. 7056, 0101 - Media wetted area cleaned to ensure suitability for paint applications, 7056 - Drilled shaft, shortened hand lever	7097

9 Type of design	Code
Standard	
Media wetted area cleaned to ensure suitability for paint applications, parts sealed in plastic bag	0101
Valve free of oil and grease, media wetted area cleaned and packed in PE bag	0107
Thermal separation between actuator and valve body via mounting kit, mounting kit and mounting parts made from stainless steel	5227
K-no. 5227, K-no. 7056, 5227 - Thermal separation via mounting kit, 7056 - Drilled shaft, shortened hand lever	5237
K-no. 0101, K-no. 5227, K-no. 7056, 0101 - Media wetted area cleaned to ensure suitability for paint applications, 5227 - Thermal separation via mounting kit, 7056 - Drilled shaft, shortened hand lever	5240
K-no. 0107, K-no. 5227, K-no. 7056, 0107 - Media wetted area cleaned to ensure suitability for paint applications, 5227 - Thermal separation via mounting kit, 7056 - Drilled shaft, shortened hand lever	5241

9 Type of design	Code
Hand lever shortened to set up feedback units. Shaft face drilled for mounting kit: DN8-DN20 M5 X 12,5 / depth of thread 9.0mm, DN25-DN100 M6 x 15 / depth of thread 10.0mm	7056
K-no. 0101, K-no. 7056, 0101 - Media wetted area cleaned to ensure suitability for paint applications, 7056 - Drilled shaft, shortened hand lever	7097

10 Special version	Code
Without	
Special version for oxygen maximum medium temperature: 60 °C, Media wetted materials cleaned, and grease and seal with BAM testing	O
ASME B31.3	P
ATEX version	X

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

Order example

Order option	Code	Description
1 Type	B22	Ball valve, metal, manually operated, three-piece body, 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	1	Threaded socket DIN ISO 228
5 Ball valve material	37	1.4408 / CF8M (body, connection), 1.4401 / SS316 (ball, shaft)
6 Seal material	5	PTFE
7 Control function	L	Manually operated, hand lever, lockable
8 Type of design		Standard
9 Special version		Without
10 CONEXO	C	Integrated RFID chip for electronic identification and traceability

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

Media temperature: Connection code 19, 59, 60: 14 – 356 °F
 Connection code 1, 31, 8, 11: -4 – 356 °F
 For media temperatures > 212 °F, we recommend using a mounting kit with adapter between the ball valve and the actuator.

Ambient temperature: -4 – 140 °F

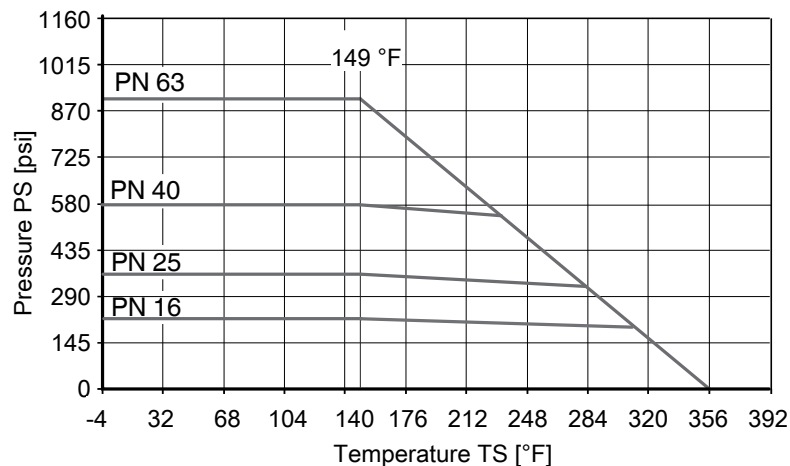
Storage temperature: -76 – 140 °F

Pressure

Operating pressure: 0 – 914 psi

Vacuum: Can be used up to a vacuum of 1.5 inhg (absolute)
 These values apply to room temperature and air. The values may deviate for other media and other temperatures.

Pressure/temperature diagram:



Note media temperature

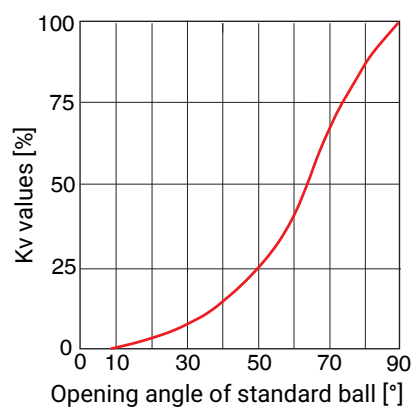
Pressure/temperature data in accordance with diagram refers to static operating conditions. Strongly fluctuating or fast-changing parameters can lead to a reduction of the service life. Special applications must be talked through with your technical contact person in advance.

Leakage rate: Leakage rate according to ANSI FCI70 – B16.104
 Leakage rate according to EN12266, 6 bar air, leakage rate A

Cv-values:**Standard ball (code D)**

DN	NPS	Kv values
8	1/4"	9.36
10	3/8"	9.36
15	1/2"	19.89
20	3/4"	39.78
25	1"	70.20
32	1¼"	109.98
40	1½"	249.21
50	2"	428.22
65	2½"	696.15
80	3"	1093.95
100	4"	1989.00

Cv values in gpm

Diagrammatic view**V-ball 30° (code U)**

DN	NPS	Opening angle										
		0	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
8	1/4"	0	0.02	0.05	0.10	0.18	0.27	0.38	0.52	0.67	0.85	1.04
10	3/8"	0	0.02	0.06	0.12	0.20	0.31	0.44	0.60	0.77	0.97	1.18
15	1/2"	0	0.10	0.10	0.20	0.30	0.50	0.80	1.09	1.59	2.19	2.59
20	3/4"	0	0.10	0.20	0.50	0.70	1.09	1.79	2.39	3.28	4.48	5.37
25	1"	0	0.10	0.30	0.80	1.29	2.29	3.48	5.07	6.97	9.51	9.94
32	1¼"	0	0.20	0.40	1.09	1.99	3.68	5.47	7.96	9.94	12.93	14.92
40	1½"	0	0.30	0.60	1.59	2.98	4.97	7.46	10.94	13.92	16.91	19.89
50	2"	0	0.40	1.19	3.78	5.97	9.94	14.92	22.87	30.83	42.76	59.67
65	2½"	0	0.40	0.99	3.98	7.96	11.93	17.90	27.85	36.80	61.66	74.59
80	3"	0	0.50	1.19	3.98	7.96	13.92	22.87	32.82	45.75	64.64	81.55
100	4"	0	0.60	1.99	5.97	14.92	28.84	47.74	70.61	99.45	129.28	158.18

Cv values in gpm

Cv-values:
V-ball 60° (code Y)

DN	NPS	Opening angle										
		0	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
8	1/4"	0	0.03	0.07	0.16	0.29	0.44	0.63	0.89	1.21	1.61	2.16
10	3/8"	0	0.04	0.08	0.19	0.33	0.50	0.72	1.02	1.38	1.85	2.47
15	1/2"	0	0.10	0.10	0.30	0.50	0.90	1.39	1.99	3.28	4.38	5.97
20	3/4"	0	0.10	0.20	0.70	0.99	1.69	2.78	3.98	6.46	8.95	11.93
25	1"	0	0.20	0.40	1.09	1.79	3.38	5.27	7.86	12.24	15.22	20.88
32	1 1/4"	0	0.20	0.60	1.79	2.98	5.47	9.45	12.73	18.90	25.86	38.79
40	1 1/2"	0	0.40	0.80	2.49	3.98	7.96	12.93	18.90	26.85	39.78	51.71
50	2"	0	0.40	1.49	4.57	8.95	16.42	26.85	38.79	54.70	82.54	109.40
65	2 1/2"	0	0.40	1.49	4.97	9.94	20.88	33.81	52.71	74.59	102.43	149.17
80	3"	0	0.50	2.49	5.97	13.92	24.86	39.78	64.64	90.50	127.30	164.15
100	4"	0	0.70	2.98	10.94	24.86	39.78	58.68	89.50	140.28	210.83	354.04

Cv values in gpm

V-ball 90° (code W)

DN	NPS	Opening angle										
		0	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
8	1/4"	0	0.04	0.10	0.25	0.46	0.77	1.18	1.63	2.15	2.73	3.52
10	3/8"	0	0.05	0.11	0.28	0.52	0.88	1.35	1.86	2.46	3.12	4.03
15	1/2"	0	0.10	0.20	0.40	0.60	0.90	1.49	2.19	3.78	5.37	6.86
20	3/4"	0	0.20	0.40	0.80	1.19	1.99	3.08	4.57	7.96	11.24	13.92
25	1"	0	0.20	0.60	1.79	3.38	5.07	8.06	11.34	15.91	20.88	28.84
32	1 1/4"	0	0.30	0.80	1.99	4.97	7.96	13.92	18.90	27.85	38.79	54.70
40	1 1/2"	0	0.50	0.90	3.48	6.96	12.93	19.89	30.83	41.77	62.65	77.57
50	2"	0	0.70	1.99	5.97	11.93	21.88	34.81	44.75	69.61	104.42	134.32
65	2 1/2"	0	0.50	1.69	6.96	13.92	27.85	47.74	69.61	105.42	159.12	216.80
80	3"	0	0.70	3.48	7.96	17.90	34.81	59.67	89.50	134.32	203.93	308.29
100	4"	0	0.99	3.48	15.91	39.78	74.59	124.37	188.96	293.44	439.57	666.32

Cv values in gpm

Pressure rating:

DN	Spigot				Threaded socket		Flange	
	Connection type code ¹⁾							
	17	19	59	60	1	31	8	11
8	-	PN63	-	PN63	PN63	PN63	-	-
10	PN63	PN63	-	PN63	PN63	PN63	-	-
15	PN63	PN63	PN63	PN63	PN63	PN63	-	PN40
20	PN63	PN63	PN63	PN63	PN63	PN63	-	PN40
25	PN63	PN63	PN63	PN63	PN63	PN63	-	PN40
32	PN63	PN63	-	PN63	PN63	PN63	-	PN40
40	PN63	PN63	PN63	PN63	PN63	PN63	-	PN40
50	PN63	PN63	PN63	PN63	PN63	PN63	-	PN40
65	PN40	PN40	PN40	PN40	PN40	PN40	PN16	PN40*
80	PN40	PN40	PN40	PN40	PN40	PN40	PN16	-
100	PN25	PN25	PN25	PN25	PN25	PN25	PN16	-

* on request

1) **Connection type**

Code 1: Threaded socket DIN ISO 228

Code 31: NPT female thread

Code 8: Flange EN 1092, PN 16, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1

Code 11: Flange EN 1092, PN 40, form B, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1

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

Code 19: Spigot DIN EN 12627

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

Product conformities

Pressure equipment standards: ASME GEMÜ B31.3 (DN 15 – 100)
2014/68/EU

Food: FDA
Regulation (EC) No. 10/2011
Regulation (EC) No. 1935/2006

Explosion protection: ATEX (2014/34/EU), order code Special version X

ATEX assessment:

External
Gas: Zone 1, 2 IIC
Dust: Zone 21, 22 IIIC

Internal
Up to DN 65
Gas: Zone 1, 2 IIC
Dust: No zone

DN 80 and 100
Gas: Zone 1, 2 IIB
Dust: No zone

Oxygen: BAM compliant, the product is suitable for application with oxygen

Mechanical data

Torques:

DN	NPS	Breakaway torque
8	1/4"	53.10
10	3/8"	53.10
15	1/2"	53.10
20	3/4"	88.51
25	1"	97.36
32	1 1/4"	150.46
40	1 1/2"	247.82
50	2"	469.09
65	2 1/2"	672.66
80	3"	787.72
100	4"	1221.40

Torques in lbf in

A safety factor of 1.2 is included

With dry, non-lubricating media the breakaway torque may be increased.

Valid for clean, non-particulate and oil-free media (water, alcohol, etc.), gas or saturated steam (clean and wet).

PTFE seal.

Weight:

Ball valve

DN	NPS	Threaded connection, spigot	Flange
8	1/4"	1.21	2.54
10	3/8"	1.21	2.54
15	1/2"	1.32	2.98
20	3/4"	1.54	3.20
25	1"	1.76	3.97
32	1 1/4"	2.65	5.29
40	1 1/2"	5.07	7.72
50	2"	7.72	10.80
65	2 1/2"	15.21	20.50
80	3"	25.79	32.41
100	4"	42.55	49.16

Weight in lb

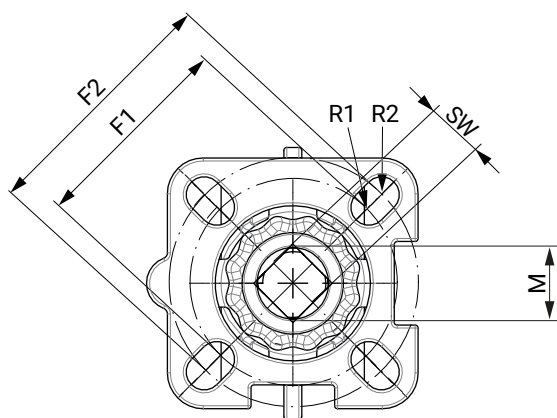
Hand lever

DN	Weight
DN 8 - 20	0.27
DN 25 - 32	0.36
DN 40 - 50	0.88
DN 65	1.72
DN 80 - 100	1.72

Weight in lb

Dimensions

Actuator flange

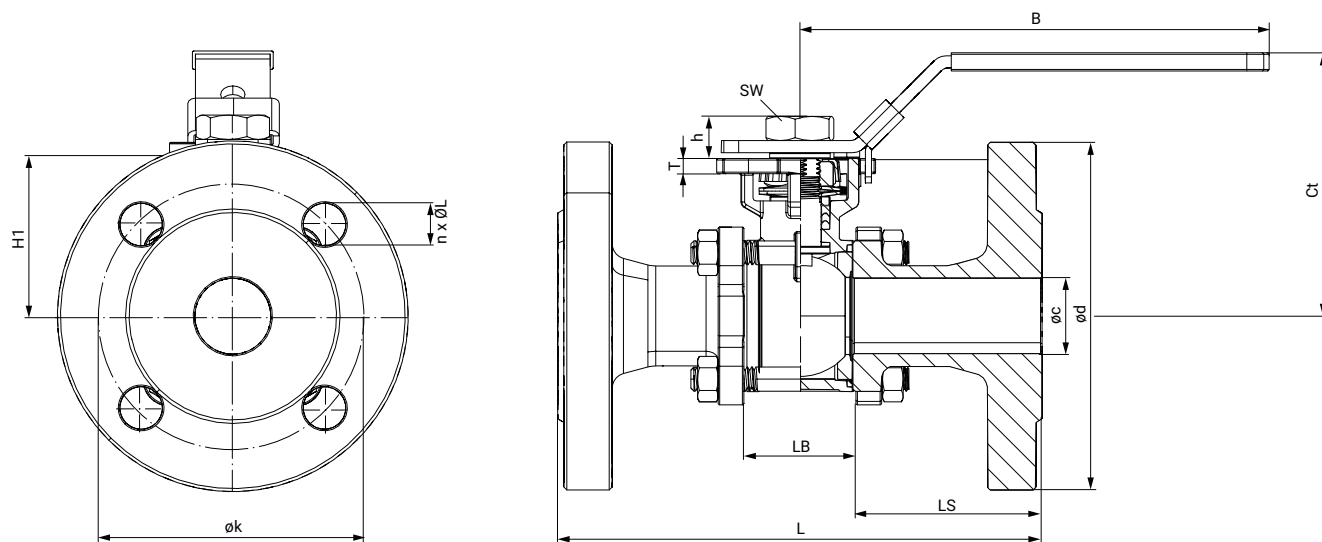


DN	G	F1	ISO 5211	R1	F2	ISO 5211	R2	SW [mm]	M
8	1/4"	1.42	F03	0.12	1.65	F04	0.12	9.0	M12
10	3/8"	1.42	F03	0.12	1.65	F04	0.12	9.0	M12
15	1/2"	1.42	F03	0.12	1.65	F04	0.12	9.0	M12
20	3/4"	1.42	F03	0.12	1.65	F04	0.12	9.0	M12
25	1"	1.65	F04	0.12	1.97	F05	0.14	11.0	M14
32	1 1/4"	1.65	F04	0.12	1.97	F05	0.14	11.0	M14
40	1 1/2"	1.97	F05	0.14	2.76	F07	0.18	14.0	M18
50	2"	1.97	F05	0.14	2.76	F07	0.18	14.0	M18
65	2 1/2"	1.97	F05	0.14	2.76	F07	0.18	14.0	M18
80	3"	2.76	F07	0.20	4.02	F10	0.24	17.0	M22
100	4"	2.76	F07	0.20	4.02	F10	0.24	17.0	M22

Dimensions in inch

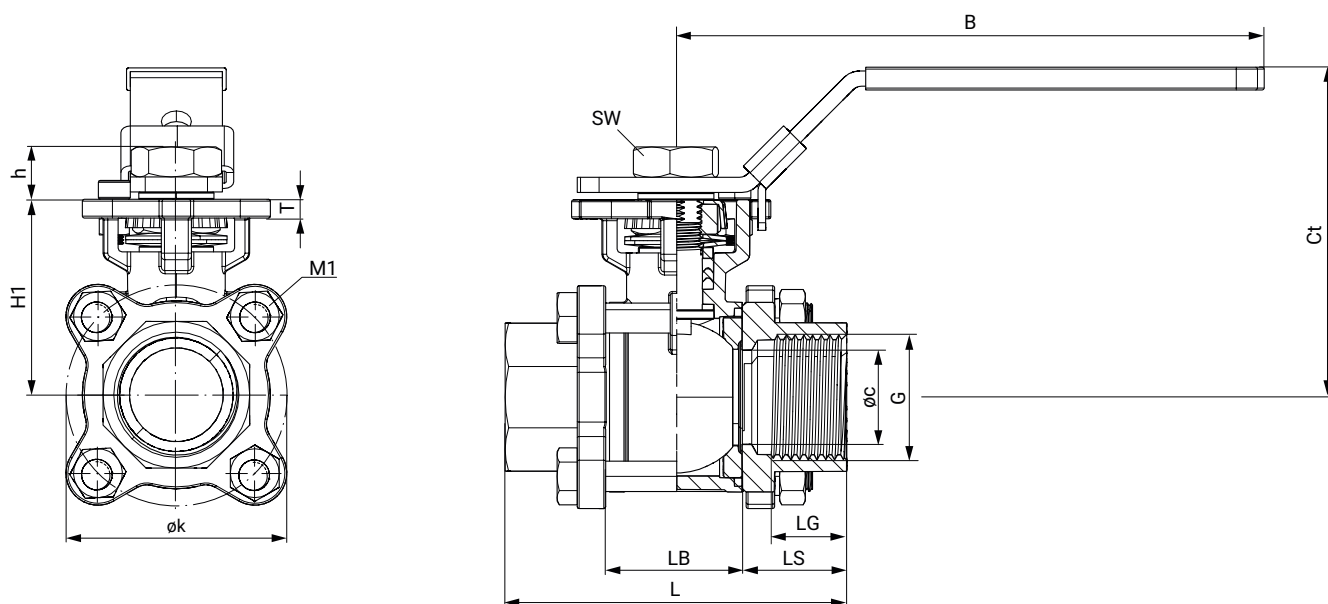
Ball valve

Flange (connection code 8, 11)



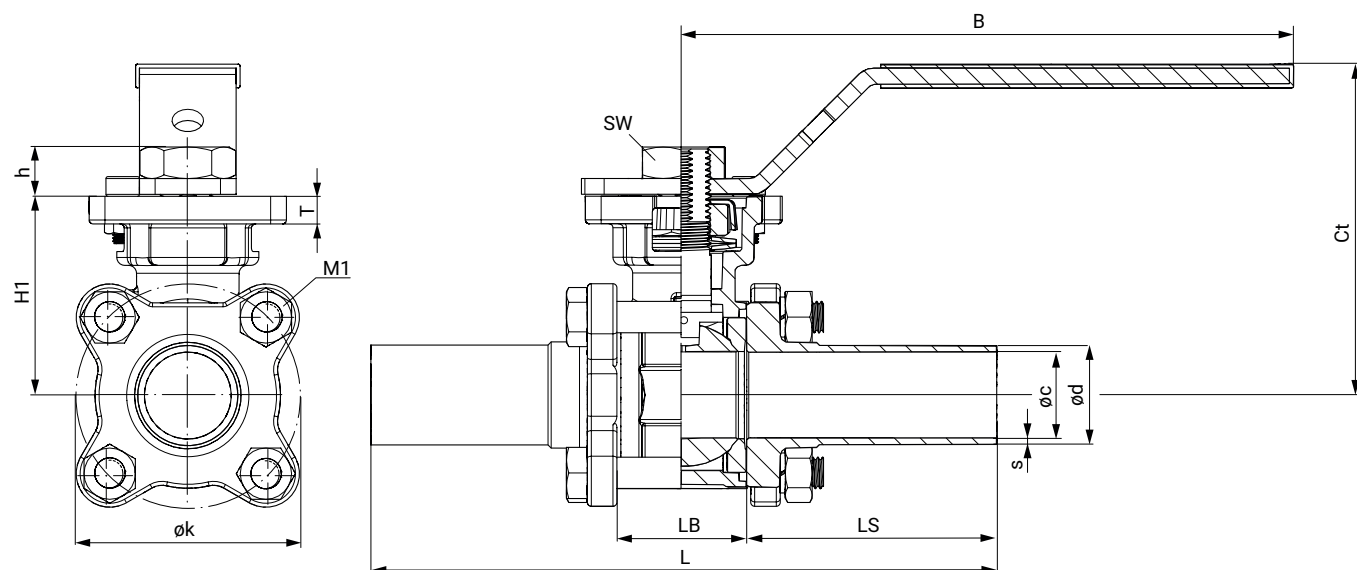
DN	Con- nection code	øc	ød	h	øk	n x ØL	B	Ct	H1	L	LB	LS	SW [mm]	T
15	11	0.59	3.74	0.35	2.56	4 x 5.51	2.81	2.83	1.59	5.12	0.94	2.09	18.0	0.22
20	11	0.79	4.13	0.41	2.95	4 x 5.51	3.03	3.03	1.77	5.91	1.14	2.38	18.0	0.22
25	11	0.98	4.53	0.49	3.35	4 x 5.51	3.43	3.43	2.05	6.30	1.38	2.46	18.0	0.20
32	11	1.26	5.51	0.49	3.94	4 x 7.09	3.59	3.62	2.24	7.09	1.73	2.68	21.0	0.26
40	11	1.50	5.91	0.63	4.33	4 x 7.09	4.06	4.06	2.72	7.87	2.09	2.89	21.0	0.30
50	11	1.93	6.50	0.63	4.92	4 x 7.09	4.33	4.37	3.03	9.06	2.56	3.25	27.0	0.33
65	8	2.56	7.28	0.59	5.71	4 x 7.09	4.88	4.88	3.54	11.42	3.19	4.11	27.0	0.33
80	8	2.99	7.87	0.71	6.30	8 x 7.09	6.30	6.34	4.25	12.20	3.78	4.21	-	0.39
100	8	3.94	8.66	0.71	7.09	8 x 7.09	6.89	6.97	4.84	13.78	4.88	4.45	-	0.39

Dimensions in inch

Threaded socket (connection code 1, 31)

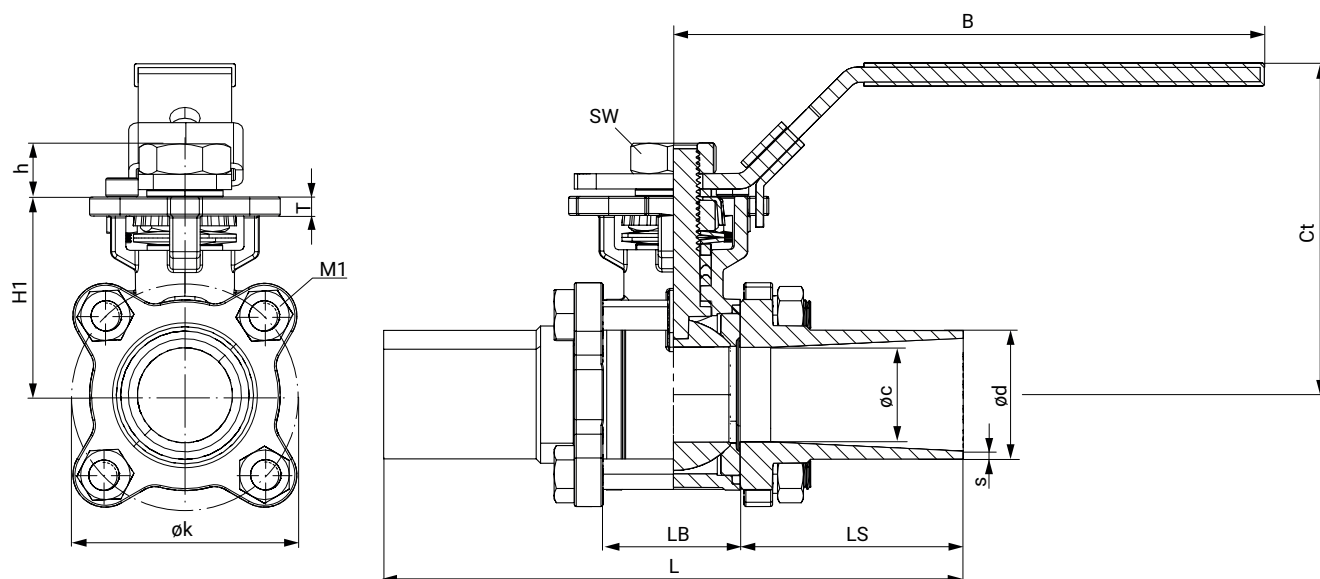
DN	G	øc	h	øk	B	Ct	H1	L	LB	LG	LS	M1	SW [mm]	T
8	1/4"	0.39	0.35	1.81	4.33	2.83	1.59	2.17	0.94	0.47	0.61	M8	18.0	0.47
10	3/8"	0.47	0.35	1.81	4.33	2.83	1.59	2.36	0.94	0.47	0.71	M8	18.0	0.55
15	1/2"	0.59	0.35	1.81	4.96	2.83	1.59	2.95	0.94	0.63	1.00	M8	18.0	0.63
20	3/4"	0.79	0.41	2.01	4.96	3.03	1.77	3.15	1.14	0.63	1.00	M8	18.0	0.63
25	1"	0.98	0.49	2.40	6.10	3.43	2.05	3.54	1.38	0.67	1.08	M8	21.0	0.67
32	1 1/4"	1.26	0.49	2.87	6.10	3.62	2.24	4.33	1.73	0.79	1.30	M10	21.0	0.79
40	1 1/2"	1.50	0.63	3.27	7.56	4.06	2.72	4.72	2.09	0.87	1.32	M10	27.0	0.87
50	2"	1.93	0.63	3.98	7.56	4.37	3.03	5.51	2.56	0.94	1.48	M12	27.0	0.94
65	2 1/2"	2.52	0.59	5.12	9.25	4.88	3.54	7.28	3.19	1.10	2.05	M12	27.0	1.10
80	3"	2.99	0.71	6.10	12.60	6.34	4.25	8.07	3.78	1.26	2.15	M14	-	1.26
100	4"	3.94	0.71	7.36	12.60	6.97	4.84	9.45	4.88	1.57	2.28	M14	-	1.57

Dimensions in inch

Spigot ASME (connection code 59)


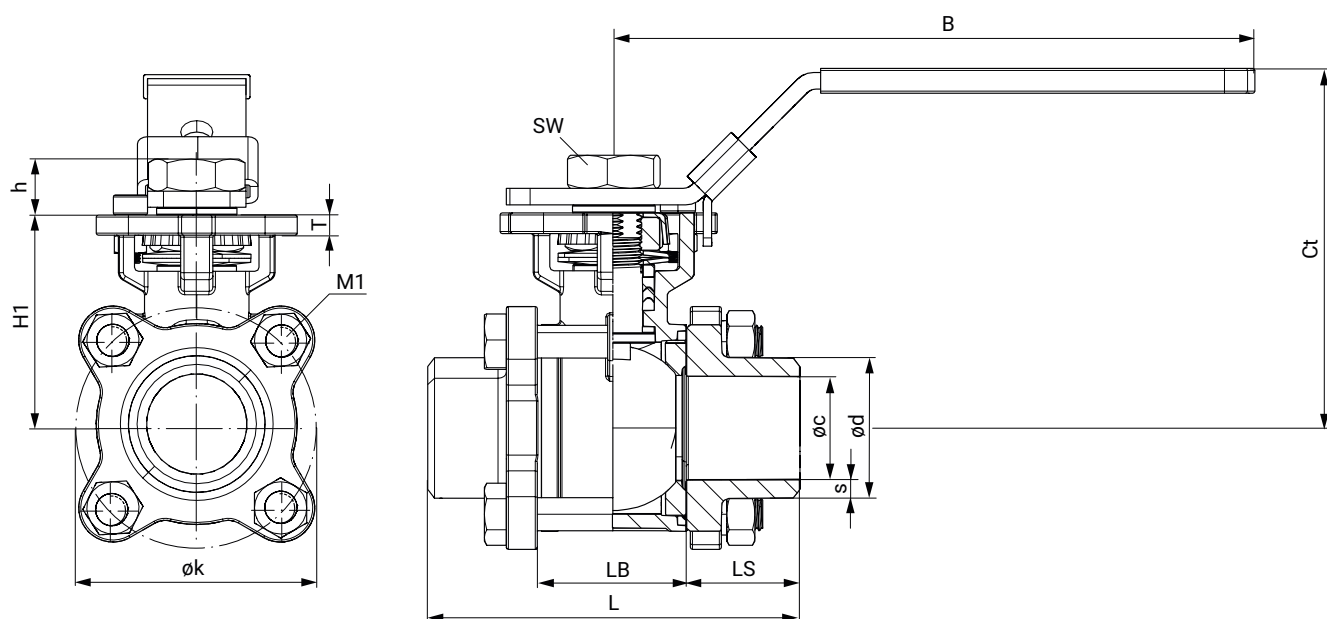
DN	ϕc	ϕd	h	ϕk	s	B	Ct	H1	L	LB	LS	M1	SW [mm]	T
15	0.37	0.50	0.33	1.81	0.06	4.92	2.80	1.59	5.51	0.98	2.26	M8	18.0	0.20
20	0.62	0.75	0.41	1.85	0.06	4.92	2.91	1.71	5.75	1.10	2.32	M8	18.0	0.20
25	0.87	1.00	0.47	2.20	0.06	6.10	3.31	1.99	6.26	1.26	2.50	M8	21.0	0.28
40	1.37	1.50	0.57	3.11	0.06	7.48	4.00	2.66	7.52	1.89	2.81	M10	27.0	0.31
50	1.87	2.00	0.57	3.88	0.06	7.48	4.33	2.97	8.50	2.44	3.03	M12	27.0	0.31
65	2.37	2.50	0.57	4.96	0.06	7.48	4.82	3.46	9.76	3.15	3.31	M12	27.0	0.31
80	2.87	3.00	0.69	5.75	0.06	6.97	6.24	4.13	10.51	3.54	3.48	M14	-	0.39
100	3.83	4.00	0.69	7.09	0.08	6.97	7.32	4.72	12.52	4.65	3.94	M14	-	0.39

Dimensions in inch

Spigot EN 10357 series A (connection code 17)

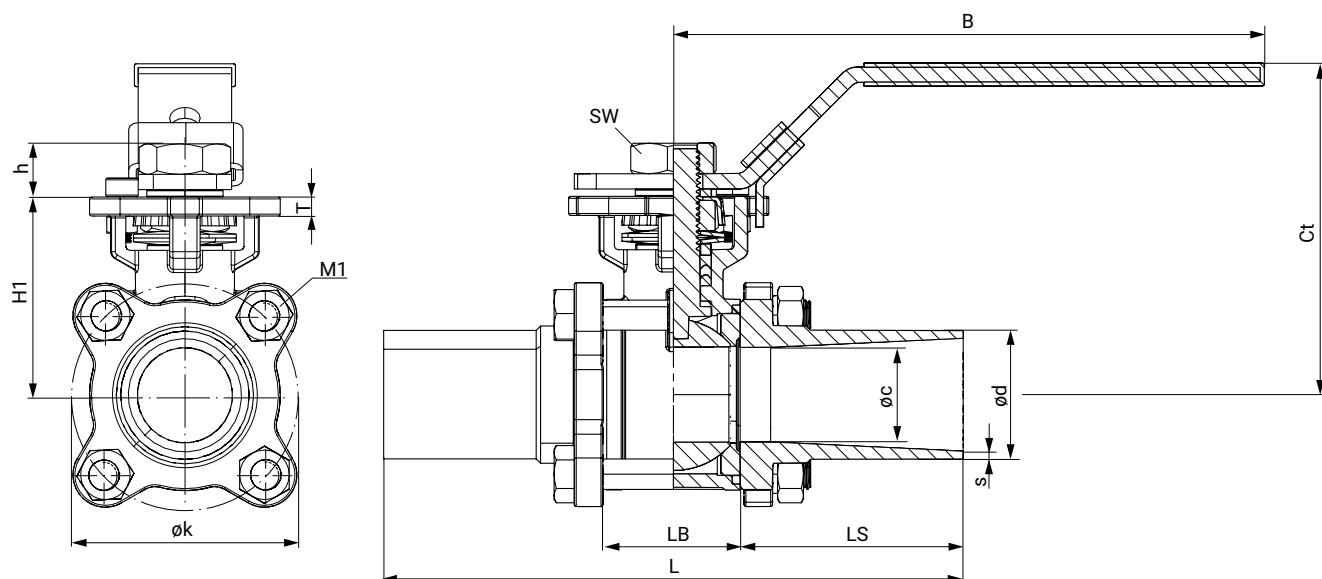
DN	$\varnothing c$	$\varnothing d$	h	$\varnothing k$	s	B	Ct	L	LB	LS	$H1$	$M1$	SW [mm]	T
10	0.39	0.51	0.35	1.81	0.06	4.92	2.83	4.72	0.94	1.89	1.59	M8	18.0	0.22
15	0.59	0.75	0.35	1.81	0.06	4.92	2.83	5.52	0.94	2.28	1.59	M8	18.0	0.22
20	0.79	0.91	0.41	2.01	0.06	4.92	3.03	5.51	1.14	2.19	1.77	M8	18.0	0.22
25	0.98	1.14	0.49	2.40	0.06	6.10	3.43	5.99	1.38	2.30	2.05	M8	21.0	0.20
32	1.26	1.38	0.49	2.87	0.06	6.10	3.62	6.50	1.73	2.38	2.24	M10	21.0	0.26
40	1.50	1.61	0.63	3.27	0.06	7.56	4.06	7.50	2.09	2.70	2.72	M10	27.0	0.30
50	1.97	2.09	0.63	3.98	0.06	7.56	4.37	7.99	2.56	2.72	3.03	M12	27.0	0.33
65	2.56	2.76	0.59	5.12	0.08	8.70	4.88	10.00	3.19	3.41	3.54	M12	27.0	0.33
80	3.15	3.35	0.71	6.10	0.08	10.91	6.34	11.03	3.78	3.62	4.25	M14	-	0.39
100	3.94	4.09	0.71	7.36	0.08	10.91	6.97	12.48	4.88	3.80	4.84	M14	-	0.39

Dimensions in inch

Spigot DIN EN 12627 (connection code 19)


DN	ϕc	ϕd	h	ϕk	s	B	Ct	$H1$	L	LB	LS	$M1$	SW [mm]	T
8	0.46	0.64	0.35	1.81	0.09	4.92	2.83	1.59	2.36	0.94	0.71	M8	18.0	0.22
10	0.50	0.69	0.35	1.81	0.09	4.92	2.83	1.59	2.36	0.94	0.71	M8	18.0	0.22
15	0.59	0.85	0.35	1.81	0.13	4.92	2.83	1.59	2.95	0.94	1.00	M8	18.0	0.22
20	0.79	1.07	0.41	2.01	0.14	4.92	3.03	1.77	3.15	1.14	1.00	M8	18.0	0.22
25	0.98	1.34	0.49	2.40	0.18	6.10	3.43	2.05	3.54	1.38	1.08	M8	21.0	0.20
32	1.26	1.68	0.49	2.87	0.21	6.10	3.62	2.24	4.33	1.73	1.30	M10	21.0	0.26
40	1.50	1.91	0.63	3.27	0.21	7.56	4.06	2.72	4.72	2.09	1.32	M10	27.0	0.30
50	1.97	2.38	0.63	3.98	0.21	7.56	4.37	3.03	5.51	2.56	1.48	M12	27.0	0.33
65	2.48	3.00	0.59	5.12	0.26	8.70	4.88	3.54	7.30	3.19	2.06	M12	27.0	0.33
80	2.99	3.50	0.71	6.10	0.26	10.91	6.34	4.25	8.07	3.78	2.15	M14	-	0.39
100	3.94	4.57	0.71	7.36	0.31	10.91	6.97	4.84	9.45	4.88	2.28	M14	-	0.39

Dimensions in inch

Spigot ISO (connection code 60)

DN	ϕc	ϕd	h	ϕk	s	B	Ct	$H1$	L	LB	LS	$M1$	SW [mm]	T
8	0.41	0.53	0.35	1.81	0.06	4.92	2.83	1.59	4.72	0.94	1.89	M8	18.0	0.22
10	0.47	0.68	0.35	1.81	0.06	4.92	2.83	1.59	4.72	0.94	1.89	M8	18.0	0.22
15	0.59	0.84	0.35	1.81	0.06	4.92	2.83	1.59	5.52	0.94	2.28	M8	18.0	0.22
20	0.79	1.06	0.41	2.01	0.06	4.92	3.43	1.77	5.51	1.14	2.19	M8	18.0	0.22
25	0.98	1.33	0.49	2.32	0.08	6.10	3.43	2.05	5.99	1.38	2.30	M8	21.0	0.20
32	1.26	1.67	0.49	2.87	0.08	6.10	3.62	2.24	6.50	1.73	2.38	M10	21.0	0.26
40	1.50	1.90	0.63	3.27	0.08	7.56	4.06	2.72	7.50	2.09	2.70	M10	27.0	0.30
50	1.93	2.37	0.63	4.06	0.08	7.56	4.37	3.03	7.99	2.56	2.72	M12	27.0	0.33
65	2.52	3.00	0.59	5.12	0.08	8.70	4.88	3.54	10.00	3.19	3.41	M12	27.0	0.33
80	2.99	3.50	0.71	6.10	0.09	10.91	6.34	4.25	11.03	3.78	3.62	M14	-	0.39
100	3.94	4.50	0.71	7.36	0.09	10.91	6.97	4.84	12.48	4.88	3.80	M14	-	0.39

Dimensions in inch

Accessories



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.

Only permissible with K-no. 5237, 5240, 5241, 7056 or 7097.

Nominal size	Item no.	Designation
DN 8–20	88470175	LSFS01Z BV F04 M5
DN 25–32	88470177	LSFS01Z BV F05 M6
DN 40–65	88470178	LSFS01Z BV F07 M6
DN 80–100	88836073	LSFS01Z BV F10 M6

Mounting example



LSF (Pepperl & Fuchs) with MSH EPV mounting kit



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.

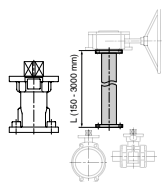
Only permissible with K-no. 5237, 5240, 5241, 7056 or 7097.

Nominal size	Item no.	Designation
DN 8–20	88494998	LSCS01Z BV F04 M5
DN 25–32	88495013	LSCS01Z BV F05 M6
DN 40–65	88495019	LSCS01Z BV F07 M6
DN 80–100	88836072	LSCS01Z BV F10 M6

Mounting example



Manual ball valve with LSC and MSH-EPV subassembly



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).

Nominal size	GEMÜ RC0 shaft extension		GEMÜ AB26 hand lever	
	Item no.	Designation	Item no.	Designation
DN 8–20	88742081	RC0VAF04 D09KF04 D09 60 M12	88660109	AB26 20D 0SET
DN 25–32	88742082	RC0VAF05 D11KF05 D11 65 M14	88660111	AB26 32D 0SET
DN 40–65	88742083	RC0VAF07 D14KF07 D14 80 M18	88660112	AB26 50D 0SET
DN 80	88742085	RC0VAF07 D17KF07 D17100 M22	88660114	AB26 80D 0SET
DN 100	88742085	RC0VAF07 D17KF07 D17100 M22	88660116	AB26 100D 0SET

Ordering information for ball valve with RC0 shaft neck extension, for thermal separation (K-no. 5227)

The manual ball valve is equipped with an RC0 shaft neck extension and a hand lever.
The shaft neck height is dependent on the nominal size of the ball valve.

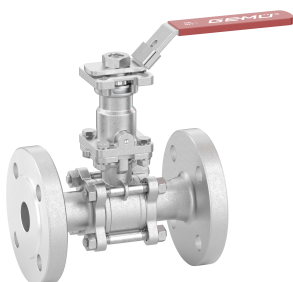
Ordering information for ball valve with RC0 shaft neck extension, for thermal separation, cleaned so that it's PWIS-free (K-no. 7097 – 0101, 5227)

The manual ball valve is equipped with an RC0 shaft neck extension and a hand lever.
The shaft neck height is dependent on the nominal size of the ball valve.
The media wetted area is cleaned without compromising the paint coating.

Ordering information for ball valve with RC0 shaft neck extension, for thermal separation, cleaned so that it's PWIS-free (K-no. 5239 – 0107, 5227)

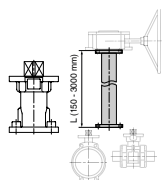
The manual ball valve is equipped with an RC0 shaft neck extension and a hand lever.
The shaft neck height is dependent on the nominal size of the ball valve.
The media wetted area is degreased.

Mounting example



Preparing for mounting a position indicator. NOTE: The corresponding mounting kit must be entered separately (K-no. 5237 – 5227, 7056)

The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever.
Different limit switches can then be mounted.
These must be ordered separately. See GEMÜ LSF or LSC for this.



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).

Ordering information for ball valve with RC0 shaft neck extension, prepared for mounting a position indicator (K-no. 5240 – 0101, 5227, 7056)

The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever. The media wetted area is cleaned without compromising the paint coating. Different limit switches can then be mounted. These must be ordered separately. See GEMÜ LSF or LSC for this.

Ordering information for ball valve with RC0 shaft neck extension, prepared for mounting a position indicator (K-no. 5241 – 0107, 5227, 7056)

The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever. The media wetted area is degreased. Different limit switches can then be mounted. These must be ordered separately. See GEMÜ LSF or LSC for this.

Mounting example



Certificates

Certificate	Standard	Item number
3.1 Material	EN 10204	88333336

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:

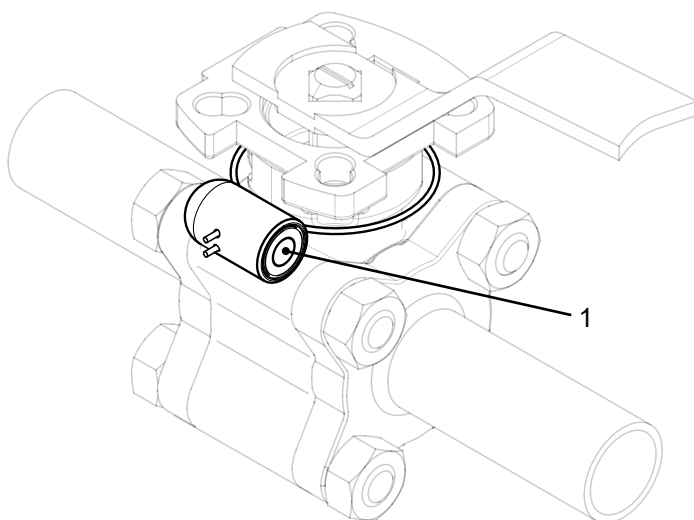
www.gemu-group.com/conexo

Ordering

GEMÜ Conexo must be ordered separately with the ordering option "CONEXO".

Installing the RFID chip

In the corresponding design with CONEXO, this product has an RFID chip for electronic identification purposes. The position of the RFID chip can be seen below.





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