

GEMÜ B26

Manually operated compact flanged ball valve



Features

- High flow rate
- · Full-flow bore
- · Compact design
- · ATEX version available as an option

Description

The GEMÜ B26 metal one-piece 2/2-way ball valve has a plastic sleeved hand lever. The seat seal is made of PTFE.

Technical specifications

• Media temperature: -20 to 180 °C Ambient temperature: -20 to 60 °C • Operating pressure: 0 to 40 bar • Nominal sizes: DN 15 to 100 • Body configurations: 2/2-way body • Ball configurations: Control ball · Connection types: Flange

· Connection standards: ANSI | EN

· Body materials: 1.4408, investment casting material

· Seal materials: PTFE

Conformities: ATEX | EAC | FDA | Reg. (EU) No. 10/2011 | Regulation (EC) No. 1935/2004 | Regulation (EC) No. 2023/2006 |

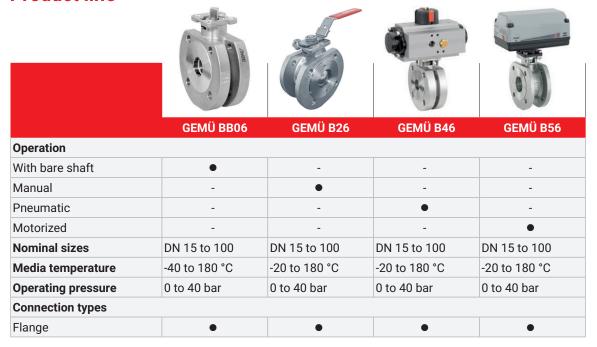
TA Luft (German Clean Air Act)

Technical data depends on the respective configuration



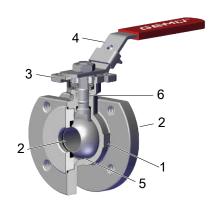


Product line



Product description

Construction

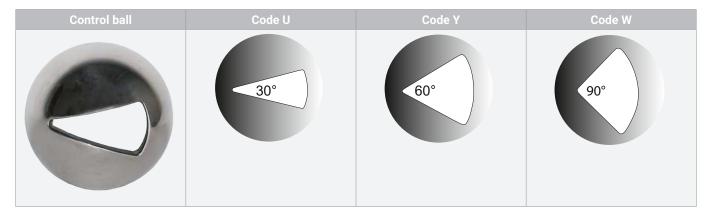


Item	Name	Materials
1	Ball valve body	1.4408 / CF8M
2	Pipe connections	1.4408 / CF8M
3	Mounting flange ISO 5211	1.4408 / CF8M
4	Hand lever	304
5	Seal	PTFE
6	Antistatic unit	1.4408

Pressure-relief hole

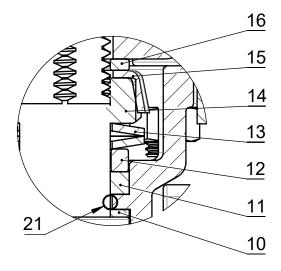


Control ball



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

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	Сар	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

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, one-piece body,	B26
compact flange,	
ISO 5211, top flange, lockable hand lever,	
low-maintenance spindle seal and blow-out proof shaft,	
with anti-static unit	

2 DN	Code
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 60° (for Kv value see datasheet)	Υ
2/2-way body, V-ball 90° (for Kv value see datasheet)	W

4 Connection type	Code
Flange ANSI Class 125/150 RF,	39
face-to-face dimension FTF EN 558 series 1, ISO 5752,	
basic series 1,	
length only for body configuration D	
Flange EN 1092, PN16/PN40, form B DN15 to DN50, flange EN1092, PN 16, form B DN65 to DN100	68

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

6 Seal	material	Code
PTFE		5

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

8 Type of design	Code
Standard	
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
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 Special version	Code
Without	
ATEX certification	X

10 CONEXO	Code
Without	
Integrated RFID chip for electronic identification and traceability	С

Order example

Ordering option	Code	Description
1 Type	B26	Ball valve, metal, manually operated, one-piece body, compact flange, ISO 5211, top flange, lockable hand lever, low-maintenance spindle seal and blow-out proof shaft, with anti-static unit
2 DN	25	DN 25
3 Body/ball configuration	D	2/2-way body
4 Connection type	39	Flange ANSI Class 125/150 RF, face-to-face dimension FTF EN 558 series 1, ISO 5752, basic series 1, length only for body configuration D
5 Ball valve material	37	1.4408/CF8M (body, connection), 1.4401/SS316 (ball, shaft)
6 Seal material	5	PTFE

Ordering option	Code	Description
7 Control function	L	Manually operated, hand lever, lockable
8 Type of design		Standard
9 Special version		Without
10 CONEXO		Without
		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 phys-

ical and chemical properties of the body and seal material.

Temperature

Media temperature: $-20 - 180 \,^{\circ}\text{C}$

Ambient temperature: $-20 - 60 \,^{\circ}\text{C}$

Higher temperatures on request

Storage temperature: $-60 - 60 \,^{\circ}\text{C}$

Pressure

Operating pressure: 0 - 40 bar

Vacuum: Can be used up to a vacuum of 50 mbar (absolute)

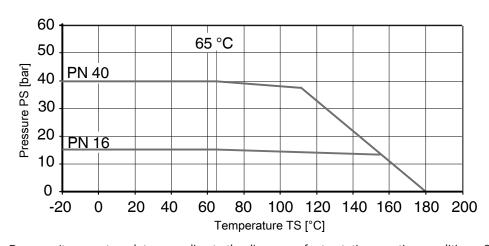
These values apply to room temperature and air. The values may deviate for other media and other

temperatures.

Leakage rate: Leakage rate according to ANSI FCI70 – B16.104

Leakage rate according to EN12266, 6 bar air, leakage rate A

Pressure/temperature diagram:



Pressure/temperature data according to the diagram refer to static operating conditions. Strongly fluctuating parameters or parameters that change quickly over time can lead to a reduction in service life. Special applications are to be discussed with your technical contact in advance.

Pressure rating: DN 15 - 50: PN40

DN 65 - 100: PN16

Kv values:

DN	NPS	Kv values
15	1/2"	13.0
20	3/4"	34.0
25	1"	60.0
32	1¼"	94.0
40	1½"	213.0
50	2"	366.0
65	2½"	595.0
80	3"	935.0
100	4"	1700.0

Kv values in m³/h

V-ball 30° (code U)

DN	NPS					Оре	ening ar	ngle				
		0	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
15	1/2"	0	0.085	0.085	0.170	0.255	0.425	0.680	0.935	1.360	1.870	2.210
20	3/4"	0	0.085	0.170	0.425	0.595	0.935	1.530	2.040	2.805	3.825	4.590
25	1"	0	0.085	0.255	0.680	1.105	1.955	2.975	4.335	5.961	8.128	8.500
32	1¼"	0	0.170	0.340	0.935	1.700	3.145	4.675	6.800	8.500	11.050	12.750
40	1½"	0	0.255	0.510	1.360	2.550	4.250	6.375	9.350	11.900	14.450	17.000
50	2"	0	0.340	1.020	3.230	5.100	8.500	12.75	19.550	26.350	36.550	51.000
65	2½"	0	0.340	0.850	3.400	6.800	10.200	15.300	23.800	31.450	52.70	63.750
80	3"	0	0.425	1.020	3.400	6.800	11.900	19.550	28.050	39.100	55.250	69.700
100	4"	0	0.510	1.700	5.100	12.750	24.650	40.800	60.350	85.000	110.50	135.20

Kv values in m³/h

V-ball 60° (code Y)

DN	NPS					Оре	ening a	ngle				
		0	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
15	1/2"	0	0.085	0.085	0.255	0.425	0.765	1.190	1.700	2.805	3.740	5.100
20	3/4"	0	0.085	0.170	0.595	0.850	1.445	2.380	3.400	5.525	7.650	10.200
25	1"	0	0.170	0.340	0.935	1.530	2.890	4.505	6.715	10.46	13.010	17.850
32	1¼"	0	0.170	0.510	1.530	2.550	4.675	8.075	10.880	16.15	22.100	33.150
40	1½"	0	0.340	0.680	2.125	3.400	6.800	11.050	16.150	22.95	34.000	44.200
50	2"	0	0.340	1.275	3.910	7.650	14.030	22.950	33.150	46.75	70.550	93.500
65	2½"	0	0.340	1.275	4.250	8.500	17.850	28.900	45.050	63.75	87.550	127.50
80	3"	0	0.425	2.125	5.100	11.900	21.250	34.000	55.250	77.35	108.80	140.30
100	4"	0	0.595	2.550	9.350	21.250	34.000	50.150	76.500	119.9	180.20	302.60

Kv values in m³/h

Kv values:

V-ball 90° (code W)

DN	NPS					Оро	ening ar	ngle				
		0	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
15	1/2"	0	0.085	0.170	0.340	0.510	0.765	1.275	1.870	3.230	4.590	5.865
20	3/4"	0	0.170	0.340	0.680	1.020	1.700	2.635	3.910	6.800	9.605	11.900
25	1"	0	0.170	0.510	1.530	2.890	4.335	6.885	9.690	13.600	17.850	24.650
32	1¼"	0	0.255	0.680	1.700	4.250	6.800	11.900	16.150	23.800	33.150	46.750
40	1½"	0	0.425	0.765	2.975	5.950	11.050	17.000	26.350	35.700	53.550	66.300
50	2"	0	0.595	1.700	5.100	10.200	18.700	29.750	38.250	59.500	89.250	114.80
65	2½"	0	0.425	1.445	5.950	11.900	23.800	40.800	59.500	90.100	136.00	185.30
80	3"	0	0.595	2.975	6.800	15.300	29.750	51.000	76.500	114.80	174.30	263.50
100	4"	0	0.850	2.975	13.600	34.000	63.750	106.30	161.50	250.80	375.70	569.50

Kv values in m³/h

Product conformities

Pressure Equipment Dir-

2014/68/EU

ective:

Food: FDA

Regulation (EC) No. 10/2011 Regulation (EC) No. 1935/2006

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

ATEX marking: Up to DN 65

Gas: 🗟 II 2G Ex h IIC T6 ... T2 Gb X
Dust: 🗟 II -/2D Ex h -/IIIC T180 °C -/Db X

DN 80 and 100

Gas: 🗟 II 2G Ex h IIB T6 ... T2 Gb X Dust: 🗟 II -/2D Ex h -/IIIC T180 °C -/Db X

Mechanical data

Torques:

DN	NPS	Breakaway
		torque
15	1/2"	7
20	3/4"	8
25	1"	10
32	1¼"	14
40	1½"	29
50	2"	58
65	21/2"	62
80	3"	120
100	4"	174

Torques in Nm

Weight: Ball valve

DN	NPS	Weight
15	1/2"	1.3
20	3/4"	2.0
25	1"	2.8
32	1¼"	4.2
40	1½"	5.3
50	2"	6.7
65	2½"	11.9
80	3"	14.9
100	4"	20.4

Weights in kg

Weight:

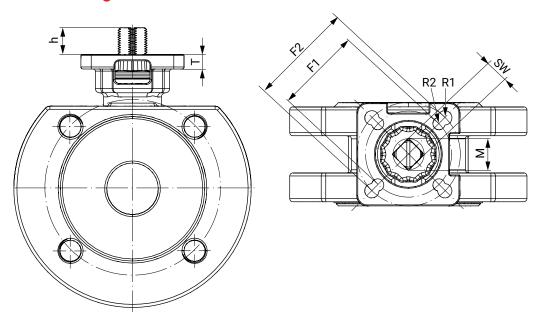
Hand lever

DN	NPS	Weight
15	1/2"	0.122
20	3/4"	0.122
25	1"	0.165
32	1¼"	0.165
40	1½"	0.398
50	2"	0.398
65	2½"	0.78
80	3"	0.78
100	4"	0.96

Weights in kg

Dimensions

Actuator flange

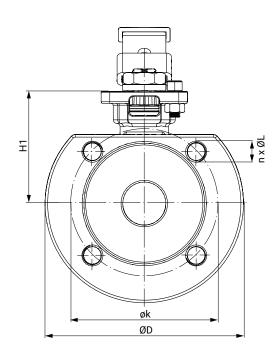


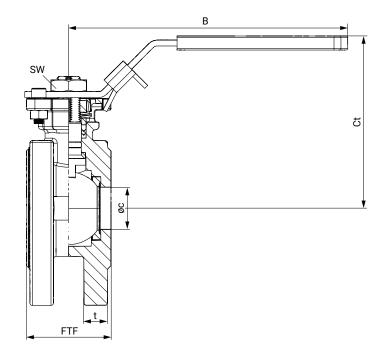
DN	G	F1	R1	F2	R2	SW			M
15	1/2"	36.0	3.0	42.0	3.0	9.0	9.0	5.0	M12
20	3/4"	36.0	3.0	42.0	3.0	9.0	7.5	5.0	M12
25	1"	42.0	3.0	50.0	3.5	11.0	13.0	7.0	M14
32	1¼"	42.0	3.0	50.0	3.5	11.0	13.0	7.0	M14
40	1½"	50.0	3.5	70.0	4.5	14.0	15.0	9.0	M18
50	2"	50.0	3.5	70.0	4.5	14.0	16.0	9.0	M18
65	2½"	70.0	5.0	102.0	6.0	17.0	18.0	10.5	M22
80	3"	70.0	5.0	102.0	6.0	17.0	18.0	10.5	M22
100	4"	70.0	5.0	102.0	6.0	17.0	18.0	10.5	M22

Dimensions in mm

Body dimensions

Flange (connection code 39)

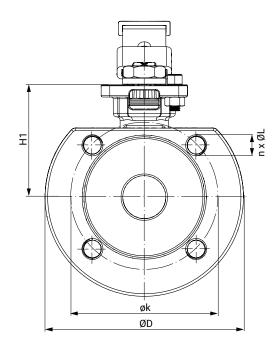


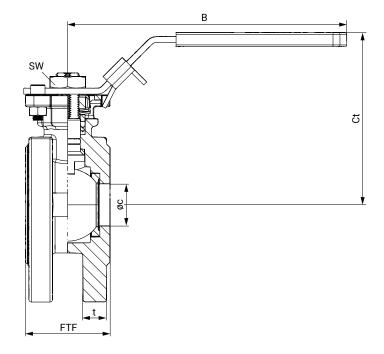


DN	ØС	ØD	øk	t	FTF	H1	n x ØL	В	Ct
15	15.0	89.0	60.5	9.2	38.0	48.5	4x1/2-13UNC	133.5	80.9
20	20.0	99.0	69.8	11.0	40.0	54.0	4x1/2-13UNC	133.5	86.4
25	25.0	108.0	79.2	13.5	46.0	65.0	4x1/2-13UNC	165.1	96.0
32	32.0	117.0	88.9	14.0	56.0	78.0	4x1/2-13UNC	165.1	107.5
40	38.0	127.0	98.6	15.5	65.0	85.0	4x1/2-13UNC	214.0	129.5
50	50.0	152.0	120.6	17.0	78.0	93.0	4x5/8-11UNC	214.0	137.5
65	65.0	178.0	139.7	20.5	99.0	107.0	4x5/8-11UNC	258.0	162.5
80	76.0	190.0	152.4	22.0	116.0	119.0	4x5/8-11UNC	298.0	174.5
100	100.0	229.0	190.5	22.0	149.0	132.0	8x5/8-11UNC	270.0	185.0

Dimensions in mm

Flange (connection code 68)





DN	ØС	ØD	øk	t	FTF	H1	n x ØL	В	Ct
15	15.0	82.0	65.0	14.0	42.0	48.5	4 x M12	133.5	79.7
20	20.0	98.0	75.0	14.0	44.0	54.0	4 x M12	133.5	85.2
25	25.0	115.0	85.0	14.0	50.0	65.0	4 x M12	165.1	102.0
32	32.0	140.0	100.0	16.0	60.0	78.0	4 x M16	165.1	119.0
40	38.0	150.0	110.0	15.0	69.0	85.0	4 x M16	214.0	130.6
50	50.0	165.0	125.0	15.5	82.0	93.0	4 x M16	214.0	139.0
65	65.0	185.0	145.0	15.5	103.0	107.0	4 x M16	258.0	162.0
80	76.0	200.0	160.0	17.0	119.0	119.0	8 x M16	298.0	174.0
100	100.0	220.0	180.0	17.0	150.0	132.0	8 x M16	270.0	186.0

Dimensions in mm

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 possible in conjunction with the following K-no.: 7056, 7097, 5237, 5240, 5241

Nominal size	Item no.	Designation
DN 15-20	88470175	LSFS01Z BV F04 M5
DN 25-32	88470177	LSFS01Z BV F05 M6
DN 40-50	88470178	LSFS01Z BV F07 M6
DN 65-100	88836073	LSFS01Z BV F10 M6



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.

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 possible in conjunction with the following K-no.: 7056, 7097, 5237, 5240, 5241

Nominal size	Item no.	Designation
DN 15-20	88494998	LSCS01Z BV F04 M5
DN 25-32	88495013	LSCS01Z BV F05 M6
DN 40-50	88495019	LSCS01Z BV F07 M6
DN 65-100	88836072	LSCS01Z BV F10 M6

Mounting example



Manual ball valve with LSC and MSH-EPV subassembly

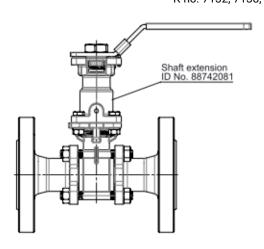
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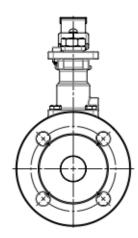
GEMÜ RC0

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).

Ball valve with shaft neck extension, K-no. 5227, as well as variants thereof K-no. 7132, 7138, 5232, 5234, 5235, 5238, 5239





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

The manual ball valve is equipped with an RCO 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 - 5227, 0101)

The manual ball valve is equipped with an RCO 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. 7039 - 5227, 0107)

The manual ball valve is equipped with an RCO 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



Preparation for mounting a position indicator (K-no. 5237 - 5227, 7056)

NOTE: The corresponding mounting kit must be entered separately.

Ordering information for ball valve with RC0 shaft neck extension, prepared for mounting a position indicator (K-no. 5237 - 5227, 7056)

The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever.

www.gemu-group.com/ifferent limit switches can then be mounted 9These must be ordered separately. See GEMÜ LSF3m/49026 for this.

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 (1) for electronic recognition. The position of the RFID chip can be seen below.

