

## GEMÜ B26

### Manually operated compact flanged ball valve



#### Features

- Compact design
- Blow-out proof shaft
- High flow rate
- Full-flow bore
- 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:** -4 to 356 °F
- **Ambient temperature:** -4 Up to 140 °F
- **Operating pressure:** 0 Up to 580 psi
- **Nominal sizes:** 1/2" (DN 15) until 4" (DN 100)
- **Body configurations:** Straight through body
- **Ball configurations:** Control ball
- **Connection types:** Flange
- **Connection standards :** ANSI | EN
- **Body materials:** 1.4408, investment casting material
- **Seal materials :** PTFE
- **Conformities:** EAC | FDA | Reg. (EU) No. 10/2011 | Regulation (EC) No. 1935/2004 | Regulation (EC) No. 2023/2006 | TA Luft (German Clean Air Act)

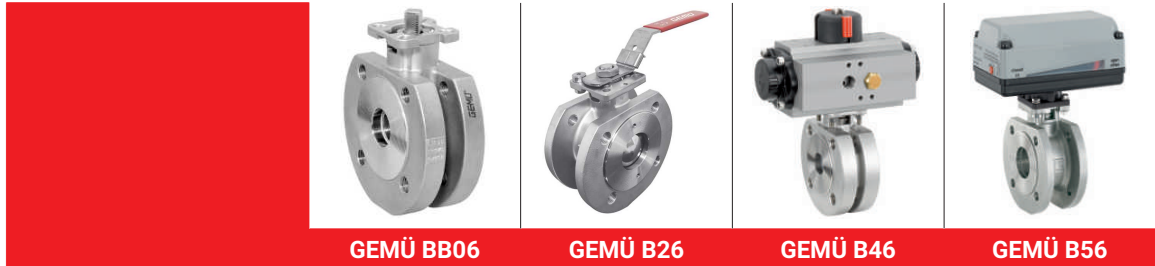
Technical data depends on the respective configuration



further information  
webcode: GW-B26



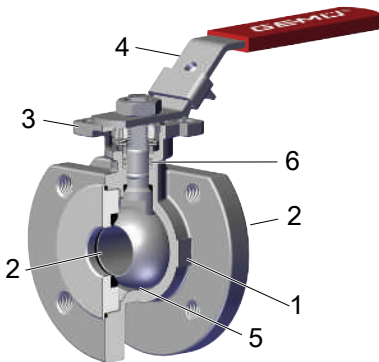
## Product line



	GEMÜ BB06	GEMÜ B26	GEMÜ B46	GEMÜ B56
<b>Operation</b>				
With bare shaft	●	-	-	-
manually	-	●	-	-
pneumatic	-	-	●	-
Motorized	-	-	-	●
<b>Nominal sizes</b>	1/2" (DN 15) until 4" (DN 100)	1/2" (DN 15) until 4" (DN 100)	1/2" (DN 15) until 4" (DN 100)	1/2" (DN 15) until 4" (DN 100)
<b>Media temperature</b>	-40 to 356 °F	-4 to 356 °F	-4 to 356 °F	-4 to 356 °F
<b>Operating pressure</b>	0 to 580 psi	0 to 580 psi	0 to 580 psi	0 to 580 psi
<b>Connection types</b>				
Flange	●	●	●	●

## 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

Pressure-relief  
hole

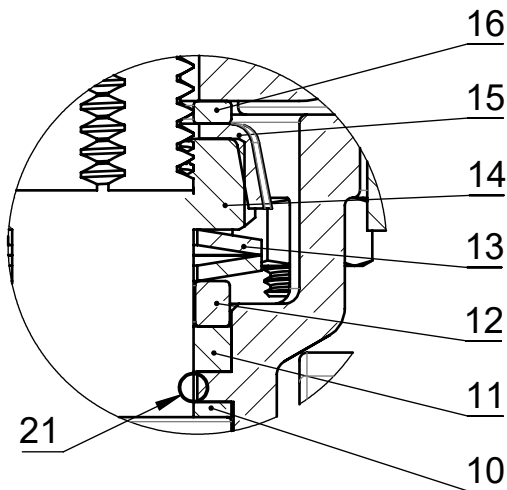


## Control ball

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.

## 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)	FKM

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

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

4 Connection type	Code
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	39
<b>Flange EN 1092, PN16/PN40, form B DN15 to DN50, Flange EN1092, PN 16, form B DN65 to DN100</b>	<b>68</b>

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

6 Seal material	Code
<b>PTFE FKM O-ring</b>	<b>5</b>

7 Control function	Code
Manually operated, toggle, lockable	L

8 Type of design	Code
Standard	
Thermal separation between actuator and valve body by mounting kit, mounting kit and mounting parts in stainless steel	5227

8 Type of design	Code
K-no. 5227, K-no. 7056, 5227 – thermal separation by mounting kit, 7056 – drilled shaft, shortened toggle	5237
Shortened toggle for construction of feedback units. Shaft face drilled for mounting kit: DN8-DN20 M5 x 12.5/depth of thread 9.0 mm, DN25-DN100 M6 x 15/depth of thread 10.0 mm	7056
K-no. 0101, K-no. 7056, 0101 – media-wetted area cleaned to ensure suitability for paint applications, 7056 – drilled shaft, shortened toggle	7097

9 Special version	Code
Without	
Special version for oxygen Maximum temperature for medium: 100 °C, Operating pressure limited in accordance with product label data Media-wetted materials cleaned, and grease and seal tested in accordance with DIN EN 1797/ISO 21010	O
Explosion protection	X

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

**Order example**

Order 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 FKM O-ring
7 Control function	L	Manually operated, toggle, 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 physical and chemical properties of the body and seal material.  
 Special version for oxygen (code S): only gaseous oxygen

### Temperature

**Media temperature:** -4 – 356 °F  
 For the medium gaseous oxygen (special version code O): Media temperature max. 212 °F.

**Ambient temperature:** -4 – 140 °F  
 Higher temperatures on request

**Storage temperature:** -76 – 140 °F

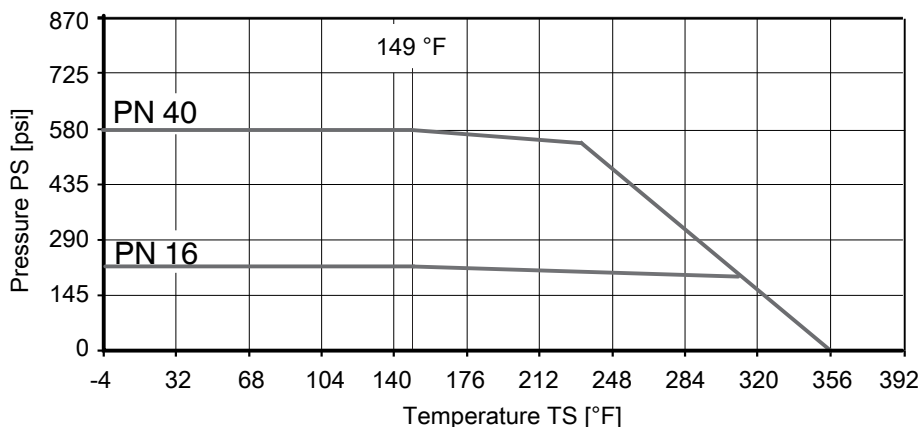
### Pressure

**Operating pressure:** 0 – 580 psi  
 For the medium gaseous oxygen (special version code O): Operating pressure limited in accordance with product label data.

**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.

**Leakage rate:** Leakage rate according to ANSI FCI70 – B16.104  
 Leakage rate according to EN 12266, 87 psi 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

**Cv values:**

DN	NPS	Cv value
15	1/2"	15.21
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

**V-ball 30° (code U)**

DN	NPS	Opening angle										
		0	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
15	1/2"	0	0.100	0.100	0.200	0.300	0.500	0.800	1.090	1.590	2.190	2.590
20	3/4"	0	0.100	0.200	0.500	0.700	1.090	1.790	2.390	3.280	4.480	5.370
25	1"	0	0.100	0.300	0.800	1.290	2.290	3.480	5.070	6.970	9.510	9.950
32	1¼"	0	0.200	0.400	1.090	1.990	3.680	5.470	7.960	9.950	12.930	14.920
40	1½"	0	0.300	0.600	1.590	2.980	4.970	7.460	10.940	13.920	16.910	19.890
50	2"	0	0.400	1.190	3.780	5.970	9.950	14.920	22.870	30.830	42.760	59.670
65	2½"	0	0.400	0.990	3.980	7.960	11.930	17.900	27.850	36.800	61.660	74.590
80	3"	0	0.500	1.190	3.980	7.960	13.920	22.870	32.820	45.750	64.640	81.550
100	4"	0	0.600	1.990	5.970	14.920	28.840	47.740	70.610	99.450	129.290	158.180

Cv values in gpm

**V-ball 60° (code Y)**

DN	NPS	Opening angle										
		0	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
15	1/2"	0	0.100	0.100	0.300	0.500	0.900	1.390	1.990	3.280	4.380	5.970
20	3/4"	0	0.100	0.200	0.700	0.990	1.690	2.780	3.980	6.460	8.950	11.930
25	1"	0	0.200	0.400	1.090	1.790	3.380	5.270	7.860	12.240	15.220	20.880
32	1¼"	0	0.200	0.600	1.790	2.980	5.470	9.450	12.730	18.900	25.860	38.790
40	1½"	0	0.400	0.800	2.490	3.980	7.960	12.930	18.900	26.850	39.780	51.710
50	2"	0	0.400	1.490	4.570	8.950	16.420	26.850	38.790	54.700	82.540	109.400
65	2½"	0	0.400	1.490	4.970	9.950	20.880	33.810	52.710	74.590	102.430	149.180
80	3"	0	0.500	2.490	5.970	13.920	24.860	39.780	64.640	90.500	127.300	164.150
100	4"	0	0.700	2.980	10.940	24.860	39.780	58.680	89.510	140.280	210.830	354.040

Cv values in gpm

**Cv values:**

**V-ball 90° (code W)**

DN	NPS	Opening angle										
		0	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
15	1/2"	0	0.100	0.200	0.400	0.600	0.900	1.490	2.190	3.780	5.370	6.860
20	3/4"	0	0.200	0.400	0.800	1.190	1.990	3.080	4.570	7.960	11.240	13.920
25	1"	0	0.200	0.600	1.790	3.380	5.070	8.060	11.340	15.910	20.880	28.840
32	1¼"	0	0.300	0.800	1.990	4.970	7.960	13.920	18.900	27.850	38.790	54.700
40	1½"	0	0.500	0.900	3.480	6.960	12.930	19.890	30.830	41.770	62.650	77.570
50	2"	0	0.700	1.990	5.970	11.930	21.880	34.810	44.750	69.620	104.420	134.320
65	2½"	0	0.500	1.690	6.960	13.920	27.850	47.740	69.620	105.420	159.120	216.800
80	3"	0	0.700	3.480	7.960	17.900	34.810	59.670	89.510	134.320	203.930	308.300
100	4"	0	0.990	3.480	15.910	39.780	74.590	124.370	188.960	293.440	439.570	666.320

Cv values in gpm

## Product conformities

**Pressure Equipment Directive:** 2014/68/EU

**Food:** FDA  
Regulation (EC) No. 10/2011  
Regulation (EC) No. 1935/2004

**Oxygen:** Testing of the seal material based on DIN EN 1797 and ISO 21010:2017 (special version code O)

## Mechanical data

**Torques:**

DN	NPS	Breakaway torque
15	1/2"	61.96
20	3/4"	70.81
25	1"	88.51
32	1¼"	123.91
40	1½"	256.67
50	2"	513.34
65	2½"	548.75
80	3"	1062.09
100	4"	1540.03

Torques in lbf in

**Weight:**

**Ball valve**

DN	NPS	Weight
15	1/2"	2.87
20	3/4"	4.41
25	1"	6.17
32	1¼"	9.26
40	1½"	11.68
50	2"	14.77
65	2½"	26.24
80	3"	32.85
100	4"	44.97

Weights in lb

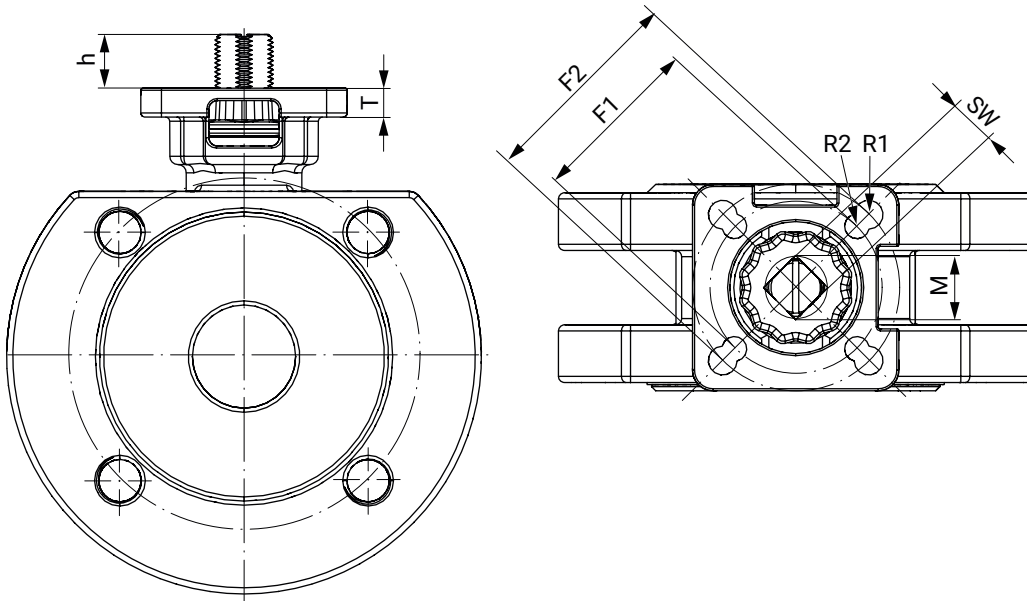
**Hand lever**

DN	NPS	Weight
15	1/2"	0.27
20	3/4"	0.27
25	1"	0.36
32	1¼"	0.36
40	1½"	0.88
50	2"	0.88
65	2½"	1.72
80	3"	1.72
100	4"	2.12

Weights in lb

## Dimensions

### Actuator flange

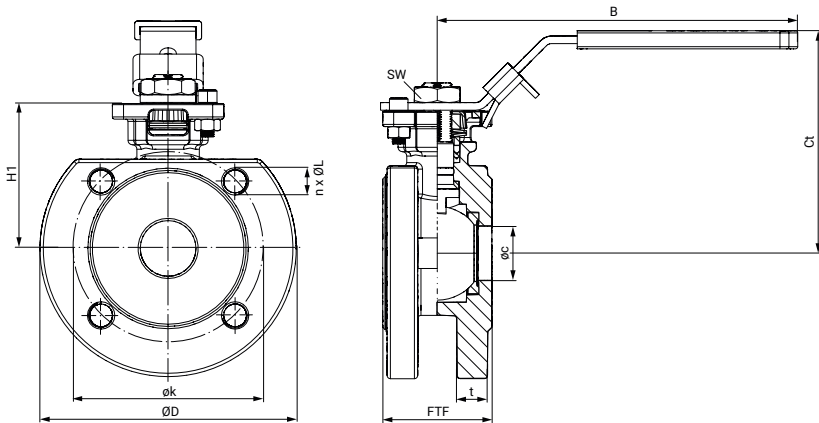


DN	G	F1	R1	F2	R2	SW [mm]	h	T	M
15	1/2"	1.42	0.12	1.65	0.12	9.0	0.35	0.20	M12
20	3/4"	1.42	0.12	1.65	0.12	9.0	0.30	0.20	M12
25	1"	1.65	0.12	1.97	0.14	11.0	0.51	0.28	M14
32	1¼"	1.65	0.12	1.97	0.14	11.0	0.51	0.28	M14
40	1½"	1.97	0.14	2.76	0.18	14.0	0.59	0.35	M18
50	2"	1.97	0.14	2.76	0.18	14.0	0.63	0.35	M18
65	2½"	2.76	0.20	4.02	0.24	17.0	0.71	0.41	M22
80	3"	2.76	0.20	4.02	0.24	17.0	0.71	0.41	M22
100	4"	2.76	0.20	4.02	0.24	17.0	0.71	0.41	M22

Dimensions in inch

**Body dimensions**

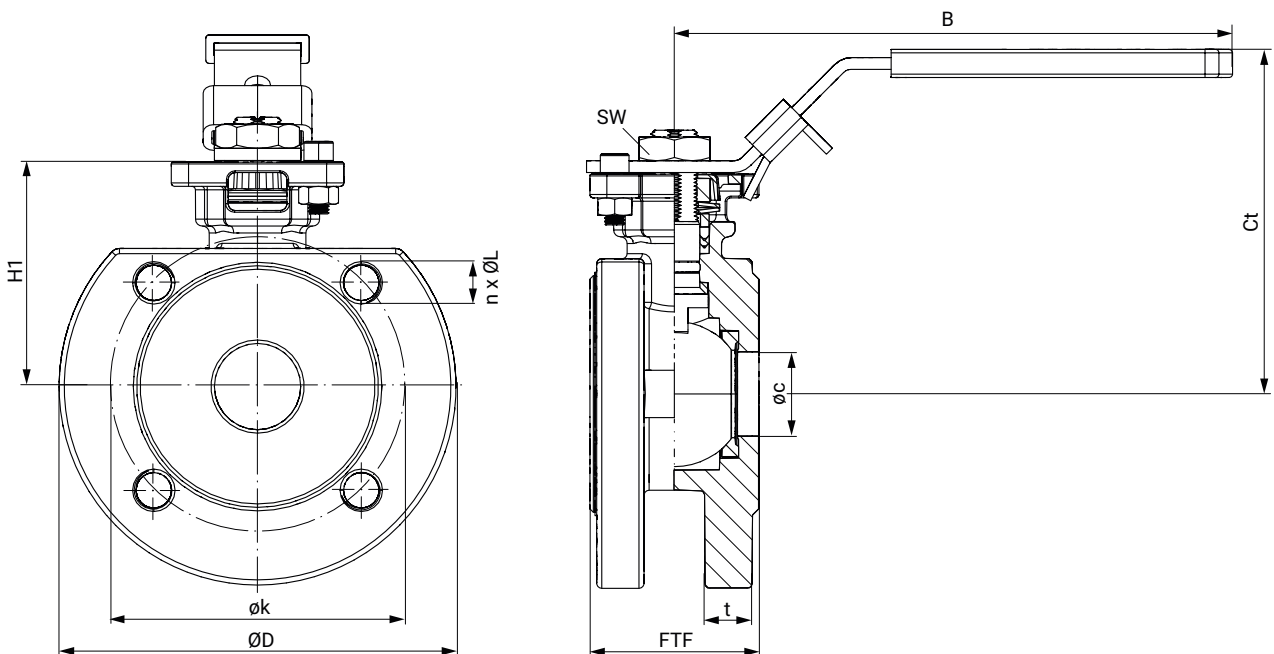
**Flange (connection code 39)**



DN	øc	ØD	øk	t	FTF	H1	n x ØL	B	Ct
15	0.59	3.50	2.38	0.36	1.50	1.91	4x1/2-13UNC	5.26	3.19
20	0.79	3.90	2.75	0.43	1.57	2.13	4x1/2-13UNC	5.26	3.40
25	0.98	4.25	3.12	0.53	1.81	2.56	4x1/2-13UNC	6.50	3.78
32	1.26	4.61	3.50	0.55	2.20	3.07	4x1/2-13UNC	6.50	4.23
40	1.50	5.00	3.88	0.61	2.56	3.35	4x1/2-13UNC	8.43	5.10
50	1.97	5.98	4.75	0.67	3.07	3.66	4x5/8-11UNC	8.43	5.41
65	2.56	7.01	5.50	0.81	3.90	4.21	4x5/8-11UNC	10.16	6.40
80	2.99	7.48	6.00	0.87	4.57	4.69	4x5/8-11UNC	11.73	6.87
100	3.94	9.02	7.50	0.87	5.87	5.20	8x5/8-11UNC	10.63	7.28

Dimensions in inch

**Flange (connection code 68)**



DN	øc	ØD	øk	t	FTF	H1	n x ØL	B	Ct
15	0.59	3.23	2.56	0.55	1.65	1.91	4 x M12	5.26	3.14

DN	$\phi c$	$\phi D$	$\phi k$	t	FTF	H1	n x $\phi L$	B	Ct
<b>20</b>	0.79	3.86	2.95	0.55	1.73	2.13	4 x M12	5.26	3.35
<b>25</b>	0.98	4.53	3.35	0.55	1.97	2.56	4 x M12	6.50	4.02
<b>32</b>	1.26	5.51	3.94	0.63	2.36	3.07	4 x M16	6.50	4.69
<b>40</b>	1.50	5.91	4.33	0.59	2.72	3.35	4 x M16	8.43	5.14
<b>50</b>	1.97	6.50	4.92	0.61	3.23	3.66	4 x M16	8.43	5.47
<b>65</b>	2.56	7.28	5.71	0.61	4.06	4.21	4 x M16	10.16	6.38
<b>80</b>	2.99	7.87	6.30	0.67	4.69	4.69	8 x M16	11.73	6.85
<b>100</b>	3.94	8.66	7.09	0.67	5.91	5.20	8 x M16	10.63	7.32

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 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

#### 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.

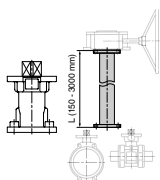
Only possible in conjunction with the following K-no.: 7056, 7097, 5237, 5240, 5241

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

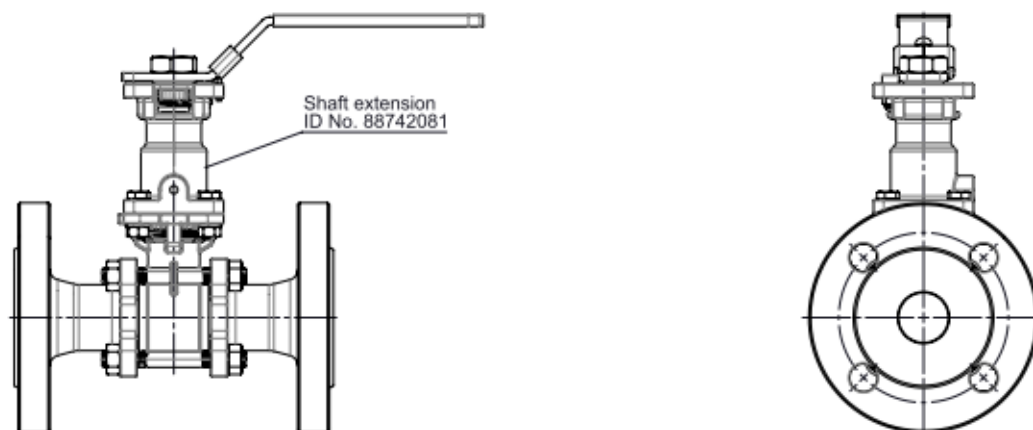


## GEMÜ RC0

### 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).

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

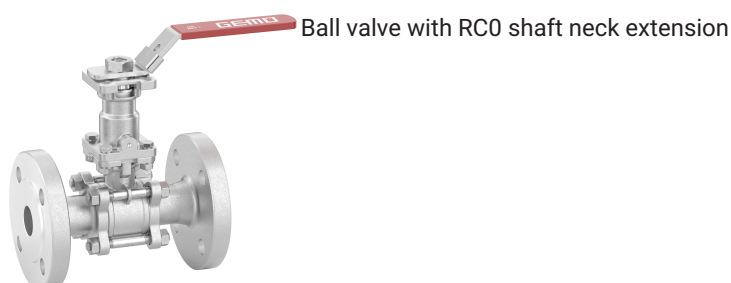
### Ordering information for ball valve with RC0 shaft neck extension, for thermal separation, cleaned so that it's PWIS-free (K-no. 7097 - 5227, 0101)

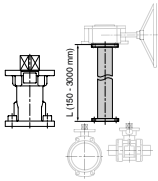
The manual ball valve is equipped with an RC0 shaft neck extension and a hand lever.  
The shaft neck height is dependent on the nominal size of the ball valve.  
The media wetted area is cleaned without compromising the paint coating.

### Ordering information for ball valve with RC0 shaft neck extension, for thermal separation, cleaned so that it's PWIS-free (K-no. 7039 - 5227, 0107)

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





**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).

**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. 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. 5240 - 5227, 0101, 7056)**

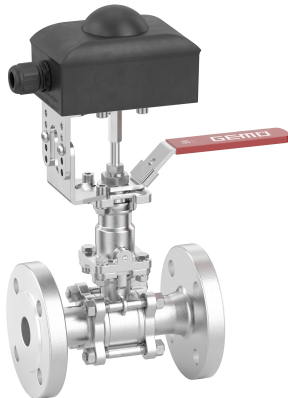
The manual ball valve is equipped with an RC0 shaft neck extension and a modified hand lever. The media wetted area is cleaned without compromising the paint coating. Different limit switches can then be mounted. These must be ordered separately. See GEMÜ LSF or LSC for this.

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

Ball valve with RC0 shaft neck extension



**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:**

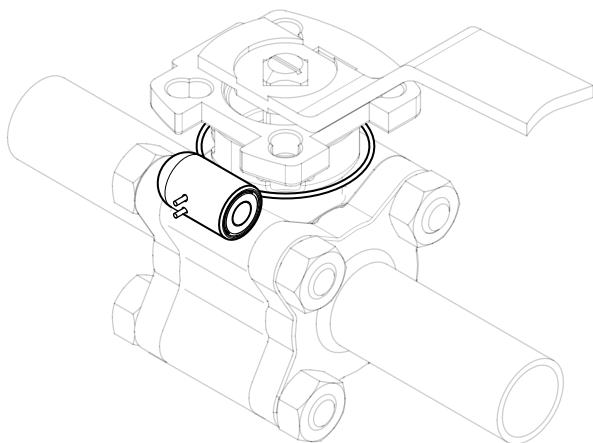
[www.gemu-group.com/conexo](http://www.gemu-group.com/conexo)

### 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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