

GEMÜ B20

Manually operated ball valve



Features

- Lockable hand lever
- Length standardised to DIN 3202 M3
- High flow rate
- Low weight
- Compact design

Description

The GEMÜ B20 2-piece 2/2-way metal ball valve is manually operated. It has a plastic sleeved lockable 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 914 psi
- **Nominal sizes:** 1/4" (DN 8) until 2 1/2" (DN 65)
- **Body configurations:** Straight through body
- **Connection types:** Thread
- **Connection standards :** DIN | NPT
- **Body materials:** 1.4408, investment casting material
- **Seal materials :** PTFE
- **Conformities:** DVGW Gas | EAC | FDA | FMEDA | Functional safety | Reg. (EU) No. 10/2011 | Regulation (EC) No. 1935/2004

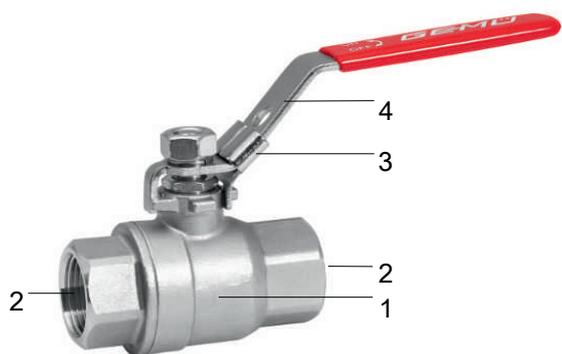
Technical data depends on the respective configuration



further information
webcode: GW-B20



Product description



Item	Name	Materials
1	Ball valve body	CF8M 1.4408 investment casting
2	Pipe connections	
3	Lock	201
4	Toggle	201

Order data

The order data provide an overview of standard configurations.

Please check the availability before ordering. Other configurations available on request.

Order codes

1 Type	Code
Ball valve, metal, manually operated, two-piece, lockable toggle, low-maintenance spindle seal and blow-out proof shaft	B20

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

3 Body/ball configuration	Code
2/2-way body	D

4 Connection type	Code
Threaded socket DIN ISO 228	1
NPT female thread	31

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

6 Seal material	Code
PTFE FKM O-ring	5

7 Control function	Code
Manually operated, toggle, lockable	L

8 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

Order example

Order option	Code	Description
1 Type	B20	Ball valve, metal, manually operated, two-piece, lockable toggle, low-maintenance spindle seal and blow-out proof shaft
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 FKM O-ring
7 Control function	L	Manually operated, toggle, lockable
8 Special version		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.
 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

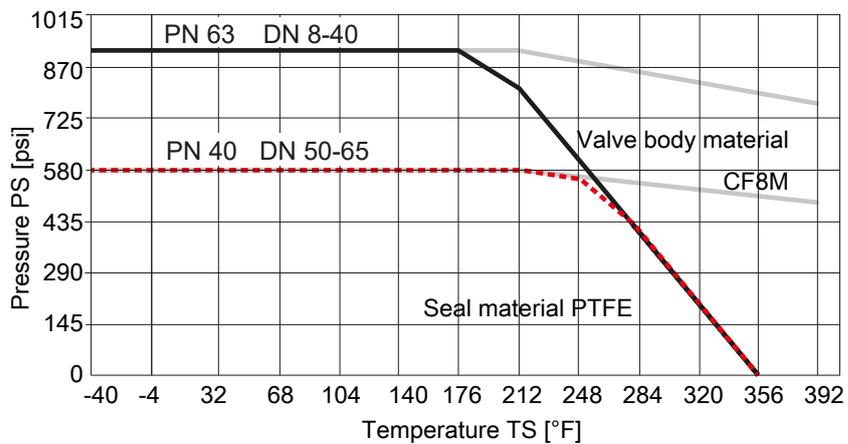
Storage temperature: 32 – 104 °F

Pressure

Operating pressure: 0 – 914 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.

Pressure/temperature diagram:



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 EN 12266, 87 psi air, leakage rate A

Cv values:

DN	NPS	Cv values
8	1/4"	10.06
10	3/8"	24.57
15	1/2"	40.95
20	3/4"	53.82
25	1"	84.24
32	1¼"	122.85
40	1½"	198.90
50	2"	321.75
65	2½"	424.71

Cv values in gpm

Product conformities

Pressure Equipment Directive: 2014/68/EU

Gas: DVGW

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)

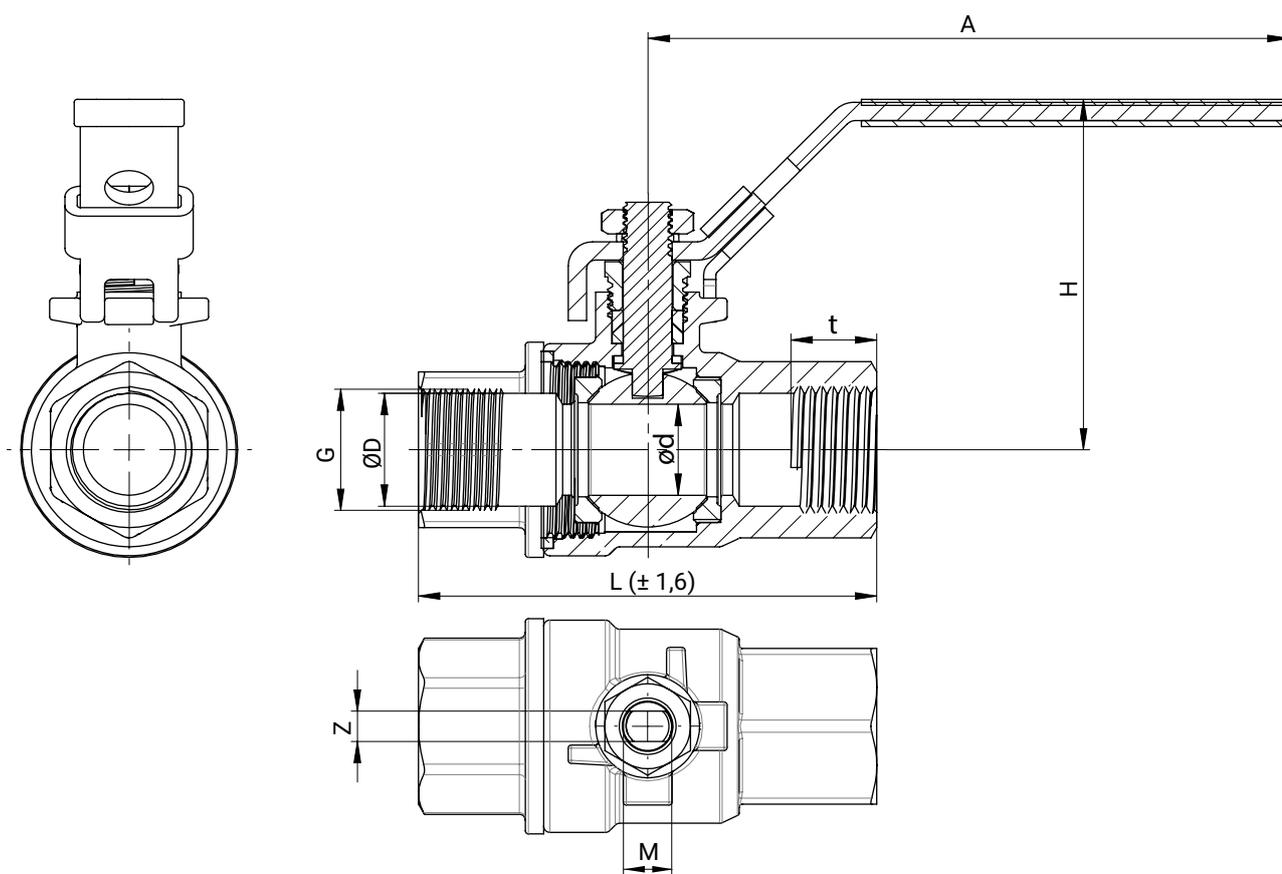
Mechanical data

Weight:

DN	NPS	Weight
8	1/4"	1.01
10	3/8"	1.01
15	1/2"	1.01
20	3/4"	1.15
25	1"	1.83
32	1 1/4"	2.85
40	1 1/2"	4.22
50	2"	6.38
65	2 1/2"	6.38

Weights in lb

Dimensions



DN	G	ød	ØD	A	L	H	t	M	Z
8	1/4"	0.47	0.59	3.62	2.17	1.93	0.43	M8	0.20
10	3/8"	0.47	0.59	3.62	2.36	1.93	0.43	M8	0.20
15	1/2"	0.59	0.73	4.13	2.95	2.05	0.55	M8	0.20
20	3/4"	0.79	0.95	4.88	3.15	2.48	0.55	M10	0.24
25	1"	0.98	1.19	5.12	3.54	2.64	0.63	M10	0.24
32	1¼"	1.26	1.54	5.51	4.33	3.15	0.87	M12	0.28
40	1½"	1.50	1.77	6.89	4.72	3.66	0.94	M14	0.35
50	2"	1.93	2.23	6.89	5.51	4.33	1.02	M14	0.35
65	2½"	2.52	2.86	8.66	7.28	4.61	1.22	M14	0.35

Dimensions in inch

Certificates

Certificate	Standard	Item number
3.1 Material	EN 10204	88333336



GEMÜ Gebr. Müller Apparatebau GmbH & Co. KG
Gert-Müller-Platz 1, 74635 Kupferzell, Germany
Tel. +49 (0)7940 123-0 · info@gemue.de
www.gemu-group.com