Ball Valve

PROFIN VT1

Type Series Booklet

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Type Series Booklet PROFIN VT1

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Ball Valves

Single-piece Ball Valves

PROFIN VT1

Main applications

- Building services
- Industrial plants
- Water
- Air-conditioning systems
- Condensate transport
- Cooling circuits
- General irrigation systems
- Pressure boosting
- Snow-making systems
- Swimming pools
- Washing plants
- Water supply systems

Fluids handled

- Condensate
- Cooling water
- Corrosive fluids
- Drinking water
- Fire-fighting water
- Lubricants
- Oil
- River water, lake water and groundwater
- Service water
- Wash water

Operating data

Table 1: Operating properties

Characteristic	Value
Nominal pressure	PN 40
Nominal size	DN 8 - 50
Nominal size [inch]	NPS ¼ - 2
Max. permissible pressure [bar]	40
Min. permissible temperature [°C]	≥ -20
Max. permissible temperature [°C]	≤ +150

Selection as per pressure/temperature ratings (⇨ Page 5)

Valve body materials

Table 2: Overview of available materials

Material	Material number	Temperature limit
ASTM A351 CF8M	1.4408	≤ 150 °C
ASTM A351 CF8	1.4308	≤ 150 °C

Design details

Design

- Ball valve with single-piece body
- Reduced bore
- Locking lever
- Threaded ends, BSP DIN EN 10226-1/ISO 7-1
- Blowout-proof shaft
- Design to ASME B16.34
- Solid ball

Product benefits

- Valve can be locked in open or closed position.
- Added safety by blowout-proof shaft

Product information

Product information as per Regulation No. 1907/2006 (REACH)

For information as per chemicals Regulation (EC) No. 1907/2006 (REACH), see http://www.ksb.com/reach.

Purchase order specifications

Please specify the following information in all enquiries or purchase orders:

1. Type
2. Nominal pressure
3. Nominal size
4. Operating pressure
5. Differential pressure
6. Operating temperature
7. Fluid handled
8. Pipe connection
9. Reference number

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Pressure/temperature ratings

Table 3: Permissible operating pressures [bar] (to ASME B16.34)

PN	Material	[°C]										
		-20 to 100	105	110	115	120	125	130	135	140	145	150
40	ASTM A 351 CF8M	40	36	32	28	24	20	16	12	8	4	0

Materials

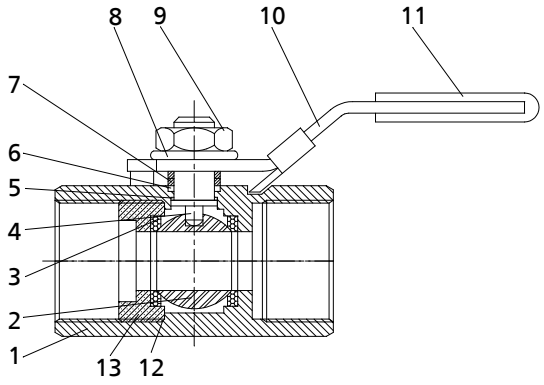

Fig. 1: Sectional drawing

Table 4: Parts list

Part No.	Description	Material	Material number	Note
1	Body	ASTM A 351 CF8M	1.4408	-
		ASTM A 351 CF8	1.4308	-
2	Ball	ASTM A 351 CF8M	1.4408	Body ASTM A 351 CF8M
		ASTM A 351 CF8	1.4308	Body ASTM A 351 CF8
3	Seat	RTFE	-	Standard
		PTFE	-	Variant
4	Shaft	AISI 304	-	-
5	Thrust washer	PTFE	-	-
6	Shaft packing	PTFE	-	-
7	Shaft washer	AISI 304	-	-
8	Spring washer	AISI 304	-	-
9	Shaft nut	AISI 304	-	-
10	Lever	AISI 304	-	-
11	Plastic sleeve	Plastic	-	-
12	Joint ring	PTFE	-	-
13	Insert	ASTM A 351 CF8M	1.4408	Body ASTM A 351 CF8M
		ASTM A 351 CF8	1.4308	Body ASTM A 351 CF8

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Dimensions and weights

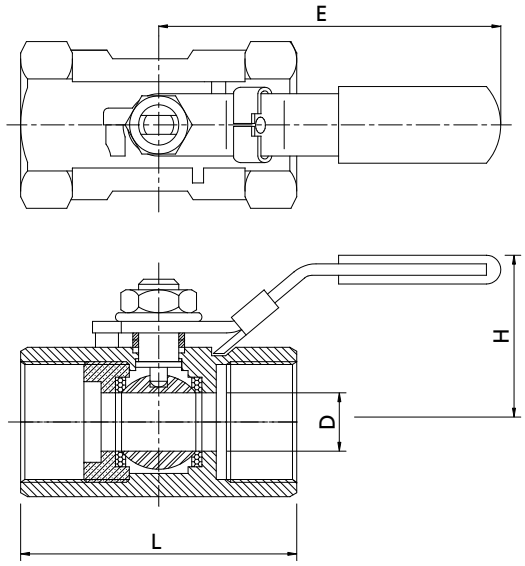

Fig. 2: Dimensions

Table 5: Dimensions and weights

PN	DN	D	l	h	E	[kg]
		[mm]	[mm]	[mm]	[mm]	
40	8	5,0	40	27	72	0,07
	10	6,8	44	29	87	0,12
	15	9,2	55	35	100	0,20
	20	12,5	59	45	100	0,29
	25	15,0	70	53	117	0,43
	32	20,0	78	55	117	0,71
	40	25,0	83	71	158	0,84
	50	32,0	99	77	158	1,35

Mating dimensions as per standard

Face-to-face lengths: See table
Threaded ends: BSP DIN EN 10226-1/ISO 7/1

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15/10/2021

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