

Ball valves VZBF, 2-way

Type codes

VZBF - 1/2 - P1 - 20 - D - 2 - F0304 - V15 V15

Type

VZBF	Ball valve
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Nominal width DN

1/2	1/2"
3/4	3/4"
1	1"
1 1/4	1 1/4"
1 1/2	1 1/2"
2	2"
2 1/2	2 1/2"
3	3"
4	4"
6	6"
8	8"

Process valve connection type

P1	Flange to ANSI 150
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Nominal pressure

20	20 bar
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Design

D	Two parts
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Valve function

2	2/2-way
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Flanged connection to ISO 5211

F0304	Hole pattern 03 and 04
F0405	Hole pattern 04 and 05
F0507	Hole pattern 05 and 07
F0710	Hole pattern 07 and 10
F1012	Hole pattern 10 and 12
F14	Hole pattern 14

Housing material

V15	Stainless steel ASTM A351-CF8M/1.4408
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Shut-off element material

V15	Stainless steel ASTM A351-CF8M/1.4408
V16	Stainless steel ASTM A240-316/1.4401

Ball valves VZBF, 2-way


Technical data


Function



- 2-way ball valve made from stainless steel



 Ring housing
DN15 ... DN200

 Flow rate
8.5 ... 2078.3 m³/h

General technical data												
Nominal width DN	15	20	25	32	40	50	65	80	100	150	200	
Process valve connection	Flange to ANSI B16.5 class 150											
Valve function	2/2											
Design	2-way ball valve											
Sealing principle	Soft											
Type of actuation	Mechanical											
Switching position indication	Slot direction = flow direction											
Flow direction	Reversible											
Type of mounting	In-line installation											
Mounting position	Any											
Based on standard	ISO 5211 ANSI B16.5 class 150											
Breakaway torque at differential pressure, nominal pressure, process valve PN	[Nm]	8	10	12	20	30	40	60	90	130	250	500
Inside Ø	[mm]	15	20	24	30	38	50	64	76	98	150	200
Flow rate Kv	[m ³ /h]	8.5	15.6	23.2	37.3	61.6	111.8	187.9	264.5	453.8	1132.3	2078.3

Operating and environmental conditions												
Nominal width DN	15	20	25	32	40	50	65	80	100	150	200	
Nominal pressure of process valve PN	20											
Temperature of medium	[°C]	-20 ... +200										
Medium	Compressed air to ISO 8573-1:2010 [:-:-] Inert gases Water Vapour Neutral fluids											
Certification	CRN											
Corrosion resistance class CRC ¹⁾	4											
CE marking (see declaration of conformity) ²⁾	-				To EU Pressure Equipment Directive							

1) Corrosion resistance class CRC 4 to Festo standard FN 940070
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (→ also FN 940082) using appropriate media.

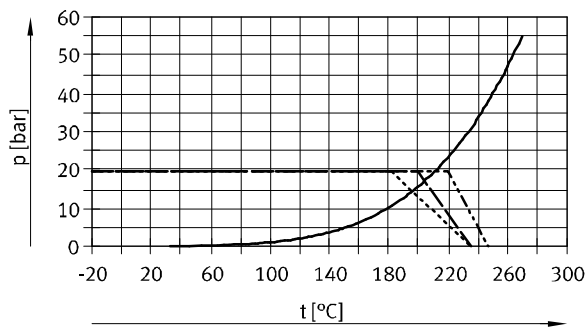
2) Additional information www.festo.com/sp → Certificates.

Ball valves VZBF, 2-way

Technical data

Materials		Material number
Housing	Stainless steel casting	1.4408 (ASTM A351-CF8M)
Ball	DN15 ... DN100	1.4408 (ASTM A351-CF8M)
	DN150 ... DN200	1.4401 (ASTM A240-316)
Shaft	High-alloy stainless steel	1.4401 (ASTM A240-316)
Seals	FPM	
	Graphite	
	PCTFE	
	PTFE	
Note on materials	RoHS compliant	
	Contains paint-wetting impairment substances	

Permissible operating pressure p as a function of the temperature of the medium t



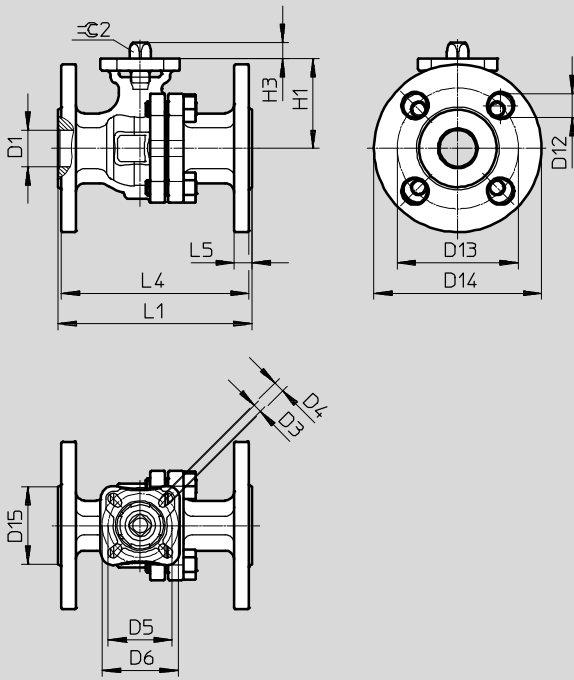
- Saturated water vapour
- - - - - PTFE, modified
- · - · - PTFE-reinforced
- · · · · PTFE

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Technical data

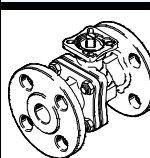
Dimensions

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Type	D1 Ø	D3 Ø	D4 Ø	D5 Ø	D6 Ø	D12 Ø	D13 Ø	D14 Ø	D15 Ø	H1	H3	L1 ±2	L4	L5	≙C2
VZBF-1/2-...	15	5.5	5.5	36	42	16	60.5	89	35	50.5	8.5	108	104.8	11.1	9
VZBF-3/4-...	20	5.5	5.5	36	42	16	70	98	43	55	8.5	117	113.8	11.6	9
VZBF-1-...	24	5.5	7	42	50	16	79.5	108	51	59	10.5	127.5	124.3	11.6	11
VZBF-11/4-...	30	5.5	7	42	50	16	89	117	64	62	10.5	140.5	137.3	12.7	11
VZBF-11/2-...	38	7	9	50	70	16	98.5	127	73	76	14	165	161.8	14.3	14
VZBF-2-...	50	7	9	50	70	19	120.5	152	92	84.5	14	178	174.8	16	14
VZBF-21/2-...	64	9	11	70	102	19	139.5	178	105	104.5	17	190.5	187.3	17.5	17
VZBF-3-...	76	9	11	70	102	19	152.5	190.5	127	111.5	17	203	199.8	19.1	17
VZBF-4-...	98	11	13	102	125	19	190.5	229	157	135.5	23	229	225.8	24	22
VZBF-6-...	150	11	13	102	125	22.4	241.5	279	216	201	27.5	394	390.8	25.4	27
VZBF-8-...	200	17	-	140	-	22.4	298.5	343	270	259	36	457	453.8	28.6	36

Ordering data

	Nominal width DN	Weight [g]	Part No.	Type
	15	1550	4810851 ¹⁾	VZBF-1/2-P1-20-D-2-F0304-V15V15
	20	1950	4810852 ¹⁾	VZBF-3/4-P1-20-D-2-F0304-V15V15
	25	3050	4810853 ¹⁾	VZBF-1-P1-20-D-2-F0405-V15V15
	32	3550	4810854 ¹⁾	VZBF-11/4-P1-20-D-2-F0405-V15V15
	40	5630	4810855 ¹⁾	VZBF-11/2-P1-20-D-2-F0507-V15V15
	50	7630	4810856 ¹⁾	VZBF-2-P1-20-D-2-F0507-V15V15
	65	13650	4810857 ¹⁾	VZBF-21/2-P1-20-D-2-F0710-V15V15
	80	17350	4810859 ¹⁾	VZBF-3-P1-20-D-2-F0710-V15V15
	100	28100	4810860 ¹⁾	VZBF-4-P1-20-D-2-F1012-V15V15
	150	50200	4810861 ¹⁾	VZBF-6-P1-20-D-2-F1012-V15V16
	200	84200	4810862 ¹⁾	VZBF-8-P1-20-D-2-F14-V15V16

1) Festo is only a retailer of this product, not the manufacturer.

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Accessories

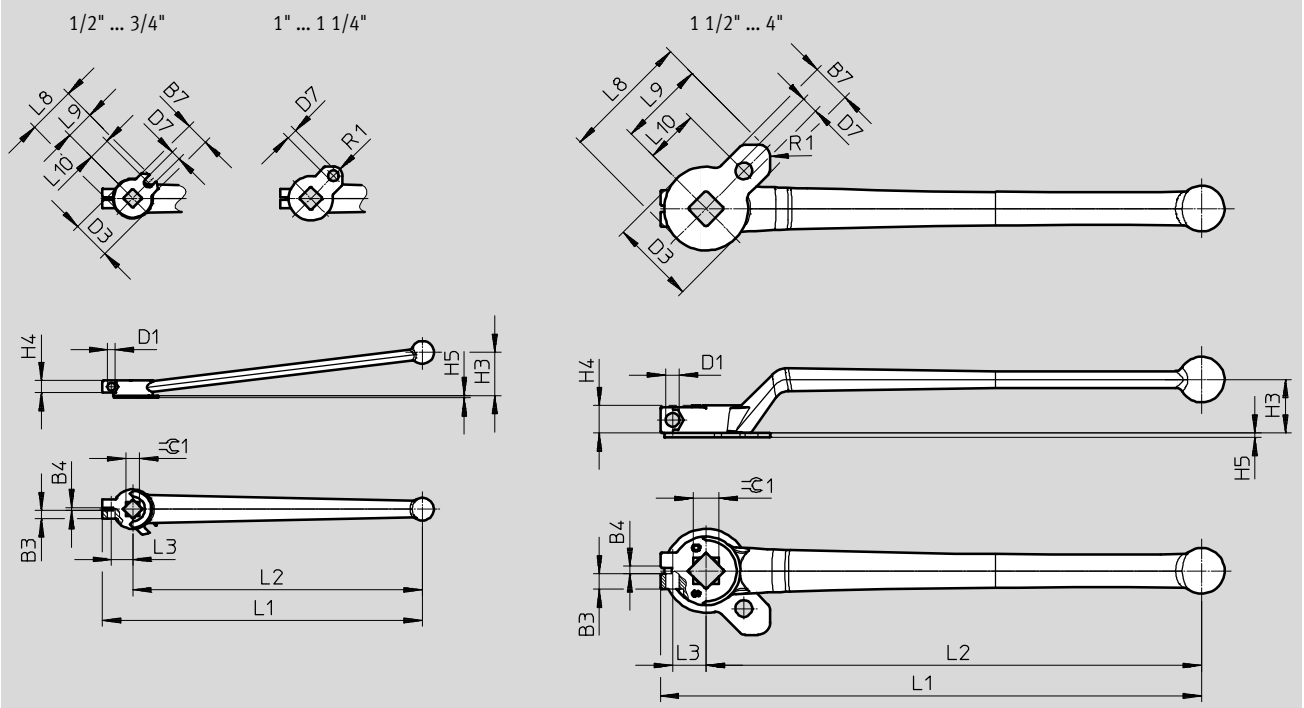
Hand lever VAOH

- High-alloy stainless steel
- Free of copper and PTFE
- RoHS compliant
- Contains paint-wetting impairment substances
- Lockable



Dimensions and ordering data

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Dimensions and ordering data

For connection	B3	B4	B7	D1	D3	D7	H3	H4	H5	L1	L2
1/2" ... 3/4"	5.5	2	15.8	5.2	25	6	28.3	8	1.5	210	190
1" ... 1 1/4"	5.5	2	17.8	5.2	29	7	28.3	8	1.8	210	190
1 1/2" ... 2"	5.5	3	26	6.2	35	8	30.5	13.5	2	260	235
2 1/2" ... 3"	10	4	27.5	9	55	11	35	18	3	355	325
4"	10	4	27.5	9	70	12	38	21	3	355	325

For connection	L3	L8	L9	L10	R1	⊖C1	CRC ²⁾	Weight [g]	Part No.	Type
1/2" ... 3/4"	14	33.5	21.1	18	–	9	3	150	4895982 ¹⁾	VAOH-F9-9-H9-A
1" ... 1 1/4"	14	41.5	27	21	6	11	3	150	4895983 ¹⁾	VAOH-F9-11-H9-A
1 1/2" ... 2"	16.2	54	36.5	25	5	14	3	370	4895984 ¹⁾	VAOH-F9-14-H9-A
2 1/2" ... 3"	22	83.6	56.1	35	8	17	3	850	4895985 ¹⁾	VAOH-F9-17-H9-A
4"	22	102.7	67.7	51	7	22	3	900	4895986 ¹⁾	VAOH-F9-22-H9-A

1) Festo is only a retailer of this product, not the manufacturer.

2) Corrosion resistance class CRC 3 to Festo standard FN 940070

High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

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Accessories

Hand lever VAOH

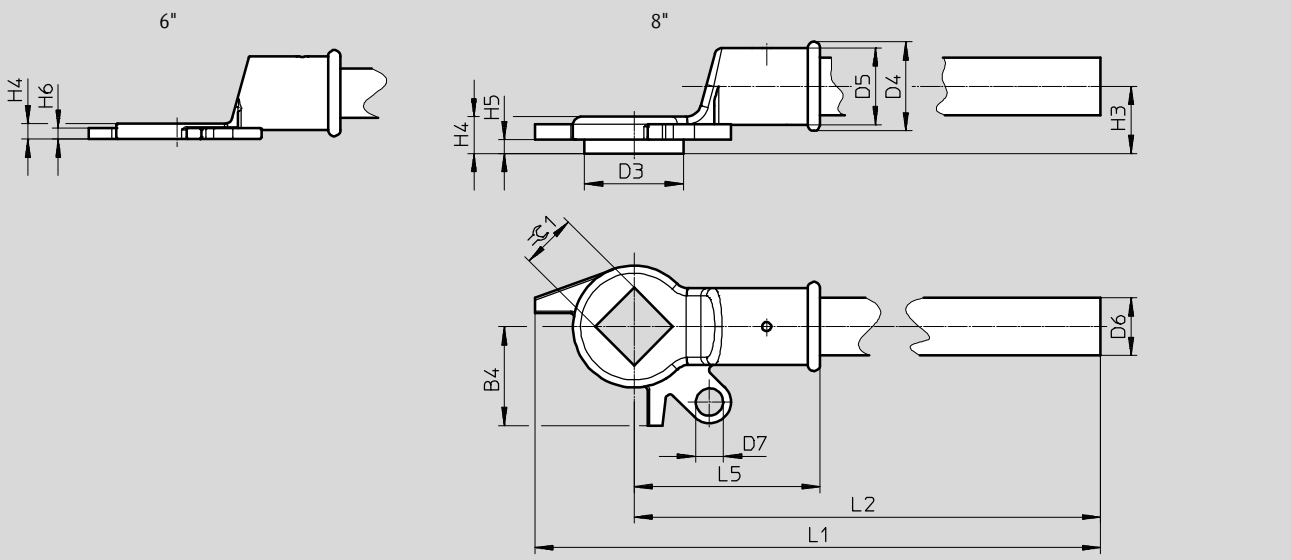
Information on materials:

- High-alloy stainless steel
- Free of copper and PTFE
- RoHS compliant
- Contains paint-wetting impairment substances



Dimensions and ordering data

Download CAD data → www.festo.com



Dimensions and ordering data

For connection	B4	D3	D4	D5	D6	D7	H3	H4	H5
6"	58	∅	56,5	48,5	32	14	30	10	-
8"	65	65	58,5	50,5	38	18	43,1	15	9

For connection	H6	L1	L2	L5	≈C1	CRC ²⁾	Weight [g]	Part No.	Type
6"	7	815,1	757,1	107	27	3	1800	4895987¹⁾	VAOH-F9-27-H14-A
8"	10	928	863	122	36	3	3800	4895988¹⁾	VAOH-F9-36-H14-A

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