

Ball valves VZBE, 2-way

Type codes

VZBE - 1/4 - T - 63 - T - 2 - F0304 - V15 V15

Type	
VZBE	Ball valve

Nominal width DN	
1/4	1/4"
3/8	3/8"
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"

Process valve connection type	
T	NPT female thread

Nominal pressure	
63	63 bar

Design	
T	Three parts

Valve function	
2	2/2-way

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

Housing material	
V15	Stainless steel ASTM A351-CF8M/1.4408

Shut-off element material	
V15	Stainless steel ASTM A351-CF8M/1.4408
V16	Stainless steel ASTM A240-316/1.4401

Ball valves VZBE, 2-way

Technical data


Function



- 2-way ball valve made from stainless steel
- NPT version



 - Connecting thread
1/4 NPT ... 4 NPT

 - Flow rate
5.1 ... 435.2 m³/h

General technical data											
Process valve connection	1/4 NPT	3/8 NPT	1/2 NPT	3/4 NPT	1" NPT	1 1/4 NPT	1 1/2 NPT	2" NPT	2 1/2 NPT	3" NPT	4" NPT
Nominal width DN	8	10	15	20	25	32	40	50	65	80	100
Valve function	2/2										
Design	2-way ball valve										
Sealing principle	Soft										
Actuation type	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										
	ASME B1.20.1										
Breakaway torque at differential pressure, nominal pressure, process valve PN [Nm]	7	7	7	9	15	18	25	35	55	70	90
Inside diameter [mm]	11.6	12.5	15	20	25	32	38	50	63	76	96
Flow rate Kv [m ³ /h]	5.1	5.8	8.5	15.6	25.1	42.6	61.6	111.8	181.9	264.5	435.2

Operating and environmental conditions											
Process valve connection	1/4 NPT	3/8 NPT	1/2 NPT	3/4 NPT	1" NPT	1 1/4 NPT	1 1/2 NPT	2" NPT	2 1/2 NPT	3" NPT	4" NPT
Nominal pressure of process valve PN	63										
Temperature of medium [°C]	-20 ... +200										
Medium ¹⁾	Compressed air to ISO 8573-1:2010 [:-:-]										
	Inert gases										
	Water										
	Vapour										
	Neutral fluids										
Certification	CRN										
Corrosion resistance class CRC ²⁾	4										
CE marking (see declaration of conformity) ³⁾	-						To EU Pressure Equipment Directive				

1) Other media on request

2) 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.

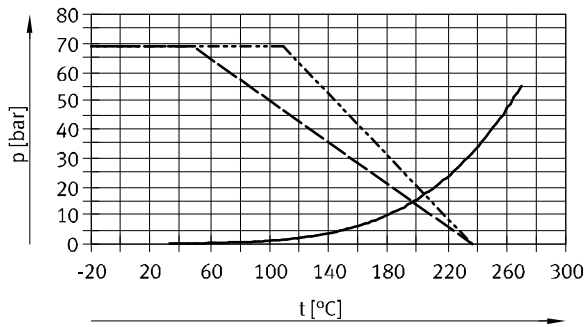
3) Additional information www.festo.com/sp → Certificates.

Ball valves VZBE, 2-way

Technical data

Materials		Material number
Housing	Stainless steel casting	1.4408
Ball	21/2NPT ... 4NPT	1.4401
	1/4NPT ... 2NPT	1.4408
Shaft	High-alloy stainless steel	1.4401
Seals	FPM	
	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



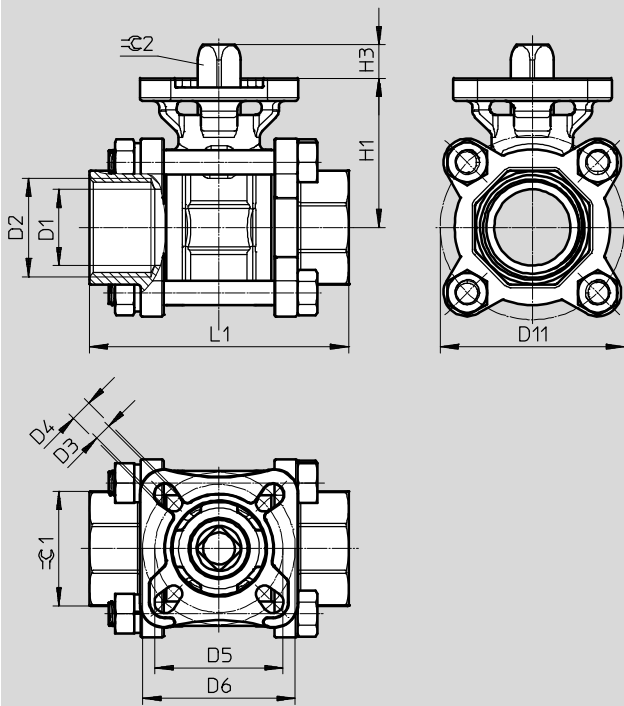
- Saturated water vapour
- - - - - PTFE-reinforced
- · - · - PTFE, modified

Ball valves VZBE, 2-way

Technical data

Dimensions

Download CAD data → www.festo.com

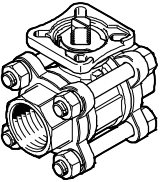


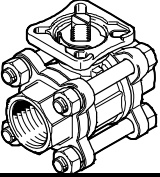
Type	D1 Ø	D2	D3 Ø	D4 Ø	D5 Ø	D6 Ø	D11 Ø	H1	H3	L1 ±2	⌀1	⌀2
VZBE-1/4-...	11.6	1/4 NPT	5.5	5.5	36	42	38	35.3	7.5	65	19.2	9
VZBE-3/8-...	12.5	3/8 NPT	5.5	5.5	36	42	38	35.3	7.5	65	22.5	9
VZBE-1/2-...	15	1/2 NPT	5.5	5.5	36	42	44	36.4	7.1	65	26	9
VZBE-3/4-...	20	3/4 NPT	5.5	5.5	36	42	52	39.5	7.3	75	32	9
VZBE-1-...	25	1" NPT	5.5	7	42	50	60.5	49	11	85	37.5	11
VZBE-11/4-...	32	1 1/4 NPT	5.5	7	42	50	74	54.2	11.5	101	48	11
VZBE-11/2-...	38	1 1/2 NPT	7	9	50	70	86	64.6	12.4	112	55	14
VZBE-2-...	50	2" NPT	7	9	50	70	102.5	72.5	13.6	130	67	14
VZBE-2 1/2-...	63	2 1/2 NPT	9	11	70	102	129	92	16.3	162	85	17
VZBE-3-...	76	3" NPT	9	11	70	102	146.5	100	16.3	188	100	17
VZBE-4-...	96	4" NPT	11	13	102	125	186.4	130	20.5	224	130	22

Ball valves VZBE, 2-way

Technical data

★ **Core product range**

Ordering data				
	Process valve connection	Weight [g]	Part No.	Type
	1/2 NPT	560	★ 4809117 ¹⁾	VZBE-1/2-T-63-T-2-F0304-V15V15
	3/4 NPT	660	★ 4809118 ¹⁾	VZBE-3/4-T-63-T-2-F0304-V15V15
	1 NPT	1000	★ 4809119 ¹⁾	VZBE-1-T-63-T-2-F0405-V15V15
	1 1/2 NPT	2420	★ 4809121 ¹⁾	VZBE-11/2-T-63-T-2-F0507-V15V15
	2 NPT	3520	★ 4809122 ¹⁾	VZBE-2-T-63-T-2-F0507-V15V15

Ordering data				
	Process valve connection	Weight [g]	Part No.	Type
	1/4 NPT	460	4836917 ¹⁾	VZBE-1/4-T-63-T-2-F0304-V15V15
	3/8 NPT	460	4836918 ¹⁾	VZBE-3/8-T-63-T-2-F0304-V15V15
	1 1/4 NPT	1600	4809120 ¹⁾	VZBE-11/4-T-63-T-2-F0405-V15V15
	2 1/2 NPT	5050	4809123 ¹⁾	VZBE-21/2-T-63-T-2-F0710-V15V16
	3 NPT	7750	4809124 ¹⁾	VZBE-3-T-63-T-2-F0710-V15V16
	4 NPT	15800	4809126 ¹⁾	VZBE-4-T-63-T-2-F1012-V15V16

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

Ball valves VZBE, 2-way

Accessories

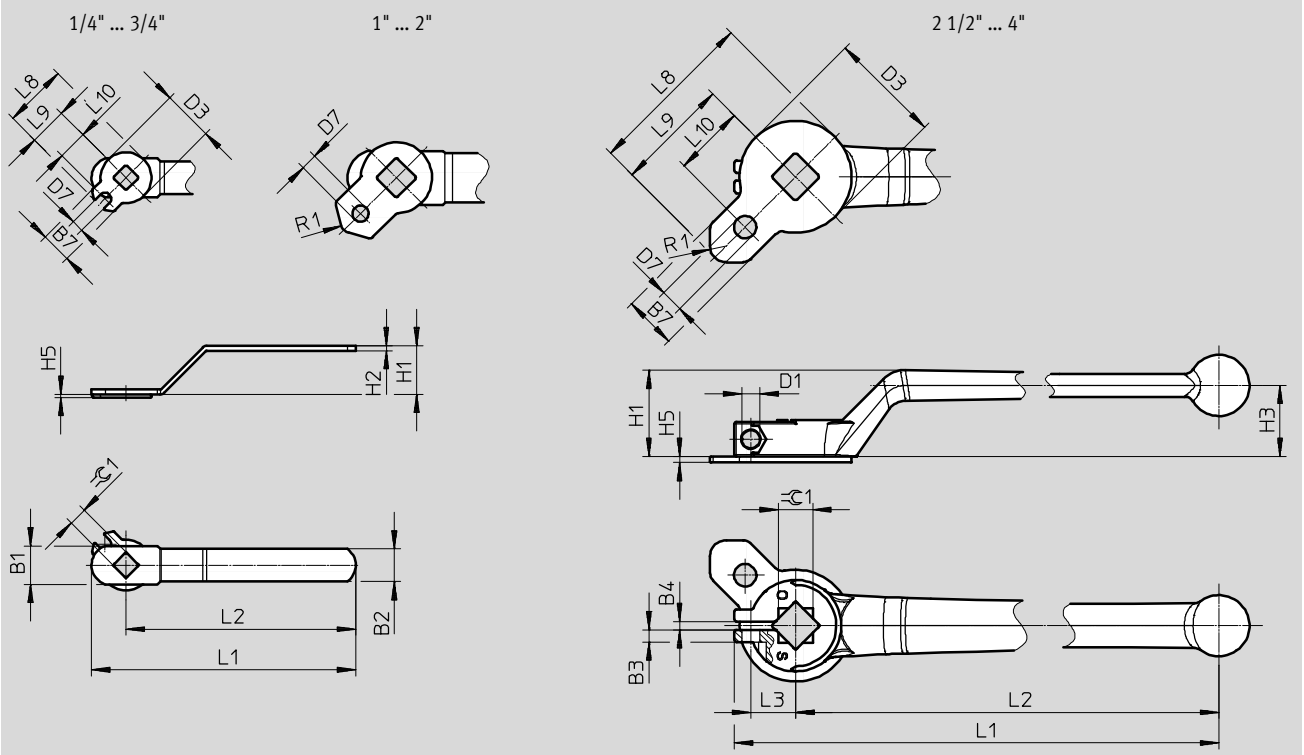
Hand lever VAOH

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



Dimensions and ordering data

Download CAD data → www.festo.com



Dimensions and ordering data

For connection	B1	B2	B3	B4	B7	D1	D3	D7	H1	H2	H3	H5	L1
						∅	∅	∅					
1/4" ... 3/4"	19	16	-	-	15.8	-	25	6	24	2.5	-	1.5	130
1" ... 1 1/4"	22.5	20	-	-	17.8	-	29	7	26	4	-	1.8	160
1 1/2" ... 2"	26.5	24	-	-	26	-	35	8	34.5	5	-	2	194
2 1/2" ... 3"	-	-	6	4	27.5	9	55	11	42.5	-	35	3	355
4"	-	-	6	4	27.5	9	70	12	42.5	-	38	3	355

For connection	L2	L3	L4	L8	L9	L10	R1	≈C1 ±0.5	CRC ⁽²⁾	Weight [g]	Part No.	Type
1/4" ... 3/4"	113	-	-	33.5	21.1	18	-	9	3	40	4895383 ¹⁾	VAOH-F7-9-H9-A-22
1" ... 1 1/4"	138.5	-	-	41.5	27	21	6	11	3	100	4895384 ¹⁾	VAOH-F7-11-H9-A-22
1 1/2" ... 2"	170	-	-	54	36.5	25	5	14	3	180	4895385 ¹⁾	VAOH-F7-14-H9-A-22
2 1/2" ... 3"	325	22	7.5	83.6	56.1	35	8	17	3	850	4895386 ¹⁾	VAOH-F7-17-H9-A-22
4"	325	22	7.5	102.7	67.7	51	7	22	3	900	4895387 ¹⁾	VAOH-F7-22-H9-A-22

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.

Ball valves VZBE, manual

Type codes

VZBE - 1/4 - T - 63 - D - 2 - M - V15 V15

Type

VZBE	Ball valve
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Nominal width DN

1/4	1/4"
3/8	3/8"
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"

Process valve connection type

T	NPT female thread
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Nominal pressure

63	63 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

M	Without flanged connection, with hand lever
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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 VZBE, manual

Technical data



- 2-way ball valve made from stainless steel
- With hand lever
- NPT version

-  - Connecting thread
1/4NPT ... 3NPT

-  - Flow rate
5 ... 264.5 m³/h



General technical data										
Process valve connection	1/4NPT	3/8NPT	1/2NPT	3/4NPT	1NPT	1 1/4NPT	1 1/2NPT	2NPT	2 1/2NPT	3NPT
Nominal width DN	8	10	15	20	25	32	40	50	65	80
Valve function	2/2									
Design	2-way ball valve									
Sealing principle	Soft									
Actuation type	Mechanical									
Switching position indication	Slot direction = flow direction									
Flow direction	Reversible									
Type of mounting	In-line installation									
Mounting position	Any									
Based on standard	ASME B1.20.1									
Breakaway torque at differential pressure, nominal pressure, process valve PN [Nm]	3.5	4	5.5	7.5	11	15	20	40	60	85
Internal diameter [mm]	11.6	12.5	15	20	25	32	38	50	63	76
Flow rate Kv [m ³ /h]	5	5.8	8.5	15.6	25.1	42.6	61.6	111.8	181.9	264.5

Operating and environmental conditions										
Process valve connection	1/4NPT	3/8NPT	1/2NPT	3/4NPT	1NPT	1 1/4NPT	1 1/2NPT	2NPT	2 1/2NPT	3NPT
Medium ¹⁾	Compressed air to ISO 8573-1:2010 [---]									
	Inert gases									
	Water									
	Vapour									
	Neutral liquids									
Process valve nominal pressure PN	63									
Temperature of medium [°C]	-20 ... +200									
Certification	CRN									
Corrosion resistance class CRC ²⁾	3									
CE marking (see declaration of conformity) ³⁾	-					To EU Pressure Equipment Directive				

1) Other media on request

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.

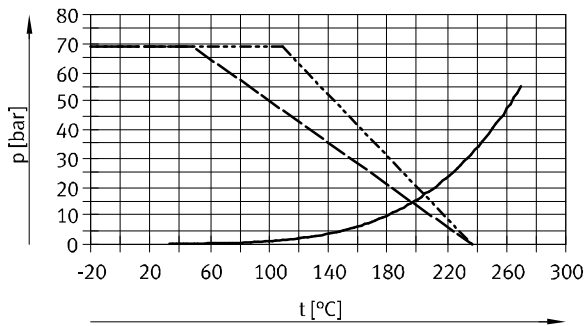
3) Additional information www.festo.com/sp → Certificates.

Ball valves VZBE, manual

Technical data

Materials		Material number
Housing	Stainless steel casting	1.4408
Ball	Stainless steel casting	1.4408
	High-alloy stainless steel	1.4401
Shaft	High-alloy stainless steel	1.4401
Seals	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

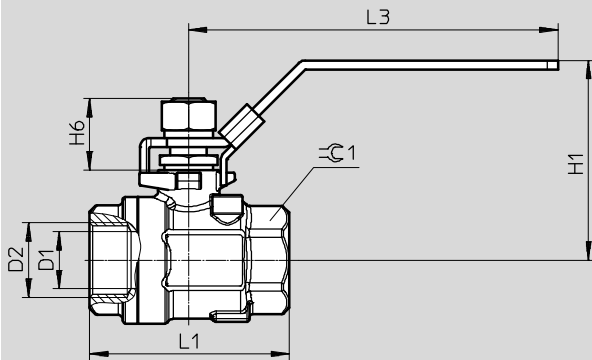


- Saturated water vapour
- - - - - PTFE-reinforced
- · - · - PTFE, modified

Ball valves VZBE, manual

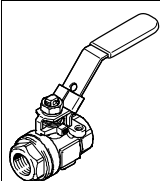
Technical data

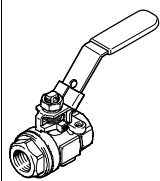
Dimensions

 Download CAD data → www.festo.com


Type	D1 ∅	D2	H1	H6	L1 ±2	L3	∠1
VZBE-1/4-...	11.6	1/4 NPT	58.5	18.5	50.8	99.5	19
VZBE-3/8-...	12.5	3/8 NPT	58.5	18.5	50.8	99.5	22.5
VZBE-1/2-...	15	1/2 NPT	60.5	18.8	58	99.5	26
VZBE-3/4-...	20	3/4 NPT	63	23.4	65.6	123	32
VZBE-1-...	25	1 NPT	79.5	26.2	78.7	149	38
VZBE-1 1/4-...	32	1 1/4 NPT	86	23.6	90	149	48
VZBE-1 1/2-...	38	1 1/2 NPT	101.7	28.2	105	190	54.8
VZBE-2-...	50	2 NPT	109.3	23.4	124	190	67
VZBE-2 1/2-...	63	2 1/2 NPT	140	39.4	146	247	85
VZBE-3-...	76	3 NPT	148.5	39.4	163.2	247	100

★ Core product range

Ordering data		Process valve connection	Weight [g]	Part No.	Type
		1/2 NPT	300	★ 4745216 ¹⁾	VZBE-1/2-T-63-D-2-M-V15V15
		3/4 NPT	500	★ 4745218 ¹⁾	VZBE-3/4-T-63-D-2-M-V15V15
		1 NPT	800	★ 4745219 ¹⁾	VZBE-1-T-63-D-2-M-V15V15
		1 1/2 NPT	1800	★ 4745221 ¹⁾	VZBE-1 1/2-T-63-D-2-M-V15V15
		2 NPT	2700	★ 4745223 ¹⁾	VZBE-2-T-63-D-2-M-V15V15

Ordering data		Process valve connection	Weight [g]	Part No.	Type
		1/4 NPT	200	4745214 ¹⁾	VZBE-1/4-T-63-D-2-M-V15V15
		3/8 NPT	200	4745215 ¹⁾	VZBE-3/8-T-63-D-2-M-V15V15
		1 1/4 NPT	1100	4745220 ¹⁾	VZBE-1 1/4-T-63-D-2-M-V15V15
		2 1/2 NPT	5600	4745224 ¹⁾	VZBE-2 1/2-T-63-D-2-M-V15V16
		3 NPT	7500	4745225 ¹⁾	VZBE-3-T-63-D-2-M-V15V16

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

Ball valves VZBA, 3-way

Type codes

FESTO

VZBA - 1/4" - G G G - 63 - 32T - F0304 - V4 V4 T

Type

VZBA	Ball valve
------	------------

Nominal width DN

1/4"	DN8
3/8"	DN10
1/2"	DN15
3/4"	DN20
1"	DN25
1 1/4"	DN32
1 1/2"	DN40
2"	DN50

Connection type 1

G	Pipe thread to EN 10226-1
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Connection type 2

G	Pipe thread to EN 10226-1
---	---------------------------

Connection type 3

G	Pipe thread to EN 10226-1
---	---------------------------

Process valve nominal pressure PN

63	63 bar
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Valve function

32T	3/2-way, T-shaped bore
32L	3/2-way, L-shaped bore

Flanged connection to ISO 5211

F0304	Hole pattern 03 and 04
F0405	Hole pattern 04 and 05
F0507	Hole pattern 05 and 07

Housing material

V4	Stainless steel 1.4408
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Shut-off element material

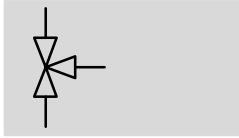
V4	Stainless steel 1.4408
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Sealing material

T	PTFE-reinforced
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Ball valves VZBA, 3-way

Technical data



- With L-shaped bore or T-shaped bore



- - Connecting thread
Rp1/4 ... Rp2
- - Flow rate
4.5 ... 100 m³/h

General technical data									
Process valve connection		Rp1/4	Rp3/8	Rp1/2	Rp3/4	Rp1	Rp11/4	Rp11/2	Rp2
Nominal width DN		8	10	15	20	25	32	40	50
Valve function		3/2							
Design		3-way ball valve							
Sealing principle		Soft							
Actuation type		Mechanical							
Manual override		None							
Switching position indication		Slot direction = flow direction							
Flow direction		Reversible							
Type of mounting		In-line installation							
Mounting position		Any							
Based on standard		EN 10226-1 ISO 5211							
Actuating torque [Nm]		13	13	13	18	22	35	42	68
Internal diameter [mm]		11.6	12.7	12.7	16	20	25.4	31.8	38.1
Flow rate Kv	Type L ¹⁾ [m ³ /h]	4.5	4.5	4.7	5.1	11.8	19.6	33.2	53.7
	Type T ²⁾ [m ³ /h]	8	8	8.3	8.3	22.4	36.5	62	100
	Type T ³⁾ [m ³ /h]	4.5	4.5	4.8	4.8	10.9	18	30	48.8
Flow rate tolerance Kv [%]		± 20							
Product weight [g]		700	700	700	1 000	1 600	2 800	3 800	7 400

- 1) Ball with L-shaped bore
- 2) Ball with T-shaped bore, straight flow
- 3) Ball with T-shaped bore, flow around corner

Operating and environmental conditions									
Process valve connection		Rp1/4	Rp3/8	Rp1/2	Rp3/4	Rp1	Rp11/4	Rp11/2	Rp2
Medium ¹⁾		Compressed air to ISO 8573-1:2010 [:-:-] Neutral liquids Inert gases Water – no water vapour							
Process valve nominal pressure		PN 63							
Temperature of medium [°C]		-10 ... +200							
Corrosion resistance class CRC ²⁾		3							
CE marking (see declaration of conformity) → www.festo.com							To EU Pressure Equipment Directive		

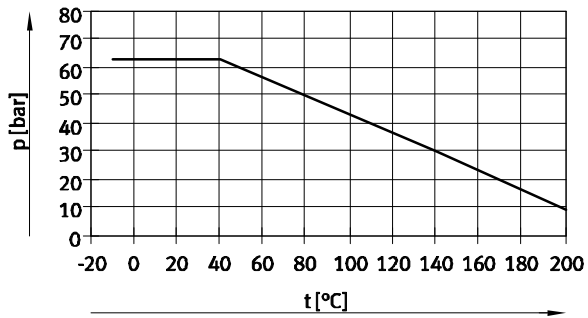
- 1) Other media on request
- 2) Corrosion resistance class CRC 3 to Festo standard FN 940070
High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

Ball valves VZBA, 3-way

Technical data

Materials		Material number
Housing	High-alloy stainless steel	1.4408
Ball		1.4408
Shaft		1.4401
Seals	PTFE	
	PTFE-reinforced	
Note on materials	RoHS compliant	
	Contains paint-wetting impairment substances	

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

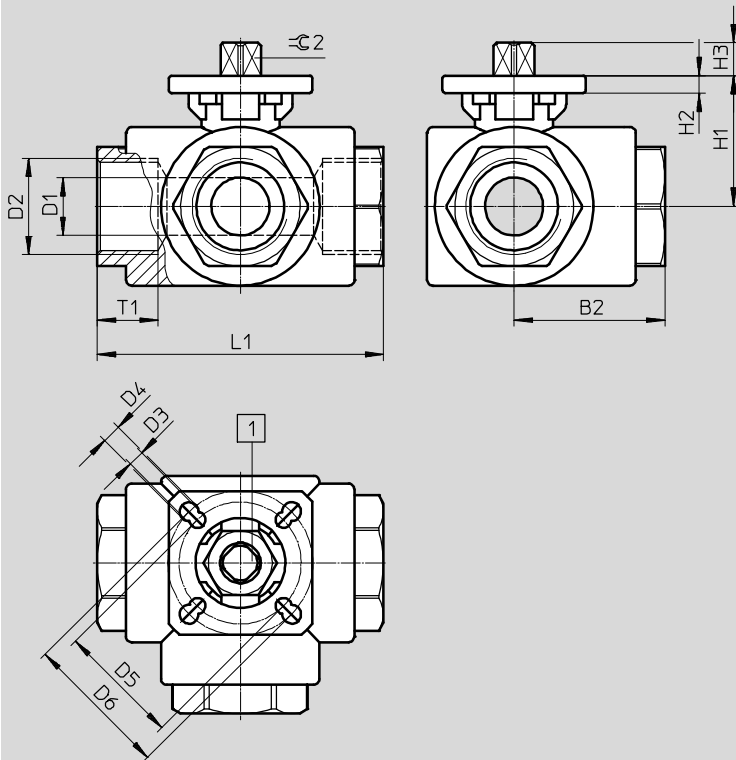


Ball valves VZBA, 3-way

Technical data

Dimensions

Download CAD data → www.festo.com



1 Switching position indication: the slot direction corresponds to the flow direction → 26

Type	B2	D1 ∅	D2	D3 ∅	D4 ∅	D5 ∅	D6 ∅	H1	H2	H3	L1	L2	±0.2
	±2	±0.15							±1		±1		-0.1
VZBA-1/4"-GGG-63-32L-F0304-V4V4T	40	11.6	Rp1/4	5.5	5.5	36	42	35.9	6	7.4	80	15	9
VZBA-1/4"-GGG-63-32T-F0304-V4V4T													
VZBA-3/8"-GGG-63-32L-F0304-V4V4T	40	12.7	Rp3/8	5.5	5.5	36	42	35.9	6	7.4	80	18	9
VZBA-3/8"-GGG-63-32T-F0304-V4V4T													
VZBA-1/2"-GGG-63-32L-F0304-V4V4T	40	12.7	Rp1/2	5.5	5.5	36	42	35.9	6	7.4	80	17.5	9
VZBA-1/2"-GGG-63-32T-F0304-V4V4T													
VZBA-3/4"-GGG-63-32L-F0405-V4V4T	43.8	16	Rp3/4	5.5	6.5	42	50	40.9	6	12.8	87.5	20	11
VZBA-3/4"-GGG-63-32T-F0405-V4V4T													
VZBA-1"-GGG-63-32L-F0405-V4V4T	50	20	Rp1	5.5	6.5	42	50	45.2	6	11.4	100	21	11
VZBA-1"-GGG-63-32T-F0405-V4V4T													
VZBA-1 1/4"-GGG-63-32L-F0405-V4V4T	61.5	25.4	Rp1 1/4	5.5	6.5	42	50	51	6	12.6	123	21	11
VZBA-1 1/4"-GGG-63-32T-F0405-V4V4T													
VZBA-1 1/2"-GGG-63-32L-F0405-V4V4T	71.1	31.8	Rp1 1/2	5.5	6.5	42	50	55.5	6	12.6	142.2	23	11
VZBA-1 1/2"-GGG-63-32T-F0405-V4V4T													
VZBA-2"-GGG-63-32L-F0507-V4V4T	85.3	38.1	Rp2	6.5	8.5	50	70	66	6	14.3	170.6	26	14
VZBA-2"-GGG-63-32T-F0507-V4V4T													

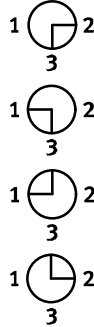
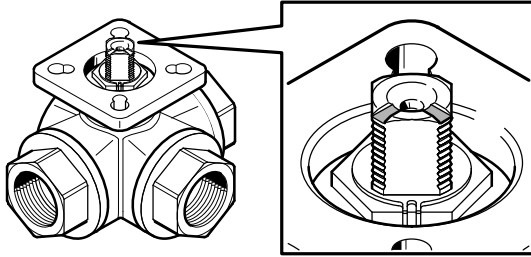
Ball valves VZBA, 3-way

Technical data

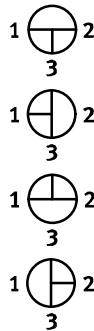
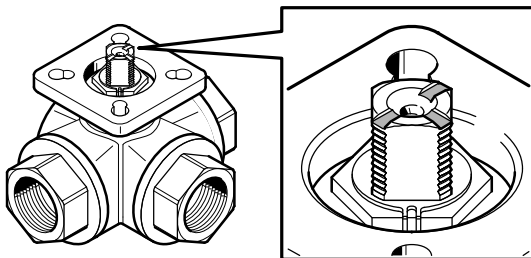
FESTO

Switching position indication

L-shaped bore



T-shaped bore



Ordering data					
	Version	Connecting thread	Weight [g]	Part No.	Type
	L-shaped bore	Rp1/4	700	1692210	VZBA-1/4"-GGG-63-32L-F0304-V4V4T
		Rp3/8	700	1692211	VZBA-3/8"-GGG-63-32L-F0304-V4V4T
		Rp1/2	700	1692212	VZBA-1/2"-GGG-63-32L-F0304-V4V4T
		Rp3/4	1000	1692214	VZBA-3/4"-GGG-63-32L-F0405-V4V4T
		Rp1	1600	1692215	VZBA-1"-GGG-63-32L-F0405-V4V4T
		Rp1 1/4	2800	1692217	VZBA-1 1/4"-GGG-63-32L-F0405-V4V4T
		Rp1 1/2	3800	1692218	VZBA-1 1/2"-GGG-63-32L-F0405-V4V4T
		Rp2	7400	1692219	VZBA-2"-GGG-63-32L-F0507-V4V4T
	T-shaped bore	Rp1/4	700	1692220	VZBA-1/4"-GGG-63-32T-F0304-V4V4T
		Rp3/8	700	1692221	VZBA-3/8"-GGG-63-32T-F0304-V4V4T
		Rp1/2	700	1692224	VZBA-1/2"-GGG-63-32T-F0304-V4V4T
		Rp3/4	1000	1692226	VZBA-3/4"-GGG-63-32T-F0405-V4V4T
		Rp1	1600	1692227	VZBA-1"-GGG-63-32T-F0405-V4V4T
		Rp1 1/4	2800	1692228	VZBA-1 1/4"-GGG-63-32T-F0405-V4V4T
		Rp1 1/2	3800	1692229	VZBA-1 1/2"-GGG-63-32T-F0405-V4V4T
Rp2	7400	1692230	VZBA-2"-GGG-63-32T-F0507-V4V4T		

Ball valves VZBA, 3-way

Accessories

Hand lever VAOH

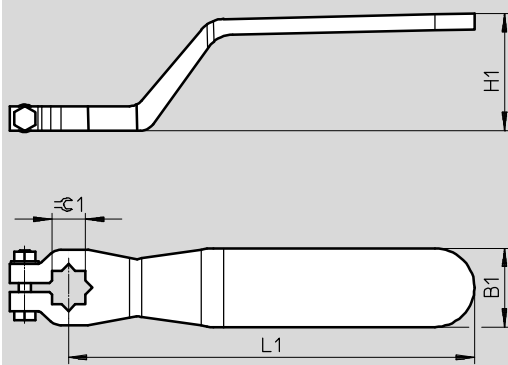
Information on materials:

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



Dimensions and ordering data

Download CAD data → www.festo.com



For connection	B1 ±5	H1 ±5	L1 ±10	rC1 ±0.5	Weight [g]	Part No.	Type
Rp1/4 ... Rp1/2	21	36	120	9	100	542702	VAOH-9-H9
Rp3/4 ... Rp1 1/2	26	40	140	11	200	542703	VAOH-11-H9
Rp2	31	46	180	14	300	542704	VAOH-14-H9

Ball valves VZBE, 3-way

Type codes

VZBE - 1/4 - T - 63 - T - 3L - F04 - V15 V15

Type	
VZBE	Ball valve

Nominal width DN	
1/4	1/4"
3/8	3/8"
1/2	1/2"
3/4	3/4"
1	1"
1 1/4	1 1/4"
1 1/2	1 1/2"
2	2"

Process valve connection type	
T	NPT female thread

Nominal pressure	
63	63 bar

Design	
T	Three parts

Valve function	
3L	3/2-way, L-shaped bore
3T	3/2-way, T-shaped bore

Flanged connection to ISO 5211	
F04	Hole pattern 04
F05	Hole pattern 05
F0507	Hole pattern 05 and 07

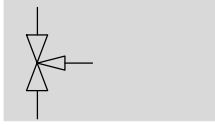
Housing material	
V15	Stainless steel ASTM A351-CF8M/1.4408

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

Ball valves VZBE, 3-way

Technical data


Function



- With L-shaped bore or T-shaped bore
- NPT version



 Connecting thread
1/4NPT ... 2NPT

 Flow rate
1.2 ... 22.5 m³/h

General technical data									
Process valve connection		1/4NPT	3/8NPT	1/2NPT	3/4NPT	1NPT	1 1/4NPT	1 1/2NPT	2NPT
Nominal width DN		8	10	15	20	25	32	40	50
Valve function		3/2							
Design		3-way ball valve							
Sealing principle		Soft							
Actuation type		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							
		ASME B1.20.1							
Breakaway torque at differential pressure, nominal pressure, process valve PN	[Nm]	9.6	9.6	9.6	14.3	25.2	33	45.5	85
Inside diameter	[mm]	11	11	12.7	16	20	25	32	38.1
Flow rate Kv	Type L [m ³ /h]	1.2	1.2	2.5	3.2	4.1	9.9	19.3	20.7
	Type T [m ³ /h]	1.4	1.4	2.8	3.7	4.6	10.6	20.2	22.5

Operating and environmental conditions									
Process valve connection		1/4NPT	3/8NPT	1/2NPT	3/4NPT	1NPT	1 1/4NPT	1 1/2NPT	2NPT
Temperature of medium	[°C]	-20 ... +200							
Medium ¹⁾		Compressed air to ISO 8573-1:2010 [:-:-]							
		Inert gases							
		Water							
		Vapour							
		Neutral fluids							
Certification		CRN							
Corrosion resistance class CRC ²⁾		4							
CE marking (see declaration of conformity) ³⁾		-					To EU Pressure Equipment Directive		

1) Other media on request

2) 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.

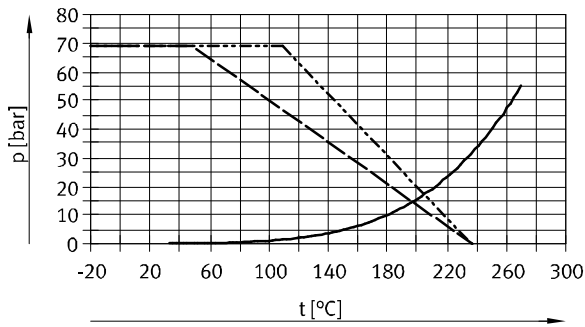
3) Additional information www.festo.com/sp → Certificates.

Ball valves VZBE, 3-way

Technical data

Materials	Material number	
Housing	Stainless steel casting	1.4408
Ball	Stainless steel casting	1.4408
Shaft	High-alloy stainless steel	1.4401
Seals	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



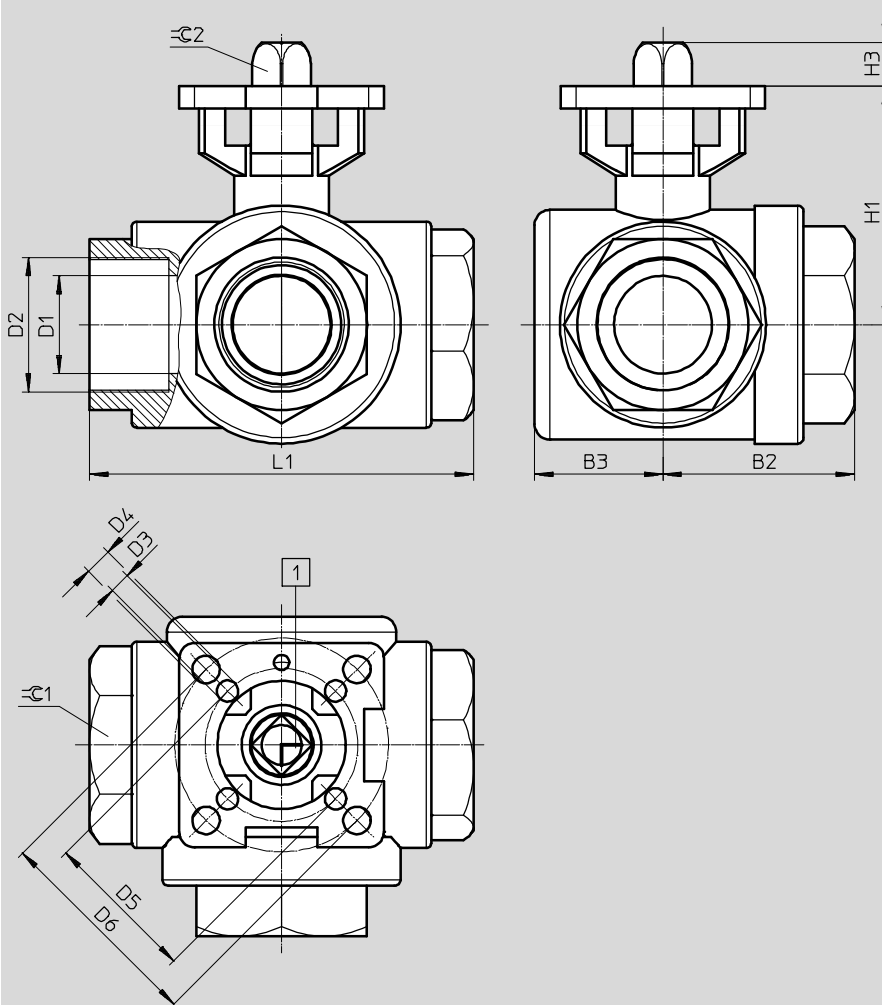
- Saturated water vapour
- - - - - PTFE-reinforced
- · - · - PTFE, modified

Ball valves VZBE, 3-way

Technical data

Dimensions

Download CAD data → www.festo.com



1 Switching position indication: the slot direction corresponds to the flow direction → 32

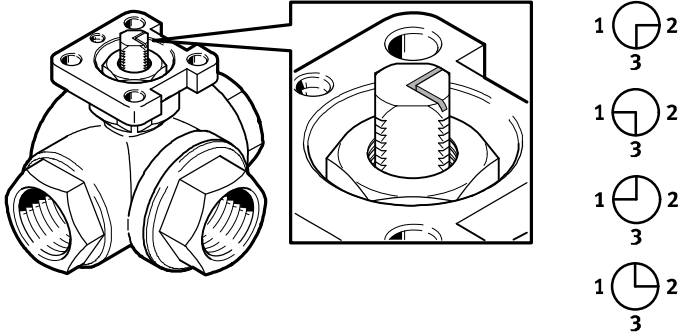
Type	B2	B3	D1	D2	D3	D4	D5	D6	H1	H3	L1	≡1	≡2
	±2		∅		∅	∅	∅	∅			±2		
VZBE-1/4-...-F04-...	37.3	22.5	11	1/4 NPT	-	6	-	42	38.2	9	75.7	26	9
VZBE-3/8-...-F04-...	37.3	22.5	11	3/8 NPT	-	6	-	42	38.2	9	75.7	26	9
VZBE-1/2-...-F04-...	37.3	22.5	12.7	1/2 NPT	-	6	-	42	38.2	9	75.7	26	9
VZBE-3/4-...-F04-...	44.7	28	16	3/4 NPT	-	6	-	42	45.2	9	86.6	33	9
VZBE-1-...-F05-...	51.4	32.7	20	1 NPT	-	7.1	-	50	56.5	11	102.4	39	11
VZBE-1 1/4-...-F05-...	57.7	37	25	1 1/4 NPT	-	7.1	-	50	61.9	11	118.2	49.5	11
VZBE-1 1/2-...-F0507-...	62.7	42.5	32	1 1/2 NPT	7.1	9.2	50	70	78.3	14.3	125.8	56	14
VZBE-2-...-F0507-...	74.6	50.5	38.1	2 NPT	7.1	9.2	50	70	87.4	14	149	70	14

Ball valves VZBE, 3-way

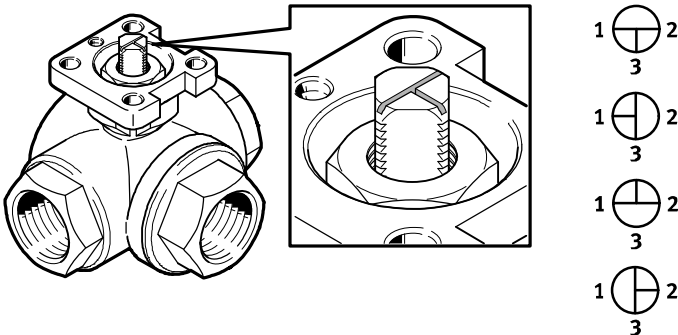
Technical data

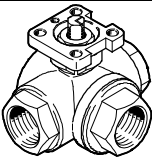
Switching position indication

L-shaped bore



T-shaped bore



Ordering data					
	Version	Process valve connection	Weight [g]	Part No.	Type
	L-shaped bore	1/4NPT	724	4834288 ¹⁾	VZBE-1/4-T-63-F-3L-F04-V15V15
		3/8NPT	624	4834289 ¹⁾	VZBE-3/8-T-63-F-3L-F04-V15V15
		1/2NPT	624	4834290 ¹⁾	VZBE-1/2-T-63-F-3L-F04-V15V15
		3/4NPT	1024	4834291 ¹⁾	VZBE-3/4-T-63-F-3L-F04-V15V15
		1NPT	1618	4834292 ¹⁾	VZBE-1-T-63-F-3L-F05-V15V15
		1 1/4NPT	2212	4834293 ¹⁾	VZBE-1 1/4-T-63-F-3L-F05-V15V15
		1 1/2NPT	3360	4834294 ¹⁾	VZBE-1 1/2-T-63-F-3L-F0507-V15V15
		2NPT	5560	4834295 ¹⁾	VZBE-2-T-63-F-3L-F0507-V15V15
	T-shaped bore	1/4NPT	724	4834296 ¹⁾	VZBE-1/4-T-63-F-3T-F04-V15V15
		3/8NPT	624	4834297 ¹⁾	VZBE-3/8-T-63-F-3T-F04-V15V15
		1/2NPT	624	4834298 ¹⁾	VZBE-1/2-T-63-F-3T-F04-V15V15
		3/4NPT	1024	4834299 ¹⁾	VZBE-3/4-T-63-F-3T-F04-V15V15
		1NPT	1618	4834300 ¹⁾	VZBE-1-T-63-F-3T-F05-V15V15
		1 1/4NPT	2212	4834301 ¹⁾	VZBE-1 1/4-T-63-F-3T-F05-V15V15
		1 1/2NPT	3360	4834302 ¹⁾	VZBE-1 1/2-T-63-F-3T-F0507-V15V15
		2NPT	5560	4834303 ¹⁾	VZBE-2-T-63-F-3T-F0507-V15V15

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