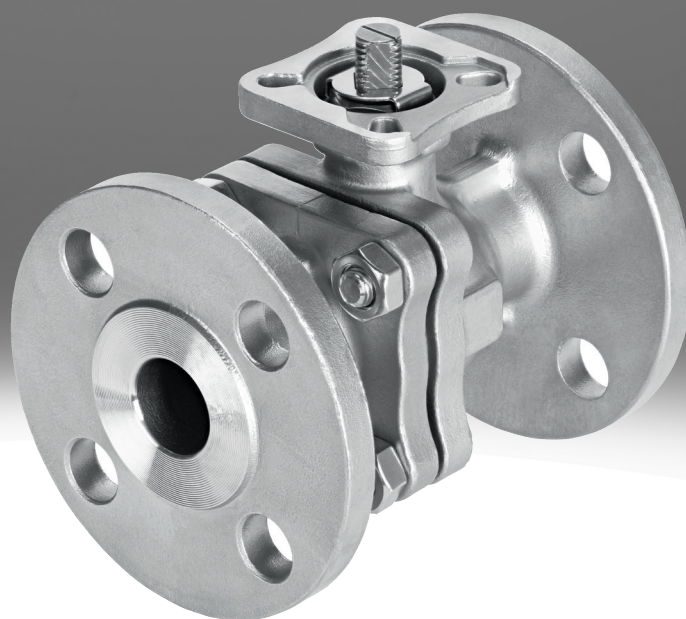


Ball valve VZBF

FESTO



Characteristics

At a glance

- 2-piece, 2-way
- Static discharge guaranteed
- Fire safe approval
- Stainless steel design
- Several connection options
- Lockable hand levers
- Flange hole pattern according to ISO 5211

Function



Process valve connection

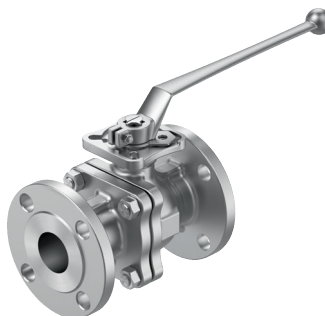
[P1] Flange to ANSI 150

[P2] Flange to DIN EN 1092-1

Actuation type

[L] Via drive

[M] With hand lever



Type code

001	Series		006	Length	
VZBF	Ball valve			Standard	
			B1	To EN 558 - Basic series 27	
002	Nominal diameter DN		007	Valve function	
1/2	1/2"		2	2/2-way	
3/4	3/4"				
1	1"		008	Flanged connection	
1 1/4	1 1/4"		F0304	Hole pattern 03 and 04	
1 1/2	1 1/2"		F04	Hole pattern 04	
2	2"		F0405	Hole pattern 04 and 05	
2 1/2	2 1/2"		F0507	Hole pattern 05 and 07	
3	3"		F0710	Hole pattern 07 and 10	
4	4"		F1012	Hole pattern 10 and 12	
5	5"		F1214	Hole pattern 12 and 14	
6	6"		F14	Hole pattern 14	
8	8"				
003	Process valve connection		009	Actuation type	
P1	Flange to ANSI 150			Via drive	
P2	Flange to DIN EN 1092-1		M	With hand lever	
004	Nominal pressure [bar]		010	Housing material	
16	16		V4	Stainless steel (chrome-nickel-molybdenum, austenitic/1.4401, 1.4404 (AISI 316L), 1.4408)	
20	20		V15	Stainless steel ASTM A351-CF8M	
40	40				
005	Design type		011	Shut-off element material	
D	Two-part		V4	Stainless steel (chrome-nickel-molybdenum, austenitic/1.4401, 1.4404 (AISI 316L), 1.4408)	
			V15	Stainless steel ASTM A351-CF8M	
			V16	Stainless steel ASTM A240-316 / 1.4401	

Datasheet

General technical data, 2-way, flange according to ANSI 150

Nominal diameter DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"
Connection Process valve	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 indicator	Slot direction = flow direction										
Flow direction	Reversible										
Type of mounting	Inline installation										
Mounting position	Any										
Based on standard	ANSI B16.5 class 150, ISO 5211										
Breakaway torque at differential pressure, nominal pressure, process valve PN	8 Nm	10 Nm	12 Nm	20 Nm	30 Nm	40 Nm	60 Nm	90 Nm	130 Nm	350 Nm	600 Nm
Inside diameter	15 mm	20 mm	24 mm	30 mm	38 mm	50 mm	64 mm	76 mm	98 mm	150 mm	200 mm
Flow rate Kv	32 m³/h	59 m³/h	87 m³/h	140 m³/h	232 m³/h	420 m³/h	707 m³/h	995 m³/h	1,707 m³/h	4,258 m³/h	7,816 m³/h
Product weight	1,550 g	1,950 g	3,050 g	3,550 g	5,630 g	7,630 g	13,650 g	17,350 g	28,100 g	50,200 g	84,200 g

General technical data, 2-way with hand lever, flange to ANSI 150

Nominal diameter DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Connection Process valve	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 indicator	Slot direction = flow direction								
Flow direction	Reversible								
Type of mounting	Inline installation								
Mounting position	Any								
Based on standard	ANSI B16.5 class 150, ISO 5211								
Breakaway torque at differential pressure, nominal pressure, process valve PN	8 Nm	10 Nm	12 Nm	20 Nm	30 Nm	40 Nm	60 Nm	90 Nm	130 Nm
Inside diameter	15 mm	20 mm	24 mm	30 mm	38 mm	50 mm	64 mm	76 mm	98 mm
Flow rate Kv	32 m³/h	59 m³/h	87 m³/h	140 m³/h	232 m³/h	420 m³/h	707 m³/h	995 m³/h	1,707 m³/h
Product weight	1,700 g	2,100 g	3,200 g	3,700 g	6,000 g	8,000 g	14,500 g	18,200 g	29,000 g

General technical data, 2-way with hand lever, flange to DIN EN 1092-1

Nominal diameter DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"
Connection Process valve	Flange to EN 1092-1											
Valve function	2/2											
Design	2-way ball valve											
Sealing principle	Soft											
Type of actuation	Mechanical											
Switching position indicator	Slot direction = flow direction											
Flow direction	Reversible											
Type of mounting	Inline installation											
Mounting position	Any											
Based on standard	EN 1092-1, EN 558, ISO 5211											
Breakaway torque at differential pressure, nominal pressure, process valve PN	8 Nm	10 Nm	11 Nm	18 Nm	28 Nm	44 Nm	78 Nm	112 Nm	174 Nm	165 Nm	255 Nm	400 Nm
Inside diameter	15 mm	20 mm	25 mm	32 mm	40 mm	50 mm	65 mm	80 mm	100 mm	125 mm	150 mm	200 mm
Flow rate Kv	19 m³/h	40 m³/h	65 m³/h	110 m³/h	180 m³/h	365 m³/h	495 m³/h	970 m³/h	1,620 m³/h	2,530 m³/h	4,050 m³/h	8,650 m³/h
Product weight	2,200 g	3,050 g	3,750 g	5,750 g	7,000 g	9,500 g	14,750 g	18,850 g	26,250 g	38,000 g	51,000 g	115,500 g

Datasheet

Operating and environmental conditions, 2-way, flange according to ANSI 150

Operating and environmental conditions, 2 way, range according to PN 10											
Nominal diameter DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"
Nominal pressure PN	20										
Media temperature	-20 ... 200°C										
Medium	Vapour, Compressed air to ISO 8573-1:2010 [---], Inert gases, Water, Neutral fluids										
Approval	API607, CRN									CRN	
Corrosion resistance class CRC ¹⁾	4 - Very high corrosion stress										
CE mark (see declaration of conformity)	–			In accordance with EU Pressure Equipment Directive							

1) More information www.festo.com/catalogue/crc

Operation and environmental conditions, 2-way with hand lever, flange to ANSI 150

Nominal diameter DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
Nominal pressure PN	20								
Media temperature	-20 ... 200°C								
Medium	Vapour, Compressed air to ISO 8573-1:2010 [---], Inert gases, Water, Neutral fluids								
Approval	API607, CRN								
Corrosion resistance class CRC ¹⁾	4 - Very high corrosion stress								
CE mark (see declaration of conformity)	–			In accordance with EU Pressure Equipment Directive					

1) More information www.festo.com/catalogue/crc

Operating and environmental conditions, 2-way with hand lever, flange to DIN EN 1092-1

Operating and environmental conditions, 2-way, non-hand lever, range to DIN EN 1092-1												
Nominal diameter DN	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"
Nominal pressure PN	40						16					
Media temperature	-30 ... 180°C											
Medium	Compressed air to ISO 8573-1:2010 [---], Inert gases, Water – no steam, Neutral fluids											
Approval	See certificates											
Corrosion resistance class CRC ¹⁾	4 - Very high corrosion stress											
CE mark (see declaration of conformity)	To EU Explosion Protection Directive (ATEX)											

1) More information www.festo.com/catalogue/crc

Materials, 2-way, flange according to ANSI 150

Material housing	Cast stainless steel
Material number housing	1,4408
Material ball	Cast stainless steel, High-alloy stainless steel
Material number ball	1,4401, 1,4408
Material shaft	High-alloy stainless steel
Material number shaft	1,4401
Material seals	Fluoro rubber, Graphite, PCTFE, PTFE
Note on materials	RoHS compliant

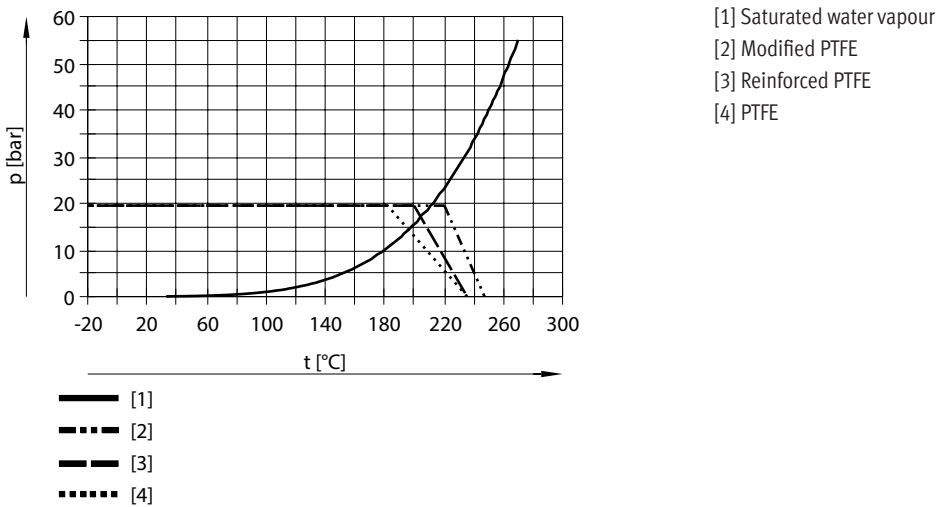
Materials, 2-way with hand lever, flange to ANSI 150

Material housing	Cast stainless steel
Material number housing	1,4408
Material ball	Cast stainless steel
Material number ball	1,4408
Material shaft	High-alloy stainless steel
Material number shaft	1,4401
Material seat seal	PTFE, PTFE, modified
Material seals	Fluoro rubber, Graphite, PCTFE, PTFE
Note on materials	RoHS compliant

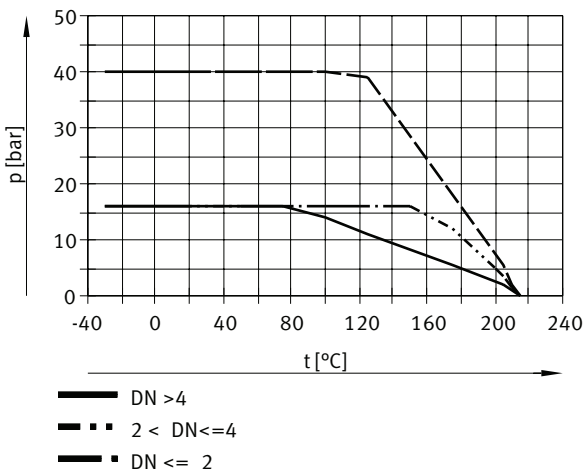
Datasheet

Materials, 2-way with hand lever, flange to DIN EN 1092-1	
Material housing	Cast stainless steel
Material number housing	1,4408
Material ball	Cast stainless steel
Material number ball	1,4408
Material shaft	High-alloy stainless steel
Material number shaft	1,4401
Material seat seal	PTFE, modified
Material seals	Fluoro rubber, PTFE, PTFE-reinforced
Note on materials	RoHS compliant

Permissible operating pressure p depending on the medium temperature t, flange according to ANSI 150



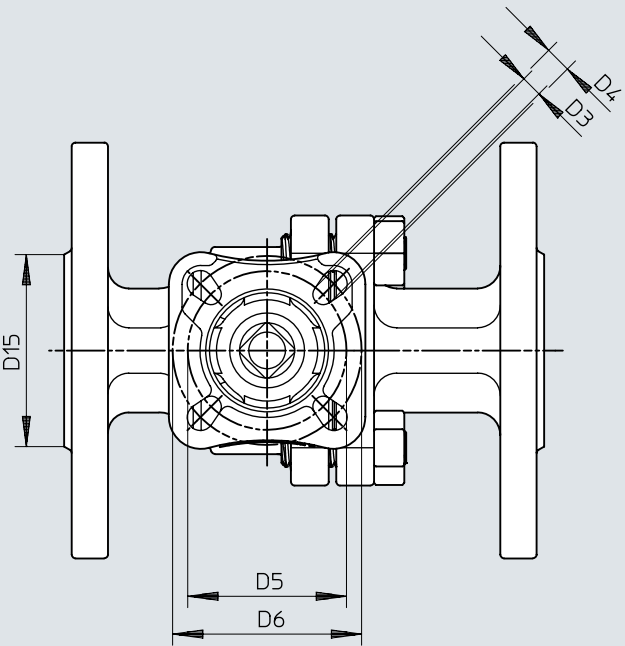
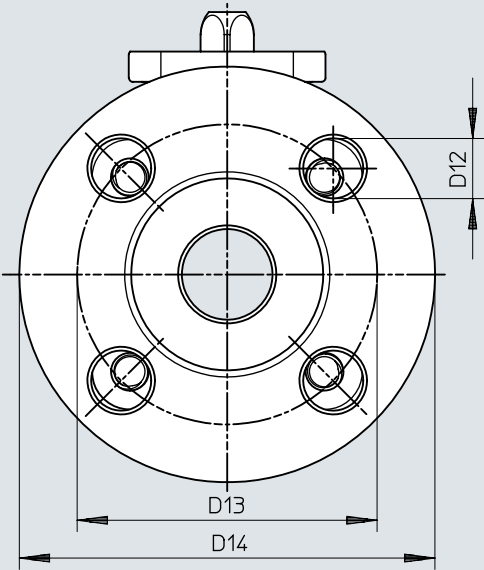
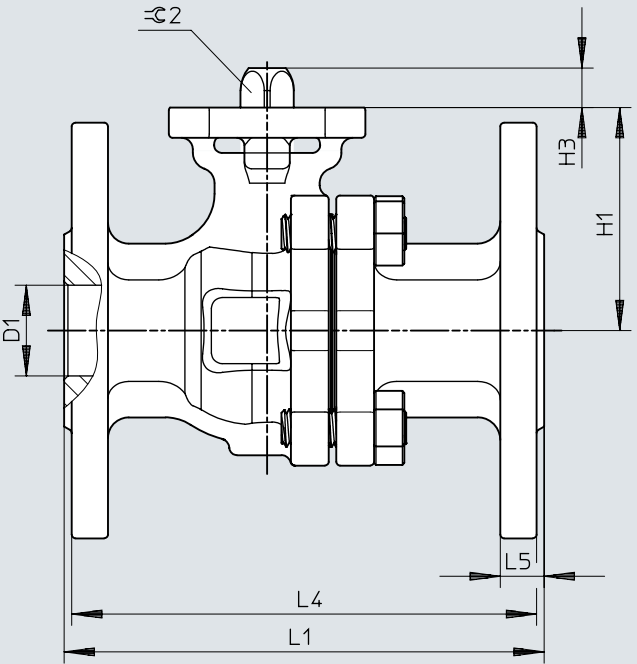
Permissible operating pressure p depending on the medium temperature t, flange according to DIN EN 1092-1



Dimensions

Dimensions – Ball valves VZBF, 2-way, flange according to ANSI 150

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Dimensions

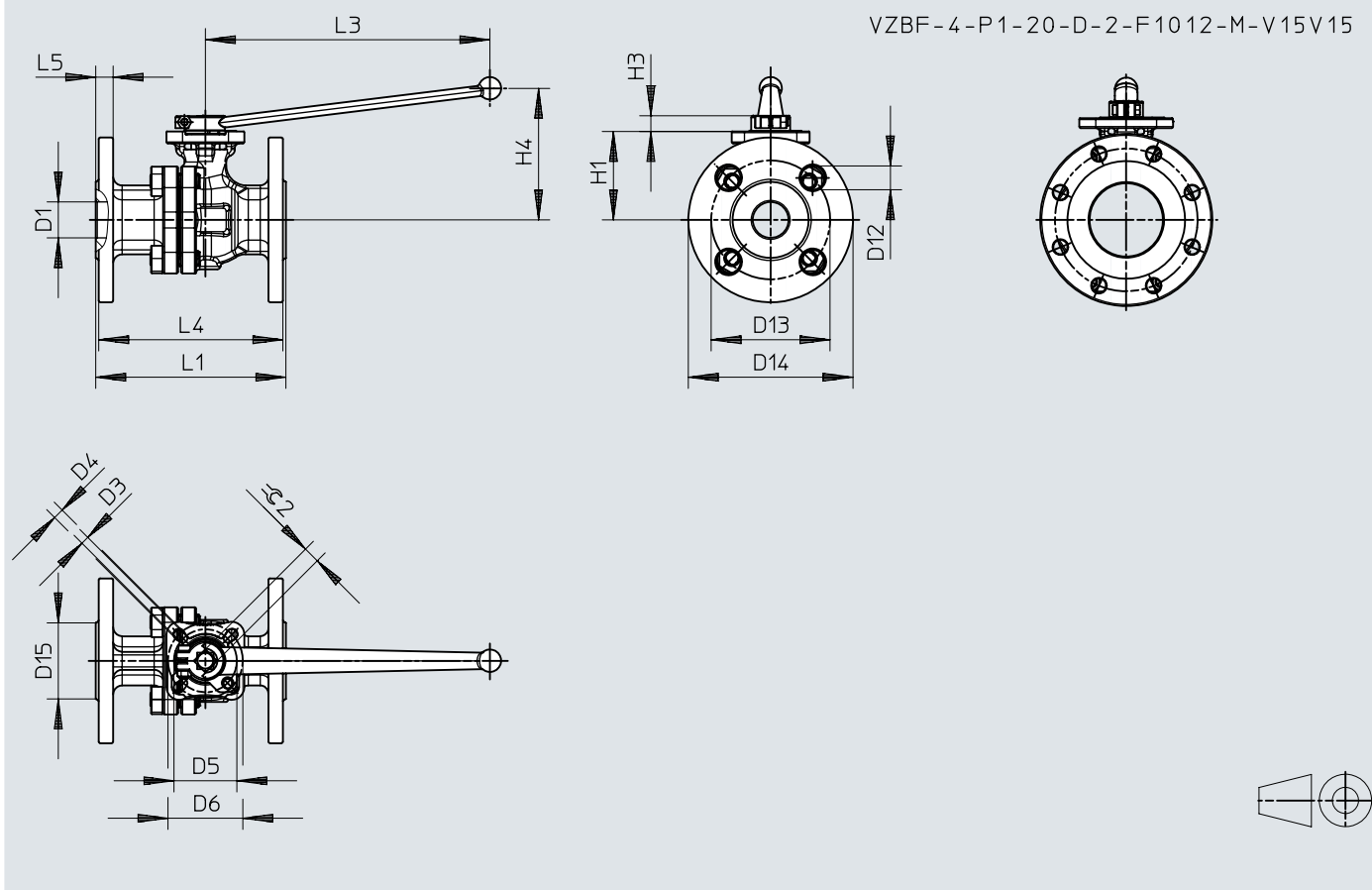
	D1 Ø	D3 Ø	D4 Ø	D5 Ø	D6 Ø	D12 Ø	D13 Ø	D14 Ø	D15 Ø	H1	H3	L1 ±2	L4	L5	≈C2
VZBF-1/2-P1...	15	5,5	5,5	36	42	16	60,5	89	35	50,5	8,5	108	104,8	11,1	9
VZBF-3/4-P1...	20	5,5	5,5	36	42	16	70	98	43	55	8,5	117	113,8	11,6	9
VZBF-1-P1...	24	5,5	7	42	50	16	79,5	108	51	59	10,5	127,5	124,3	11,6	11
VZBF-1 1/4-P1...	30	5,5	7	42	50	16	89	117	64	62	10,5	140,5	137,3	12,7	11
VZBF-1 1/2-P1...	38	7	9	50	70	16	98,5	127	73	76	14	165	161,8	14,3	14
VZBF-2-P1...	50	7	9	50	70	19	120,5	152	92	84,5	14	178	174,8	16	14
VZBF-2 1/2-P1...	64	9	11	70	102	19	139,5	178	105	104,5	17	190,5	187,3	17,5	17
VZBF-3-P1...	76	9	11	70	102	19	152,5	190,5	127	111,5	17	203	199,8	19,1	17
VZBF-4-P1...	98	11	13	102	125	19	190,5	229	157	135,5	23	229	225,8	24	22
VZBF-6-P1...	150	11	13	102	125	22,4	241,5	279	216	201	27,5	394	390,8	25,4	27
VZBF-8-P1...	200	17	–	140	–	22,4	298,5	343	270	259	36	457	453,8	28,6	36

Dimensions

Dimensions – Ball valves VZBF, 2-way with hand lever, flange according to ANSI 150

Download CAD data www.festo.com

VZBF-4-P1-20-D-2-F1012-M-V15V15

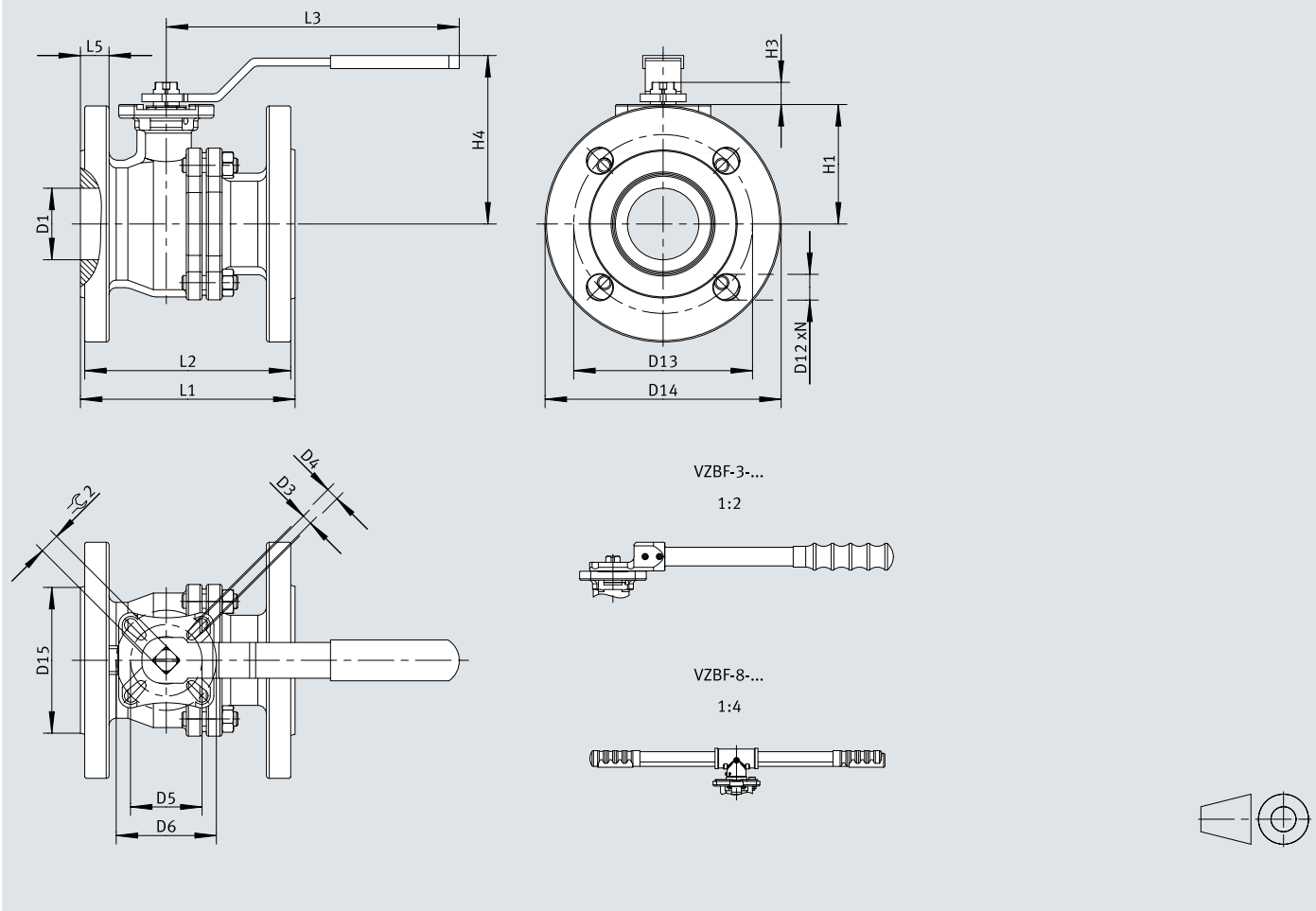


	D1 ø	D3 ø	D4 ø	D5 ø	D6 ø	D12 ø	D13 ø	D14 ø	D15 ø	H1	H3	H4	L1 ±2	L3	L4	L5	≅2
VZBF-1/2-P1...	15	5,5	5,5	36	42	16	60,5	89	35	50,5	8,5	78,5	108	190	104,8	11,1	9
VZBF-3/4-P1...	20	5,5	5,5	36	42	16	70	98	43	55	8,5	83	117	190	113,8	11,6	9
VZBF-1-P1...	24	5,5	7	42	50	16	79,5	108	51	59	10,5	86,7	127,5	190	124,3	11,6	11
VZBF-1 1/4-P1...	30	5,5	7	42	50	16	89	117	64	62	10,5	90,4	140,5	190	137,3	12,7	11
VZBF-1 1/2-P1...	38	7	9	50	70	16	98,5	127	73	76	14	108,4	165	235	161,8	14,3	14
VZBF-2-P1...	50	7	9	50	70	19	120,5	152	92	84,5	14	117,4	178	235	174,8	16	14
VZBF-2 1/2-P1...	64	9	11	70	102	19	139,5	178	105	104,5	17	141,3	190,5	325	187,3	17,5	17
VZBF-3-P1...	76	9	11	70	102	19	152,5	190,5	127	111,5	17	148,3	203	325	199,8	19,1	17
VZBF-4-P1...	98	11	13	102	125	19	190,5	229	157	135,5	23	175,9	229	325	225,8	24	22

Dimensions

Dimensions – Ball valves VZBF, 2-way with hand lever, flange according to DIN EN 1092-1

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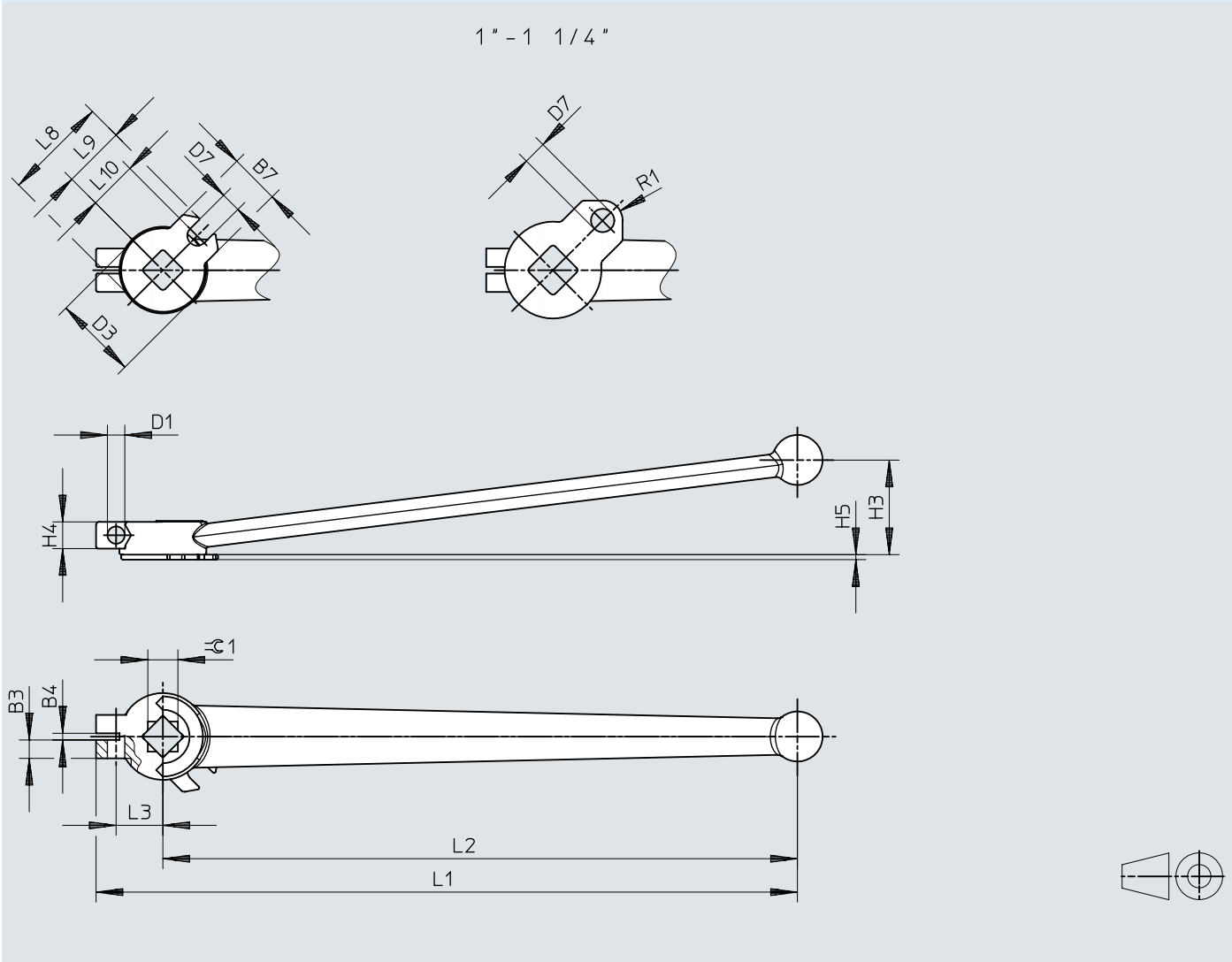
Dimensions

	D1 ø	D3 ø	D4 ø	D5 ø	D6 ø	D12 ø	D13 ø	D14 ø -1	D15 ø
VZBF-1/2-P2-40-D-B1-2-F04-M-V4V4	15	6	–	42	–	14	65	95	45
VZBF-3/4-P2-40-D-B1-2-F0405-M-V4V4	20	6	7	42	50	14	75	105	58
VZBF-1-P2-40-D-B1-2-F0405-M-V4V4	25	6	7	42	50	14	85	115	68
VZBF-11/4-P2-40-D-B1-2-F0507-M-V4V4	32	7	9	50	70	18	100	140	78
VZBF-11/2-P2-40-D-B1-2-F0507-M-V4V4	40	7	9	50	70	18	110	150	88
VZBF-2-P2-40-D-B1-2-F0507-M-V4V4	50	7	9	50	70	18	125	165	102
VZBF-21/2-P2-16-D-B1-2-F0710-M-V4V4	65	9	11	70	102	18	145	185	122
VZBF-3-P2-16-D-B1-2-F0710-M-V4V4	80	9	11	70	102	18	160	200	138
VZBF-4-P2-16-D-B1-2-F0710-M-V4V4	100	9	11	70	102	18	180	220	158
VZBF-5-P2-16-D-B1-2-F1012-M-V4V4	125	12	14	102	125	18	210	250	188
VZBF-6-P2-16-D-B1-2-F1012-M-V4V4	150	12	14	102	125	22	240	285	212
VZBF-8-P2-16-D-B1-2-F1214-M-V4V4	200	13	17	125	140	22	295	340	268

	H1 +1	H3	H4 ±5	L1	L2	L3 ±5	L5	N	≈G2
VZBF-1/2-P2-40-D-B1-2-F04-M-V4V4	47,5	9,5	90	115	111	165	16	4	9
VZBF-3/4-P2-40-D-B1-2-F0405-M-V4V4	52,5	9	95	120	116	165	18	4	9
VZBF-1-P2-40-D-B1-2-F0405-M-V4V4	57,5	11	95	125	121	165	18	4	11
VZBF-11/4-P2-40-D-B1-2-F0507-M-V4V4	71	15,5	106	130	126	200	18	4	14
VZBF-11/2-P2-40-D-B1-2-F0507-M-V4V4	76	15,5	110	140	134	200	18	4	14
VZBF-2-P2-40-D-B1-2-F0507-M-V4V4	83	15,5	118	150	144	200	20	4	14
VZBF-21/2-P2-16-D-B1-2-F0710-M-V4V4	119	21	170	170	164	380	18	4	17
VZBF-3-P2-16-D-B1-2-F0710-M-V4V4	130	21	170	180	174	380	20	8	17
VZBF-4-P2-16-D-B1-2-F0710-M-V4V4	145	21	170	190	184	380	20	8	17
VZBF-5-P2-16-D-B1-2-F1012-M-V4V4	163	34	200	325	319	520	22	8	27
VZBF-6-P2-16-D-B1-2-F1012-M-V4V4	180	34	220	350	344	620	22	8	27
VZBF-8-P2-16-D-B1-2-F1214-M-V4V4	253	26	345	400	394	800	24	12	27

Dimensions

Dimensions – Hand lever VAOH 1/2" ... 1 1/4" Download CAD data www.festo.com

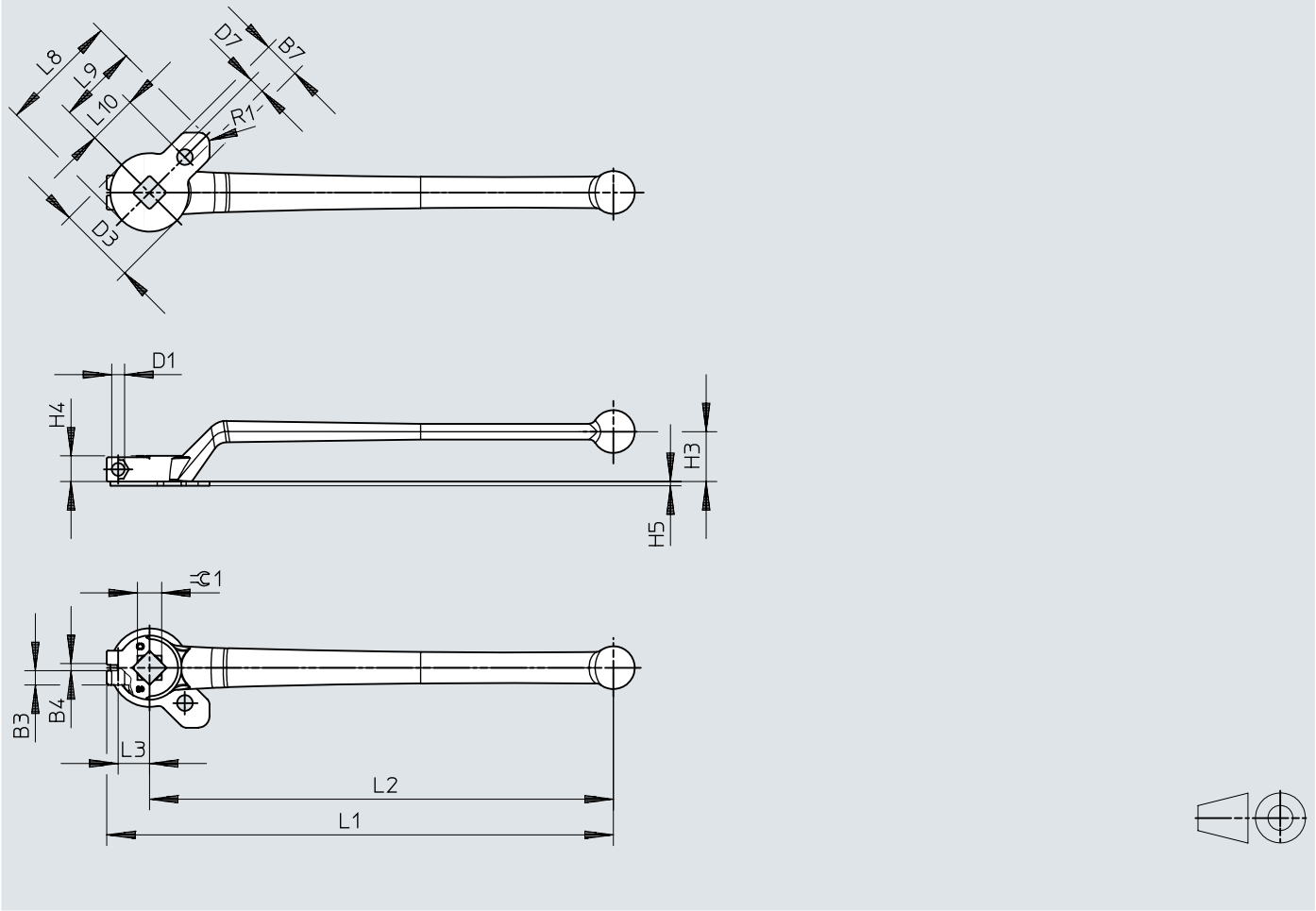


		B3	B4	B7	D1 ø	D3 ø	D7 ø	H3	H4	H5	L1	L2	L3	L8	L9	L10	R1	≅G1
VAOH-F9-9-H9-A	1/2" ... 3/4"	5,5	2	15,8	5,2	25	6	28,3	8	1,5	210	190	14	33,5	21,1	18	–	9
VAOH-F9-11-H9-A	1" ... 1 1/4"	5,5	2	17,8	5,2	29	7	28,3	8	1,8	210	190	14	41,5	27	21	6	11
VAOH-F9-14-H9-A	1 1/2" ... 2"	5,5	3	26	6,2	35	8	30,5	13,5	2	260	235	16,2	54	36,5	25	5	14

Dimensions

Dimensions – Hand lever VAOH 1 1/2" ... 4"

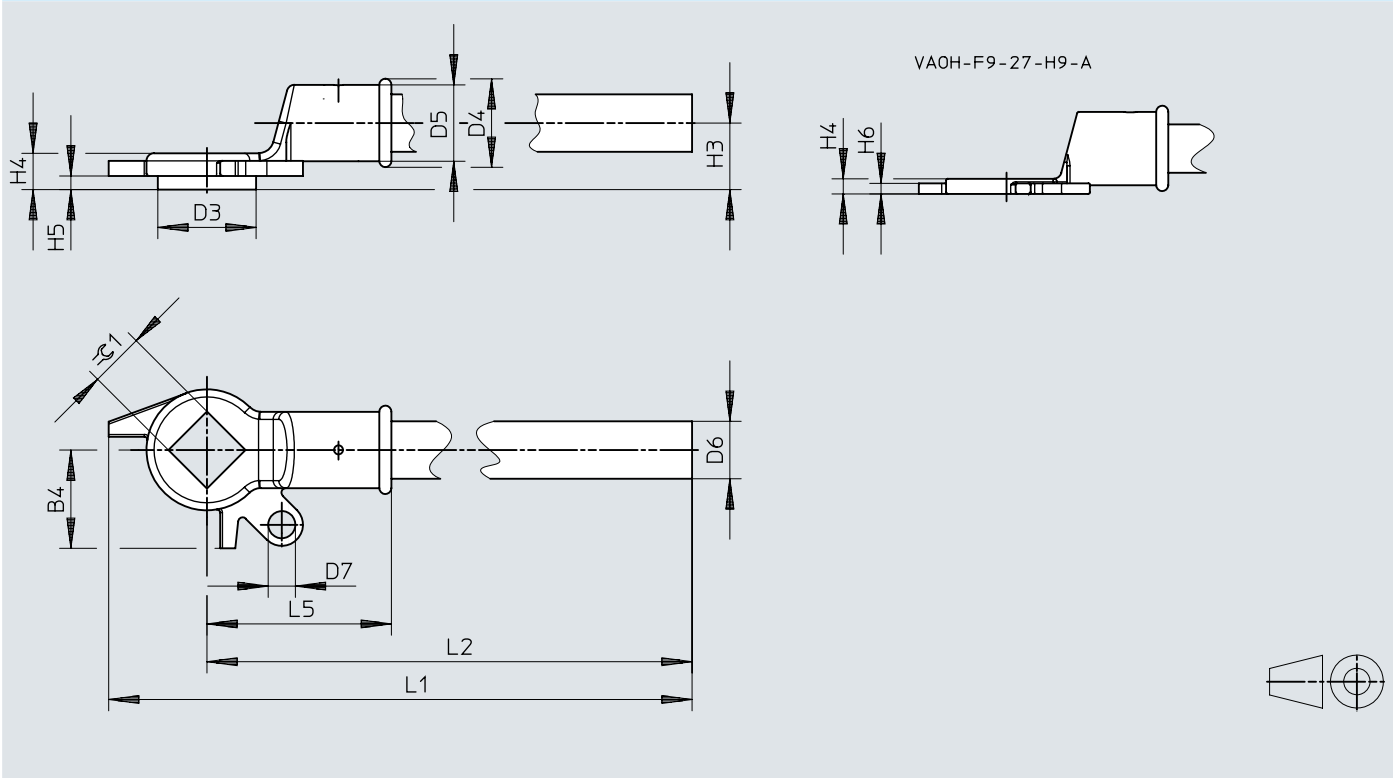
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		B3	B4	B7	D1 ø	D3 ø	D7 ø	H3	H4	H5	L1	L2	L3	L8	L9	L10	R1	±0,5
VAOH-F9-17-H9-A	2 1/2" ... 3"	10	4	27,5	9	55	11	35	18	3	355	325	22	83,6	56,1	35	8	17
VAOH-F9-22-H9-A	4"	10	4	27,5	9	70	12	38	21	3	355	325	22	102,7	67,7	51	7	22

Dimensions

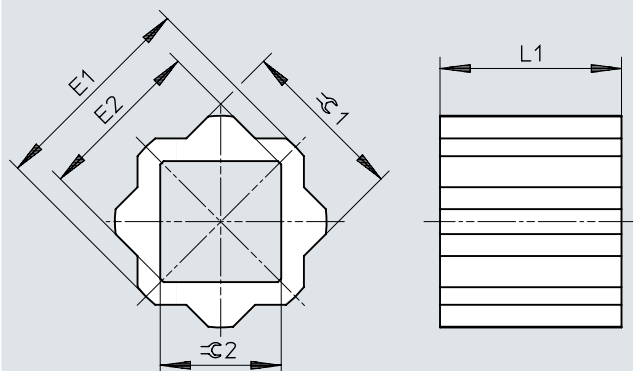
Dimensions – Hand lever VAOH Download CAD data www.festo.com



		B4	D3 Ø	D4 Ø	D5 Ø	D6 Ø	D7 Ø	H3	H4	H5	H6	L1	L2	L5	≈G1
VAOH-F9-27-H9-A	6"	58	–	56,5	48,5	32	14	30	10	–	7	815,1	757,1	107	27
VAOH-F9-36-H9-A	8"	65	65	58,5	50,5	38	18	43,1	15	9	10	928	863	122	36

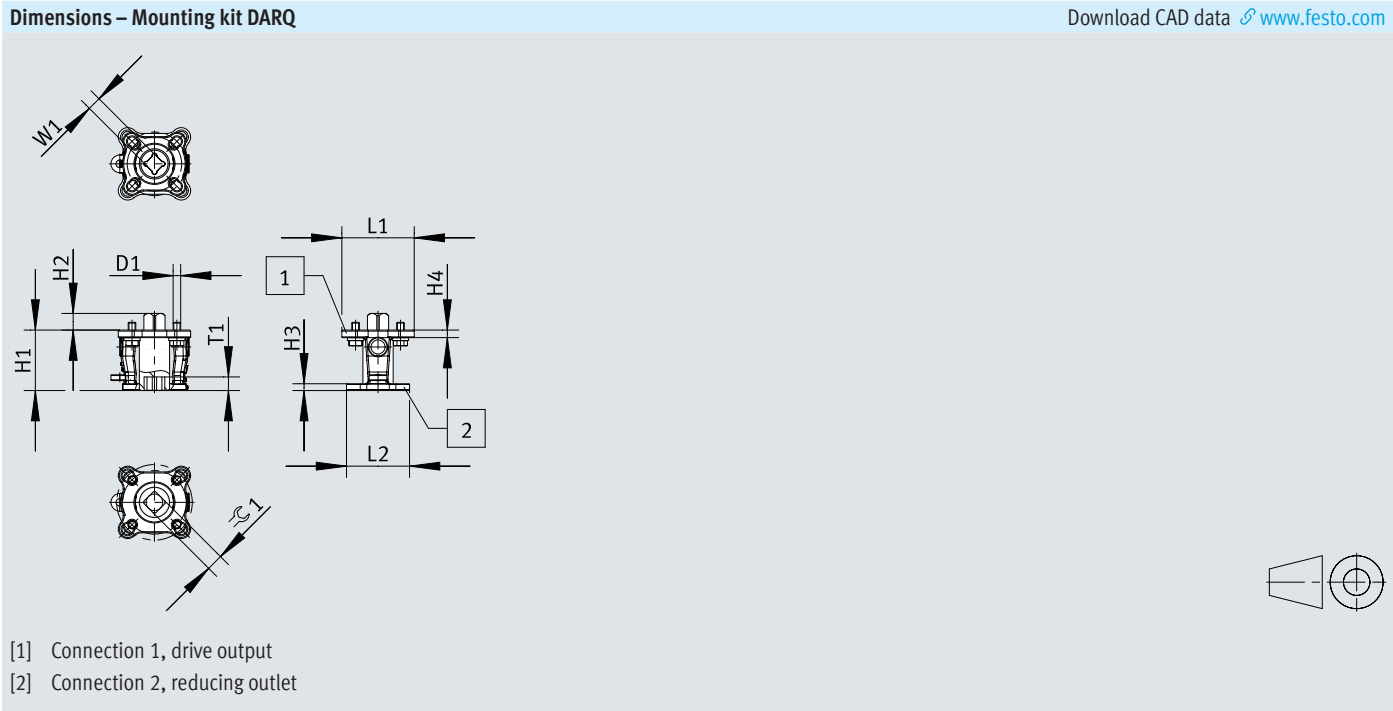
Dimensions

Dimensions – Reducing sleeve DARQ

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	E1 +0,1/-0,3	E2 +0,3/-0,1	L1 $\pm 0,2$	$\varnothing 1$ -0,02/-0,12	$\varnothing 2$ +0,04/+0,18
DARQ-R-A-S11-S8-...	14	11	12	11	8
DARQ-R-A-S11-S9-...	14	12,3	11	11	9
DARQ-R-A-S14-S8-...	18	11	16	14	8
DARQ-R-A-S14-S9-...	18	12,3	16	14	9
DARQ-R-A-S14-S10-...	18	13,3	16	14	10
DARQ-R-A-S14-S11-...	18	14,3	16	14	11
DARQ-R-A-S14-S12-...	18	16,3	16	14	12
DARQ-R-A-S17-S8-...	22	11	17	17	8
DARQ-R-A-S17-S9-...	22	12,3	17	17	9
DARQ-R-A-S17-S11-...	22	14,3	17	17	11
DARQ-R-A-S17-S12-...	22	16,3	17	17	12
DARQ-R-A-S17-S14-...	22	18,3	17	17	14
DARQ-R-A-S22-S11-...	28	14,3	22	22	11
DARQ-R-A-S22-S14-...	28	18,3	22	22	14
DARQ-R-A-S22-S16-...	28	21,3	22	22	16
DARQ-R-A-S22-S17-...	28	22,3	22	22	17
DARQ-R-A-S27-S14-...	36	18,3	27	27	14
DARQ-R-A-S27-S17-...	36	22,3	27	27	17
DARQ-R-A-S27-S22-...	36	28,5	27	27	22
DARQ-R-A-S36-S22-...	48	28,5	36	36	22
DARQ-R-A-S36-S27-...	48	36,1	36	36	27
DARQ-R-A-S46-S22-...	59	28,5	46	46	22
DARQ-R-A-S46-S27-...	59	36,1	46	46	27
DARQ-R-A-S46-S36-...	59	48	46	46	36

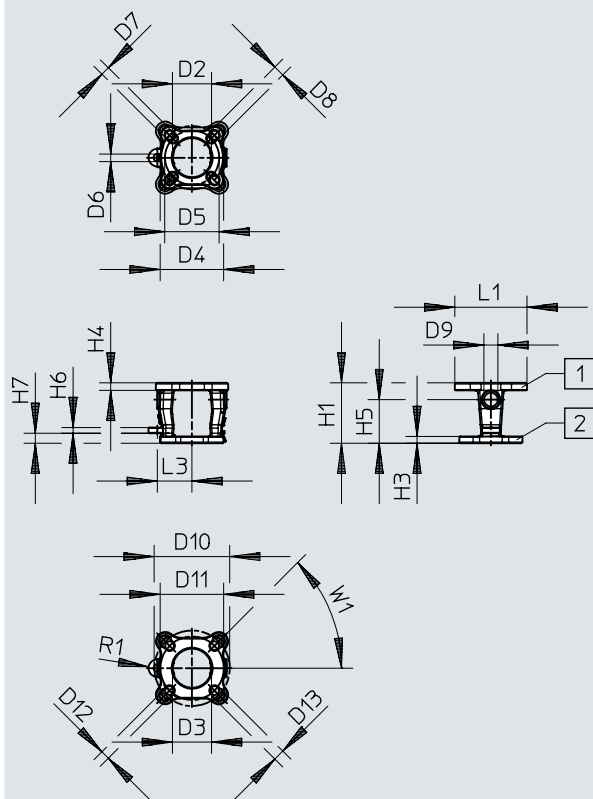
Dimensions



	D1	H1	H2	H3	H4	L1	L2	T1	W1 H11	≈ 1 h11
DARQ-K-V-F04S11-F03S9-R1	M5	40	11	3,2	5	46	23	9	9	11
DARQ-K-V-F05S14-F03S9-R1	M6	40	15	3,2	5	46	23	9	9	14
DARQ-K-V-F05S14-F04S11-R1	M6	40	15	3,2	5	46	23	11	11	14
DARQ-K-V-F07S17-F04S11-R1	M8	50	18	6	6	66	30,5	11	11	17
DARQ-K-V-F07S17-F05S14-R1	M8	50	18	6	6	66	30,5	15	14	17
DARQ-K-V-F10S22-F05S14-R1	M10	75	23	10	9,5	132,1	63	15	14	22
DARQ-K-V-F10S22-F07S17-R1	M10	75	23	10	9,5	132,1	63	18	17	22
DARQ-K-V-F10S27-F07S17-R1	M10	75	28	10	9,5	132,1	63	18	17	27

Dimensions

Dimensions – Mounting adapter DARQ

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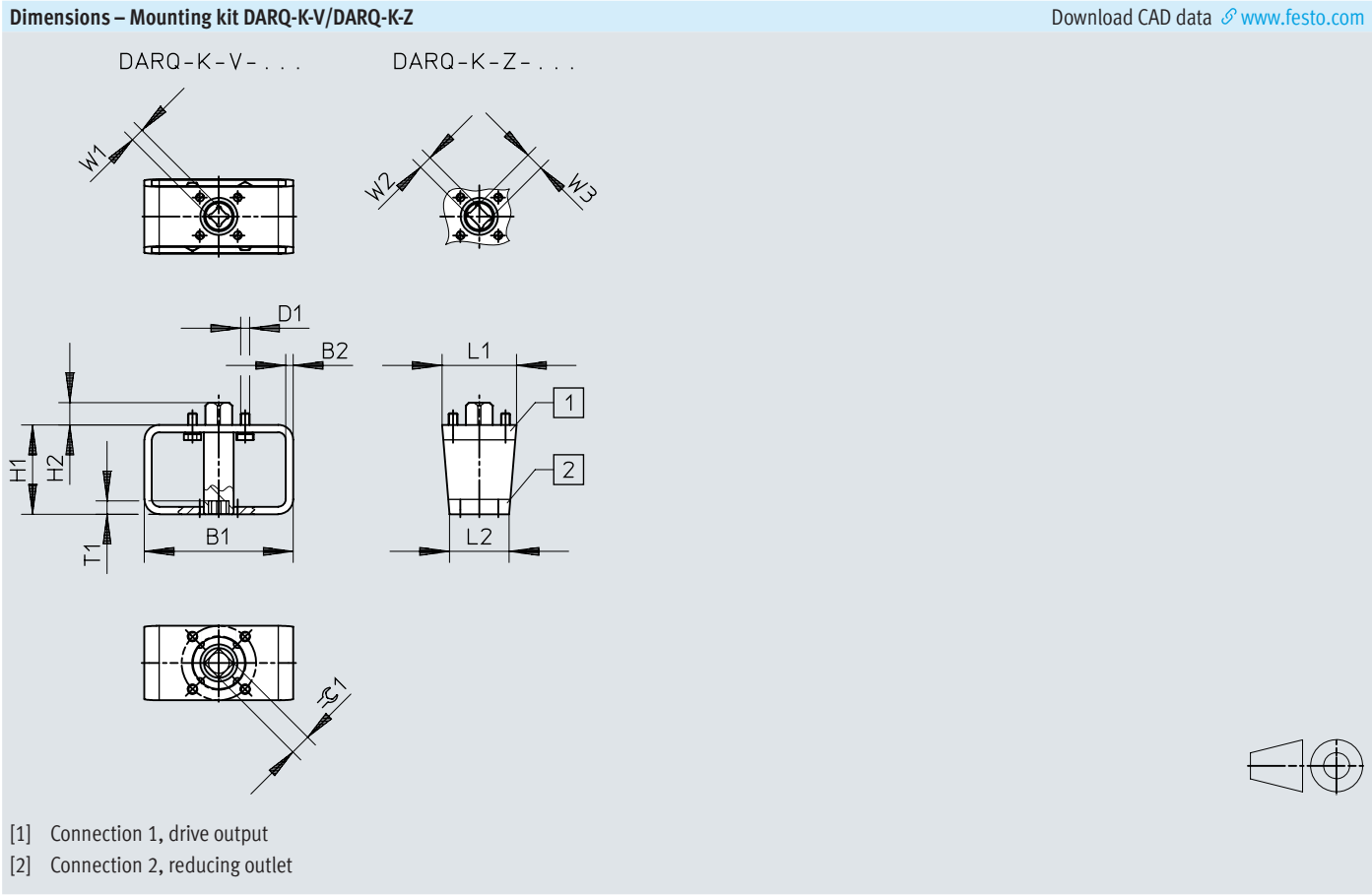
[1] Connection 1, drive output

[2] Connection 2, reducing outlet

	D2 ø	D3 ø	D4 ø	D5 ø	D6 ø	D7 ø	D8 ø	D9 ø	D10 ø	D11 ø
DARQ-B-F0405-F0304-...	25,9	25,9	42	36	5,1	6,1	6,1	9,4	50	42
DARQ-B-F0507-F0405-...	30,5	36,8	50	42	5,1	7,6	6,6	10,9	70	50
DARQ-B-F0710-F0507-...	38,6	50	70	50	5,1	8,9	7,1	14	102	70
DARQ-B-F1012-F10-...	69,9	76,2	–	102	5,1	–	11,2	17,3	125	102

	D12 ø	D13 ø	H1	H3	H4	H5	H6	H7	L1	L3	W1
DARQ-B-F0405-F0304-...	6,1	7,6	39,9	3,2	5	28,2	3,8	7,1	46	22,9	45°
DARQ-B-F0507-F0405-...	7,6	10,2	50	6	6	36,3	3,8	7,1	66	30,5	45°
DARQ-B-F0710-F0507-...	8,9	10,9	74,9	9,5	9,5	50,5	3,8	7,1	102,1	39,1	45°
DARQ-B-F1012-F10-...	11,2	13	80	10	9,5	58,4	3,8	7,1	132,1	63	45°

Dimensions



Dimensions

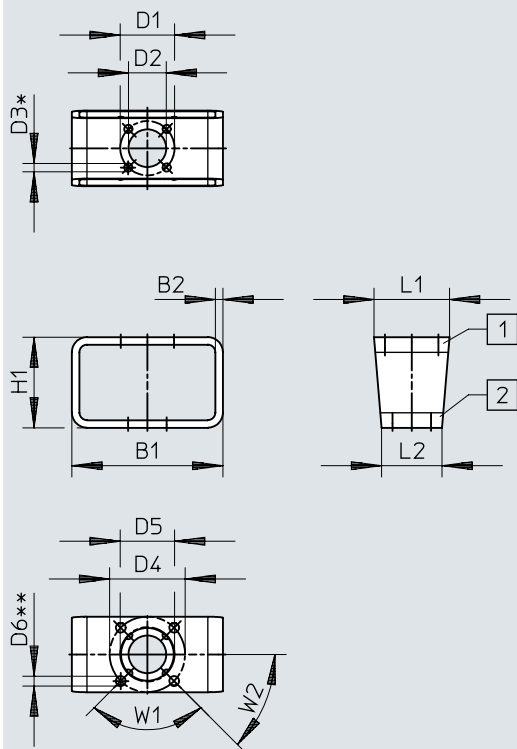
	B1	B2	D1	H1	H2	L1	L2	T1	W1 H11	≈ 1 h11
DARQ-K-V-F03S9-F03S9-...	80	4	M5	50	9	40	40	9	9	9
DARQ-K-V-F04S11-F03S9-...	80	4	M5	50	11	45	40	9	9	11
DARQ-K-V-F04S11-F04S11-...	80	4	M5	50	11	45	45	11	11	11
DARQ-K-V-F05S14-F03S9-...	100	5	M6	60	15	50	40	9	9	14
DARQ-K-V-F05S14-F04S11-...	100	5	M6	60	15	50	45	11	11	14
DARQ-K-V-F05S14-F05S14-...	100	5	M6	60	15	50	50	15	14	14
DARQ-K-V-F07S17-F03S9	100	5	M8	60	18	70	45	9	9	17
DARQ-K-V-F07S17-F04S11-...	100	5	M8	60	18	70	45	11	11	17
DARQ-K-V-F07S17-F05S14-...	100	5	M8	60	18	70	50	15	14	17
DARQ-K-V-F07S17-F07S14-...	100	5	M8	60	18	70	70	15	14	17
DARQ-K-V-F07S22-F05S11-...	100	5	M8	60	23	70	50	11	11	22
DARQ-K-V-F10S22-F04S11	120	5	M10	80	22	95	50	11	11	22
DARQ-K-V-F10S22-F05S14-...	120	5	M10	80	22,5	95	50	15	14	22
DARQ-K-V-F10S22-F07S17-...	120	5	M10	80	22,5	95	70	18	17	22
DARQ-K-V-F10S22-F10S22-...	120	5	M10	80	22,5	95	95	22,5	22	22
DARQ-K-V-F10S27-F05S14-...	120	5	M10	80	27,5	95	50	15	14	27
DARQ-K-V-F10S27-F07S14-...	120	5	M10	80	27,5	95	70	15	14	27
DARQ-K-V-F10S27-F07S17-...	120	5	M10	80	27,5	95	70	18	17	27
DARQ-K-V-F12S27-F05S14	160	6	M12	80	27	115	70	15	14	27
DARQ-K-V-F12S27-F07S14	160	6	M12	80	27	115	70	15	14	27
DARQ-K-V-F12S27-F07S17-...	160	6	M12	80	27	115	70	18	17	27
DARQ-K-V-F12S27-F10S22-...	160	6	M12	80	27	115	95	22,5	22	27
DARQ-K-V-F12S27-F12S27-...	160	6	M12	80	27	115	115	27,5	27	27

	B1	B2	D1	H1	H2	L1	L2	T1	W2 -0,1	W3 H11	≈ 1 h11
DARQ-K-Z-F03S9-F03S9-...	80	4	M5	50	9	40	40	14	9	12,1	9
DARQ-K-Z-F04S11-F03S9-...	80	4	M5	50	11	45	40	14	9	12,1	11
DARQ-K-Z-F04S11-F04S11-...	80	4	M5	50	11	45	45	17	11	14,1	11
DARQ-K-Z-F05S14-F03S9-...	100	5	M6	60	15	50	40	14	9	12,1	14
DARQ-K-Z-F05S14-F04S11-...	100	5	M6	60	15	50	45	17	11	14,1	14
DARQ-K-Z-F05S14-F05S14-...	100	5	M6	60	15	50	50	21	14	18,1	14
DARQ-K-Z-F07S17-F04S11-...	100	5	M8	60	18	70	45	17	11	14,1	17
DARQ-K-Z-F07S17-F05S14-...	100	5	M8	60	18	70	50	21	14	18,1	17
DARQ-K-Z-F07S17-F07S14-...	100	5	M8	60	18	70	70	21	14	18,1	17
DARQ-K-Z-F10S22-F05S14-...	120	5	M10	80	22,5	95	50	21	14	18,1	22
DARQ-K-Z-F10S22-F07S17-...	120	5	M10	80	22,5	95	70	26	17	22,2	22
DARQ-K-Z-F10S22-F10S22-...	120	5	M10	80	22,5	95	95	33	22	28,2	22

Dimensions

Dimensions – Mounting adapter DARQ-B

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- [1] Drive outlet flange 1
- [2] Reducing outlet flange 2
- [3] * = N1 (number of holes flange 1)
- [4] ** = N2 (number of holes flange 2)

Dimensions

	B1	B2	D1 Ø	D2 Ø	D3 Ø	D4 Ø	D5 Ø	D6 Ø	H1	L1	L2	*N1	**N2	W1	W2
DARQ-B-F03-F03-...	80	4	36	25	5,5	36	25	5,5	50	40	40	4	4	90°	45°
DARQ-B-F04-F03-...	80	4	36	25	5,5	42	30	5,5	50	45	40	4	4	90°	45°
DARQ-B-F04-F04-...	80	4	42	30	5,5	42	30	5,5	50	45	45	4	4	90°	45°
DARQ-B-F05-F03-...	100	5	36	25	5,5	50	35	6,5	60	50	40	4	4	90°	45°
DARQ-B-F05-F04-...	100	5	42	30	5,5	50	35	6,5	60	50	45	4	4	90°	45°
DARQ-B-F05-F05-...	100	5	50	35	6,5	50	35	6,5	60	50	50	4	4	90°	45°
DARQ-B-F07-F04-...	100	5	42	30	5,5	70	55	9	60	70	45	4	4	90°	45°
DARQ-B-F07-F05-...	100	5	50	35	6,5	70	55	9	60	70	50	4	4	90°	45°
DARQ-B-F07-F07-...	100	5	70	55	9	70	55	9	60	70	70	4	4	90°	45°
DARQ-B-F10-F05-...	120	5	50	35	6,5	102	70	11	80	95	50	4	4	90°	45°
DARQ-B-F10-F07-...	120	5	70	55	9	102	70	11	80	95	70	4	4	90°	45°
DARQ-B-F10-F10-...	120	5	102	70	11	102	70	11	80	95	95	4	4	90°	45°
DARQ-B-F12-F07-...	160	6	70	55	9	125	85	13	80	115	70	4	4	90°	45°
DARQ-B-F12-F10-...	160	6	102	70	11	125	85	13	80	115	95	4	4	90°	45°
DARQ-B-F12-F12-...	160	6	125	85	13	125	85	13	80	115	115	4	4	90°	45°
	B1	B2	D1 Ø	D2 Ø	D3 Ø	D4 Ø	D5 Ø	D6 Ø	H1	L1	L2	*N1	**N2	W1	W2
DARQ-B-F14-F10-...	160	6	102	70	11	140	100	17	80	135	95	4	4	90°	45°
DARQ-B-F14-F12-...	160	6	125	85	13	140	100	17	80	135	115	4	4	90°	45°
DARQ-B-F14-F14-...	160	6	140	100	17	140	100	17	80	135	135	4	4	90°	45°
DARQ-B-F16-F12-...	200	6	125	85	13	165	130	21	100	160	115	4	4	90°	45°
DARQ-B-F16-F14-...	200	6	140	100	17	165	130	21	100	160	135	4	4	90°	45°
DARQ-B-F16-F16-...	200	6	165	130	21	165	130	21	100	160	160	4	4	90°	45°
DARQ-B-F25-F14-...	400	10	140	100	17	254	200	17	200	270	135	8	4	45°	22,5°
DARQ-B-F25-F16-...	400	10	165	130	21	254	200	17	200	270	160	8	4	45°	22,5°
DARQ-B-F25-F25-...	400	10	254	200	17	254	200	17	200	270	270	8	4	45°	22,5°
DARQ-B-F30-F16-...	400	10	165	130	21	298	230	21	200	320	160	8	4	45°	22,5°
DARQ-B-F30-F25-...	400	10	254	200	17	298	230	21	200	320	270	8	4	45°	22,5°
DARQ-B-F30-F30-...	400	10	298	200	21	298	230	21	200	320	320	8	4	45°	22,5°

Ordering data

2-way, flange according to ANSI 150

	Nominal diameter DN	Nominal size DN	Part no.	Type
	1/2"	15	4810851	VZBF-1/2-P1-20-D-2-F0304-V15V15
	3/4"	20	4810852	VZBF-3/4-P1-20-D-2-F0304-V15V15
	1"	25	4810853	VZBF-1-P1-20-D-2-F0405-V15V15
	1 1/4"	32	4810854	VZBF-1 1/4-P1-20-D-2-F0405-V15V15
	1 1/2"	40	4810855	VZBF-1 1/2-P1-20-D-2-F0507-V15V15
	2"	50	4810856	VZBF-2-P1-20-D-2-F0507-V15V15
	2 1/2"	65	4810857	VZBF-2 1/2-P1-20-D-2-F0710-V15V15
	3"	80	4810859	VZBF-3-P1-20-D-2-F0710-V15V15
	4"	100	4810860	VZBF-4-P1-20-D-2-F1012-V15V15
	6"	150	4810861	VZBF-6-P1-20-D-2-F1012-V15V16
	8"	200	4810862	VZBF-8-P1-20-D-2-F14-V15V16

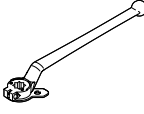
2-way with hand lever, flange according to ANSI 150

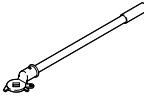
	Nominal diameter DN	Nominal size DN	Part no.	Type
	1/2"	15	8097467	VZBF-1/2-P1-20-D-2-F0304-M-V15V15
	3/4"	20	8097468	VZBF-3/4-P1-20-D-2-F0304-M-V15V15
	1"	25	8097469	VZBF-1-P1-20-D-2-F0405-M-V15V15
	1 1/4"	32	8097470	VZBF-1 1/4-P1-20-D-2-F0405-M-V15V15
	1 1/2"	40	8097471	VZBF-1 1/2-P1-20-D-2-F0507-M-V15V15
	2"	50	8097472	VZBF-2-P1-20-D-2-F0507-M-V15V15
	2 1/2"	65	8097473	VZBF-2 1/2-P1-20-D-2-F0710-M-V15V15
	3"	80	8097474	VZBF-3-P1-20-D-2-F0710-M-V15V15
	4"	100	8097475	VZBF-4-P1-20-D-2-F1012-M-V15V15

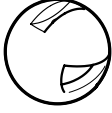
2-way with hand lever, flange according to DIN EN 1092-1

	Nominal diameter DN	Nominal size DN	Part no.	Type
	1/2"	15	8247177	VZBF-1/2-P2-40-D-B1-2-F04-M-V4V4
	3/4"	20	8247178	VZBF-3/4-P2-40-D-B1-2-F0405-M-V4V4
	1"	25	8247179	VZBF-1-P2-40-D-B1-2-F0405-M-V4V4
	1 1/4"	32	8247180	VZBF-1 1/4-P2-40-D-B1-2-F0507-M-V4V4
	1 1/2"	40	8247181	VZBF-1 1/2-P2-40-D-B1-2-F0507-M-V4V4
	2"	50	8247182	VZBF-2-P2-40-D-B1-2-F0507-M-V4V4
	2 1/2"	65	8247183	VZBF-2 1/2-P2-16-D-B1-2-F0710-M-V4V4
	3"	80	8247184	VZBF-3-P2-16-D-B1-2-F0710-M-V4V4
	4"	100	8247185	VZBF-4-P2-16-D-B1-2-F0710-M-V4V4
	5"	125	8247186	VZBF-5-P2-16-D-B1-2-F1012-M-V4V4
	6"	150	8247187	VZBF-6-P2-16-D-B1-2-F1012-M-V4V4
	8"	200	8247188	VZBF-8-P2-16-D-B1-2-F1214-M-V4V4

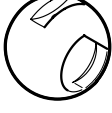
Accessories

Hand lever VAOH				
	Description	Product weight	Part no.	Type
	For connection 1/2" ... 3/4"	150 g	4895982	VAOH-F9-9-H9-A
	For connection 1" ... 1 1/4"		4895983	VAOH-F9-11-H9-A
	For connection 1 1/2" ... 2"	370 g	4895984	VAOH-F9-14-H9-A
	For connection 2 1/2" ... 3"	850 g	4895985	VAOH-F9-17-H9-A
	For connection 4"	900 g	4895986	VAOH-F9-22-H9-A

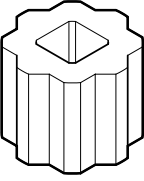
Hand lever VAOH-F9-27/36				
	Description	Product weight	Part no.	Type
	For connection 6"	1,800 g	4895987	VAOH-F9-27-H9-A
	For connection 8"	3,800 g	4895988	VAOH-F9-36-H9-A

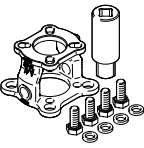
V-port ball VAVC, passage opening 30°				
	Nominal size DN	Product weight	Part no.	Type
	15	52.6 g	8083128	VAVC-F9-B-V30-1/2"
	20		8083129	VAVC-F9-B-V30-3/4"
	25	159.6 g	8083130	VAVC-F9-B-V30-1"
	32		8083131	VAVC-F9-B-V30-1 1/4"
	40	257.7 g	8083132	VAVC-F9-B-V30-1 1/2"
	50	516.9 g	8083133	VAVC-F9-B-V30-2"
	65	954.3 g	8083134	VAVC-F9-B-V30-2 1/2"
	80	2,384.1 g	8083135	VAVC-F9-B-V30-3"
	100	3,287.3 g	8083136	VAVC-F9-B-V30-4"

V-port ball VAVC, passage opening 60°				
	Nominal size DN	Product weight	Part no.	Type
	15	51.1 g	8083137	VAVC-F9-B-V60-1/2"
	20		8083138	VAVC-F9-B-V60-3/4"
	25	154.4 g	8083139	VAVC-F9-B-V60-1"
	32		8083140	VAVC-F9-B-V60-1 1/4"
	40	248.5 g	8083141	VAVC-F9-B-V60-1 1/2"
	50	501.5 g	8083142	VAVC-F9-B-V60-2"
	65	922 g	8083143	VAVC-F9-B-V60-2 1/2"
	80	2,323.6 g	8083144	VAVC-F9-B-V60-3"
	100	3,203.9 g	8083145	VAVC-F9-B-V60-4"

V-port ball VAVC, passage opening 90°				
	Nominal size DN	Product weight	Part no.	Type
	15	49.8 g	8083146	VAVC-F9-B-V90-1/2"
	20		8083147	VAVC-F9-B-V90-3/4"
	25	150.5 g	8083148	VAVC-F9-B-V90-1"
	32		8083149	VAVC-F9-B-V90-1 1/4"
	40	241.5 g	8083150	VAVC-F9-B-V90-1 1/2"
	50	489.4 g	8083151	VAVC-F9-B-V90-2"
	65	896.8 g	8083152	VAVC-F9-B-V90-2 1/2"
	80	2,276.4 g	8083153	VAVC-F9-B-V90-3"
	100	3,139 g	8083154	VAVC-F9-B-V90-4"

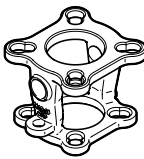
Accessories

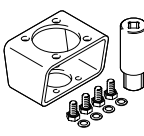
Reducing sleeve DARQ				
	Length	Product weight	Part no.	Type
	11 mm	5 g	8082117	DARQ-R-A-S11-S9-11
		25 g	8082131	DARQ-R-A-S11-S9-11-P5
		50 g	8082140	DARQ-R-A-S11-S9-11-P10
		250 g	8082145	DARQ-R-A-S11-S9-11-P50
	12 mm	7 g	8082116	DARQ-R-A-S11-S8-12
		35 g	8082130	DARQ-R-A-S11-S8-12-P5
	16 mm	10 g	8082121	DARQ-R-A-S14-S12-16
		13 g	8082120	DARQ-R-A-S14-S11-16
		16 g	8082119	DARQ-R-A-S14-S10-16
		18 g	8082118	DARQ-R-A-S14-S9-16
		20 g	8086383	DARQ-R-A-S14-S8-16
		65 g	8082133	DARQ-R-A-S14-S11-16-P5
		90 g	8082132	DARQ-R-A-S14-S9-16-P5
		100 g	8086388	DARQ-R-A-S14-S8-16-P5
		130 g	8082142	DARQ-R-A-S14-S11-16-P10
		180 g	8082141	DARQ-R-A-S14-S9-16-P10
		650 g	8082147	DARQ-R-A-S14-S11-16-P50
		900 g	8082146	DARQ-R-A-S14-S9-16-P50
	17 mm	19 g	8082123	DARQ-R-A-S17-S14-17
		25 g	8086385	DARQ-R-A-S17-S12-17
		29 g	8082122	DARQ-R-A-S17-S11-17
		34 g	8096914	DARQ-R-A-S17-S9-17
		36 g	8086384	DARQ-R-A-S17-S8-17
		95 g	8082135	DARQ-R-A-S17-S14-17-P5
		125 g	8086389	DARQ-R-A-S17-S12-17-P5
		145 g	8082134	DARQ-R-A-S17-S11-17-P5
		190 g	8082143	DARQ-R-A-S17-S14-17-P10
		1,450 g	8082148	DARQ-R-A-S17-S11-17-P50
	22 mm	46 g	8082126	DARQ-R-A-S22-S17-22
		52 g	8082125	DARQ-R-A-S22-S16-22
		62 g	8082124	DARQ-R-A-S22-S14-22
		75 g	8086386	DARQ-R-A-S22-S11-22
		230 g	8082137	DARQ-R-A-S22-S17-22-P5
		310 g	8082136	DARQ-R-A-S22-S14-22-P5
		460 g	8082144	DARQ-R-A-S22-S17-22-P10
		2,300 g	8082149	DARQ-R-A-S22-S17-22-P50
	27 mm	80 g	8082127	DARQ-R-A-S27-S22-27
		121 g	8086387	DARQ-R-A-S27-S17-27
		400 g	8082138	DARQ-R-A-S27-S22-27-P5
	36 mm	140 g	8096913	DARQ-R-A-S27-S14-27
		215 g	8082128	DARQ-R-A-S36-S27-36
		286 g	8096915	DARQ-R-A-S36-S22-36
		1,075 g	8082139	DARQ-R-A-S36-S27-36-P5
	46 mm	410 g	8082129	DARQ-R-A-S46-S36-46
		618 g	8215769	DARQ-R-A-S46-S27-46
		709 g	8215771	DARQ-R-A-S46-S22-46

Mounting kit DARQ			
	Product weight	Part no.	Type
	232 g	8088299	DARQ-K-V-F04S11-F03S9-R1

Accessories

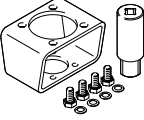
Mounting kit DARQ			
	Product weight	Part no.	Type
	255 g	8088301	DARQ-K-V-F05S14-F03S9-R1
	342 g	8088297	DARQ-K-V-F05S14-F04S11-R1
	563 g	8088302	DARQ-K-V-F07S17-F04S11-R1
	771 g	8088303	DARQ-K-V-F07S17-F05S14-R1
	1,515 g	8088300	DARQ-K-V-F10S22-F05S14-R1
	1,977 g	8215767	DARQ-K-V-F10S27-F07S17-R1
	2,010 g	8088298	DARQ-K-V-F10S22-F07S17-R1

Mounting flange adapter DARQ-B-...-R1					
	Connection 1, design	Connection 2, design	Product weight	Part no.	Type
	Hole pattern 04, Hole pattern 05	Hole pattern 03, Hole pattern 04	120 g	8087462	DARQ-B-F0405-F0304-R1
	Hole pattern 05, Hole pattern 07	Hole pattern 04, Hole pattern 05	300 g	8087463	DARQ-B-F0507-F0405-R1
	Hole pattern 07, Port pattern 10	Hole pattern 05, Hole pattern 07	1,610 g	8087465	DARQ-B-F0710-F0507-R1
	Port pattern 10, Port pattern 12	Port pattern 10	950 g	8087464	DARQ-B-F1012-F10-R1

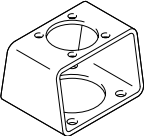
Mounting kit DARQ-K-V/DARQ-K-Z						
	Design	Connection 1, design	Connection 2, design	Product weight	Part no.	Type
	Square socket and square drive, Assembly kit	SW9, Hole pattern 03	SW9, Hole pattern 03	392 g	8084186	DARQ-K-V-F03S9-F03S9-R13
				410 g	8084187	DARQ-K-V-F04S11-F03S9-R13
		SW11, Hole pattern 04	SW11, Hole pattern 04	480 g	8084188	DARQ-K-V-F04S11-F04S11-R13
				630 g	8084189	DARQ-K-V-F05S14-F03S9-R13
		SW14, Hole pattern 05	SW9, Hole pattern 03	725 g	8084190	DARQ-K-V-F05S14-F04S11-R13
			SW11, Hole pattern 04	830 g	8084191	DARQ-K-V-F05S14-F05S14-R13
			SW14, Hole pattern 05	823 g	8084192	DARQ-K-V-F07S17-F04S11-R13
		SW17, Hole pattern 07	SW11, Hole pattern 04	926 g	8084193	DARQ-K-V-F07S17-F05S14-R13
			SW14, Hole pattern 05	980 g	8084194	DARQ-K-V-F07S17-F07S14-R13
			SW14, Hole pattern 07	866 g	8132814	DARQ-K-V-F07S17-F03S9-R13
		SW17, Hole pattern 0705	SW9, Hole pattern 0403	986 g	8084195	DARQ-K-V-F07S22-F05S11-R13
		SW22, Port pattern 10	SW11, Hole pattern 05	1,410 g	8133487	DARQ-K-V-F10S22-F04S11-R13
			SW11, Hole pattern 04	1,432 g	8084196	DARQ-K-V-F10S22-F05S14-R13
			SW14, Hole pattern 05	2,045 g	8084197	DARQ-K-V-F10S22-F07S17-R13
			SW17, Hole pattern 07	2,113 g	8084198	DARQ-K-V-F10S22-F10S22-R13
		SW27, Port pattern 10	SW11, Hole pattern 04	1,935 g	8084199	DARQ-K-V-F10S27-F05S14-R13
			SW14, Hole pattern 05	2,134 g	8086439	DARQ-K-V-F10S27-F07S14-R13
			SW17, Hole pattern 07	2,116 g	8084200	DARQ-K-V-F10S27-F07S17-R13

Accessories

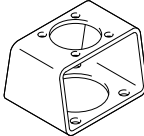
Mounting kit DARQ-K-V/DARQ-K-Z

	Design	Connection 1, design	Connection 2, design	Product weight	Part no.	Type
	Square socket and square drive, Assembly kit	SW27, Port pattern 12	SW14, Hole pattern 05	2,728 g	8133486	DARQ-K-V-F12S27-F05S14-R13
			SW14, Hole pattern 07	2,655 g	8131545	DARQ-K-V-F12S27-F07S14-R13
			SW17, Hole pattern 07	2,615 g	8084201	DARQ-K-V-F12S27-F07S17-R13
			SW22, Port pattern 10	2,753 g	8084202	DARQ-K-V-F12S27-F10S22-R13
			SW27, Port pattern 12	3,552 g	8084203	DARQ-K-V-F12S27-F12S27-R13
	Two-flats and male square, Assembly kit	SW9, Hole pattern 03	SW9, Hole pattern 03	385 g	8085017	DARQ-K-Z-F03S9-F03S9-R13
				400 g	8085016	DARQ-K-Z-F04S11-F03S9-R13
		SW11, Hole pattern 04	SW11, Hole pattern 04	465 g	8085018	DARQ-K-Z-F04S11-F04S11-R13
				620 g	8085019	DARQ-K-Z-F05S14-F03S9-R13
		SW14, Hole pattern 05	SW9, Hole pattern 03	710 g	8085020	DARQ-K-Z-F05S14-F04S11-R13
			SW11, Hole pattern 04	795 g	8085021	DARQ-K-Z-F05S14-F05S14-R13
			SW14, Hole pattern 05	810 g	8085022	DARQ-K-Z-F07S17-F04S11-R13
		SW17, Hole pattern 07	SW11, Hole pattern 04	890 g	8085023	DARQ-K-Z-F07S17-F05S14-R13
			SW14, Hole pattern 05	945 g	8085024	DARQ-K-Z-F07S17-F07S14-R13
			SW14, Hole pattern 07	1,396 g	8085026	DARQ-K-Z-F10S22-F05S14-R13
		SW22, Port pattern 10	SW14, Hole pattern 05	1,970 g	8085027	DARQ-K-Z-F10S22-F07S17-R13
			SW17, Hole pattern 07	1,980 g	8085025	DARQ-K-Z-F10S22-F10S22-R13
			SW22, Port pattern 10			

Mounting flange adapter DARQ-B-...-R13

	Connection 1, design	Connection 2, design	Product weight	Part no.	Type
	Hole pattern 03	Hole pattern 03	260 g	8082977	DARQ-B-F03-F03-R13
	Hole pattern 04	Hole pattern 04	270 g	8082978	DARQ-B-F04-F03-R13
			275 g	8082979	DARQ-B-F04-F04-R13
	Hole pattern 05	Hole pattern 04	1,375 g	8083004	DARQ-B-F04-F04-R13-P5
			442 g	8082980	DARQ-B-F05-F03-R13
		Hole pattern 04	461 g	8082981	DARQ-B-F05-F04-R13
			2,305 g	8083005	DARQ-B-F05-F04-R13-P5
		Hole pattern 05	478 g	8082982	DARQ-B-F05-F05-R13
			2,390 g	8083006	DARQ-B-F05-F05-R13-P5
	Hole pattern 07	Hole pattern 04	514 g	8082983	DARQ-B-F07-F04-R13
		Hole pattern 05	530 g	8082984	DARQ-B-F07-F05-R13
			2,650 g	8083007	DARQ-B-F07-F05-R13-P5
		Hole pattern 07	583 g	8082985	DARQ-B-F07-F07-R13
			2,915 g	8083008	DARQ-B-F07-F07-R13-P5
	Port pattern 10	Hole pattern 05	836 g	8082986	DARQ-B-F10-F05-R13
		Hole pattern 07	920 g	8082987	DARQ-B-F10-F07-R13
			4,600 g	8083009	DARQ-B-F10-F07-R13-P5
		Port pattern 10	1,037 g	8082988	DARQ-B-F10-F10-R13
			5,185 g	8083010	DARQ-B-F10-F10-R13-P5
	Port pattern 12	Hole pattern 07	1,504 g	8082989	DARQ-B-F12-F07-R13

Accessories

Mounting flange adapter DARQ-B-...-R13					
	Connection 1, design	Connection 2, design	Product weight	Part no.	Type
	Port pattern 12	Port pattern 10	1,688 g	8082990	DARQ-B-F12-F10-R13
		Port pattern 12	1,802 g	8082991	DARQ-B-F12-F12-R13
	Port pattern 14	Port pattern 10	1,775 g	8082992	DARQ-B-F14-F10-R13
		Port pattern 12	1,889 g	8082993	DARQ-B-F14-F12-R13
		Port pattern 14	1,976 g	8082994	DARQ-B-F14-F14-R13
	Port pattern 16	Port pattern 12	2,648 g	8082995	DARQ-B-F16-F12-R13
		Port pattern 14	2,792 g	8082996	DARQ-B-F16-F14-R13
		Port pattern 16	2,844 g	8082997	DARQ-B-F16-F16-R13
	Port pattern 25	Port pattern 14	14,734 g	8082998	DARQ-B-F25-F14-R13
		Port pattern 16	15,384 g	8082999	DARQ-B-F25-F16-R13
		Port pattern 25	18,895 g	8083000	DARQ-B-F25-F25-R13
	Port pattern 30	Port pattern 16	16,740 g	8083001	DARQ-B-F30-F16-R13
		Port pattern 25	20,250 g	8083002	DARQ-B-F30-F25-R13
		Port pattern 30	21,644 g	8083003	DARQ-B-F30-F30-R13