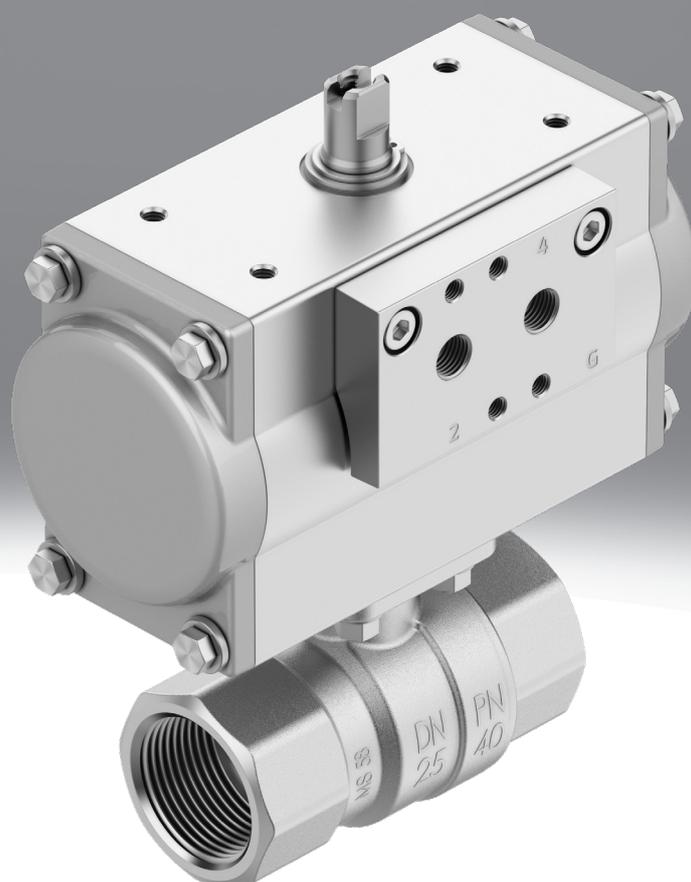


Ball valve unit VAPB

FESTO



Characteristics

At a glance

- Electric or pneumatic actuation
- Flange hole pattern according to ISO 5211
- Connection pattern to NAMUR VDI/VDE 3845
- Corrosion-resistant and acid-resistant versions
- Combination of a pneumatic quarter-turn actuator and a ball valve
- The flow is fully opened or closed in both directions
- Sensor boxes or limit switches for sensing the end positions can be mounted directly on the actuator unit

Type code

001	Series
VAPB	Ball valve
002	Version
A	Ball valve actuator unit
003	Nominal diameter 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"
004	Process valve connection
F	Rp female thread according to DIN EN 10226-1

005	Nominal pressure [bar]
25	25
40	40
006	Flanged connection
F03	Hole pattern 03
F0304	Hole pattern 03 and 04
F0405	Hole pattern 04 and 05
F05	Hole pattern 05
F07	Hole pattern 07
007	Drive
PA	DFPD, double-acting
PB	DFPD, single-acting
008	Torque [Nm]
10	10
20	20
40	40
60	60
80	80
160	160

Datasheet

General technical data

Nominal size DN	15	20	25	32	40	50	63
Type of mounting	In-line installation						
Mounting position	optional						
Design	2-way ball valve, Semi-rotary drive						
Type of actuation	Pneumatic						
Sealing principle	Soft						
Nominal pressure PN	40				25		
Based on standard	EN 10226-1, ISO 5211	EN 10226-1	EN 10226-1, ISO 5211	EN 10226-1	EN 10226-1, ISO 5211		
Flow rate Kv	5.9 ... 17 m ³ /h	41 m ³ /h	70 m ³ /h	121 m ³ /h	200 m ³ /h	292 m ³ /h	535 m ³ /h

Operating and ambient conditions

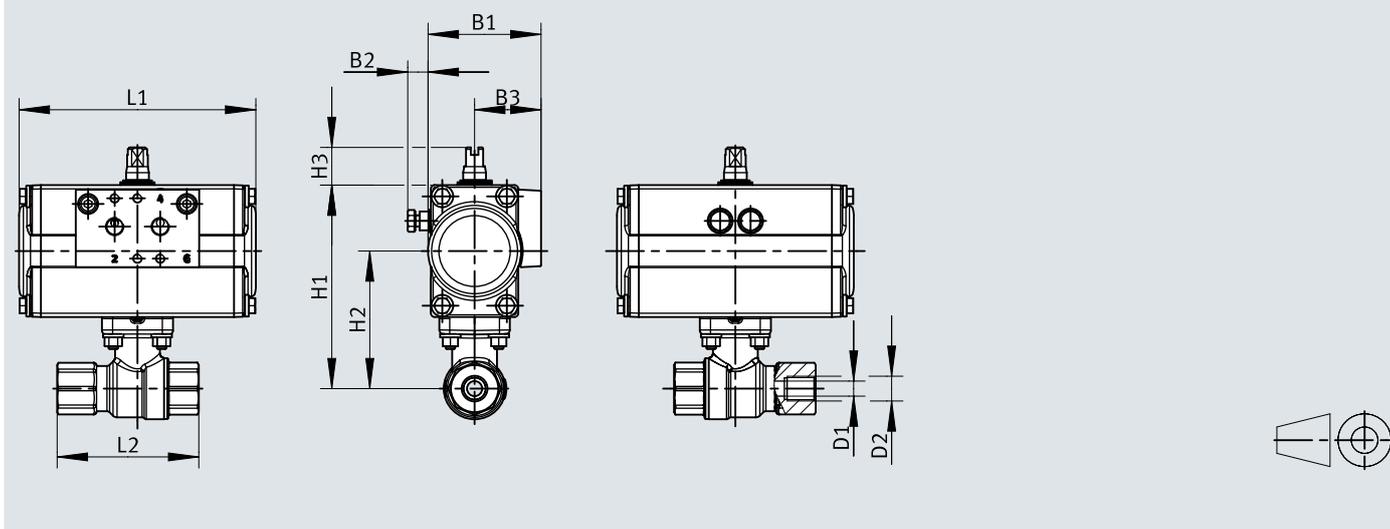
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Operating pressure	0.55 ... 0.8 MPa
Operating pressure	79.75 ... 116 psi
Media temperature	-10 ... 200°C
Medium	Compressed air to ISO 8573-1:2010 [:-:-], Inert gases, Water – no water vapour, Neutral fluids, Other media on request
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Corrosion resistance class CRC	1 - Low corrosion stress

Materials

Note on materials	RoHS-compliant
Material housing	Brass, nickel-plated
Material number housing	2.0402, CW617N
Material seat seal	PTFE
Material seals	HNBR, PTFE
Material ball	Brass, Hard-chrome-plated
Material number ball	2.0401, 2.0402, CW614N, CW617N
Material shaft	Brass
Material number shaft	2.0401, CW614N
LABS (PWIS) conformity	VDMA24364 zone III

Dimensions

Dimensions – DFPD, double-acting

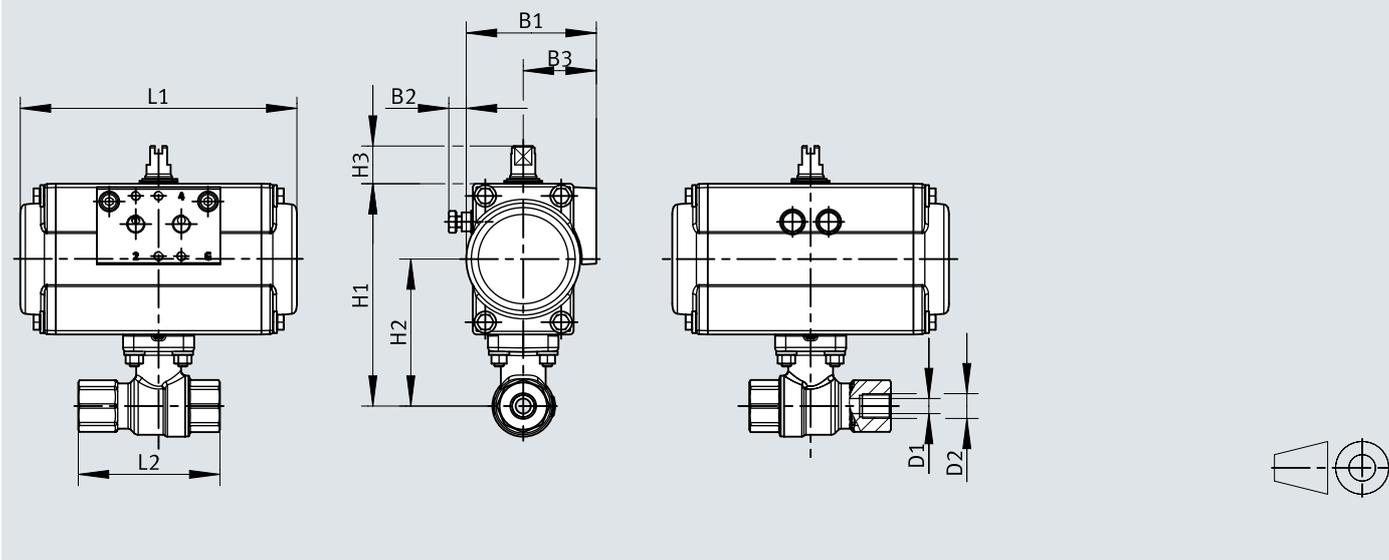
Download CAD data www.festo.com

	B1	B2	B3	D1 Ø	D2	H1	H2	H3	L1	L2
VAPB-A-1/4-F-40-F03-PA10	59,5	10,7	35	10	Rp 1/4"	108	73	20	124,7	75
VAPB-A-3/8-F-40-F03-PA10	59,5	10,7	35	10	Rp 3/8"	108	73	20	124,7	75
VAPB-A-1/2-F-40-F03-PA10	59,5	10,7	35	15	Rp 1/2"	108	73	20	124,7	75
VAPB-A-3/4-F-40-F03-PA10	59,5	10,7	35	20	Rp 3/4"	110,5	75,5	20	124,7	80
VAPB-A-1-F-40-F0304-PA20	68,5	9,2	38,5	25	Rp 1"	124	84	20	133,3	90
VAPB-A-1 1/4-F-40-F0405-PA20	68,5	9,2	38,5	32	Rp 1 1/4"	135	95	20	133,3	110
VAPB-A-1 1/2-F-25-F0405-PA40	81,5	8,2	45	40	Rp 1 1/2"	153,5	107,5	20	151,4	120
VAPB-A-2-F-25-F05-PA40	81,5	8,2	45	50	Rp 2"	165	119	20	151,4	140
VAPB-A-2 1/2-F-25-F07-PA60	93,5	11	50,5	63	Rp 2 1/2"	187,8	135,3	20	170	143

Dimensions

Dimensions – DFPD, single-acting

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	B1	B2	B3	D1 Ø	D2	H1	H2	H3	L1	L2
VAPB-A-1/4-F-40-F03-PB20	68,5	9,2	38,5	10	Rp 1/4"	118	78	20	145,7	75
VAPB-A-3/8-F-40-F03-PB20	68,5	9,2	38,5	10	Rp 3/8"	118	78	20	145,7	75
VAPB-A-1/2-F-40-F03-PB20	68,5	9,2	38,5	15	Rp 1/2"	118	78	20	145,7	75
VAPB-A-3/4-F-40-F03-PB20	68,5	9,2	38,5	20	Rp 3/4"	120,5	80,5	20	145,7	80
VAPB-A-1-F-40-F0304-PB40	81,5	8,2	45	25	Rp 1"	136	90	20	170,4	90
VAPB-A-1 1/4-F-40-F0405-PB60	93,5	11	50,5	32	Rp 1 1/4"	160	107,5	20	201	110
VAPB-A-1 1/2-F-25-F0405-PB60	93,5	11	50,5	40	Rp 1 1/2"	166,5	114	20	201	120
VAPB-A-2-F-25-F05-PB80	99	9	53	50	Rp 2"	183	128	20	270,9	140
VAPB-A-2 1/2-F-25-F07-PB160	120	13,4	63,5	63	Rp 2 1/2"	226,75	149,75	20	270,9	143

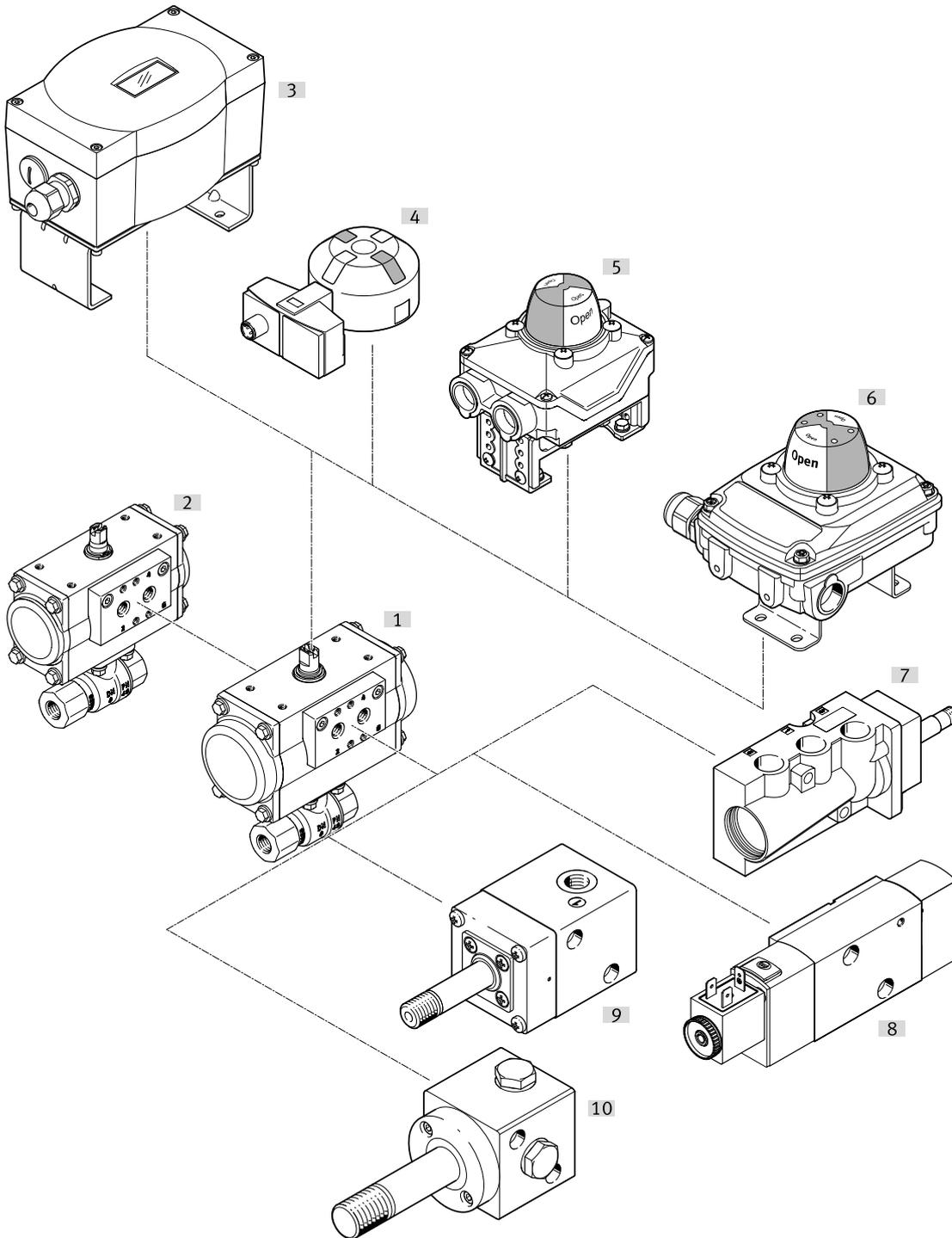
Ordering data

DFPD, double-acting			
	Nominal size DN	Part no.	Type
	15	8191919	VAPB-A-1/2-F-40-F03-PA10
		8191918	VAPB-A-3/8-F-40-F03-PA10
		8191917	VAPB-A-1/4-F-40-F03-PA10
	20	8191920	VAPB-A-3/4-F-40-F03-PA10
	25	8191921	VAPB-A-1-F-40-F0304-PA20
	32	8191922	VAPB-A-1 1/4-F-40-F0405-PA20
	40	8191923	VAPB-A-1 1/2-F-25-F0405-PA40
	50	8191924	VAPB-A-2-F-25-F05-PA40
	63	8191925	VAPB-A-2 1/2-F-25-F07-PA60

DFPD, single-acting			
	Nominal size DN	Part no.	Type
	15	8191926	VAPB-A-1/4-F-40-F03-PB20
		8191927	VAPB-A-3/8-F-40-F03-PB20
		8191928	VAPB-A-1/2-F-40-F03-PB20
	20	8191929	VAPB-A-3/4-F-40-F03-PB20
	25	8191930	VAPB-A-1-F-40-F0304-PB40
	32	8191931	VAPB-A-1 1/4-F-40-F0405-PB60
	40	8191932	VAPB-A-1 1/2-F-25-F0405-PB60
	50	8191933	VAPB-A-2-F-25-F05-PB80
	63	8191934	VAPB-A-2 1/2-F-25-F07-PB160

Peripherals

Peripherals overview



Accessories			→ Link
Type/order code	Description		
[1] Ball valve actuator unit VAPB	Single-acting		vapb
[2] Ball valve actuator unit VAPB	Double-acting		vapb
[3] Positioner CMSX	For controlling the position of quarter-turn actuators in process automation systems		cmsx
[4] Sensor boxes SRBG	For electrical feedback and control of the position of process valves actuated by quarter-turn actuators		srbg
[5] Limit switch box SRBK	SRBK-CA4-... Variants with pre-assembled position		srbk
[6] Sensor boxes SRBC	For electrical feedback and control of the position of process valves operated by quarter-turn actuators		srbk
[7] Solenoid valve NVF3	For F solenoid coil and explosion-proof F solenoid coil		nvf3
[8] Solenoid valves VSNC	For single-acting and double-acting quarter-turn actuators with a connection pattern VDI/VDE 3845		vsnc
[9] Solenoid valves VOFC	Solenoid valve with solenoid coil, NAMUR connection pattern		vofc

Peripherals

Accessories		→ Link
Type/order code	Description	
[10] Solenoid valves VOFD	Solenoid valve with solenoid coil, NAMUR connection pattern	vofd