

Angle seat valve VZXA

FESTO



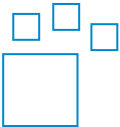
Characteristics

At a glance

The angle seat valves VZXA are externally controlled valves which are actuated by a direct supply of compressed air and are used to shut off gaseous or liquid media in piping systems. In the process, a spindle with a soft-sealing valve disc is raised or lowered using a pneumatic actuator. The valve seat of all versions mentioned below is slanted at an angle of approx. 40° in relation to the media flow. The flow direction is determined by the design of the valve (angle seat fitting and actuator).

Ordering data - modular system

[Link](#)  [VZXA](#)



Configurable product

This product and all its product options can be ordered online via the configurator.

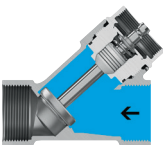
Diagrams

[Link](#)  [VZXA](#)



Flow direction

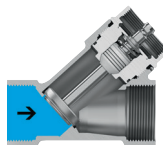
[A] Above valve seat, for gaseous media



VZXA-A:
For gaseous media, “closing in the direction of the media flow” is used

- Closed via reduced spring force, N/C

[B] Below valve seat, for gaseous and liquid media



VZXA-B:
For gaseous and liquid media, “closing against the direction of the media flow” is used in order to prevent or reduce water hammer effects

- Closed via spring force, NC
- Opened by spring force, NO
- Double-acting, DA

Line connection

[C] Clamp



Available in connection sizes DN13, 1/2“ to DN32, 1 1/4“

[T] Threaded collar



Available in connection sizes DN13, 1/2“ to DN65, 2 1/2“

[W] Welded end



Available in connection sizes DN13, 1/2“ to DN32, 1 1/4“

Characteristics

Connection standard

[S1] ASME BPE

Only in combination with line connection [C] or [W]

[S3] DIN EN ISO 1127 / ISO 4200

Only in combination with line connection [W]

- Ideal for controlling material flows (gaseous) in systems that do not permit leakage

[S6] G thread to DIN ISO 228

Only in combination with line connection [T]

- Cylindrical Whitworth pipe threads to DIN ISO 228-1 are non-metallic sealing. They must either be provided with an annular seal outside the thread or must be sealed by wrapping the thread with PTFE or hemp.

[S13] Rc thread to DIN 10226

Only in combination with line connection [T]

- Rc threads to DIN 10226-2 are pipe threads for fittings that seal on the thread. The female thread is tapered like the male thread.

[S2] DIN 11850 R2

Only in combination with line connection [W]

- Ideal for controlling material flows (gaseous) in systems that do not permit leakage

[S5] DIN 32676, series A

Only in combination with line connection [C]

- Ideal for controlling material flows in systems that require a quick and easy to release connection

[S7] NPT thread to ANSI/A SME B 1.20.1

Only in combination with line connection [T]

- American, tapered NPT pipe threads to ANSI/ASME B 1.20.1 form a seal with sealing material on the thread. The female thread is tapered like the male thread.

[S15] DIN 32676, series B

Only in combination with line connection [C]

- Ideal for controlling material flows in systems that require a quick and easy to release connection

Drive

[K] Piston drive

With low space requirement

- Can close under pressure up to 10 bar

[M] Diaphragm actuator

No stick-slip effect

- Ideal for high force requirements and control applications

Drive size

[46] 46 mm

Pressure range 3 to 10 bar

- For connection sizes DN13 – 1/2" to DN25 – 1"

[90] 90 mm

Pressure range 3 to 7 bar

- For connection sizes DN32 – 1 1/4" to DN50 – 2"

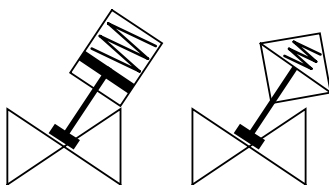
[75] 75 mm

Pressure range 3 to 10 bar

- For connection sizes DN20 – 3/4" to DN40 – 1 1/2"

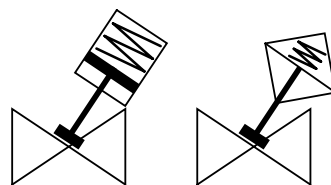
Control function

[L] Closed via spring force, N/C



In the rest position, the valve is closed by springs. When the actuator is supplied with operating pressure, it raises the control piston and, at the same time, the valve disc too – this opens the valve.

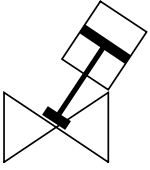
[PR] Closed via reduced spring force, N/C



In the rest position, the valve is closed by a spring (reduced spring force for low operating pressures). When the actuator is supplied with operating pressure, it raises the control piston and, at the same time, the valve disc too – this opens the valve.

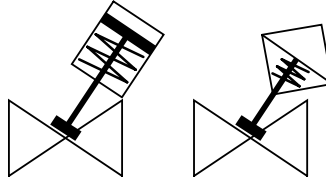
Characteristics

[D] Double-acting



The alternating pneumatic activation of the actuator chambers carries out the control function. Only available for the piston drive.

[S] Opened via spring force, N/O



In the rest position, the valve is opened by a spring. When the actuator is supplied with operating pressure, it lowers the control piston and, at the same time, the valve disc too – this closes the valve.

EU certification

[EX4] II 2GD

ATEX category for gas II 2G

- Type of ignition protection for gas c T6 ... T3 X
- ATEX category for dust II 2D
- Type of ignition protection for dust c T80 °C ... T200 °C X
- Explosion-proof ambient temperature rating $0^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

Type code

001	Series
VZXA	Process valve

002	Flow direction
A	Above valve seat, for gaseous media
B	Below valve seat, for gaseous and liquid media

003	Line connection
C	Clamp
T	Threaded collar
W	Welded end

004	Connection standard
S1	ASME BPE
S2	DIN 11850 R2
S3	DIN EN ISO 1127 / ISO 4200
S5	DIN 32676, series A
S6	G thread to DIN ISO 228
S7	NPT thread to ANSI/A SME B 1.20.1
S13	Rc thread to DIN 10226
S15	DIN 32676, series B

005	Connection size
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"
13	DN13
20	DN20
25	DN25
32	DN32
40	DN40
50	DN50
65	DN65

006	Temperature of medium
M2	-10 ... +180°C
M3	-30 ... +200 °C
M6	-10 ... +60°C
M7	→+100 ... +230°C
M9	→+100 ... +220°C

007	Valve housing material
B1	Brass
V13	Stainless steel 1.4409
V14	Stainless steel ASTM A351-CF3M

008	Seat seal material
P	PEEK
T	PTFE
TP	PTFE modified

009	Medium pressure
4	0 ... 4 bar
4.4	0 ... 4.4 bar
4.8	0 ... 4.8 bar
5.6	0 ... 5.6 bar
5.8	0 ... 5.8 bar
6	0 ... 6 bar
6.2	0 ... 6.2 bar
6.8	0 ... 6.8 bar
7.5	0 ... 7.5 bar
8	0 ... 8 bar
8.3	0 ... 8.3 bar
9.3	0 ... 9.3 bar
10	0 ... 10 bar
11.5	0 ... 11.5 bar
12.2	0 ... 12.2 bar
12.8	0 ... 12.8 bar
13.5	0 ... 13.5 bar
14.5	0 ... 14.5 bar
15.5	0 ... 15.5 bar
16	0 ... 16 bar
23	0 ... 23 bar
25	0 ... 25 bar
30	0 ... 30 bar

010	Drive
K	Piston drive
M	Diaphragm actuator

011	Drive size
46	46 mm
75	75 mm
90	90 mm

012	Stroke [mm]
17	17
20	20
26	26

013	Control function
	Closed via spring force, N/C
D	Double-acting
S	Opened via spring force, N/O
PR	Closed via reduced spring force, N/C

014	Drive housing material
PM	Polymer
V4	Stainless steel 1.4408

015	EU certification
	None
EX4	II 2GD

Datasheet

General technical data VZXA, with piston drive

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Size of drive	46 mm	46 ... 75 mm			75 mm	
Stroke	17 mm	17 ... 20 mm			20 mm	
Flow rate Kv	6 ... 6.6 m³/h	13.3 ... 14.5 m³/h	20.3 ... 22.6 m³/h	27.9 ... 30.3 m³/h	41.4 m³/h	50.1 m³/h
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Mounting position	optional					
Valve function	2/2					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of reset	Mechanical spring					
Type of piloting	Externally controlled					
Position detection	Via mechanical indicator					
Control of medium	On/off operation					
Control function	Closed via reduced spring force, N/C, Closed via spring force, N/C			Closed via spring force, N/C		
Direction of flow	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media			Below valve seat, for gaseous and liquid media		
Product weight	1,096 ... 1,830 g	1,910 ... 3,360 g	2,150 ... 3,600 g	2,480 ... 3,930 g	4,610 g	5,430 g

General technical data VZXA, with piston drive NPT

Line connection	Threaded coupling 1/2 NPT as per ANSI/ASME B 1.20.1	Threaded coupling 3/4 NPT as per ANSI/ASME B 1.20.1	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1
Size of drive	46 mm	46 ... 75 mm			75 mm	
Stroke	17 mm	17 ... 20 mm			20 mm	
Flow rate Kv	6 ... 6.6 m³/h	13.3 ... 14.5 m³/h	20.3 ... 22.6 m³/h	27.9 ... 30.3 m³/h	41.4 m³/h	50.1 m³/h
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Mounting position	optional					
Valve function	2/2					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of reset	Mechanical spring					
Type of piloting	Externally controlled					
Position detection	Via mechanical indicator					
Control of medium	On/off operation					
Control function	Closed via reduced spring force, N/C, Closed via spring force, N/C			Closed via spring force, N/C		
Direction of flow	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media			Below valve seat, for gaseous and liquid media		
Product weight	1,775 ... 1,830 g	1,910 ... 3,360 g	2,150 ... 3,600 g	2,480 ... 3,930 g	4,610 g	5,430 g

Datasheet

General technical data VZXA, with polymer piston drive

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Size of drive	46 mm	46 ... 75 mm			75 mm	
Stroke	17 mm	17 ... 20 mm			20 mm	
Flow rate Kv	4.6 ... 4.9 m ³ /h	11.1 ... 12.7 m ³ /h	15.9 ... 19.2 m ³ /h	22.2 ... 25.3 m ³ /h	32.9 ... 34.5 m ³ /h	38.8 ... 40.1 m ³ /h
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Mounting position	optional					
Valve function	2/2					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of reset	Mechanical spring					
Type of piloting	Externally controlled					
Position detection	Via mechanical indicator					
Control of medium	On/off operation					
Control function	Closed via reduced spring force, N/C, Closed via spring force, N/C					
Direction of flow	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media					
Product weight	1,096 ... 1,151 g	1,257 ... 2,448 g	1,486 ... 2,677 g	1,937 ... 3,128 g	3,650 ... 3,777 g	4,627 ... 4,754 g

General technical data VZXA, with polymer piston drive NPT

Line connection	Threaded coupling 1/2 NPT as per ANSI/ASME B 1.20.1	Threaded coupling 3/4 NPT as per ANSI/ASME B 1.20.1	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1
Size of drive	46 mm	46 ... 75 mm			75 mm	
Stroke	17 mm	17 ... 20 mm			20 mm	
Flow rate Kv	4.6 ... 4.9 m ³ /h	11.1 ... 12.7 m ³ /h	15.9 ... 19.2 m ³ /h	22.2 ... 25.3 m ³ /h	32.9 ... 34.5 m ³ /h	38.8 ... 40.1 m ³ /h
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Mounting position	optional					
Valve function	2/2					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of reset	Mechanical spring					
Type of piloting	Externally controlled					
Position detection	Via mechanical indicator					
Control of medium	On/off operation					
Control function	Closed via reduced spring force, N/C, Closed via spring force, N/C					
Direction of flow	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media					
Product weight	1,096 ... 1,151 g	1,257 ... 2,448 g	1,486 ... 2,677 g	1,937 ... 3,128 g	3,650 ... 3,777 g	4,627 ... 4,754 g

Datasheet

General technical data VZXA, with diaphragm actuator

Line connection	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228	Threaded coupling G2 1/2 to DIN ISO 228
Size of drive	90 mm				
Stroke	26 mm				
Flow rate Kv	23.6 m³/h	33.1 ... 35.4 m³/h	47.4 ... 49 m³/h	60.4 ... 68.5 m³/h	77.4 ... 77.9 m³/h
Design	Poppet valve with diaphragm actuator				
Type of actuation	Pneumatic				
Type of mounting	In-line installation				
Mounting position	optional				
Valve function	2/2				
Pneumatic connection	Female thread G1/8				
Flow direction	Non-reversible				
Type of reset	Mechanical spring				
Type of piloting	Externally controlled				
Position detection	Via mechanical indicator				
Control of medium	On/off operation				
Control function	Closed via spring force, N/C		Closed via reduced spring force, N/C, Closed via spring force, N/C		
Direction of flow	Below valve seat, for gaseous and liquid media		Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media		
Product weight	6,780 g	6,595 ... 7,110 g	7,275 ... 7,790 g	8,095 ... 8,610 g	10,185 ... 10,700 g

General technical data VZXA, with diaphragm actuator NPT

Line connection	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 1/2 NPT to ANSI/ASME B 1.20.1
Size of drive	90 mm				
Stroke	26 mm				
Flow rate Kv	23.6 m³/h	33.1 ... 35.4 m³/h	47.4 ... 49 m³/h	60.4 ... 68.5 m³/h	77.4 ... 77.9 m³/h
Design	Poppet valve with diaphragm actuator				
Type of actuation	Pneumatic				
Type of mounting	In-line installation				
Mounting position	optional				
Valve function	2/2				
Pneumatic connection	Female thread G1/8				
Flow direction	Non-reversible				
Type of reset	Mechanical spring				
Type of piloting	Externally controlled				
Position detection	Via mechanical indicator				
Control of medium	On/off operation				
Control function	Closed via spring force, N/C		Closed via reduced spring force, N/C, Closed via spring force, N/C		
Direction of flow	Below valve seat, for gaseous and liquid media		Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media		
Product weight	6,780 g	6,595 ... 7,110 g	7,275 ... 7,790 g	8,095 ... 8,610 g	10,185 ... 10,700 g

Datasheet

Operating and environmental conditions VZXA, with piston drive		
Flow direction	Above valve seat, for gaseous media	Below valve seat, for gaseous and liquid media
Operating pressure ¹⁾	0.5 ... 1 MPa	
Operating pressure ²⁾	72.5 ... 145 psi	
Operating pressure ³⁾	5 ... 10 bar	
Ambient temperature	0 ... 60°C	
Media temperature ⁴⁾	-10 ... 180°C	
Storage temperature	-10 ... 60°C	
Outdoor applications	Weather-protected application areas Class C1 based on IEC 60654-1	
CE mark (see declaration of conformity) ⁵⁾	–	In accordance with EU Pressure Equipment Directive
UKCA marking (see declaration of conformity) ⁶⁾	–	to UK Pressure Equipment Regulations
Approval	CRN	
Certificate issuing authority	TÜV 968/V 1039.01/20	
Degree of protection	IP65 IP67	
Max. viscosity	600	
Medium	Vapour Inert gases Filtered compressed air, grade of filtration 200 µm	Vapour Mineral oil-based hydraulic fluid Inert gases Mineral oil Water Filtered compressed air, grade of filtration 200 µm Neutral fluids
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]	
Safety Integrity Level (SIL)	SIL 2	
Probability of Failure per Hour (PFH)	0.000000136	
Probability of Failure on Demand (PFD)	0.000595	

1) See table „Pressure of medium and operating pressure“ with relevant control function.

2) See table „Pressure of medium and operating pressure“ with relevant control function.

3) See table „Pressure of medium and operating pressure“ with relevant control function.

4) Temperature of medium -30 ... +200 °C only in combination with modified PTFE seat seal (see modular product system).

5) More information www.festo.com/sp → certificates

6) More information www.festo.com/sp → certificates

Datasheet

Operating and environmental conditions VZXA, with polymer piston drive		
Flow direction	Above valve seat, for gaseous media	Below valve seat, for gaseous and liquid media
Operating pressure ¹⁾	0.5 ... 0.7 MPa	
Operating pressure ²⁾	72.5 ... 101.5 psi	
Operating pressure ³⁾	5 ... 7 bar	
Ambient temperature	0 ... 60°C	
Media temperature ⁴⁾	-10 ... 60°C	-10 ... 180°C
Storage temperature	-10 ... 60°C	
Outdoor applications	Weather-protected application areas Class C1 based on IEC 60654-1	
CE mark (see declaration of conformity) ⁵⁾	In accordance with EU Pressure Equipment Directive	
UKCA marking (see declaration of conformity) ⁶⁾	to UK Pressure Equipment Regulations	
Degree of protection	IP65 IP67	
Max. viscosity	600	
Medium	Vapour Inert gases Filtered compressed air, grade of filtration 200 µm	Vapour Mineral oil-based hydraulic fluid Inert gases Mineral oil Water Filtered compressed air, grade of filtration 200 µm Neutral fluids
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]	

1) See table „Pressure of medium and operating pressure“ with relevant control function.

2) See table „Pressure of medium and operating pressure“ with relevant control function.

3) See table „Pressure of medium and operating pressure“ with relevant control function.

4) Temperature of medium -30 ... +200 °C only in combination with modified PTFE seat seal (see modular product system).

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6) More information www.festo.com/sp → certificates

Datasheet

Operating and environmental conditions VZXA, with diaphragm actuator		
Flow direction	Above valve seat, for gaseous media	Below valve seat, for gaseous and liquid media
Operating pressure ¹⁾	0.5 ... 0.7 MPa	
Operating pressure ²⁾	72.5 ... 101.5 psi	
Operating pressure ³⁾	5 ... 7 bar	
Ambient temperature	0 ... 60°C	
Media temperature ⁴⁾	-10 ... 180°C	
Storage temperature	-10 ... 60°C	
Outdoor applications	Weather-protected application areas Class C1 based on IEC 60654-1	
CE mark (see declaration of conformity) ⁵⁾	In accordance with EU Pressure Equipment Directive	
UKCA marking (see declaration of conformity) ⁶⁾	to UK Pressure Equipment Regulations	
Approval	CRN	
Certificate issuing authority	TÜV 968/V 1039.01/20	
Degree of protection	IP65 IP67	
Max. viscosity	600	
Medium	Vapour Inert gases Filtered compressed air, grade of filtration 200 µm	Vapour Mineral oil-based hydraulic fluid Inert gases Mineral oil Water Filtered compressed air, grade of filtration 200 µm Neutral fluids
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]	
Safety Integrity Level (SIL)	SIL 2	
Probability of Failure per Hour (PFH)	0.000000136	
Probability of Failure on Demand (PFD)	0.000595	

1) See table „Pressure of medium and operating pressure“ with relevant control function.

2) See table „Pressure of medium and operating pressure“ with relevant control function.

3) See table „Pressure of medium and operating pressure“ with relevant control function.

4) Temperature of medium -30 ... +200 °C only in combination with modified PTFE seat seal (see modular product system).

5) More information www.festo.com/sp → certificates

6) More information www.festo.com/sp → certificates

ATEX VZXA		
Drive ¹⁾	Piston drive	Diaphragm actuator
Material drive housing	Stainless steel casting	PA-reinforced Stainless steel casting
ATEX category gas	–	
Explosion ignition protection type for gas	–	
ATEX category dust	–	
Explosion ignition protection type for dust	–	
Explosion ambient temperature	–	

1) Selected types, see www.festo.com

Materials VZXA, with piston drive	
Material piston rod	High-alloy stainless steel
Material cover	Stainless steel casting
Material seals	FPM
Material spindle seal	PTFE
Material seat seal	PTFE
Material drive housing	Stainless steel casting
Material process valve housing	Stainless steel casting
Note on materials	RoHS-compliant

Datasheet

Materials VZXA, with polymer piston drive

Material piston rod	High-alloy stainless steel
Material cover	PA-reinforced
Material seals	FPM
Material spindle seal	PTFE
Material seat seal	PTFE
Material drive housing	PA-reinforced
Material process valve housing	Brass
Note on materials	RoHS-compliant

Materials VZXA, with diaphragm actuator

Material piston rod	High-alloy stainless steel
Material cover	Stainless steel casting
Material seals	NBR
Material spindle seal	PTFE
Material seat seal	PTFE
Material drive housing	Stainless steel casting
Material process valve housing	Stainless steel casting
Note on materials	RoHS-compliant

Medium pressure and operating pressure for control function NC, VZXA-B (flow direction below valve seat; piston actuator size 46 mm and 75 mm)

More information in the user documentation

→ Internet: www.festo.com/userdocu/vzxa

Medium pressure and operating pressure for control function NC with reduced spring force, VZXA-B-...-PR (flow direction below valve seat; piston actuator size 46 mm and 75 mm)

More information in the user documentation

→ Internet: www.festo.com/userdocu/vzxa

Pressure of medium p1 and operating pressure p2 for control function N/O, opened via spring force, VZXA-B-...-S (flow direction under the valve seat;) piston drive size 46 mm)



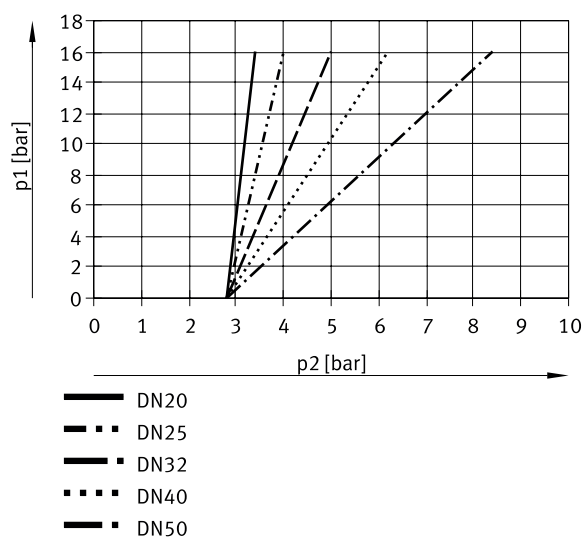
Further information in the user documentation

→ Internet: www.festo.com/userdocu/vzxa

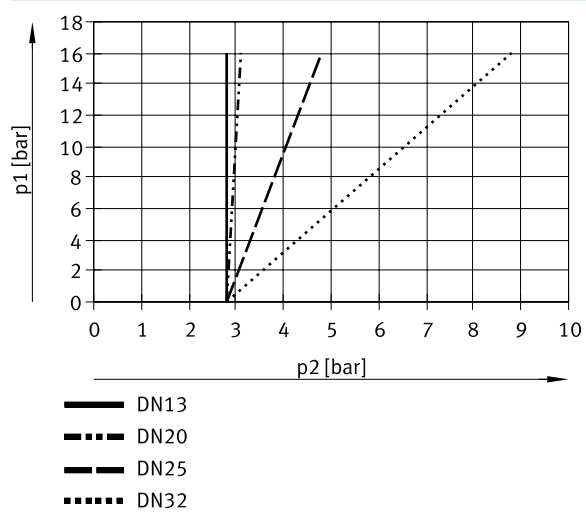
- DN13
- · - DN20
- · - DN25

Datasheet

Pressure of medium p1 and operating pressure p2 for control function N/O, opened via spring force, VZX-B-...-S (flow direction under the valve seat;) piston drive size 75 mm)

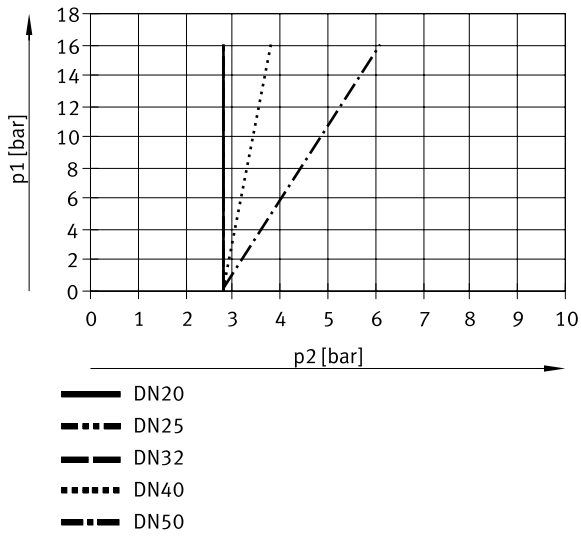


Pressure of medium p1 and operating pressure p2 for control function double-acting, VZX-B-...-D (flow direction below valve seat; piston drive size 46 mm)

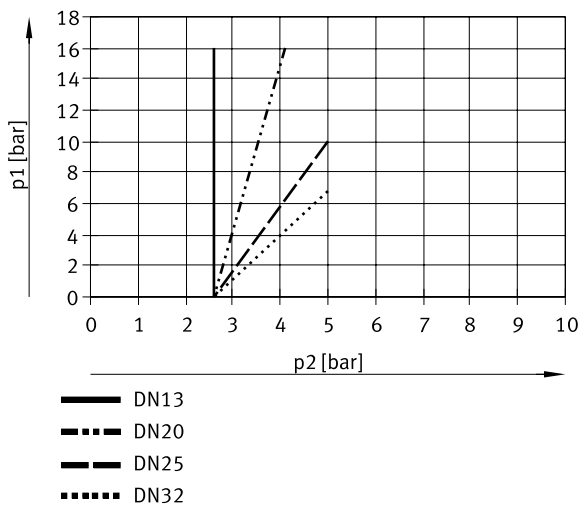


Datasheet

Pressure of medium p1 and operating pressure p2 for control function double-acting, VZXA-B-...-D (flow direction below valve seat; piston drive size 75 mm)

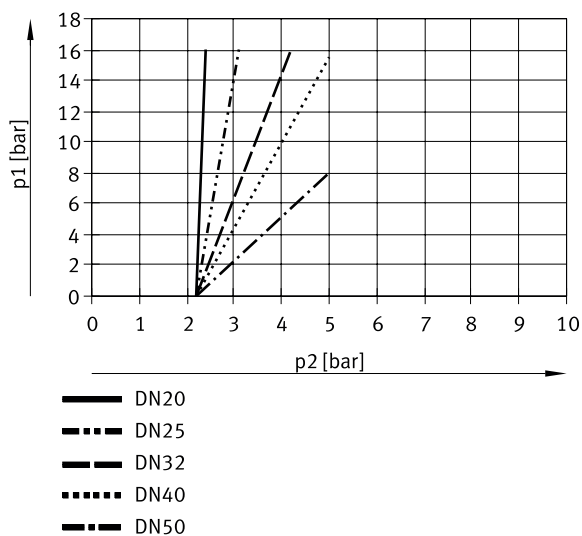


Medium pressure p1 and operating pressure p2 for control function N/C with reduced spring force, VZXA-A-...-PR (flow direction over the valve seat; piston drive size 46 mm)



Datasheet

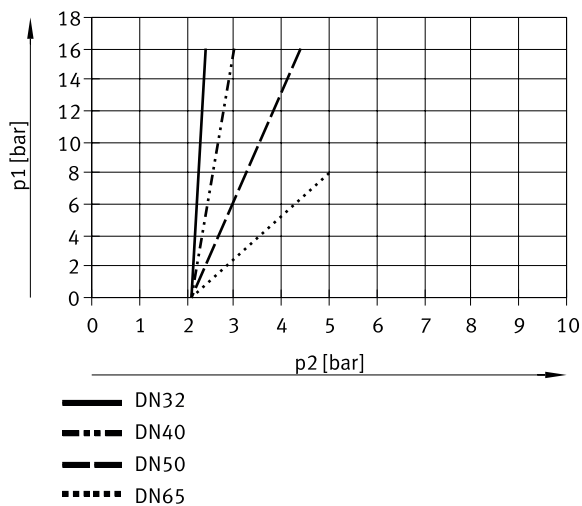
Medium pressure p_1 and operating pressure p_2 for control function N/C with reduced spring force, VZXA-A-...-PR (flow direction over the valve seat; piston drive size 75 mm)



Permissible operating pressure as a function of pressure of medium for control function NC, VZXA-B-... (Flow direction below valve seat; diaphragm actuator size 90 mm)

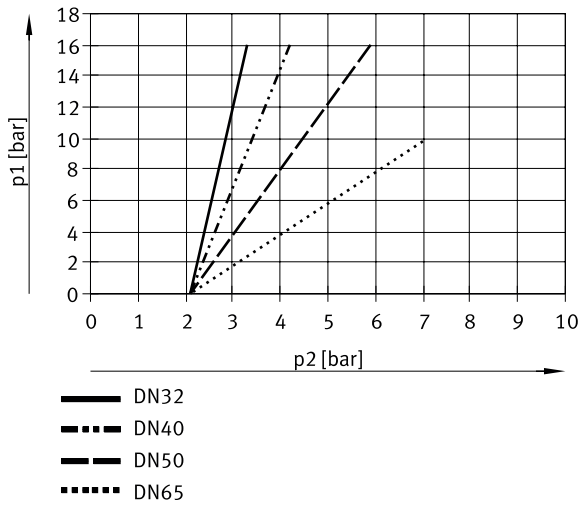
More information in the user documentation
 → Internet: www.festo.com/userdocu/vzxa

Pressure of medium p_1 and operating pressure p_2 for N/C control function with reduced spring force, VZXA-A-...-PR (flow direction over the valve seat; diaphragm actuator size 90 mm)



Datasheet

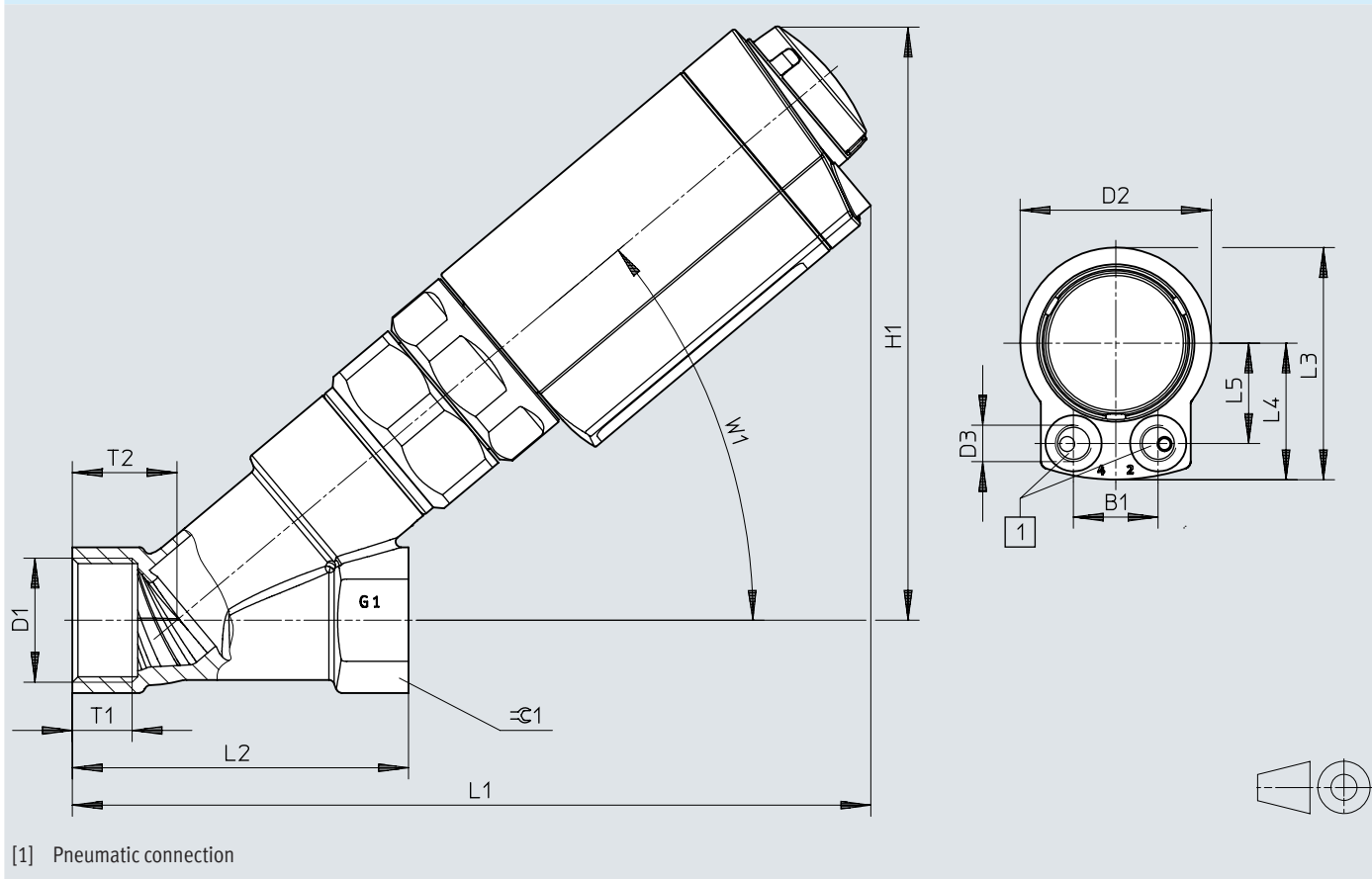
Pressure of medium p_1 and operating pressure p_2 for control function N/O, opened by spring force, VZXA-B-...-S (flow direction under the valve seat; diaphragm actuator size 90 mm)



Dimensions

Dimensions – Threaded socket [T] with stainless steel piston drive, size 46,
75

Download CAD data www.festo.com



Dimensions

	B1	D1			D2 ø	D3	H1 max.	L1 max.	L2
		S6	S7	S13 ¹⁾					
VZXA-A-...-13-...-16-...-46-17-...	22,6	G1/2	1/2 NPT	Rc1/2	51	G1/8	159	202	65
VZXA-A-...-20-...-16-...-75-20-...	41	G3/4	3/4 NPT	Rc3/4	82,6		187	238	75
VZXA-A-...-25-...-16-...-75-20-...	41	G1	1 NPT	Rc1	82,6		192	244	90
VZXA-B-...-13-...-30-...-46-17-...	22,6	G1/2	1/2 NPT	Rc1/2	51		159	202	65
VZXA-B-...-20-...-12.8-...-46-17-...	22,6	G3/4	3/4 NPT	Rc3/4	51		157	207	75
VZXA-B-...-20-...-30-...-75-20-...	41	G3/4	3/4 NPT	Rc3/4	82,6		187	238	75
VZXA-B-...-25-...-8.3-...-46-17-...	22,6	G1	1 NPT	Rc1	51		164	214	90
VZXA-B-...-25-...-23-...-75-20-...	41	G1	1 NPT	Rc1	82,6		192	244	90
VZXA-B-...-32-...-4.4-...-46-17-...	22,6	G1 1/4	1 1/4 NPT	Rc1 1/4	51		168	218	110
VZXA-B-...-32-...-13.5-...-75-20-...	41	G1 1/4	1 1/4 NPT	Rc1 1/4	82,6		198	248	110
VZXA-B-...-40-...-9.3-...-75-20-...	41	G1 1/2	1 1/2 NPT	Rc1 1/2	82,6		216	270	120
VZXA-B-...-50-...-5.6-...-75-20-...	41	G2	2 NPT	Rc2	82,6		215	286	150

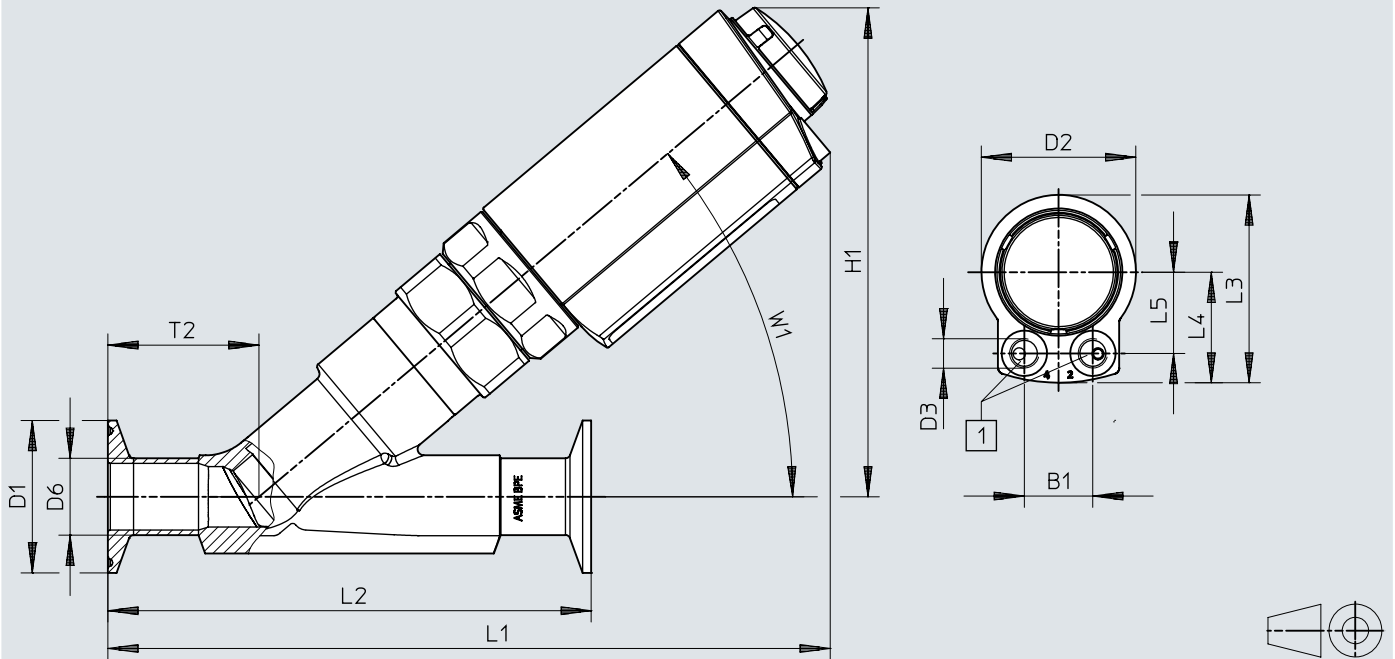
	L3	L4	L5	T1			T2	W1	αG1
				S6	S7	S13 ¹⁾			
VZXA-A-...-13-...-16-...-46-17-...	62,1	36,5	26,8	14	13,7	13,2	21,5	40°	25
VZXA-A-...-20-...-16-...-75-20-...	94,4	53,1	41	16	14	14,5	24	40°	32
VZXA-A-...-25-...-16-...-75-20-...	94,4	53,1	41	16	16,8	16,8	28	40°	41
VZXA-B-...-13-...-30-...-46-17-...	62,1	36,5	26,8	14	13,7	13,2	21,5	40°	25
VZXA-B-...-20-...-12.8-...-46-17-...	62,1	36,5	26,8	16	14	14,5	24	40°	32
VZXA-B-...-20-...-30-...-75-20-...	94,4	53,1	41	16	14	14,5	24	40°	32
VZXA-B-...-25-...-8.3-...-46-17-...	62,1	36,5	26,8	16	16,8	16,8	28	40°	41
VZXA-B-...-25-...-23-...-75-20-...	94,4	53,1	41	16	16,8	16,8	28	40°	41
VZXA-B-...-32-...-4.4-...-46-17-...	62,1	36,5	26,8	20	17,3	19,1	36	42°	50
VZXA-B-...-32-...-13.5-...-75-20-...	94,4	53,1	41	20	17,3	19,1	36	42°	50
VZXA-B-...-40-...-9.3-...-75-20-...	94,4	53,1	41	22	17,3	19,1	38	42°	55
VZXA-B-...-50-...-5.6-...-75-20-...	94,4	53,1	41	24	17,6	23,4	43	40°	65

1) selected types, see www.festo.com

Dimensions

Dimensions – Clamp [C] with stainless steel piston drive, size 46, 75

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[1] Pneumatic connection

	B1	D1	D2 ø	D3	D6 ø	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-CS1-1/2"-...-46-...	22,6	25 ¹⁾	51	G1/8	12,7 ¹⁾	161 ¹⁾	211 ¹⁾	130	62,1	36,5	26,8	28 ¹⁾	40
VZXA-...-CS1-3/4"-...-46-...	22,6	25 ¹⁾	51		19,1 ¹⁾	161 ¹⁾	222 ¹⁾	150	62,1	36,5	26,8	39 ¹⁾	
VZXA-...-CS1-3/4"-...-75-...	41	25 ¹⁾	82,6		19,1 ¹⁾	190 ¹⁾	252 ¹⁾	150	94,4	53,1	41	39 ¹⁾	
VZXA-...-CS1-1"-...-46-...	22,6	50,4	51		25,4	166	239	160	62,1	36,5	26,8	50 ¹⁾	
VZXA-...-CS1-1"-...-75-...	41	34	82,6		25,4	195	269	160	94,4	53,1	41	50	

	B1	D1	D2 ø	D3	D6 ø	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-CS5-13-...-46-...	22,6	34	51	G1/8	19	159	208	130	62,1	36,5	26,8	28	40
VZXA-...-CS5-20-...-46-...	22,6	34	51		23	158	222	150	62,1	36,5	26,8	39	
VZXA-...-CS5-20-...-75-...	41	34	82,6		23	187	253	150	94,4	53,1	41	39	
VZXA-...-CS5-25-...-46-...	22,6	50,5	51		29	164	236	160	62,1	36,5	26,8	50	
VZXA-...-CS5-25-...-75-...	41	50,5	82,6		29	192	266	160	94,4	53,1	41	50	
VZXA-...-CS5-32-...-46-...	22,6	50,5	51		35	165	241	180	62,1	36,5	26,8	54	
VZXA-...-CS5-32-...-75-...	41	50,5	82,6		35	194	272	180	94,4	53,1	41	54	
VZXA-...-CS5-40-...-75-...	41	50,5	82,6		41	212	317	200	94,4	53,1	41	77	

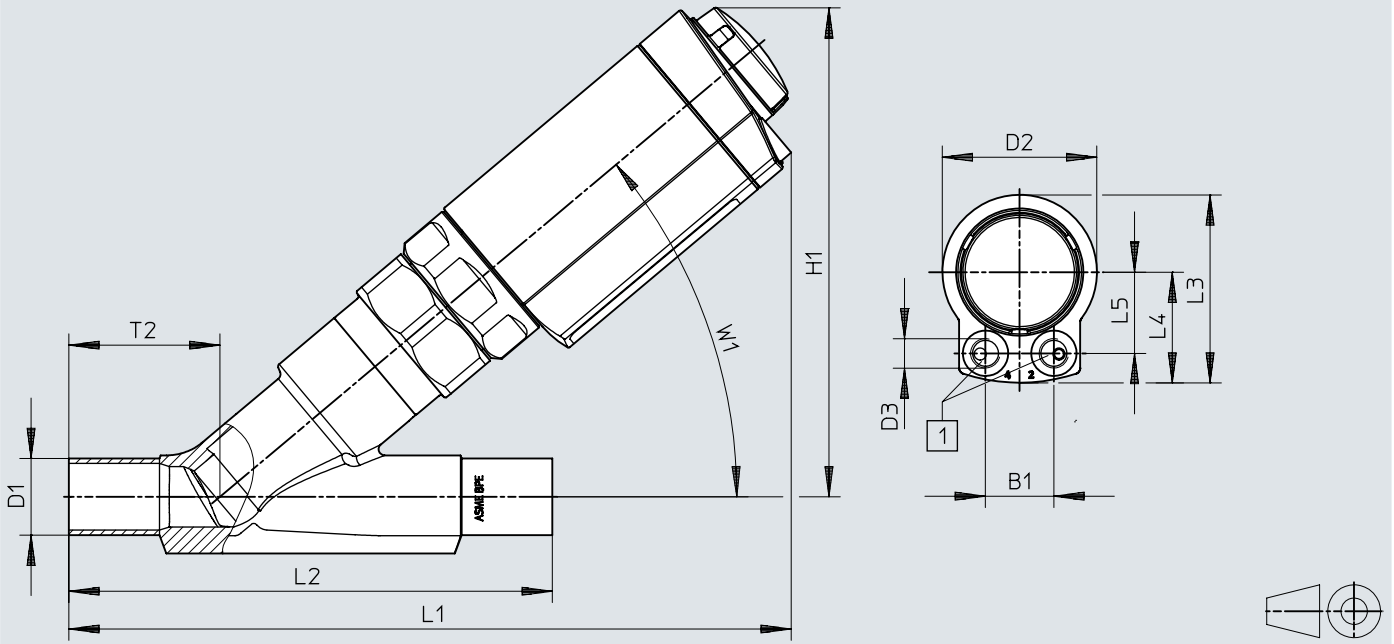
	B1	D1	D2 ø	D3	D6 ø	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-CS15-13-...-46-...	22,6	50,5	51	G1/8	21,3	159	208	130	62,1	36,5	26,8	28	40
VZXA-...-CS15-20-...-46-...	22,6	50,5	51		26,9	158	218	150	62,1	36,5	26,8	39	
VZXA-...-CS15-20-...-75-...	41	50,5	82,6		26,9	187	249	150	94,4	53,1	41	39	
VZXA-...-CS15-25-...-46-...	22,6	50,5	51		33,7	164	236	160	62,1	36,5	26,8	50	
VZXA-...-CS15-25-...-75-...	41	50,5	82,6		33,7	192	266	160	94,4	53,1	41	50	
VZXA-...-CS15-32-...-46-...	22,6	64	51		42,4	165	241	180	62,1	36,5	26,8	54	
VZXA-...-CS15-32-...-75-...	41	64	82,6		42,4	194	272	180	94,4	53,1	41	54	

1) ASME BPE type A

Dimensions

Dimensions – Welded end [W] with stainless steel piston drive, size 46, 75

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[1] Pneumatic connection

Dimensions

	B1	D1	D2 ø	D3	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-WS1-1/2"-...-46-...	22,6	12,7	51	G1/8	161	211	130	62,1	36,5	26,8	28	40
VZXA-...-WS1-3/4"-...-46-...	22,6	19,1	51		161	222	150	62,1	36,5	26,8	39	
VZXA-...-WS1-3/4"-...-75-...	41	19,1	82,6		190	252	150	94,4	53,1	41	39	
VZXA-...-WS1-1"-...-46-...	22,6	25,4	51		166	239	160	62,1	36,5	26,8	50	
VZXA-...-WS1-1"-...-75-...	41	25,4	82,6		195	269	160	94,4	53,1	41	50	
VZXA-...-WS1-...-40-...	41	38,1	82,6		213	317	200	94,4	53,1	41	77	
VZXA-...-WS1-...-50-...	41	50,8	82,6		215	332	230	94,4	53,1	41	89,50	

	B1	D1	D2 ø	D3	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-WS2-13-...-46-...	22,6	19	51	G1/8	159	208	130	62,1	36,5	26,8	28	40
VZXA-...-WS2-20-...-46-...	22,6	23	51		158	222	150	62,1	36,5	26,8	39	
VZXA-...-WS2-20-...-75-...	41	23	82,6		187	253	150	94,4	53,1	41	39	
VZXA-...-WS2-25-...-46-...	22,6	29	51		164	236	160	62,1	36,5	26,8	50	
VZXA-...-WS2-25-...-75-...	41	29	82,6		192	266	160	94,4	53,1	41	50	
VZXA-...-WS2-32-...-46-...	22,6	35	51		165	241	180	62,1	36,5	26,8	54	
VZXA-...-WS2-32-...-75-...	41	35	82,6		194	272	180	94,4	53,1	41	54	
VZXA-...-WS2-40-...-75-...	41	41	82,6		213	317	200	94,4	53,1	41	77	
VZXA-...-WS2-50-...-75-...	41	53	82,6		215	332	230	94,4	53,1	41	89,5	

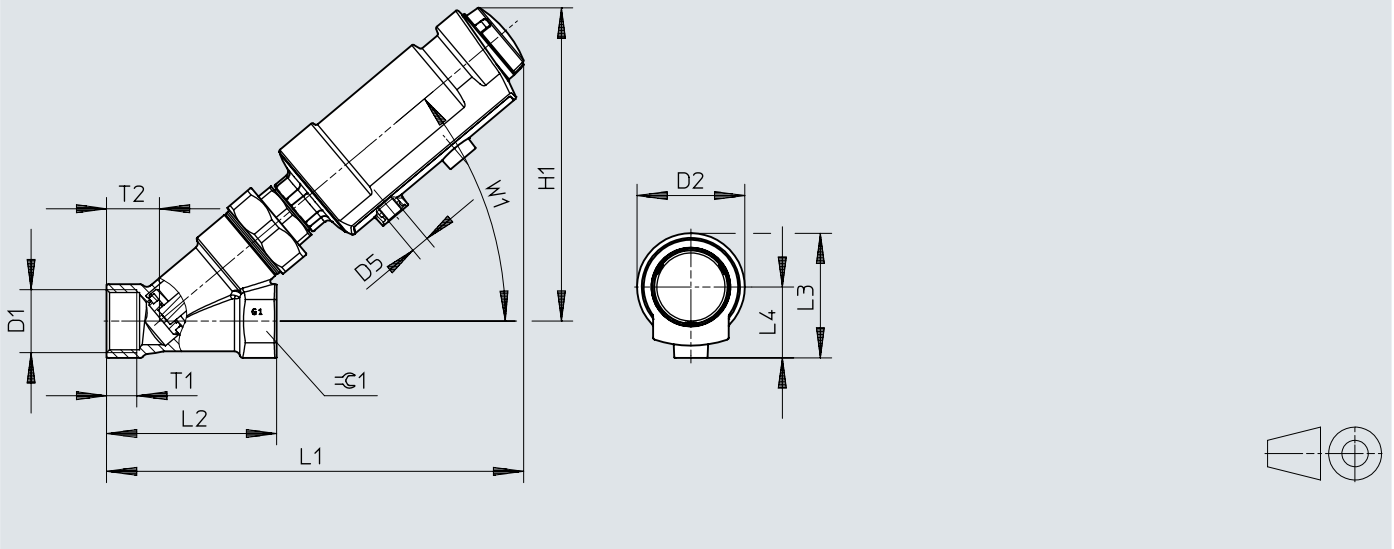
	B1	D1	D2 ø	D3	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-WS3-13-...-46-...	22,6	21,3	51	G1/8	159	208	130	62,1	36,5	26,8	28	40
VZXA-...-WS3-20-...-46-...	22,6	26,9	51		158	218	150	62,1	36,5	26,8	39	
VZXA-...-WS3-20-...-75-...	41	26,9	82,6		187	249	150	94,4	53,1	41	39	
VZXA-...-WS3-25-...-46-...	22,6	33,7	51		164	236	160	62,1	36,5	26,8	50	
VZXA-...-WS3-25-...-75-...	41	33,7	82,6		192	266	160	94,4	53,1	41	50	
VZXA-...-WS3-32-...-46-...	22,6	42,4	51		165	241	180	62,1	36,5	26,8	54	
VZXA-...-WS3-32-...-75-...	41	42,4	82,6		194	272	180	94,4	53,1	41	54	
VZXA-...-WS3-40-...-75-...	41	48,3	82,6		210	307	200	94,4	53,1	41	70	
VZXA-...-WS3-50-...-75-...	41	60,3	82,6		216	324	230	94,4	53,1	41	80	

	B1	D1	D2 ø	D3	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-WS3-...-13-M7-...-46-...	22,6	21,3	51	G1/8	145	200	130	62,1	36,5	26,8	28	40
VZXA-...-WS3-M7/M9-...-20-...-46-...	41	26,9	82,6		179	244	150	94,4	53,1	41	39	40
VZXA-...-WS3-M7/M9-...-20-...-75-...	41	33,7	82,6		182	258	160	94,4	53,1	41	50	40
VZXA-...-WS3-M7-M9-...-25-...-46-...	41	42,4	82,6		192	273	180	94,4	53,1	41	54	42

Dimensions

Dimensions – Threaded socket [T] with polymer piston drive, size 46

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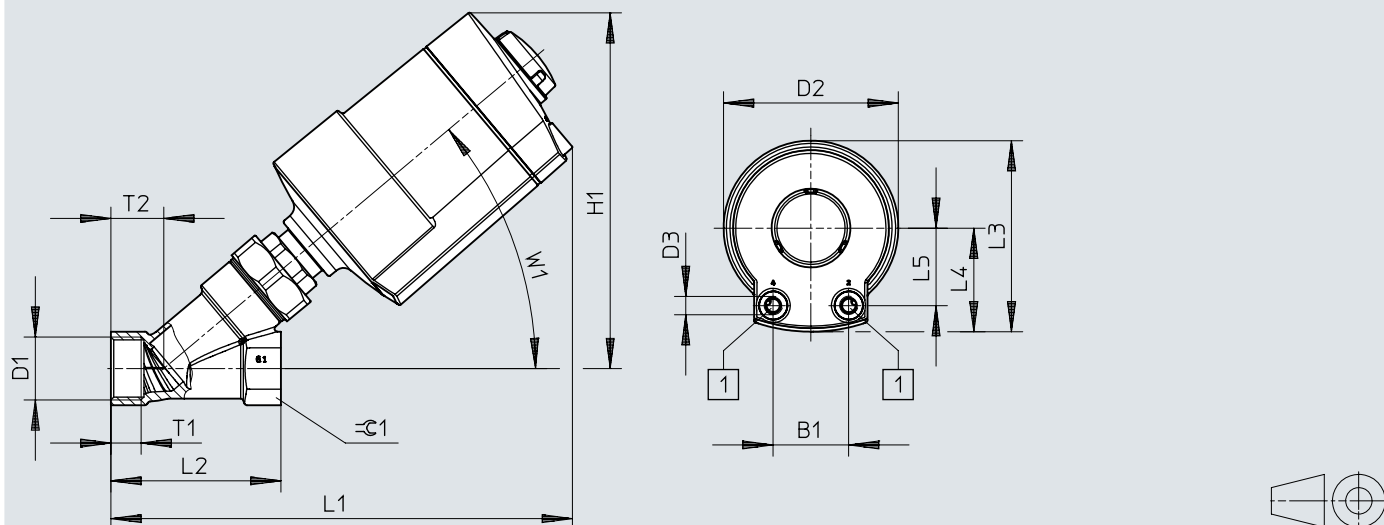
VZXA		D1			D2 ∅	D5	H1	L1	L2	L3	L4	T1			T2	W1	⊖C1
		S6	S7	S13 ¹⁾								S6	S7	S13 ¹⁾			
DN13, 1/2"	...-K-46-...	G1/2	1/2 NPT	Rc1/2	57	G1/8	161	208	65	66	37,5	14	13,7	13,2	21,5	40°	25
DN20, 3/4"		G3/4	3/4 NPT	Rc3/4			163	213	75			16	16	14,5	24	40°	32
DN25, 1"		G1	1 NPT	Rc1			166	221	90			16	16	16,8	28	40°	41
DN32, 1 1/4"		G1 1/4	1 1/4 NPT	Rc1 1/4			179	232	110			20	19	19,1	36	42°	50

1) selected types, see www.festo.com

Dimensions

Dimensions – Threaded socket [T] with polymer piston drive, size 75

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[1] Pneumatic connection

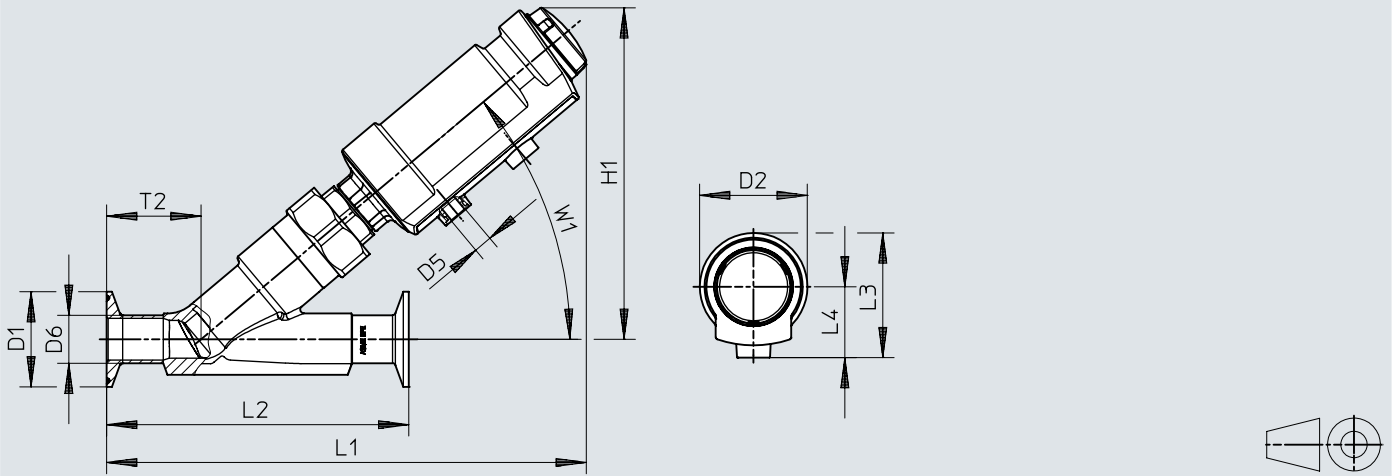
	B1	D1			D2 ø	D3	H1	L1	L2	L3	L4	L5	T1			T2	W1	≙G1
		S6	S7	S13 ¹⁾									S6	S7	S13 ¹⁾			
VZXA-A-T...-K-75-...	40	G3/4	3/4 NPT	Rc3/4	92,5	G1/8	185	237	75	101	54,8	41	16	16	14,5	24	40°	32
		G1	1 NPT	Rc1			188	244	90				16	16	16,8	28	40°	41
		G1 1/4	1 1/4 NPT	Rc1 1/4			201	256	110				20	19	19,1	36	42°	50
		G1 1/2	1 1/2 NPT	Rc1 1/2			214	272	120				22	17,3	19,1	38	42°	55
		G2	2 NPT	Rc2			217	294	150				24	17,6	23,4	43	40°	65

1) selected types, see www.festo.com

Dimensions

Dimensions – Clamp [C] with polymer piston drive, size 46

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[1] Pneumatic connection

	D1	D2 ∅	D5 ∅	D6 ∅	H1	L1	L2	L3	L4	T2	W1
VZXA-...-CS1-1/2"-...-46-...	25 ¹⁾	57	G1/8	12,7 ¹⁾	190 ¹⁾	250 ¹⁾	130	66	37,5	28 ¹⁾	40
VZXA-...-CS1-3/4"-...-46-...	25 ¹⁾			19,1 ¹⁾	193 ¹⁾	264 ¹⁾	150			39 ¹⁾	
VZXA-...-CS1-1"-...-46-...	50,4			25,4	195 ¹⁾	278 ¹⁾	160			50	

	D1	D2 ∅	D5 ∅	D6 ∅	H1	L1	L2	L3	L4	T2	W1
VZXA-...-CS5-13-...-46-...	34	57	G1/8	19	190	247	130	66	37,5	28	40
VZXA-...-CS5-20-...-46-...	34			23	193	261	150			39	
VZXA-...-CS5-25-...-46-...	50,5			29	195	275	160			50	
VZXA-...-CS5-32-...-46-...	50,5			35	201	280	180			-	54

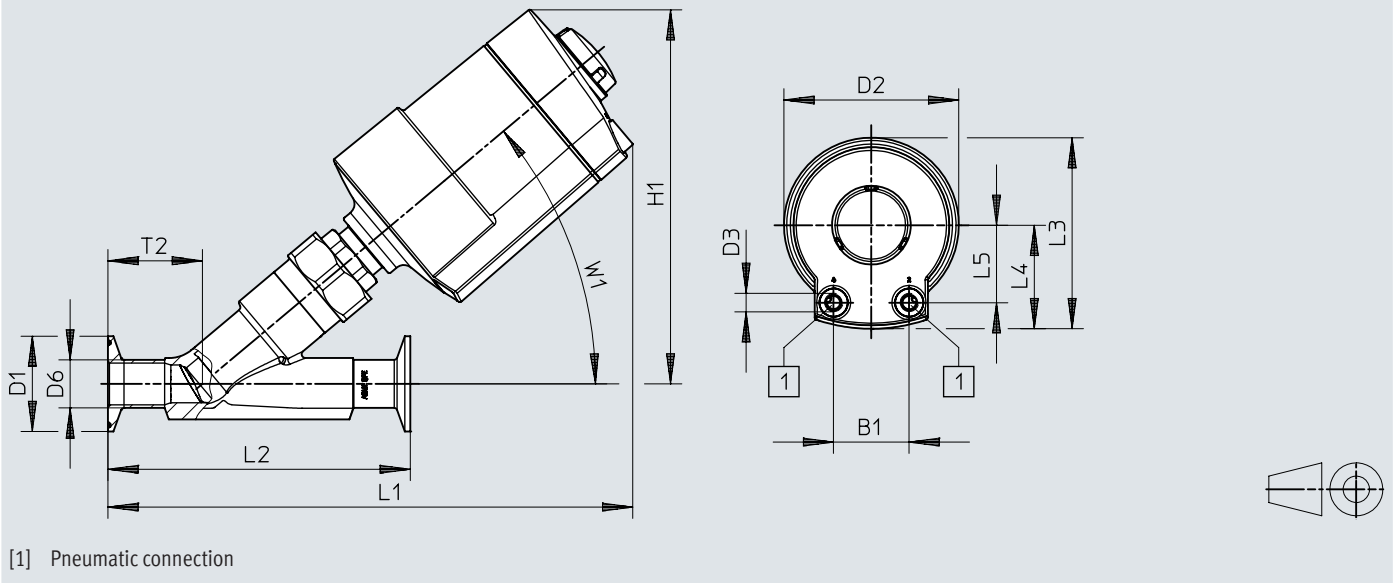
	D1	D2 ∅	D5 ∅	D6 ∅	H1	L1	L2	L3	L4	T2	W1
VZXA-...-CS15-13-...-46-...	50,5	57	G1/8	21,3	190	247	130	66	37,5	28	40
VZXA-...-CS15-20-...-46-...				26,9	193	261	150			39	
VZXA-...-CS15-25-...-46-...				33,7	195	275	160			50	
VZXA-...-CS15-32-...-46-...				64	42,4	201	280			180	-

1) ASME BPE type A

Dimensions

Dimensions – Clamp [C] with polymer piston drive, size 75

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	B1	D1	D2 ∅	D3 ∅	D6 ∅	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-CS1-3/4"-...-75-...	40	25 ¹⁾	92,5	G1/8	19,1 ¹⁾	171 ¹⁾	241 ¹⁾	150	101	54,8	41	39 ¹⁾	40
VZXA-...-CS1-1"-...-75-...		34			25,4	173 ¹⁾	254 ¹⁾					50	

	B1	D1	D2 ∅	D3 ∅	D6 ∅	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-CS5-20-...-75-...	40	34	92,5	G1/8	23	171	238	150	101	54,8	41	39	40
VZXA-...-CS5-25-...-75-...		50,5			29	173	251					160	
VZXA-...-CS5-32-...-75-...		50,5			35	179	256					180	54

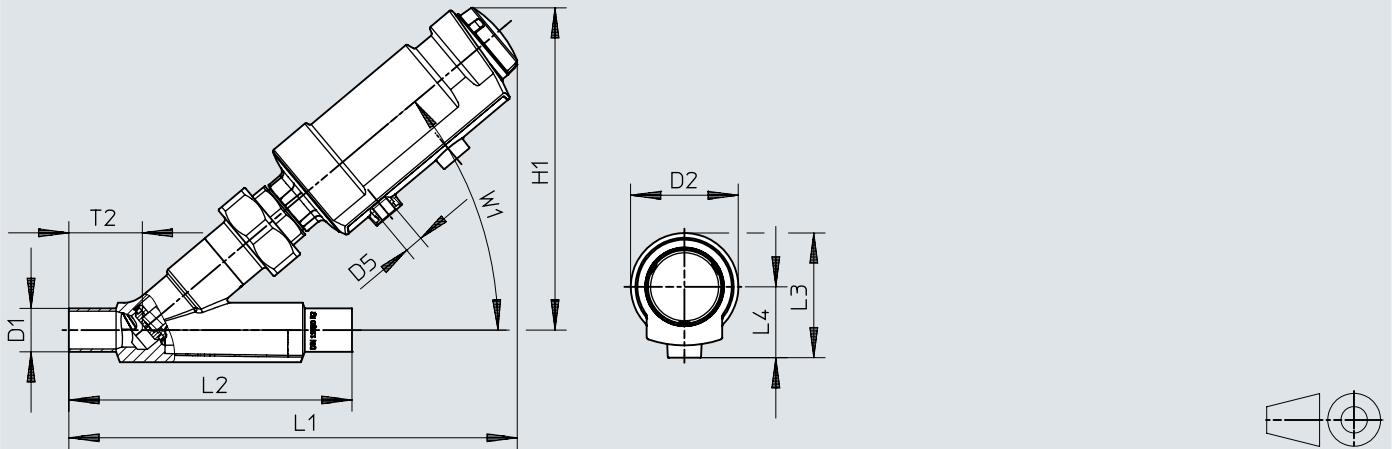
	B1	D1	D2 ∅	D3 ∅	D6 ∅	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-CS15-20-...-75-...	40	50,5	92,5	G1/8	26,9	171	238	150	101	54,8	41	39	40
VZXA-...-CS15-25-...-75-...		50,5			33,7	173	251					160	
VZXA-...-CS15-32-...-75-...		64			42,4	179	256					180	54

1) ASME BPE type A

Dimensions

Dimensions – Welded end [W] with polymer piston drive, size 46

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[1] Pneumatic connection

	D1	D2 ∅	D5 ∅	H1	L1	L2	L3	L4	T2	W1
VZXA-...-WS1-1/2"-...-46-...	12,7	57	G1/8	190	250	130	66	37,5	28	40
VZXA-...-WS1-3/4"-...-46-...	19,1			193	264	150			39	
VZXA-...-WS1-1"-...-46-...	25,4			195	278	160			50	

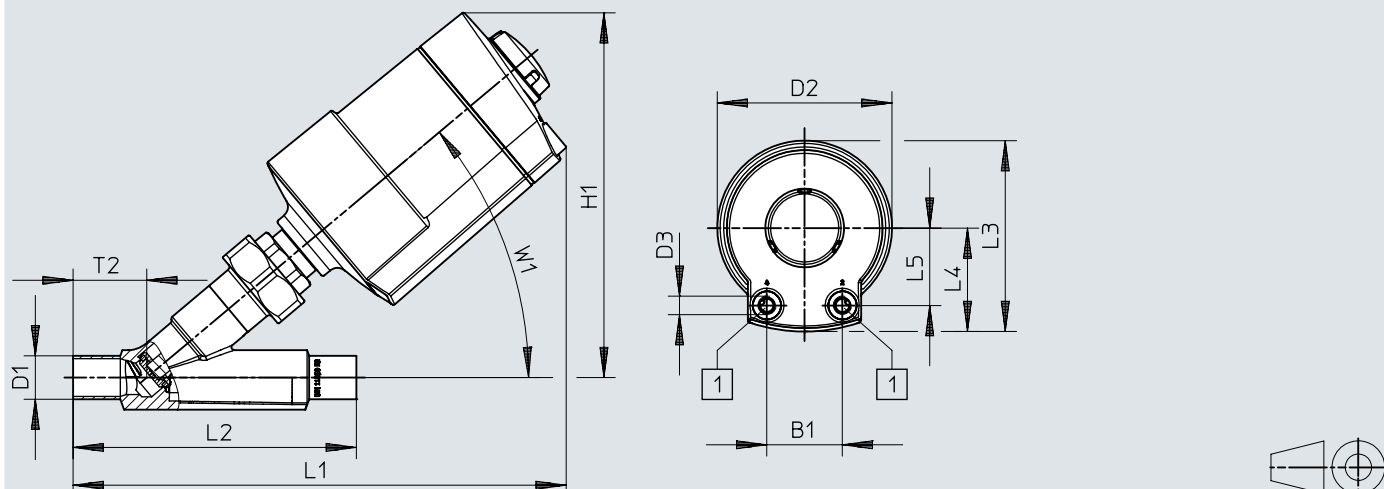
	D1	D2 ∅	D5 ∅	H1	L1	L2	L3	L4	T2	W1
VZXA-...-WS2-13-...-46-...	19	57	G1/8	190	247	130	66	37,5	28	40
VZXA-...-WS2-20-...-46-...	23			193	261	150			39	
VZXA-...-WS2-25-...-46-...	29			195	275	160			50	
VZXA-...-WS2-32-...-46-...	35			201	280	180		-	54	-

	D1	D2 ∅	D5 ∅	H1	L1	L2	L3	L4	T2	W1
VZXA-...-WS3-13-...-46-...	21,3	57	G1/8	190	247	130	66	37,5	28	40
VZXA-...-WS3-20-...-46-...	26,9			193	261	150			39	
VZXA-...-WS3-25-...-46-...	33,7			195	275	160			-	
VZXA-...-WS3-32-...-46-...	42,2			201	280	180		-	-	-

Dimensions

Dimensions – Welded end [W] with polymer piston drive, size 75

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[1] Pneumatic connection

	B1	D1 ∅	D2 ∅	D3	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-WS1-1/2"-...-75-...	40	19,1	92,5	G1/8	171	241	150	101	54,8	41	39	40
VZXA-...-WS1-1"-...-75-...		25,4			173	254	160				50	

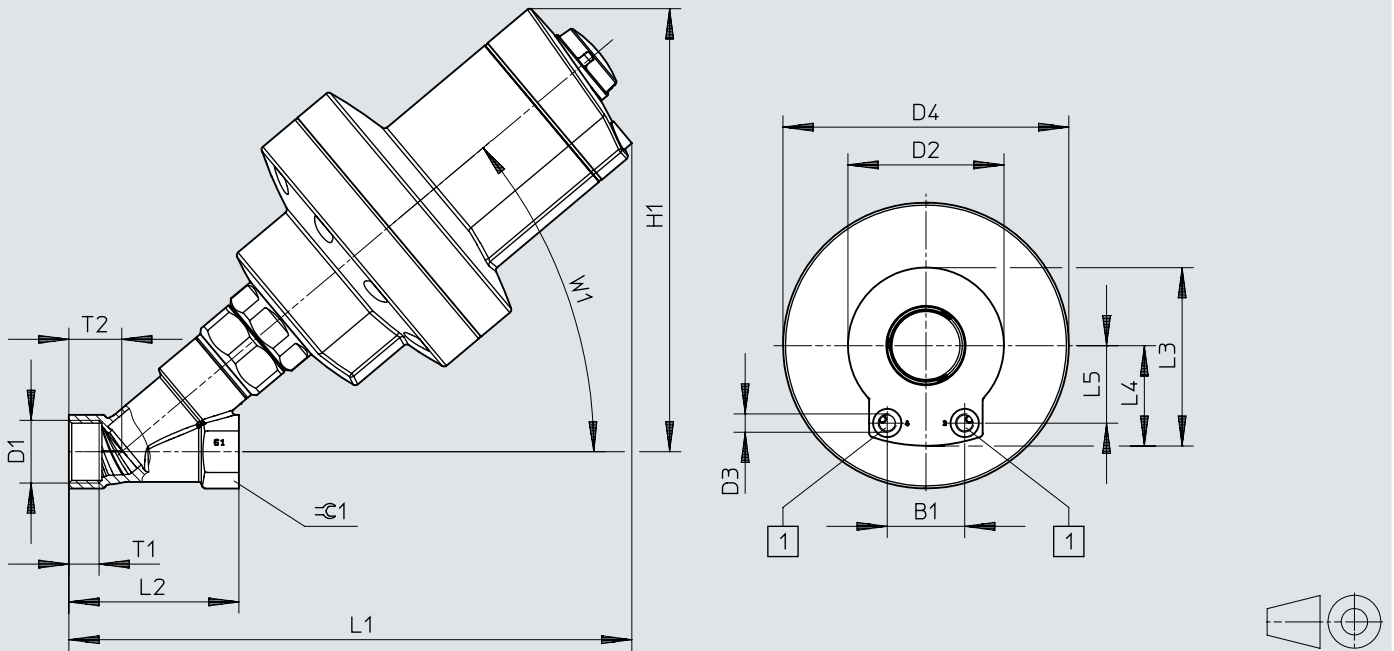
	B1	D1 ∅	D2 ∅	D3	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-WS2-20-...-75-...	40	23	92,5	G1/8	171	238	150	101	54,8	41	39	40
VZXA-...-WS2-25-...-75-...		29			173	251	160				50	
VZXA-...-WS2-32-...-75-...		35			179	256	180				54	

	B1	D1 ∅	D2 ∅	D3	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-WS3-20-...-75-...	40	26,9	92,5	G1/8	171	238	150	101	54,8	41	39	40
VZXA-...-WS3-25-...-75-...		33,7			173	251	160				-	
VZXA-...-WS3-32-...-75-...		42,2			179	256	180				54	

Dimensions

Dimensions – Threaded socket [T] with stainless steel diaphragm actuator, size 90

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[1] Pneumatic connection

	B1	D1			D2 ø	D3	D4 ø	H1 max.	L1 max.	L2
		S6	S7	S13 ¹⁾						
VZXA-A-...-32-...-16-...-PR-...	41	G1 1/4	1 1/4 NPT	Rc1 1/4	82,6	G1/8	151,3	245	300	110
VZXA-A-...-40-...-16-...-PR-...	41	G1 1/2	1 1/2 NPT	Rc1 1/2	82,6	G1/8	151,3	263	322	120
VZXA-A-...-50-...-16-...-PR-...	41	G2	2 NPT	Rc2	82,6	G1/8	151,3	260	340	150
VZXA-A-...-65-...-8-...-PR-...	41	G2 1/2	2 1/2 NPT	Rc2 1/2	82,6	G1/8	151,3	273	366	190
VZXA-B-...-25-...-30-...	41	G1	1 NPT	Rc1	82,6	G1/8	151,3	238	298	90
VZXA-B-...-32-...-25-...	41	G1 1/4	1 1/4 NPT	Rc1 1/4	82,6	G1/8	151,3	245	300	110
VZXA-B-...-40-...-16-...	41	G1 1/2	1 1/2 NPT	Rc1 1/2	82,6	G1/8	151,3	263	322	120
VZXA-B-...-50-...-10-...	41	G2	2 NPT	Rc2	82,6	G1/8	151,3	260	340	150
VZXA-B-...-65-...-5.6-...	41	G2 1/2	2 1/2 NPT	Rc2 1/2	82,6	G1/8	151,3	273	366	190

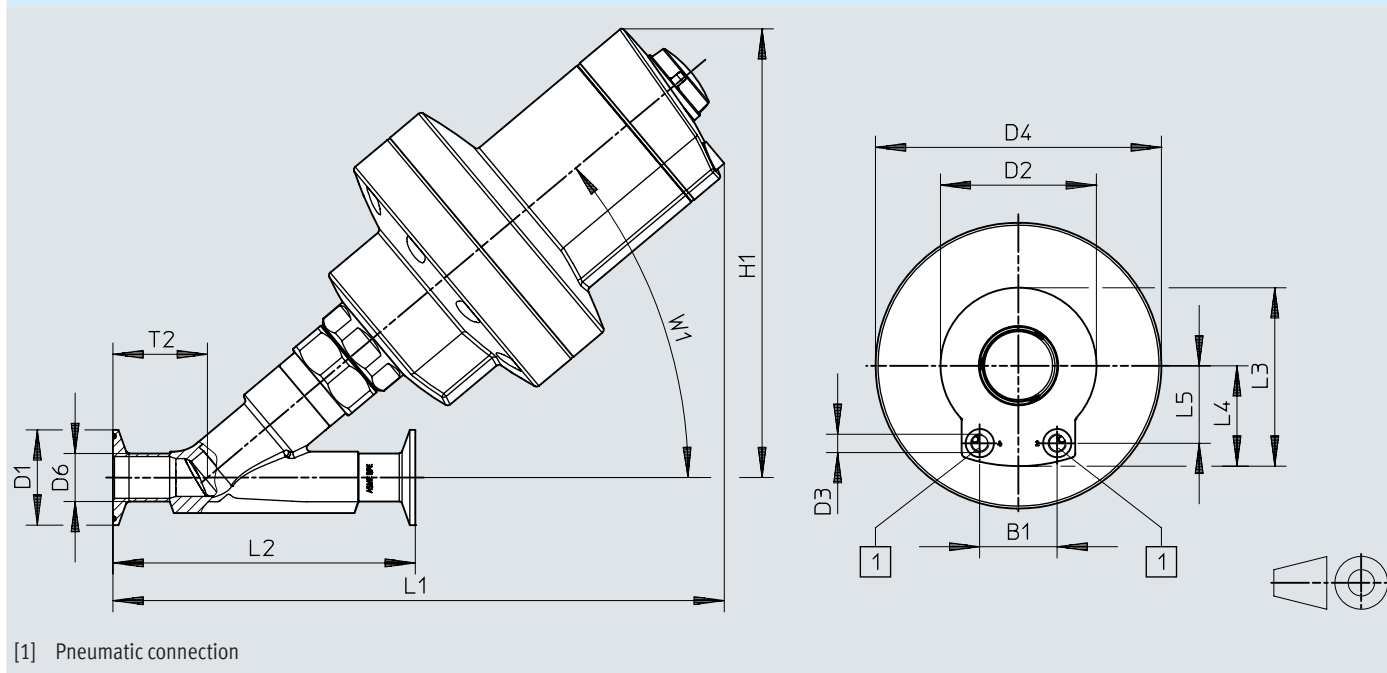
	L3	L4	L5	T1			T2	W1	∠C1
				S6	S7	S13 ¹⁾			
VZXA-A-...-32-...-16-...-PR-...	94,4	53,1	41	20	17,3	19,1	36	42°	50
VZXA-A-...-40-...-16-...-PR-...	94,4	53,1	41	22	17,3	19,1	38	42°	55
VZXA-A-...-50-...-16-...-PR-...	94,4	53,1	41	24	17,6	23,4	43	40°	65
VZXA-A-...-65-...-8-...-PR-...	94,4	53,1	41	27	24	27	53	40°	85
VZXA-B-...-25-...-30-...	94,4	53,1	41	16	16,8	16,8	28	40°	41
VZXA-B-...-32-...-25-...	94,4	53,1	41	20	17,3	19,1	36	42°	50
VZXA-B-...-40-...-16-...	94,4	53,1	41	22	17,3	19,1	38	42°	55
VZXA-B-...-50-...-10-...	94,4	53,1	41	24	17,6	23,4	43	40°	65
VZXA-B-...-65-...-5.6-...	94,4	53,1	41	27	24	27	53	40°	85

1) selected types, see www.festo.com

Dimensions

Dimensions – Clamp [C] with stainless steel diaphragm actuator, actuator size 90

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	B1	D1	D2 ∅	D3	D4 ∅	D6 ∅	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-CS1-1"-...-90-...	41	34	82,6	G1/8	151,3	25,4	240	323	160	94,4	53,1	41	50	40

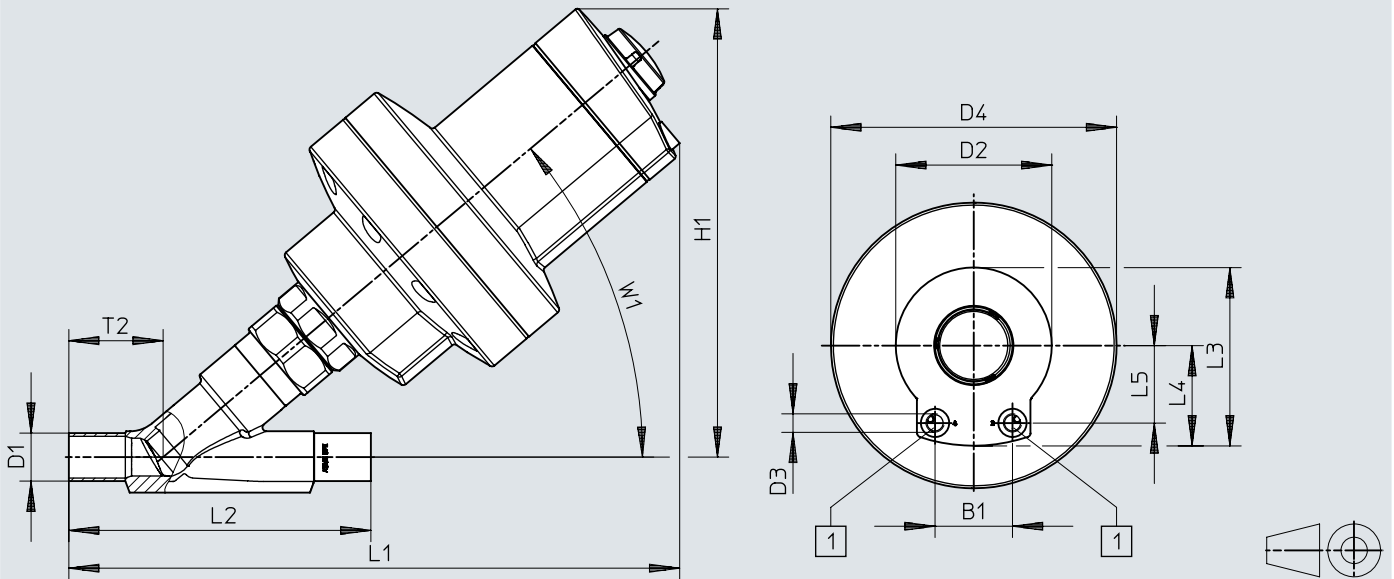
	B1	D1	D2 ∅	D3	D4 ∅	D6 ∅	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-CS5-25-...-90-...	41	50,5	82,6	G1/8	151,3	29	238	320	160	94,4	53,1	41	50	40
VZXA-...-CS5-32-...-90-...		50,5				35							239	

	B1	D1	D2 ∅	D3	D4 ∅	D6 ∅	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-CS15-25-...-90-...	41	50,5	82,6	G1/8	151,3	33,7	238	320	160	94,4	53,1	41	50	40
VZXA-...-CS15-32-...-90-...		64				42,4							239	

Dimensions

Dimensions – Welded end [W] with stainless steel diaphragm actuator, actuator size 90

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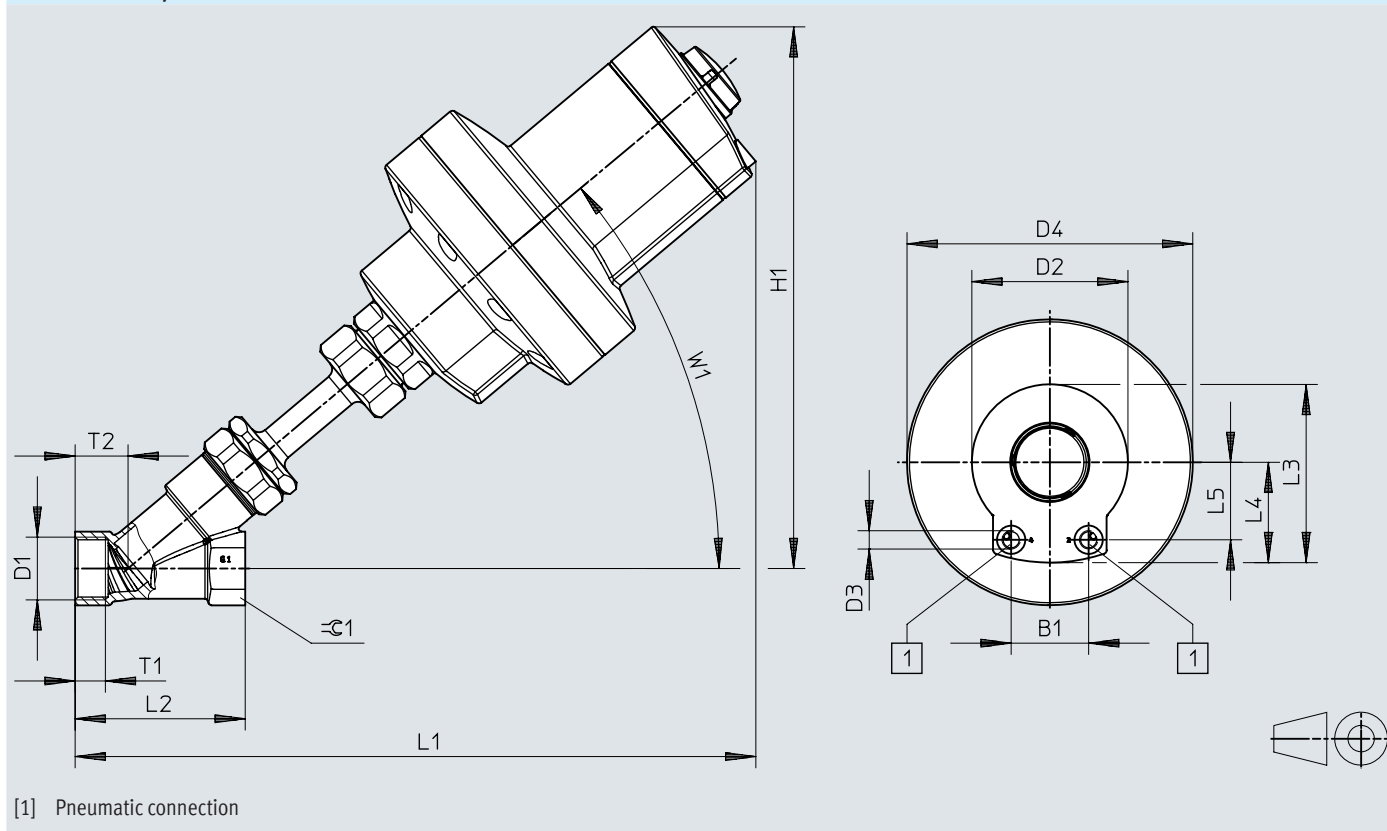
[1] Pneumatic connection

	B1	D1	D2 ø	D3	D4 ø	H1	L1	L2	L3	L4	L5	T2	W1
VZXA-...-WS1-1"-...-90-...	41	25,4	82,6	G1/8	151,3	240	323	160	94,4	53,1	41	50	40
VZXA-...-WS2-25-...-90-...	41	29	82,6	G1/8	151,3	238	320	160	94,4	53,1	41	50	40
VZXA-...-WS2-32-...-90-...		35				239						54	
VZXA-...-WS3-25-...-90-...	41	33,7	82,6	G1/8	151,3	238	320	160	94,4	53,1	41	50	40
VZXA-...-WS3-32-...-90-...		42,4				239						54	

Dimensions

Dimensions – Threaded socket [T] diaphragm actuator, size 90, for temperature of medium up to +230 °C

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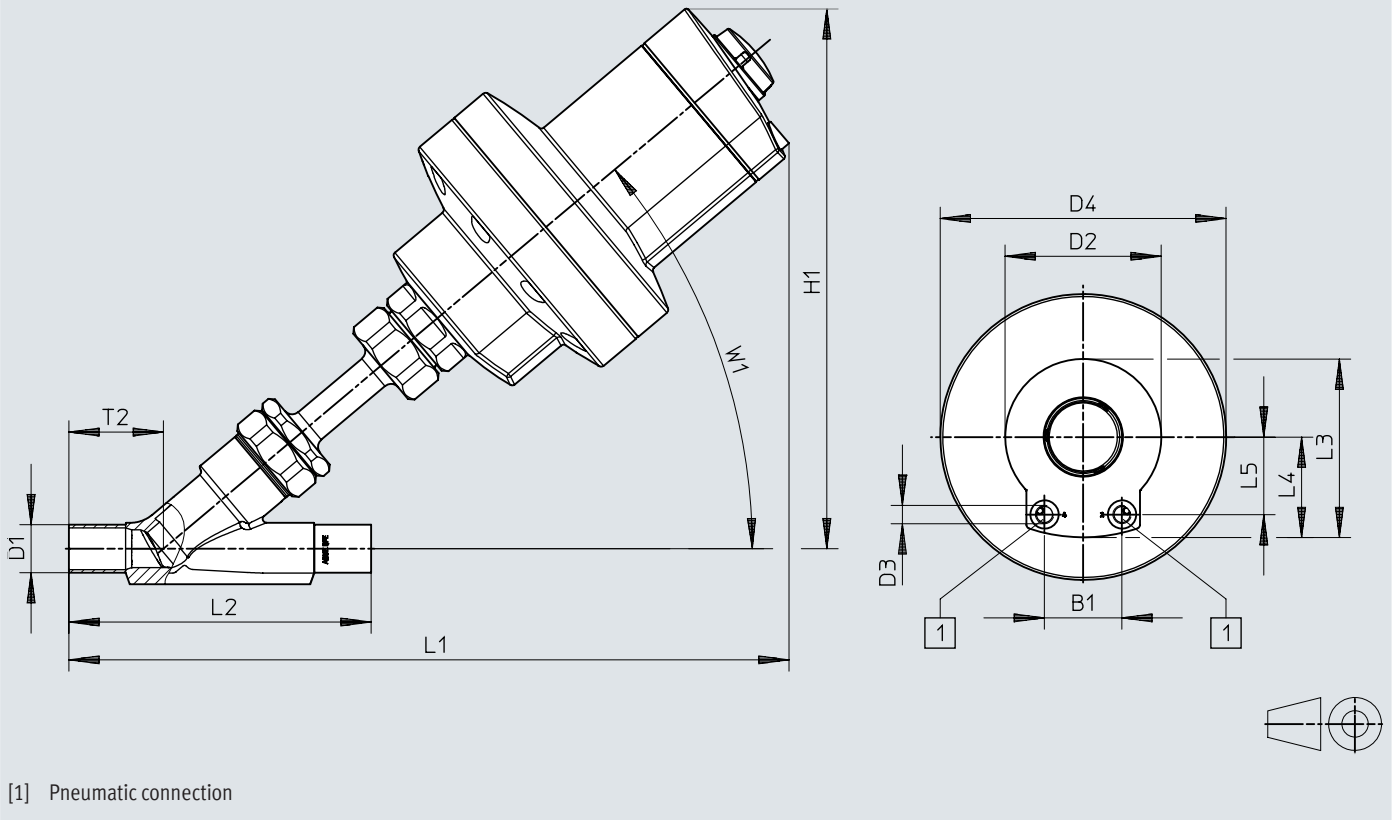
	B1	D1		D2 ø	D3	D4 ø	H1
		S6	S7				
VZXA-...-TS6-25-M7/M9-V13/V14-...-90-...-V4	41	G1	NPT11	82,6	G1/8	151,3	282
VZXA-...-TS6-32-M7/M9-V13/V14-...-90-...-V4	41	G1 1/4	NPT1 1/4	82,6	G1/8	151,3	290

	L1	L2	L3	L4	L5	T1		T2	W1	⊕C1
						S6	S7			
VZXA-...-TS6-25-M7/M9-V13/V14-...-90-...-V4	356	90	94,4	53,1	41	16	16,8	28	40	41
VZXA-...-TS6-32-M7/M9-V13/V14-...-90-...-V4	365	110	94,4	53,1	41	20	17,3	36	42	50

Dimensions

Dimensions – Weld end [W] diaphragm actuator, size 90, for temperature of medium up to +230 °C

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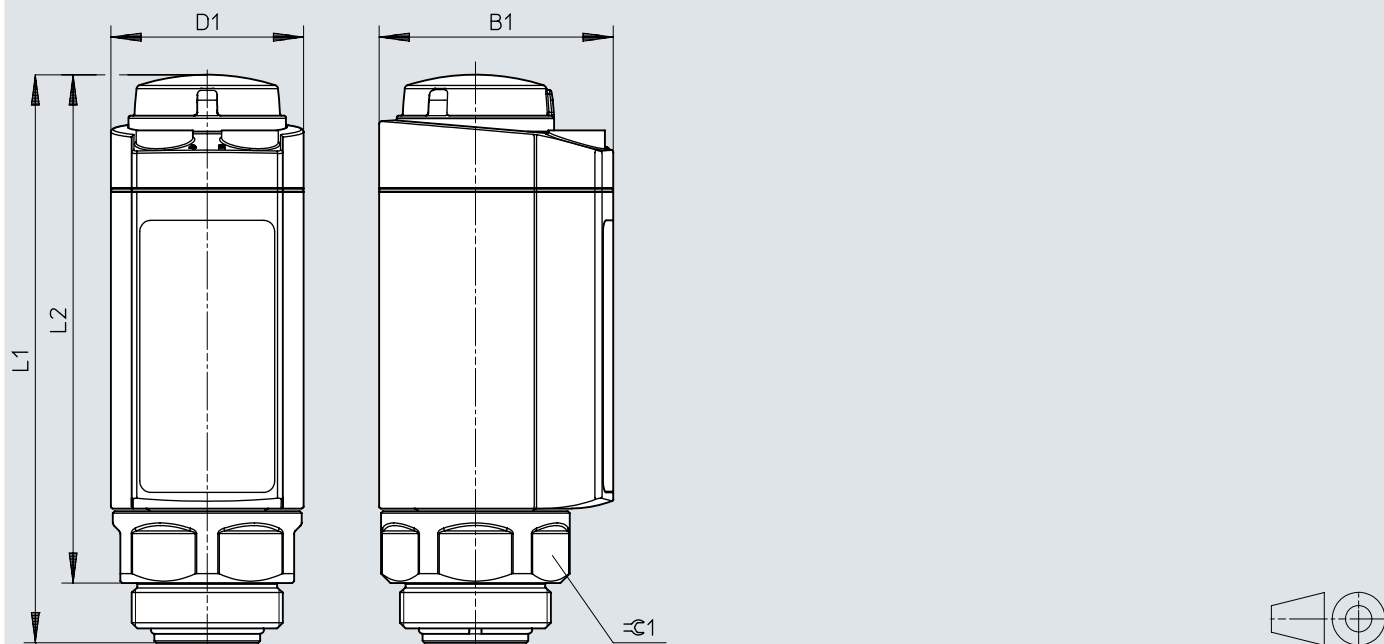
	B1	D1	D2 ø	D3	D4 ø	H1
VZXA-...-WS-...-25-M7/M9-V13/V14-...-90-...-V4	41	33,7	82,6	G1/8	151,3	281
VZXA-...-WS-...-32-M7/M9-V13/V14-...-90-...-V4	41	42,4	82,6	G1/8	151,3	290

	L1	L2	L3	L4	L5	T2	W1
VZXA-...-WS-...-25-M7/M9-V13/V14-...-90-...-V4	377	160	82,6	53,1	41	50	40
VZXA-...-WS-...-32-M7/M9-V13/V14-...-90-...-V4	393	180	82,6	53,1	41	54	40

Dimensions

Dimensions – Piston drive DFPK

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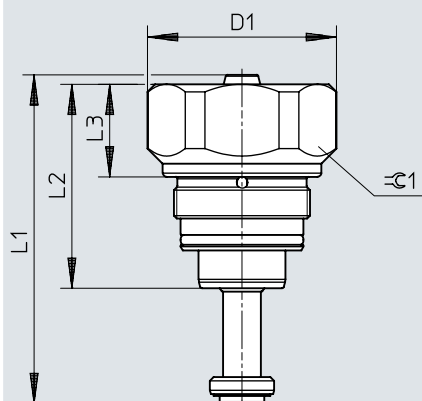
[1] Pneumatic connection

	B1	D1 ∅	L1	L2	≡1
DFPK-46-17-V4	62	51	150,3	134,5	46
DFPK-46-17-PR-V4					
DFPK-46-17-S-V4					
DFPK-46-17-D-V4					
DFPK-75-20-V4	94,4	82,5	181	165,2	
DFPK-75-20-PR-V4					
DFPK-75-20-S-V4					
DFPK-75-20-D-V4					

Dimensions

Dimensions – Cover kit VAVC

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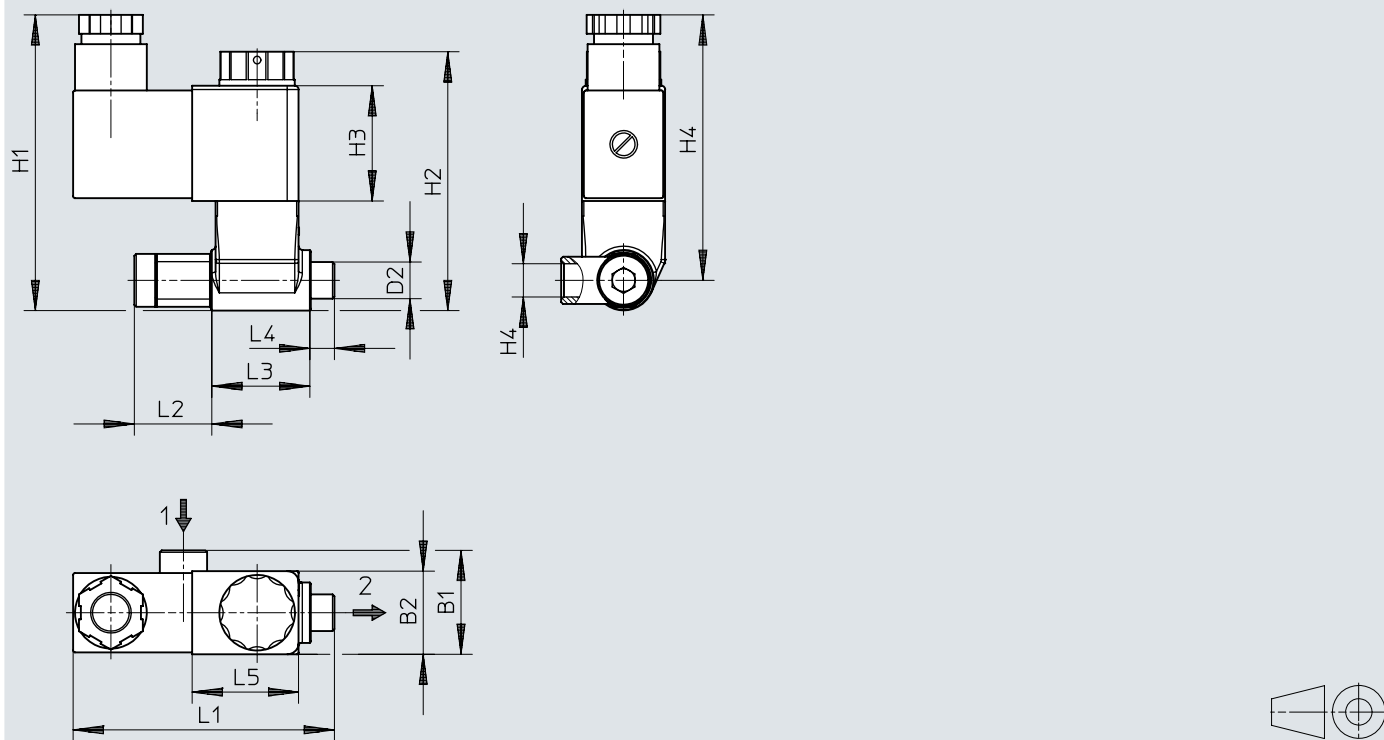


	D1 ∅	L1	L2	L3	∅1
VAVC-F12-SCC-13-TP	50	87	54	24,5	46
VAVC-F12-SCC-20-TP		85,6			
VAVC-F12-SCC-25-TP		94,4			
VAVC-F12-SCC-32-TP		94,4		17	
VAVC-F12-SCC-40-TP	55	121,5	80,1	32,2	
VAVC-F12-SCC-50-TP	67,5	129,7	85,9	21,5	

Dimensions

Dimensions – Pilot valve VOFX

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[1] Flow direction


	B1	B2	D1	D2	H1	H2	H3	H4	L1	L2	L3	L4	L5
VOFX-...-1B2	27,5	22	G1/8	G1/8	~78,3	68,5	30,5	~70,3	69,2	20,5	26	6,5	28,2
VOFX-...-3AA1	27,5	30	G1/8	G1/8	~77,5	68,5	29,5	~69,5	86,5	20,5	26	6,5	35,5
VOFX-...-1A1-EX2-N	27,5	30	G1/8	G1/8	~77,5	68,5	29,5	~69,5	86,5	20,5	26	6,5	35,5
VOFX-...-1-EX4-M	27,5	29,7	G1/8	G1/8	~78,3	68,5	31,3	~70,3	67,8	20,5	26	6,5	35,6

Ordering data


Ordering data VZXA, with piston drive


	Direction of flow	Size of drive	Connection standard	Flow rate Kv	Part no.	Type	
	Above valve seat, for gaseous media	46 mm	G thread to DIN ISO 228	6.6 m³/h	8060513	VZXA-A-TS6-13-M2-V13T-16-K-46-17-PR-V4	
			NPT thread to ANSI/A SME B 1.20.1		8060520	VZXA-A-TS7-1/2"-M2-V14T-16-K-46-17-PR-V4	
		75 mm	G thread to DIN ISO 228	14.5 m³/h	8060514	VZXA-A-TS6-20-M2-V13T-16-K-75-20-PR-V4	
				21.5 m³/h	8060515	VZXA-A-TS6-25-M2-V13T-16-K-75-20-PR-V4	
			NPT thread to ANSI/A SME B	14.5 m³/h	8060521	VZXA-A-TS7-3/4"-M2-V14T-16-K-75-20-PR-V4	
				21.5 m³/h	8060522	VZXA-A-TS7-1"-M2-V14T-16-K-75-20-PR-V4	
		Below valve seat, for gaseous and liquid media	46 mm	G thread to DIN ISO 228	6 m³/h	8060527	VZXA-B-TS6-13-M2-V13T-30-K-46-17-V4
					13.3 m³/h	8060528	VZXA-B-TS6-20-M2-V13T-12.8-K-46-17-V4
					20.3 m³/h	8060530	VZXA-B-TS6-25-M2-V13T-8.3-K-46-17-V4
					27.9 m³/h	8060533	VZXA-B-TS6-32-M2-V13T-4.4-K-46-17-V4
	NPT thread to ANSI/A SME B 1.20.1			6 m³/h	8060541	VZXA-B-TS7-1/2"-M2-V14T-30-K-46-17-V4	
	75 mm		G thread to DIN ISO 228	13.5 m³/h	8060529	VZXA-B-TS6-20-M2-V13T-30-K-75-20-V4	
				22.6 m³/h	8060531	VZXA-B-TS6-25-M2-V13T-23-K-75-20-V4	
				30.3 m³/h	8060534	VZXA-B-TS6-32-M2-V13T-13.5-K-75-20-V4	
				41.4 m³/h	8060536	VZXA-B-TS6-40-M2-V13T-9.3-K-75-20-V4	
			50.1 m³/h	8060538	VZXA-B-TS6-50-M2-V13T-5.6-K-75-20-V4		
	NPT thread to ANSI/A SME B 1.20.1	13.5 m³/h	8060543	VZXA-B-TS7-3/4"-M2-V14T-30-K-75-20-V4			
	22.6 m³/h	8060545	VZXA-B-TS7-1"-M2-V14T-23-K-75-20-V4				
	30.3 m³/h	8060548	VZXA-B-TS7-1 1/4"-M2-V14T-13.5-K-75-20-V4				
	41.4 m³/h	8060550	VZXA-B-TS7-1 1/2"-M2-V14T-9.3-K-75-20-V4				
50.1 m³/h	8060552	VZXA-B-TS7-2"-M2-V14T-5.6-K-75-20-V4					


Ordering data VZXA, with polymer piston drive

	Direction of flow	Size of drive	Connection standard	Flow rate Kv	Part no.	Type
	Above valve seat, for gaseous media	46 mm	G thread to DIN ISO 228	4.9 m³/h	8111583	VZXA-A-TS6-13-M6-B1T-16-K-46-17-PR-PM
			NPT thread to ANSI/A SME B 1.20.1		8111598	VZXA-A-TS7-1/2"-M6-B1T-16-K-46-17-PR-PM
		75 mm	G thread to DIN ISO 228	12.7 m³/h	8111584	VZXA-A-TS6-20-M6-B1T-16-K-75-20-PR-PM
				19.2 m³/h	8111585	VZXA-A-TS6-25-M6-B1T-16-K-75-20-PR-PM
				25.3 m³/h	8111586	VZXA-A-TS6-32-M6-B1T-16-K-75-20-PR-PM
				34.5 m³/h	8111587	VZXA-A-TS6-40-M6-B1T-15.5-K-75-20-PR-PM
			40.1 m³/h	8111588	VZXA-A-TS6-50-M6-B1T-8-K-75-20-PR-PM	
			NPT thread to ANSI/A SME B 1.20.1	12.7 m³/h	8111599	VZXA-A-TS7-3/4"-M6-B1T-16-K-75-20-PR-PM
				19.2 m³/h	8111600	VZXA-A-TS7-1"-M6-B1T-16-K-75-20-PR-PM
				25.3 m³/h	8111601	VZXA-A-TS7-1 1/4"-M6-B1T-16-K-75-20-PR-PM
	34.5 m³/h	8111602		VZXA-A-TS7-1 1/2"-M6-B1T-15.5-K-75-20-PR-PM		
	40.1 m³/h	8111603	VZXA-A-TS7-2"-M6-B1T-8-K-75-20-PR-PM			
	Below valve seat, for gaseous and liquid media	46 mm	G thread to DIN ISO 228	4.6 m³/h	8111589	VZXA-B-TS6-13-M2-B1T-30-K-46-17-PM

Ordering data

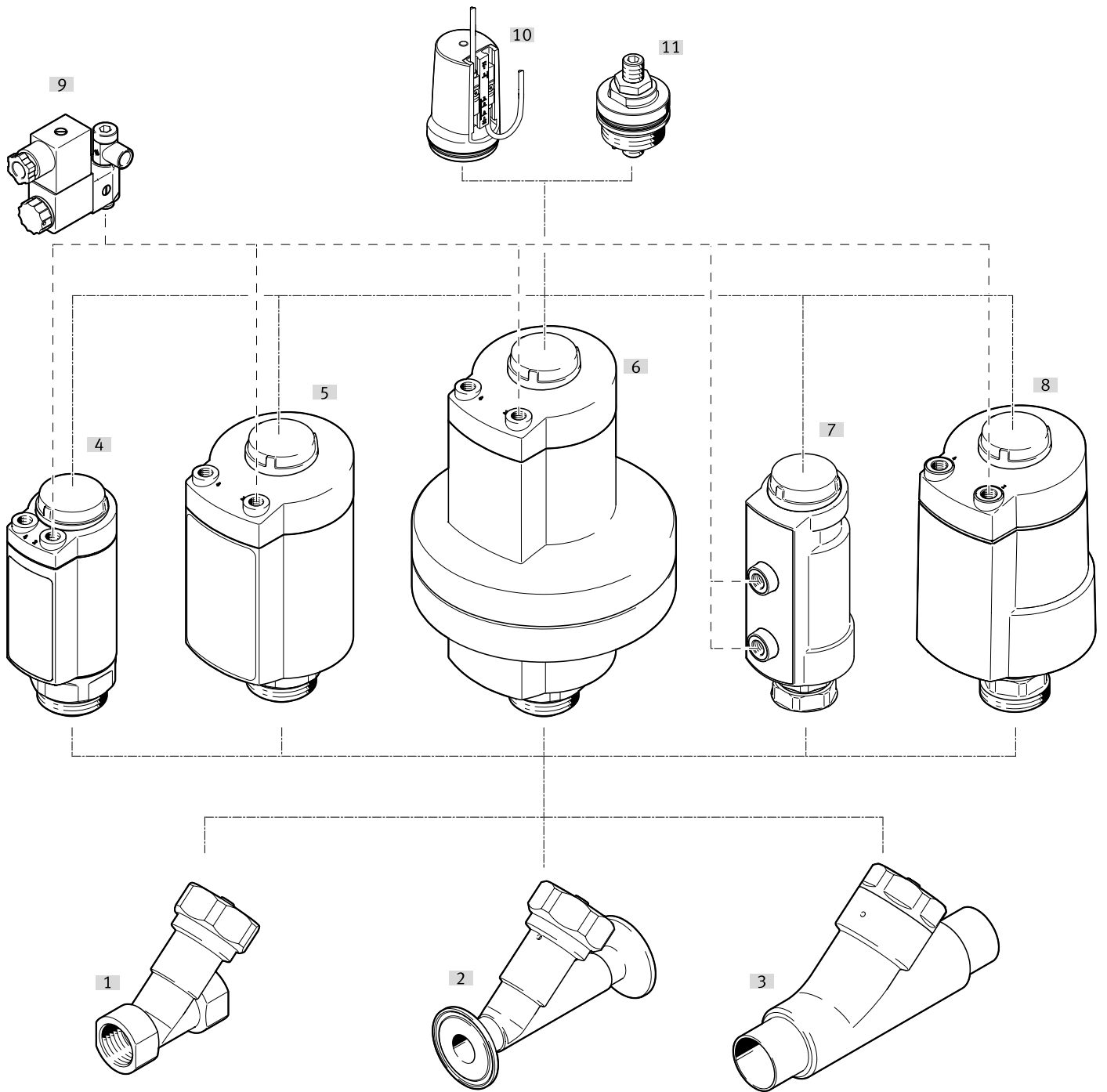
Ordering data VZXA, with polymer piston drive						
	Direction of flow	Size of drive	Connection standard	Flow rate Kv	Part no.	Type
	Below valve seat, for gaseous and liquid media	46 mm	G thread to DIN ISO 228	11.1 m ³ /h	8111590	VZXA-B-TS6-20-M2-B1T-12.8-K-46-17-PM
				15.9 m ³ /h	8111592	VZXA-B-TS6-25-M2-B1T-8.3-K-46-17-PM
				22.2 m ³ /h	8111594	VZXA-B-TS6-32-M2-B1T-4.4-K-46-17-PM
			NPT thread to AN-SI/A SME B 1.20.1	4.6 m ³ /h	8111604	VZXA-B-TS7-1/2"-M2-B1T-30-K-46-17-PM
				11.1 m ³ /h	8111605	VZXA-B-TS7-3/4"-M2-B1T-12.8-K-46-17-PM
				15.9 m ³ /h	8111607	VZXA-B-TS7-1"-M2-B1T-8.3-K-46-17-PM
		75 mm	G thread to DIN ISO 228	22.2 m ³ /h	8111609	VZXA-B-TS7-1 1/4"-M2-B1T-4.4-K-46-17-PM
				11.8 m ³ /h	8111591	VZXA-B-TS6-20-M2-B1T-30-K-75-20-PM
				17.2 m ³ /h	8111593	VZXA-B-TS6-25-M2-B1T-23-K-75-20-PM
			NPT thread to AN-SI/A SME B 1.20.1	24.4 m ³ /h	8111595	VZXA-B-TS6-32-M2-B1T-13.5-K-75-20-PM
				32.9 m ³ /h	8111596	VZXA-B-TS6-40-M2-B1T-9.3-K-75-20-PM
				38.8 m ³ /h	8111597	VZXA-B-TS6-50-M2-B1T-5.6-K-75-20-PM
		G thread to DIN ISO 228	11.8 m ³ /h	8111606	VZXA-B-TS7-3/4"-M2-B1T-30-K-75-20-PM	
			17.2 m ³ /h	8111608	VZXA-B-TS7-1"-M2-B1T-23-K-75-20-PM	
			24.4 m ³ /h	8111610	VZXA-B-TS7-1 1/4"-M2-B1T-13.5-K-75-20-PM	
		NPT thread to AN-SI/A SME B 1.20.1	32.9 m ³ /h	8111611	VZXA-B-TS7-1 1/2"-M2-B1T-9.3-K-75-20-PM	
38.8 m ³ /h			8111612	VZXA-B-TS7-2"-M2-B1T-5.6-K-75-20-PM		

Ordering data VZXA, with diaphragm actuator						
	Direction of flow	Size of drive	Connection standard	Flow rate Kv	Part no.	Type
	Above valve seat, for gaseous media	90 mm	G thread to DIN ISO 228	35.4 m ³ /h	8060516	VZXA-A-TS6-32-M2-V13T-16-M-90-26-PR-V4
				47.4 m ³ /h	8060517	VZXA-A-TS6-40-M2-V13T-16-M-90-26-PR-V4
				68.5 m ³ /h	8060518	VZXA-A-TS6-50-M2-V13T-16-M-90-26-PR-V4
				77.4 m ³ /h	8060519	VZXA-A-TS6-65-M2-V13T-8-M-90-26-PR-V4
			NPT thread to AN-SI/A SME B 1.20.1	35.4 m ³ /h	8060523	VZXA-A-TS7-1 1/4"-M2-V14T-16-M-90-26-PR-V4
				47.4 m ³ /h	8060524	VZXA-A-TS7-1 1/2"-M2-V14T-16-M-90-26-PR-V4
				68.5 m ³ /h	8060525	VZXA-A-TS7-2"-M2-V14T-16-M-90-26-PR-V4
				77.4 m ³ /h	8060526	VZXA-A-TS7-2 1/2"-M2-V14T-8-M-90-26-PR-V4
				Below valve seat, for gaseous and liquid media	G thread to DIN ISO 228	23.6 m ³ /h
	33.1 m ³ /h	8060535	VZXA-B-TS6-32-M2-V13T-25-M-90-26-V4			
	49 m ³ /h	8060537	VZXA-B-TS6-40-M2-V13T-16-M-90-26-V4			
	60.4 m ³ /h	8060539	VZXA-B-TS6-50-M2-V13T-10-M-90-26-V4			
	NPT thread to AN-SI/A SME B 1.20.1	77.9 m ³ /h	8060540		VZXA-B-TS6-65-M2-V13T-5.6-M-90-26-V4	
		23.6 m ³ /h	8060546		VZXA-B-TS7-1"-M2-V14T-30-M-90-26-V4	
		33.1 m ³ /h	8060549		VZXA-B-TS7-1 1/4"-M2-V14T-25-M-90-26-V4	
		49 m ³ /h	8060551		VZXA-B-TS7-1 1/2"-M2-V14T-16-M-90-26-V4	
		60.4 m ³ /h	8060553		VZXA-B-TS7-2"-M2-V14T-10-M-90-26-V4	
	77.9 m ³ /h	8060554	VZXA-B-TS7-2 1/2"-M2-V14T-5.6-M-90-26-V4			

Ordering information – Modular product system				
	Direction of flow	Flow rate Kv	Part no.	Type
	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media	4.6 ... 77.9 m ³ /h	3539410	VZXA

Peripherals

Peripherals overview



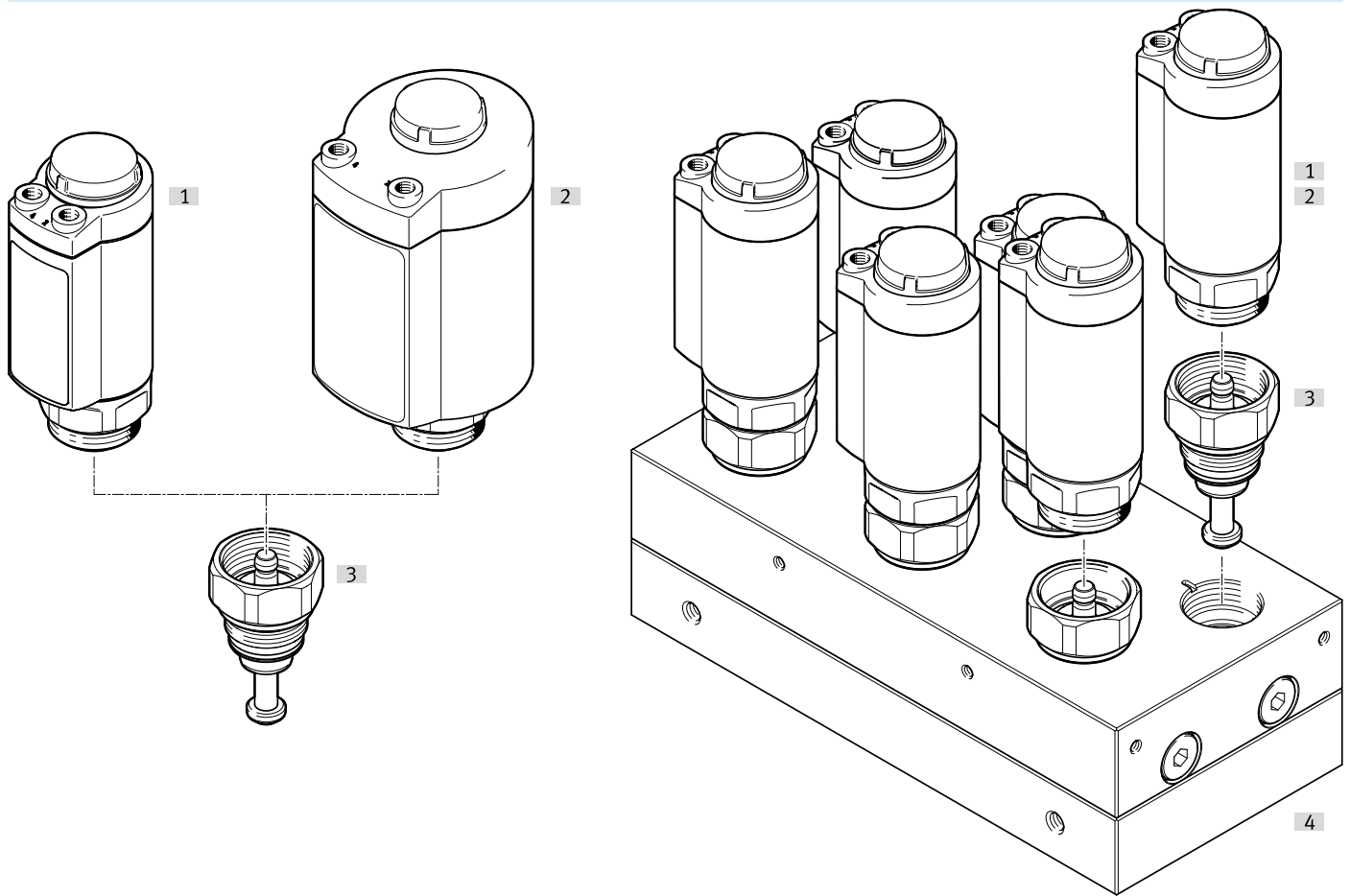
Accessories		→ Link
Type/order code	Description	
[1] Valve body VZXA	With line connection [T] Threaded sleeve	vzxa
[2] Valve body VZXA	- With line connection [C] clamp - Selected types. This product and all its product options can be ordered online via the configurator.	vzxa
[3] Valve body VZXA	- With line connection [W] welding end - Selected types. This product and all its product options can be ordered online via the configurator.	vzxa
[4] Piston drive DFPK	- Drive size 46 mm - Stainless steel piston drive	41
[5] Piston drive DFPK	- Drive size 75 mm - Stainless steel piston drive	41
[6] Diaphragm actuator DFBM	- Drive size 90 mm - Without stick-slip effect, ideal for high force requirements and control applications	vzxa

Peripherals

Accessories		→ Link
Type/order code	Description	
[7] Piston drive DFPK	- Drive size 46 mm - Polymer piston drive	41
[8] Piston drive DFPK	- Drive size 75 mm - Polymer piston drive	41
[9] Pilot valve VOFX	- Mounted directly on the drive - Can be ordered separately as an accessory	41
[10] Position indicator SAMH	- Position indicator with two standard T-slots, for mounting position sensors - Version with or without sensors - Can be ordered separately as an accessory	42
[11] Stroke reduction VAVA	- Piston rod stroke is reduced using a threaded pin or shock absorber - For angle seat valves VZXa with piston and diaphragm actuator - For piston drives DFPK - Can be ordered separately as an accessory	42

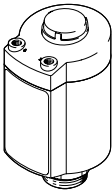
Peripherals

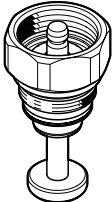
Peripherals overview valve block

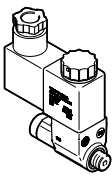



Accessories		→ Link
Type/order code	Description	
[1] Piston drive DFPK	- Drive size 46 mm - Stainless steel piston drive - Can be ordered separately as an accessory	41
[2] Piston drive DFPK	- Drive size 75 mm - Stainless steel piston drive - Can be ordered separately as an accessory	41
[3] Cover kit VAVC	- Spindles and sealing components included - Can be ordered separately as an accessory	41
[4] Manifold block	- Requirement and dimensions for production - www.festo.com/catalogue/vzxa → Downloads	↗

Accessories


Piston drive DFPK							
	Control function	Size of valve actuator	Product weight	Temperature range	Part no.	Type	
	Closed via reduced spring force, N/C	46	1,243 g	Standard	8083960	DFPK-46-17-PR-V4	
		75	2,539 g		8083964	DFPK-75-20-PR-V4	
	Double-acting	46	1,210 g		8083962	DFPK-46-17-D-V4	
		75	2,412 g		8083966	DFPK-75-20-D-V4	
	Opened via spring force, N/O	46	1,243 g		Suitable for high temperature applications	8198976	DFPK-46-17-S-T32-V4
					Standard	8083965	DFPK-75-20-S-V4
		75	2,539 g	Suitable for high temperature applications	8198978	DFPK-75-20-S-T32-V4	
				Standard	8083959	DFPK-46-17-V4	
	Closed via spring force, N/C	46	1,298 g	Suitable for high temperature applications	8198975	DFPK-46-17-T32-V4	
				Standard	8083963	DFPK-75-20-V4	
		75	2,746 g	Suitable for high temperature applications	8198977	DFPK-75-20-T32-V4	

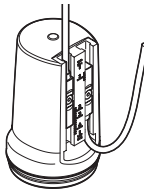
Cover kit VAVC				
	Nominal size DN	Product weight	Part no.	Type
	13	358 g	8084035	VAVC-F12-SCC-13-TP
			8201221	VAVC-F12-SCC-13-P
	20	363 g	8084036	VAVC-F12-SCC-20-TP
			8201222	VAVC-F12-SCC-20-P
	25	385 g	8084042	VAVC-F12-SCC-25-TP
			921 g	8201223
	32	424 g	8084034	VAVC-F12-SCC-32-TP
			1,080 g	8201224
	40	846 g	8084032	VAVC-F12-SCC-40-TP
	50	1,180 g	8084045	VAVC-F12-SCC-50-TP

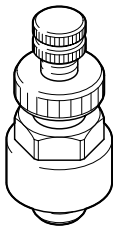
Pilot valve VOFX			
	Description	Part no.	Type
	Pilot valve, 3/2 closed monostable	8178212	VOFX-LT-M32C-MY-G18-SG18-1C3-EX4-M
		8178210	VOFX-LT-M32C-MY-G18-SG18-3AA1
		8178211	VOFX-LT-M32C-MY-G18-SG18-1A1-EX2-N
		8119587	VOFX-LT-M32C-MY-G18-SG18-1B2

Illuminating seal MF						
	Description	Product weight	Max. tightening torque	Operational voltage range DC	Part no.	Type
	Illuminating seal for F solenoid coils, Degree of protection to EN 60529 IP65 (when mounted)	1.6 g	0.6 Nm	12 ... 24 V	19143	MF-LD-12-24DC

Accessories

Stroke reduction VAVA				
	Description	Description	Part no.	Type
	Opening stroke limitation	Only for under seat flow, Stop is adjustable without special-purpose tool via threaded pin	8089993	VAVA-F12-H-H1
		Stop is adjustable without special-purpose tool via shock absorber	8107369	VAVA-F12-H-H6

Position indicator SAMH			
	Description	Part no.	Type
	With 2 sensors with explosion protection and high IP protection	8101084	SAMH-F12-MK-A2
	Without sensors	8092711	SAMH-F12-MK

Flow control/silencer VFFK					
	Pneumatic connection 1	Operating pressure	Product weight	Part no.	Type
	M5	0 ... 10 bar	4.3 g	133140	VFFK-C-K-M5-P