

Angle seat valve VZXF

FESTO



Angle seat valve VZXF

Key features

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Function

Angle seat valves are externally actuated valves. These valves are actuated by a direct supply of compressed air. In this process, the seat of the process valve is raised by means of a pneumatic actuator. In the normal position, the valve is closed by a spring. When the actuator is subjected to operating pressure, it raises the actuating piston and, at the same time, the valve disc too – the

valve opens. The valve seat is slanted at an angle of approx. 50° in relation to the medium flow. The direction of flow is determined by the design of the valve. Angle seat valves are used in applications in which absolute purity of the medium cannot be ensured, in which highly viscous media are to be controlled or in steam applications.

Design

-  - Connecting thread
G1/2 ... G2
-  - Flow rate Kv
2.8 ... 47.5 m³/h
- Gunmetal (red brass) variant
- Stainless steel casting variant
- Stainless steel casting variant with nickel-plated actuator head

General

- Angle seat valves are simple and sturdy and are thus perfectly suitable for almost all media with a viscosity of up to 600 mm²/s
- Angle seat valves control suitable gaseous and liquid media in rigid piping systems without the need for any pressure differential
- No pressure differential required between the inlet and outlet
- Low flow resistance
- Insensitive to steam or slightly contaminated media
- Long service life
- Low maintenance
- The valves have a high chemical and thermal resistance by virtue of their design
- The N/C function ensures that the valve is closed in the event of pressure loss in the control circuit
- Different designs of angle seat valves are available depending on the pressure of the medium
- There is a choice of two versions: “closing in the direction of medium flow” is used for gaseous media; “closing against the direction of media flow” is used for liquid media

Explosion protection

- ATEX-certified is used in production areas which are potentially explosive to a certain extent. The VZXF angle seat valves are certified for use in equipment group II, category 2

PWIS-free

- PWIS-free is chosen for use in production areas in which the influence of paint-wetting impairment substances must be avoided at all costs

Vacuum version

- The variant that is suitable for vacuum is used in packaging machines which need to generate a vacuum

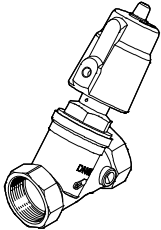
Angle seat valve VZXF

Key features

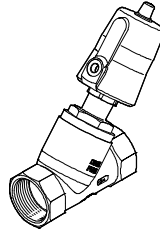
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Variants

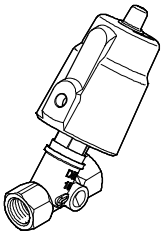
VZXF-L-...-M-A-G112-350-H3B1-50-8



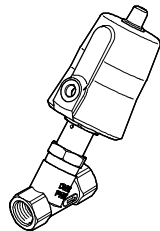
VZXF-L-...-M-A-G112-350-M1-V4V4T-50-7



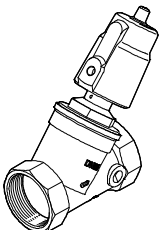
VZXF-L-...-M-A-G12-120-M1-H3B1-50-16



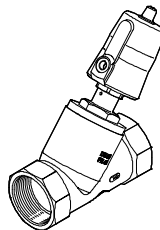
VZXF-L-...-M-B-G12-130-M1-V4V4T-50-40



VZXF-F-L-...-M-B-G2-430-H3B1-50-3



VZXF-F-L-...-M-B-G2-450-M1-V4V4T-50-3



Angle seat valve VZXF

Product range overview

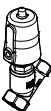
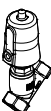
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Version	Type	Process valve connection	Nominal size DN	Temperature of medium [°C]	Flow rate Kv [m³/h]	Process valve nominal pressure PN	→ Page/Internet
Gunmetal (red brass)							
	VZXF-L-...-H3B1-...	G½	15	-10 ... +80	2.8 ... 33.8	16	8
		G¾	20				
		G1	25				
		G1¼	32				
		G1½	40				
		G2	50				
	VZXF-L-...-H3B1T-..., VZXF-L-...-H3ALT-...	G½	15	-40 ... +200	3.5 ... 40	16	11
		G¾	20				
		G1	25				
		G1¼	32				
		G1½	40				
		G2	50				
Gunmetal (red brass), vacuum version							
	VZXF-L-...-H3B1V-..., VZXF-L-...-H3ALV-...	G½	15	-10 ... +80	3.5 ... 40	16	15
		G¾	20				
		G1	25				
		G1¼	32				
		G1½	40				
		G2	50				
Gunmetal (red brass), PWIS-free							
	VZXF-L-...-H3B1V-...	G½	15	-10 ... +80	3.7 ... 16.5	16	18
		G¾	20				
		G1	25				
		G1½	40				
Gunmetal (red brass) with EX certification							
	VZXF-L-...-H3B1V-...-EX4	G½	15	-10 ... +80	3.5 ... 28	16	20
		G¾	20				
		G1	25				
		G1¼	32				
		G1½	40				
		G2	50				

Angle seat valve VZXF

Product range overview

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Version	Type	Process valve connection	Nominal size DN	Temperature of medium [°C]	Flow rate Kv [m³/h]	Process valve nominal pressure PN	→ Page/Internet
Stainless steel casting							
	VZXF-L-...-V4V4T-...	G½	15	-40 ... +200	2.8 ... 47.5	40	24
		G¾	20				
		G1	25				
		G1¼	32				
		G1½	40				
		G2	50				
Stainless steel casting with nickel-plated actuator head							
	VZXF-L-...-V4B2T-..., VZXF-L-...-V4ANT-...	G½	15	-40 ... +200	3.5 ... 40	40	28
		G¾	20				
		G1	25				
		G1¼	32				
		G1½	40				
		G2	50				
Stainless steel casting, vacuum version							
	VZXF-L-...-V4B2V-..., VZXF-L-...-V4ANV-...	G½	15	-10 ... +80	3.8 ... 43	40	32
		G¾	20				
		G1	25				
		G1¼	32				
		G1½	40				
		G2	50				
Stainless steel casting with EX certification							
	VZXF-L-...-V4V4T-...-EX4	G½	15	-40 ... +200	3.3 ... 34.5	40	36
		G¾	20				
		G1	25				
		G1¼	32				
		G1½	40				
		G2	50				

Angle seat valve VZXF

Type codes

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VZXF - L - M22C - M - A - G12 - 120 -

Type

VZXF	Angle seat valve, externally actuated
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Type of directional control valve

L	In-line valve
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Valve function

M22C	2/2-way valve, normally closed
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Reset method for monostable valves

M	Mechanical spring
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Media flow

A	Above valve seat for gaseous media
B	Below valve seat for gaseous and liquid media

Process valve connection

G12	Thread G1½
G34	Thread G¾
G1	Thread G1
G114	Thread G1¼
G112	Thread G1½
G2	Thread G2

Nominal width

120	12 mm
130	13 mm
160	16 mm
180	18 mm
230	23 mm
240	24 mm
290	29 mm
310	31 mm
350	35 mm
430	43 mm
450	45 mm

Temperature range of medium

	Standard, -10 ... +80 °C
M1	-40 ... +200 °C

Angle seat valve VZXF

Type codes

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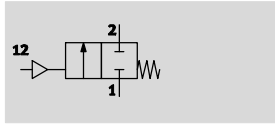
		H3	B1		-	50	-	16	-		-	EX4
Housing material												
H3	Gunmetal (red brass)											
V4	Stainless steel											
Housing, actuator material												
AL	Aluminium											
AN	Nickel-plated aluminium											
B1	Brass											
B2	Nickel-plated brass											
V4	Stainless steel											
Sealing materials												
	Standard, NBR											
T	PTFE											
V	FPM											
Actuator size												
50	50 mm											
80	80 mm											
Medium pressure												
V	-0.9 ... 0 bar											
3	Max. 3 bar											
4	Max. 4 bar											
5	Max. 5 bar											
6	Max. 6 bar											
7	Max. 7 bar											
8	Max. 8 bar											
9	Max. 9 bar											
10	Max. 10 bar											
12	Max. 12 bar											
16	Max. 16 bar											
20	Max. 20 bar											
22	Max. 22 bar											
25	Max. 25 bar											
40	Max. 40 bar											
Presence of paint-wetting impairment substances												
	Standard											
C	PWIS-free											
EU certification												
	None											
EX4	II 2GD											

Angle seat valve VZXF

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Technical data – Gunmetal (red brass), temperature of medium –10 ... +80 °C

Function



-  - Flow rate Kv
3.5 ... 28 m³/h

-  - Connecting thread
G½ ... G2



General technical data			
Process valve connection	G½	G¾	G1
Auxiliary pilot air port	G⅛		
Nominal size DN	15	20	25
Nominal width [mm]	12	16	23
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Process valve connection	G1¼	G1½	G2
Auxiliary pilot air port	G⅛		
Nominal size DN	32	40	50
Nominal width [mm]	29	35	43
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Angle seat valve VZXF

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Technical data – Gunmetal (red brass), temperature of medium –10 ... +80 °C

Operating and environmental conditions			
Process valve connection	G1/2	G3/4	G1
Nominal pressure of process valve PN	16		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]		
Medium	Filtered compressed air, grade of filtration 200 µm		
	Mineral oil-based hydraulic oil		
	Inert gases		
	Mineral oil		
	Neutral fluids		
	Water		
Max. viscosity [mm ² /s]	600		
Ambient temperature [°C]	–10 ... +60		
Temperature of medium [°C]	–10 ... +80		
CE marking (see declaration of conformity)	–		

Process valve connection	G1 1/4	G1 1/2	G2
Nominal pressure of process valve PN	16		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]		
Medium	Filtered compressed air, grade of filtration 200 µm		
	Mineral oil-based hydraulic oil		
	Inert gases		
	Mineral oil		
	Neutral fluids		
	Water		
Max. viscosity [mm ² /s]	600		
Ambient temperature [°C]	–10 ... +60		
Temperature of medium [°C]	–10 ... +80		
CE marking (see declaration of conformity)	To EU Pressure Equipment Directive		

Materials		
Angle seat valves		Material number
1 Housing	Gunmetal (red brass)	CC499K
2 Actuator head	Brass	–
3 Stem seal	NBR	–
Seat seal	PTFE	–
– Note on materials	Contains paint-wetting impairment substances, RoHS compliant	–

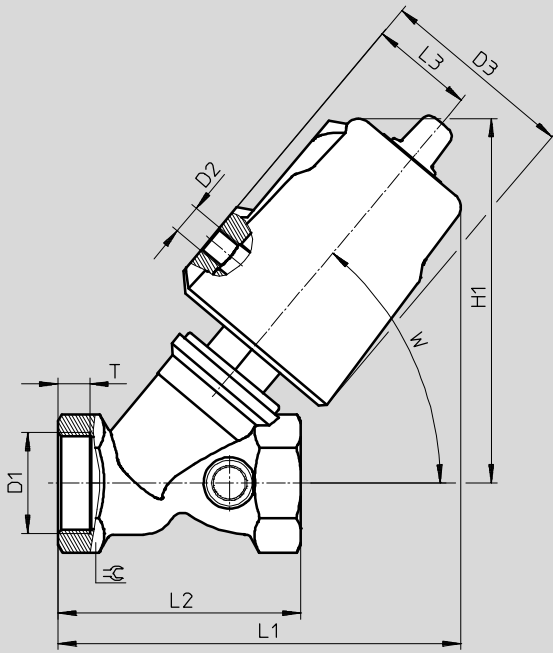
Angle seat valve VZXF

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Technical data – Gunmetal (red brass), temperature of medium –10 ... +80 °C

Dimensions

Download CAD data → www.festo.com



	D1	D2	D3 Ø	H1	L1	L2	L3	T	W	≈C
VZXF-L-...-G12-...-H3B1-50-...	G½	G⅛	62	112	123	66	34	8	50°	27
VZXF-L-...-G34-...-H3B1-50-...	G¾			117	130	75		9		33
VZXF-L-...-G1-...-H3B1-50-...	G1			121	133	80		10.5		41
VZXF-L-...-G114-...-H3B1-50-...	G1¼			139	154	97		12.5		50
VZXF-L-...-G112-...-H3B1-50-...	G1½			145	161	107		14.5		56
VZXF-L-...-G2-...-H3B1-50-...	G2			154	171	124		16.5		68

Ordering data – Angle seat valve VZXF

	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC ¹⁾	Product weight [g]	Part No.	Type
	G½	3.5	0 ... 16	1	1200	1002500	VZXF-L-M22C-M-A-G12-120-H3B1-50-16
		3.7				1002501	VZXF-L-M22C-M-B-G12-120-H3B1-50-16
	G¾	5.2	0 ... 16		1300	1002503	VZXF-L-M22C-M-B-G34-160-H3B1-50-16
		6.7				1002502	VZXF-L-M22C-M-A-G34-160-H3B1-50-16
	G1	9.6	0 ... 10		1500	1002505	VZXF-L-M22C-M-B-G1-230-H3B1-50-10
		10.8	0 ... 16			1002504	VZXF-L-M22C-M-A-G1-230-H3B1-50-16
	G1¼	6	0 ... 7		1900	1002507	VZXF-L-M22C-M-B-G114-290-H3B1-50-7
		19	0 ... 10			1002506	VZXF-L-M22C-M-A-G114-290-H3B1-50-10
	G1½	16.5	0 ... 6		2300	1002509	VZXF-L-M22C-M-B-G112-350-H3B1-50-6
		23				1002508	VZXF-L-M22C-M-A-G112-350-H3B1-50-8
	G2	23	0 ... 3		2800	1002511	VZXF-L-M22C-M-B-G2-430-H3B1-50-3
		28	0 ... 4			1002510	VZXF-L-M22C-M-A-G2-430-H3B1-50-4

1) Corrosion resistance class CRC 1 to Festo standard FN 940070

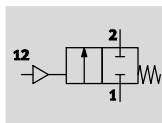
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Angle seat valve VZXF

Technical data – Gunmetal (red brass), temperature of medium –40 ... +200 °C

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Function



-  - Flow rate Kv
3.5 ... 40 m³/h

-  - G½ ... G2



General technical data			
Process valve connection	G½	G¾	G1
Pneumatic connection	G ⅛		
Nominal size DN	15	20	25
Nominal width [mm]	12	16	23
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Process valve connection	G1¼	G1½	G2
Pneumatic connection	G ⅛		
Nominal size DN	32	40	50
Nominal width [mm]	29	35	43
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Angle seat valve VZXF

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Technical data – Gunmetal (red brass), temperature of medium –40 ... +200 °C

Operating and environmental conditions						
Process valve connection	G1/2		G3/4		G1	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	16					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Steam					
	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–40 ... +200					
CE marking (see declaration of conformity)	–					

Process valve connection	G1 1/4		G1 1/2		G2	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	16					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Steam					
	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–40 ... +200					
CE marking (see declaration of conformity)	To EU Pressure Equipment Directive					

Materials			
Angle seat valves	...-H3ALT-...	...-H3B1T-...	Material number
1 Housing	Gunmetal (red brass)		CC499K
2 Actuator head	Aluminium	Brass	–
3 Stem seal	PTFE		–
Seat seal	PTFE		–
– Note on materials	Contains paint-wetting impairment substances, RoHS compliant		

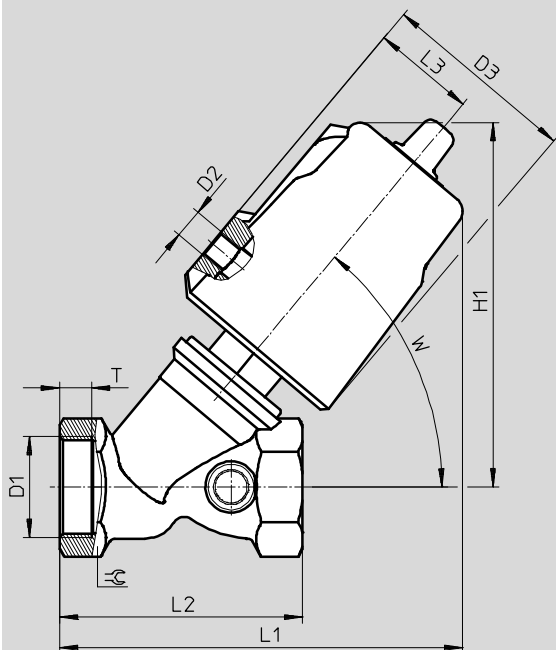
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Dimensions

Download CAD data → www.festo.com

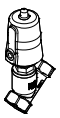


	D1	D2	D3 Ø	H1	L1	L2	L3	T	W	≡
VZXF-L-...-G12-...-H3B1T-50-...	G1½	G1/8	62	130	135.5	66	34	13	50°	27
VZXF-L-...-G34-...-H3B1T-50-...	G¾			130	140	75		14.5		32
VZXF-L-...-G1-...-H3B1T-50-...	G1			133	143	80		10.5		41
VZXF-L-...-G114-...-H3B1T-50-...	G1¼			148	160	97		12.5		50
VZXF-L-...-G114-...-H3ALT-80-...	G1¼		94	180	190	97	49	12.5		50
VZXF-L-...-G112-...-H3B1T-50-...	G1½		62	152.5	167	107	34	14.5		55
VZXF-L-...-G112-...-H3ALT-80-...	G1½		94	186	197	107	49	14.5		55
VZXF-L-...-G2-...-H3B1T-50-...	G2		62	162	178	124	34	16.5		67
VZXF-L-...-G2-...-H3ALT-80-...	G2		94	196	207.5	124	49	16.5		67

Angle seat valve VZXF

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Technical data – Gunmetal (red brass), temperature of medium –40 ... +200 °C

Ordering data – Angle seat valve VZXF							
	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC ¹⁾	Product weight [g]	Part No.	Type
	G½	3.5	0 ... 16	1	1200	3535619	VZXF-L-M22C-M-A-G12-120-M1-H3B1T-50-16
		3.7				3535620	VZXF-L-M22C-M-B-G12-120-M1-H3B1T-50-16
	G¾	5.2	0 ... 16	1	1300	3535644	VZXF-L-M22C-M-B-G34-160-M1-H3B1T-50-16
		6.7				3535643	VZXF-L-M22C-M-A-G34-160-M1-H3B1T-50-16
	G1	9.6	0 ... 10	1	1500	3535665	VZXF-L-M22C-M-B-G1-230-M1-H3B1T-50-10
		10.8	0 ... 16			3535664	VZXF-L-M22C-M-A-G1-230-M1-H3B1T-50-16
		14.5	0 ... 16	–	2000	3540768	VZXF-L-M22C-M-B-G1-230-M1-H3ALT-80-16
	G1¼	6	0 ... 7	1	1900	3535689	VZXF-L-M22C-M-B-G114-290-M1-H3B1T-50-7
		19	0 ... 10			3535684	VZXF-L-M22C-M-A-G114-290-M1-H3B1T-50-10
		19	0 ... 12	–	2300	3535712	VZXF-L-M22C-M-B-G114-290-M1-H3ALT-80-12
		21.5	0 ... 16			3535711	VZXF-L-M22C-M-A-G114-290-M1-H3ALT-80-16
	G1½	16.5	0 ... 6	1	2300	3535721	VZXF-L-M22C-M-B-G112-350-M1-H3B1T-50-6
		23	0 ... 7			3535720	VZXF-L-M22C-M-A-G112-350-M1-H3B1T-50-7
		29.5	0 ... 8	–	2600	3535825	VZXF-L-M22C-M-B-G112-350-M1-H3ALT-80-8
		30.5	0 ... 16			3535824	VZXF-L-M22C-M-A-G112-350-M1-H3ALT-80-16
	G2	23	0 ... 3	1	2800	3535838	VZXF-L-M22C-M-B-G2-430-M1-H3B1T-50-3
		28	0 ... 4			3535837	VZXF-L-M22C-M-A-G2-430-M1-H3B1T-50-4
		30	0 ... 5	–	2900	3536436	VZXF-L-M22C-M-B-G2-430-M1-H3ALT-80-5
		40	0 ... 16			3536435	VZXF-L-M22C-M-A-G2-430-M1-H3ALT-80-16

1) Corrosion resistance class CRC 1 to Festo standard FN 940070

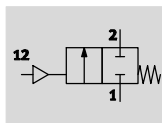
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Angle seat valve VZXF

Technical data – Gunmetal (red brass), vacuum version

FESTO

Function



-  - Flow rate Kv
3.5 ... 40 m³/h

-  - G $\frac{1}{2}$... G2



General technical data			
Process valve connection	G $\frac{1}{2}$	G $\frac{3}{4}$	G1
Pneumatic connection	G $\frac{1}{8}$		
Nominal size DN	15	20	25
Nominal width [mm]	12	16	23
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Process valve connection	G1 $\frac{1}{4}$	G1 $\frac{1}{2}$	G2
Pneumatic connection	G $\frac{1}{8}$		
Nominal size DN	32	40	50
Nominal width [mm]	29	35	43
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Angle seat valve VZXF

Technical data – Gunmetal (red brass), vacuum version

FESTO

Operating and environmental conditions						
Process valve connection	G1/2		G3/4		G1	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	16					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Steam					
	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–10 ... +80					
CE marking (see declaration of conformity)	–					

Process valve connection	G1 1/4		G1 1/2		G2	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	16					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Steam					
	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–10 ... +80					
CE marking (see declaration of conformity)	To EU Pressure Equipment Directive					

Materials			
Angle seat valves	...-H3ALV-...	...-H3B1V-...	Material number
1 Housing	Gunmetal (red brass)		CC499K
2 Actuator head	Aluminium	Brass	–
3 Stem seal	FPM		–
Seat seal	FPM		–
– Note on materials	Contains paint-wetting impairment substances, RoHS compliant		

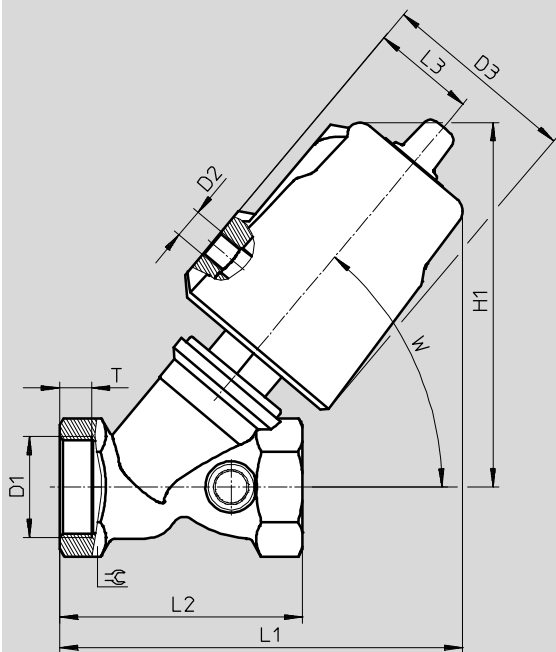
Angle seat valve VZXF

Technical data – Gunmetal (red brass), vacuum version

FESTO

Dimensions

Download CAD data → www.festo.com



	D1	D2	D3 Ø	H1	L1	L2	L3	T	W	≡
VZXF-L-...-G12-...-H3B1V-50-...	G1/2	G1/8	62	113.5	123	66	34	13	50°	27
VZXF-L-...-G34-...-H3B1V-50-...	G3/4			118	130	75	34	14.5		32
VZXF-L-...-G1-...-H3B1V-50-...	G1			121	133	80	34	10.5		41
VZXF-L-...-G1-...-H3ALV-80-...	G1		94	168	174.5	80	49	10.5		41
VZXF-L-...-G114-...-H3B1V-50-...	G1 1/4		62	138.5	153.5	97	34	12.5		50
VZXF-L-...-G114-...-H3ALV-80-...	G1 1/4		94	174.5	185	97	49	12.5		50
VZXF-L-...-G112-...-H3B1V-50-...	G1 1/2		62	146	160	107	34	14.5		55
VZXF-L-...-G112-...-H3ALV-80-...	G1 1/2		94	180.5	192	107	49	14.5		55
VZXF-L-...-G2-...-H3ALV-80-...	G2		94	190	202.5	124	49	16.5		68

Ordering data – Angle seat valve VZXF

	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC ¹⁾	Product weight [g]	Part No.	Type
	G1/2	3.5	-0.9	1	1200	3538869	VZXF-L-M22C-M-A-G12-120-H3B1V-50-V
	G3/4	6.7		1	1300	3539178	VZXF-L-M22C-M-A-G34-160-H3B1V-50-V
	G1	10.8		1	1500	3539247	VZXF-L-M22C-M-A-G1-230-H3B1V-50-V
		12		-	2000	3536819	VZXF-L-M22C-M-A-G1-230-H3ALV-80-V
	G1 1/4	19		1	1900	3539352	VZXF-L-M22C-M-A-G114-290-H3B1V-50-V
		21.5		-	2300	3536830	VZXF-L-M22C-M-A-G114-290-H3ALV-80-V
	G1 1/2	23		1	2300	3539367	VZXF-L-M22C-M-A-G112-350-H3B1V-50-V
		30.5		-	2600	3536850	VZXF-L-M22C-M-A-G112-350-H3ALV-80-V
	G2	40		-	2900	3540796	VZXF-L-M22C-M-A-G2-430-H3ALV-80-V

1) Corrosion resistance class CRC 1 to Festo standard FN 940070

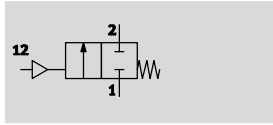
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Angle seat valve VZXF

Technical data – Gunmetal (red brass), PWIS-free

FESTO

Function



Flow rate Kv
3.7 ... 16.5 m³/h

Ø G 1/2 ... G 1 1/2



General technical data				
Process valve connection	G 1/2	G 3/4	G 1	G 1 1/2
Pneumatic connection	G 1/8			
Nominal size DN	15	20	25	40
Nominal width [mm]	12	16	23	35
Valve function	2/2-way, closed, monostable			
Design	Poppet valve with spring return			
Type of mounting	In-line installation			
Mounting position	Any			
Direction of flow	Non-reversible			
Exhaust function	No flow control			
Sealing principle	Soft			
Reset method	Mechanical spring			
Type of actuation	Pneumatic			
Type of pilot control	Externally actuated			

Operating and environmental conditions				
Process valve connection	G 1/2	G 3/4	G 1	G 1 1/2
Nominal pressure of process valve PN	16			
Operating pressure [bar]	6 ... 10			
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]			
Medium	Inert gases			
	Filtered compressed air, degree of filtration 200 µm			
	Mineral oil-based hydraulic oil			
	Mineral oil			
	Neutral fluids			
	Water			
Max. viscosity [mm²/s]	600			
Ambient temperature [°C]	-10 ... +60			
Temperature of medium [°C]	-10 ... +80			
CE marking (see declaration of conformity)	–			

Materials		
Angle seat valves		Material number
1 Housing	Gunmetal (red brass)	CC499K
2 Actuator head	Brass	–
3 Stem seal	FPM	–
Seat seal	FPM	–
– Note on materials	RoHS compliant	

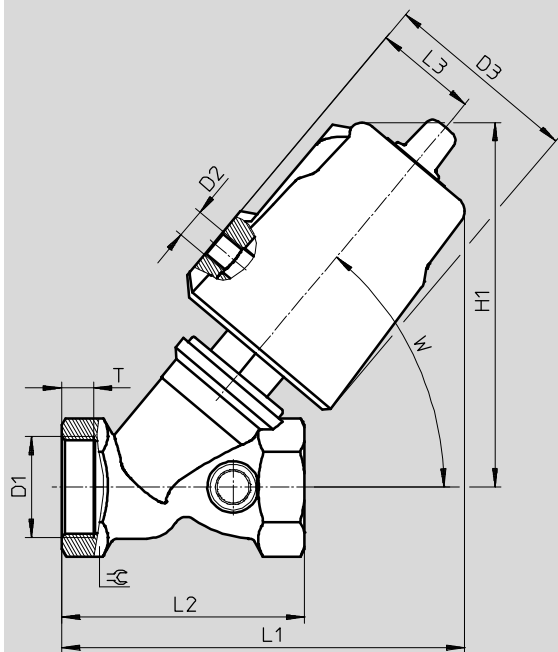
Angle seat valve VZXF

Technical data – Gunmetal (red brass), PWIS-free

FESTO

Dimensions

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	D1	D2	D3 Ø	H1	L1	L2	L3	T	W	50°
VZXF-L-...-G12-...-H3B1V-50-...	G1/2	G1/8	62	113.5	123	66	34	13	50°	27
VZXF-L-...-G34-...-H3B1V-50-...	G3/4			118	130	75	34	14.5		32
VZXF-L-...-G1-...-H3B1V-50-...	G1			121	133	80	34	10.5		41
VZXF-L-...-G112-...-H3B1V-50-...	G1 1/2		62	146	160	107	34	14.5		55

Ordering data – Angle seat valve VZXF

	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC ¹⁾	Product weight [g]	Part No.	Type
	G1/2	3.7	0 ... 16	1	1200	3539036	VZXF-L-M22C-M-B-G12-120-H3B1V-50-16-C
	G3/4	5.2	0 ... 16		1300	3539179	VZXF-L-M22C-M-B-G34-160-H3B1V-50-16-C
	G1	9.6	0 ... 10		1500	3539248	VZXF-L-M22C-M-B-G1-230-H3B1V-50-10-C
	G1 1/2	16.5	0 ... 6		2300	3539368	VZXF-L-M22C-M-B-G112-350-H3B1V-50-6-C

1) Corrosion resistance class CRC 1 to Festo standard FN 940070

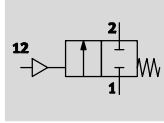
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Angle seat valve VZXF

Technical data – Gunmetal (red brass) with EX certification

FESTO

Function



-  - Flow rate Kv
3.5 ... 28 m³/h

-  - G1/2 ... G2



General technical data			
Process valve connection	G1/2	G3/4	G1
Pneumatic connection	G 1/8		
Nominal size DN	15	20	25
Nominal width [mm]	13	16	23
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Process valve connection	G1 1/4	G1 1/2	G2
Pneumatic connection	G 1/8		
Nominal size DN	32	40	50
Nominal width [mm]	29	35	45
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Angle seat valve VZXF

Technical data – Gunmetal (red brass) with EX certification

FESTO

Operating and environmental conditions						
Process valve connection	G1/2		G3/4		G1	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	16					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–10 ... +80					
ATEX category for gas	II 2G					
Type of ignition protection for gas	c TX X					
ATEX category for dust	II 2D					
Type of ignition protection for dust	c TX X					
Explosion-proof temperature	–10 °C ≤ Ta ≤ +60 °C					
CE marking (see declaration of conformity)	As per EU Explosion Protection Directive (ATEX)					

Process valve connection	G1 1/4		G1 1/2		G2	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	16					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–10 ... +80					
ATEX category for gas	II 2G					
Type of ignition protection for gas	c TX X					
ATEX category for dust	II 2D					
Type of ignition protection for dust	c TX X					
Explosion-proof temperature	–10 °C ≤ Ta ≤ +60 °C					
CE marking (see declaration of conformity)	To EU Pressure Equipment Directive					
	As per EU Explosion Protection Directive (ATEX)					

Angle seat valve VZXF

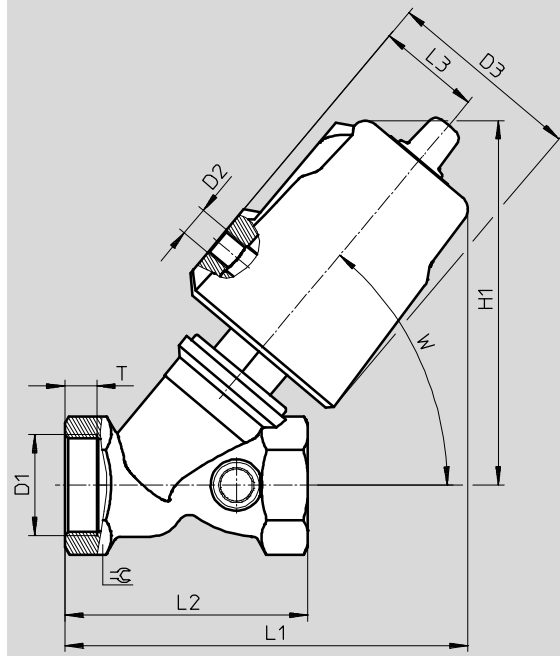
FESTO

Technical data – Gunmetal (red brass) with EX certification

Materials		
Angle seat valves		Material number
1	Housing	Gunmetal (red brass)
2	Actuator head	Brass
3	Stem seal	NBR
	Seat seal	PTFE
–	Note on materials	Contains paint-wetting impairment substances, RoHS compliant

Dimensions

Download CAD data → www.festo.com

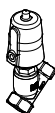


	D1	D2	D3 Ø	H1	L1	L2	L3	T	W	EX
VZXF-L-...-G12-...-H3B1-50-...	G½	G⅛	62	112	123	66	34	8	50°	27
VZXF-L-...-G34-...-H3B1-50-...	G¾			117	130	75	34	9		33
VZXF-L-...-G1-...-H3B1-50-...	G1			121	133	80	34	10.5		41
VZXF-L-...-G114-...-H3B1-50-...	G1¼			139	154	97	34	12.5		50
VZXF-L-...-G112-...-H3B1-50-...	G1½			145	161	107	34	14.5		56
VZXF-L-...-G2-...-H3B1-50-...	G2			154	171	124	34	16.5		68

Angle seat valve VZXF

Technical data – Gunmetal (red brass) with EX certification

FESTO

Ordering data – Angle seat valve VZXF							
	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC ¹⁾	Product weight [g]	Part No.	Type
	G1½	3.5	0 ... 16	1	1200	3539021	VZXF-L-M22C-M-A-G12-120-H3B1-50-16-EX4
		3.7				3539037	VZXF-L-M22C-M-B-G12-120-H3B1-50-16-EX4
	G¾	5.2	0 ... 16		1300	3539181	VZXF-L-M22C-M-B-G34-160-H3B1-50-16-EX4
		6.7				3539180	VZXF-L-M22C-M-A-G34-160-H3B1-50-16-EX4
	G1	9.6	0 ... 10		1500	3539250	VZXF-L-M22C-M-B-G1-230-H3B1-50-10-EX4
		10.8	0 ... 16			3539249	VZXF-L-M22C-M-A-G1-230-H3B1-50-16-EX4
	G1¼	6	0 ... 7		1900	3539354	VZXF-L-M22C-M-B-G114-290-H3B1-50-7-EX4
		19	0 ... 10			3539353	VZXF-L-M22C-M-A-G114-290-H3B1-50-10-EX4
	G1½	16.5	0 ... 6		2300	3539370	VZXF-L-M22C-M-B-G112-350-H3B1-50-6-EX4
		23	0 ... 7			3539369	VZXF-L-M22C-M-A-G112-350-H3B1-50-7-EX4
	G2	23	0 ... 3		2800	3540293	VZXF-L-M22C-M-B-G2-430-H3B1-50-3-EX4
		28	0 ... 4			3540292	VZXF-L-M22C-M-A-G2-430-H3B1-50-4-EX4

1) Corrosion resistance class CRC 1 to Festo standard FN 940070

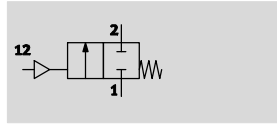
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Angle seat valve VZXF

FESTO

Technical data – Stainless steel casting, temperature of medium –40 ... +200 °C

Function



-  - Flow rate Kv
3.3 ... 43 m³/h

-  - Connecting thread
G1/2 ... G2



General technical data			
Process valve connection	G1/2	G3/4	G1
Auxiliary pilot air port	G1/8		
Nominal size DN	15	20	25
Nominal width [mm]	13	18	24
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	With external control		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]		

Process valve connection	G1 1/4	G1 1/2	G2
Auxiliary pilot air port	G1/8		
Nominal size DN	32	40	50
Nominal width [mm]	31	35	45
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	With external control		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]		

Angle seat valve VZXF

FESTO

Technical data – Stainless steel casting, temperature of medium –40 ... +200 °C

Operating and environmental conditions			
Process valve connection	G½	G¾	G1
Nominal pressure of process valve PN	40		
Medium	Filtered compressed air, grade of filtration 200 µm		
	Mineral oil-based hydraulic oil		
	Inert gases		
	Mineral oil		
	Neutral fluids		
	Water		
	Steam		
Max. viscosity	[mm²/s]	600	
Ambient temperature	[°C]	–10 ... 60	
Temperature of medium	[°C]	–40 ... 200	
CE marking (see declaration of conformity)	–		

Process valve connection	G1¼	G1½	G2
Nominal pressure of process valve PN	40		
Medium	Filtered compressed air, grade of filtration 200 µm		
	Mineral oil-based hydraulic oil		
	Inert gases		
	Mineral oil		
	Neutral fluids		
	Water		
	Steam		
Max. viscosity	[mm²/s]	600	
Ambient temperature	[°C]	–10 ... 60	
Temperature of medium	[°C]	–40 ... 200	
CE marking (see declaration of conformity)	To EU Pressure Equipment Directive		

Materials		
Angle seat valves		Material number
① Housing	Stainless steel casting	1.4408
② Actuator head	Stainless steel	–
③ Stem seal	PTFE	–
Seat seal	PTFE	–
– Note on materials	Contains paint-wetting impairment substances, RoHS compliant	–

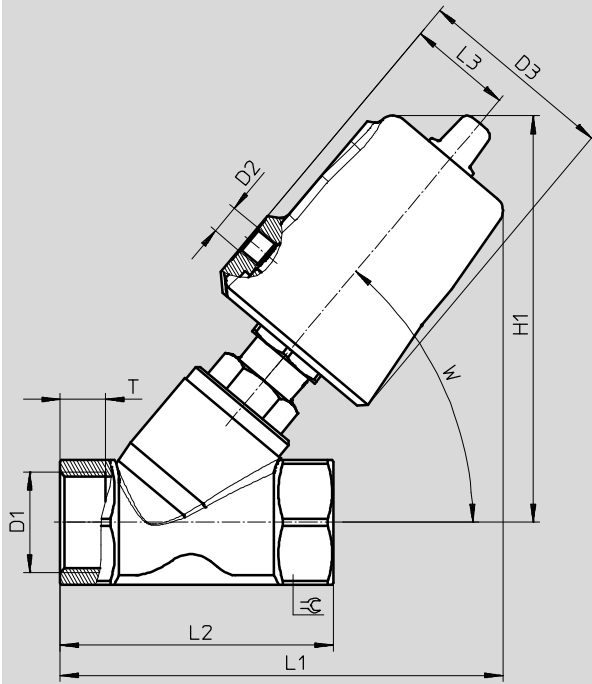
Angle seat valve VZXF

FESTO

Technical data – Stainless steel casting, temperature of medium –40 ... +200 °C

Dimensions

Download CAD data → www.festo.com

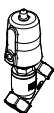


	D1	D2	D3 Ø	H1	L1	L2	L3	T	W	≡
VZXF-L-...-G12-...-V4V4T-50-...	G1½	G1/8	62	129	135	65	34	12	50°	27
VZXF-L-...-G34-...-V4V4T-50-...	G¾		62	130	138	75	34	13		32
VZXF-L-...-G1-...-V4V4T-50-...	G1		62	135	146	90	34	15		42
VZXF-L-...-G1-...-V4V4T-80-...	G1		94	177	184		48			
VZXF-L-...-G114-...-V4V4T-50-...	G1¼		62	151	155	110	34	17		50
VZXF-L-...-G114-...-V4V4T-80-...	G1¼		94	183	194		48			
VZXF-L-...-G112-...-V4V4T-50-...	G1½		62	155	174	120	34	19		55
VZXF-L-...-G112-...-V4V4T-80-...	G1½		94	187	202		48			
VZXF-L-...-G2-...-V4V4T-50-...	G2		62	167	193	150	34	21		70
VZXF-L-...-G2-...-V4V4T-80-...	G2		94	199	222		48			

Angle seat valve VZXF

FESTO

Technical data – Stainless steel casting, temperature of medium –40 ... +200 °C

Ordering data – Angle seat valve VZXF						
	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC ¹⁾	Product weight [g]	Part No. Type
	G1/2	3.3	0 ... 40	3	1300	1002513 VZXF-L-M22C-M-B-G12-130-M1-V4V4T-50-40
		3.8	0 ... 25			1002512 VZXF-L-M22C-M-A-G12-130-M1-V4V4T-50-25
	G3/4	6.5	0 ... 20		1400	1002515 VZXF-L-M22C-M-B-G34-180-M1-V4V4T-50-20
		7.5	0 ... 20			1002514 VZXF-L-M22C-M-A-G34-180-M1-V4V4T-50-20
	G1	11	0 ... 10		1600	1002517 VZXF-L-M22C-M-B-G1-240-M1-V4V4T-50-10
		12	0 ... 16			1002516 VZXF-L-M22C-M-A-G1-240-M1-V4V4T-50-16
		12	0 ... 22		3600	1002526 VZXF-L-M22C-M-B-G1-240-M1-V4V4T-80-22
		12.5	0 ... 40			1002525 VZXF-L-M22C-M-A-G1-240-M1-V4V4T-80-40
	G1 1/4	10.7	0 ... 7		2200	1002519 VZXF-L-M22C-M-B-G114-310-M1-V4V4T-50-7
		17.5	0 ... 10		3800	1002528 VZXF-L-M22C-M-B-G114-310-M1-V4V4T-80-10
		18.5	0 ... 9		2200	1002518 VZXF-L-M22C-M-A-G114-310-M1-V4V4T-50-9
		19	0 ... 25		3800	1002527 VZXF-L-M22C-M-A-G114-310-M1-V4V4T-80-25
	G1 1/2	17.5	0 ... 6		2500	1002521 VZXF-L-M22C-M-B-G112-350-M1-V4V4T-50-6
		25	0 ... 7			1002520 VZXF-L-M22C-M-A-G112-350-M1-V4V4T-50-7
		28	0 ... 8		4300	1002530 VZXF-L-M22C-M-B-G112-350-M1-V4V4T-80-8
		29	0 ... 20			1002529 VZXF-L-M22C-M-A-G112-350-M1-V4V4T-80-20
	G2	19.5	0 ... 3		3500	1002523 VZXF-L-M22C-M-B-G2-450-M1-V4V4T-50-3
		34.5	0 ... 4			1002522 VZXF-L-M22C-M-A-G2-450-M1-V4V4T-50-4
		39	0 ... 5		5400	1002532 VZXF-L-M22C-M-B-G2-450-M1-V4V4T-80-5
		43	0 ... 12			1002531 VZXF-L-M22C-M-A-G2-450-M1-V4V4T-80-12

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

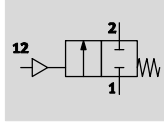
High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

Angle seat valve VZXF

Technical data – Stainless steel casting with nickel-plated actuator head

FESTO

Function



-  - Flow rate Kv
3.5 ... 40 m³/h

-  - G1/2 ... G2



General technical data			
Process valve connection	G1/2	G3/4	G1
Pneumatic connection	G 1/8		
Nominal size DN	15	20	25
Nominal width [mm]	13	18	24
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Process valve connection	G1 1/4	G1 1/2	G2
Pneumatic connection	G 1/8		
Nominal size DN	32	40	50
Nominal width [mm]	31	35	45
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Angle seat valve VZXF

FESTO

Technical data – Stainless steel casting with nickel-plated actuator head

Operating and environmental conditions						
Process valve connection	G1/2		G3/4		G1	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	40					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Steam					
	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–40 ... +200					
CE marking (see declaration of conformity)	–					

Process valve connection	G1 1/4		G1 1/2		G2	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	40					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Steam					
	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–40 ... +200					
CE marking (see declaration of conformity)	To EU Pressure Equipment Directive					

Materials			
Angle seat valves	... -V4ANT- ...	... -V4B2T- ...	Material number
1 Housing	Stainless steel casting		1.4408
2 Actuator head	Nickel-plated aluminium	Nickel-plated brass	–
3 Stem seal	PTFE		–
Seat seal	PTFE		–
– Note on materials	Contains paint-wetting impairment substances, RoHS compliant		

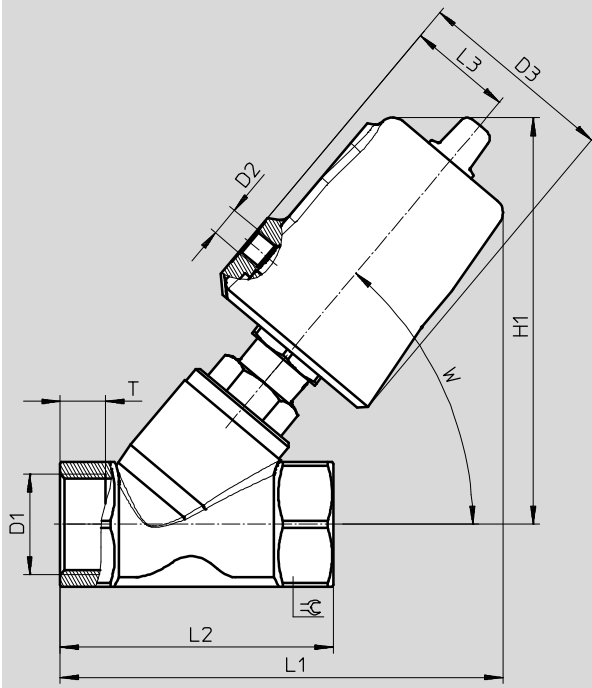
Angle seat valve VZXF

Technical data – Stainless steel casting with nickel-plated actuator head

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Dimensions

Download CAD data → www.festo.com

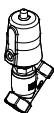


	D1	D2	D3 Ø	H1	L1	L2	L3	T	W	≡
VZXF-L-...-G12-...-V4B2T-50-...	G½	G⅛	62	128	133	65	34	12	50°	27
VZXF-L-...-G34-...-V4B2T-50-...	G¾		62	128	136.5	75		13		32
VZXF-L-...-G1-...-V4B2T-50-...	G1		62	133	145	90		15		41
VZXF-L-...-G1-...-V4ANT-80-...			94	176.5	183	90	49	15		41
VZXF-L-...-G114-...-V4B2T-50-...	G1¼		62	150	163.5	110	34	17		50
VZXF-L-...-G114-...-V4ANT-80-...			94	183	193	110		17		50
VZXF-L-...-G112-...-V4B2T-50-...	G1½		62	153	172	120		19		55
VZXF-L-...-G112-...-V4ANT-80-...			94	187	202	120		19		55
VZXF-L-...-G2-...-V4B2T-50-...	G2		62	167	193	150		21		70
VZXF-L-...-G2-...-V4ANT-80-...			94	199	221.5	150	49	21		70

Angle seat valve VZXF

FESTO

Technical data – Stainless steel casting with nickel-plated actuator head

Ordering data – Angle seat valve VZXF						
	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC ¹⁾	Product weight [g]	Part No. Type
	G1/2	3.3	0 ... 40	2	1300	3539720 VZXF-L-M22C-M-B-G12-130-M1-V4B2T-50-40
		3.8				3539719 VZXF-L-M22C-M-A-G12-130-M1-V4B2T-50-40
	G3/4	6.5	0 ... 20	2	1400	3538842 VZXF-L-M22C-M-B-G34-180-M1-V4B2T-50-20
		7.5				3539745 VZXF-L-M22C-M-A-G34-180-M1-V4B2T-50-20
	G1	11	0 ... 10	2	1600	3539783 VZXF-L-M22C-M-B-G1-240-M1-V4B2T-50-10
		12	0 ... 16	2	1600	3539782 VZXF-L-M22C-M-A-G1-240-M1-V4B2T-50-16
		12	0 ... 22	1	3600	3540198 VZXF-L-M22C-M-B-G1-240-M1-V4ANT-80-22
	G1 1/4	10.7	0 ... 7	2	2200	3539816 VZXF-L-M22C-M-B-G114-310-M1-V4B2T-50-7
		17.5	0 ... 10	1	3800	3540818 VZXF-L-M22C-M-B-G114-310-M1-V4ANT-80-10
		18.5	0 ... 9	2	2200	3539815 VZXF-L-M22C-M-A-G114-310-M1-V4B2T-50-9
		19	0 ... 25	1	3800	3540817 VZXF-L-M22C-M-A-G114-310-M1-V4ANT-80-25
	G1 1/2	17.5	0 ... 6	2	2500	3539927 VZXF-L-M22C-M-B-G112-350-M1-V4B2T-50-6
		25	0 ... 7	2	2500	3539926 VZXF-L-M22C-M-A-G112-350-M1-V4B2T-50-7
		28	0 ... 8	1	4300	3540250 VZXF-L-M22C-M-B-G112-350-M1-V4ANT-80-8
		29	0 ... 20	1	4300	3540248 VZXF-L-M22C-M-A-G112-350-M1-V4ANT-80-20
	G2	19.5	0 ... 3	2	3500	3540146 VZXF-L-M22C-M-B-G2-450-M1-V4B2T-50-3
		34.5	0 ... 4	2	3500	3540145 VZXF-L-M22C-M-A-G2-450-M1-V4B2T-50-4
		39	0 ... 5	1	5400	3540277 VZXF-L-M22C-M-B-G2-450-M1-V4ANT-80-5
		43	0 ... 12	1	5400	3540276 VZXF-L-M22C-M-A-G2-450-M1-V4ANT-80-12

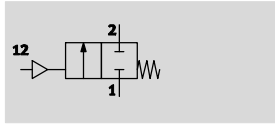
- 1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).
- 2) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Angle seat valve VZXF

Technical data – Stainless steel casting, vacuum version

FESTO

Function



-  - Flow rate Kv
3.8 ... 43 m³/h

-  - G1/2 ... G2



General technical data			
Process valve connection	G1/2	G3/4	G1
Pneumatic connection	G 1/8		
Nominal size DN	15	20	25
Nominal width [mm]	13	18	24
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Process valve connection	G1 1/4	G1 1/2	G2
Pneumatic connection	G 1/8		
Nominal size DN	32	40	50
Nominal width [mm]	31	35	45
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Angle seat valve VZXF

Technical data – Stainless steel casting, vacuum version

FESTO

Operating and environmental conditions						
Process valve connection	G1/2		G3/4		G1	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	40					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm²/s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–10 ... +80					
CE marking (see declaration of conformity)	–					

Process valve connection	G1 1/4		G1 1/2		G2	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	40					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm²/s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–10 ... +80					
CE marking (see declaration of conformity)	To EU Pressure Equipment Directive					

Angle seat valve VZXF

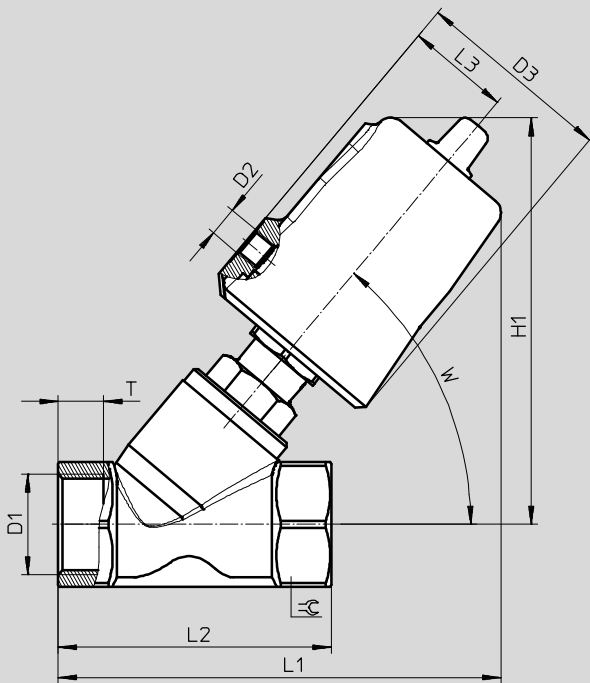
Technical data – Stainless steel casting, vacuum version

FESTO

Materials			
Angle seat valves	...-V4ANV-...	...-V4B2V-...	Material number
1 Housing	Stainless steel casting		1.4408
2 Actuator head	Nickel-plated aluminium	Nickel-plated brass	–
3 Stem seal	FPM		–
Seat seal	FPM		–
– Note on materials	Contains paint-wetting impairment substances, RoHS compliant		

Dimensions

Download CAD data → www.festo.com

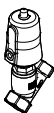


	D1	D2	D3 Ø	H1	L1	L2	L3	T	W	50°
VZXF-L-...-G12-...-V4B2V-50-...	G1½	G1/8	62	112	119	65	34	12	50°	27
VZXF-L-...-G34-...-V4B2V-50-...	G¾		62	118	126.5	75	34	13		32
VZXF-L-...-G1-...-V4B2V-50-...	G1		62	121.5	135	90	34	15		41
VZXF-L-...-G1-...-V4ANV-80-...			94	169	176	90	49	15		41
VZXF-L-...-G114-...-V4B2V-50-...	G1¼		62	142.5	156.5	110	34	17		50
VZXF-L-...-G114-...-V4ANV-80-...			94	177	188	110	49	17		50
VZXF-L-...-G112-...-V4B2V-50-...	G1½		62	146	165	120	34	19		55
VZXF-L-...-G112-...-V4ANV-80-...			94	181	197	120	49	19		55
VZXF-L-...-G2-...-V4ANV-80-...	G2		94	193	216.5	150	49	21		70

Angle seat valve VZXF

Technical data – Stainless steel casting, vacuum version

FESTO

Ordering data – Angle seat valve VZXF							
	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC ¹⁾	Product weight [g]	Part No.	Type
	G1/2	3.8	-0.9	2	1300	3536502	VZXF-L-M22C-M-A-G12-130-V4B2V-50-V
	G3/4	7.5		2	1400	3536650	VZXF-L-M22C-M-A-G34-180-V4B2V-50-V
	G1	12		2	1600	3536659	VZXF-L-M22C-M-A-G34-180-V4B2V-50-V
		12.5		1	3600	3536677	VZXF-L-M22C-M-A-G1-240-V4ANV-80-V
	G1 1/4	18.5		2	2200	3536686	VZXF-L-M22C-M-A-G114-310-V4B2V-50-V
		19		1	3800	3536711	VZXF-L-M22C-M-A-G114-310-V4ANV-80-V
	G1 1/2	25		2	2500	3536717	VZXF-L-M22C-M-A-G112-350-V4B2V-50-V
		29		1	4300	3536771	VZXF-L-M22C-M-A-G112-350-V4ANV-80-V
	G2	43		1	5400	3536786	VZXF-L-M22C-M-A-G2-450-V4ANV-80-V

- 1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

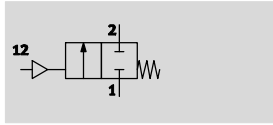
- 2) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Angle seat valve VZXF

Technical data – Stainless steel casting with EX certification

FESTO

Function



-  - Flow rate Kv
3.3 ... 34.5 m³/h

-  - G1/2 ... G2



General technical data			
Process valve connection	G1/2	G3/4	G1
Pneumatic connection	G 1/8		
Nominal size DN	15	20	25
Nominal width [mm]	13	18	24
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Process valve connection	G1 1/4	G1 1/2	G2
Pneumatic connection	G 1/8		
Nominal size DN	32	40	50
Nominal width [mm]	31	35	45
Valve function	2/2-way, closed, monostable		
Design	Poppet valve with spring return		
Type of mounting	In-line installation		
Mounting position	Any		
Direction of flow	Non-reversible		
Exhaust function	No flow control		
Sealing principle	Soft		
Reset method	Mechanical spring		
Type of actuation	Pneumatic		
Type of pilot control	Externally actuated		

Angle seat valve VZXF

Technical data – Stainless steel casting with EX certification

FESTO

Operating and environmental conditions						
Process valve connection	G1/2		G3/4		G1	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	40					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Steam					
	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–40 ... +200					
ATEX category for gas	II 2G					
Type of ignition protection for gas	c TX X					
ATEX category for dust	II 2D					
Type of ignition protection for dust	c TX X					
Explosion-proof temperature	–10 °C ≤ Ta ≤ +60 °C					
CE marking (see declaration of conformity)	As per EU Explosion Protection Directive (ATEX)					

Process valve connection	G1 1/4		G1 1/2		G2	
Variant	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...	...-M-A-...	...-M-B-...
Nominal pressure of process valve PN	40					
Operating pressure [bar]	6 ... 10					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Medium	Steam					
	Inert gases					
	Filtered compressed air, degree of filtration 200 µm					
	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil	–	Mineral oil-based hydraulic oil
	–	Mineral oil	–	Mineral oil	–	Mineral oil
	–	Neutral fluids	–	Neutral fluids	–	Neutral fluids
	–	Water	–	Water	–	Water
Max. viscosity [mm ² /s]	600					
Ambient temperature [°C]	–10 ... +60					
Temperature of medium [°C]	–40 ... +200					
ATEX category for gas	II 2G					
Type of ignition protection for gas	c TX X					
ATEX category for dust	II 2D					
Type of ignition protection for dust	c TX X					
Explosion-proof temperature	–10 °C ≤ Ta ≤ +60 °C					
CE marking (see declaration of conformity)	To EU Pressure Equipment Directive					
	As per EU Explosion Protection Directive (ATEX)					

Angle seat valve VZXF

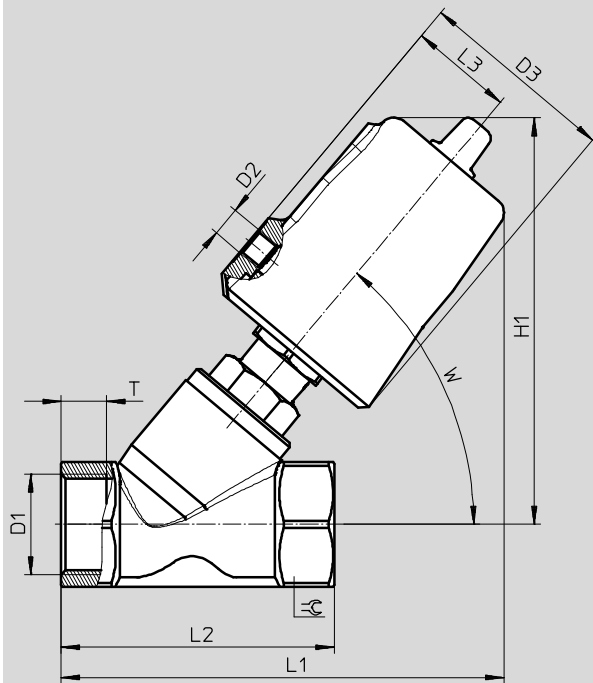
Technical data – Stainless steel casting with EX certification

FESTO

Materials		
Angle seat valves		Material number
1	Housing	Stainless steel casting
2	Actuator head	Stainless steel
3	Stem seal	PTFE
	Seat seal	PTFE
–	Note on materials	Contains paint-wetting impairment substances, RoHS compliant

Dimensions

Download CAD data → www.festo.com

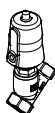


	D1	D2	D3 Ø	H1	L1	L2	L3	T	W	EX
VZXF-L-...-G12-...-V4V4T-50-...	G½	G⅛	62	129	135	65	34	12	50°	27
VZXF-L-...-G34-...-V4V4T-50-...	G¾			130	138	75		13		32
VZXF-L-...-G1-...-V4V4T-50-...	G1			135	146	90		15		42
VZXF-L-...-G114-...-V4V4T-50-...	G1¼			151	155	110		17		50
VZXF-L-...-G112-...-V4V4T-50-...	G1½			155	174	120		19		55
VZXF-L-...-G2-...-V4V4T-50-...	G2			167	193	150		21		70

Angle seat valve VZXF

Technical data – Stainless steel casting with EX certification

FESTO

Ordering data – Angle seat valve VZXF							
	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC ¹⁾	Product weight [g]	Part No.	Type
	G1/2	3.3	0 ... 40	3	1300	3539723	VZXF-L-M22C-M-B-G12-130-M1-V4V4T-50-40-EX4
		3.8				3539024	VZXF-L-M22C-M-A-G12-130-M1-V4V4T-50-40-EX4
	G3/4	6.5	0 ... 20		1400	3539749	VZXF-L-M22C-M-B-G34-180-M1-V4V4T-50-20-EX4
		7.5				3539748	VZXF-L-M22C-M-A-G34-180-M1-V4V4T-50-20-EX4
	G1	11	0 ... 10		1600	3539787	VZXF-L-M22C-M-B-G1-240-M1-V4V4T-50-10-EX4
		12				3539786	VZXF-L-M22C-M-A-G1-240-M1-V4V4T-50-16-EX4
	G1¼	10.7	0 ... 7		2200	3539820	VZXF-L-M22C-M-B-G114-310-M1-V4V4T-50-7-EX4
		18.5				3539819	VZXF-L-M22C-M-A-G114-310-M1-V4V4T-50-9-EX4
	G1½	17.5	0 ... 6		2500	3539931	VZXF-L-M22C-M-B-G112-350-M1-V4V4T-50-6-EX4
		25				3539930	VZXF-L-M22C-M-A-G112-350-M1-V4V4T-50-7-EX4
	G2	19.5	0 ... 3		3500	3540148	VZXF-L-M22C-M-B-G2-450-M1-V4V4T-50-3-EX4
		34.5				3540147	VZXF-L-M22C-M-A-G2-450-M1-V4V4T-50-4-EX4

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

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