Angle seat valve VZXF

FESTO

Angle seat valve VZXF

Key features

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 G½ … G2
- Flow rate Kv 2.8 … 47.5 m^3/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 mm^2/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

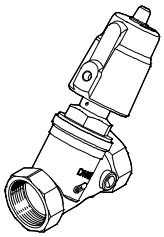
- The variant that is suitable for vacuum is used in packaging machines which need to generate a vacuum

Angle seat valve VZXF

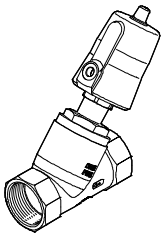
Key features

Variants

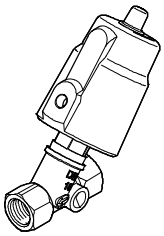
VZXF-L-...-M-A-G112-350-H3B1-50-8



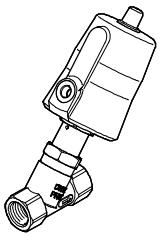
VZXF-L-...-M-A-G112-350-M1-V4V4T-50-7



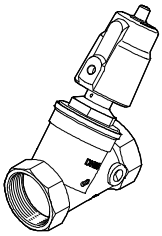
VZXF-L-...-M-A-G12-120-M1-H3B1-50-16



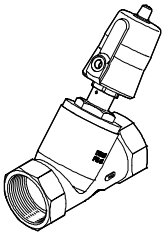
VZXF-L-...-M-B-G12-130-M1-V4V4T-50-40



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



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

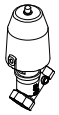
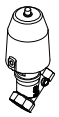
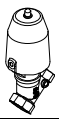
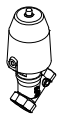


New

Angle seat valve VZXF

Product range overview

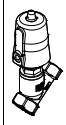
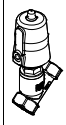
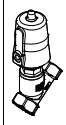
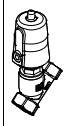
FESTO

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

FESTO

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

FESTO

VZXF – L – M22C – M – A – G12 – 120 –

Type	
VZXF	Angle seat valve, externally actuated

Type of directional control valve	
L	In-line valve

Valve function	
M22C	2/2-way valve, normally closed

Reset method for monostable valves	
M	Mechanical spring

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

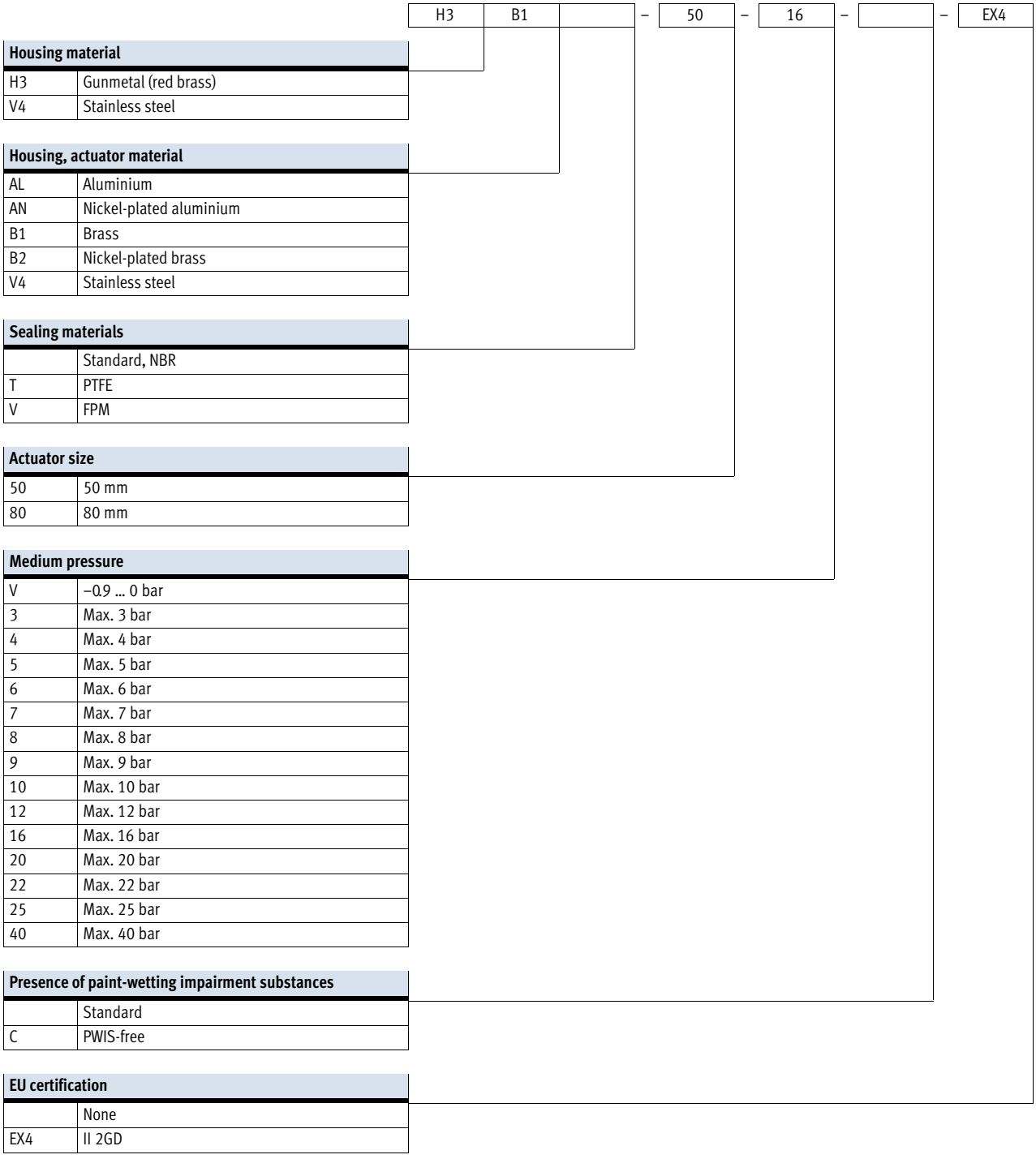
Process valve connection	
G12	Thread G½
G34	Thread G¾
G1	Thread G1
G114	Thread G1¼
G112	Thread G1½
G2	Thread G2

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



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

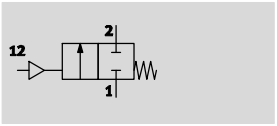
Presence of paint-wetting impairment substances	
	Standard
C	PWIS-free

EU certification	
	None
EX4	II 2GD

Angle seat valve VZXF

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

Function



- Flow rate Kv
  3.5 … 28 m^3/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

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

Operating and environmental conditions				
Process valve connection		G1½	G¾	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)		–		

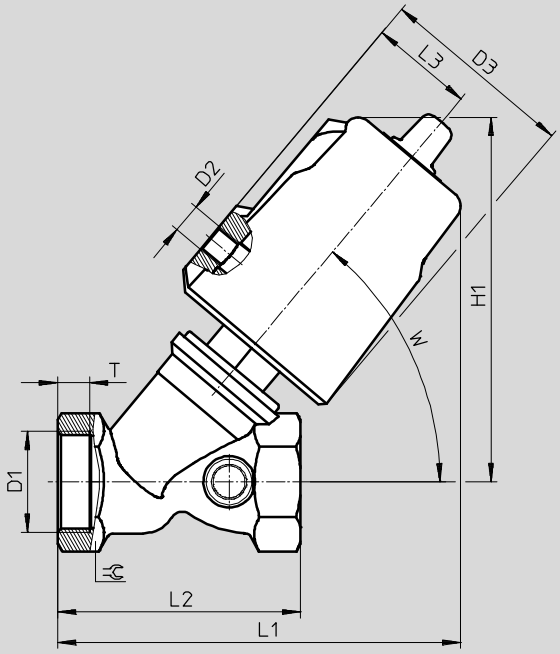
Process valve connection		G1¼	G1½	G2
Nominal pressure of process valve PN		16		
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]		
Medium		Filtered compressed air, grade of filtration 200 µm		
		Mineral oil-based hydraulic oil		
		Inert gases		
		Mineral oil		
		Neutral fluids		
		Water		
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

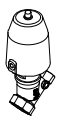
Technical data – Gunmetal (red brass), temperature of medium –10 … +80 °C

Dimensions Download CAD data ➔ **www.festo.com**



	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	⫧
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

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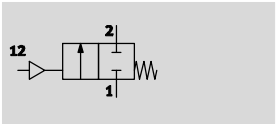
Technical data – Gunmetal (red brass), temperature of medium –40 … +200 °C

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

FESTO

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

Operating and environmental conditions							
Process valve connection		G½		G¾		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	[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	
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	[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		…-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		

Angle seat valve VZXF

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

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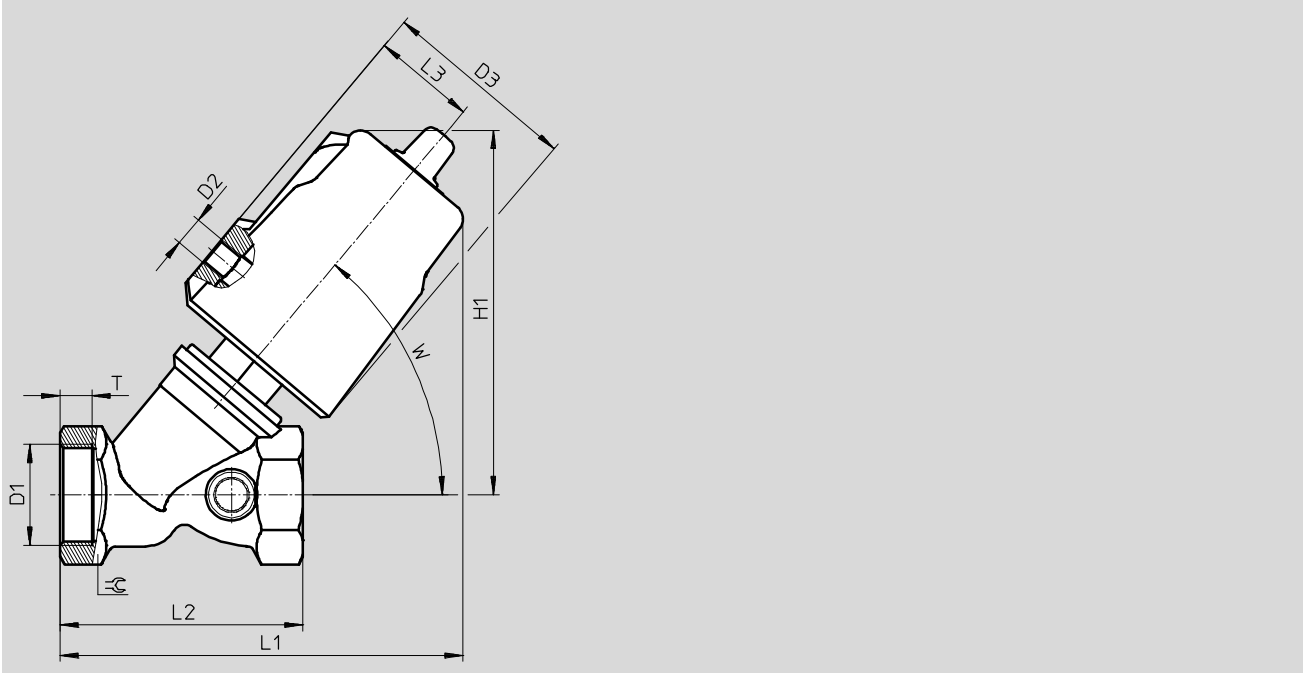
Dimensions Download CAD data ➔ **www.festo.com**



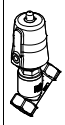
	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	⫧
VZXF-L-...-G12-...-H3B1T-50-...	G½			130	135.5	66		13		27
VZXF-L-...-G34-...-H3B1T-50-...	G¾		62	130	140	75	34	14.5		32
VZXF-L-...-G1-...-H3B1T-50-...	G1			133	143	80		10.5		41
VZXF-L-...-G114-...-H3B1T-50-...	G1¼			148	160	97		12.5		50
VZXF-L-...-G114-...-H3ALT-80-...	G1¼	G⅛	94	180	190	97	49	12.5	50°	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

FESTO

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**

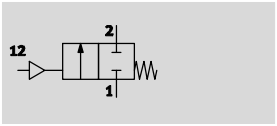
1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Angle seat valve VZXF

FESTO

Technical data – Gunmetal (red brass), vacuum version

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

Technical data – Gunmetal (red brass), vacuum version

Operating and environmental conditions							
Process valve connection		G½		G¾		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	[mm²/s]	600					
Ambient temperature	[°C]	–10 ... +60					
Temperature of medium	[°C]	–10 ... +80					
CE marking (see declaration of conformity)		–					

Process valve connection		G1¼		G1½		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	[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					

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

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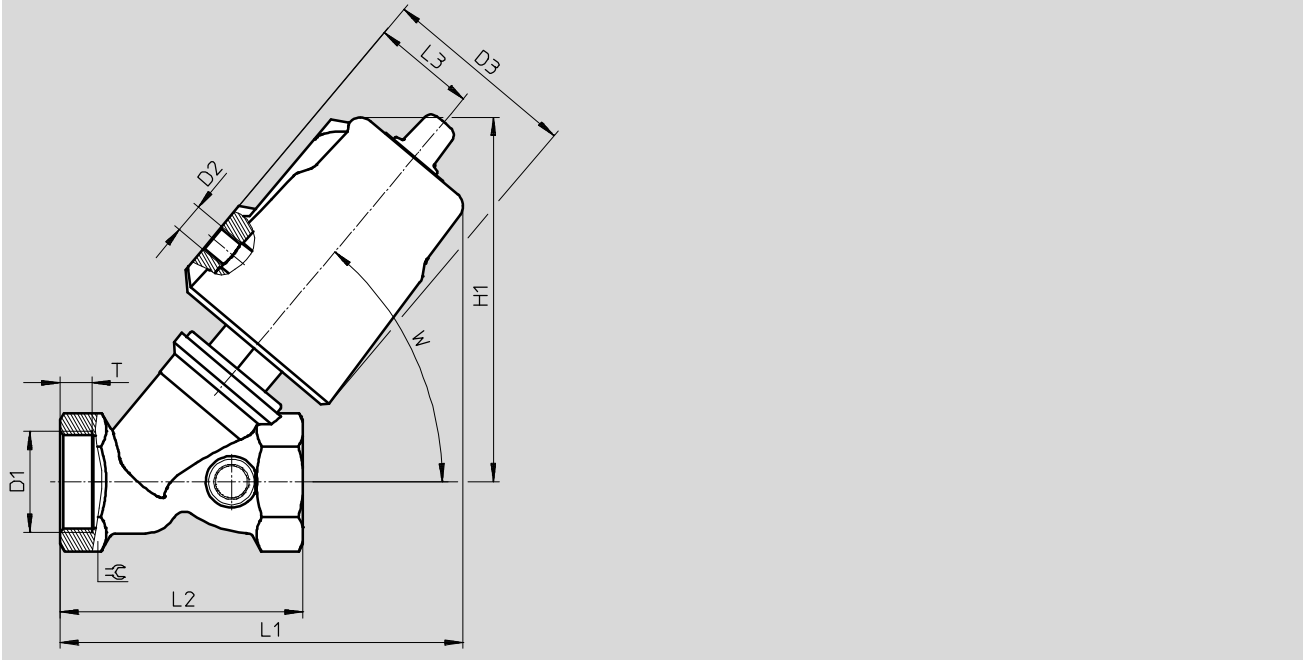
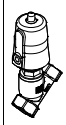
Dimensions Download CAD data ➔ **www.festo.com**



	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	⫧
VZXF-L-...-G12-...-H3B1V-50-...	G½	G⅛	62	113.5	123	66	34	13	50°	27
VZXF-L-...-G34-...-H3B1V-50-...	G¾			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-...	G1¼		62	138.5	153.5	97	34	12.5		50
VZXF-L-...-G114-...-H3ALV-80-...	G1¼		94	174.5	185	97	49	12.5		50
VZXF-L-...-G112-...-H3B1V-50-...	G1½		62	146	160	107	34	14.5		55
VZXF-L-...-G112-...-H3ALV-80-...	G1½		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
	G½	3.5	–0.9	1	1200	**3538869**	**VZXF-L-M22C-M-A-G12-120-H3B1V-50-V**
	G¾	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**
	G1¼	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**
	G1½	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).

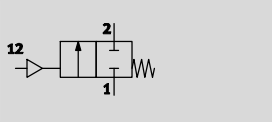
New

Angle seat valve VZXF

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

FESTO

Function



Flow rate Kv
3.7 … 16.5 m³/h

G½ … G1½

General technical data					
Process valve connection		G½	G¾	G1	G1½
Pneumatic connection		G ⅛			
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		G½	G¾	G1	G1½
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)		–			

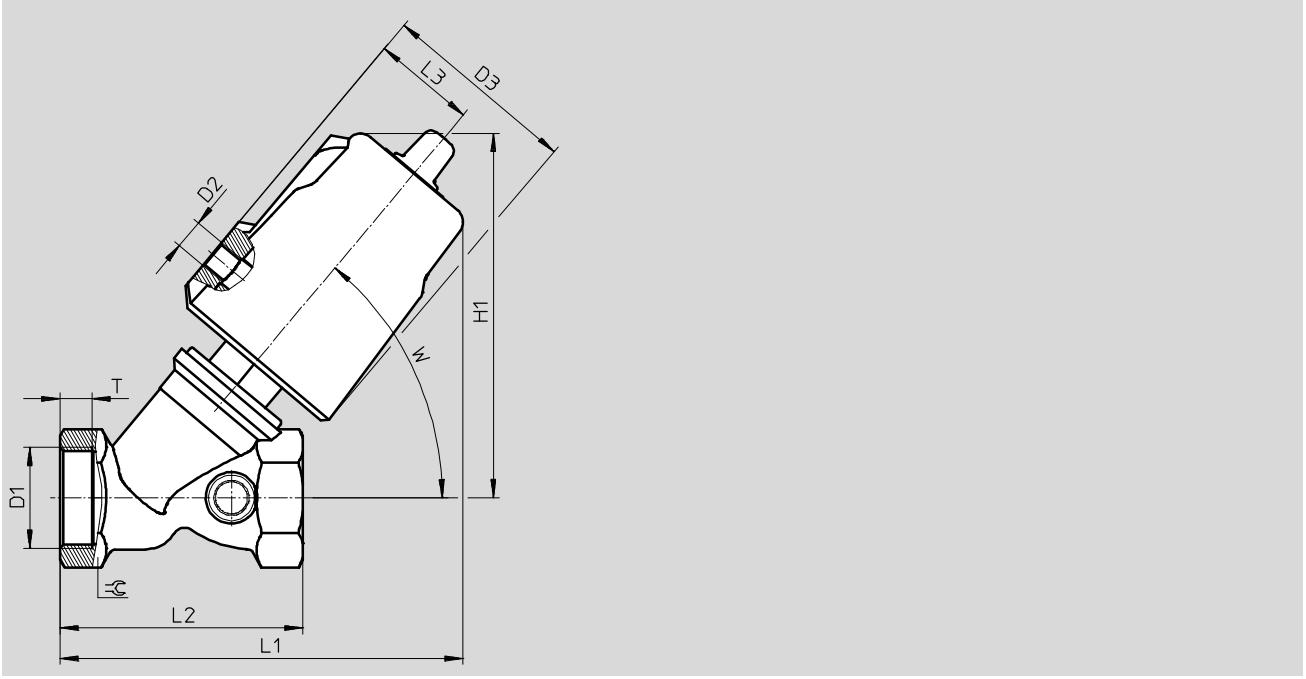
Materials			
Angle seat valves			Material number
1	Housing	Gunmetal (red brass)	CC499K
2	Actuator head	Brass	–
3	Stem seal	FPM	–
	Seat seal	FPM	–
–	Note on materials	RoHS compliant	

Angle seat valve VZXF

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

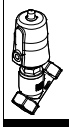
FESTO

Dimensions Download CAD data ➔ **www.festo.com**



	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	⫧
VZXF-L-...-G12-...-H3B1V-50-...	G½	G⅛	62	113.5	123	66	34	13	50°	27
VZXF-L-...-G34-...-H3B1V-50-...	G¾			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-...	G1½		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
	G½	3.7	0 ... 16	1	1200	**3539036**	**VZXF-L-M22C-M-B-G12-120-H3B1V-50-16-C**
	G¾	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**
	G1½	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).

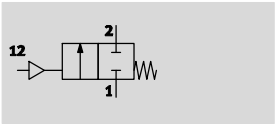
New

Angle seat valve VZXF

Technical data – Gunmetal (red brass) with EX certification

FESTO

Function



Flow rate Kv
3.5 ... 28 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]	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		G1¼	G1½	G2
Pneumatic connection		G ⅛		
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

FESTO

Technical data – Gunmetal (red brass) with EX certification

Operating and environmental conditions							
Process valve connection		G½		G¾		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	[mm²/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		G1¼		G1½		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	[mm²/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)					

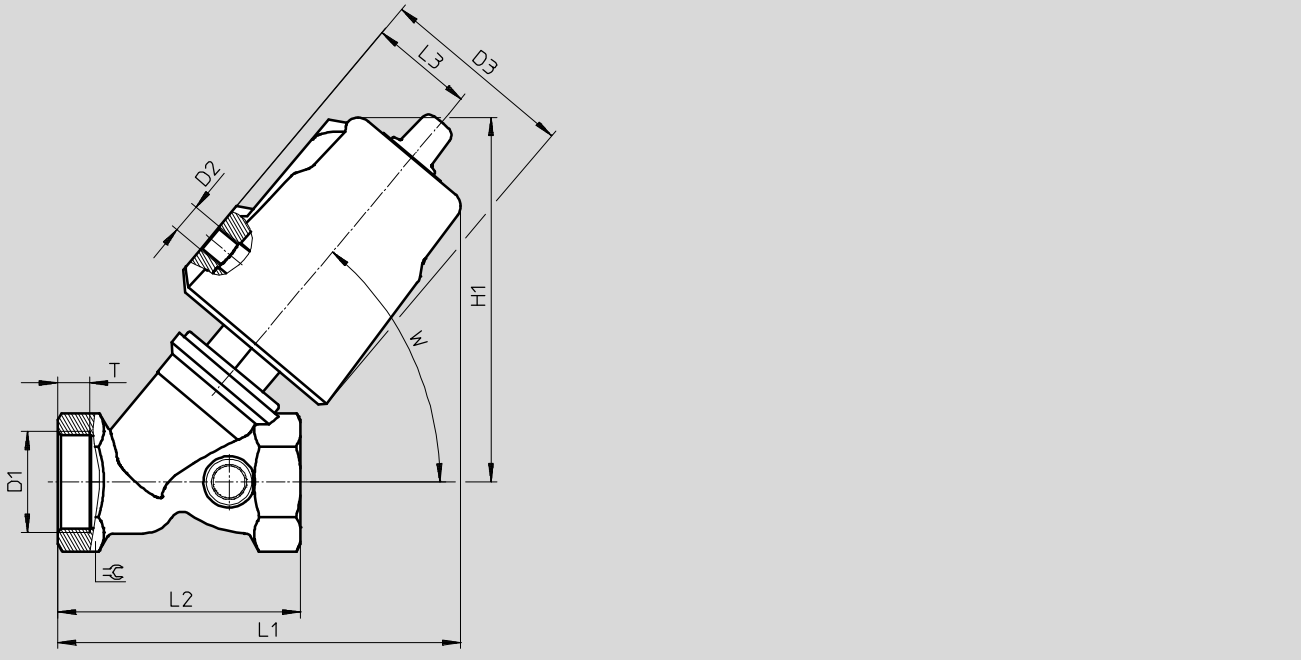
Angle seat valve VZXF

Technical data – Gunmetal (red brass) with EX certification

FESTO

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	

Dimensions Download CAD data ➔ **www.festo.com**



	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	⫧
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

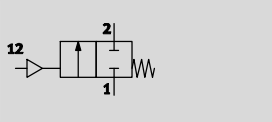
	Process valve connection	Flow rate Kv [m³/h]	Medium pressure [bar]	Corrosion resistance CRC[1)]	Product weight [g]	Part No.	Type
	G½	3.5	0 … 16	1	1200	**3539021**	**VZXF-L-M22C-M-A-G12-120-H3B1-50-16-EX4**
		3.7				**3539037**	**VZXF-L-M22C-M-B-G12-120-H3B1-50-16-EX4**
	G¾	5.2	0 … 16		1300	**3539181**	**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

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

Function



- Flow rate Kv
  3.3 … 43 m^3/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]	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		G1¼	G1½	G2
Auxiliary pilot air port		G⅛		
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

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	[mm^2/s]	600		
Ambient temperature	[°C]	–10 … 60		
Temperature of medium	[°C]	–40 … 200		
CE marking (see declaration of conformity)		–		

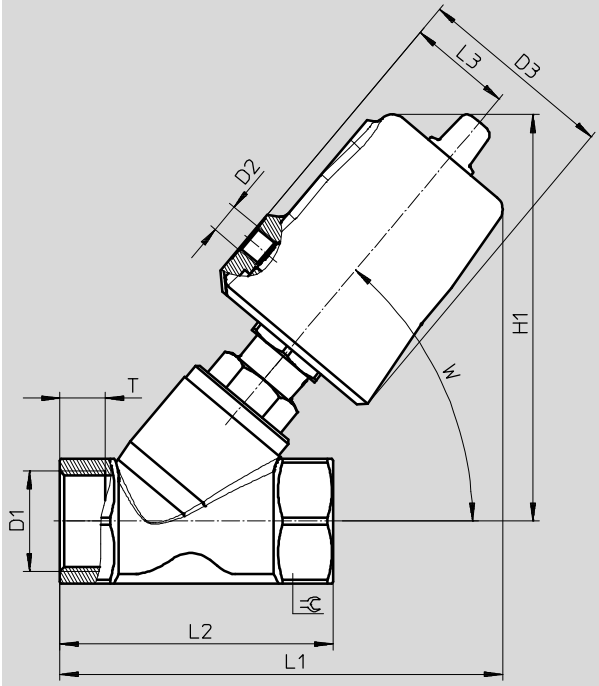
Process valve connection		G1¼	G1½	G2
Nominal pressure of process valve PN		40		
Medium		Filtered compressed air, grade of filtration 200 µm		
		Mineral oil-based hydraulic oil		
		Inert gases		
		Mineral oil		
		Neutral fluids		
		Water		
		Steam		
Max. viscosity	[mm^2/s]	600		
Ambient temperature	[°C]	–10 … 60		
Temperature of medium	[°C]	–40 … 200		
CE marking (see declaration of conformity)		To EU Pressure Equipment Directive		

Materials			
Angle seat valves			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

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

Dimensions Download CAD data ➔ **www.festo.com**

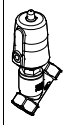


	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	⫧
VZXF-L-…-G12-…-V4V4T-50-…	G½	G⅛	62	129	135	65	34	12	50°	27
VZXF-L-…-G34-…-V4V4T-50-…	G¾		62	130	138	75	34	13		32
VZXF-L-…-G1-…-V4V4T-50-…	G1		62	135	146	90	34	15		42
VZXF-L-…-G1-…-V4V4T-80-…	G1		94	177	184		48			
VZXF-L-…-G114-…-V4V4T-50-…	G1¼		62	151	155	110	34	17		50
VZXF-L-…-G114-…-V4V4T-80-…	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

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
	G½	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**
	G¾	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-V4V4-T-80-22**
		12.5	0 … 40			**1002525**	**VZXF-L-M22C-M-A-G1-240-M1-V4V4-T-80-40**
	G1¼	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**
	G1½	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.

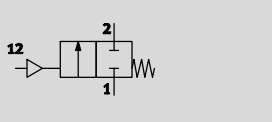
New

Angle seat valve VZXF

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

FESTO

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]	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		G1¼	G1½	G2
Pneumatic connection		G ⅛		
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		G½		G¾		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	[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	
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	[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		... -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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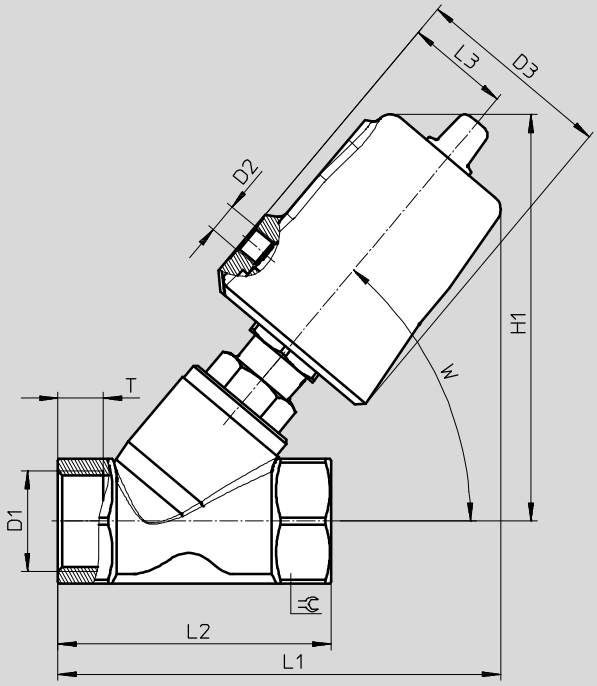
Dimensions Download CAD data ➔ **www.festo.com**



	D1	D2	D3 ∅	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

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

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
	G½	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**
	G¾	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**
	G1¼	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**
	G1½	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.

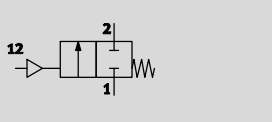
New

Angle seat valve VZXF

Technical data – Stainless steel casting, vacuum version

FESTO

Function



Flow rate Kv
3.8 ... 43 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]	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		G1¼	G1½	G2
Pneumatic connection		G ⅛		
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		G½		G¾		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		G1¼		G1½		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					

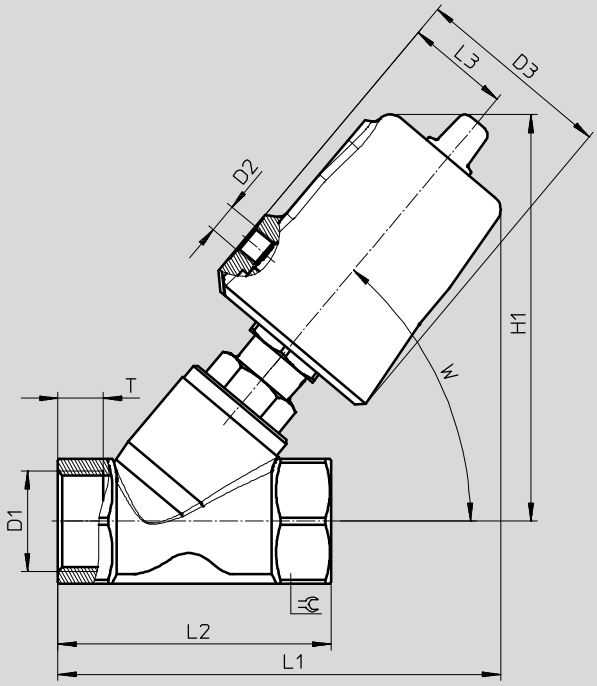
Angle seat valve VZXF

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**

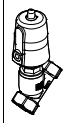


	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	⫧
VZXF-L-...-G12-...-V4B2V-50-...	G½	G⅛	62	112	119	65	34	12	50°	27
VZXF-L-...-G34-...-V4B2V-50-...	G¾		62	118	126.5	75	34	13		32
VZXF-L-...-G1-...-V4B2V-50-...	G1		62	121.5	135	90	34	15		41
VZXF-L-...-G1-...-V4ANV-80-...			94	169	176	90	49	15		41
VZXF-L-...-G114-...-V4B2V-50-...	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
	G½	3.8	–0.9	2	1300	**3536502**	**VZXF-L-M22C-M-A-G12-130-V4B2V-50-V**
	G¾	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**
	G1¼	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**
	G1½	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).

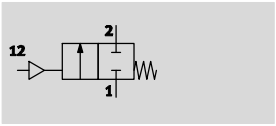
2) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial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

Angle seat valve VZXF

Technical data – Stainless steel casting with EX certification

FESTO

Function



Flow rate Kv
3.3 ... 34.5 m^3/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]	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		G1¼	G1½	G2
Pneumatic connection		G ⅛		
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 EX certification

Operating and environmental conditions							
Process valve connection		G½		G¾		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	[mm²/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		G1¼		G1½		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	[mm²/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)					

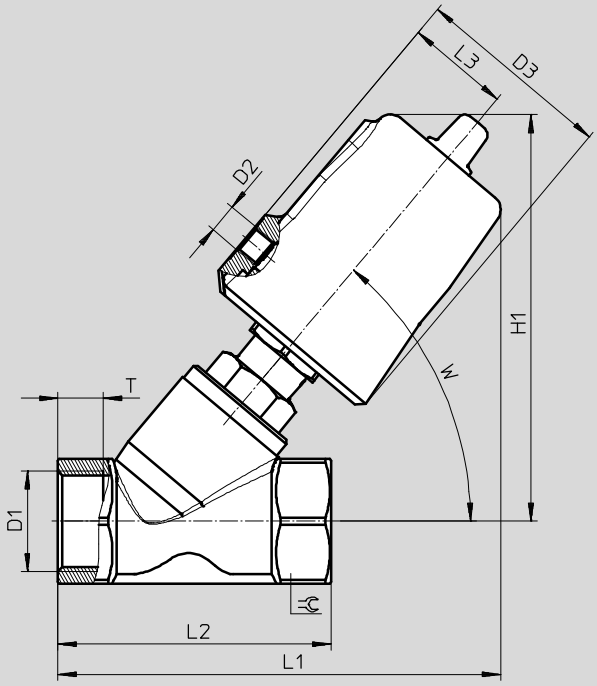
Angle seat valve VZXF

Technical data – Stainless steel casting with EX certification

FESTO

Materials			
Angle seat valves			Material number
1	Housing	Stainless steel casting	1.4408
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**



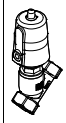
	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	⫧
VZXF-L-...-G12-...-V4V4T-50-...	G½	G⅛	62	129	135	65	34	12	50°	27
VZXF-L-...-G34-...-V4V4T-50-...	G¾			130	138	75		13		32
VZXF-L-...-G1-...-V4V4T-50-...	G1			135	146	90		15		42
VZXF-L-...-G114-...-V4V4T-50-...	G1¼			151	155	110		17		50
VZXF-L-...-G112-...-V4V4T-50-...	G1½			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
	G½	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**
	G¾	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	0 … 16			**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	0 … 9			**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	0 … 7			**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	0 … 4			**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.

Product Range and Company Overview

A Complete Suite and Company Overview

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Complete custom engineered solutions

Custom Control Cabinets
Comprehensive engineering support and on-site services

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Quality Assurance, ISO 9001 and ISO 14001 Certifications
Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.

9001:CERTCS-16248-2006-AQ-ESN-TGA
ISO 9001
ISO 14001
DNV
Certified Company
14001:CERTCS-16248A-2006-AQ-ESN-TGA

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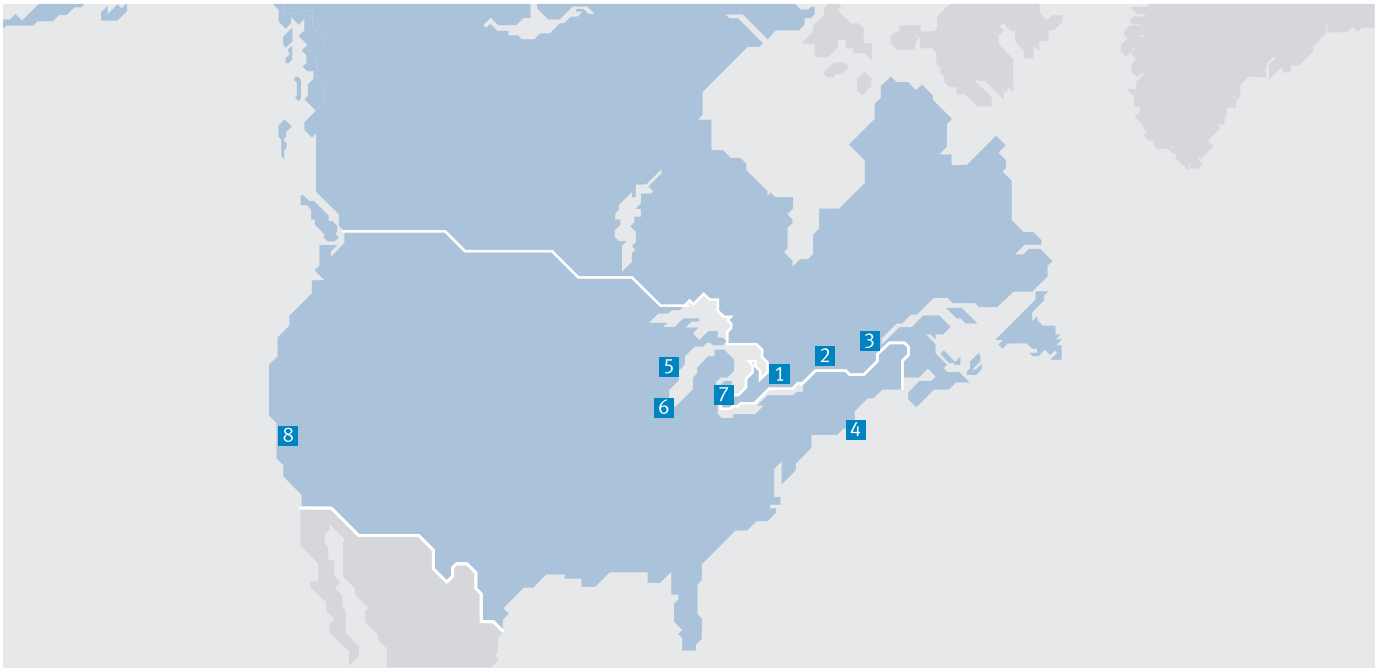

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