

Angle seat valve VZXF



Festo core product range
Covers 80% of your automation tasks

Worldwide:
Superb:
Easy:

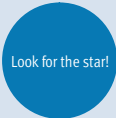
Always in stock
Festo quality at an attractive price
Reduces procurement and storing complexity



Ready for dispatch from the Festo factory in 24 hours
Held in stock in 13 service centres worldwide
More than 2200 products



Ready for dispatch in 5 days maximum from stock
Assembled for you in 4 service centres worldwide
Up to 6 x 10¹² variants per product series



Angle seat valve VZXF

Key features



FESTO

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

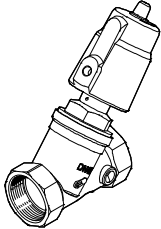
Angle seat valve VZXF

Key features

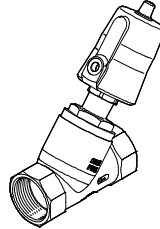
FESTO

Variants

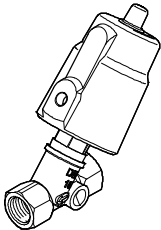
VZXF-L...-M-A-G112-350-H3B1-50-8



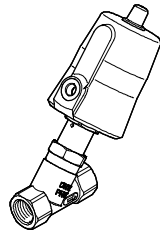
VZXF-L...-M-A-G112-350-M1-V4V4T-50-7



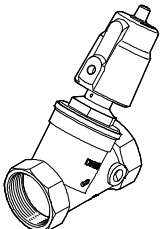
VZXF-L...-M-A-G12-120-M1-H3B1-50-16



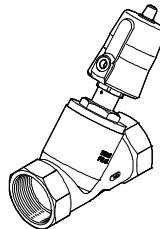
VZXF-L...-M-B-G12-130-M1-V4V4T-50-40



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



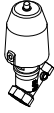

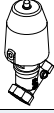

VZXF-L...-M-B-G2-450-M1-V4V4T-50-3



Angle seat valve VZXF

Product range overview

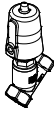
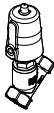
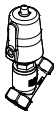

FESTO

| 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 | 12 |
| | | 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 | 16 |
| | | 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 | 19 |
| | | G¾ | 20 | | | | |
| | | G1 | 25 | | | | |
| | | G1½ | 40 | | | | |
| Gunmetal (red brass) with EX certification | | | | | | | |
|  | VZXF-L-...-H3B1V-...-EX4 | G½ | 15 | -10 ... +80 | 3.5 ... 28 | 16 | 21 |
| | | 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-... | G1/2 | 15 | -40 ... +200 | 2.8 ... 47.5 | 40 | 25 |
| | | G3/4 | 20 | | | | |
| | | G1 | 25 | | | | |
| | | G1 1/4 | 32 | | | | |
| | | G1 1/2 | 40 | | | | |
| | | G2 | 50 | | | | |
| Stainless steel casting with nickel-plated actuator head | | | | | | | |
|  | VZXF-L-...-V4B2T-..., VZXF-L-...-V4ANT-... | G1/2 | 15 | -40 ... +200 | 3.5 ... 40 | 40 | 29 |
| | | G3/4 | 20 | | | | |
| | | G1 | 25 | | | | |
| | | G1 1/4 | 32 | | | | |
| | | G1 1/2 | 40 | | | | |
| | | G2 | 50 | | | | |
| Stainless steel casting, vacuum version | | | | | | | |
|  | VZXF-L-...-V4B2V-..., VZXF-L-...-V4ANV-... | G1/2 | 15 | -10 ... +80 | 3.8 ... 43 | 40 | 33 |
| | | G3/4 | 20 | | | | |
| | | G1 | 25 | | | | |
| | | G1 1/4 | 32 | | | | |
| | | G1 1/2 | 40 | | | | |
| | | G2 | 50 | | | | |
| Stainless steel casting with EX certification | | | | | | | |
|  | VZXF-L-...-V4V4T-...-EX4 | G1/2 | 15 | -40 ... +200 | 3.3 ... 34.5 | 40 | 37 |
| | | G3/4 | 20 | | | | |
| | | G1 | 25 | | | | |
| | | G1 1/4 | 32 | | | | |
| | | G1 1/2 | 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 G1/2 |
| G34 | Thread G3/4 |
| G1 | Thread G1 |
| G114 | Thread G1 1/4 |
| G112 | Thread G1 1/2 |
| 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

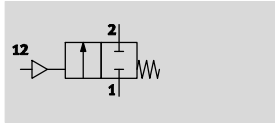
| | | | | | | | | | | | | |
|--|-------------------------|----|----|--|---|----|---|----|---|--|---|-----|
| | | H3 | B1 | | - | 50 | - | 16 | - | | - | EX4 |
| Housing material | | | | | | | | | | | | |
| H3 | Gunmetal (red brass) | | | | | | | | | | | |
| V4 | Stainless steel | | | | | | | | | | | |
| 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


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

FESTO

Function



-  - Flow rate Kv
3.5 ... 28 m³/h

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



| General technical data | | | |
|--------------------------|---------------------------------|-----------------|----|
| Process valve connection | G $\frac{1}{2}$ | G $\frac{3}{4}$ | G1 |
| Auxiliary pilot air port | 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 |
|--------------------------|---------------------------------|------------------|----|
| Auxiliary pilot air port | 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

FESTO

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 | 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 | | |

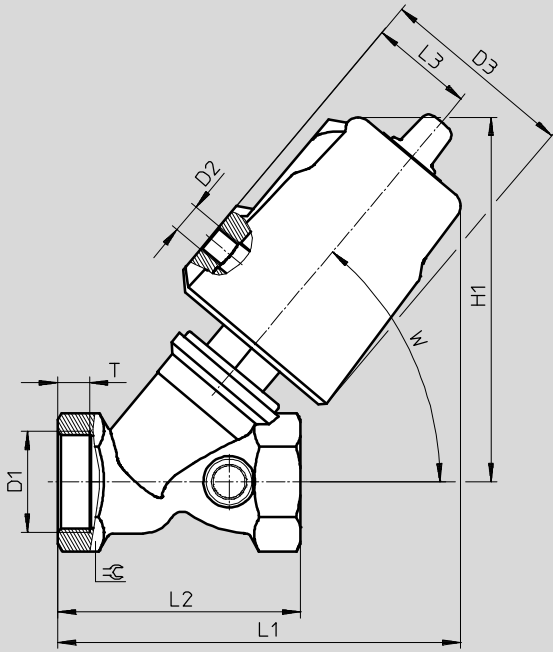
| Materials | | |
|---------------------|--|-----------------|
| Angle seat valves | | Material number |
| 1 Housing | Gunmetal (red brass) | CC499K |
| 2 Actuator head | Brass | – |
| 3 Stem seal | NBR | – |
| | Seat seal | PTFE |
| – Note on materials | Contains paint-wetting impairment substances,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

Angle seat valve VZXF

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

Dimensions

Download CAD data → www.festo.com

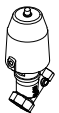



| | D1 | D2 | D3 Ø | H1 | L1 | L2 | L3 | T | W | ☞ |
|---------------------------------|-----|----|---------|-----|-----|-----|----|------|-----|----|
| VZXF-L-...-G12-...-H3B1-50-... | G½ | G⅛ | 62 | 112 | 123 | 66 | 34 | 8 | 50° | 27 |
| VZXF-L-...-G34-...-H3B1-50-... | G¾ | | | 117 | 130 | 75 | | 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 |

Angle seat valve VZXF

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

★ Core product range

| 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 | ★ 1002501 VZXF-L-M22C-M-B-G12-120-H3B1-50-16 |
| | G3/4 | 5.2 | 0 ... 16 | | 1300 | ★ 1002503 VZXF-L-M22C-M-B-G34-160-H3B1-50-16 |
| | G1 | 9.6 | 0 ... 10 | | 1500 | ★ 1002505 VZXF-L-M22C-M-B-G1-230-H3B1-50-10 |

| 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 ... 16 | 1 | 1200 | 1002500 VZXF-L-M22C-M-A-G12-120-H3B1-50-16 |
| | G3/4 | 6.7 | 0 ... 16 | | 1300 | 1002502 VZXF-L-M22C-M-A-G34-160-H3B1-50-16 |
| | G1 | 10.8 | 0 ... 16 | | 1500 | 1002504 VZXF-L-M22C-M-A-G1-230-H3B1-50-16 |
| | G1 1/4 | 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 |
| | G1 1/2 | 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).

Festo core product range

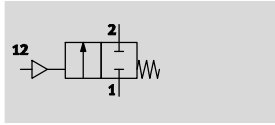
- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

Angle seat valve VZXF

FESTO

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

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), 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 | | | | | |

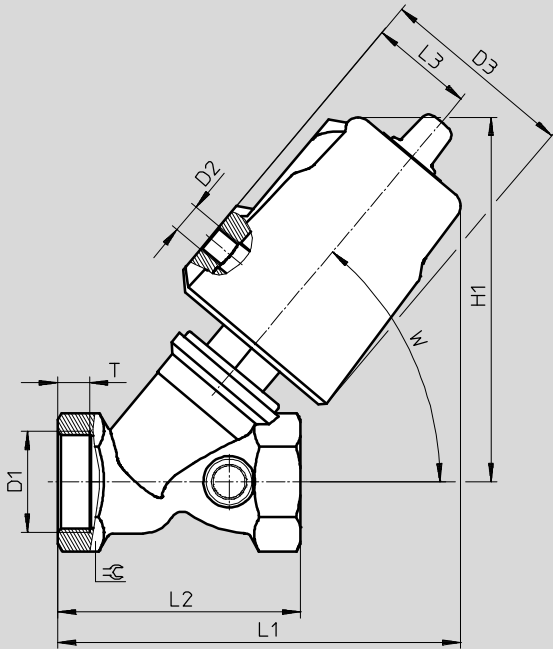
| Materials | | | | |
|---------------------|--|-------|---------------|-----------------|
| Angle seat valves | ...-H3ALT-... | | ...-H3B1T-... | Material number |
| 1 Housing | Gunmetal (red brass) | | | CC499K |
| 2 Actuator head | Aluminium | Brass | | – |
| 3 Stem seal | PTFE | | | – |
| Seat seal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

Angle seat valve VZXF

Technical data – Gunmetal (red brass), 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-...-H3B1T-50-... | G1/2 | G1/8 | 62 | 130 | 135.5 | 66 | 34 | 13 | 50° | 27 |
| VZXF-L-...-G34-...-H3B1T-50-... | G3/4 | | | 130 | 140 | 75 | | 14.5 | | 32 |
| VZXF-L-...-G1-...-H3B1T-50-... | G1 | | | 133 | 143 | 80 | | 10.5 | | 41 |
| VZXF-L-...-G114-...-H3B1T-50-... | G1 1/4 | | | 148 | 160 | 97 | | 12.5 | | 50 |
| VZXF-L-...-G114-...-H3ALT-80-... | G1 1/4 | | 94 | 180 | 190 | 97 | 49 | 12.5 | | 50 |
| VZXF-L-...-G112-...-H3B1T-50-... | G1 1/2 | | 62 | 152.5 | 167 | 107 | 34 | 14.5 | | 55 |
| VZXF-L-...-G112-...-H3ALT-80-... | G1 1/2 | | 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

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 |
|  | G1/2 | 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 |
| | G3/4 | 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 |
| | G1 1/4 | 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 | | |
| | G1 1/2 | 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

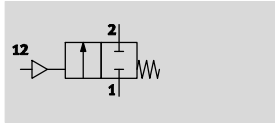
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).


Angle seat valve VZXF


FESTO

Technical data – Gunmetal (red brass), vacuum version

Function



-  - Flow rate Kv
3.5 ... 40 m³/h

-  - 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 | | |

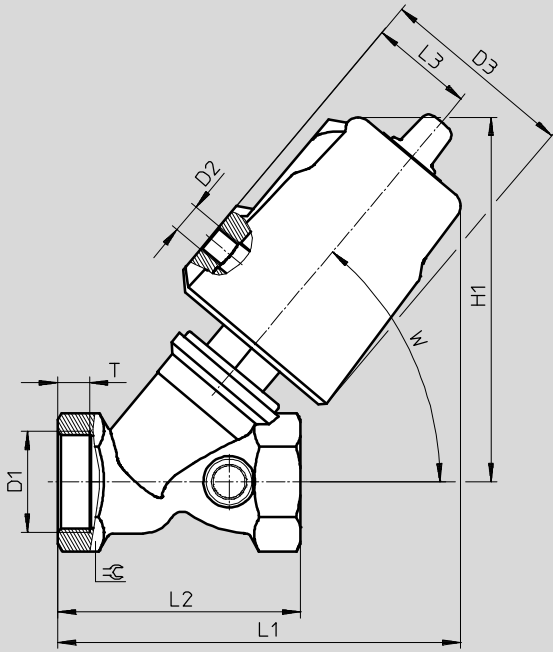
Angle seat valve VZXF

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-... | G½ | G⅜ | 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

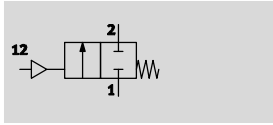
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Angle seat valve VZXF

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

FESTO

Function



- - Flow rate Kv
3.7 ... 16.5 m³/h

- - G $\frac{1}{2}$... G1 $\frac{1}{2}$



| General technical data | | | | |
|--------------------------|---------------------------------|-----------------|----|------------------|
| Process valve connection | G $\frac{1}{2}$ | G $\frac{3}{4}$ | G1 | G1 $\frac{1}{2}$ |
| Pneumatic connection | G $\frac{1}{8}$ | | | |
| 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 $\frac{1}{2}$ | G $\frac{3}{4}$ | G1 | G1 $\frac{1}{2}$ |
| 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 μ m | | | |
| | Mineral oil-based hydraulic oil | | | |
| | 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) | - | | | |

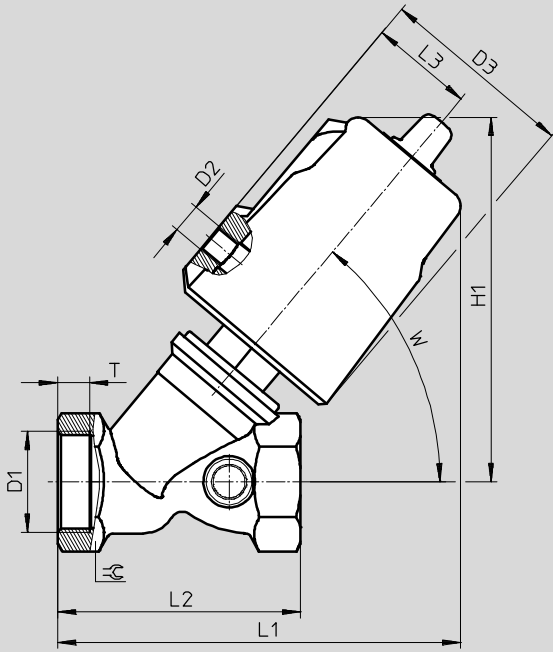
| Materials | | |
|---------------------|----------------------|-----------------|
| Angle seat valves | | Material number |
| 1 Housing | Gunmetal (red brass) | CC499K |
| 2 Actuator head | Brass | - |
| 3 Stem seal | FPM | - |
| Seat seal | FPM | - |
| - Note on materials | RoHS compliant | |

Angle seat valve VZXF

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

Dimensions

Download CAD data → www.festo.com



| | D1 | D2 | D3 Ø | 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 |

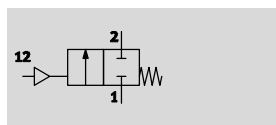
1) Corrosion resistance class CRC 1 to Festo standard FN 940070


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).


Angle seat valve VZXF

Technical data – Gunmetal (red brass) with EX certification

Function



-  - Flow rate Kv
3.5 ... 28 m³/h

-  - G¹/₂ ... G2



| General technical data | | | |
|--------------------------|---------------------------------|-------------------------------|----|
| Process valve connection | G ¹ / ₂ | G ³ / 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

| 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) | | | | | |

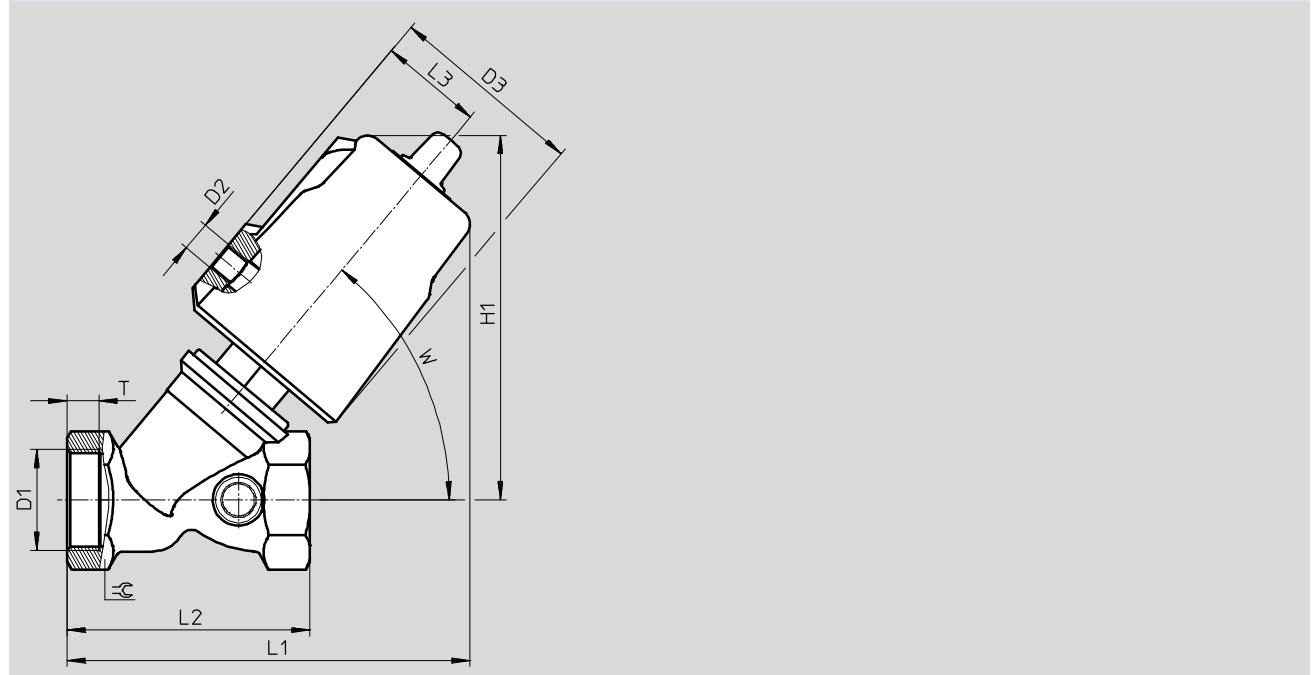
| Process valve connection | G1 1/4 | | G1 1/2 | | G2 | |
|--|--|---------------------------------|-------------|---------------------------------|-------------|---------------------------------|
| Variant | ...-M-A-... | ...-M-B-... | ...-M-A-... | ...-M-B-... | ...-M-A-... | ...-M-B-... |
| Nominal 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

Technical data – Gunmetal (red brass) with EX certification

| 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 Ø | H1 | L1 | L2 | L3 | T | W | ☞ |
|---------------------------------|--------|------|---------|-----|-----|-----|----|------|-----|----|
| VZXF-L-...-G12-...-H3B1-50-... | G1/2 | G1/8 | 62 | 112 | 123 | 66 | 34 | 8 | 50° | 27 |
| VZXF-L-...-G34-...-H3B1-50-... | G3/4 | | | 117 | 130 | 75 | 34 | 9 | | 33 |
| VZXF-L-...-G1-...-H3B1-50-... | G1 | | | 121 | 133 | 80 | 34 | 10.5 | | 41 |
| VZXF-L-...-G114-...-H3B1-50-... | G1 1/4 | | | 139 | 154 | 97 | 34 | 12.5 | | 50 |
| VZXF-L-...-G112-...-H3B1-50-... | G1 1/2 | | | 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

| Ordering data – Angle seat valve VZXF | | | | | | |
|---|--------------------------|----------------------------------|-----------------------|--|--------------------|---|
| | Process valve connection | Flow rate Kv [m ³ /h] | Medium pressure [bar] | Corrosion resistance CRC ¹⁾ | Product weight [g] | Part No. Type |
|  | G1/2 | 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 |
| | G3/4 | 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 |
| | G1 1/4 | 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 |
| | G1 1/2 | 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 |

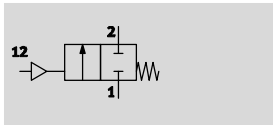
1) Corrosion resistance class CRC 1 to Festo standard FN 940070


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 m³/h

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



| General technical data | | | |
|--------------------------|---|-----------------|----|
| Process valve connection | G $\frac{1}{2}$ | G $\frac{3}{4}$ | G1 |
| Auxiliary pilot air port | G $\frac{1}{8}$ | | |
| 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 | With external control | | |
| Operating medium | Compressed air to ISO 8573-1:2010 [7:4:4] | | |

| Process valve connection | G1 $\frac{1}{4}$ | G1 $\frac{1}{2}$ | G2 |
|--------------------------|---|------------------|----|
| Auxiliary pilot air port | G $\frac{1}{8}$ | | |
| 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 | 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 | G1/2 | G3/4 | 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 | | |

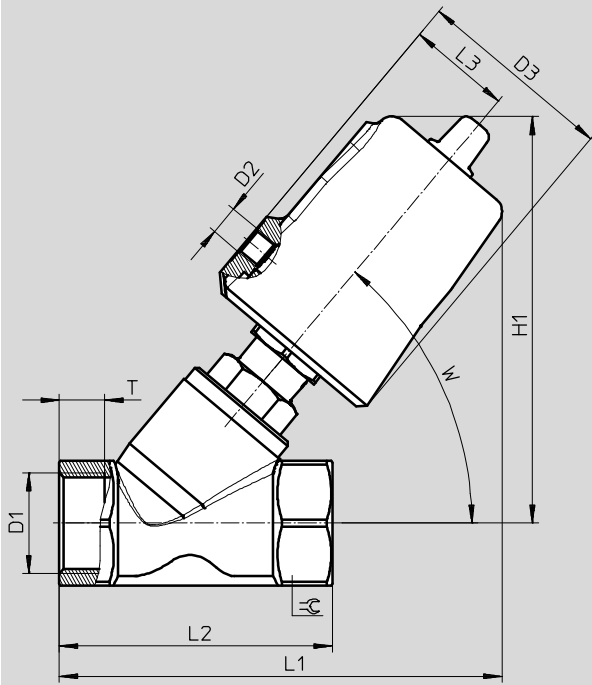
| Materials | | | |
|-------------------|-------------------|--|-----------------|
| Angle seat valves | | | Material number |
| 1 | Housing | Stainless steel casting | 1.4408 |
| 2 | Actuator head | Stainless steel | – |
| 3 | Stem seal | PTFE | – |
| | Seat seal | PTFE | – |
| – | Note on materials | 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



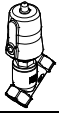
| | D1 | D2 | D3 Ø | H1 | L1 | L2 | L3 | T | W | ⊞ |
|----------------------------------|--------|------|---------|-----|-----|-----|----|----|-----|----|
| VZXF-L-...-G12-...-V4V4T-50-... | G1/2 | G1/8 | 62 | 129 | 135 | 65 | 34 | 12 | 50° | 27 |
| VZXF-L-...-G34-...-V4V4T-50-... | G3/4 | | 62 | 130 | 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-... | G1 1/4 | | 62 | 151 | 155 | 110 | 34 | 17 | | 50 |
| VZXF-L-...-G114-...-V4V4T-80-... | G1 1/4 | | 94 | 183 | 194 | | 48 | | | |
| VZXF-L-...-G112-...-V4V4T-50-... | G1 1/2 | | 62 | 155 | 174 | 120 | 34 | 19 | | 55 |
| VZXF-L-...-G112-...-V4V4T-80-... | G1 1/2 | | 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 | | | |

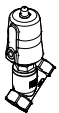
Angle seat valve VZXF

FESTO

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

★ Core product range

| 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 |
| | G¾ | 6.5 | 0 ... 20 | | 1400 | ★ 1002515 | VZXF-L-M22C-M-B-G34-180-M1-V4V4T-50-20 |
| | G1 | 11 | 0 ... 10 | | 1600 | ★ 1002517 | VZXF-L-M22C-M-B-G1-240-M1-V4V4T-50-10 |

| 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 ... 25 | 3 | 1300 | 1002512 | VZXF-L-M22C-M-A-G12-130-M1-V4V4T-50-25 |
| | G¾ | 7.5 | 0 ... 20 | | 1400 | 1002514 | VZXF-L-M22C-M-A-G34-180-M1-V4V4T-50-20 |
| | G1 | 12 | 0 ... 16 | | 1600 | 1002516 | VZXF-L-M22C-M-A-G1-240-M1-V4V4T-50-16 |
| | | | 0 ... 22 | | 3600 | 1002526 | VZXF-L-M22C-M-B-G1-240-M1-V4V4-T-80-22 |
| | | | 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 |
| | | | 0 ... 10 | | 3800 | 1002528 | VZXF-L-M22C-M-B-G114-310-M1-V4V4T-80-10 |
| | | | 0 ... 9 | | 2200 | 1002518 | VZXF-L-M22C-M-A-G114-310-M1-V4V4T-50-9 |
| | | | 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 |
| | | | 0 ... 7 | | | 1002520 | VZXF-L-M22C-M-A-G112-350-M1-V4V4T-50-7 |
| | | | 0 ... 8 | | 4300 | 1002530 | VZXF-L-M22C-M-B-G112-350-M1-V4V4T-80-8 |
| | | | 0 ... 20 | | | 1002529 | VZXF-L-M22C-M-A-G112-350-M1-V4V4T-80-20 |
| | | | 0 ... 3 | | | 3500 | 1002523 |
| | 0 ... 4 | 1002522 | VZXF-L-M22C-M-A-G2-450-M1-V4V4T-50-4 | | | | |
| | 0 ... 5 | 5400 | 1002532 | | VZXF-L-M22C-M-B-G2-450-M1-V4V4T-80-5 | | |
| | 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.

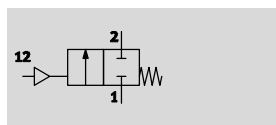
Festo core product range


- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock


Angle seat valve VZXF

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

Function



-  - Flow rate Kv
3.5 ... 40 m³/h

-  - G¹/₂ ... G2



| General technical data | | | |
|--------------------------|---------------------------------|-------------------------------|----|
| Process valve connection | G ¹ / ₂ | G ³ / 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 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 | | | | | |

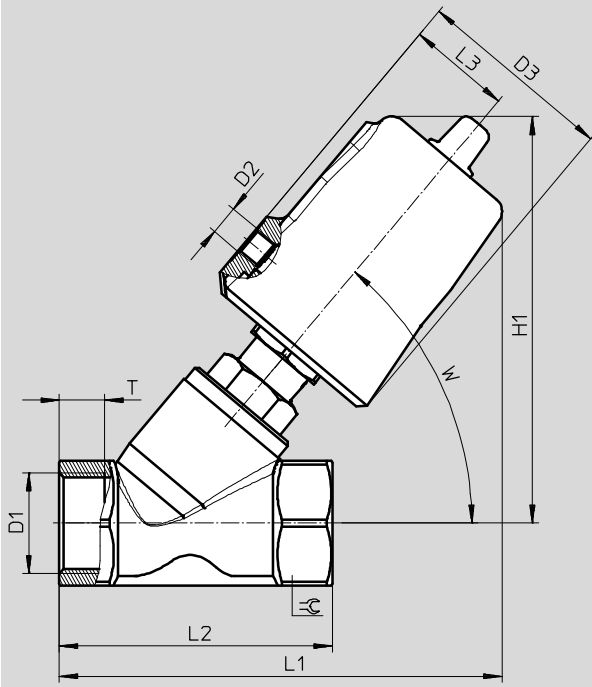
| Materials | | | |
|---------------------|--|---------------------|-----------------|
| Angle seat valves | ... -V4ANT- ... | ... -V4B2T- ... | Material number |
| 1 Housing | Stainless steel casting | | 1.4408 |
| 2 Actuator head | Nickel-plated aluminium | Nickel-plated brass | – |
| 3 Stem seal | 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

Dimensions

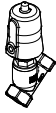
Download CAD data → www.festo.com



| | D1 | D2 | D3 Ø | H1 | L1 | L2 | L3 | T | W | ≡C |
|----------------------------------|-----|----|---------|-------|-------|-----|----|-----|-----|----|
| VZXF-L-...-G12-...-V4B2T-50-... | G½ | G⅜ | 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-... | G1¼ | | 94 | 183 | 193 | 110 | | 17 | | 50 |
| VZXF-L-...-G112-...-V4B2T-50-... | | | G1½ | 62 | 153 | 172 | | 120 | | 19 |
| 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

| 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

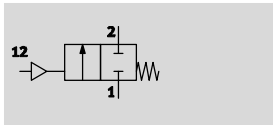
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

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 | G ¹ / ₂ | G ³ / 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

| 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 [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 | |
|--|--|---------------------------------|-------------|---------------------------------|-------------|---------------------------------|
| 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 [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 | | | | | |

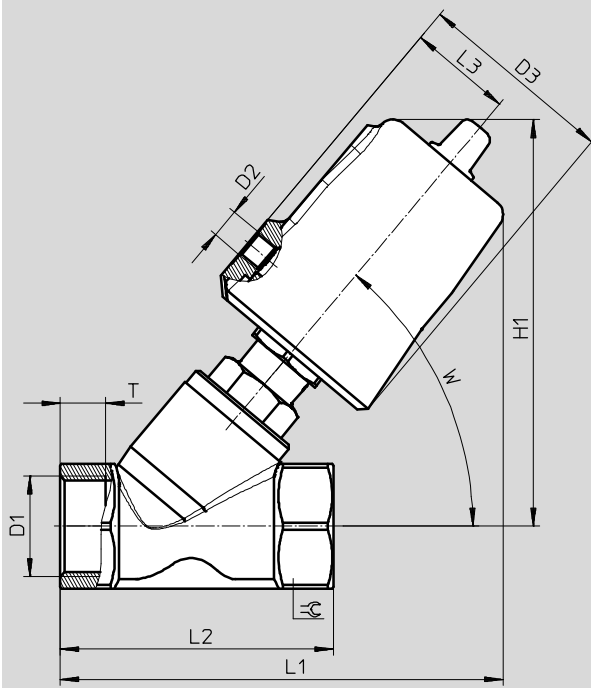
Angle seat valve VZXF

Technical data – Stainless steel casting, vacuum version

| 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

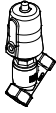
Download CAD data → www.festo.com



| | D1 | D2 | D3 Ø | H1 | L1 | L2 | L3 | T | W | ↺ |
|----------------------------------|-----|----|---------|-------|-------|-------|-----|----|-----|----|
| VZXF-L-...-G12-...-V4B2V-50-... | G½ | G⅜ | 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 |

Angle seat valve VZXF

Technical data – Stainless steel casting, vacuum version

| Ordering data – Angle seat valve VZXF | | | | | | | |
|---|--------------------------|----------------------------------|-----------------------|--|--------------------|----------------|--|
| | Process valve connection | Flow rate Kv [m ³ /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 |
| | | | | 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 |
| | | | | 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 |
| | | | | 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 |

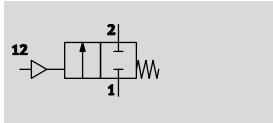
- 1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).
- 2) Corrosion 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 | G ¹ / ₂ | G ³ / 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

| 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) | | | | | |

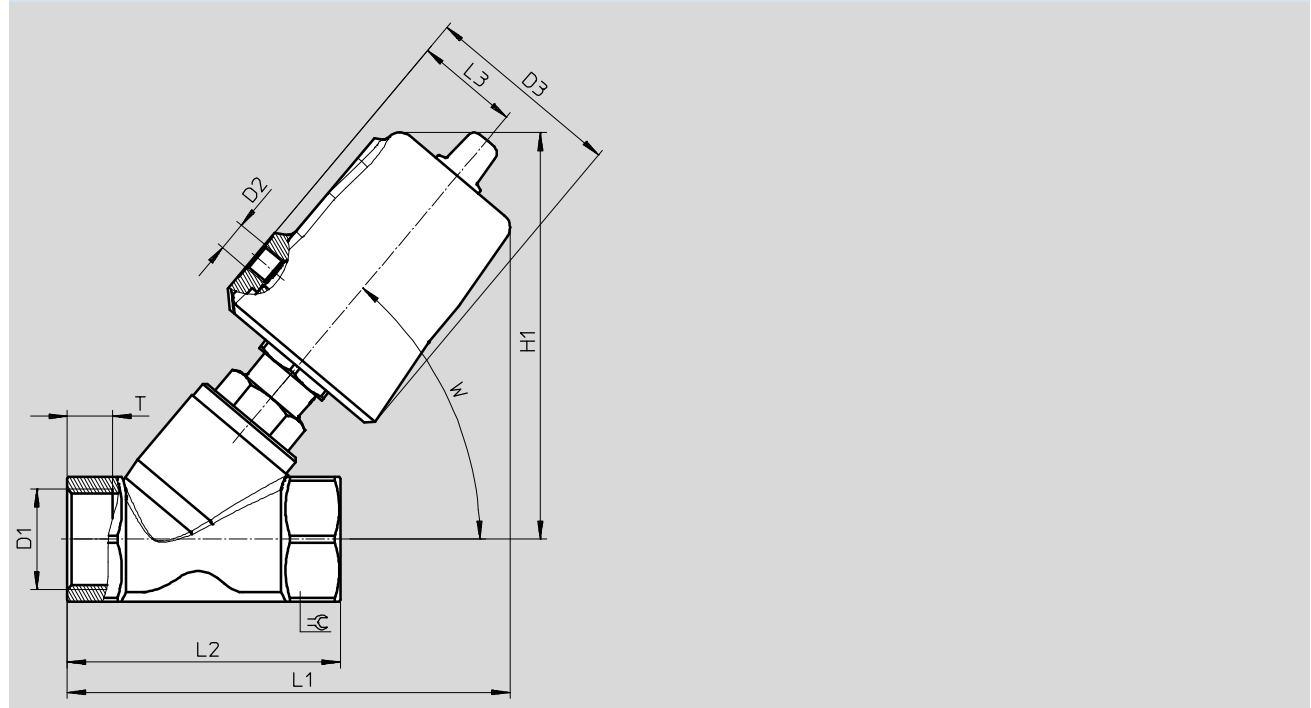
| Process valve connection | G1 1/4 | | G1 1/2 | | G2 | |
|--|--|---------------------------------|----------------|---------------------------------|----------------|---------------------------------|
| Variant | ...-M-A-... | ...-M-B-... | ...-M-A-... | ...-M-B-... | ...-M-A-... | ...-M-B-... |
| Nominal 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

| 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 |

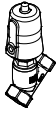
Dimensions Download CAD data → www.festo.com



| | D1 | D2 | D3 Ø | H1 | L1 | L2 | L3 | T | W | ☉ |
|----------------------------------|--------|------|---------|-----|-----|-----|----|----|-----|----|
| VZXF-L-...-G12-...-V4V4T-50-... | G1/2 | G1/8 | 62 | 129 | 135 | 65 | 34 | 12 | 50° | 27 |
| VZXF-L-...-G34-...-V4V4T-50-... | G3/4 | | | 130 | 138 | 75 | | 13 | | 32 |
| VZXF-L-...-G1-...-V4V4T-50-... | G1 | | | 135 | 146 | 90 | | 15 | | 42 |
| VZXF-L-...-G114-...-V4V4T-50-... | G1 1/4 | | | 151 | 155 | 110 | | 17 | | 50 |
| VZXF-L-...-G112-...-V4V4T-50-... | G1 1/2 | | | 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

| 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 | 0 ... 16 | | | 3539786 VZXF-L-M22C-M-A-G1-240-M1-V4V4T-50-16-EX4 |
| | G1 1/4 | 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 |
| | G1 1/2 | 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.

Festo - Your Partner in Automation



1 Festo Inc.
5300 Explorer Drive
Mississauga, ON L4W 5G4
Canada

Festo Customer Interaction Center
Tel: 1 877 463 3786
Fax: 1 877 393 3786
Email: customer.service.ca@festo.com



2 Festo Pneumatic
Av. Ceylán 3,
Col. Tequesquináhuac
54020 Tlalnepantla,
Estado de México

Multinational Contact Center
01 800 337 8669
ventas.mexico@festo.com



3 Festo Corporation
1377 Motor Parkway
Suite 310
Islandia, NY 11749

Festo Customer Interaction Center
1 800 993 3786
1 800 963 3786
customer.service.us@festo.com



4 Regional Service Center
7777 Columbia Road
Mason, OH 45040

Connect with us



www.festo.com/socialmedia



www.festo.com

Subject to change