

## Angle seat valve VZXF

**FESTO**



### Characteristics

#### At a glance

Angle seat valves are externally controlled valves. These valves are actuated by a direct supply of compressed air. The seat of the process valve is raised by a pneumatic actuator. In the normal position, the valve is closed by a spring. When the actuator is supplied with operating pressure, it raises the control piston as well as the valve disc – this opens the valve. The valve seat is angled at approx. 50° in relation to the media flow. The flow direction 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 vapour applications.

#### Design type

- Red brass variant
- Cast stainless steel variant
- Cast stainless steel variant, nickel-plated drive head

#### Overview

- Angle seat valves are simple and sturdy and are therefore perfectly suitable for almost all media with a viscosity of up to 600 mm<sup>2</sup>/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 input and the output
- Low flow resistance
- Insensitive to vapour or slightly contaminated media
- Long service life thanks to excellent cushioning characteristics and low friction values
- Low maintenance
- The valves are designed with a high chemical and thermal resistance
- The NC function ensures that the valve is closed in the event of a pressure loss in the control circuit
- Angle seat valves are available in different designs depending on the pressure of the medium
- Customers can choose from two different variants: Closing in the direction of the media flow is used for gaseous media. Closing against the direction of media flow is used for liquid media
- The vacuum-compatible variant is used in packaging machines that need to generate a vacuum

#### PWIS content

LABS (PWIS)-free is chosen for use in production areas where the influence of paint-wetting impairment substances must always be avoided

## Type code

<b>001</b>	Series	
VZXF	Angle seat valve	

<b>002</b>	Directional control valve type	
L	In-line valve	

<b>003</b>	Valve function	
M22C	2/2-way valve, normally closed	

<b>004</b>	Reset method for monostable/single solenoid valves	
M	Mechanical spring	

<b>005</b>	Flow direction	
A	Above valve seat, for gaseous media	
B	Below valve seat, for gaseous and liquid media	

<b>006</b>	Process valve connection	
G12	G1/2	
G34	G3/4	
G1	G1	
G114	G1 1/4	
G112	G1 1/2	
G2	G2	
N12	1/2 NPT	
N34	3/4 NPT	
N1	1 NPT	
N114	1 1/4 NPT	
N112	1 1/2 NPT	
N2	2 NPT	

<b>007</b>	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	

<b>008</b>	Temperature of medium	
	Standard	
M1	-40 ... 200°C	

<b>009</b>	Housing material	
H3	Gunmetal (red brass)	
V4	Stainless steel (chrome-nickel-molybdenum, austenitic/1.4401, 1.4404 (AISI 316L), 1.4408)	

<b>010</b>	Drive housing material	
AL	Aluminium	
AN	Aluminium, nickel-plated	
B1	Brass	
B2	Brass, nickel-plated	
V4	Stainless steel 1.4408	

<b>011</b>	Ball screw seal material	
T	PTFE	
	Standard (NBR)	
V	FPM	

<b>012</b>	Drive size	
50	50 mm	
80	80 mm	

<b>013</b>	Medium pressure	
V	-0.9 ... 0 bar	
3	0 ... 3 bar	
4	0 ... 4 bar	
5	0 ... 5 bar	
6	0 ... 6 bar	
7	0 ... 7 bar	
8	0 ... 8 bar	
9	0 ... 9 bar	
10	0 ... 10 bar	
12	0 ... 12 bar	
16	0 ... 16 bar	
20	0 ... 20 bar	
22	0 ... 22 bar	
40	0 ... 40 bar	

<b>014</b>	PWIS content	
	Standard	
C	Free of PWIS	

## Datasheet

**General technical data, gunmetal (red brass), temperature of medium -10 ... +80 °C**

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal size	12 mm	16 mm	23 mm	29 mm	35 mm	43 mm
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Sealing principle	Soft					
Mounting position	optional					
Valve function	2/2-way, closed, monostable					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of piloting	Externally controlled					
Type of reset	Mechanical spring					
Exhaust-air function	Without flow control option					
Direction of flow	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media					

**General technical data, gunmetal (red brass), temperature of medium -40 ... +200 °C**

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal size	12 mm	16 mm	23 mm	29 mm	35 mm	43 mm
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Sealing principle	Soft					
Mounting position	optional					
Valve function	2/2-way, closed, monostable					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of piloting	Externally controlled					
Type of reset	Mechanical spring					
Exhaust-air function	Without flow control option					
Direction of flow	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media					

**General technical data, gunmetal (red brass) (red brass), vacuum version**

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal size	12 mm	16 mm	23 mm	29 mm	35 mm	43 mm
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Sealing principle	Soft					
Mounting position	optional					
Valve function	2/2-way, closed, monostable					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of piloting	Externally controlled					
Type of reset	Mechanical spring					
Exhaust-air function	Without flow control option					
Direction of flow	Above valve seat, for gaseous media					

## Datasheet

**General technical data, gunmetal (red brass) (red brass), PWIS free**

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228
Nominal size	12 mm	16 mm	23 mm	35 mm
Design	Poppet valve with piston drive			
Type of actuation	Pneumatic			
Type of mounting	In-line installation			
Sealing principle	Soft			
Mounting position	optional			
Valve function	2/2-way, closed, monostable			
Pneumatic connection	Female thread G1/8			
Flow direction	Non-reversible			
Type of piloting	Externally controlled			
Type of reset	Mechanical spring			
Exhaust-air function	Without flow control option			
Direction of flow	Below valve seat, for gaseous and liquid media			

**General technical data, cast stainless steel, temperature of medium -40 ... +200 °C**

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal size	13 mm	18 mm	24 mm	31 mm	35 mm	45 mm
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Sealing principle	Soft					
Mounting position	optional					
Valve function	2/2-way, closed, monostable					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of piloting	Externally controlled					
Type of reset	Mechanical spring					
Exhaust-air function	Without flow control option					
Direction of flow	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media					

**General technical data, cast stainless steel, nickel-plated drive head**

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal size	13 mm	18 mm	24 mm	31 mm	35 mm	45 mm
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Sealing principle	Soft					
Mounting position	optional					
Valve function	2/2-way, closed, monostable					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of piloting	Externally controlled					
Exhaust-air function	Without flow control option					
Direction of flow	Below valve seat, for gaseous and liquid media	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media				

Datasheet

**General technical data, cast stainless steel, vacuum version**

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal size	13 mm	18 mm	24 mm	31 mm	35 mm	45 mm
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Sealing principle	Soft					
Mounting position	optional					
Valve function	2/2-way, closed, monostable					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of piloting	Externally controlled					
Type of reset	Mechanical spring					
Exhaust-air function	Without flow control option					
Direction of flow	Above valve seat, for gaseous media					

**Operating and environmental conditions, gunmetal (red brass), temperature of medium -10 ... +80 °C**

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal pressure PN	16					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Operating pressure	0.6 ... 1 MPa					
Operating pressure	6 ... 10 bar					
Operating pressure	87 ... 145 psi					
Medium	Vapour, Mineral oil-based hydraulic fluid, Inert gases, Mineral oil, Water, Filtered compressed air, grade of filtration 200 µm, Neutral fluids					
Media temperature	-10 ... 80°C					
Medium pressure	0 ... 1.6 MPa		0 ... 1 MPa	0 ... 0.8 MPa	0 ... 0.4 MPa	
Medium pressure	0 ... 16 bar		0 ... 10 bar	0 ... 8 bar	0 ... 4 bar	
Max. viscosity	600 mm <sup>2</sup> /s					
Ambient temperature	-10 ... 60°C					
CE mark (see declaration of conformity) <sup>1)</sup>	-			In accordance with EU Pressure Equipment Directive		
UKCA marking (see declaration of conformity)	-			to UK Pressure Equipment Regulations		
Corrosion resistance class CRC	1 - Low corrosion stress					

1) More information [www.festo.com/sp](http://www.festo.com/sp) Certificates.

**Operating and environmental conditions, gunmetal (red brass), temperature of medium -40 ... +200 °C**

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal pressure PN	16					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Operating pressure	0.6 ... 1 MPa					
Operating pressure	6 ... 10 bar					
Operating pressure	87 ... 145 psi					
Medium	Vapour, Mineral oil-based hydraulic fluid, Inert gases, Mineral oil, Water, Filtered compressed air, grade of filtration 200 µm, Neutral fluids					
Medium pressure	0 ... 1.6 MPa					
Medium pressure	0 ... 16 bar					
Max. viscosity	600 mm <sup>2</sup> /s					
Ambient temperature	-10 ... 60°C					
Media temperature	-40 ... 200°C					
CE mark (see declaration of conformity) <sup>1)</sup>	-			In accordance with EU Pressure Equipment Directive		
UKCA marking (see declaration of conformity)	-			to UK Pressure Equipment Regulations		
Corrosion resistance class CRC	1 - Low corrosion stress		0 - No corrosion stress, 1 - Low corrosion stress			

1) More information [www.festo.com/sp](http://www.festo.com/sp) Certificates.

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## Operating and environmental conditions, gunmetal (red brass), vacuum version

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal pressure PN	16					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Operating pressure	0.6 ... 1 MPa					
Operating pressure	6 ... 10 bar					
Operating pressure	87 ... 145 psi					
Medium	Vapour, Inert gases, Filtered compressed air, grade of filtration 200 µm					
Medium pressure	-0.09 ... 0 MPa					
Medium pressure	-0.9 ... 0 bar					
Max. viscosity	600 mm <sup>2</sup> /s					
Ambient temperature	-10 ... 60°C					
Media temperature	-10 ... 80°C					
Corrosion resistance class CRC	1 - Low corrosion stress		0 - No corrosion stress, 1 - Low corrosion stress			0 - No corrosion stress

## Operating and environmental conditions, gunmetal (red brass), PWIS-free

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228
Nominal pressure PN	16			
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]			
Operating pressure	0.6 ... 1 MPa			
Operating pressure	6 ... 10 bar			
Operating pressure	87 ... 145 psi			
Medium	Vapour, Mineral oil-based hydraulic fluid, Inert gases, Mineral oil, Water, Filtered compressed air, grade of filtration 200 µm, Neutral fluids			
Medium pressure	0 ... 1.6 MPa		0 ... 1 MPa	0 ... 0.6 MPa
Medium pressure	0 ... 16 bar		0 ... 10 bar	0 ... 6 bar
Max. viscosity	600 mm <sup>2</sup> /s			
Ambient temperature	-10 ... 60°C			
Media temperature	-10 ... 80°C			
CE mark (see declaration of conformity) <sup>1)</sup>	-			In accordance with EU Pressure Equipment Directive
Corrosion resistance class CRC	1 - Low corrosion stress			

1) More information [www.festo.com/sp/Certificates](http://www.festo.com/sp/Certificates).

## Operating and environmental conditions, cast stainless steel, temperature of medium -40 ... +200 °C

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal pressure PN	40					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Operating pressure	0.6 ... 1 MPa					
Operating pressure	6 ... 10 bar					
Operating pressure	87 ... 145 psi					
Medium	Vapour, Mineral oil-based hydraulic fluid, Inert gases, Mineral oil, Water, Filtered compressed air, grade of filtration 200 µm, Neutral fluids					
Medium pressure	0 ... 4 MPa	0 ... 2 MPa	0 ... 2.2 MPa	0 ... 1.6 MPa		0 ... 1.2 MPa
Medium pressure	0 ... 40 bar	0 ... 20 bar	0 ... 22 bar	0 ... 16 bar		0 ... 12 bar
Max. viscosity	600 mm <sup>2</sup> /s					
Ambient temperature	-10 ... 60°C					
Media temperature	-40 ... 200°C					
CE mark (see declaration of conformity) <sup>1)</sup>	-			In accordance with EU Pressure Equipment Directive		
UKCA marking (see declaration of conformity)	-			to UK Pressure Equipment Regulations		
Corrosion resistance class CRC	3 - high corrosion stress					

1) More information [www.festo.com/sp/Certificates](http://www.festo.com/sp/Certificates).

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### Operating and environmental conditions, cast stainless steel, nickel-plated drive head

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal pressure PN	40					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Operating pressure	0.6 ... 1 MPa					
Operating pressure	6 ... 10 bar					
Operating pressure	87 ... 145 psi					
Medium	Vapour, Mineral oil-based hydraulic fluid, Inert gases, Mineral oil, Water, Filtered compressed air, grade of filtration 200 µm, Neutral fluids					
Medium pressure	0 ... 4 MPa	0 ... 2 MPa	0 ... 2.2 MPa	0 ... 1.6 MPa	0 ... 1.2 MPa	
Medium pressure	0 ... 40 bar	0 ... 20 bar	0 ... 22 bar	0 ... 16 bar	0 ... 12 bar	
Max. viscosity	600 mm <sup>2</sup> /s					
Ambient temperature	-10 ... 60°C					
Media temperature	-40 ... 200°C					
CE mark (see declaration of conformity) <sup>1)</sup>	-			In accordance with EU Pressure Equipment Directive		
UKCA marking (see declaration of conformity)	-			to UK Pressure Equipment Regulations		
Corrosion resistance class CRC	2 - Moderate corrosion stress		1 - Low corrosion stress, 2 - Moderate corrosion stress			

1) More information [www.festo.com/sp/Certificates](http://www.festo.com/sp/Certificates).

### Operating and environmental conditions, cast stainless steel, vacuum version

Line connection	Threaded coupling G1/2 to DIN ISO 228	Threaded coupling G3/4 to DIN ISO 228	Threaded coupling G1 to DIN ISO 228	Threaded coupling G1 1/4 to DIN ISO 228	Threaded coupling G1 1/2 to DIN ISO 228	Threaded coupling G2 to DIN ISO 228
Nominal pressure PN	40					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Operating pressure	0.6 ... 1 MPa					
Operating pressure	6 ... 10 bar					
Operating pressure	87 ... 145 psi					
Medium	Vapour, Inert gases, Filtered compressed air, grade of filtration 200 µm					
Medium pressure	-0.09 ... 0 MPa					
Medium pressure	-0.9 ... 0 bar					
Max. viscosity	600 mm <sup>2</sup> /s					
Ambient temperature	-10 ... 60°C					
Media temperature	-10 ... 80°C					
CE mark (see declaration of conformity)	-					
Corrosion resistance class CRC	2 - Moderate corrosion stress		1 - Low corrosion stress, 2 - Moderate corrosion stress			1 - Low corrosion stress

### Materials, gunmetal (red brass), temperature of medium -10 ... +80 °C

Material process valve housing	Gunmetal (red brass)
Material drive housing	Brass
Material spindle seal	NBR
Material seat seal	PTFE
Note on materials	RoHS-compliant

### Materials, gunmetal (red brass), temperature of medium -40 ... +200 °C

Material process valve housing	Gunmetal (red brass)
Material drive housing	Aluminium, Brass
Material spindle seal	PTFE
Material seat seal	PTFE
Note on materials	RoHS-compliant

### Materials, gunmetal (red brass), vacuum version

Material process valve housing	Gunmetal (red brass)
Material drive housing	Aluminium, Brass
Material spindle seal	FPM
Material seat seal	FPM
Note on materials	RoHS-compliant

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**Materials, gunmetal (red brass), PWIS-free**

Material process valve housing	Gunmetal (red brass)
Material drive housing	Brass
Material spindle seal	FPM
Material seat seal	FPM
Note on materials	RoHS-compliant

**Materials, cast stainless steel, temperature of medium -40 ... +200°C**

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

**Materials, cast stainless steel, nickel-plated drive head**

Material process valve housing	Stainless steel casting
Material drive housing	Aluminium, nickel-plated, Nickel-plated brass
Material spindle seal	PTFE
Material seat seal	PTFE
Note on materials	RoHS-compliant

**Materials, cast stainless steel, vacuum version**

Material process valve housing	Stainless steel casting
Material drive housing	Aluminium, nickel-plated, Nickel-plated brass
Material spindle seal	FPM
Material seat seal	FPM
Note on materials	RoHS-compliant

**General technical data, gunmetal (red brass), temperature of medium -10 ... +80 °C**

Line connection	Threaded coupling 1/2 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 3/4 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1
Nominal size	12 mm	16 mm	23 mm	29 mm	35 mm	43 mm
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Sealing principle	Soft					
Mounting position	optional					
Valve function	2/2-way, closed, monostable					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of piloting	Externally controlled					
Type of reset	Mechanical spring					
Exhaust-air function	Without flow control option					
Direction of flow	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media					

Datasheet

**General technical data, cast stainless steel, temperature of medium -40 ... +200 °C**

Line connection	Threaded coupling 1/2 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 3/4 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1
Nominal size	13 mm	18 mm	24 mm	31 mm	35 mm	45 mm
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Sealing principle	Soft					
Mounting position	optional					
Valve function	2/2-way, closed, monostable					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of piloting	Externally controlled					
Type of reset	Mechanical spring					
Exhaust-air function	Without flow control option					
Direction of flow	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media					

**General technical data, cast stainless steel, nickel-plated drive head**

Line connection	Threaded coupling 1/2 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 3/4 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1
Nominal size	13 mm	18 mm	24 mm	31 mm	35 mm	45 mm
Design	Poppet valve with piston drive					
Type of actuation	Pneumatic					
Type of mounting	In-line installation					
Sealing principle	Soft					
Mounting position	optional					
Valve function	2/2-way, closed, monostable					
Pneumatic connection	Female thread G1/8					
Flow direction	Non-reversible					
Type of piloting	Externally controlled					
Type of reset	Mechanical spring					
Exhaust-air function	Without flow control option					
Direction of flow	Below valve seat, for gaseous and liquid me- dia	Above valve seat, for gaseous media, Below valve seat, for gaseous and liquid media				

**Operating and environmental conditions, gunmetal (red brass), temperature of medium -10 ... +80 °C**

Line connection	Threaded coupling 1/2 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 3/4 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1
Nominal pressure PN	16					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Operating pressure	0.6 ... 1 MPa					
Operating pressure	6 ... 10 bar					
Operating pressure	87 ... 145 psi					
Medium	Vapour, Mineral oil-based hydraulic fluid, Inert gases, Mineral oil, Water, Filtered compressed air, grade of filtration 200 µm, Neutral fluids					
Medium pressure	0 ... 1.6 MPa			0 ... 1 MPa	0 ... 0.8 MPa	0 ... 0.4 MPa
Medium pressure	0 ... 16 bar			0 ... 10 bar	0 ... 8 bar	0 ... 4 bar
Max. viscosity	600 mm <sup>2</sup> /s					
Ambient temperature	-10 ... 60°C					
Media temperature	-10 ... 80°C					
CE mark (see declaration of conformity) <sup>1)</sup>	-			In accordance with EU Pressure Equipment Directive		
UKCA marking (see declaration of conformity)	-			to UK Pressure Equipment Regulations		
Corrosion resistance class CRC	1 - Low corrosion stress					

1) More information [www.festo.com/sp](http://www.festo.com/sp) Certificates.

## Datasheet

**Operating and environmental conditions, cast stainless steel, temperature of medium -40 ... +200 °C**

Line connection	Threaded coupling 1/2 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 3/4 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1
Nominal pressure PN	40					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Operating pressure	0.6 ... 1 MPa					
Operating pressure	6 ... 10 bar					
Operating pressure	87 ... 145 psi					
Medium	Vapour, Mineral oil-based hydraulic fluid, Inert gases, Mineral oil, Water, Filtered compressed air, grade of filtration 200 µm, Neutral fluids					
Medium pressure	0 ... 4 MPa	0 ... 2 MPa	0 ... 2.2 MPa	0 ... 1.6 MPa	0 ... 1.2 MPa	
Medium pressure	0 ... 40 bar	0 ... 20 bar	0 ... 22 bar	0 ... 16 bar	0 ... 12 bar	
Max. viscosity	600 mm <sup>2</sup> /s					
Ambient temperature	-10 ... 60°C					
Media temperature	-40 ... 200°C					
CE mark (see declaration of conformity) <sup>1)</sup>	–			In accordance with EU Pressure Equipment Directive		
UKCA marking (see declaration of conformity)	–			to UK Pressure Equipment Regulations		
Corrosion resistance class CRC	3 - high corrosion stress					

1) More information [www.festo.com/sp](http://www.festo.com/sp) Certificates.**Operating and environmental conditions, cast stainless steel, nickel-plated drive head**

Line connection	Threaded coupling 1/2 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 3/4 NPT as per ANSI/ ASME B 1.20.1	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1
Nominal pressure PN	40					
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]					
Operating pressure	0.6 ... 1 MPa					
Operating pressure	6 ... 10 bar					
Operating pressure	87 ... 145 psi					
Medium	Vapour, Mineral oil-based hydraulic fluid, Inert gases, Mineral oil, Water, Filtered compressed air, grade of filtration 200 µm, Neutral fluids					
Medium pressure	0 ... 4 MPa	0 ... 2 MPa	0 ... 1.6 MPa	0 ... 0.9 MPa	0 ... 0.7 MPa	0 ... 0.4 MPa
Medium pressure	0 ... 40 bar	0 ... 20 bar	0 ... 16 bar	0 ... 9 bar	0 ... 7 bar	0 ... 4 bar
Max. viscosity	600 mm <sup>2</sup> /s					
Ambient temperature	-10 ... 60°C					
Media temperature	-40 ... 200°C					
CE mark (see declaration of conformity) <sup>1)</sup>	–			In accordance with EU Pressure Equipment Directive		
UKCA marking (see declaration of conformity)	–			to UK Pressure Equipment Regulations		
Corrosion resistance class CRC	2 - Moderate corrosion stress					

1) More information [www.festo.com/sp](http://www.festo.com/sp) Certificates.**Materials, gunmetal (red brass), temperature of medium -10 ... +80 °C**

Material process valve housing	Gunmetal (red brass)
Material drive housing	Brass
Material spindle seal	NBR
Material seat seal	PTFE
Note on materials	RoHS-compliant

**Materials, cast stainless steel, temperature of medium -40 ... +200°C**

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

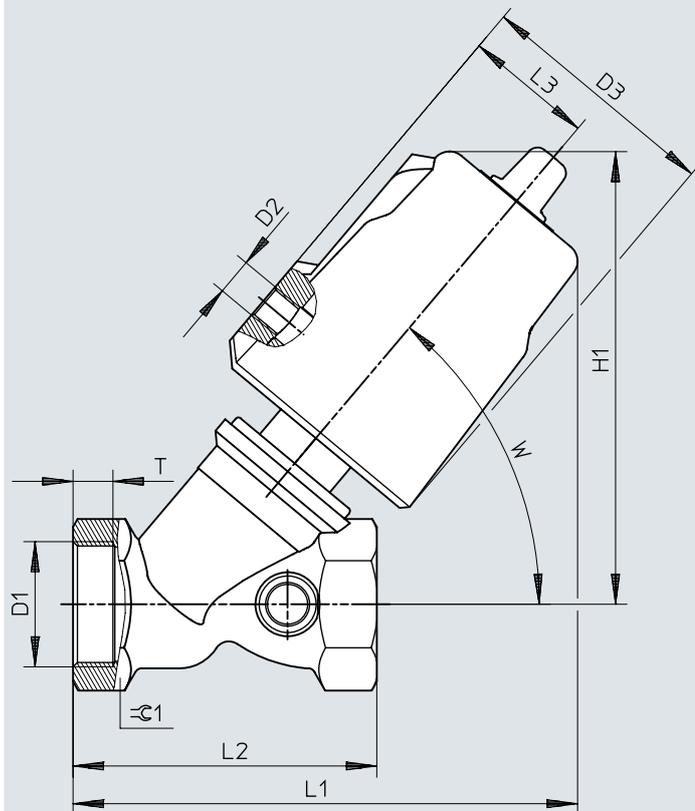
## Datasheet

### Materials, cast stainless steel, nickel-plated drive head

Material process valve housing	Stainless steel casting
Material drive housing	Nickel-plated brass
Material spindle seal	PTFE
Material seat seal	PTFE
Note on materials	RoHS-compliant

## Dimensions

Dimensions – Red brass, temperature of medium -10 ... +80 °C

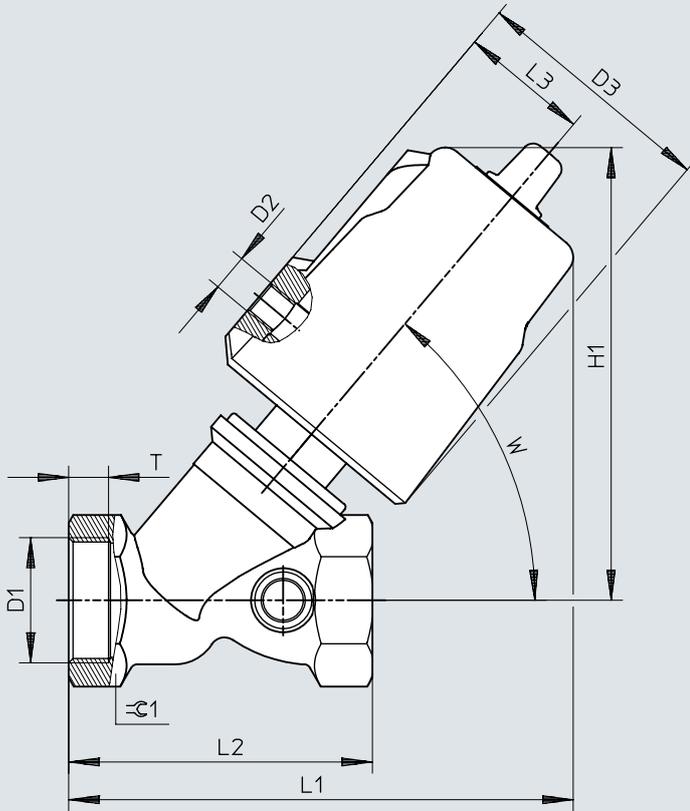
Download CAD data [www.festo.com](http://www.festo.com)

	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	☞
VZXF-L...-G12-...	G1/2	G1/8	62	112	123	66	34	8	50°	27
VZXF-L...-G34-...	G3/4			117	130	75		9		33
VZXF-L...-G1-...	G1			121	133	80		10,5		41
VZXF-L...-G114-...	G1 1/4			139	154	97		12,5		50
VZXF-L...-G112-...	G1 1/2			145	161	107		14,5		56
VZXF-L...-G2-...	G2			154	171	124		16,5		68

## Dimensions

Dimensions – Red brass, temperature of medium -40 ... +200 °C

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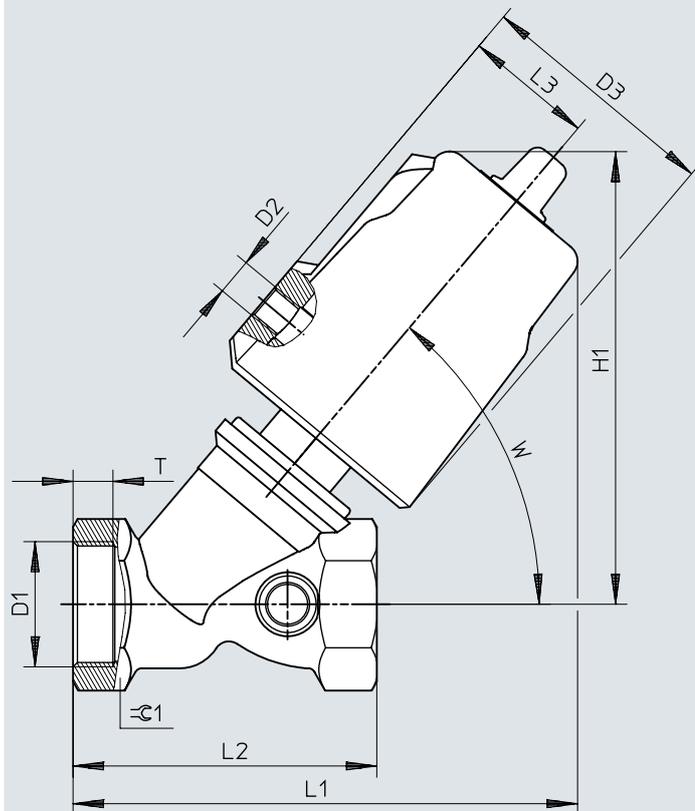


	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	☞
VZXF-L...-G12...-H3B1T-50...	G1/2	G1/8	62	130	135,5	66	34	13	50°	27
VZXF-L...-G34...-H3B1T-50...	G3/4			130	140	75		14,5		32
VZXF-L...-G1...-H3B1T-50...	G1			133	143	80		10,5		41
VZXF-L...-G114...-H3B1T-50...	G1 1/4			148	160	97		12,5		50
VZXF-L...-G114...-H3ALT-80...	G1 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

## Dimensions

Dimensions – Red brass, vacuum version

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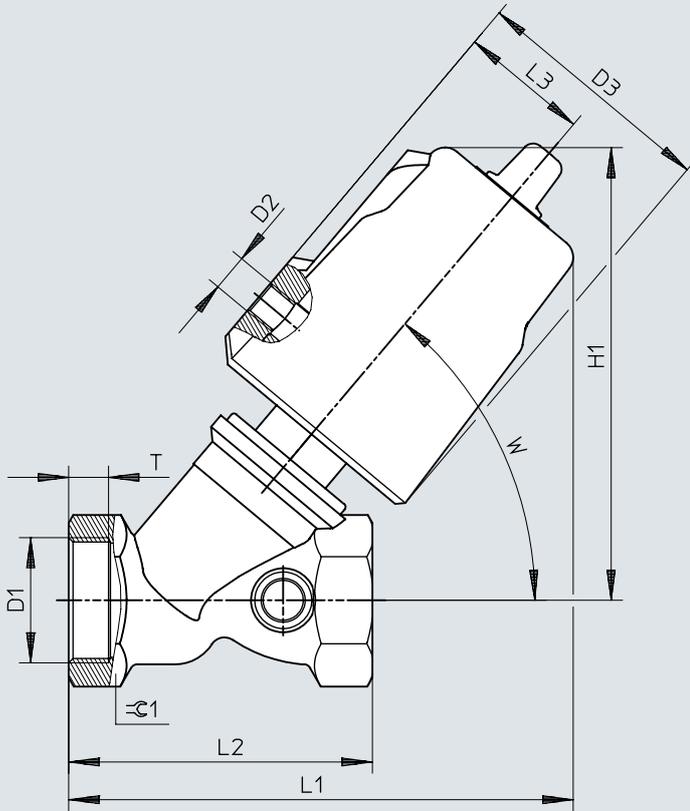


	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	☉
VZXF-L...-G12...-H3B1V-50...	G1/2	G1/8	62	113,5	123	66	34	13	50°	27
VZXF-L...-G34...-H3B1V-50...	G3/4			118	130	75	34	14,5		32
VZXF-L...-G1...-H3B1V-50...	G1			121	133	80	34	10,5		41
VZXF-L...-G1...-H3ALV-80...	G1		94	168	174,5	80	49	10,5		41
VZXF-L...-G114...-H3B1V-50...	G1 1/4		62	138,5	153,5	97	34	12,5		50
VZXF-L...-G114...-H3ALV-80...	G1 1/4		94	174,5	185	97	49	12,5		50
VZXF-L...-G112...-H3B1V-50...	G1 1/2		62	146	160	107	34	14,5		55
VZXF-L...-G112...-H3ALV-80...	G1 1/2		94	180,5	192	107	49	14,5		55
VZXF-L...-G2...-H3ALV-80...	G2		94	190	202,5	124	49	16,5		68

## Dimensions

Dimensions – Red brass, PWIS-free

Download CAD data [www.festo.com](http://www.festo.com)

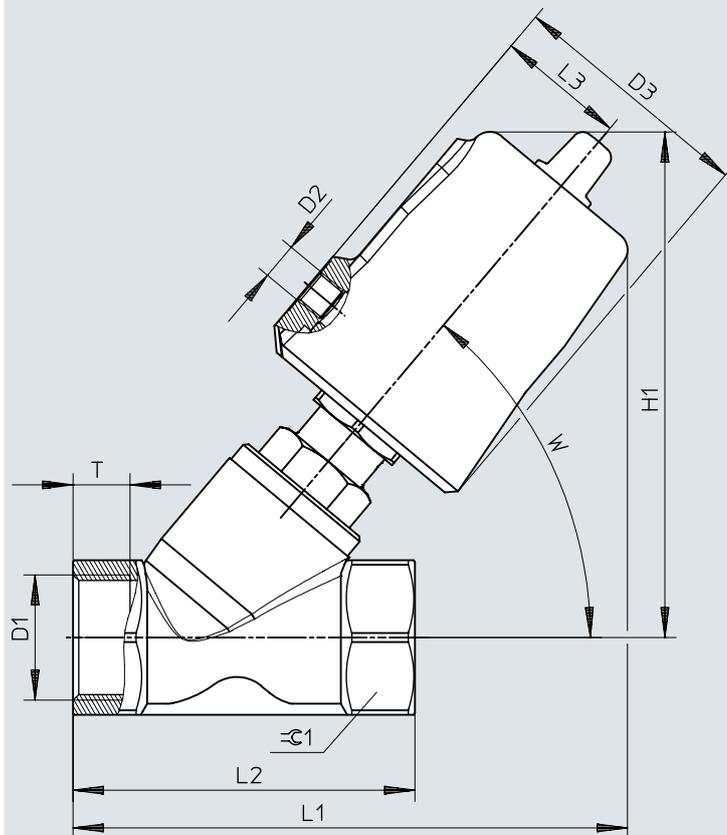


	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	∠
VZXF-L...-G12-...	G1/2	G1/8	62	113,5	123	66	34	13	50°	27
VZXF-L...-G34-...	G3/4			118	130	75	34	14,5		32
VZXF-L...-G1-...	G1			121	133	80	34	10,5		41
VZXF-L...-G112-...	G1 1/2		62	146	160	107	34	14,5		55

## Dimensions

Dimensions – Cast stainless steel, temperature of medium -40 ... +200°C

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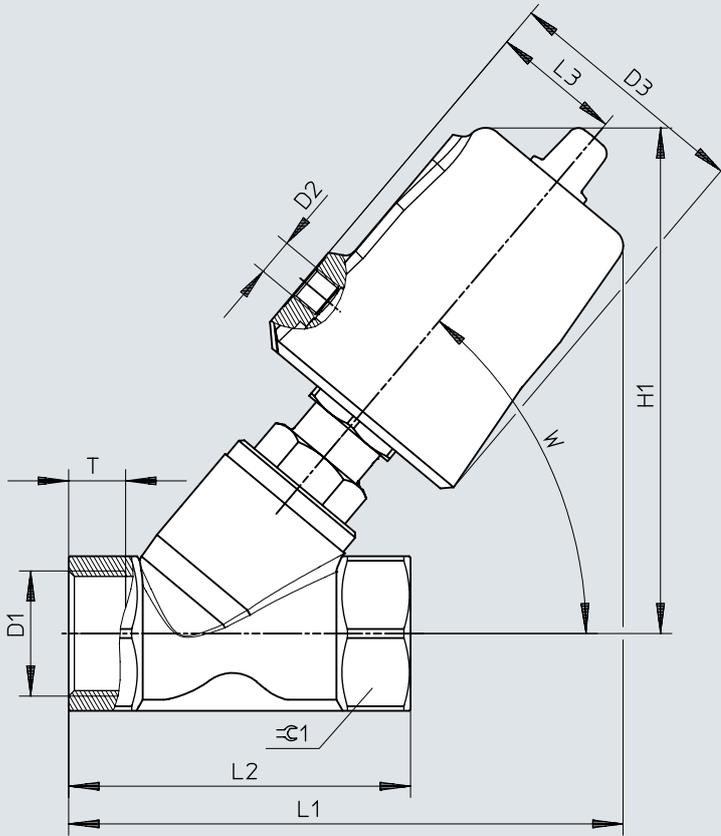


	D1	D2	D3 ø	H1	L1	L2	L3	T	W	⊖
VZXF-L...-G12...-V4V4T-50...	G1/2	G1/8	62	129	135	65	34	12	50°	27
VZXF-L...-G34...-V4V4T-50...	G3/4		62	130	138	75	34	13		32
VZXF-L...-G1...-V4V4T-50...	G1		62	135	146	90	34	15		42
VZXF-L...-G1...-V4V4T-80...	G1		94	177	184		48			
VZXF-L...-G114...-V4V4T-50...	G1 1/4		62	151	155	110	34	17		50
VZXF-L...-G114...-V4V4T-80...	G1 1/2		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			

## Dimensions

Dimensions – Cast stainless steel, nickel-plated drive head

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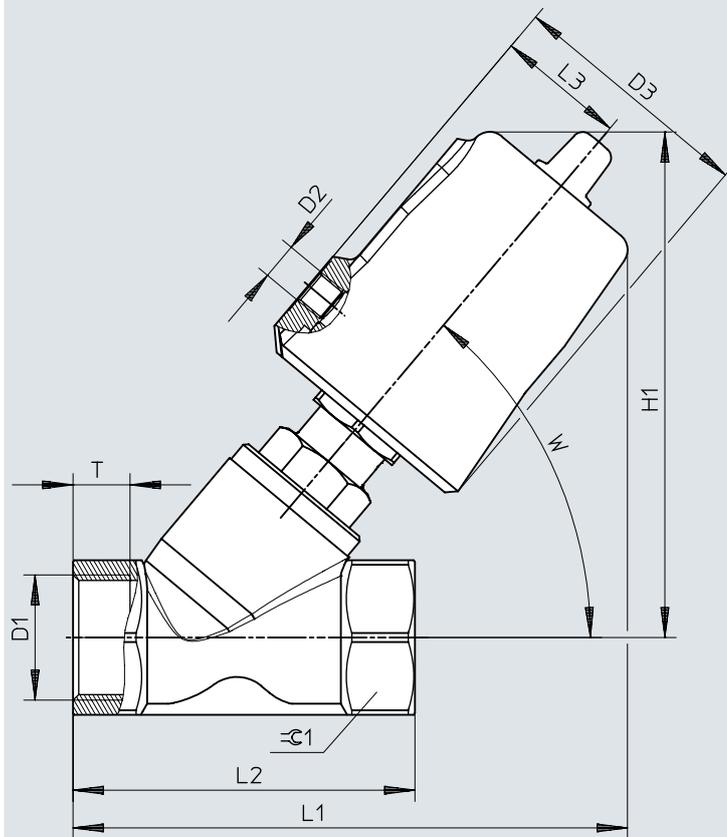


	D1	D2	D3 ø	H1	L1	L2	L3	T	W	∅C
VZXF-L...-G12-...-V4B2T-50-...	G1/2	G1/8	62	128	133	65	34	12	50°	27
VZXF-L...-G34-...-V4B2T-50-...	G3/4		62	128	136,5	75		13		32
VZXF-L...-G1-...-V4B2T-50-...	G1		62	133	145	90		15		41
VZXF-L...-G1-...-V4ANT-80-...			94	176,5	183	90	15	41		
VZXF-L...-G114-...-V4B2T-50-...	G1 1/4		62	150	163,5	110	34	17		50
VZXF-L...-G114-...-V4ANT-80-...			94	183	193	110		17		50
VZXF-L...-G112-...-V4B2T-50-...	G1 1/2		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	21	70		

## Dimensions

Dimensions – Cast stainless steel, vacuum version

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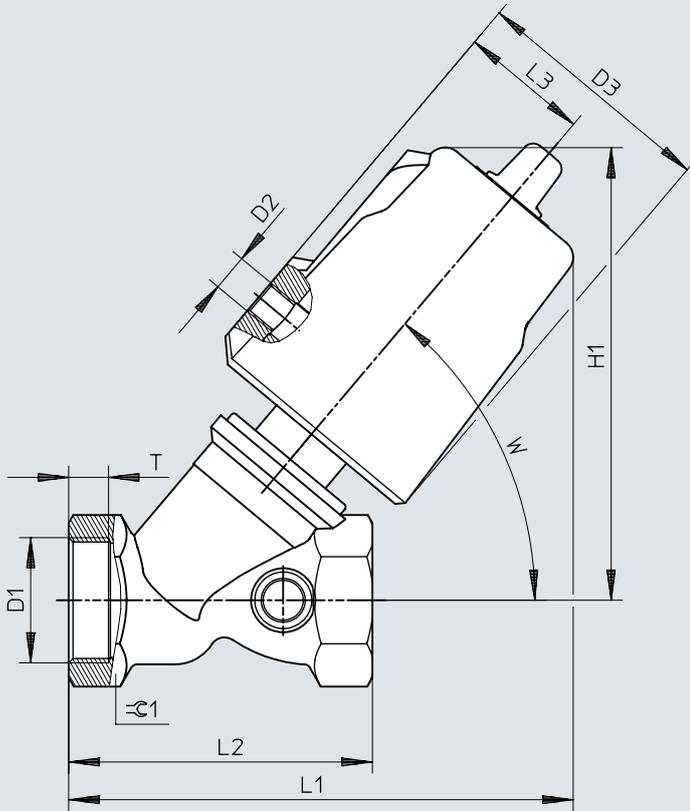


	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	∅
VZXF-L-...-G12-...-V4B2V-50-...	G1/2	G1/8	62	112	119	65	34	12	50°	27
VZXF-L-...-G34-...-V4B2V-50-...	G3/4		62	118	126,5	75	34	13		32
VZXF-L-...-G1-...-V4B2V-50-...	G1		62	121,5	135	90	34	15		41
VZXF-L-...-G1-...-V4ANV-80-...			94	169	176	90	49	15		41
VZXF-L-...-G114-...-V4B2V-50-...	G1 1/4		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-...	G1 1/2		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

## Dimensions

Dimensions – Gunmetal, temperature of medium -10 ... +80 °C, NPT

Download CAD data [www.festo.com](http://www.festo.com)

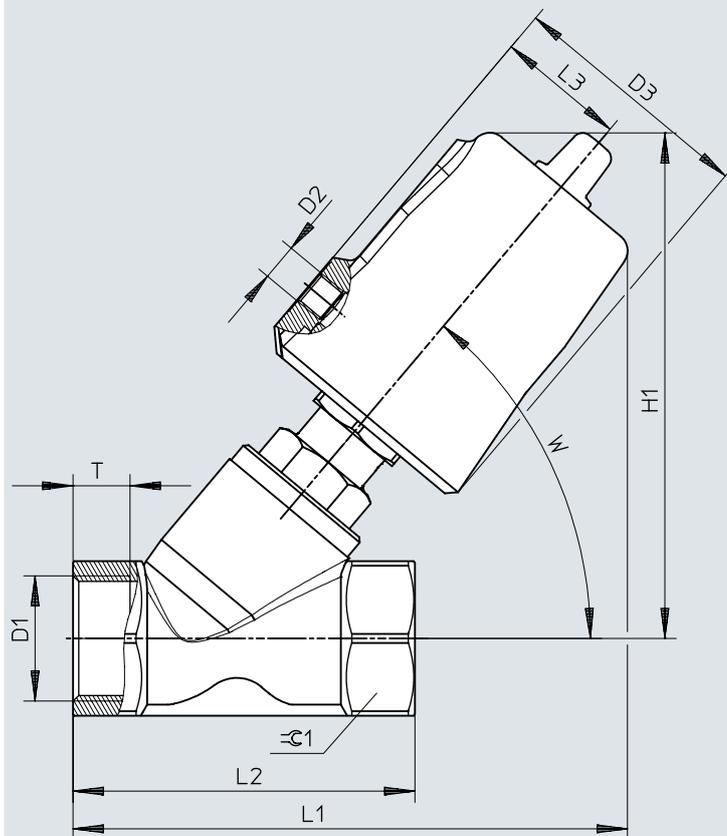


	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	⊞
VZXF-L...-N12...-H3B1-50...	1/2 NPT	G1/8	62	112	123	66	34	8	50°	27
VZXF-L...-N34...-H3B1-50...	3/4 NPT			117	130	75		9		33
VZXF-L...-N1...-H3B1-50...	1 NPT			121	133	80		10,5		41
VZXF-L...-N114...-H3B1-50...	1 1/4 NPT			139	154	97		12,5		50
VZXF-L...-N112...-H3B1-50...	1 1/2 NPT			145	161	107		14,5		56
VZXF-L...-N2...-H3B1-50...	2 NPT			154	171	124		16,5		68

## Dimensions

Dimensions – Cast stainless steel, temperature of medium -40 ... +200 °C,  
NPT

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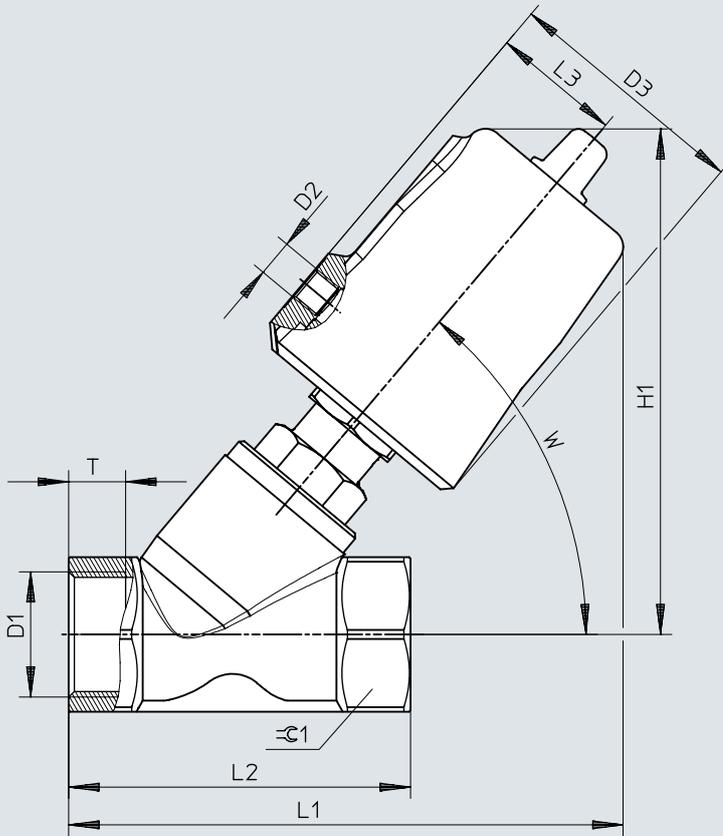


	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	∅
VZXF-L-...-N12-...-V4V4T-50-...	1/2 NPT	G1/8	62	129	135	65	34	12	50°	27
VZXF-L-...-N34-...-V4V4T-50-...	3/4 NPT			130	138			75		13
VZXF-L-...-N1-...-V4V4T-50-...	1 NPT			135	146	90		15		42
VZXF-L-...-N1-...-V4V4T-80-...	1 NPT		94	177	184	48	17	19		55
VZXF-L-...-N114-...-V4V4T-50-...	1 1/4 NPT		62	151	155	110				
VZXF-L-...-N114-...-V4V4T-80-...	1 1/4 NPT		94	183	194	48	120	48		70
VZXF-L-...-N112-...-V4V4T-50-...	1 1/2 NPT		62	155	174	34				
VZXF-L-...-N112-...-V4V4T-80-...	1 1/2 NPT		94	187	202	48	150	21		70
VZXF-L-...-N2-...-V4V4T-50-...	2 NPT		62	167	193	34				
VZXF-L-...-N2-...-V4V4T-80-...	2 NPT		94	199	222	48				

## Dimensions

Dimensions – Stainless steel casting, nickel-plated drive head, line connection NPT

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	D1	D2	D3 ∅	H1	L1	L2	L3	T	W	∠
VZXF-L...-N12...-V4B2T-50-...	1/2 NPT	G1/8	62	128	133	65	34	12	50°	27
VZXF-L...-N34...-V4B2T-50-...	3/4 NPT			128	136,5	75		13		32
VZXF-L...-N1...-V4B2T-50-...	1 NPT			133	145	90		15		41
VZXF-L...-N114...-V4B2T-50-...	1 1/4 NPT			150	163,5	110		17		50
VZXF-L...-N112...-V4B2T-50-...	1 1/2 NPT			153	172	120		19		55
VZXF-L...-N2...-V4B2T-50-...	2 NPT			167	193	150		21		70

## Ordering data

Ordering data VZXF, gunmetal (red brass), temperature of medium -10 ... +80 °C						
	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling G1/2 to DIN ISO 228	3.5 m³/h	0 ... 16 bar	1,200 g	1002500	VZXF-L-M22C-M-A-G12-120-H3B1-50-16
		3.7 m³/h			1002501	VZXF-L-M22C-M-B-G12-120-H3B1-50-16
	Threaded coupling G3/4 to DIN ISO 228	5.2 m³/h	0 ... 16 bar	1,300 g	1002503	VZXF-L-M22C-M-B-G34-160-H3B1-50-16
		6.7 m³/h			1002502	VZXF-L-M22C-M-A-G34-160-H3B1-50-16
	Threaded coupling G1 to DIN ISO 228	9.6 m³/h	0 ... 10 bar	1,500 g	1002505	VZXF-L-M22C-M-B-G1-230-H3B1-50-10
		10.8 m³/h	0 ... 16 bar		1002504	VZXF-L-M22C-M-A-G1-230-H3B1-50-16
	Threaded coupling G1 1/4 to DIN ISO 228	6 m³/h	0 ... 7 bar	1,900 g	1002507	VZXF-L-M22C-M-B-G114-290-H3B1-50-7
		19 m³/h	0 ... 10 bar		1002506	VZXF-L-M22C-M-A-G114-290-H3B1-50-10
	Threaded coupling G1 1/2 to DIN ISO 228	16.5 m³/h	0 ... 6 bar	2,300 g	1002509	VZXF-L-M22C-M-B-G112-350-H3B1-50-6
		23 m³/h	0 ... 8 bar		1002508	VZXF-L-M22C-M-A-G112-350-H3B1-50-8
Threaded coupling G2 to DIN ISO 228	28 m³/h	0 ... 3 bar	2,800 g	1002511	VZXF-L-M22C-M-B-G2-430-H3B1-50-3	
		0 ... 4 bar		1002510	VZXF-L-M22C-M-A-G2-430-H3B1-50-4	

Ordering data VZXF, gunmetal (red brass), temperature of medium -40 ... +200 °C						
	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling G1/2 to DIN ISO 228	3.5 m³/h	0 ... 16 bar	1,200 g	3535619	VZXF-L-M22C-M-A-G12-120-M1-H3B1T-50-16
		3.7 m³/h			3535620	VZXF-L-M22C-M-B-G12-120-M1-H3B1T-50-16
	Threaded coupling G3/4 to DIN ISO 228	5.2 m³/h	0 ... 16 bar	1,300 g	3535644	VZXF-L-M22C-M-B-G34-160-M1-H3B1T-50-16
		6.7 m³/h			3535643	VZXF-L-M22C-M-A-G34-160-M1-H3B1T-50-16
	Threaded coupling G1 to DIN ISO 228	9.6 m³/h	0 ... 10 bar	1,500 g	3535665	VZXF-L-M22C-M-B-G1-230-M1-H3B1T-50-10
		10.8 m³/h	0 ... 16 bar		3535664	VZXF-L-M22C-M-A-G1-230-M1-H3B1T-50-16
		14.5 m³/h	0 ... 16 bar	2,000 g	3540768	VZXF-L-M22C-M-B-G1-230-M1-H3ALT-80-16
	Threaded coupling G1 1/4 to DIN ISO 228	6 m³/h	0 ... 7 bar	1,900 g	3535689	VZXF-L-M22C-M-B-G114-290-M1-H3B1T-50-7
		19 m³/h	0 ... 10 bar	2,300 g	3535684	VZXF-L-M22C-M-A-G114-290-M1-H3B1T-50-10
		21.5 m³/h	0 ... 16 bar		3535711	VZXF-L-M22C-M-A-G114-290-M1-H3ALT-80-16
	Threaded coupling G1 1/2 to DIN ISO 228	16.5 m³/h	0 ... 6 bar	2,600 g	3535721	VZXF-L-M22C-M-B-G112-350-M1-H3B1T-50-6
		23 m³/h	0 ... 7 bar		3535720	VZXF-L-M22C-M-A-G112-350-M1-H3B1T-50-7
		29.5 m³/h	0 ... 8 bar	2,600 g	3535825	VZXF-L-M22C-M-B-G112-350-M1-H3ALT-80-8
		30.5 m³/h	0 ... 16 bar		3535824	VZXF-L-M22C-M-A-G112-350-M1-H3ALT-80-16
	Threaded coupling G2 to DIN ISO 228	23 m³/h	0 ... 3 bar	2,800 g	3535838	VZXF-L-M22C-M-B-G2-430-M1-H3B1T-50-3
		28 m³/h	0 ... 4 bar	2,900 g	3535837	VZXF-L-M22C-M-A-G2-430-M1-H3B1T-50-4
		30 m³/h	0 ... 5 bar		3536436	VZXF-L-M22C-M-B-G2-430-M1-H3ALT-80-5
		40 m³/h	0 ... 16 bar	3536435	VZXF-L-M22C-M-A-G2-430-M1-H3ALT-80-16	

Ordering data VZXF, gunmetal (red brass), vacuum version						
	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling G1/2 to DIN ISO 228	3.5 m³/h	-0.9 ... 0 bar	1,200 g	3538869	VZXF-L-M22C-M-A-G12-120-H3B1V-50-V
		6.7 m³/h		1,300 g	3539178	VZXF-L-M22C-M-A-G34-160-H3B1V-50-V
	Threaded coupling G1 to DIN ISO 228	10.8 m³/h	-0.9 ... 0 bar	1,500 g	3539247	VZXF-L-M22C-M-A-G1-230-H3B1V-50-V
		12 m³/h		2,000 g	3536819	VZXF-L-M22C-M-A-G1-230-H3ALV-80-V
	Threaded coupling G1 1/4 to DIN ISO 228	19 m³/h	-0.9 ... 0 bar	1,900 g	3539352	VZXF-L-M22C-M-A-G114-290-H3B1V-50-V

Ordering data

Ordering data VZXF, gunmetal (red brass), vacuum version

	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling G1 1/4 to DIN ISO 228	21.5 m³/h	-0.9 ... 0 bar	2,300 g	3536830	VZXF-L-M22C-M-A-G114-290-H3ALV-80-V
	Threaded coupling G1 1/2 to DIN ISO 228	23 m³/h			3539367	VZXF-L-M22C-M-A-G112-350-H3B1V-50-V
		30.5 m³/h	2,600 g	3536850	VZXF-L-M22C-M-A-G112-350-H3ALV-80-V	
	Threaded coupling G2 to DIN ISO 228	40 m³/h	2,900 g	3540796	VZXF-L-M22C-M-A-G2-430-H3ALV-80-V	

Ordering data VZXF, gunmetal (red brass) (red brass), PWIS free

	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling G1/2 to DIN ISO 228	3.7 m³/h	0 ... 16 bar	1,200 g	3539036	VZXF-L-M22C-M-B-G12-120-H3B1V-50-16-C
	Threaded coupling G3/4 to DIN ISO 228	5.2 m³/h		1,300 g	3539179	VZXF-L-M22C-M-B-G34-160-H3B1V-50-16-C
		Threaded coupling G1 to DIN ISO 228	9.6 m³/h	0 ... 10 bar	1,500 g	3539248
	Threaded coupling G1 1/2 to DIN ISO 228	16.5 m³/h	0 ... 6 bar	2,300 g	3539368	VZXF-L-M22C-M-B-G112-350-H3B1V-50-6-C

Ordering data VZXF, cast stainless steel, temperature of medium -40 ... +200 °C

	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling G1/2 to DIN ISO 228	3.3 m³/h	0 ... 40 bar	1,300 g	1002513	VZXF-L-M22C-M-B-G12-130-M1-V4V4T-50-40
		3.8 m³/h	0 ... 16 bar		1002512	VZXF-L-M22C-M-A-G12-130-M1-V4V4T-50-16
	Threaded coupling G3/4 to DIN ISO 228	6.5 m³/h	0 ... 20 bar	1,400 g	1002515	VZXF-L-M22C-M-B-G34-180-M1-V4V4T-50-20
		7.5 m³/h	0 ... 16 bar		1002514	VZXF-L-M22C-M-A-G34-180-M1-V4V4T-50-16
	Threaded coupling G1 to DIN ISO 228	11 m³/h	0 ... 10 bar	1,600 g	1002517	VZXF-L-M22C-M-B-G1-240-M1-V4V4T-50-10
		12 m³/h	0 ... 16 bar	3,600 g	1002516	VZXF-L-M22C-M-A-G1-240-M1-V4V4T-50-16
		12.5 m³/h	0 ... 22 bar		1002526	VZXF-L-M22C-M-B-G1-240-M1-V4V4T-80-22
			0 ... 16 bar	1002525	VZXF-L-M22C-M-A-G1-240-M1-V4V4T-80-16	
	Threaded coupling G1 1/4 to DIN ISO 228	10.7 m³/h	0 ... 7 bar	2,200 g	1002519	VZXF-L-M22C-M-B-G114-310-M1-V4V4T-50-7
		17.5 m³/h	0 ... 10 bar	3,800 g	1002528	VZXF-L-M22C-M-B-G114-310-M1-V4V4T-80-10
		18.5 m³/h	0 ... 9 bar	2,200 g	1002518	VZXF-L-M22C-M-A-G114-310-M1-V4V4T-50-9
		19 m³/h	0 ... 16 bar	3,800 g	1002527	VZXF-L-M22C-M-A-G114-310-M1-V4V4T-80-16
	Threaded coupling G1 1/2 to DIN ISO 228	17.5 m³/h	0 ... 6 bar	2,500 g	1002521	VZXF-L-M22C-M-B-G112-350-M1-V4V4T-50-6
		25 m³/h	0 ... 7 bar	4,300 g	1002520	VZXF-L-M22C-M-A-G112-350-M1-V4V4T-50-7
		28 m³/h	0 ... 8 bar		1002530	VZXF-L-M22C-M-B-G112-350-M1-V4V4T-80-8
		29 m³/h	0 ... 16 bar	1002529	VZXF-L-M22C-M-A-G112-350-M1-V4V4T-80-16	
	Threaded coupling G2 to DIN ISO 228	19.5 m³/h	0 ... 3 bar	3,500 g	1002523	VZXF-L-M22C-M-B-G2-450-M1-V4V4T-50-3
		34.5 m³/h	0 ... 4 bar	5,400 g	1002522	VZXF-L-M22C-M-A-G2-450-M1-V4V4T-50-4
		39 m³/h	0 ... 5 bar		1002532	VZXF-L-M22C-M-B-G2-450-M1-V4V4T-80-5
		43 m³/h	0 ... 12 bar	1002531	VZXF-L-M22C-M-A-G2-450-M1-V4V4T-80-12	

## Ordering data

Ordering data VZXF, cast stainless steel, nickel-plated drive head						
	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling G1/2 to DIN ISO 228	3.3 m³/h	0 ... 40 bar	1,300 g	3539720	VZXF-L-M22C-M-B-G12-130-M1-V4B2T-50-40
	Threaded coupling G3/4 to DIN ISO 228	6.5 m³/h	0 ... 20 bar	1,400 g	3538842	VZXF-L-M22C-M-B-G34-180-M1-V4B2T-50-20
		7.5 m³/h	0 ... 16 bar		3539745	VZXF-L-M22C-M-A-G34-180-M1-V4B2T-50-16
	Threaded coupling G1 to DIN ISO 228	11 m³/h	0 ... 10 bar	1,600 g	3539783	VZXF-L-M22C-M-B-G1-240-M1-V4B2T-50-10
		12 m³/h	0 ... 16 bar		3539782	VZXF-L-M22C-M-A-G1-240-M1-V4B2T-50-16
			0 ... 22 bar	3,600 g	3540198	VZXF-L-M22C-M-B-G1-240-M1-V4ANT-80-22
	Threaded coupling G1 1/4 to DIN ISO 228	10.7 m³/h	0 ... 7 bar	2,200 g	3539816	VZXF-L-M22C-M-B-G114-310-M1-V4B2T-50-7
		17.5 m³/h	0 ... 10 bar	3,800 g	3540818	VZXF-L-M22C-M-B-G114-310-M1-V4ANT-80-10
		18.5 m³/h	0 ... 9 bar	2,200 g	3539815	VZXF-L-M22C-M-A-G114-310-M1-V4B2T-50-9
		19 m³/h	0 ... 16 bar	3,800 g	3540817	VZXF-L-M22C-M-A-G114-310-M1-V4ANT-80-16
	Threaded coupling G1 1/2 to DIN ISO 228	17.5 m³/h	0 ... 6 bar	2,500 g	3539927	VZXF-L-M22C-M-B-G112-350-M1-V4B2T-50-6
		25 m³/h	0 ... 7 bar		3539926	VZXF-L-M22C-M-A-G112-350-M1-V4B2T-50-7
		28 m³/h	0 ... 8 bar	4,300 g	3540250	VZXF-L-M22C-M-B-G112-350-M1-V4ANT-80-8
		29 m³/h	0 ... 16 bar		3540248	VZXF-L-M22C-M-A-G112-350-M1-V4ANT-80-16
	Threaded coupling G2 to DIN ISO 228	19.5 m³/h	0 ... 3 bar	3,500 g	3540146	VZXF-L-M22C-M-B-G2-450-M1-V4B2T-50-3
		34.5 m³/h	0 ... 4 bar		3540145	VZXF-L-M22C-M-A-G2-450-M1-V4B2T-50-4
39 m³/h		0 ... 5 bar	5,400 g	3540277	VZXF-L-M22C-M-B-G2-450-M1-V4ANT-80-5	
43 m³/h		0 ... 12 bar		3540276	VZXF-L-M22C-M-A-G2-450-M1-V4ANT-80-12	

Ordering data VZXF, cast stainless steel, vacuum version						
	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling G1/2 to DIN ISO 228	3.8 m³/h	-0.9 ... 0 bar	1,300 g	3536502	VZXF-L-M22C-M-A-G12-130-V4B2V-50-V
	Threaded coupling G3/4 to DIN ISO 228	7.5 m³/h		1,400 g	3536650	VZXF-L-M22C-M-A-G34-180-V4B2V-50-V
		12 m³/h			1,600 g	3536659
	Threaded coupling G1 to DIN ISO 228	12.5 m³/h		3,600 g	3536677	VZXF-L-M22C-M-A-G1-240-V4ANV-80-V
		18.5 m³/h		2,200 g	3536686	VZXF-L-M22C-M-A-G114-310-V4B2V-50-V
	Threaded coupling G1 1/4 to DIN ISO 228	19 m³/h		3,800 g	3536711	VZXF-L-M22C-M-A-G114-310-V4ANV-80-V
		25 m³/h		2,500 g	3536717	VZXF-L-M22C-M-A-G112-350-V4B2V-50-V
	Threaded coupling G1 1/2 to DIN ISO 228	29 m³/h		4,300 g	3536771	VZXF-L-M22C-M-A-G112-350-V4ANV-80-V
43 m³/h		5,400 g	3536786	VZXF-L-M22C-M-A-G2-450-V4ANV-80-V		

Ordering data VZXF-NPT, gunmetal (red brass), temperature of medium -10 ... +80 °C						
	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling 1/2 NPT as per ANSI/ASME B 1.20.1	3.5 m³/h	0 ... 16 bar	1,200 g	1002533	VZXF-L-M22C-M-A-N12-120-H3B1-50-16

Ordering data

Ordering data VZXF-NPT, gunmetal (red brass), temperature of medium -10 ... +80 °C

	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling 1/2 NPT as per ANSI/ASME B 1.20.1	3.7 m³/h	0 ... 16 bar	1,200 g	1002534	VZXF-L-M22C-M-B-N12-120-H3B1-50-16
		5.2 m³/h			1,300 g	1002536
	Threaded coupling 3/4 NPT as per ANSI/ASME B 1.20.1	6.7 m³/h	0 ... 10 bar	1,500 g	1002535	VZXF-L-M22C-M-A-N34-160-H3B1-50-16
		9.6 m³/h			10.8 m³/h	1002538
	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	10.8 m³/h	0 ... 16 bar	1,500 g	1002537	VZXF-L-M22C-M-A-N1-230-H3B1-50-16
		6 m³/h	0 ... 7 bar		1,900 g	1002540
	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	19 m³/h	0 ... 10 bar	1,900 g	1002539	VZXF-L-M22C-M-A-N114-290-H3B1-50-10
		16.5 m³/h	0 ... 6 bar		2,300 g	1002542
	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	23 m³/h	0 ... 8 bar	2,300 g		1002541
		Threaded coupling 2 NPT to	0 ... 3 bar		2,800 g	1002544
	28 m³/h		0 ... 4 bar	2,800 g	1002543	VZXF-L-M22C-M-A-N2-430-H3B1-50-4

Ordering data VZXF-NPT, cast stainless steel, temperature of medium -40 ... +200 °C

	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling 1/2 NPT as per ANSI/ASME B 1.20.1	3.3 m³/h	0 ... 40 bar	1,300 g	1002546	VZXF-L-M22C-M-B-N12-130-M1-V4V4T-50-40
		3.8 m³/h	0 ... 16 bar		1002545	VZXF-L-M22C-M-A-N12-130-M1-V4V4T-50-16
	Threaded coupling 3/4 NPT as per ANSI/ASME B 1.20.1	6.5 m³/h	0 ... 20 bar	1,400 g	1002548	VZXF-L-M22C-M-B-N34-180-M1-V4V4T-50-20
		7.5 m³/h	0 ... 16 bar		1002547	VZXF-L-M22C-M-A-N34-180-M1-V4V4T-50-16
	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	11 m³/h	0 ... 10 bar	1,600 g	1002550	VZXF-L-M22C-M-B-N1-240-M1-V4V4T-50-10
		12 m³/h	0 ... 16 bar		1002549	VZXF-L-M22C-M-A-N1-240-M1-V4V4T-50-16
		12.5 m³/h	0 ... 22 bar	3,600 g	1002552	VZXF-L-M22C-M-B-N1-240-M1-V4V4T-80-22
			0 ... 16 bar		1002551	VZXF-L-M22C-M-A-N1-240-M1-V4V4T-80-16
	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	10.7 m³/h	0 ... 7 bar	2,200 g	1002554	VZXF-L-M22C-M-B-N114-310-M1-V4V4T-50-7
		17.5 m³/h	0 ... 10 bar	3,800 g	1002556	VZXF-L-M22C-M-B-N114-310-M1-V4V4T-80-10
		18.5 m³/h	0 ... 9 bar	2,200 g	1002553	VZXF-L-M22C-M-A-N114-310-M1-V4V4T-50-9
		19 m³/h	0 ... 16 bar	3,800 g	1002555	VZXF-L-M22C-M-A-N114-310-M1-V4V4T-80-16
	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	17.5 m³/h	0 ... 6 bar	2,500 g	1002558	VZXF-L-M22C-M-B-N112-350-M1-V4V4T-50-6
		25 m³/h	0 ... 7 bar	4,300 g	1002557	VZXF-L-M22C-M-A-N112-350-M1-V4V4T-50-7
		28 m³/h	0 ... 8 bar		1002560	VZXF-L-M22C-M-B-N112-350-M1-V4V4T-80-8
	Threaded coupling 2 NPT to ANSI/ASME B 1.20.1	29 m³/h	0 ... 16 bar	4,300 g	1002559	VZXF-L-M22C-M-A-N112-350-M1-V4V4T-80-16
		19.5 m³/h	0 ... 3 bar		3,500 g	1002562
		34.5 m³/h	0 ... 4 bar	5,400 g	1002561	VZXF-L-M22C-M-A-N2-450-M1-V4V4T-50-4
	39 m³/h	0 ... 5 bar	1002564		VZXF-L-M22C-M-B-N2-450-M1-V4V4T-80-5	
	43 m³/h	0 ... 12 bar	1002563		VZXF-L-M22C-M-A-N2-450-M1-V4V4T-80-12	

## Ordering data

Ordering data VZXF-NPT, cast stainless steel, nickel-plated actuator head						
	Line connection	Flow rate Kv	Medium pressure	Product weight	Part no.	Type
	Threaded coupling 1/2 NPT as per ANSI/ASME B 1.20.1	3.3 m <sup>3</sup> /h	0 ... 40 bar	1,300 g	3539722	VZXF-L-M22C-M-B-N12-130-M1-V4B2T-50-40
	Threaded coupling 3/4 NPT as per ANSI/ASME B 1.20.1	6.5 m <sup>3</sup> /h	0 ... 20 bar	1,400 g	3539747	VZXF-L-M22C-M-B-N34-180-M1-V4B2T-50-20
		7.5 m <sup>3</sup> /h	0 ... 16 bar		3539746	VZXF-L-M22C-M-A-N34-180-M1-V4B2T-50-16
	Threaded coupling 1 NPT to ANSI/ASME B 1.20.1	11 m <sup>3</sup> /h	0 ... 10 bar	1,600 g	3539785	VZXF-L-M22C-M-B-N1-240-M1-V4B2T-50-10
		12 m <sup>3</sup> /h	0 ... 16 bar		3539784	VZXF-L-M22C-M-A-N1-240-M1-V4B2T-50-16
	Threaded coupling 1 1/4 NPT to ANSI/ASME B 1.20.1	10.7 m <sup>3</sup> /h	0 ... 7 bar	2,200 g	3539818	VZXF-L-M22C-M-B-N114-310-M1-V4B2T-50-7
		18.5 m <sup>3</sup> /h	0 ... 9 bar		3539817	VZXF-L-M22C-M-A-N114-310-M1-V4B2T-50-9
	Threaded coupling 1 1/2 NPT to ANSI/ASME B 1.20.1	17.5 m <sup>3</sup> /h	0 ... 6 bar	2,500 g	3539929	VZXF-L-M22C-M-B-N112-350-M1-V4B2T-50-6
		25 m <sup>3</sup> /h	0 ... 7 bar		3539928	VZXF-L-M22C-M-A-N112-350-M1-V4B2T-50-7
	Threaded coupling 2 NPT to	19.5 m <sup>3</sup> /h	0 ... 3 bar	3,500 g	3540144	VZXF-L-M22C-M-B-N2-450-M1-V4B2T-50-3
		34.5 m <sup>3</sup> /h	0 ... 4 bar		3540143	VZXF-L-M22C-M-A-N2-450-M1-V4B2T-50-4