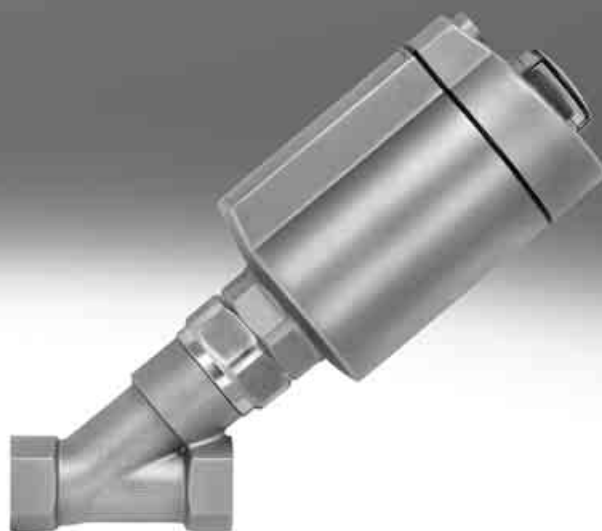


## Angle seat valves VZXA

**FESTO**



# Angle seat valves VZXA

Key features

FESTO

## Function

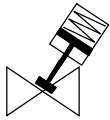
The angle seat valves VZXA are externally actuated valves which are controlled by a direct feed of compressed air and are used to shut off gaseous

or liquid media in pipe systems. In the process, a spindle with a soft-sealing valve disc is raised and lowered with the aid of a pneumatic

actuator. In all the versions mentioned below, the valve seat is slanted around 40° toward the medium flow.

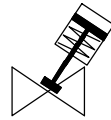
The direction of flow is determined by the design of the valve (process valve and actuator).

## NC version (normally closed)



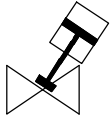
In the normal position, the valve is closed by a spring. When the actuator is supplied with operating pressure, it raises the control piston and, at the same time, the valve disc too – this opens the valve.

## NO version (normally open)



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

## DA version (double acting)



The control function is performed by reciprocal pneumatic actuation of the actuator chambers.

## Economical

- Modular design
- Hygienic design, insensitive to dirt
- Long service life
- Quick and easy maintenance
- High flow rates achievable

## Flexible

- Control of medium flows (gaseous and liquid) in closed and open circuits
- The angle seat valves VZXA 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 VZXA made from stainless steel with PTFE seals have high chemical and thermal resistance
- Temperature of medium –10 ... +180 °C

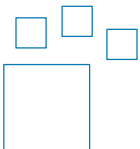
## Design

- G thread to DIN ISO 228-1 Parallel Whitworth pipe thread, non-metallically sealing; must either be provided with an annular seal outside the thread or must be sealed by wrapping the thread with PTFE or hemp
- NPT thread to ANSI/ASME B 1.20.1 American tapered pipe thread with sealing material sealing in the thread, female thread tapered, male thread tapered
- Rc thread to DIN 10226-2 Pipe thread for fittings sealing in the thread, female thread tapered, male thread tapered

- Connection sizes 1/2" ... 2" and DN13 ... DN50
- Medium pressure: 0 ... 30 bar
- Operating pressure: 5 ... 10 bar
- Threaded collar connection
- Actuator sizes: piston actuator 46 mm and 75 mm
- ATEX



## Ordering data – Product options



Configurable product  
This product and all its product options can be ordered using the configurator.

The configurator can be found under Products on the DVD or  
→ [www.festo.com/catalogue/...](http://www.festo.com/catalogue/...)

Part No. Type  
**3539410 VZXA**

# Angle seat valves VZXA

Product range overview

| Product range overview                                                            |            |                                                                                                                                               |                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                   | Type       | Control function                                                                                                                              | Direction of flow                                                                                                                                                                                                   |
|  | VZXA-A-... | <ul style="list-style-type: none"> <li>Closed via spring force, NC</li> </ul>                                                                 | <ul style="list-style-type: none"> <li>Above valve seat</li> <li>For gaseous media, “closing in the direction of medium flow” is used</li> </ul>                                                                    |
|  | VZXA-B-... | <ul style="list-style-type: none"> <li>Closed via spring force, NC</li> <li>Opened via spring force, NO</li> <li>Double-acting, DA</li> </ul> | <ul style="list-style-type: none"> <li>Below valve seat</li> <li>For gaseous and liquid media, “closing against the direction of medium flow” is used in order to prevent or reduce water hammer effects</li> </ul> |

# Angle seat valves VZXA

Type codes

FESTO

VZXA - A - - T S7 - 1/2" - M2 - V14 T

## Type

|      |               |
|------|---------------|
| VZXA | Process valve |
|------|---------------|

## Direction of flow

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

## Control of the medium

|   |                  |
|---|------------------|
| - | On/off operation |
|---|------------------|

## Line connection

|   |                 |
|---|-----------------|
| T | Threaded collar |
|---|-----------------|

## Connection standard

|     |                    |
|-----|--------------------|
| S6  | DIN ISO 228-1      |
| S7  | ANSI/ASME B 1.20.1 |
| S13 | DIN 10226          |

## Connection size

|        |        |
|--------|--------|
| 1/2"   | 1/2"   |
| 3/4"   | 3/4"   |
| 1"     | 1"     |
| 1 1/2" | 1 1/2" |
| 1 1/4" | 1 1/4" |
| 2"     | 2"     |
| 13     | DN13   |
| 20     | DN20   |
| 25     | DN25   |
| 32     | DN32   |
| 40     | DN40   |
| 50     | DN50   |

## Temperature of medium

|    |                |
|----|----------------|
| M2 | -10 to +180 °C |
|----|----------------|

## Valve housing material

|     |                                |
|-----|--------------------------------|
| V13 | Stainless steel 1.4409         |
| V14 | Stainless steel ASTM A351-CF3M |

## Seat seal material

|   |      |
|---|------|
| T | PTFE |
|---|------|

# Angle seat valves VZXA

Type codes

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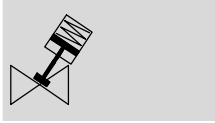
|                                  |                                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
|----------------------------------|-------------------------------------|---|----|---|---|---|----|---|----|---|----|---|--|---|----|---|--|
|                                  |                                     | - | 16 | - | K | - | 46 | - | 17 | - | PR | - |  | - | V4 | - |  |
| <b>Medium pressure</b>           |                                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 4                                | 0 ... 4 bar                         |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 4,4                              | 0 ... 4.4 bar                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 4,8                              | 0 ... 4.8 bar                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 5,6                              | 0 ... 5.6 bar                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 5,8                              | 0 ... 5.8 bar                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 6                                | 0 ... 6 bar                         |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 6,2                              | 0 ... 6.2 bar                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 6,8                              | 0 ... 6.8 bar                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 7,5                              | 0 ... 7.5 bar                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 8                                | 0 ... 8 bar                         |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 8,3                              | 0 ... 8.3 bar                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 9,3                              | 0 ... 9.3 bar                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 10                               | 0 ... 10 bar                        |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 11,5                             | 0 ... 11.5 bar                      |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 12,2                             | 0 ... 12.2 bar                      |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 12,8                             | 0 ... 12.8 bar                      |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 13,5                             | 0 ... 13.5 bar                      |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 14,5                             | 0 ... 14.5 bar                      |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 15,5                             | 0 ... 15.5 bar                      |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 16                               | 0 ... 16 bar                        |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 23                               | 0 ... 23 bar                        |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 25                               | 0 ... 25 bar                        |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 30                               | 0 ... 30 bar                        |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| <b>Actuator</b>                  |                                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| K                                | Piston actuator                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| <b>Actuator size</b>             |                                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 46                               | 46 mm                               |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 75                               | 75 mm                               |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| <b>Stroke</b>                    |                                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 17                               | 17 mm                               |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| 20                               | 20 mm                               |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| <b>Control function</b>          |                                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| -                                | Closed via spring force, NC         |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| D                                | Double-acting                       |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| S                                | Opened via spring force, NO         |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| PR                               | Closed via reduced spring force, NC |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| <b>Position sensing</b>          |                                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| -                                | With mechanical indicator           |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| <b>Actuator housing material</b> |                                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| V4                               | Stainless steel 1.4408              |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| <b>EU certification</b>          |                                     |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| -                                | None                                |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |
| EX4                              | II 2GD                              |   |    |   |   |   |    |   |    |   |    |   |  |   |    |   |  |

# Angle seat valves VZXA with piston actuator

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## Technical data

### Function



- Poppet valve with piston actuator
- Line connection  
1/2" ... 2", DN13 ... DN50
- Stroke  
17 ... 20 mm



| General technical data |            |        |                                               |            |      |          |      |              |      |              |          |
|------------------------|------------|--------|-----------------------------------------------|------------|------|----------|------|--------------|------|--------------|----------|
| Line connection        |            |        | DN13, 1/2"                                    | DN20, 3/4" |      | DN25, 1" |      | DN32, 1 1/4" |      | DN40, 1 1/2" | DN50, 2" |
| Actuator               |            |        | D46                                           | D46        | D75  | D46      | D75  | D46          | D75  | D75          | D75      |
| Flow rate Kv           | VZXA-A-... | [m³/h] | 6.6                                           | –          | 14.5 | –        | 21.5 | –            | –    | –            | –        |
|                        | VZXA-B-... | [m³/h] | 6                                             | 13.3       | 13.5 | 20.3     | 22.6 | 27.9         | 30.3 | 41.4         | 50.1     |
| Design                 |            |        | Poppet valve with piston actuator             |            |      |          |      |              |      |              |          |
| Type of actuation      |            |        | Pneumatic                                     |            |      |          |      |              |      |              |          |
| Type of mounting       |            |        | In-line installation                          |            |      |          |      |              |      |              |          |
| Mounting position      |            |        | Any                                           |            |      |          |      |              |      |              |          |
| Valve function         |            |        | 2/2                                           |            |      |          |      |              |      |              |          |
| Pneumatic connection   |            |        | Female thread G1/8                            |            |      |          |      |              |      |              |          |
| Flow direction         |            |        | Non-reversible                                |            |      |          |      |              |      |              |          |
| Reset method           |            |        | Mechanical spring                             |            |      |          |      |              |      |              |          |
| Type of actuation      |            |        | Externally actuated                           |            |      |          |      |              |      |              |          |
| Position sensing       |            |        | With mechanical indicator                     |            |      |          |      |              |      |              |          |
| Control of the medium  |            |        | On/off operation                              |            |      |          |      |              |      |              |          |
| Control function       | VZXA-A-... |        | Closed via reduced spring force, NC           |            |      |          |      |              |      |              |          |
|                        | VZXA-B-... |        | Closed via spring force, NC                   |            |      |          |      |              |      |              |          |
| Direction of flow      | VZXA-A-... |        | Above valve seat for gaseous media            |            |      |          |      |              |      |              |          |
|                        | VZXA-B-... |        | Below valve seat for gaseous and liquid media |            |      |          |      |              |      |              |          |

# Angle seat valves VZXA with piston actuator

FESTO

Technical data

| Operating and environmental conditions                   |                         |                                                     |
|----------------------------------------------------------|-------------------------|-----------------------------------------------------|
| Operating pressure                                       | [bar]                   | 5 ... 10                                            |
| Ambient temperature                                      | [°C]                    | 0 ... +60                                           |
| Temperature of medium                                    | [°C]                    | -10 ... +180                                        |
| Storage temperature                                      | [°C]                    | -10 ... +60                                         |
| Corrosion resistance class CRC <sup>1)</sup>             |                         | 3                                                   |
| CE mark<br>(see declaration of conformity) <sup>2)</sup> |                         | To EU Machinery Directive                           |
| Degree of protection                                     |                         | IP65                                                |
|                                                          |                         | IP67                                                |
|                                                          |                         | IP69K                                               |
| Max. viscosity                                           | [mm <sup>2</sup> /s]    | 600                                                 |
| Medium                                                   |                         | Vapour                                              |
|                                                          |                         | Inert gases                                         |
|                                                          |                         | Filtered compressed air, grade of filtration 200 µm |
|                                                          | VZXA-B-... additionally | Mineral oil-based hydraulic oil                     |
|                                                          |                         | Mineral oil                                         |
|                                                          |                         | Water                                               |
|                                                          |                         | Neutral fluids                                      |
| Operating medium                                         |                         | Compressed air to ISO 8573-1:2010 [7:4:4]           |
| Safety Integrity Level (SIL)                             |                         | SIL 2                                               |
| PFH                                                      |                         | 0.00000014                                          |
| PFD                                                      |                         | 0.000595                                            |
| Certificate issuing authority                            |                         | TÜV 968/V 1039.00/18                                |

- 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.
- 2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

| ATEX <sup>1)</sup>                   |                      |                  |          |              |              |          |
|--------------------------------------|----------------------|------------------|----------|--------------|--------------|----------|
| Connection size                      | DN13, 1/2"           | DN20, 3/4"       | DN25, 1" | DN32, 1 1/4" | DN40, 1 1/2" | DN50, 2" |
| ATEX category for gas                | II 2G                |                  |          |              |              |          |
| Type of ignition protection for gas  | c T6 ... T3 X        |                  |          |              |              |          |
| ATEX category for dust               | II 2D                |                  |          |              |              |          |
| Type of ignition protection for dust | c T80°C ... T200°C X |                  |          |              |              |          |
| Explosion ambient temperature        | [°C]                 | 0°C ≤ Ta ≤ +60°C |          |              |              |          |

- 1) Specified types → [www.festo.com](http://www.festo.com)

# Angle seat valves VZXA with piston actuator

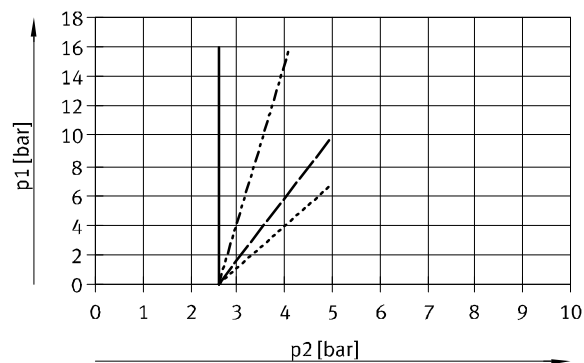
Technical data

FESTO

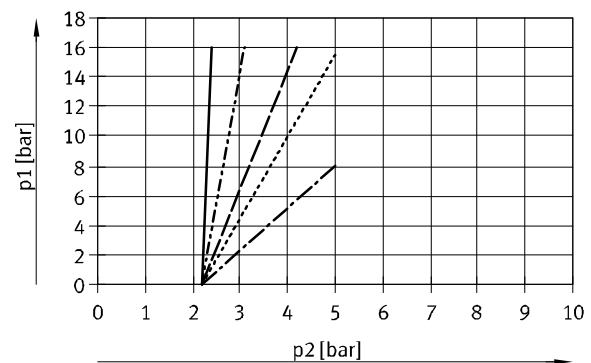
| Materials         |                                              | Material number |
|-------------------|----------------------------------------------|-----------------|
| Piston rod        | High-alloy stainless steel                   |                 |
| End cap           | Stainless steel casting                      |                 |
| Seals             | FPM                                          |                 |
| Spindle washer    | PTFE                                         |                 |
| Seat seal         | PTFE                                         |                 |
| Actuator housing  | Stainless steel casting                      | 1.4408          |
| Valve housing     | Stainless steel casting                      | 1.4409          |
|                   |                                              | ASTM A351-CF3M  |
| Note on materials | Contains paint-wetting impairment substances |                 |
|                   | RoHS compliant                               |                 |

| Permissible operating pressure as a function of medium pressure for control function NC, type B |                      |      |                         |     |
|-------------------------------------------------------------------------------------------------|----------------------|------|-------------------------|-----|
| Nominal width                                                                                   | Max. medium pressure |      | Min. operating pressure |     |
|                                                                                                 | D46                  | D75  | D46                     | D75 |
| DN13, 1/2"                                                                                      | 30                   | –    | 4.8                     | –   |
| DN20, 3/4"                                                                                      | 12.8                 | 30   | 4.8                     | 4.6 |
| DN25, 1"                                                                                        | 8.3                  | 23   | 4.8                     | 4.6 |
| DN32, 1 1/4"                                                                                    | 4.4                  | 13.5 | 4.8                     | 4.6 |
| DN40, 1 1/2"                                                                                    | –                    | 9.3  | –                       | 4.6 |
| DN50, 2"                                                                                        | –                    | 5.6  | –                       | 4.6 |

| Permissible operating pressure p2 as a function of medium pressure p1 for control function NC, type A |                        |
|-------------------------------------------------------------------------------------------------------|------------------------|
| VZXA-A-...-K-46-...-PR                                                                                | VZXA-A-...-K-75-...-PR |



- DN13, 1/2"
- - - DN20, 3/4"
- DN25, 1"
- - - DN32, 1 1/4"



- DN20, 3/4"
- - - DN25, 1"
- DN32, 1 1/4"
- - - DN40, 1 1/2"
- DN50, 2"



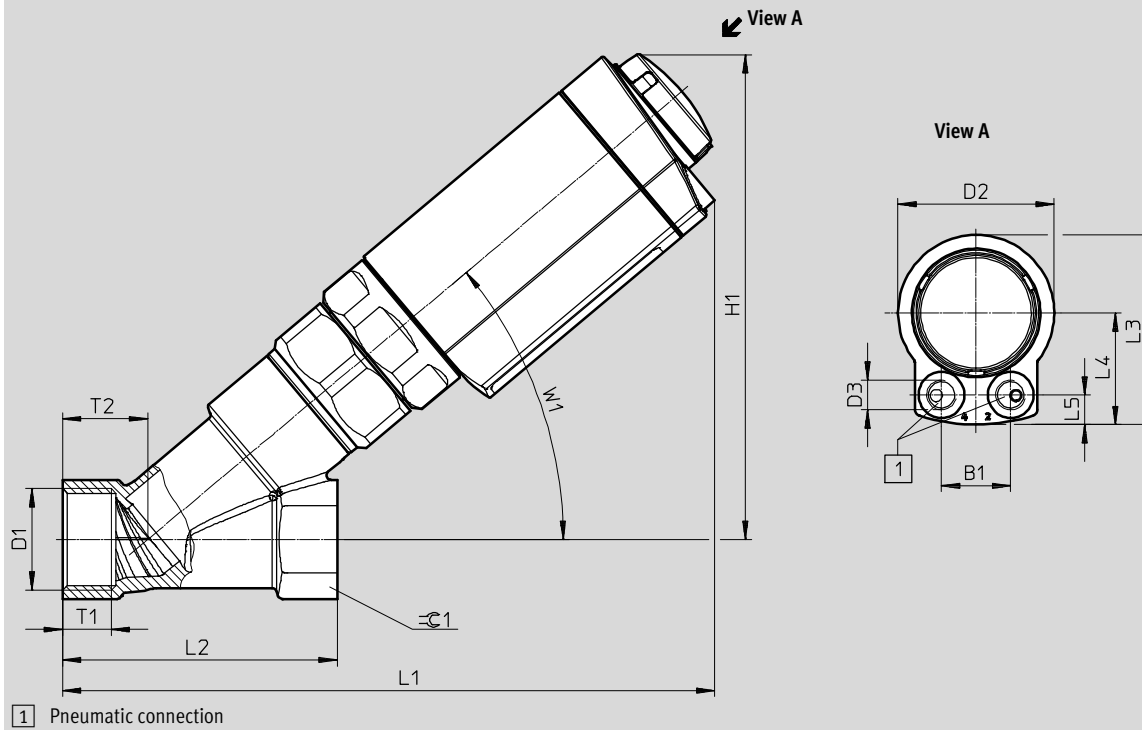
# Angle seat valves VZXA with piston actuator

Technical data

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## Dimensions

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



| Type                                 | B1   | D1    |          |        | D2<br>Ø | D3   | H1  | L1  | L2  |
|--------------------------------------|------|-------|----------|--------|---------|------|-----|-----|-----|
|                                      |      | S6    | S7       | S13    |         |      |     |     |     |
| VZXA-A-...-13-...-16-...-46-17-...   | 22.6 | G1/2  | 1/2 NPT  | Rc1/2  | 51      | G1/8 | 159 | 202 | 65  |
| VZXA-A-...-20-...-16-...-75-20-...   | 41   | G3/4  | 3/4 NPT  | Rc3/4  | 82.6    |      | 187 | 234 | 75  |
| VZXA-A-...-25-...-16-...-75-20-...   | 41   | G1    | 1" NPT   | Rc1    | 82.6    |      | 192 | 244 | 90  |
| VZXA-B-...-13-...-30-...-46-17-...   | 22.6 | G1/2  | 1/2 NPT  | Rc1/2  | 51      |      | 159 | 202 | 65  |
| VZXA-B-...-20-...-12.8-...-46-17-... | 22.6 | G3/4  | 3/4 NPT  | Rc3/4  | 51      |      | 158 | 203 | 75  |
| VZXA-B-...-20-...-30-...-75-20-...   | 41   | G3/4  | 3/4 NPT  | Rc3/4  | 82.6    |      | 187 | 234 | 75  |
| VZXA-B-...-25-...-8.3-...-46-17-...  | 22.6 | G1    | 1" NPT   | Rc1    | 51      |      | 164 | 214 | 90  |
| VZXA-B-...-25-...-23-...-75-20-...   | 41   | G1    | 1" NPT   | Rc1    | 82.6    |      | 192 | 244 | 90  |
| VZXA-B-...-32-...-4.4-...-46-17-...  | 22.6 | G11/4 | 11/4 NPT | Rc11/4 | 51      |      | 168 | 218 | 110 |
| VZXA-B-...-32-...-13.5-...-75-20-... | 41   | G11/4 | 11/4 NPT | Rc11/4 | 82.6    |      | 198 | 248 | 110 |
| VZXA-B-...-40-...-9.3-...-75-20-...  | 41   | G11/2 | 11/2 NPT | Rc11/2 | 82.6    |      | 216 | 270 | 120 |
| VZXA-B-...-50-...-5.6-...-75-20-...  | 41   | G2    | 2" NPT   | Rc2    | 82.6    |      | 215 | 286 | 150 |

| Type                                 | L3   | L4   | L5   | T1 |      |      | T2   | W1 | C1 |
|--------------------------------------|------|------|------|----|------|------|------|----|----|
|                                      |      |      |      | S6 | S7   | S13  |      |    |    |
| VZXA-A-...-13-...-16-...-46-17-...   | 62   | 36.5 | 26.8 | 14 | 13.7 | 13.2 | 21.5 | 40 | 25 |
| VZXA-A-...-20-...-16-...-75-20-...   | 94.4 | 53.1 | 41   | 16 | 14   | 14.5 | 24   | 40 | 32 |
| VZXA-A-...-25-...-16-...-75-20-...   | 94.4 | 53.1 | 41   | 16 | 16.8 | 16.8 | 28   | 40 | 41 |
| VZXA-B-...-13-...-30-...-46-17-...   | 62   | 36.5 | 26.8 | 14 | 13.7 | 13.2 | 21.5 | 40 | 25 |
| VZXA-B-...-20-...-12.8-...-46-17-... | 62   | 36.5 | 26.8 | 16 | 14   | 14.5 | 24   | 40 | 32 |
| VZXA-B-...-20-...-30-...-75-20-...   | 94.4 | 53.1 | 41   | 16 | 14   | 14.5 | 24   | 40 | 32 |
| VZXA-B-...-25-...-8.3-...-46-17-...  | 62   | 36.5 | 26.8 | 16 | 16.8 | 16.8 | 28   | 40 | 41 |
| VZXA-B-...-25-...-23-...-75-20-...   | 94.4 | 53.1 | 41   | 16 | 16.8 | 16.8 | 28   | 40 | 41 |
| VZXA-B-...-32-...-4.4-...-46-17-...  | 62   | 36.5 | 26.8 | 20 | 17.3 | 19.1 | 36   | 42 | 50 |
| VZXA-B-...-32-...-13.5-...-75-20-... | 94.4 | 53.1 | 41   | 20 | 17.3 | 19.1 | 36   | 42 | 50 |
| VZXA-B-...-40-...-9.3-...-75-20-...  | 94.4 | 53.1 | 41   | 22 | 17.3 | 19.1 | 38   | 42 | 55 |
| VZXA-B-...-50-...-5.6-...-75-20-...  | 94.4 | 53.1 | 41   | 24 | 17.6 | 23.4 | 43   | 40 | 65 |

# Angle seat valves VZXA with piston actuator

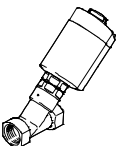
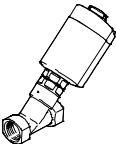
FESTO

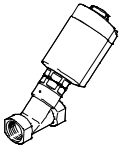
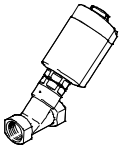
Technical data

## Ordering data

Key features:

- Control function closed via spring force, NC
- Without ATEX certification

| VZXA-A-..., flow direction above valve seat                                       |                    | Flow rate Kv<br>[m³/h] | Medium pressure<br>[bar] | Weight<br>[g] | Part No.       | Type                                            |
|-----------------------------------------------------------------------------------|--------------------|------------------------|--------------------------|---------------|----------------|-------------------------------------------------|
| G thread to DIN ISO 228-1                                                         |                    |                        |                          |               |                |                                                 |
|  | DN13, D46 actuator | 6.6                    | 0 ... 16                 | 1775          | <b>8060513</b> | <b>VZXA-A-TS6-13-M2-V13T-16-K-46-17-PR-V4</b>   |
|                                                                                   | DN20, D75 actuator | 14.5                   |                          | 3155          | <b>8060514</b> | <b>VZXA-A-TS6-20-M2-V13T-16-K-75-20-PR-V4</b>   |
|                                                                                   | DN25, D75 actuator | 21.5                   |                          | 3395          | <b>8060515</b> | <b>VZXA-A-TS6-25-M2-V13T-16-K-75-20-PR-V4</b>   |
| NPT thread to ANSI/ASME B 1.20.1                                                  |                    |                        |                          |               |                |                                                 |
|  | 1/2", D46 actuator | 6.6                    | 0 ... 16                 | 1775          | <b>8060520</b> | <b>VZXA-A-TS7-1/2"-M2-V14T-16-K-46-17-PR-V4</b> |
|                                                                                   | 3/4", D75 actuator | 14.5                   |                          | 3155          | <b>8060521</b> | <b>VZXA-A-TS7-3/4"-M2-V14T-16-K-75-20-PR-V4</b> |
|                                                                                   | 1", D75 actuator   | 21.5                   |                          | 3395          | <b>8060522</b> | <b>VZXA-A-TS7-1"-M2-V14T-16-K-75-20-PR-V4</b>   |

| VZXA-B-..., flow direction below valve seat                                         |                      | Flow rate Kv<br>[m³/h] | Medium pressure<br>[bar] | Weight<br>[g] | Part No. | Type                                      |
|-------------------------------------------------------------------------------------|----------------------|------------------------|--------------------------|---------------|----------|-------------------------------------------|
| G thread to DIN ISO 228-1                                                           |                      |                        |                          |               |          |                                           |
|  | DN13, D46 actuator   | 6                      | 0 ... 30                 | 1830          | 8060527  | VZXA-B-TS6-13-M2-V13T-30-K-46-17-V4       |
|                                                                                     | DN20, D46 actuator   | 13.3                   | 0 ... 12.8               | 1910          | 8060528  | VZXA-B-TS6-20-M2-V13T-12.8-K-46-17-V4     |
|                                                                                     | DN20, D75 actuator   | 13.5                   | 0 ... 30                 | 3360          | 8060529  | VZXA-B-TS6-20-M2-V13T-30-K-75-20-V4       |
|                                                                                     | DN25, D46 actuator   | 20.3                   | 0 ... 8.3                | 2150          | 8060530  | VZXA-B-TS6-25-M2-V13T-8.3-K-46-17-V4      |
|                                                                                     | DN25, D75 actuator   | 22.6                   | 0 ... 23                 | 3600          | 8060531  | VZXA-B-TS6-25-M2-V13T-23-K-75-20-V4       |
|                                                                                     | DN32, D46 actuator   | 27.9                   | 0 ... 4.4                | 2480          | 8060533  | VZXA-B-TS6-32-M2-V13T-4.4-K-46-17-V4      |
|                                                                                     | DN32, D75 actuator   | 30.3                   | 0 ... 13.5               | 3930          | 8060534  | VZXA-B-TS6-32-M2-V13T-13.5-K-75-20-V4     |
|                                                                                     | DN40, D75 actuator   | 41.4                   | 0 ... 9.3                | 4610          | 8060536  | VZXA-B-TS6-40-M2-V13T-9.3-K-75-20-V4      |
|                                                                                     | DN50, D75 actuator   | 50.1                   | 0 ... 5.6                | 5430          | 8060538  | VZXA-B-TS6-50-M2-V13T-5.6-K-75-20-V4      |
| NPT thread to ANSI/ASME B 1.20.1                                                    |                      |                        |                          |               |          |                                           |
|  | 1/2", D46 actuator   | 6                      | 0 ... 30                 | 1830          | 8060541  | VZXA-B-TS7-1/2"-M2-V14T-30-K-46-17-V4     |
|                                                                                     | 3/4", D46 actuator   | 13.3                   | 0 ... 12.8               | 1910          | 8060542  | VZXA-B-TS7-3/4"-M2-V14T-12.8-K-46-17-V4   |
|                                                                                     | 3/4", D75 actuator   | 13.5                   | 0 ... 30                 | 3360          | 8060543  | VZXA-B-TS7-3/4"-M2-V14T-30-K-75-20-V4     |
|                                                                                     | 1", D46 actuator     | 20.3                   | 0 ... 8.3                | 2150          | 8060544  | VZXA-B-TS7-1"-M2-V14T-8.3-K-46-17-V4      |
|                                                                                     | 1", D75 actuator     | 22.6                   | 0 ... 23                 | 3600          | 8060545  | VZXA-B-TS7-1"-M2-V14T-23-K-75-20-V4       |
|                                                                                     | 1 1/4", D46 actuator | 27.9                   | 0 ... 4.4                | 2480          | 8060547  | VZXA-B-TS7-1 1/4"-M2-V14T-4.4-K-46-17-V4  |
|                                                                                     | 1 1/4", D75 actuator | 30.3                   | 0 ... 13.5               | 3930          | 8060548  | VZXA-B-TS7-1 1/4"-M2-V14T-13.5-K-75-20-V4 |
|                                                                                     | 1 1/2", D75 actuator | 41.4                   | 0 ... 9.3                | 4610          | 8060550  | VZXA-B-TS7-1 1/2"-M2-V14T-9.3-K-75-20-V4  |
|                                                                                     | 2", D75 actuator     | 50.1                   | 0 ... 5.6                | 5430          | 8060552  | VZXA-B-TS7-2"-M2-V14T-5.6-K-75-20-V4      |

# Angle seat valves VZXA

Ordering data – Modular product system

**FESTO**

| Ordering table |                            |                                               |                         |               |
|----------------|----------------------------|-----------------------------------------------|-------------------------|---------------|
| VZXA-...       |                            | Condi-<br>tions                               | Code                    | Entry<br>code |
| <b>[M]</b>     | Module no.                 | <b>3539410</b>                                |                         |               |
|                | Product type               | VZXA                                          | <b>VZXA</b>             | VZXA          |
|                | Direction of flow          | Above valve seat for gaseous media            | <b>-A</b>               |               |
|                |                            | Below valve seat for gaseous and liquid media | <b>-B</b>               |               |
| <b>[O]</b>     | Control of the medium      | On/off operation                              |                         |               |
| <b>[M]</b>     | Line connection            | Threaded collar                               | <b>-T</b>               | -T            |
|                | Connection standard        | DIN ISO 228-1                                 | <b>S6</b>               |               |
|                |                            | ANSI/ASME B 1.20.1                            | <b>S7</b>               |               |
|                |                            | DIN 10226                                     | <b>S13</b>              |               |
|                | Connection size            | DN13                                          | <b>[5] -13</b>          |               |
|                |                            | DN20                                          | <b>[5] -20</b>          |               |
|                |                            | DN25                                          | <b>[5] -25</b>          |               |
|                |                            | DN32                                          | <b>[5] -32</b>          |               |
|                |                            | DN40                                          | <b>[5] -40</b>          |               |
|                |                            | DN50                                          | <b>[5] -50</b>          |               |
|                |                            | 1/2"                                          | <b>[1] -1/2"</b>        |               |
|                |                            | 3/4"                                          | <b>[1] -3/4"</b>        |               |
|                |                            | 1"                                            | <b>[1] -1"</b>          |               |
|                |                            | 1 1/4"                                        | <b>[1], [2] -1 1/4"</b> |               |
|                |                            | 1 1/2"                                        | <b>[1] -1 1/2"</b>      |               |
|                |                            | 2"                                            | <b>[1] -2"</b>          |               |
|                | Temperature of medium [°C] | -10 ... +180                                  | <b>-M2</b>              | -M2           |
|                | Valve housing material     | Stainless steel 1.4409                        | <b>[3] -V13</b>         |               |
|                |                            | Stainless steel ASTM A351-CF3M                | <b>[4] -V14</b>         |               |
| <b>↓</b>       | Seat seal material         | PTFE                                          | <b>T</b>                | T             |

- [1]** 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" Not with connection standard S6, S13  
**[2]** 30 Not with connection size DN50, 2", DN40, 1 1/2", DN32, 1 1/4" or flow direction A  
**[3]** V13 Not with imperial connection size  
**[4]** V14 Not with metric connection size  
**[5]** DN13, 20, 25, 32, 40, 50 Not with connection standard S7

- [M]** Mandatory data  
**[O]** Options

## Transfer order code

VZXA - - - T - - - M2 - - - T

# Angle seat valves VZXA

Ordering data – Modular product system

FESTO

| Ordering table                         |                           |                                     |                 |       |               |     |
|----------------------------------------|---------------------------|-------------------------------------|-----------------|-------|---------------|-----|
| VZXA-...                               |                           |                                     | Condi-<br>tions | Code  | Entry<br>code |     |
| <div> <div>↓</div> <div>M</div> </div> | Medium pressure           | [bar] 0 ... 4                       | 6               | -4    |               |     |
|                                        |                           | [bar] 0 ... 4.4                     | 6               | -4,4  |               |     |
|                                        |                           | [bar] 0 ... 4.8                     | 6               | -4,8  |               |     |
|                                        |                           | [bar] 0 ... 5.6                     | 6               | -5,6  |               |     |
|                                        |                           | [bar] 0 ... 5.8                     | 6               | -5,8  |               |     |
|                                        |                           | [bar] 0 ... 6                       | 6               | -6    |               |     |
|                                        |                           | [bar] 0 ... 6.2                     | 6               | -6,2  |               |     |
|                                        |                           | [bar] 0 ... 6.8                     | 9               | -6,8  |               |     |
|                                        |                           | [bar] 0 ... 7.5                     | 6               | -7,5  |               |     |
|                                        |                           | [bar] 0 ... 8                       | 7               | -8    |               |     |
|                                        |                           | [bar] 0 ... 8.3                     | 6               | -8,3  |               |     |
|                                        |                           | [bar] 0 ... 9.3                     | 6               | -9,3  |               |     |
|                                        |                           | [bar] 0 ... 10                      |                 | -10   |               |     |
|                                        |                           | [bar] 0 ... 11.5                    | 6               | -11,5 |               |     |
|                                        |                           | [bar] 0 ... 12.2                    | 6               | -12,2 |               |     |
|                                        |                           | [bar] 0 ... 12.8                    | 6               | -12,8 |               |     |
|                                        |                           | [bar] 0 ... 13.5                    | 6               | -13,5 |               |     |
|                                        |                           | [bar] 0 ... 14.5                    | 6               | -14,5 |               |     |
|                                        |                           | [bar] 0 ... 15.5                    | 9               | -15,5 |               |     |
|                                        |                           | [bar] 0 ... 16                      |                 | -16   |               |     |
|                                        |                           | [bar] 0 ... 23                      | 8, 6            | -23   |               |     |
|                                        |                           | [bar] 0 ... 25                      | 8, 6            | -25   |               |     |
|                                        |                           | [bar] 0 ... 30                      | 9, 6            | -30   |               |     |
|                                        | Actuator                  | Piston actuator                     |                 | -K    |               |     |
|                                        | Actuator size             | [mm] 46                             |                 | -46   |               |     |
|                                        |                           | [mm] 75                             |                 | -75   |               |     |
|                                        | Stroke                    | [mm] 17                             | 10              | -17   |               |     |
|                                        |                           | [mm] 20                             | 11              | -20   |               |     |
| O                                      | Control function          | Closed via spring force, NC         |                 |       |               |     |
|                                        |                           | Double-acting                       | 13              | -D    |               |     |
|                                        |                           | Opened via spring force, NO         | 13              | -S    |               |     |
|                                        |                           | Closed via reduced spring force, NC | 12              | -PR   |               |     |
|                                        | Position sensing          | With mechanical indicator           |                 |       |               |     |
| M                                      | Actuator housing material | Stainless steel 1.4408              |                 | -V4   |               | -V4 |
| O                                      | EU certification          | None                                |                 |       |               |     |
|                                        |                           | II 2GD                              |                 | -EX4  |               |     |

- |    |                                             |                                                                                   |
|----|---------------------------------------------|-----------------------------------------------------------------------------------|
| 6  | 4...6.2, 8.3, 9.3, 11.5, 12.8, 13.5, 2...30 | Not in conjunction with flow direction A                                          |
| 7  | 6.8, 8, 15.5                                | Not in conjunction with flow direction B                                          |
| 8  | 18, 20, 23, 25                              | Not with connection size DN50, 2", DN40, 1 1/2" or flow direction A               |
| 9  | 30                                          | Not with connection size DN50, 2", DN40, 1 1/2", DN32, 1 1/4" or flow direction A |
| 10 | Stroke 17                                   | Only with size 46                                                                 |
| 11 | Stroke 20                                   | Only with size 75                                                                 |
| 12 | Control function PR                         | Must be in combination with flow direction A                                      |
| 13 | Control function D, S                       | Must be in combination with flow direction B                                      |

- M

Mandatory data
- O

Options

Transfer order code

-  -  -  -  -  -  -  -

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