

## Pinch valves VZQA

**FESTO**



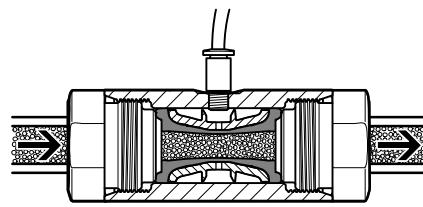
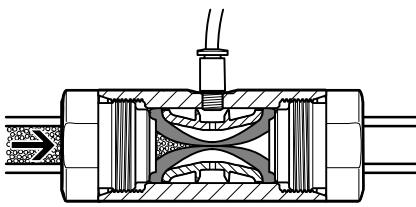
# Pinch valves VZQA

Features

FESTO

| Application   | Design  | Areas of application  |
|---|---|---|
| <ul style="list-style-type: none"><li>The valve can be used to control liquid and dusty media, solids and material mixtures</li></ul> | <ul style="list-style-type: none"><li>Easy-to-clean housing (clean design)</li><li>Open or closed in normal position</li><li>Pinch valve sleeve made from elastomer</li></ul> | <p>The pinch valve may only be used in systems where a damaged or leaking seal cartridge cannot pose a hazard to people or property. The media circuit must be sized for the set operating pressure. The designer and operator of the system are responsible for ensuring the product is suitable for the system as well as for ensuring that the seal cartridge material is resistant to the medium used. Appropriate tests are generally required to assess the suitability. The risks associated with a leaking seal cartridge and the corresponding consequences must be taken into account when planning the system.</p> |

| VZQA-C-M22C function (normally closed)  | VZQA-C-M22U function (normally open)  |
|---|---|
| <p>The pinch valve is a 2/2-way valve for controlling material flows. It is closed in normal position. The shut-off element is a tubular pinch valve sleeve made from elastomer. The sleeve opens when the valve is pressurised, releasing the material flow. When pressure is no longer applied, a spring will close the normally open valve. The valve can be used with liquid and gaseous media. The free passage when the valve is opened ensures minimum flow resistance and prevents the valve becoming blocked or clogged.</p> | <p>The pinch valve is a 2/2-way valve for controlling material flows. It is open in normal position. The shut-off element is a tubular pinch valve sleeve made from elastomer. The sleeve closes when the valve is pressurised, completely shutting off the material flow. When pressure is no longer applied, the normally closed valve will open due to the inherent stress of the pinch valve sleeve or the pressure of the medium. The valve can be used to shut off liquid and dusty media, solids (granulate) and mixtures of substances. The free passage when the valve is opened ensures minimum flow resistance and prevents the valve becoming blocked or clogged.</p> |



## - Note

The hermetic separation between the media circuit and control circuit is no longer guaranteed if wear causes the pinch valve sleeve to leak. The flow medium can then get into the control circuit, from where it can escape. Any potential hazard (e.g. due to aggressive or hot media) must be ruled out. The compressed air supply to the control valve must be protected against the

ingress of the flow medium using a suitable check valve, or a suitable protection against return flow must be integrated in the pilot line in the immediate vicinity of the media valve. Pilot medium can get into the media circuit if the pinch valve sleeve fails. The media circuit must therefore be sized for the set operating pressure. Any potential hazard must be ruled out.

## Pinch valves VZQA

FESTO

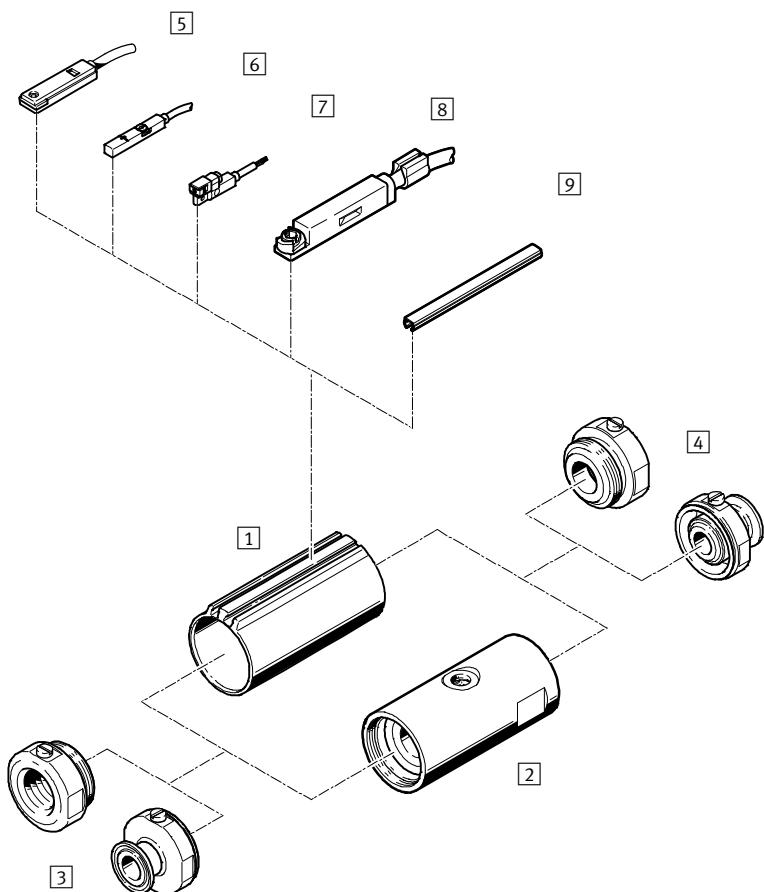
Product range overview

| Feature   | Type            | Nominal width DN | Process valve connection     | Flow rate<br>[m³/h] | Pilot air port 12 / max. permissible thread length | ➔ Page/Internet |
|---|-----------------|------------------|------------------------------|---------------------|--|-----------------|
|  | VZQA-C-M22C-... | 15               | G1/2                         | 5                   | M5 / 5 mm  | 6               |
|   |                 |                  | 1/2 NPT                      |                     |  |                 |
|   |                 |                  | Clamp to DIN 32676, series A |                     |  |                 |
|   |                 |                  | Clamp to ASME-BPE, type A    |                     |  |                 |
|  | VZQA-C-M22U-... | 6                | G1/4                         | 0.7                 | M5 / 4.5 mm  | 9               |
|   |                 |                  | 1/4 NPT                      |                     |  |                 |
|   |                 |                  | Clamp to DIN 32676, series A |                     |  |                 |
|   |                 |                  | Clamp to ASME-BPE, type A    |                     |  |                 |
|  | VZQA-C-M22U-... | 15               | G1/2                         | 5                   | G1/8 / 5 mm  | 9               |
|   |                 |                  | 1/2 NPT                      |                     |  |                 |
|   |                 |                  | Clamp to DIN 32676, series A |                     |  |                 |
|   |                 |                  | Clamp to ASME-BPE, type A    |                     |  |                 |
|  | VZQA-C-M22U-... | 25               | G1                           | 18                  | G1/8 / 6 mm  | 9               |
|   |                 |                  | 1 NPT                        |                     |  |                 |
|   |                 |                  | Clamp to DIN 32676, series A |                     |  |                 |
|   |                 |                  | Clamp to ASME-BPE, type A    |                     |  |                 |
|   |                 |                  | Clamp to ASME-BPE, type B    |                     |  |                 |

# Pinch valves VZQA

Peripherals overview

**FESTO**



| Accessories                        | Description  | ➔ Page/Internet |
|------------------------------------|--|-----------------|
| <b>1</b> Basic body<br>VZQA-C-M22C | Normally closed  | 6               |
| <b>2</b> Basic body<br>VZQA-C-M22U | Normally open  | 9               |
| <b>3</b> Connection type 1         | Various connections are available:<br><ul style="list-style-type: none"><li>• G female thread</li><li>• NPT female thread</li><li>• Clamp to DIN 32676, series A</li><li>• Clamp to ASME-BPE, type A</li><li>• Clamp to ASME-BPE, type B</li></ul> | -               |
| <b>4</b> Connection type 2         | Various connections are available:<br><ul style="list-style-type: none"><li>• G female thread</li><li>• NPT female thread</li><li>• Clamp to DIN 32676, series A</li><li>• Clamp to ASME-BPE, type A</li><li>• Clamp to ASME-BPE, type B</li></ul> | -               |
| Proximity sensors for T-slot       |  | 14              |
| <b>5</b> SME-8                     | Magnetic reed, insertable in slot lengthwise   |                 |
| <b>6</b> SME-8M                    | Magnetic reed, insertable in the slot from above   |                 |
| <b>6</b> SMT-8M                    | Magneto-resistive, insertable in the slot from above   |                 |
| <b>7</b> SMT-8G                    | Magneto-resistive, insertable in slot lengthwise   |                 |
| <b>8</b> SMT-8F                    | Magneto-inductive, NAMUR, insertable in the slot from above, to EU Explosion Protection Directive  |                 |
| <b>9</b> Slot cover<br>ABP-5-S     | For protecting the sensor cable and keeping dirt out of the sensor slots   | 15              |

# Pinch valves VZQA

FESTO

Type codes

VZQA - C - M22U - 6 - G G - V4 V4 N - 4 - E

## Type

VZQA Pinch valve, pneumatically actuated

## Product version

C Easy-to-clean design

## Valve function

M22C 2/2-way valve, normally closed

M22U 2/2-way valve, normally open

## Nominal width DN

6 6 mm

15 15 mm

25 25 mm

## Connection type 1

G G female thread

T NPT female thread

S1 Clamp to ASME-BPE, type A

S5 Clamp to DIN 32676, series A

S12 Clamp to ASME-BPE, type B

## Connection type 2

G G female thread

T NPT female thread

S1 Clamp to ASME-BPE, type A

S5 Clamp to DIN 32676, series A

S12 Clamp to ASME-BPE, type B

## Housing material

AL Aluminium

V2 Stainless steel

V4 Stainless steel

## Housing cover material

AL Aluminium

V4 Stainless steel

POM Polyoxymethylene

## Shut-off element material

E EPDM

N NBR

S1 Silicone

## Pressure range of media

4 0 ... 4 bar

6 0 ... 6 bar

## Sensing type

- None

E End positions

# Pinch valves VZQA

Technical data M22C

FESTO

Function



| General technical data               |                                     |
|--------------------------------------|-------------------------------------|
| Nominal width DN                     | 15                                  |
| Nominal pressure of process valve PN | 10                                  |
| Design                               | Pinch valve, pneumatically actuated |
| Type of actuation                    | Pneumatic                           |
| Sealing principle                    | Soft                                |
| Mounting position                    | Any                                 |
| Valve function                       | 2/2-way, closed, monostable         |
| Direction of flow                    | Reversible                          |
| Reset method                         | Mechanical spring                   |
| Type of piloting                     | Externally actuated                 |
| Type of mounting                     | In-line installation                |
| Auxiliary pilot air port 12          | M5                                  |
| Switching time on [ms]               | 150                                 |
| Switching time off [ms]              | 250                                 |
| Flow rate Kv [m³/h]                  | 5                                   |
| Max. viscosity [mm²/s]               | 4000                                |

| Operating and environmental conditions              |   |  |
|---|---|--|
| Operating pressure [bar]                            | 3.5 ... 6                                 |  |
| Burst pressure [bar]                                | 16  |  |
| Medium pressure [bar]                               | 0 ... 6                                   |  |
| Ambient temperature [°C]                            | -5 ... +60                                |  |
| Temperature of medium [°C]                          | -5 ... +100                               |  |
| Storage temperature [°C]                            | 6 ... 8                                   |  |
| Suitable for use in the food industry <sup>1)</sup> | As per manufacturer's declaration         |  |
| Pilot medium  | Compressed air to ISO 8573-1:2010 [7:4:1] |  |
| Medium  | Compressed air to ISO 8573-1:2010 [-:-1]  |  |
|   | Water                                     |  |

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

| Materials         |                            |                         |
|-------------------|----------------------------|-------------------------|
| VZQA-C-M22C...    | V2V4E                      | ALV4E                   |
| Housing           | High-alloy stainless steel | Wrought aluminium alloy |
| Housing cover     | High-alloy stainless steel |                         |
| Bowl              | PA6                        |                         |
| Seals             | FPM                        |                         |
| Shut-off element  | EPDM                       |                         |
| Note on materials | RoHS compliant             |                         |

# Pinch valves VZQA

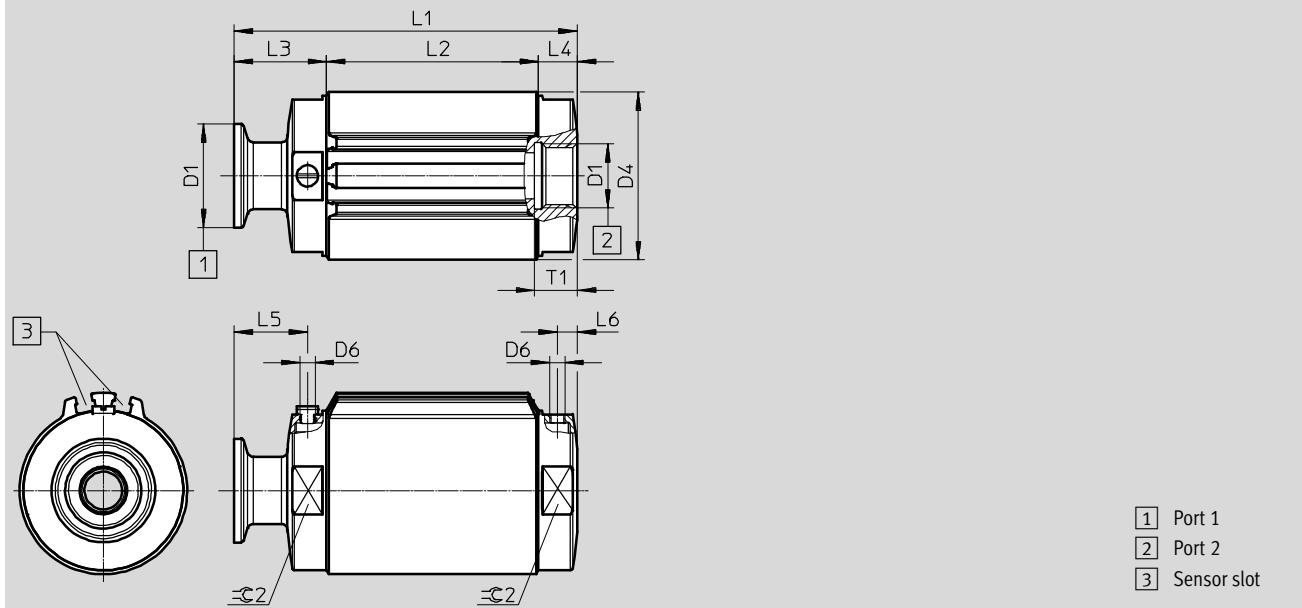
FESTO

Technical data M22C

## Dimensions

Illustration of port 1: clamp to DIN 32676, series A, port 2: G1/2

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



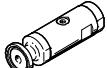
| Process valve connection  | D1                  | Housing material | D4<br>∅ | D6 | L2   | L3   | L4   | L5  | L6  | T1 | =E2 |
|---------------------------|---------------------|------------------|---------|----|------|------|------|-----|-----|----|-----|
| <b>Nominal width DN15</b> |                     |                  |         |    |      |      |      |     |     |    |     |
| G                         | G1/2                | V2               | 52.4    | M5 | 69.5 | 12.8 | 12.8 | 6.6 | 6.6 | 14 | 50  |
|                           |                     | AL               | 55      |    |      | 12.8 | 12.8 | 6.6 | 6.6 |    |     |
| T                         | 1/2 NPT             | V2               | 52.4    |    |      | 12.8 | 12.8 | 6.6 | 6.6 |    |     |
|                           |                     | AL               | 55      |    |      | 12.8 | 12.8 | 6.6 | 6.6 |    |     |
| S5                        | DIN 32676, series A | V2               | 55      |    |      | 30.3 | 30.3 | 24  | 24  |    |     |
| S1                        | ASME-BPE, type A    | V2               | 55      |    |      | 30.3 | 30.3 | 24  | 24  |    |     |

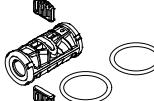
|  |       |
|--|-------|
| Connection types                       | L1    |
| <b>Nominal width DN15</b>              |       |
| GG                                     | 95    |
| GT, TT, TG                             | 95    |
| S1S1, S1S5, S5S5, S5S1                 | 130   |
| S1G, S1T, GS1, TS1, S5G, S5T, GS5, TS5 | 112.5 |

## Pinch valves VZQA

Technical data M22C

FESTO

| Ordering data   |                  |                              |                           |            |          |                               |
|---|------------------|------------------------------|---------------------------|------------|----------|-------------------------------|
| Pinch valves  | Nominal width DN | Process valve connection     | Material shut-off element | Weight [g] | Part No. | Type                          |
|  | 15               | Clamp to DIN 32676, series A | EPDM                      | 666        | 3412424  | VZQA-C-M22C-15-S5S5-V2V4E-6   |
|   |                  | Clamp to DIN 32676, series A | EPDM                      | 607        | 3412425  | VZQA-C-M22C-15-S5S5-ALV4E-6-E |
|   |                  | G1/2                         | EPDM                      | 536        | 3412426  | VZQA-C-M22C-15-GG-V2V4E-6     |

| Ordering data   |                  |                          |                           |                   |          |                   |
|---|------------------|--------------------------|---------------------------|-------------------|----------|-------------------|
| Seal cartridge  | Nominal width DN | Storage temperature [°C] | Material shut-off element | Note on materials | Part No. | Type              |
|  | 15               | 6 ... 8                  | EPDM                      | RoHS compliant    | 3418619  | VAVC-Q2-M22C-15-E |

**Pinch valves VZQA**

Technical data M22U

## Function

**General technical data**

|                                      |                                     |      |      |
|--------------------------------------|-------------------------------------|------|------|
| Nominal width DN                     | 6                                   | 15   | 25   |
| Nominal pressure of process valve PN | 10                                  |      |      |
| Design                               | Pinch valve, pneumatically actuated |      |      |
| Type of actuation                    | Pneumatic                           |      |      |
| Sealing principle                    | Soft                                |      |      |
| Mounting position                    | Any                                 |      |      |
| Valve function                       | 2/2-way, open, monostable           |      |      |
| Direction of flow                    | Reversible                          |      |      |
| Reset method                         | Rebound resilience                  |      |      |
| Type of piloting                     | Externally actuated                 |      |      |
| Type of mounting                     | In-line installation                |      |      |
| Auxiliary pilot air port 12          | M5                                  | G1/8 | G1/8 |
| Switching time on [ms]               | 125                                 | 250  | 250  |
| Switching time off [ms]              | 125                                 | 250  | 250  |
| Flow rate Kv [m³/h]                  | 0.7                                 | 5    | 18   |
| Max. viscosity [mm²/s]               | 4000                                |      |      |

**Materials**

| VZQA-C-M22U-...                 | V4V4   | ALAL                    | ALV4                       | ALPOM |
|---------------------------------|--|-------------------------|----------------------------|-------|
| Housing                         | High-alloy stainless steel                   | Wrought aluminium alloy |                            |       |
| Housing cover                   | High-alloy stainless steel                   | Wrought aluminium alloy | High-alloy stainless steel | POM   |
| Bowl                            | PA6  |                         |                            |       |
| Seals                           | FPM  |                         |                            |       |
| Note on materials               |  |                         |                            |       |
| Shut-off element NBR, EPDM, VMQ | RoHS compliant                               |                         |                            |       |
| Shut-off element VMQ            | Contains paint-wetting impairment substances |                         |                            |       |

## Pinch valves VZQA

Technical data M22U

**FESTO**

| Operating and environmental conditions |   |     |     |
|--|---|-----|-----|
| Nominal width DN                       | 6   | 15  | 25  |
| Operating pressure [bar]               | 1 ... 6.5                                       |     |     |
| Overload pressure [bar]                | 7.8   |     |     |
| Medium pressure [bar]                  | 0 ... 4   |     |     |
| Differential pressure [bar]            |   |     |     |
| Shut-off element NBR, EPDM             | 2.5   | 2.5 | 2.5 |
| Shut-off element VMQ                   | 2.5   | 2.5 | 3   |
| Burst pressure [bar]                   | 16  |     |     |
| Ambient temperature [°C]               | -5 ... +60                                      |     |     |
| Temperature of medium [°C]             |   |     |     |
| Shut-off element NBR                   | -5 ... +60                                      |     |     |
| Shut-off element EPDM                  | -5 ... +100                                     |     |     |
| Shut-off element VMQ                   | -5 ... +150                                     |     |     |
| Storage temperature [°C]               |   |     |     |
| Shut-off element NBR, EPDM             | 6 ... 8   |     |     |
| Shut-off element VMQ                   | 0 ... 25  |     |     |
| Suitable for use in the food industry  |   |     |     |
| Shut-off element EPDM                  | As per manufacturer's declaration <sup>1)</sup> |     |     |
| Shut-off element NBR, VMQ              | See declaration of conformity                   |     |     |
| Pilot medium                           |   |     |     |
| Shut-off element EPDM                  | Compressed air to ISO 8573-1:2010 [7:4:1]       |     |     |
| Shut-off element NBR, VMQ              | Compressed air to ISO 8573-1:2010 [7:4:4]       |     |     |
| Medium                                 |   |     |     |
| Shut-off element EPDM                  | Compressed air to ISO 8573-1:2010 [-:-:1]       |     |     |
|  | Water   |     |     |
| Shut-off element NBR, VMQ              | Compressed air to ISO 8573-1:2010 [-:-:]        |     |     |

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

**Pinch valves VZQA**

Technical data M22U

**Dimensions**

Illustration of port 1: clamp to DIN 32676, series A, port 2: G1/2

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

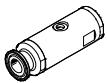
| Process valve connection  | D1                  | Housing material | D2   | D3   | D4   | L2  | L3   | L4   | T1 | =C1 | =C2 |
|---------------------------|---------------------|------------------|------|------|------|-----|------|------|----|-----|-----|
| <b>Nominal width DN6</b>  |                     |                  |      |      |      |     |      |      |    |     |     |
| G                         | G1/4                | V4, AL           | M5   | 9    | 24   | 49  | 8    | 8    | 12 | 22  | 22  |
| T                         | 1/4 NPT             | V4, AL           |      | 8    | 8    |     |      |      |    |     |     |
| S5                        | DIN 32676, series A | V4               |      | 23   | 23   |     |      |      |    |     |     |
| S1                        | ASME-BPE, type A    | V4               |      | 23   | 23   |     |      |      |    |     |     |
| <b>Nominal width DN15</b> |                     |                  |      |      |      |     |      |      |    |     |     |
| G                         | G1/2                | V4, AL           | G1/8 | 15   | 38   | 81  | 7    | 7    | 14 | 36  | 36  |
|                           |                     | POM              |      | 12   | 12   |     |      |      |    |     |     |
| T                         | 1/2 NPT             | V4, AL           |      | 7    | 7    |     |      |      |    |     |     |
|                           |                     | POM              |      | 12   | 12   |     |      |      |    |     |     |
| S5                        | DIN 32676, series A | V4               |      | 24.5 | 24.5 |     |      |      |    |     |     |
| S1                        | ASME-BPE, type A    | V4               |      | 24.5 | 24.5 |     |      |      |    |     |     |
| <b>Nominal width DN25</b> |                     |                  |      |      |      |     |      |      |    |     |     |
| G                         | G1                  | V4, AL           | G1/8 | 15   | 58   | 109 | 10.5 | 10.5 | 18 | 55  | 55  |
|                           |                     | POM              |      | 15.5 | 15.5 |     |      |      |    |     |     |
| T                         | 1 NPT               | V4, AL           |      | 10.5 | 10.5 |     |      |      |    |     |     |
|                           |                     | POM              |      | 15.5 | 15.5 |     |      |      |    |     |     |
| S5                        | DIN 32676, series A | V4               |      | 28   | 28   |     |      |      |    |     |     |
| S1                        | ASME-BPE, type A    | V4               |      | 28   | 28   |     |      |      |    |     |     |
| S12                       | ASME-BPE, type B    | V4               |      | 28   | 28   |     |      |      |    |     |     |

| Connection types   | L1                |                    |                    |
|--|-------------------|--------------------|--------------------|
|  | Nominal width DN6 | Nominal width DN15 | Nominal width DN25 |
| GG, GT, TT, TG of V4 or AL                                     | 65                | 95                 | 130                |
| GG, GT, TT, TG of POM  | -                 | 105                | 140                |
| GG, GT, TT, TG of V4 or AL with POM                            | -                 | 100                | 135                |
| S1S1, S1S5, S5S5, S5S1, S1S12, S12S1, S5S12, S12S5, S12S12     | 80                | 130                | 165                |
| S1G, S1T, GS1, TS1, S5G, S5T, GS5, TS5, S12G, S12T, GS12, TS12 | 95                | 112.5              | 147.5              |

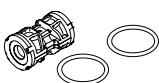
## Pinch valves VZQA

Technical data M22U

### Ordering data

| Pinch valves  | Nominal width DN | Process valve connection     | Material shut-off element | Weight [g] | Part No. | Type                           |
|---|------------------|------------------------------|---------------------------|------------|----------|--------------------------------|
|  | 6                | G1/4                         | NBR                       | 105.5      | 2931679  | VZQA-C-M22U-6-GG-ALV4N-4       |
|   |                  |                              | EPDM                      | 157        | 2931678  | VZQA-C-M22U-6-GG-V4V4E-4       |
|   |                  |                              | Silicone                  | 157        | 2931683  | VZQA-C-M22U-6-GG-V4V4S1-4      |
|   |                  | 1/4 NPT                      | Silicone                  | 157        | 2931685  | VZQA-C-M22U-6-TT-V4V4S1-4      |
|   |                  | Clamp to DIN 32676, series A | EPDM                      | 215        | 2931681  | VZQA-C-M22U-6-S5S5-V4V4E-4     |
|   |                  |                              | Silicone                  | 215        | 2931682  | VZQA-C-M22U-6-S5S5-V4V4S1-4    |
|   | 15               | G1/2                         | Silicone                  | 195        | 2931684  | VZQA-C-M22U-6-S1S1-V4V4S1-4    |
|   |                  |                              | NBR                       | 431        | 3022830  | VZQA-C-M22U-15-GG-V4V4N-4      |
|   |                  |                              | NBR                       | 265        | 3022831  | VZQA-C-M22U-15-GG-ALV4N-4      |
|   |                  |                              | NBR                       | 158        | 3022832  | VZQA-C-M22U-15-GG-ALPOMN-4     |
|   |                  |                              | EPDM                      | 431        | 3022829  | VZQA-C-M22U-15-GG-V4V4E-4      |
|   |                  |                              | Silicone                  | 431        | 3022835  | VZQA-C-M22U-15-GG-V4V4S1-4     |
|   |                  | 1/2 NPT                      | Silicone                  | 431        | 3022838  | VZQA-C-M22U-15-TT-V4V4S1-4     |
|   |                  | Clamp to DIN 32676, series A | EPDM                      | 559        | 3022833  | VZQA-C-M22U-15-S5S5-V4V4E-4    |
|   |                  |                              | Silicone                  | 559        | 3022834  | VZQA-C-M22U-15-S5S5-V4V4S1-4   |
|   |                  | Clamp to ASME-BPE, type A    | Silicone                  | 495        | 3022837  | VZQA-C-M22U-15-S1S1-V4V4S1-4   |
|   | 25               | G1                           | EPDM                      | 1178       | 3968922  | VZQA-C-M22U-25-GG-V4V4E-4      |
|   |                  |                              | EPDM                      | 480        | 3968923  | VZQA-C-M22U-25-GG-ALALE-4      |
|   |                  |                              | Silicone                  | 1178       | 3968926  | VZQA-C-M22U-25-GG-V4V4S1-4     |
|   |                  | 1 NPT                        | Silicone                  | 1178       | 3968928  | VZQA-C-M22U-25-TT-V4V4S1-4     |
|   |                  | Clamp to DIN 32676, series A | EPDM                      | 1474       | 3968924  | VZQA-C-M22U-25-S5S5-V4V4E-4    |
|   |                  |                              | Silicone                  | 1474       | 3968925  | VZQA-C-M22U-25-S5S5-V4V4S1-4   |
|   |                  | Clamp to ASME-BPE, type B    | Silicone                  | 1516       | 3968927  | VZQA-C-M22U-25-S12S12-V4V4S1-4 |

### Ordering data

| Seal cartridge  | Nominal width DN | Material shut-off element | Storage temperature [°C] | Note on materials                                   | Food-safe      | Part No. | Type               |
|---|------------------|---------------------------|--------------------------|---|----------------|----------|--------------------|
|  | 6                | NBR                       | 6 ... 8                  | –   | RoHS-compliant | 2392881  | VAVC-Q2-M22U-6-N   |
|   |                  | EPDM                      |                          |   |                | 2392882  | VAVC-Q2-M22U-6-E   |
|   |                  | VMQ (silicone)            | 0 ... 25                 | Contains PWIS (paint-wetting impairment substances) |                | 2392883  | VAVC-Q2-M22U-6-S1  |
|   |                  | NBR                       | 6 ... 8                  | –   |                | 3019151  | VAVC-Q2-M22U-15-N  |
|   |                  | EPDM                      |                          |   |                | 3019148  | VAVC-Q2-M22U-15-E  |
|   | 15               | VMQ (silicone)            | 0 ... 25                 | Contains PWIS (paint-wetting impairment substances) |                | 3019144  | VAVC-Q2-M22U-15-S1 |
|   |                  | NBR                       | 6 ... 8                  | –   |                | 3970092  | VAVC-Q2-M22U-25-N  |
|   |                  | EPDM                      |                          |   |                | 3970093  | VAVC-Q2-M22U-25-E  |
|   | 25               | VMQ (silicone)            | 0 ... 25                 | Contains PWIS (paint-wetting impairment substances) | 2)             | 3970094  | VAVC-Q2-M22U-25-S1 |

- 1) See supplementary material information.  
Additional information [www.festo.com/sp](http://www.festo.com/sp) ➔ Certificates.

- 2) See declaration of conformity

# Pinch valves VZQA

FESTO

Ordering data – Modular product system

**Ordering table**

| VZQA-C....                      | M22C   | M22U   | Conditions | Code         | Entry code |
|---------------------------------|--|--|------------|--------------|------------|
| <b>[M] Module no.</b>           | <b>3174282</b>   | <b>2037881</b>   |            |              |            |
| Product type                    | Pinch valve  |  |            | <b>VZQA</b>  | VZQA       |
| Version                         | Easy-to-clean design                                   |  |            | <b>-C</b>    | -C         |
| Valve function                  | 2/2-way valve, normally closed                         | –  |            | <b>-M22C</b> |            |
|                                 | –  | 2/2-way valve, normally open                                 |            | <b>-M22U</b> |            |
| Nominal diameter DN             | –  | 6  |            | <b>-6</b>    |            |
|                                 | 15   |  |            | <b>-15</b>   |            |
|                                 | –  | 25   |            | <b>-25</b>   |            |
| Process valve connection type 1 | G female thread  |  |            | <b>-G</b>    |            |
|                                 | Clamp to ASME-BPE, type A                              | [1] [4] [6]  |            | <b>-S1</b>   |            |
|                                 | Clamp to DIN 32676, series A                           | [1]  |            | <b>-S5</b>   |            |
|                                 | NPT female thread                                      |  |            | <b>-T</b>    |            |
|                                 | Clamp to ASME-BPE, type B                              | [1] [3] [6] [7]  |            | <b>-S12</b>  |            |
| Process valve connection type 2 | G female thread  |  |            | <b>G</b>     |            |
|                                 | Clamp to ASME-BPE, type A                              | [1] [4] [6]  |            | <b>S1</b>    |            |
|                                 | Clamp to DIN 32676, series A                           | [1]  |            | <b>S5</b>    |            |
|                                 | NPT female thread                                      |  |            | <b>T</b>     |            |
|                                 | Clamp to ASME-BPE, type B                              | [1] [3] [6] [7]  |            | <b>-S12</b>  |            |
| Housing material                | Aluminium  |  |            | <b>-AL</b>   |            |
|                                 | Stainless steel<br>(chrome-nickel, austenitic)         | –  |            | <b>-V2</b>   |            |
|                                 | –  | Stainless steel<br>(chrome-nickel-molybdenum,<br>austenitic) |            | <b>-V4</b>   |            |
| Housing cover material          | Aluminium  |  |            | <b>AL</b>    |            |
|                                 | –  | Polyoxymethylene   | [3]        | <b>POM</b>   |            |
|                                 | Stainless steel (chrome-nickel-molybdenum, austenitic) |  |            | <b>V4</b>    |            |
| Shut-off element material       | EPDM   |  |            | <b>E</b>     |            |
|                                 | –  | NBR  |            | <b>N</b>     |            |
|                                 | –  | Silicone   | [4]        | <b>S1</b>    |            |
| Pressure range of media [bar]   | –  | 0 ... 4  |            | <b>-4</b>    |            |
|                                 | 0 ... 6  | –  |            | <b>-6</b>    |            |
| <b>[O] Sensing type</b>         | None   | –  |            |              |            |
|                                 | End positions  | –  | [2] [5]    | <b>-E</b>    |            |

- [1] **S1, S5, S12** Only in combination with housing cover material V4 (stainless steel)
- [2] **E** Only in combination with valve function M22C
- [3] **POM, S12** Not in combination with nominal diameter DN6
- [4] **S1** Not in combination with nominal diameter DN25
- [5] **E** Not in combination with housing material V2 (stainless steel)
- [6] **S1, S12** Not in combination with nominal diameter DN25 and valve function M22C
- [7] **S12** Not in combination with nominal diameter DN15

**[M]** Mandatory data

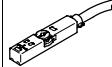
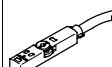
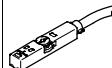
**[O]** Options

**Transfer order code**

\_\_\_\_\_ [VZQA] – [C] – \_\_\_\_\_ – \_\_\_\_\_ – \_\_\_\_\_ – \_\_\_\_\_ – \_\_\_\_\_ – \_\_\_\_\_ – \_\_\_\_\_ – \_\_\_\_\_ – \_\_\_\_\_

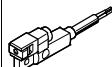
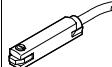
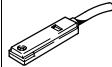
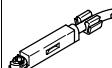
## Pinch valves VZQA

Accessories

| Ordering data – Proximity sensor for T-slot, magneto-resistive                      |                        |                       |                               |       | Technical data ➔ Internet: smt-8 |          |                               |  |  |
|---|------------------------|-----------------------|-------------------------------|-------|----------------------------------|----------|-------------------------------|--|--|
|   | Switching output       | Electrical connection |                               |       | Cable length<br>[m]              | Part No. | Type                          |  |  |
|   |                        | Cable                 | Cable with plug, knurled ring |       |                                  |          |                               |  |  |
|   |                        | M8x1                  | M12x1                         |       |                                  |          |                               |  |  |
| <b>N/O contact</b>  |                        |                       |                               |       |                                  |          |                               |  |  |
|    | PNP                    | –                     | 3-pin                         | –     | 0.3                              | 574334   | SMT-8M-A-PS-24V-E-0,3-M8D     |  |  |
|   |                        | 3-wire                | –                             | –     | 2.5                              | 574335   | SMT-8M-A-PS-24V-E-2,5-OE      |  |  |
|   |                        | 3-wire                | –                             | –     | 5                                | 574336   | SMT-8M-A-PS-24V-E-5,0-OE      |  |  |
|   |                        | –                     | –                             | 3-pin | 0.3                              | 574337   | SMT-8M-A-PS-24V-E-0,3-M12     |  |  |
|   |                        |                       |                               | –     | 0.3                              | 574342   | SMT-8M-A-PS-24V-E-0,3-M8D-EX2 |  |  |
|   | NPN                    | 3-wire                | –                             | –     | 2.5                              | 574338   | SMT-8M-A-NS-24V-E-2,5-OE      |  |  |
|   |                        | –                     | 3-pin                         | –     | 0.3                              | 574339   | SMT-8M-A-NS-24V-E-0,3-M8D     |  |  |
|   |                        | Contactless           | 2-wire                        | –     | 5                                | 574341   | SMT-8M-A-ZS-24V-E-5,0-OE-EX2  |  |  |
|   | Contacting,<br>bipolar | –                     | –                             | –     | 0.3                              | 543861   | SME-8M-DS-24V-K-0,3-M8D       |  |  |
|   |                        | –                     | 3-pin                         | –     | 2.5                              | 543862   | SME-8M-DS-24V-K-2,5-OE        |  |  |
|   |                        | 3-wire                | –                             | –     | 5                                | 543863   | SME-8M-DS-24V-K-5,0-OE        |  |  |
|   |                        | 2-wire                | –                             | –     | 2.5                              | 543872   | SME-8M-ZS-24V-K-2,5-OE        |  |  |
|   |                        | 3-wire                | –                             | –     | 7.5                              | 543876   | SME-8M-DS-24V-K-7,5-OE        |  |  |
| <b>N/C contact</b>  |                        |                       |                               |       |                                  |          |                               |  |  |
|   | PNP                    | 3-wire                | –                             | –     | 7.5                              | 574340   | SMT-8M-A-PO-24V-E-7,5-OE      |  |  |
|   | Contacting,<br>bipolar | 3-wire                | –                             | –     | 7.5                              | 546799   | SME-8M-DO-24V-K-7,5-OE        |  |  |
| <b>Switchable</b>   |                        |                       |                               |       |                                  |          |                               |  |  |
|  | PNP/NPM                | –                     | 3-pin                         | –     | 0.3                              | 574343   | SMT-8M-A-PNS-24V-E-0,3-M8D    |  |  |
|   | PNP PS/PO              | –                     | 3-pin                         | –     | 0.3                              | 574344   | SMT-8M-A-PSO-24V-E-0,3-M8D    |  |  |

**Pinch valves VZQA**

Accessories

| Ordering data – Proximity sensor for T-slot   |                     |                       |       | Technical data → Internet: crsmt |          |                          |
|---|---------------------|-----------------------|-------|----------------------------------|----------|--------------------------|
|   | Switching output    | Electrical connection |       | Cable length<br>[m]              | Part No. | Type                     |
| N/O contact   |                     |                       |       |                                  |          |                          |
|    | PNP                 | 3-wire                | -     | 2.5                              | 547859   | SMT-8G-PS-24V-E-2,5Q-OE  |
|   |                     | -                     | 3-pin | 0.3                              | 547860   | SMT-8G-PS-24V-E-0,3Q-M8D |
|    | Contacting, bipolar | -                     | 3-pin | -                                | 562019   | SMT-8-SL-PS-LED-24-B     |
|   |                     | 3-wire                | -     | 2.5                              | 150855   | SME-8-K-LED-24           |
|   |                     | 3-wire                | -     | 5.0                              | 175404   | SME-8-K5-LED-24          |
|   |                     | 3-wire                | -     | 7.5                              | 530491   | SME-8-K-7,5-LED-24       |
|   |                     | -                     | 3-pin | 0.3                              | 150857   | SME-8-S-LED-24           |
|   |                     | 2-wire                | -     | 2.5                              | 171169   | SME-8-ZS-KL-LED-24       |
|   |                     | -                     | 3-pin | -                                | 526622   | SME-8-SL-LED-24          |
|   |                     | 2-wire                | -     | 2.5                              | 161756   | SME-8-K-24-S6            |
|   |                     | 2-wire                | -     | 2.5                              | 152820   | SME-8-K-LED-230          |
|   |                     | 3-wire                | -     | 1                                | 562515   | SME-8-FM-DS-24V-K-1,0-OE |
|    | Contacting, bipolar | 2-wire                | -     | 1                                | 562516   | SME-8-FM-ZS-24V-K-1,0-OE |
| N/C contact   |                     |                       |       |                                  |          |                          |
|   | Contacting, bipolar | 3-wire                | -     | 7.5                              | 160251   | SME-8-O-K-LED-24         |
| NAMUR   |                     |                       |       |                                  |          |                          |
|  | NAMUR               | 2-wire                | -     | 5                                | 536956   | SMT-8F-I-8,2V-K5,0-OE-EX |

| Ordering data – Slot cover for T-slot   |                       |               |  | Part No. |  | Type    |
|---|-----------------------|---------------|--|----------|--|---------|
|   | Assembly              | Length<br>[m] |  |          |  |         |
|  | Insertable from above | 2x 0.5        |  | 151680   |  | ABP-5-S |

# Festo North America



**[1] Festo Canada Headquarters**  
**Festo Inc.**  
5300 Explorer Drive  
Mississauga, ON  
L4W 5G4

**[2] Montréal**  
5600, Trans-Canada  
Pointe-Claire, QC  
H9R 1B6

**[3] Québec City**  
2930, rue Watt#117  
Québec, QC  
G1X 4G3



**[4] Festo United States Headquarters**  
**Festo Corporation**  
395 Moreland Road  
Hauppauge, NY  
11788

**[5] Appleton**  
North 922 Tower View Drive, Suite N  
Greenville, WI  
54942

**[7] Detroit**  
1441 West Long Lake Road  
Troy, MI  
48098

**[6] Chicago**  
85 W Algonquin - Suite 340  
Arlington Heights, IL  
60005

**[8] Silicon Valley**  
4935 Southfront Road, Suite F  
Livermore, CA  
94550

## Festo Regional Contact Center

### Canadian Customers

Commercial Support:  
Tel: 1 877 GO FESTO (1 877 463 3786)  
Fax: 1 877 FX FESTO (1 877 393 3786)  
Email: festo.canada@ca.festo.com

Technical Support:  
Tel: 1 866 GO FESTO (1 866 463 3786)  
Fax: 1 877 FX FESTO (1 877 393 3786)  
Email: technical.support@ca.festo.com

### USA Customers

Commercial Support:  
Tel: 1 800 99 FESTO (1 800 993 3786)  
Fax: 1 800 96 FESTO (1 800 963 3786)  
Email: customer.service@us.festo.com

Technical Support:  
Tel: 1 866 GO FESTO (1 866 463 3786)  
Fax: 1 800 96 FESTO (1 800 963 3786)  
Email: product.support@us.festo.com