

# Standard valves to ISO 15218

Product range overview



| Function                 | Electrical connection                   |                                 | Voltage         | Manual override         | → Page/Internet |
|--------------------------|-----------------------------------------|---------------------------------|-----------------|-------------------------|-----------------|
| Pilot valve to ISO 15218 | <b>Plug connector</b>                   |                                 |                 |                         |                 |
|                          | Plug connector type C, to EN 175301-803 | –                               | 12 V DC         | Non-detenting           | 2               |
|                          |                                         |                                 |                 | Non-detenting/detenting | 2               |
|                          |                                         |                                 | 24 V DC         | Non-detenting           | 2               |
|                          |                                         |                                 |                 | Non-detenting/detenting | 2               |
|                          |                                         | With protective earth conductor | 24 V AC         | Non-detenting           | 2               |
|                          |                                         |                                 |                 | Non-detenting/detenting | 2               |
|                          |                                         |                                 | 110 V AC        | Non-detenting           | 2               |
|                          |                                         |                                 |                 | Non-detenting/detenting | 2               |
|                          |                                         |                                 | 230 V AC        | Non-detenting           | 2               |
|                          |                                         |                                 |                 | Non-detenting/detenting | 2               |
|                          | Plug connector M12, to IEC 61076-2-101  | –                               | 24 V DC         | Non-detenting           | 6               |
|                          |                                         |                                 |                 | Non-detenting/detenting | 6               |
|                          | Plug connector type A, to EN 175301-803 | –                               | 24 V DC/42 V AC | Non-detenting           | 9               |
|                          |                                         |                                 | 24 V DC/48 V AC | Non-detenting           | 9               |
|                          |                                         |                                 | 110 V AC        | Non-detenting           | 9               |
|                          |                                         |                                 | 230 V AC        | Non-detenting           | 9               |

## Standard valves to ISO 15218, plug connector type C, EN 175301-803

Type codes

|                                          |                                                                                                   | VSCS | - | B | - | M32 | - | M | - |  | - | WA | - |  | - | C1 | - |  |  |
|------------------------------------------|---------------------------------------------------------------------------------------------------|------|---|---|---|-----|---|---|---|--|---|----|---|--|---|----|---|--|--|
| <b>Function</b>                          |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| VSCS                                     | Standard valve to ISO 15218                                                                       |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| <b>Type of directional control valve</b> |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| B                                        | Sub-base valve                                                                                    |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| <b>Valve function</b>                    |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| M32                                      | 3/2-way valve                                                                                     |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| <b>Type of reset</b>                     |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| M                                        | Mechanical spring                                                                                 |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| <b>Manual override</b>                   |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| D                                        | Non-detenting, detenting                                                                          |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| H                                        | Non-detenting                                                                                     |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| <b>Pneumatic connection</b>              |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| WA                                       | CNOMO interface, small                                                                            |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| <b>Nominal operating voltage</b>         |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| 1A                                       | 24 V AC, 50/60 Hz                                                                                 |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| 2A                                       | 110 V AC, 50/60 Hz                                                                                |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| 3A                                       | 230 V AC, 50/60 Hz                                                                                |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| 1                                        | 24 V DC                                                                                           |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| 5                                        | 12 V DC                                                                                           |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| <b>Electrical connection</b>             |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| C1                                       | Plug connector type C, EN 175301-803                                                              |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| <b>Pressure range</b>                    |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| -                                        | 0 ... 10 bar                                                                                      |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |
| 8                                        | 1.5 ... 8 bar  |      |   |   |   |     |   |   |   |  |   |    |   |  |   |    |   |  |  |

# Standard valves to ISO 15218, plug connector type C, EN 175301-803

FESTO

Technical data

## Standard valve with plug connector type C

VSCS-B-M32-...C1

- Valve actuator for electrical actuation of valve bodies
- Pneumatic connection: to ISO 15218 (CNOMO)
- Electrical connection: to EN 175301-803, type C



| General technical data             |                                                                |              |
|------------------------------------|----------------------------------------------------------------|--------------|
| Operating pressure                 | 1.5 ... 8 bar                                                  | 0 ... 10 bar |
| Electrical connection              | Plug connector type C (without PE conductor), to EN 175301-803 |              |
| Valve function                     | 3/2-way single solenoid valve, normally closed                 |              |
| Sealing principle                  | Soft                                                           |              |
| Actuation type                     | Electrical                                                     |              |
| Reset method                       | Mechanical spring                                              |              |
| Type of control                    | Direct                                                         |              |
| Flow direction                     | Non-reversible                                                 |              |
| Non-overlapping                    | None                                                           |              |
| Width [mm]                         | 15                                                             |              |
| Mounting position                  | Any                                                            |              |
| Mounting                           | Screwed to valve body or connecting plate (2x M3)              |              |
| Standard nominal flow rate [l/min] | 13.5                                                           | 18           |
| Duty cycle [%]                     | 100                                                            |              |
| Degree of protection to EN 60529   | IP65 (in combination with plug socket)                         |              |
| Conforms to                        | ISO 15218                                                      |              |

| Characteristic coil data – Operating pressure 1.5 ... 8 bar |      |         |         |         |          |          |
|-------------------------------------------------------------|------|---------|---------|---------|----------|----------|
| Operating voltage                                           |      | 12 V DC | 24 V DC | 24 V AC | 110 V AC | 230 V AC |
| Frequency                                                   | [Hz] | –       | –       | 50/60   | 50/60    | 50/60    |
| Power                                                       | [W]  | 1.3     | 1.3     | –       | –        | –        |
| Pickup power                                                | [VA] | –       | –       | 2.1     | 2.0      | 1.9      |
| Holding power                                               | [VA] | –       | –       | 1.6     | 1.5      | 1.3      |
| Switching time                                              | On   | [ms]    | 8       | 9       | 8        | 8        |
|                                                             | Off  | [ms]    | 6       | 30      | 20       | 35       |
| Perm. voltage fluctuations                                  | [%]  | –10/+10 | –10/+10 | –10/+10 | –10/+10  | –10/+10  |

| Characteristic coil data – Operating pressure 0 ... 10 bar |      |         |         |         |          |          |
|------------------------------------------------------------|------|---------|---------|---------|----------|----------|
| Operating voltage                                          |      | 12 V DC | 24 V DC | 24 V AC | 110 V AC | 230 V AC |
| Frequency                                                  | [Hz] | –       | –       | 50/60   | 50/60    | 50/60    |
| Power                                                      | [W]  | 1.8     | 1.8     | –       | –        | –        |
| Pickup power                                               | [VA] | –       | –       | 3.1     | 2.9      | 2.9      |
| Holding power                                              | [VA] | –       | –       | 2.3     | 2.1      | 2.1      |
| Switching time                                             | On   | [ms]    | 6       | 6       | 6        | 6        |
|                                                            | Off  | [ms]    | 6       | 6       | 6        | 6        |
| Perm. voltage fluctuations                                 | [%]  | –15/+10 | –15/+10 | –15/+10 | –15/+10  | –15/+10  |

| Materials         |                |
|-------------------|----------------|
| Seals             | NBR            |
| Note on materials | RoHS compliant |

# Standard valves to ISO 15218, plug connector type C, EN 175301-803

FESTO

Technical data

| Safety data – Operating pressure 1.5 ... 8 bar |                                                                                  |         |         |          |          |
|------------------------------------------------|----------------------------------------------------------------------------------|---------|---------|----------|----------|
| Operating voltage                              | 12 V DC                                                                          | 24 V DC | 24 V AC | 110 V AC | 230 V AC |
| Note on forced checking procedure              | Switching frequency min. 1/week                                                  |         |         |          |          |
| Shock resistance                               | Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27                |         |         |          |          |
| Vibration resistance                           | Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6 |         |         |          |          |

| Safety data – Operating pressure 0 ... 10 bar  |                                                                                  |         |         |          |          |
|------------------------------------------------|----------------------------------------------------------------------------------|---------|---------|----------|----------|
| Operating voltage                              | 12 V DC                                                                          | 24 V DC | 24 V AC | 110 V AC | 230 V AC |
| Note on forced checking procedure              | Switching frequency min. 1/week                                                  |         |         |          |          |
| Maximum positive test pulse with 0 signal [μs] | –                                                                                | 2100    | –       | –        | –        |
| Maximum negative test pulse with 1 signal [μs] | –                                                                                | 800     | –       | –        | –        |
| Shock resistance                               | Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27                |         |         |          |          |
| Vibration resistance                           | Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 |         |         |          |          |

| Operating and environmental conditions – Operating pressure 1.5 ... 8 bar |                                                                                            |         |         |                             |          |
|---------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------|---------|-----------------------------|----------|
| Operating voltage                                                         | 12 V DC                                                                                    | 24 V DC | 24 V AC | 110 V AC                    | 230 V AC |
| Operating medium                                                          | Compressed air according to ISO 8573-1:2010 [7:4:4]                                        |         |         |                             |          |
| Note on operating/pilot medium                                            | Lubricated operation possible (in which case lubricated operation will always be required) |         |         |                             |          |
| Ambient temperature [°C]                                                  | –5 ... +50                                                                                 |         |         |                             |          |
| Temperature of medium [°C]                                                | –5 ... +50                                                                                 |         |         |                             |          |
| Corrosion resistance class CRC <sup>1)</sup>                              | 2                                                                                          |         |         |                             |          |
| CE marking (see declaration of conformity) <sup>2)</sup>                  | –                                                                                          | –       | –       | To EU Low Voltage Directive |          |

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

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

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

| Operating and environmental conditions – Operating pressure 0 ... 10 bar |                                                                                            |                           |         |                             |          |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------|---------|-----------------------------|----------|
| Operating voltage                                                        | 12 V DC                                                                                    | 24 V DC                   | 24 V AC | 110 V AC                    | 230 V AC |
| Operating medium                                                         | Compressed air according to ISO 8573-1:2010 [7:4:4]                                        |                           |         |                             |          |
| Note on operating/pilot medium                                           | Lubricated operation possible (in which case lubricated operation will always be required) |                           |         |                             |          |
| Ambient temperature [°C]                                                 | –10 ... +50                                                                                |                           |         |                             |          |
| Temperature of medium [°C]                                               | –10 ... +50                                                                                |                           |         |                             |          |
| Corrosion resistance class CRC <sup>1)</sup>                             | 2                                                                                          |                           |         |                             |          |
| CE marking (see declaration of conformity) <sup>2)</sup>                 | –                                                                                          | –                         | –       | To EU Low Voltage Directive |          |
| Certification                                                            | –                                                                                          | c UL us - Recognized (OL) | –       | –                           | –        |

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

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

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

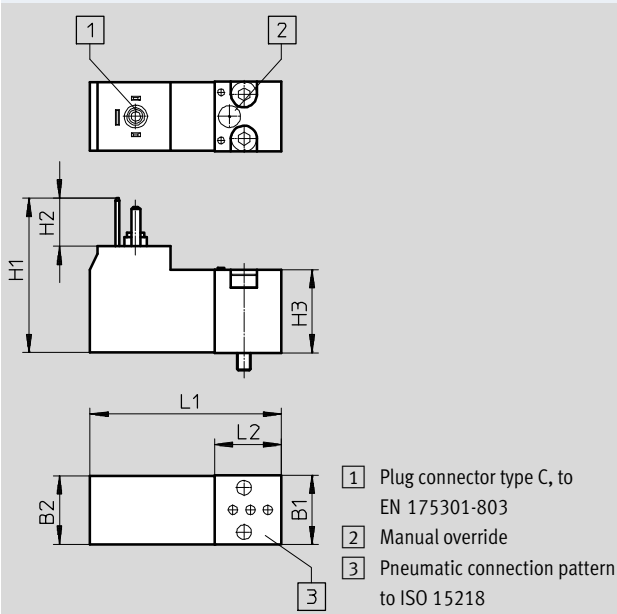
## Standard valves to ISO 15218, plug connector type C, EN 175301-803

**FESTO**

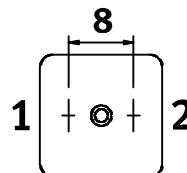
Technical data

### Dimensions

VSCS-...C1

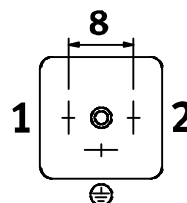


### Electrical connection



Operating voltage:

- 12 V DC
- 24 V DC
- 24 V AC

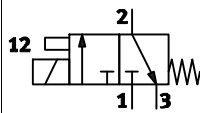
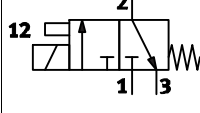


Operating voltage:

- 110 V AC
- 230 V AC

| Type       | B1   | B2 | H1   | H2   | H3   | L1   | L2   |
|------------|------|----|------|------|------|------|------|
| VSCS-...C1 | 15.2 | 15 | 33.7 | 10.5 | 18.2 | 41.9 | 14.7 |

### Ordering data

|                                                                                     | Operating voltage | Manual override         | Part No. | Type                                                                                                          |
|-------------------------------------------------------------------------------------|-------------------|-------------------------|----------|---------------------------------------------------------------------------------------------------------------|
| Operating pressure 1.5 ... 8 bar                                                    |                   |                         |          |                                                                                                               |
|  | 12 V DC           | Non-detenting           | 8040565  | VSCS-B-M32-MH-WA-5C1-8   |
|                                                                                     |                   | Non-detenting/detenting | 8040571  | VSCS-B-M32-MD-WA-5C1-8   |
|                                                                                     | 24 V DC           | Non-detenting           | 8040564  | VSCS-B-M32-MH-WA-1C1-8   |
|                                                                                     |                   | Non-detenting/detenting | 8040570  | VSCS-B-M32-MD-WA-1C1-8   |
|                                                                                     | 24 V AC           | Non-detenting           | 8040566  | VSCS-B-M32-MH-WA-1AC1-8  |
|                                                                                     |                   | Non-detenting/detenting | 8040572  | VSCS-B-M32-MD-WA-1AC1-8  |
|                                                                                     | 110 V AC          | Non-detenting           | 8040567  | VSCS-B-M32-MH-WA-2AC1-8  |
|                                                                                     |                   | Non-detenting/detenting | 8040573  | VSCS-B-M32-MD-WA-2AC1-8  |
|                                                                                     | 230 V AC          | Non-detenting           | 8040568  | VSCS-B-M32-MH-WA-3AC1-8  |
|                                                                                     |                   | Non-detenting/detenting | 8040574  | VSCS-B-M32-MD-WA-3AC1-8  |
| Operating pressure 0 ... 10 bar                                                     |                   |                         |          |                                                                                                               |
|  | 12 V DC           | Non-detenting           | 546257   | VSCS-B-M32-MH-WA-5C1     |
|                                                                                     |                   | Non-detenting/detenting | 571062   | VSCS-B-M32-MD-WA-5C1     |
|                                                                                     | 24 V DC           | Non-detenting           | 546256   | VSCS-B-M32-MH-WA-1C1     |
|                                                                                     |                   | Non-detenting/detenting | 571061   | VSCS-B-M32-MD-WA-1C1     |
|                                                                                     | 24 V AC           | Non-detenting           | 546258   | VSCS-B-M32-MH-WA-1AC1    |
|                                                                                     |                   | Non-detenting/detenting | 571063   | VSCS-B-M32-MD-WA-1AC1    |
|                                                                                     | 110 V AC          | Non-detenting           | 546259   | VSCS-B-M32-MH-WA-2AC1    |
|                                                                                     |                   | Non-detenting/detenting | 571064   | VSCS-B-M32-MD-WA-2AC1    |
|                                                                                     | 230 V AC          | Non-detenting           | 546260   | VSCS-B-M32-MH-WA-3AC1    |
|                                                                                     |                   | Non-detenting/detenting | 571065   | VSCS-B-M32-MD-WA-3AC1    |

## Standard valves to ISO 15218, plug connector M12x1, IEC 61076-2-101

Type codes

|                                          |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
|------------------------------------------|---------------------------------------------------------------------------------------------------|------|---|---|---|-----|---|---|---|--|---|----|---|---|---|----|---|--|
|                                          |                                                                                                   | VSCS | - | B | - | M32 | - | M | - |  | - | WA | - | 1 | - | R3 | - |  |
| <b>Function</b>                          |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| VSCS                                     | Standard valve to ISO 15218                                                                       |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| <b>Type of directional control valve</b> |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| B                                        | Sub-base valve                                                                                    |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| <b>Valve function</b>                    |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| M32                                      | 3/2-way valve                                                                                     |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| <b>Type of reset</b>                     |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| M                                        | Mechanical spring                                                                                 |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| <b>Manual override</b>                   |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| D                                        | Non-detenting, detenting                                                                          |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| H                                        | Non-detenting                                                                                     |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| <b>Pneumatic connection</b>              |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| WA                                       | CNOMO interface, small                                                                            |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| <b>Nominal operating voltage</b>         |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| 1                                        | 24 V DC                                                                                           |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| <b>Electrical connection</b>             |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| R3                                       | Plug connector M12x1, A-coded, EN 61076-2-101                                                     |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| <b>Pressure range</b>                    |                                                                                                   |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| -                                        | 0 ... 10 bar                                                                                      |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |
| 8                                        | 1.5 ... 8 bar  |      |   |   |   |     |   |   |   |  |   |    |   |   |   |    |   |  |

# Standard valves to ISO 15218, plug connector M12x1, IEC 61076-2-101

**FESTO**

Technical data

## Standard valve with round plug connector

VSCS-B-M32 ... 1R3

- Valve actuator for electrical actuation of basic valve bodies
- Pneumatic connection: to ISO 15218 (CNOMO)
- Electrical connection M12x1 in accordance with IEC 61076-2-101



| General technical data             |                                                     |              |
|------------------------------------|-----------------------------------------------------|--------------|
| Operating pressure                 | 1.5 ... 8 bar                                       | 0 ... 10 bar |
| Electrical connection              | Plug connector M12x1, to IEC 61076-2-101            |              |
| Valve function                     | 3/2-way solenoid valve, normally closed, monostable |              |
| Sealing principle                  | Soft                                                |              |
| Actuation type                     | Electrical                                          |              |
| Reset method                       | Mechanical spring                                   |              |
| Type of control                    | Direct                                              |              |
| Flow direction                     | Non-reversible                                      |              |
| Non-overlapping                    | None                                                |              |
| Width [mm]                         | 15                                                  |              |
| Mounting position                  | Any                                                 |              |
| Mounting                           | Screwed to valve body or connecting plate (2x M3)   |              |
| Standard nominal flow rate [l/min] | 13.5                                                | 18           |
| Duty cycle [%]                     | 100                                                 |              |
| Degree of protection to EN 60529   | IP65 (in combination with plug socket)              |              |
| Conforms to                        | ISO 15218                                           |              |

| Characteristic coil data       |               |              |
|--------------------------------|---------------|--------------|
| Operating pressure             | 1.5 ... 8 bar | 0 ... 10 bar |
| Operating voltage [V DC]       | 24            | 24           |
| Power [W]                      | 1.3           | 1.8          |
| Switching time On [ms]         | 8             | 6            |
| Switching time Off [ms]        | 6             | 6            |
| Perm. voltage fluctuations [%] | -10/+10       | -15/+10      |

| Materials         |                |
|-------------------|----------------|
| Seals             | NBR            |
| Note on materials | RoHS compliant |

| Safety data                                 |                                                                                  |                                                                                  |
|---------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Operating pressure                          | 1.5 ... 8 bar                                                                    | 0 ... 10 bar                                                                     |
| Note on forced checking procedure           | Switching frequency min. 1/week                                                  | Switching frequency min. 1/week                                                  |
| Max. positive test pulse with 0 signal [μs] | —                                                                                | 2100                                                                             |
| Max. negative test pulse with 1 signal [μs] | —                                                                                | 800                                                                              |
| Shock resistance                            | Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27                | Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27                |
| Vibration resistance                        | Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6 | Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6 |

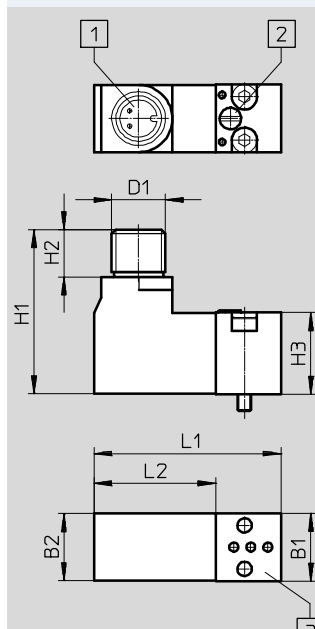
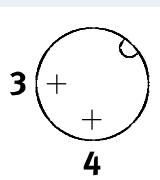
## Standard valves to ISO 15218, plug connector M12x1, IEC 61076-2-101

**FESTO**

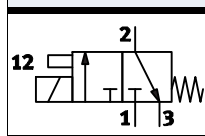
Technical data

| Operating and environmental conditions       |                                                                                            |                           |
|----------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------|
| Operating pressure                           | 1.5 ... 8 bar                                                                              | 0 ... 10 bar              |
| Operating medium                             | Compressed air according to ISO 8573-1:2010 [7:4:4]                                        |                           |
| Note on operating/pilot medium               | Lubricated operation possible (in which case lubricated operation will always be required) |                           |
| Ambient temperature [°C]                     | -5 ... +50                                                                                 | -10 ... +50               |
| Temperature of medium [°C]                   | -5 ... +50                                                                                 | -10 ... +50               |
| Corrosion resistance class CRC <sup>1)</sup> | 2                                                                                          | 2                         |
| Certification                                | -                                                                                          | c UL us - Recognized (OL) |

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

| Dimensions                                                                                                                                                                                                |  | Download CAD data → <a href="http://www.festo.com">www.festo.com</a>               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------|
| VSCS-...1R3                                                                                                                                                                                               |  | Electrical connection                                                              |
|  <p>1 Plug connector M12x1 to IEC 61076-2-101<br/>2 Manual override<br/>3 Pneumatic connection pattern to ISO 15218</p> |  |  |

| Type        | B1   | B2 | D1  | H1   | H2   | H3   | L1   | L2   |
|-------------|------|----|-----|------|------|------|------|------|
| VSCS-...1R3 | 15.2 | 15 | M12 | 36.7 | 10.6 | 18.2 | 41.9 | 27.2 |

| Ordering data                                                                       |               | Operating pressure      | Manual override | Part No. | Type                                                                                                         |
|-------------------------------------------------------------------------------------|---------------|-------------------------|-----------------|----------|--------------------------------------------------------------------------------------------------------------|
|  | 1.5 ... 8 bar | Non-detenting           |                 | 8040569  | VSCS-B-M32-MH-WA-1R3-8  |
|                                                                                     |               | Non-detenting/detenting |                 | 8040575  | VSCS-B-M32-MD-WA-1R3-8  |
|                                                                                     | 0 ... 10 bar  | Non-detenting           |                 | 573214   | VSCS-B-M32-MH-WA-1R3                                                                                         |
|                                                                                     |               | Non-detenting/detenting |                 | 573215   | VSCS-B-M32-MD-WA-1R3                                                                                         |

# Standard valves to ISO 15218, plug connector type A, EN 175301-803

FESTO

Type codes

|                                  |  |                             |   |     |   |  |
|----------------------------------|--|-----------------------------|---|-----|---|--|
|                                  |  | MDH                         | - | 3/2 | - |  |
|                                  |  |                             |   |     |   |  |
|                                  |  |                             |   |     |   |  |
| <b>Function</b>                  |  |                             |   |     |   |  |
| MDH                              |  | Standard valve to ISO 15218 |   |     |   |  |
| <b>Valve function</b>            |  |                             |   |     |   |  |
| 3/2                              |  | 3/2-way valve               |   |     |   |  |
| <b>Nominal operating voltage</b> |  |                             |   |     |   |  |
| 24VDC/42VAC                      |  | 24 V DC, 42 V AC 50/60 Hz   |   |     |   |  |
| 24DC                             |  | 24 V DC, 48 V AC 50/60 Hz   |   |     |   |  |
| 110VAC                           |  | 110 V AC, 50/60 Hz          |   |     |   |  |
| 230VAC                           |  | 230 V AC, 50/60 Hz          |   |     |   |  |

# Standard valves to ISO 15218, plug connector type A, EN 175301-803

FESTO

Technical data

## Standard valve with plug connector type A

MDH-3/2 ...

- Valve actuator for electrical actuation of valve bodies
- Pneumatic connection: to ISO 15218 (CNOMO)
- Electrical connection, plug connector type A, to EN 175301-803



| General technical data             |                                                 |
|------------------------------------|-------------------------------------------------|
| Electrical connection              | Plug connector type A, to EN 175301-803         |
| Valve function                     | 3/2-way single solenoid valve, normally closed  |
| Sealing principle                  | Soft-sealing                                    |
| Actuation type                     | Electrical                                      |
| Reset method                       | Mechanical spring                               |
| Design                             | Poppet valve                                    |
| Type of control                    | Direct                                          |
| Flow direction                     | Non-reversible                                  |
| Non-overlapping                    | None                                            |
| Width [mm]                         | 30                                              |
| Mounting position                  | Any                                             |
| Mounting                           | Screwed to basic valve body or connecting plate |
| Manual override                    | Non-detenting                                   |
| Standard nominal flow rate [l/min] | 50                                              |
| Duty cycle [%]                     | 100                                             |
| Operating pressure [bar]           | 1 ... 16                                        |
| Degree of protection to EN 60529   | IP65 (in combination with plug socket)          |
| Conforms to                        | ISO 15218                                       |
| Weight [g]                         | 140                                             |

| Characteristic coil data     |        |         |         |          |          |
|------------------------------|--------|---------|---------|----------|----------|
| Operating voltage            |        | 42 V AC | 48 V AC | 110 V AC | 230 V AC |
| Operating voltage            | [V AC] | 42      | 48      | 110      | 230      |
|                              | [V DC] | 24      | 24      | –        | –        |
|                              | [Hz]   | 50/60   | 50/60   | 50/60    | 50/60    |
| Power                        | [W]    | 8.4     | 6       | –        | –        |
| Pickup power                 | [VA]   | 11.5    | 14.5    | 12       | 12       |
| Holding power                | [VA]   | 8.5     | 9.9     | 8        | 8        |
| Switching time on/off        | [ms]   | 11/9    | 11/9    | 11/9     | 11/9     |
| Perm. voltage fluctuations   | [%]    | –10/+10 | –10/+10 | –10/+10  | –10/+10  |
| Perm. frequency fluctuations | [%]    | –10/+10 | –       | –10/+10  | –10/+10  |

| Materials         |                |
|-------------------|----------------|
| Seals             | FPM            |
| Note on materials | RoHS compliant |

# Standard valves to ISO 15218, plug connector type A, EN 175301-803

FESTO

Technical data

| Operating and environmental conditions                   |                                                                                            |         |                             |          |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------|---------|-----------------------------|----------|
| Operating voltage                                        | 42 V AC                                                                                    | 48 V AC | 110 V AC                    | 230 V AC |
| Operating medium                                         | Compressed air according to ISO 8573-1:2010 [7:4:4]                                        |         |                             |          |
| Note on operating/pilot medium                           | Lubricated operation possible (in which case lubricated operation will always be required) |         |                             |          |
| Ambient temperature [°C]                                 | -10 ... +50                                                                                |         | -15 ... +50                 |          |
| Temperature of medium [°C]                               | -15 ... +80                                                                                |         | -15 ... +80                 |          |
| Corrosion resistance class CRC <sup>1)</sup>             | 2                                                                                          |         | 2                           |          |
| CE marking (see declaration of conformity) <sup>2)</sup> | -                                                                                          |         | To EU Low Voltage Directive |          |

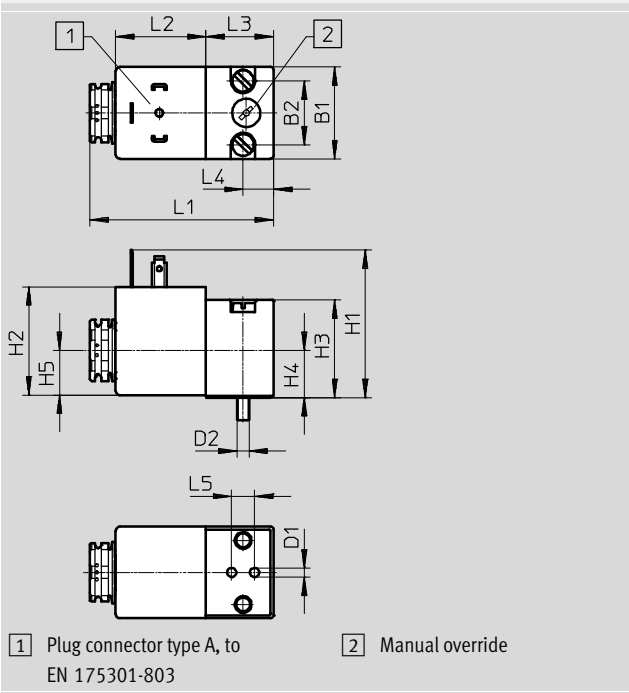
1) Corrosion resistance class CRC 2 to Festo standard FN 940070

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

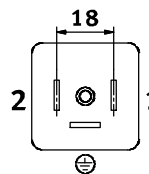
2) Additional information [www.festo.com/sp](http://www.festo.com/sp) → Certificates.

## Dimensions

MDH-3/2 ...



## Electrical connection



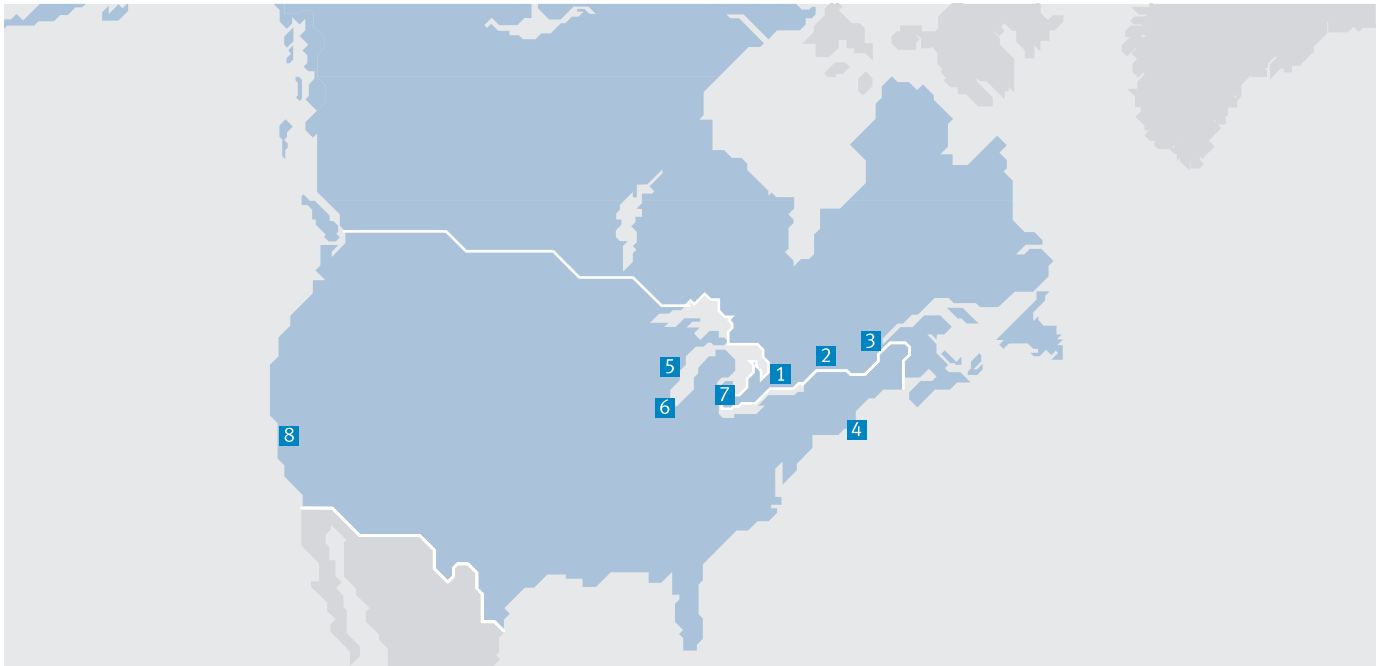
Download CAD data → [www.festo.com](http://www.festo.com)

| Type        | B1 | B2 | D1 | D2 | H1   | H2   | H3 | H4   | H5   | L1   | L2   | L3 | L4 | L5  |
|-------------|----|----|----|----|------|------|----|------|------|------|------|----|----|-----|
| MDH-3/2 ... | 30 | 21 | 3  | M4 | 48.4 | 35.5 | 32 | 15.5 | 14.7 | 60.7 | 29.5 | 22 | 10 | 7.5 |

## Ordering data

|  | Operating voltage |         | Part No. | Type                |
|--|-------------------|---------|----------|---------------------|
|  | 24 V DC           | 42 V AC | 119603   | MDH-3/2-24VDC/42VAC |
|  |                   | 48 V AC | 119600   | MDH-3/2-24DC        |
|  | 110 V AC          |         | 119601   | MDH-3/2-110VAC      |
|  | 230 V AC          |         | 119602   | MDH-3/2-230VAC      |

# 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

Subject to change

Internet: [www.festo.com/us](http://www.festo.com/us)