



### 3/2-way flipper solenoid valve, direct-acting

- Direct-acting
- 0 to 10 bar
- Low power consumption
- Standard variant, Ex ia variant, latching variant
- 10 mm installation width / 11 mm width/station



Product variants described in the data sheet may differ from the product presentation and description.

#### Can be combined with

|                                                                                     |                                                                                            |   |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---|
|   | <b>Type 6524</b><br>3/2-way or 2 × 3/2-way<br>solenoid valve for pneumatic<br>applications | ► |
|  | <b>Type 2505</b><br>10 mm socket for Bürkert<br>small solenoid valves                      | ► |

#### Type description

Type 6144 is a direct-acting 3/2-way solenoid valve designed for neutral gases and liquids. Through the movement between the two end positions, the switching element (flipper) seals one of the two opposing valve seats and connects the other to the working port. This movement is caused by the magnetic field pushing a permanent magnet, which is fixed to the flipper element, when switching the solenoid. This valve design makes it possible to realise both monostable and bistable variants. In addition to its exceptional performance characteristics, the flipper principle is especially marked by its very low switching noise and low wear level. Furthermore, integrated medium separation enables use above and beyond pneumatic applications. Depending on the application, various flange connections are available that are suitable for both individual and block installation. Installation advice: The valve must be at least 5 mm away from other ferromagnetic materials in order to avoid malfunctioning during operation.

## Table of contents

|                                                                        |           |
|------------------------------------------------------------------------|-----------|
| <b>1. General technical data</b>                                       | <b>3</b>  |
| <b>2. Product variants</b>                                             | <b>4</b>  |
| 2.1. Electrical connection variants.....                               | 4         |
| 2.2. Fluidic connection variants .....                                 | 4         |
| 2.3. Manual override .....                                             | 5         |
| <b>3. Circuit functions</b>                                            | <b>5</b>  |
| <b>4. Approvals and conformities</b>                                   | <b>6</b>  |
| 4.1. General notes .....                                               | 6         |
| 4.2. Conformity .....                                                  | 6         |
| 4.3. Standards .....                                                   | 6         |
| 4.4. Explosion protection.....                                         | 6         |
| 4.5. North America (USA/Canada) .....                                  | 6         |
| 4.6. Others .....                                                      | 6         |
| China Compulsory Certification (CCC).....                              | 6         |
| <b>5. Materials</b>                                                    | <b>7</b>  |
| 5.1. Bürkert resistApp .....                                           | 7         |
| 5.2. Material specifications .....                                     | 7         |
| <b>6. Dimensions</b>                                                   | <b>8</b>  |
| 6.1. Bürkert sub-base (10 × 18 mm) .....                               | 8         |
| 6.2. Bürkert sub-base vertical (10 × 32 mm) .....                      | 9         |
| 6.3. Bürkert sub-base lateral (10 × 42 mm).....                        | 10        |
| 6.4. Bürkert sub-base horizontal (26 × 41 mm) .....                    | 11        |
| <b>7. Product connections</b>                                          | <b>12</b> |
| 7.1. Electrical connection.....                                        | 12        |
| Pin assignment.....                                                    | 12        |
| <b>8. Performance specifications</b>                                   | <b>12</b> |
| 8.1. Electrical data explosion-proof variant Ex ia.....                | 12        |
| <b>9. Ordering information</b>                                         | <b>13</b> |
| 9.1. Bürkert eShop .....                                               | 13        |
| 9.2. Bürkert product filter .....                                      | 13        |
| 9.3. Bürkert Product Enquiry Form .....                                | 13        |
| 9.4. Ordering chart .....                                              | 14        |
| Standard variant.....                                                  | 14        |
| ATEX/IECEX ia variant.....                                             | 15        |
| Impulse variant .....                                                  | 15        |
| 9.5. Ordering chart accessories.....                                   | 16        |
| Cable plug Type 2505.....                                              | 16        |
| 9.6. Single manifold for Bürkert sub-base (10 × 18 mm).....            | 16        |
| 9.7. Multiple manifold for Bürkert sub-base (10 × 18 mm).....          | 17        |
| 9.8. Single manifold for Bürkert sub-base lateral (10 × 42 mm) .....   | 17        |
| 9.9. Multiple manifold for Bürkert sub-base lateral (10 × 42 mm) ..... | 18        |

## 1. General technical data

|                                                 |                                                                                                                                                                                                                                             |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product properties</b>                       |                                                                                                                                                                                                                                             |
| Dimensions                                      | Further information can be found in chapter <b>"6. Dimensions"</b> on page 8.                                                                                                                                                               |
| <b>Material</b>                                 |                                                                                                                                                                                                                                             |
| Seal                                            | FKM (other materials on request)                                                                                                                                                                                                            |
| Fluidic housing                                 | PPS                                                                                                                                                                                                                                         |
| Minimum bending radius for flying leads variant | Single bending: 8.5 mm radius                                                                                                                                                                                                               |
| Orifice                                         | DN 0.6                                                                                                                                                                                                                                      |
| Circuit function                                | C, D and T, monostable<br>K and S, bistable<br>Further information can be found in chapter <b>"3. Circuit functions"</b> on page 5.                                                                                                         |
| <b>Performance data</b>                         |                                                                                                                                                                                                                                             |
| Duty cycle                                      | 100 % continuous operation                                                                                                                                                                                                                  |
| <b>Switching time</b> <sup>1)</sup>             |                                                                                                                                                                                                                                             |
| Standard variant                                | Opening: approx. 8 ms (pressure rise 0...10 %)<br>Closing: approx. 10 ms (pressure drop 100...90 %)                                                                                                                                         |
| Explosion-proof variant                         | Opening: approx. 14 ms (pressure rise 0...10 %)<br>Closing: approx. 18 ms (pressure drop 100...90 %)                                                                                                                                        |
| <b>Electrical data</b>                          |                                                                                                                                                                                                                                             |
| Operating voltage <sup>2)</sup>                 | 12 V DC, 24 V DC (other voltages on request)                                                                                                                                                                                                |
| Electrical control                              | With SPS possible                                                                                                                                                                                                                           |
| <b>Nominal power</b>                            |                                                                                                                                                                                                                                             |
| Standard variant                                | 0.8 W                                                                                                                                                                                                                                       |
| Impulse variant                                 | Switching 0.8 W (impulse length minimum 50 ms), holding power 0 W                                                                                                                                                                           |
| Switching frequency <sup>4)</sup>               | Approx. 17 Hz                                                                                                                                                                                                                               |
| Voltage tolerance <sup>3)</sup>                 | ± 10 %                                                                                                                                                                                                                                      |
| <b>Medium data</b>                              |                                                                                                                                                                                                                                             |
| Operating medium                                | Lubricated or oil-free compressed dry air, neutral gases and liquids (5 µm filtering)<br>(see chapter <b>"5.1. Bürkert resistApp"</b> on page 7)                                                                                            |
| Medium temperature                              | - 10 °C...+ 55 °C                                                                                                                                                                                                                           |
| <b>Product connections</b>                      |                                                                                                                                                                                                                                             |
| Electrical connection                           | Cable plug <b>Type 2505</b> ►<br>Further information can be found in chapter <b>"Cable plug Type 2505"</b> on page 16.<br>Two FEP-leads 0.2 mm <sup>2</sup> (AWG24), length 500 mm<br>(round plug M8 × 1 or PCB plug RM 5.08 mm on request) |
| Port connection                                 | Bürkert sub-base (10 × 18 mm)<br>Bürkert sub-base vertical (10 × 32 mm)<br>Bürkert sub-base lateral (10 × 42 mm)<br>Bürkert sub-base horizontal (26 × 41 mm)<br>UNF ¼"- 28<br>Hose connector                                                |
| <b>Approvals and conformities</b>               |                                                                                                                                                                                                                                             |
| Degree of protection                            | IP65 with flying leads<br>IP30                                                                                                                                                                                                              |
| Protection class                                | III according to VDE 0580                                                                                                                                                                                                                   |
| Explosion protection                            | Further information can be found in chapter <b>"4.4. Explosion protection"</b> on page 6.                                                                                                                                                   |
| North America (USA/Canada)                      | Further information can be found in chapter <b>"4.5. North America (USA/Canada)"</b> on page 6.                                                                                                                                             |
| Others                                          | Further information can be found in chapter <b>"4.6. Others"</b> on page 6.                                                                                                                                                                 |
| <b>Environment and installation</b>             |                                                                                                                                                                                                                                             |
| Installation position                           | As required, preferably with actuator upright<br>(5 mm minimum distance to ferromagnetic materials)                                                                                                                                         |
| Ambient temperature                             | - 10 °C...+ 55 °C                                                                                                                                                                                                                           |

1.) Measurement at + 20 °C, 6 bar at the valve outlet according to DIN ISO 12238:2001

2.) Battery voltage, observe polarity as shown on top of the valve

3.) Maximum permitted residual ripple

4.) At ambient temperature + 20 °C

2. Product variants

2.1. Electrical connection variants

Note:

- Rectangular plug as standard
- Other connections are available on request.

| Rectangular plug Type 2505                                                        | 2 FEP flying leads 0.2 mm <sup>2</sup> ,<br>AWG24, length on request              | PCB plug (RM 5.08 mm)<br>(e.g. for PCB mounting<br>0.63 × 0.63)                    | Round plug M8 × 1                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |

2.2. Fluidic connection variants

Note:

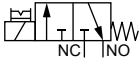
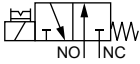
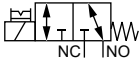
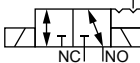
The materials of the fluidic connections may differ from the fluidic housing material mentioned in chapter “1. General technical data” on page 3.

| Bürkert sub-base (10 × 18 mm)                                                       | Bürkert sub-base vertical<br>(10 × 32 mm)                                           | Bürkert sub-base lateral<br>(10 × 42 mm)                                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |  |
| Bürkert sub-base horizontal<br>(26 × 41 mm)                                         | UNF ¼"-28                                                                           | Hose connector                                                                       |
|  |  |  |

2.3. Manual override

| Manual override standard                                                          | Manual override with additional over-rotation protection                          | Without manual override                                                            |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  |  |  |

3. Circuit functions

| Symbol                                                                              | Description                                                                                                                               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>Circuit function C (CF C)</b><br>3/2-way solenoid valve<br>Direct-acting, with manual override<br>Normally closed                      |
|   | <b>Circuit function D (CF D)</b><br>3/2-way solenoid valve<br>Direct-acting, with manual override<br>Normally open                        |
|  | <b>Circuit function T (CF T)</b><br>3/2-way solenoid valve<br>Direct-acting, with manual override<br>Flow direction optional<br>Universal |
|  | <b>Circuit function K (CF K)</b><br>3/2-way impulse solenoid valve<br>Direct-acting<br>Observe flow direction <sup>1)</sup>               |
|  | <b>Circuit function S (CF S)</b><br>3/2-way impulse solenoid valve<br>Direct-acting<br>Flow direction unrestricted                        |

1.) Further information can be found in chapter ["Pin assignment"](#) on page 12.

## 4. Approvals and conformities

### 4.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available variants can be supplied with the below mentioned approvals or conformities.

### 4.2. Conformity

In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

### 4.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

### 4.4. Explosion protection

| Approval                                                                                                                                                                  | Description                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br> | <b>Optional: Explosion protection</b><br>EU type examination certificate: PTB 07 ATEX 2048 X / IECEx PTB 07.0063X<br><br><b>ATEX:</b><br>II 2G Ex ia IIC T4...T6 Gb<br><br><b>IECEx:</b><br>Ex ia IIC T4...T6 Gb |

### 4.5. North America (USA/Canada)

| Approval                                                                            | Description                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Optional: UL Recognized for the USA and Canada<sup>1)</sup></b><br>The products are UL Recognized for the USA and Canada according to: <ul style="list-style-type: none"> <li>• UL 429 (electrically operated valves)</li> <li>• CAN/CSA-C22.2 No. 139 - 19</li> </ul> |

1.) This device is intended to be used with a NEC Class 2 power source or NEC Class 2 transformer in accordance with UL1310 or UL1585.

### 4.6. Others

#### China Compulsory Certification (CCC)

| Conformity                                                                          | Description                                                                                                                                                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Optional: China Compulsory Certification (CCC)</b><br>The products with Ex approval are suitable for import and use for hazardous applications in China. |

5. Materials

5.1. Bürkert resistApp

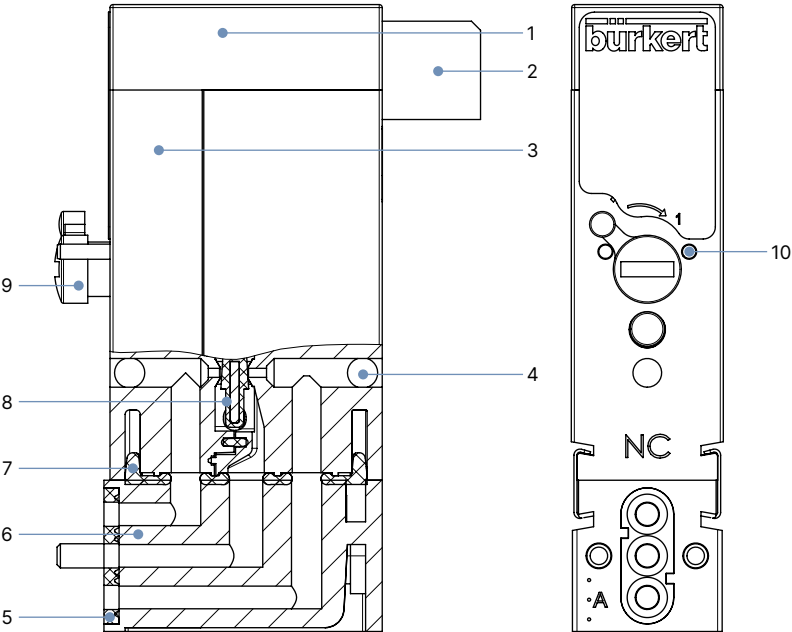


**Bürkert resistApp – Chemical resistance chart**

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start chemical resistance check](#)

5.2. Material specifications



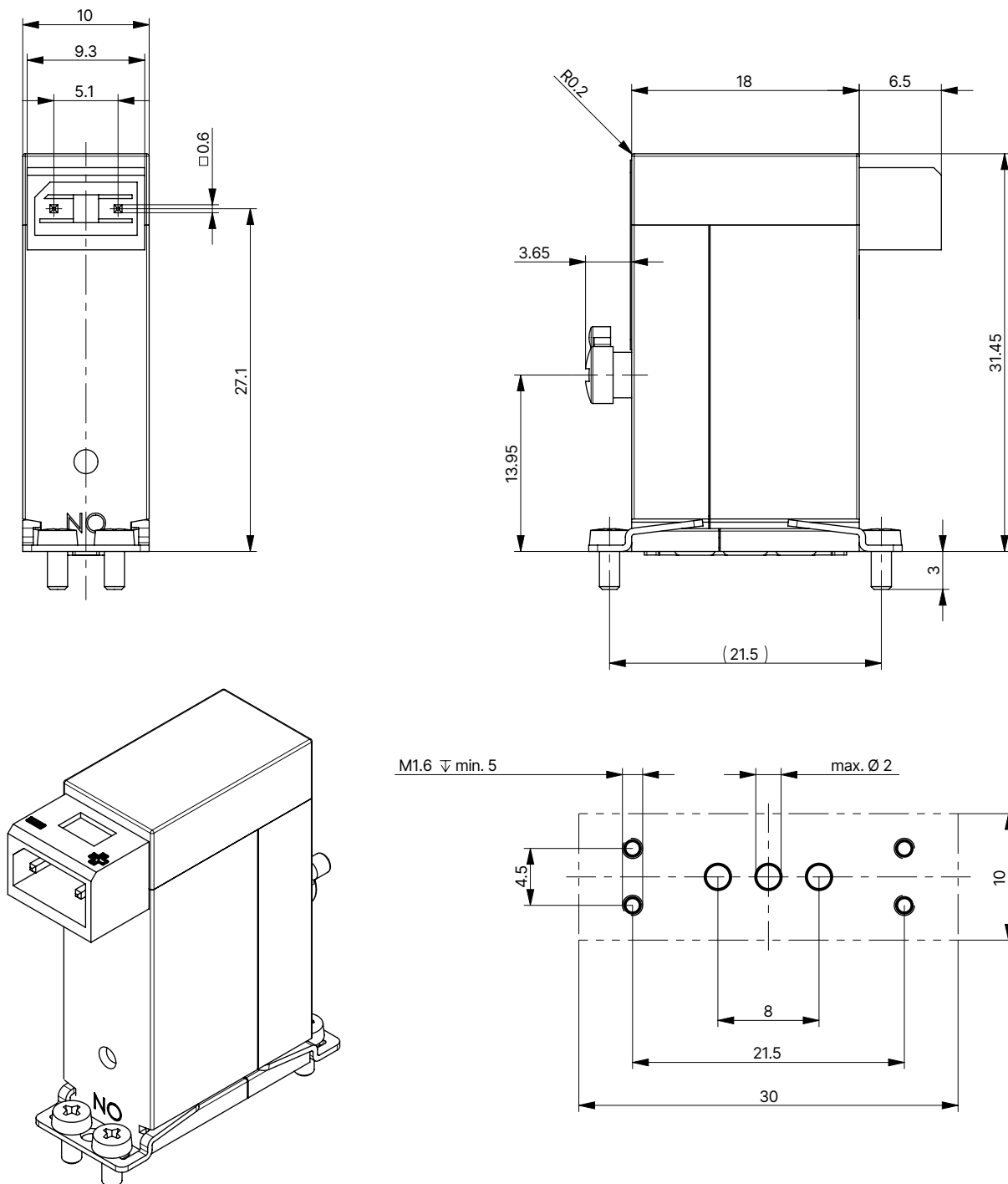
| No. | Element                                                                                     | Material               |
|-----|---------------------------------------------------------------------------------------------|------------------------|
| 1   | Casting compound                                                                            | Thermelt               |
| 2   | Plug (symbolic illustration for all cable connections; other variants on request)           | PA                     |
| 3   | Housing                                                                                     | PPS                    |
| 4   | Ball                                                                                        | Stainless steel 1.4301 |
| 5   | Seal                                                                                        | FKM                    |
| 6   | Port connection (symbolic illustration for all port connections; other variants on request) | PA, PPS, PEEK          |
| 7   | Sealing mat                                                                                 | FKM, EPDM              |
| 8   | Sealing element                                                                             | FKM, EPDM              |
| 9   | Manual override                                                                             | PA                     |
| 10  | Additional over-rotation protection                                                         | Stainless steel 1.4305 |

## 6. Dimensions

### 6.1. Bürkert sub-base (10 × 18 mm)

**Note:**

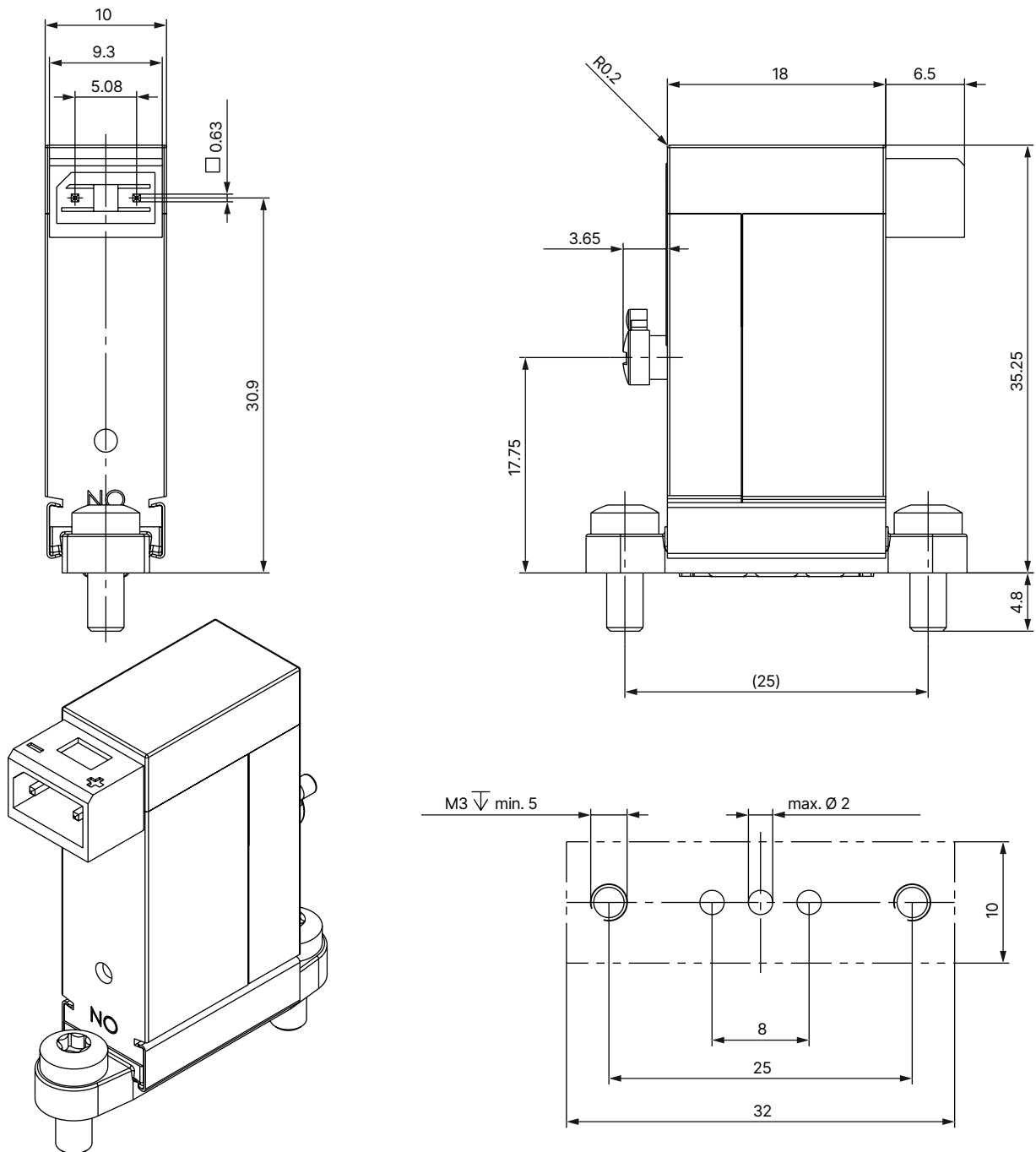
- Dimensions in mm
- The valve is optionally available with or without a manual override (left or right-sided) (standard position: opposite electrical connection).



## 6.2. Bürkert sub-base vertical (10 × 32 mm)

### Note:

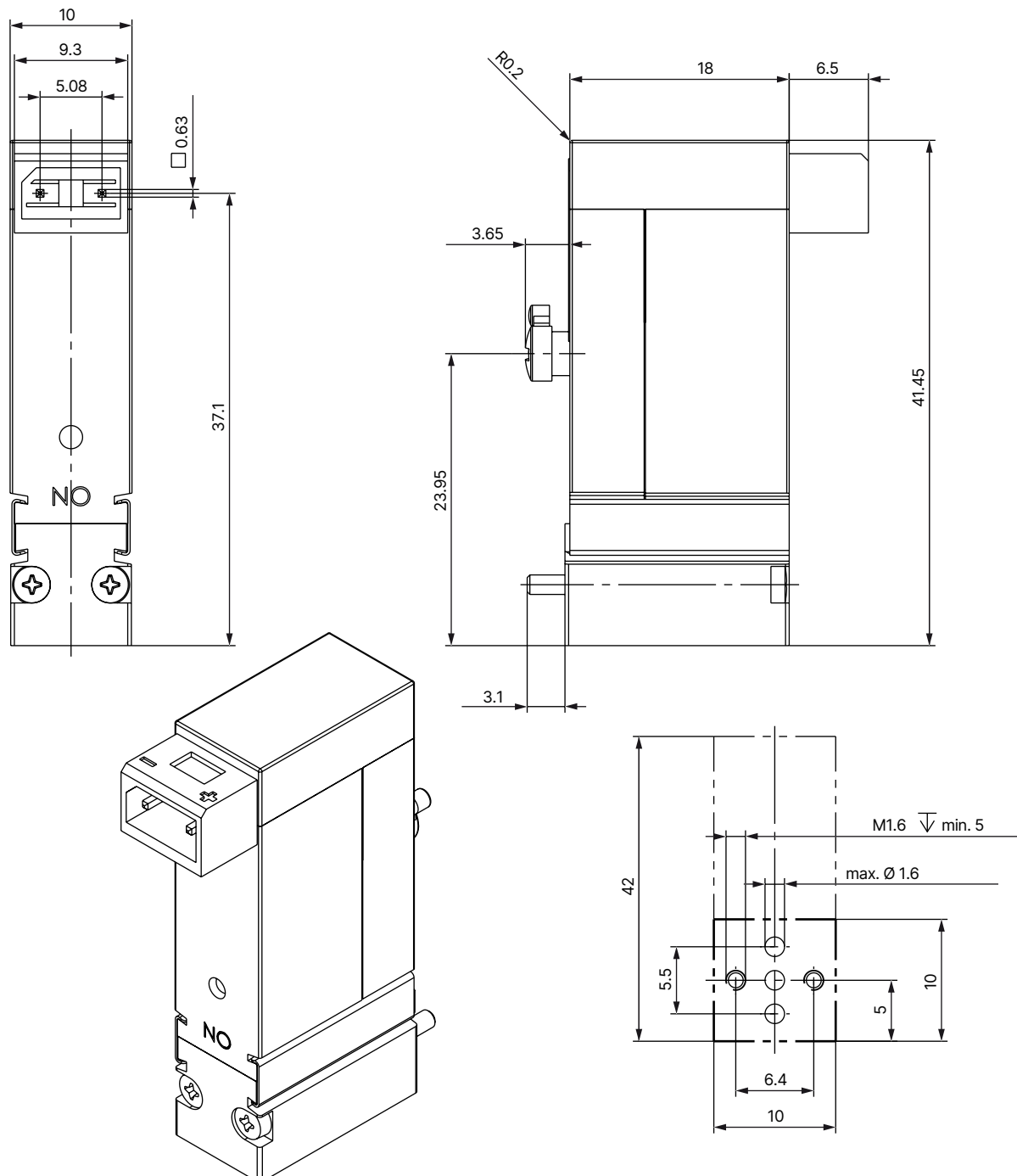
- Dimensions in mm
- The valve is optionally available with or without a manual override (left or right-sided) (standard position: opposite electrical connection).



### 6.3. Bürkert sub-base lateral (10 × 42 mm)

**Note:**

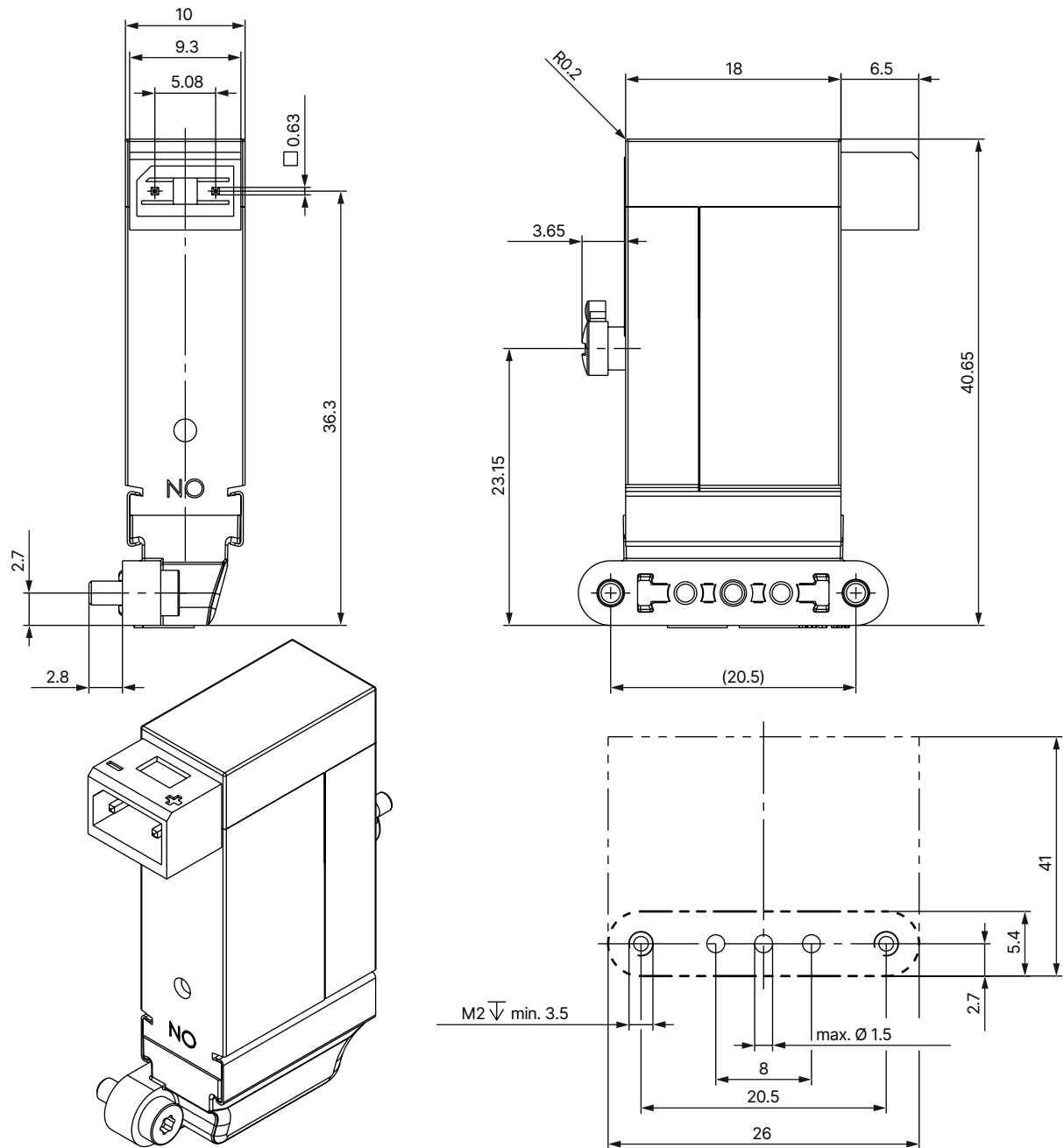
- Dimensions in mm
- The valve is optionally available with or without a manual override (left or right-sided) (standard position: opposite electrical connection).



#### 6.4. Bürkert sub-base horizontal (26 × 41 mm)

**Note:**

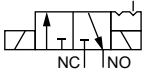
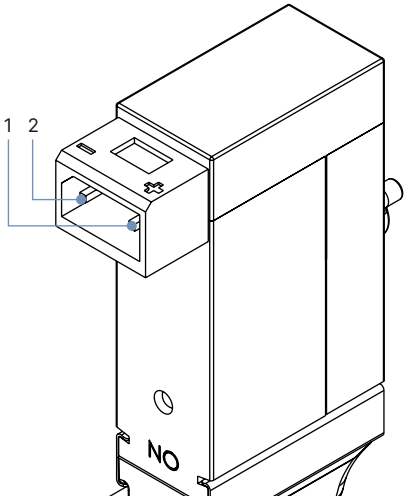
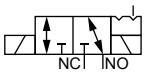
- Dimensions in mm
- The valve is optionally available with or without a manual override (left or right-sided) (standard position: opposite electrical connection).



7. Product connections

7.1. Electrical connection

Pin assignment

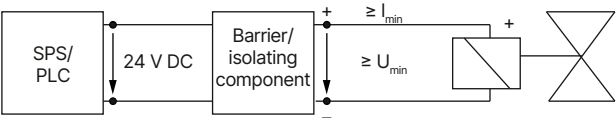
| Electrical control for impulse variants                                                                                                                                            |                    | Impulse length min. 50 ms |   |                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------|---|-------------------------------------------------------------------------------------|
|                                                                                                                                                                                    |                    | 1                         | 2 |                                                                                     |
| <b>CF K</b><br>3/2-way impulse solenoid valve<br>Direct-acting<br>Observe flow direction<br>      | NC → COM<br>(open) | +                         | - |  |
|                                                                                                                                                                                    | COM → NO<br>(open) | -                         | + |                                                                                     |
| <b>CF S</b><br>3/2-way impulse solenoid valve<br>Direct-acting<br>Flow direction unrestricted<br> | NC ↔ COM<br>(open) | +                         | - |                                                                                     |
|                                                                                                                                                                                    | COM ↔ NO<br>(open) | -                         | + |                                                                                     |

8. Performance specifications

8.1. Electrical data explosion-proof variant Ex ia

Note:

- The valve is designed to operate on 24 V/DC outputs through an intermediary intrinsically safe apparatus (isolating block or barrier).
- Refer to the **additional instructions Type 6144 ▶** for the permissible maximum values/value pairs.
- Type of protection: PTB 07 ATEX 2048 X, II 2G Ex ia IIC T4...T6 Gb  
IECEX PTB 07.0063X, Ex ia IIC T4...T6 Gb



| Variant                            | Resistance at + 20 °C ± 4 % | Minimum terminal voltage | Minimum current |
|------------------------------------|-----------------------------|--------------------------|-----------------|
|                                    | [Ω]                         | [V]                      | [mA]            |
| For use with a 300 Ω supply module | 320                         | 9.3                      | 29              |
| High resistance variant            | 510                         | 11.7                     | 23              |

## 9. Ordering information

### 9.1. Bürkert eShop



#### Bürkert eShop – Easy ordering and quick delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

[Order online now](#)

### 9.2. Bürkert product filter

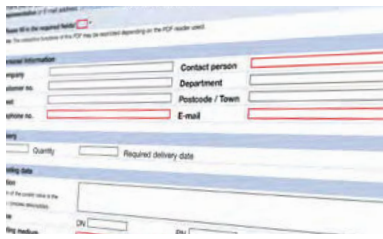


#### Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

[Try out our product filter](#)

### 9.3. Bürkert Product Enquiry Form



#### Bürkert Product Enquiry Form – Your enquiry quickly and compactly

Would you like to make a specific product enquiry based on your technical requirements? Use our Product Enquiry Form for this purpose. There you will find all the relevant information for your Bürkert contact. This will enable us to provide you with the best possible advice.

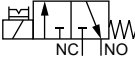
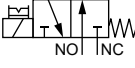
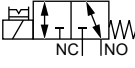
[Fill out the form now](#)

## 9.4. Ordering chart

### Standard variant

#### Note:

- Including fastening screws for Bürkert sub-base: 4 x M1.6 × 3.5; Bürkert sub-base lateral: 2 x M1.6 × 20 and Bürkert sub-base horizontal: 2 x M2 × 6
- Rectangular cable plug Type 2505 is not included in the scope of delivery and must be ordered separately, see **"9.5. Ordering chart accessories" on page 16.**
- Other variants are available on request.

| Circuit function                                                                                                                                                                                            | Port connection                                                                                                                                                                      | Orifice                                                                                      | Q <sub>Nn</sub> value air | K <sub>v</sub> value water         | Voltage/ Frequency       | Nominal power                                                                               | Pressure range        | Manual override standard | Electrical connection | Article no.                                                                                |        |     |        |     |                    |                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------|------------------------------------|--------------------------|---------------------------------------------------------------------------------------------|-----------------------|--------------------------|-----------------------|--------------------------------------------------------------------------------------------|--------|-----|--------|-----|--------------------|----------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                             |                                                                                                                                                                                      | [mm]                                                                                         | [l/min] <sup>1.)</sup>    | [m <sup>3</sup> /h] <sup>2.)</sup> | [V/Hz]                   | [W]                                                                                         | [bar] <sup>3.)</sup>  |                          |                       |                                                                                            |        |     |        |     |                    |                                                                                              |
| <b>CF C</b><br>3/2-way solenoid valve<br>Direct-acting, with manual override<br>Normally closed<br>                        | Bürkert sub-base                                                                                                                                                                     | 0.6                                                                                          | 8.5                       | 0.0075                             | 12/DC                    | 0.8                                                                                         | 0...10 <sup>4.)</sup> | yes                      | Rectangular plug      | 182862  |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             |                                                                                                                                                                                      |                                                                                              |                           |                                    | Bürkert sub-base lateral |                                                                                             |                       |                          | Flying leads 0.5 m    | 215686  |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             |                                                                                                                                                                                      |                                                                                              |                           |                                    |                          |                                                                                             |                       |                          | Rectangular plug      | 181367  |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             |                                                                                                                                                                                      |                                                                                              |                           |                                    |                          |                                                                                             |                       |                          | Flying leads 0.5 m    | 202578  |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             | Rectangular plug                                                                                                                                                                     |                                                                                              |                           |                                    |                          | 175682   |                       |                          |                       |                                                                                            |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             | Flying leads 0.5 m                                                                                                                                                                   |                                                                                              |                           |                                    |                          | 214196   |                       |                          |                       |                                                                                            |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             | Rectangular plug                                                                                                                                                                     |                                                                                              |                           |                                    |                          | 357406  |                       |                          |                       |                                                                                            |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             | Flying leads 0.5 m                                                                                                                                                                   |                                                                                              |                           |                                    | o. r.                    |                                                                                             |                       |                          |                       |                                                                                            |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             | <b>CF D</b><br>3/2-way solenoid valve<br>Direct-acting, with manual override<br>Normally open<br> |                                                                                              |                           |                                    | Bürkert sub-base         | 0.6                                                                                         |                       |                          | 8.5                   | 0.0075                                                                                     | 24/DC  | 0.8 | 0...10 | yes | Rectangular plug   | 175653  |
|                                                                                                                                                                                                             |                                                                                                                                                                                      |                                                                                              |                           |                                    | Bürkert sub-base lateral |                                                                                             |                       |                          |                       |                                                                                            |        |     |        |     | Flying leads 0.5 m | o. r.                                                                                        |
| Rectangular plug                                                                                                                                                                                            |                                                                                                                                                                                      | 179098  |                           |                                    |                          |                                                                                             |                       |                          |                       |                                                                                            |        |     |        |     |                    |                                                                                              |
| Flying leads 0.5 m                                                                                                                                                                                          |                                                                                                                                                                                      | o. r.                                                                                        |                           |                                    |                          |                                                                                             |                       |                          |                       |                                                                                            |        |     |        |     |                    |                                                                                              |
| Rectangular plug                                                                                                                                                                                            |                                                                                                                                                                                      | 357407  |                           |                                    |                          |                                                                                             |                       |                          |                       |                                                                                            |        |     |        |     |                    |                                                                                              |
| Flying leads 0.5 m                                                                                                                                                                                          |                                                                                                                                                                                      | o. r.                                                                                        |                           |                                    |                          |                                                                                             |                       |                          |                       |                                                                                            |        |     |        |     |                    |                                                                                              |
| <b>CF T</b><br>3/2-way solenoid valve<br>Direct-acting, with manual override<br>Flow direction optional<br>Universal<br> | Bürkert sub-base                                                                                                                                                                     | 0.6                                                                                          | 8.5                       | 0.0075                             |                          | 24/DC                                                                                       | 0.8                   | 0...3 <sup>4.)</sup>     | yes                   | Rectangular plug                                                                           | 215276 |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             | Bürkert sub-base lateral                                                                                                                                                             |                                                                                              |                           |                                    | Flying leads 0.5 m       |                                                                                             |                       |                          |                       | o. r.                                                                                      |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             |                                                                                                                                                                                      |                                                                                              |                           |                                    | Rectangular plug         |                                                                                             |                       |                          |                       | 20099067                                                                                   |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             |                                                                                                                                                                                      |                                                                                              |                           |                                    | Flying leads 0.5 m       |                                                                                             |                       |                          |                       | o. r.                                                                                      |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             |                                                                                                                                                                                      |                                                                                              |                           |                                    | Rectangular plug         |                                                                                             |                       |                          |                       | 20099069                                                                                   |        |     |        |     |                    |                                                                                              |
|                                                                                                                                                                                                             |                                                                                                                                                                                      |                                                                                              |                           |                                    | Flying leads 0.5 m       |                                                                                             |                       |                          |                       | o. r.                                                                                      |        |     |        |     |                    |                                                                                              |

o. r. = on request

1.) Measurement at + 20 °C, 6 bar at the valve inlet and 1 bar differential pressure

2.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

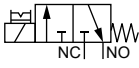
3.) Pressure data: overpressure to atmospheric pressure

4.) Application with vacuum are available on request.

## ATEX/IECEx ia variant

## Note:

- Including fastening screws for Bürkert sub-base: M1.6 × 3.5
- Rectangular cable plug Type 2505 is not included in the scope of delivery and must be ordered separately, see [“9.5. Ordering chart accessories” on page 16](#).

| Circuit function                                                                                                                                                                           | Port connection  | Orifice | Q <sub>Nn</sub> value air | K <sub>V</sub> value water         | Pressure range       | Manual override standard | Resistance at + 20 °C ± 4 % | Minimum holding current | Article no.                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------|---------------------------|------------------------------------|----------------------|--------------------------|-----------------------------|-------------------------|--------------------------------------------------------------------------------------------|
|                                                                                                                                                                                            |                  | [mm]    | [l/min] <sup>1.)</sup>    | [m <sup>3</sup> /h] <sup>2.)</sup> | [bar] <sup>3.)</sup> |                          | [Ω]                         | [mA]                    |                                                                                            |
| <b>CF C</b><br>3/2-way solenoid valve<br>Direct-acting,<br>with manual<br>override<br>Normally closed<br> | Bürkert sub-base | 0.6     | 8.5                       | 0.0075                             | 0...7                | yes                      | 320                         | 29                      | 175657  |
|                                                                                                                                                                                            |                  |         |                           |                                    |                      |                          | 510                         | 23                      | 175656  |

1.) Measurement at + 20 °C, 6 bar at the valve inlet and 1 bar differential pressure

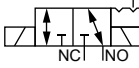
2.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

3.) Pressure data: overpressure to atmospheric pressure

## Impulse variant

## Note:

- Including fastening screws for Bürkert sub-base: M1.6 × 3.5
- Rectangular cable plug Type 2505 is not included in the scope of delivery and must be ordered separately, see [“9.5. Ordering chart accessories” on page 16](#).
- Impulse variants without manual override

| Circuit function                                                                                                                                                                               | Port connection             | Orifice | Q <sub>Nn</sub> value air | K <sub>V</sub> value water         | Voltage/ Frequency | Nominal power                 | Pressure range       | Electrical connection | Article no. |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------|---------------------------|------------------------------------|--------------------|-------------------------------|----------------------|-----------------------|-------------|
|                                                                                                                                                                                                |                             | [mm]    | [l/min] <sup>1.)</sup>    | [m <sup>3</sup> /h] <sup>2.)</sup> | [V/Hz]             | [W]                           | [bar] <sup>3.)</sup> |                       |             |
| <b>CF K</b><br>3/2-way impulse solenoid valve<br>Direct-acting<br>Observe flow direction <sup>4.)</sup><br> | Bürkert sub-base            | 0.6     | 8.5                       | 0.0075                             | 24/DC              | Switch 0.8 watts, hold 0 watt | 0...10               | Rectangular plug      | 175655      |
|                                                                                                                                                                                                | Bürkert sub-base lateral    |         |                           |                                    |                    |                               |                      | Rectangular plug      | 20097125    |
|                                                                                                                                                                                                | Bürkert sub-base horizontal |         |                           |                                    |                    |                               |                      | Rectangular plug      | 20028496    |
| <b>CFS</b><br>3/2-way impulse solenoid valve<br>Direct-acting<br>Flow direction unrestricted<br>            | Bürkert sub-base            | 0.6     | 8.5                       | 0.0075                             | 24/DC              | Switch 0.8 watts, hold 0 watt | 0...3                | Rectangular plug      | 20097125    |
|                                                                                                                                                                                                | Bürkert sub-base lateral    |         |                           |                                    |                    |                               |                      | Rectangular plug      | 20097129    |
|                                                                                                                                                                                                | Bürkert sub-base horizontal |         |                           |                                    |                    |                               |                      | Rectangular plug      | 20097131    |

1.) Measurement at + 20 °C, 6 bar at the valve inlet and 1 bar differential pressure

2.) Measurement at + 20 °C, 1 bar at the valve inlet and free outlet

3.) Pressure data: overpressure to atmospheric pressure

4.) Further information can be found in chapter [“Pin assignment” on page 12](#).

| Further variants on request                                                       |                                                                                                                                                                                             |  |                                                                                   |                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Additional</b><br>The valve can be supplied with a manual override on the left or right side, or without manual override on request.                                                     |  |  | <b>Electrical connection</b><br>Electrical connection can be supplied either on the left or right side. Possible electrical connections are 2 single flying leads, round plug M8 × 1 or plug for PCB contact. |
|                                                                                   |  <b>Approval</b><br>Further information can be found in chapter “4. Approvals and conformities” on page 6. |  |                                                                                   |  <b>Control function/Circuit function</b><br>Further information can be found in chapter “3. Circuit functions” on page 5.   |

9.5. Ordering chart accessories

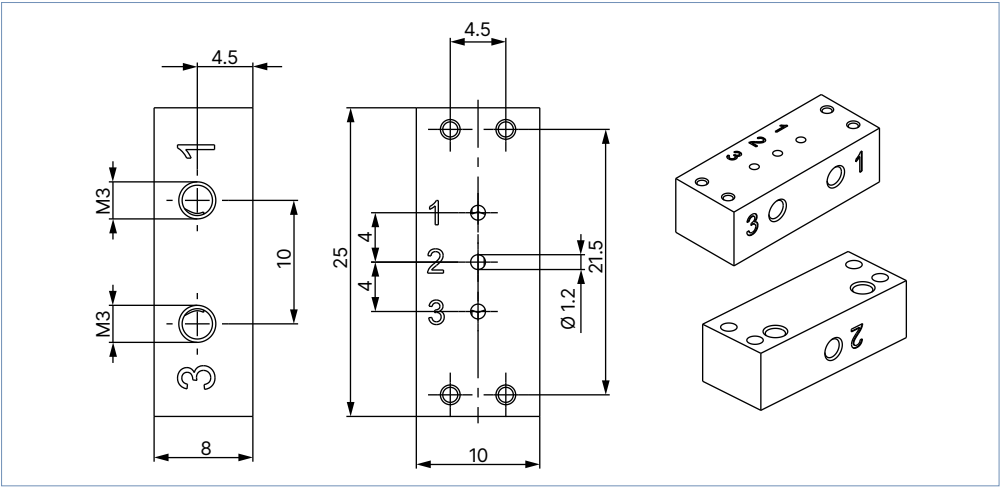
Cable plug Type 2505

**Note:**  
For further variants see data sheet **Type 2505** ►.

| Accessories                                                                        | Description                                                                                     | Article no. |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------|
|   | Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 3 m (Type 2505)   | 252572 𐀀    |
|                                                                                    | Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 5 m (Type 2505)   | 255194 𐀀    |
|  | Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 0,3 m (Type 2505) | 644068 𐀀    |
|                                                                                    | Cable plug 10 mm with cable, 2-pin, rectangular plug, straight, cable length: 0.6 m (Type 2505) | 162144 𐀀    |

9.6. Single manifold for Bürkert sub-base (10 × 18 mm)

- Note:**
- Dimensions in mm
  - Port connection M3
  - Material aluminium (black anodized)

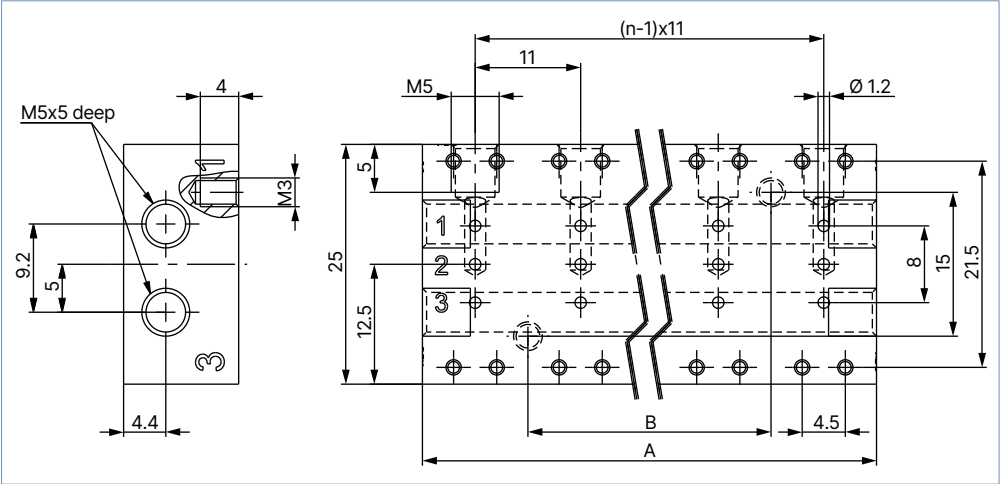


| Description                          | Article no. |
|--------------------------------------|-------------|
| Single manifold for Bürkert sub-base | 639873 𐀀    |

9.7. Multiple manifold for Bürkert sub-base (10 × 18 mm)

Note:

- Dimensions in mm
- Port connection M5
- Material aluminium (black anodized)



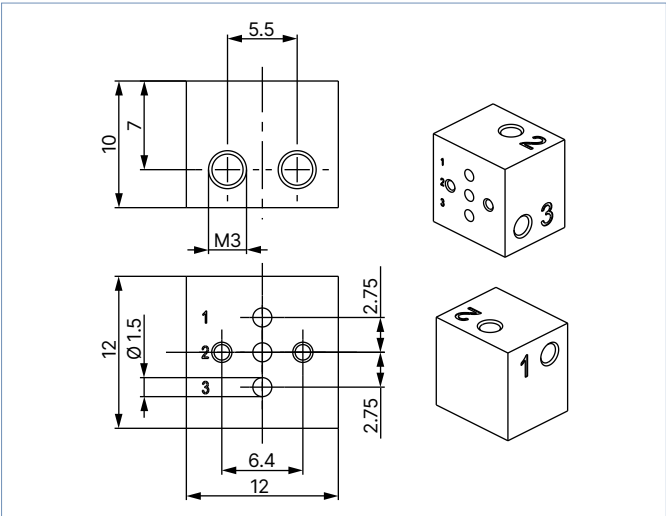
| n                  | A  | B               | Article no. |
|--------------------|----|-----------------|-------------|
| 2 valves           | 22 | 0 <sup>1)</sup> | 641911      |
| 4 valves           | 44 | 22              | 641912      |
| 6 valves           | 66 | 44              | 639874      |
| Blanking plate kit |    |                 | 645512      |

1.) Drill holes are at the same height.

9.8. Single manifold for Bürkert sub-base lateral (10 × 42 mm)

Note:

- Dimensions in mm
- Port connection M3
- Material aluminium (black anodized)

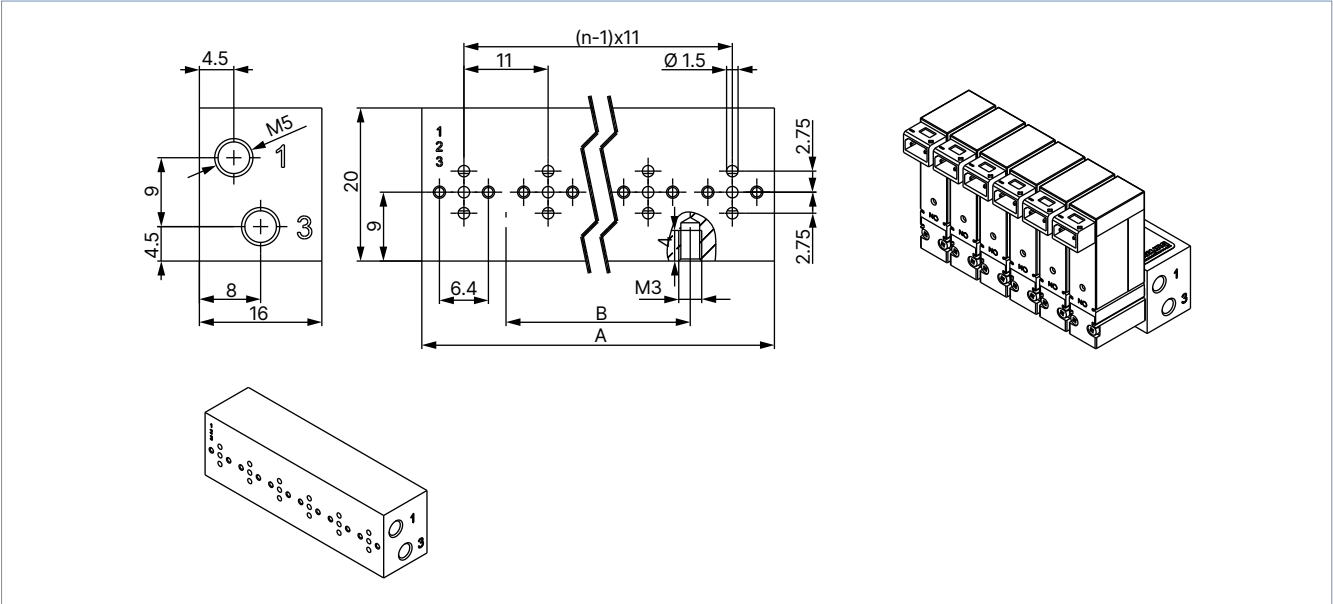


| Description                                               | Article no. |
|-----------------------------------------------------------|-------------|
| Single manifold for Bürkert sub-base lateral (10 × 42 mm) | 639234      |

9.9. Multiple manifold for Bürkert sub-base lateral (10 × 42 mm)

**Note:**

- Dimensions in mm
- Port connection M5
- Material aluminium (black anodized)
- Mounting hole: M3×4 thread



| n                  | A  | B                | Article no.                                                                                |
|--------------------|----|------------------|--------------------------------------------------------------------------------------------|
| 2 valves           | 22 | 0 <sup>1.)</sup> | 641915  |
| 4 valves           | 44 | 22               | 641916  |
| 6 valves           | 66 | 44               | 639235  |
| Blanking plate kit |    |                  | 645513  |

1.) Drill holes are at the same height.