The 8025 batch controller is specially designed for use with neutral, slightly aggressive, solid-free liquids.

Type 8025 batch controller is offered in different models:

- **The compact batch controller** with paddle wheel sensor (page 4…9)
- **The remote batch controller** for panel or wall-mounted versions, which can be connected to the Bürkert 8020/8030/8031/8041/SE30+S077 flowmeter or any sensors already on the market; sensors with open collector output, reed relay output, TTL, CMOS or coil can be operated by this batch controller (page 10…12).

### General technical data (common to the various versions)

| **Display** | 15 x 60 mm, 8-digit LCD, alphanumeric, 15 segments, 9 mm high |
| **Connection cable** | Cable with maximum operating temperature greater than 80 °C (90 °C for UL-Recognized version), max. 50 m, shielded, 0.2…1.5 mm² max. cross-section |
| **Height above sea level** | max. 2000 m |
| **Relative humidity** | ≤80 %, without condensation |

The applied standards, which verify conformity with the EU Directives, can be found on the EU Type Examination Certificate and/or the EU Declaration of conformity if applicable.

**Certification**

UL-Recognized for US and Canada UL 61010-1 + CAN/CSA-C22.2 No. 61010-1
Operation and display (common to the various versions)

When mounted in a pipe (compact version) or connected to a flowmeter (remote version) in series with one or two valves, the 8025 batch controller makes it possible to carry out a dosing of one or several quantities of liquids. The unit controls the opening of the valves and measures the quantity of the fluid which flows. The unit also closes the valves when the preset quantity has been delivered.

The electronic component needs a voltage supply of 12…36 V DC or 115/230 V AC.

The device is equipped with 4 digital inputs (DI1 up to DI4), 2 transistor outputs (DO1 configured as a pulse output and DO4 configured as state output, by default), 2 relay outputs (DO2 always configured to control the valve and by default parameterize of 100 % of the batch quantity and DO3 configured as alarm output by default), two volume or mass totalizers and two batch totalizers.

The second relay output can be used to activate another valve, to initiate alarms or to generate warnings.

The following dosing modes are possible:

- **Locally started dosing of free quantity:**
  the user enters the quantity to be filled and starts the dosing from the keypad.

- **Locally started dosing of preset quantity:**
  the user selects a quantity which has been preset and starts the dosing from the keypad.

- **Locally started dosing of free/preset quantity**
  the user enters the quantity to be filled or selects a quantity which has been preset and starts the dosing from the keypad.

- **Dosing controlled by a PLC unit**
  the user selects a quantity which has been preset and starts the dosing using binary inputs.

- **Locally/remote selection of preset quantity and dosing controlled by a PLC unit:**
  the user selects a quantity which has been preset from the keypad or using binary inputs and starts the dosing using binary inputs.

- **Automatic dosing controlled by variation of pulse duration:**
  the quantity of the dosing is directly proportional to the duration of a pulse.

- **Remote dosing determined by Teach-In:**
  Teach-In of the dosing quantity using binary inputs.

- **Local dosing determined by Teach-In:**
  Teach-In of the dosing quantity from the keypads.

The device is calibrated by means of the K-factor which is either entered or determined via the Teach-In functions.

User adjustments, such as measuring range, engineering units, pulse output, etc. are carried out via the device operators interface.

The operation is specified according to five levels:

<table>
<thead>
<tr>
<th>Indication in operating mode/display</th>
<th>Parameter definition</th>
<th>Test</th>
<th>Information</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>• dosing amount</td>
<td>• language</td>
<td>• input test</td>
<td>• Display of error, alarm and/or warning messages</td>
<td></td>
</tr>
<tr>
<td>• dosing mode</td>
<td>• engineering units</td>
<td>• output test</td>
<td>• Display of the 10 latest batches</td>
<td></td>
</tr>
<tr>
<td>• main quantity totalizer</td>
<td>• K-factor/Teach-In function</td>
<td>• frequency test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• daily quantity totalizer with reset function</td>
<td>• selection of dosing mode</td>
<td>• warning and fault messages generating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• main batch totalizer</td>
<td>• over run correction</td>
<td>• configuration mode</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• daily batch totalizer with reset function</td>
<td>• alarm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• outputs configuration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• reset both quantity/batch totalizerS (main and daily)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Brightness of the display (back-light)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Description of the navigation keys and the status LEDs

- Scrolling up the parameters within a level or a menu
- Increase the figure selected
- Read the batches history

- Scrolling down the parameters within a level or a menu
- Selecting the figure on the left

- Reading the messages in the information menu
- Validating the settings

Large digital display with 8 characters

Device status LED: see following table.

<table>
<thead>
<tr>
<th>Device status LED</th>
<th>Status of the device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>The device operates correctly.</td>
</tr>
<tr>
<td>Orange</td>
<td>A dosing related alarm and/or a warning messages is generated in the information menu.</td>
</tr>
<tr>
<td>Red</td>
<td>A fault message is generated in the information menu.</td>
</tr>
</tbody>
</table>
| Blinking, whatever the colour | - Slow blinking: The dosing is interrupted.  
- Fast blinking: - during a dosing: a dosing related alarm is generated. 
- dosing not active: the information menu has been remote-consulted or a check for the correct behaviour of the inputs/outputs is running. |
The compact batch controller

The compact batch controller combines a paddle-wheel flow sensor and an electronic module with a display in an IP65 enclosure. The electrical connection is provided via two cable glands.

Bürkert designed fitting S020 ensures simple installation of the Bürkert sensor into pipes from DN20…DN400.

The compact batch controller consists of a paddle-wheel flow sensor and an electronic module with a display in an IP65 enclosure. The electrical connection is provided via two cable glands.

Bürkert designed fitting S020 ensures simple installation of the Bürkert sensor into pipes from DN20…DN400.

Pressure/temperature chart

### General data

<table>
<thead>
<tr>
<th>Compatibility</th>
<th>With Bürkert Insertion fitting S020 (see corresponding datasheet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>Housing, cover, lid, nut, Cable glands, Wetted parts, Sensor holder, paddle wheel, Seal, Axis and bearings</td>
</tr>
<tr>
<td></td>
<td>PC, Polyester / Stainless steel, PA, PVDF, FKM standard (EPDM included, but not mounted), Ceramics (Al₂O₃)</td>
</tr>
<tr>
<td>Electrical connections</td>
<td>Cable glands M20 x 1.5</td>
</tr>
</tbody>
</table>

### Complete device data (fitting + batch controller)

<table>
<thead>
<tr>
<th>Pipe diameter</th>
<th>DN20…DN400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring range</td>
<td>0.3…10 m/s</td>
</tr>
<tr>
<td>Fluid temperature with fitting in PVC/PP, PVDF, brass or stainless steel</td>
<td>0…+50 °C (-32…+122 °F) / 0…+80 °C (-32…+176 °F)</td>
</tr>
<tr>
<td>Fluid pressure max.</td>
<td>PN10 (145 PSI) - see pressure/temperature chart</td>
</tr>
<tr>
<td>Viscosity / Particles rate</td>
<td>300 cSt max. / 1 % max. (size: 0.5 mm max.)</td>
</tr>
</tbody>
</table>

### Measurement deviation

- Teach-In: ±1 % of the measured value (at Teach-In flow rate value)
- ±2.5 % of the measured value

### Linearity

- ±0.5 % of F.S.
- ±0.4 % of the measured value

### Electrical data

- Power supply (V+): 12…36 V DC (max. tolerance: ±5 % or +10 % at 12 V DC; ±10 % at 36 V DC), filtered and regulated, SELV (safety extra low voltage) circuit with a non dangerous energy level or 115/230 V AC 50/60 Hz (see technical specifications 115 V AC)
- Characteristics of the power source (not provided) of UL-Recognized devices:
  - Limited power source (according to § 9.4 of the UL 61010-1 standard) or, Class 2 type power source (according to the 1310/1585 and 60950-1 standards)
- Reversed polarity of DC: protected
- Current consumption with sensor:
  - Version with relay: Without consumption of digital input and pulse output ≤ 100 mA (at 12 V DC); ≤ 50 mA (at 36 V DC); ≤ 55 mA (115/230 V AC)
  - Version without relays: ≤ 70 mA (at 12 V DC); ≤ 35 mA (at 36 V DC); ≤ 40 mA (115/230 V AC)

### Inputs DI (1 to 4)

- Switching threshold Von: 5…36 V DC;
- Switching threshold Voff max.: 2 V DC;
- Input impedance: 9.4 Kohms;
- Galvanic insulation, protected against polarity reversals and voltage spike

### Outputs

- Transistors (DO1 and DO4): NPN or PNP (wiring dependent), potential free;
  - function: pulse output (by default for DO1), batch state (by default for DO4), configurable and parameterizable
  - 0.6…2200 Hz, 5…36 V DC, 100 mA max., line drop 2.7 V DC at 100 mA duty cycle:
    - > 0.45 if 0.6 < frequency < 300 Hz
    - > 0.4 if 300 < frequency < 1500 Hz
    - < 0.4 if 1500 < frequency < 2200 Hz
  - Galvanic insulation, protected against overvoltage, polarity reversals and short-circuits
- Relays (DO2 and DO3): 2 relays (normally open), parameterizable (by default: DO2 always configured to control the valve, parameterized of 100 % of the batch quantity and DO3 configured as alarm), 230 V AC/3 A or 40 V DC/3 A (resistive load), max. cutting power of 750 VA

If the device is mounted in a humid environment or outside, then the maximum voltage allowed is 35 V DC instead of 36 V DC.
**8025**

**Insertion compact**

### Technical specifications 115/230 V AC

- **Voltage supply available inside the device:** 27 V DC regulated
  - Max. current: 125 mA
  - Integrated protection: fuse 125 mA temporised
  - Power: 3 VA

### Environment

- **Ambient temperature (operation and storage):** -10...+60 °C (+14...+140 °F) (12...36 V DC version)
  - -10...+50 °C (+14...+122 °F) (115/230 V AC version)

### Standards, directives and certifications

- **Protection class (according to EN 60529):** IP65 with device wired, cover and lid screwed tight and cable glands mounted and tightened or with blind plug if not used.
- **Standards and directives:** Complying with article 4, §1 of 2014/68/EU directive
- **Specific technical data of UL-Recognized products for US and Canada**
  - **Relay output:** 30 V AC and 42 V peak max./3 A or 60 V DC max./1 A
  - **Ambient temperature:** 0...+40 °C (+32...+104 °F)
  - **Relative humidity:** max. 80 %, without condensation
  - **Intended for an inner pollution degree:** Pollution degree 2 according to EN 61010-1
  - **Installation category:** Category I according to UL 61010-1 – indoor use

### Type of Fluid | Conditions
---|---
Fluid group 1, article 4, §1.c.i | DN ≤ 25
Fluid group 2, article 4, §1.c.i | DN ≤ 32 or PN*DN ≤ 1000
Fluid group 1, article 4, §1.c.ii | DN ≤ 25 or PN*DN ≤ 2000
Fluid group 2, article 4, §1.c.ii | DN ≤ 200 or PN ≤ 10 or PN*DN ≤ 5000

* For the 2014/68/EU pressure directive, the device can only be used under the following conditions (depends on max. pressure, pipe diameter and fluid).
Principle of operation

When liquid flows through the pipe, the paddle wheel with 4 inserted magnets is set in rotation, producing a measuring signal in the sensor (Hall sensor). The frequency modulated induced voltage is proportional to the flow velocity of the fluid.

A conversion coefficient (K-factor in Pulse/l available in the instruction manual of the sensor-fitting), specific to each pipe (size and material) enables the conversion of this frequency into flow rate.

The electronic component converts the measured signal and displays the actual value of the volume or mass.

Installation

The 8025 batch controller can easily be installed into any Bürkert Insertion fitting system (S020), by just fixing the main nut.

**Minimum straight upstream and downstream distances must be observed.** According to the pipe’s design, necessary distances can be bigger or use a flow conditioner to obtain the best accuracy.

For more information, please refer to EN ISO 5167-1.

EN ISO 5167-1 prescribes the straight inlet and outlet distances that must be complied with when installing fittings in pipe lines in order to achieve calm flow conditions. The most important layouts that could lead to turbulence in the flow are shown below, together with the associated prescribed minimum inlet and outlet distances.

These ensure calm, problem-free measurement conditions at the measurement point.

![Diagram](image)

The device can be installed into either horizontal or vertical pipes. Important criteria for this are; ensure that the measurement pipe is fully filled and that the measurement pipe is air bubble free.

![Correct and Incorrect Diagrams](image)

Pressure and temperature ratings must be respected according to the selected fitting material.

The suitable pipe size is selected using the diagram Flow/Velocity/DN.

The batch controller is not designed for gas and steam flow measurement.
Example:

- Specification of nominal flow: 10 m³/h
- Ideal flow velocity: 2...3 m/s

For these specifications, the diagram indicates a pipe size of DN40 (or DN50 for (*)) mentioned fittings.

* for following fittings with:
  - external threads acc. to SMS 1145
  - weld ends acc. to SMS 3008, BS4825-1/ASME BPE/DIN 11866 series C or DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A
  - Clamp acc. to SMS 3017, BS 4825-3/ASME BPE or DIN 32676 series A
Insertion compact

Dimensions [mm] of batch controller

Batch controller

Note:
The length of the flow probe depends on the fitting used. See datasheet Type S020.

Batch controller with S020 fitting

<table>
<thead>
<tr>
<th>DN</th>
<th>H with S020 fitting T-Fitting</th>
<th>Saddle</th>
<th>Plastic spigot</th>
<th>Metal spigot</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>185</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>185</td>
<td></td>
<td></td>
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<tr>
<td>32</td>
<td>188</td>
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<tr>
<td>40</td>
<td>192</td>
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<td>50</td>
<td>198</td>
<td>223</td>
<td>206</td>
<td>193</td>
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<td>65</td>
<td>198</td>
<td>221</td>
<td>212</td>
<td>204</td>
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<tr>
<td>80</td>
<td>226</td>
<td>219</td>
<td>214</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>231</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>227</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>125</td>
<td>234</td>
<td>254</td>
<td>225</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>244</td>
<td>261</td>
<td>236</td>
<td></td>
</tr>
<tr>
<td>180</td>
<td>268</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>280</td>
<td>282</td>
<td>257</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>300</td>
<td></td>
<td>317</td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>312</td>
<td></td>
<td>336</td>
<td></td>
</tr>
<tr>
<td>350</td>
<td>325</td>
<td></td>
<td>348</td>
<td></td>
</tr>
<tr>
<td>400</td>
<td>340</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A complete 8025 batch controller with integrated paddle wheel sensor consists of a compact 8025 batch controller and a Bürkert S020 Insertion fitting.

The following information is necessary for the selection of a complete device:

- Article no. of the desired compact 8025 batch controller (see ordering chart below)
- Article no. of the selected S020 Insertion fitting (see separate datasheet)

You have to order the two components separately.

When you click on the orange box "More info.," you will come to our website for the resp. product where you can download the datasheet.

All these versions have as minimum:
- 2 transistor outputs (DO1 and DO4)
- 2 relay outputs (DO2 and DO3)
- 4 digital inputs (DI1...DI4)
- 2 volume or mass totalizers
- 2 batch totalizers

### Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Voltage supply</th>
<th>Sensor version</th>
<th>Electrical connection</th>
<th>Article no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch controller, compact version</td>
<td>12…36 V DC</td>
<td>Hall, short</td>
<td>2 cable glands</td>
<td>419520</td>
</tr>
<tr>
<td>Batch controller, compact version,</td>
<td>12…36 V DC</td>
<td>Hall, short</td>
<td>2 cable glands</td>
<td>419522</td>
</tr>
<tr>
<td>UL-Recognized for US and Canada</td>
<td>115/230 V AC</td>
<td>Hall, short</td>
<td>2 cable glands</td>
<td>419521</td>
</tr>
<tr>
<td>Batch controller, compact version,</td>
<td>115/230 V AC</td>
<td>Hall, long</td>
<td>2 cable glands</td>
<td>419529</td>
</tr>
</tbody>
</table>

Note: FKM seal in standard; 1 set including a black EPDM seal for the sensor, an obturator for an M20×1.5 cable gland, a 2×6 mm multiway seal and a mounting instruction sheet is supplied with each batch controller.

### Ordering chart - accessories (has to be ordered separately)

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Article no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set with 2 cable glands M20×1.5 + 2 neoprene flat seals for cable gland or plug + 2 screw-plugs M20×1.5 + 2 multiway seals 2×6 mm</td>
<td>449755</td>
</tr>
<tr>
<td>Set with 2 reductions M20×1.5/NPT ½&quot; + 2 neoprene flat seals for cable gland or plug + 2 screw-plugs M20×1.5</td>
<td>551782</td>
</tr>
<tr>
<td>Set with 1 stopper for unused cable gland M20×1.5 + 1 multiway seal 2×6 mm for cable gland + 1 black EPDM seal for the sensor + 1 mounting instruction sheet</td>
<td>551775</td>
</tr>
<tr>
<td>Ring</td>
<td>619205</td>
</tr>
<tr>
<td>Union nut</td>
<td>619204</td>
</tr>
<tr>
<td>Set with 8 FLOW foils</td>
<td>553191</td>
</tr>
<tr>
<td>Set with 1 green FKM and 1 black EPDM seal</td>
<td>552111</td>
</tr>
</tbody>
</table>

### Diagrams

- **T-fitting**
  - DN20: Short sensor
  - DN50: Short sensor
  - DN85: Short sensor
  - DN100: Long sensor
  - DN200: Long sensor
  - DN350: Long sensor
  - DN400: Long sensor

- **Weld-in socket**
  - DN20: Short sensor
  - DN50: Short sensor
  - DN85: Short sensor
  - DN100: Long sensor
  - DN200: Long sensor
  - DN350: Long sensor
  - DN400: Long sensor

- **Fusion spigot**
  - DN20: Short sensor
  - DN50: Short sensor
  - DN85: Short sensor
  - DN100: Long sensor
  - DN200: Long sensor
  - DN350: Long sensor
  - DN400: Long sensor

- **Screw-on S020**
  - DN20: Short sensor
  - DN50: Short sensor
  - DN85: Short sensor
  - DN100: Long sensor
  - DN200: Long sensor
  - DN350: Long sensor
  - DN400: Long sensor

- **Saddle S020**
  - DN20: Long sensor
  - DN50: Long sensor
  - DN85: Long sensor
  - DN100: Long sensor
  - DN200: Long sensor
  - DN350: Long sensor
  - DN400: Long sensor
The remote batch controller

The remote 8025 batch controller can be associated with Bürkert flowmeters 8020, 8030, 8070... (see interconnection chart on page 13) or another flow sensor which emits a frequency signal (with pulse output signal).

The remote 8025 is a batch controller with display, available in wall-mounted and panel versions:

The panel version
is made up of an electronics integrated in an open housing with display. The electrical connection is carried out on the terminal blocks of the electronic board.

The wall-mounted version
is made up of an electronics integrated in a housing with cover, display. The electrical connection is carried out on the terminal blocks of the electronic board via 5 cable glands.

![Insertion remote](image)

If the device is mounted in a humid environment or outside, then the maximum voltage allowed is 35 V DC instead of 36 V DC.

General data

<table>
<thead>
<tr>
<th>Compatibility</th>
<th>Bürkert flow sensor with frequency output (8020, 8030, 8030HT, 8041, 8021, 8070, 8071) or other sensors with compatible electrical data.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>Housing, cover, front panel foil, screws, cable glands / cable clips</td>
</tr>
<tr>
<td></td>
<td>PC (panel-mounted version); ABS (wall-mounted version); Polyester; Stainless steel; PA (wall-mounted version) / PA (panel-mounted version)</td>
</tr>
<tr>
<td>Electrical connections</td>
<td>Terminals (panel-mounted version) or terminals via gland M16 x 1.5 (wall-mounted version)</td>
</tr>
<tr>
<td>Connection cable</td>
<td>5...8 mm external diameter (for the cable glands of the wall-mounted version)</td>
</tr>
</tbody>
</table>

Electrical data

- **Power supply (V+)**
  - Panel- and wall-mounted version
    - 12...36 V DC (max tolerance: ±5 % or ±10 % at 12 V DC; ±10 % at 36 V DC), filtered and regulated, SELV (safety extra low voltage) circuit with a non dangerous energy level,
  - Wall-mounted version
    - 115/230 V AC 50/60 Hz (see technical specifications 115/230 V AC)

- **Characteristics of the power source** (not provided) of UL-Recognized devices
  - Limited power source (according to § 9.4 of the UL 61010-1 standard) or, Class 2 type power source (according to the 1310/1585 and 60950-1 standards)
  - Reversed polarity of DC protected

- **Current consumption with sensor**
  - Version with relay
    - ≤ 70 mA (at 12 V DC);
    - ≤ 45 mA (at 36 V DC);
    - ≤ 55 mA (for 115/230 V AC wall-mounted version)
  - Version without relays
    - ≤ 50 mA (at 12 V DC);
    - ≤ 30 mA (at 36 V DC);
    - ≤ 35 mA (for 115/230 V AC wall-mounted version)

- **Controller input (from sensor)**
  - Frequency range: 0.6 Hz...2.2 kHz;
  - max. voltage: 36 V DC;
  - Type of the signal: open collector NPN (with 470 Ω or 2.2 kΩ resistance) or PNP, Coil, TTL, CMOS (with 39 kΩ resistance)

- **Controller output (to sensor)**
  - Voltage supply - with a 12...36 V DC powered controller:
    - 10.5...34.5 V DC (=[V+] - 1.5 V DC), 140 mA max.
    - +27 V DC, 80 mA max.
    - +14.5 V DC (=[V+] - 12.5 V DC) 80 mA max.
    - + 5 V DC, 30 mA max.
  - with a 115/230 V AC powered controller:
    - +27 V DC, 80 mA max.
    - +14.5 V DC (=[V+] - 12.5 V DC) 80 mA max.
    - + 5 V DC, 30 mA max.
  - with a 115/230 V AC powered controller:
    - +27 V DC, 80 mA max.
    - +14.5 V DC (=[V+] - 12.5 V DC) 80 mA max.
    - + 5 V DC, 30 mA max.

- **Inputs DI (1 to 4)**
  - Switching threshold Von: 5...36 V DC;
  - Switching threshold Voff max.: 2 V DC;
  - Input impedance: 9.4 KΩ;
  - Galvanic insulation, protected against polarity reversals and voltage spike

- **Outputs**
  - Transistors (DO1 and DO4)
    - NPN or PNP (wiring dependent), potential free;
    - function: pulse output (by default for DO1), state (by default for DO4), configurable and parameterizable
    - 0.6...2200 Hz, 5...36 V DC, 100 mA max., line drop 2.7 V DC at 100 mA
    - duty cycle:
      - >0.45 if 0.6 < frequency < 300 Hz
      - >0.4 if 300 < frequency < 1500 Hz
      - <0.4 if 1500 < frequency < 2200 Hz
    - Galvanic insulation, protected against overvoltage, polarity reversals and short-circuits
  - Relays (DO2 and DO3)
    - 2 relays (normally open), parameterizable (by default: DO2 always configured to control the valve, parameterized of 100 % of the batch quantity and DO3 configured as alarm), 230 V AC/3 A or 40 V DC/3 A (resistive load), max. cutting power of 750 VA (resistive load)
8025
Insertion remote

Technical specifications 115/230 V AC

| Voltage supply available inside the device | Wall-mounted version: 27 V DC regulated
Max. current: 250 mA
Integrated protection: fuse 250 mA temporised
Power: 6 VA |
|--|---|

Environment

<table>
<thead>
<tr>
<th>Ambient temperature</th>
<th>-10…+60 °C (+14…+140 °F) (operation and storage)</th>
</tr>
</thead>
</table>

Standards, directives and certifications

| Protection class | Wall-mounted version: (according to EN 60529)
IP65 with device wired, cover screwed tight and cable glands tightened. |
| Panel-mounted version | Front side: IP65 installation completed and closed cabinet
Rear side: IP20, inside the closed cabinet |

Specific technical data of UL-Recognized products for US and Canada

| Relay output | 30 V AC and 42 V peak max./3 A or 60 V DC max./1 A |
| Ambient temperature | 0…+40 °C (+32…+104 °F) |
| Relative humidity | max. 80 %, without condensation |
| Intended for an inner pollution | Pollution degree 2 according to EN 61010-1 |
| Installation category | Category I according to UL 61010-1 – indoor use |

Dimensions [mm]

- **Panel-mounted version**
- **Wall-mounted version**
A complete remote 8025 batch controller (panel- or wall-mounted) for connection to Bürkert or other flow sensors consists of a remote 8025 batch controller (wall-mounted or panel-mounted) and a Bürkert flowmeter or other flow sensors (has to be ordered separately).

The following information is necessary for the selection of a complete device:

- Article no. of the desired remote 8025 batch controller (see ordering chart below)
- Article no. of the selected flowmeter or flow sensor (see corresponding data sheets)

You have to order the two components separately.

All these versions have as minimum:
- 2 transistor outputs (DO1 and DO4)
- 2 relay outputs (DO2 and DO3)
- 4 digital inputs (DI1...DI4)
- 2 volume or mass totalizers
- 2 batch totalizers

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Voltage supply</th>
<th>Sensor version</th>
<th>Electrical connection</th>
<th>Article no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch controller, panel mounted</td>
<td>12...36 V DC</td>
<td>see note</td>
<td>Terminal strip</td>
<td>419536</td>
</tr>
<tr>
<td>Batch controller, panel mounted, UL-Recognized for US and Canada</td>
<td>12...36 V DC</td>
<td>see note</td>
<td>Terminal strip</td>
<td>564415</td>
</tr>
<tr>
<td>Batch controller, wall-mounted</td>
<td>12...36 V DC</td>
<td>see note</td>
<td>3 cable glands</td>
<td>433740</td>
</tr>
<tr>
<td></td>
<td>115/230 V AC</td>
<td>see note</td>
<td>3 cable glands</td>
<td>433741</td>
</tr>
</tbody>
</table>

NOTE: See the chart about compatible and recommended interconnection possibilities with Bürkert flowmeters on page 13.

Ordering chart - accessories (has to be ordered separately)

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Article no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spare part, panel version</td>
<td></td>
</tr>
<tr>
<td>Mounting set (screws, washer, nuts, cable clips)</td>
<td>554807</td>
</tr>
<tr>
<td>Seal</td>
<td>419350</td>
</tr>
<tr>
<td>Set with 8 FLOW foils</td>
<td>553191</td>
</tr>
<tr>
<td>Spare part, wall version</td>
<td></td>
</tr>
<tr>
<td>Power supply board 115/230 V AC + mounting instruction sheet</td>
<td>555722</td>
</tr>
</tbody>
</table>
**8025 Insertion**

Interconnection possibilities with other Bürkert flowmeter

<table>
<thead>
<tr>
<th>Sensor Type</th>
<th>Remote batch controller</th>
<th>Panel-mounted</th>
<th>Wall-mounted</th>
</tr>
</thead>
<tbody>
<tr>
<td>8020 Hall version (short or long) - Frequency output with pulse signal (NPN, PNP, Open Collector)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8020 Hall “Low Power” version (short or long) - Frequency output with pulse signal (NPN, Open Collector)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8030/8070 Hall version - Frequency output with pulse signal (NPN, PNP, Open Collector)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8030/8070 Hall “Low Power” version - Frequency output with pulse signal (NPN, Open Collector)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8030 High temperature - Frequency output with pulse signal (NPN, PNP, Open Collector)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SE30 Ex</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8031 - Frequency output with pulse signal (NPN)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8041 - Frequency output with pulse signal (NPN)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8071 - Frequency output with pulse signal (NPN)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8077 - Frequency output with pulse signal (NPN)</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

X = Compatible or recommended interconnection possibilities

1) except sensor with article no. 419543

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To find your nearest Bürkert facility, click on the orange box

www.burkert.com

In case of special application conditions, please consult for advice.

Subject to alteration.

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