



Insertion magnetic inductive flowmeter

- Sensor without moving parts
- Indicates both flow rate and volume
- Simulation of all output signals
- Clean in place (CIP), FDA-compliant materials
- Version with Alloy C22 electrodes

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

Can be combined with



Type 2030 ▶
Pneumatically operated 2/2 way diaphragm valve CLASSIC with plastic body



Type 2301 ▶
Pneumatically operated 2 way Globe Control Valve



Type 8802 ▶
ELEMENT continuous control valve systems - overview



Type 8644 ▶
Remote Process Actuation Control System AirLINE

Type description

The electromagnetic flowmeter 8045 is made up of an electronic module including a backlit display, operating keys and a sensor consisting of PVDF or stainless steel material. It has been designed to measure a flow rate of neutral and slightly aggressive fluids with a conductivity of more than 20 $\mu\text{S}/\text{cm}$ in DN 06...DN 400 pipes.

It is equipped with a 4...20 mA output, a digital output (pulse output by default). Some versions are equipped with two relay outputs and one digital input. Two independent totalizers allow counting the flow rate.

This flowmeter is available either with a G 2" connection with a PVDF sensor or, a G 2" or clamp connection with a stainless steel sensor which are designed for use with Type S020 Insertion fitting.

The version with a stainless steel sensor can be used in applications with higher pressures (PN 16) and higher temperatures (110 °C). The version with Alloy C22 electrodes has been designed for applications with aggressive fluids (chemicals) and especially sea water applications.

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1. General technical data

Note:

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.

Product properties

Material

Please make sure the device materials are compatible with the fluid you are using.

Detailed information can be found in chapter [“3.1. Chemical Resistance Chart – Bürkert resistApp” on page 6.](#)

Non wetted parts

| | |
|---------------------|---|
| Housing, cover, nut | <ul style="list-style-type: none"> Version with flow sensor in PVDF: PC (glass fibre reinforced for housing) Version with flow sensor in stainless steel: back PPA (glass fibre reinforced) |
| Seal | NBR |
| Lid | <ul style="list-style-type: none"> Version with flow sensor in PVDF: PC Version with flow sensor in stainless steel: PSU |
| Seal | Silicone |
| Front panel foil | Polyester |
| Holder | Stainless steel 1.4404/316L (for flowmeter with clamp process connection, over the clamp) |
| Screws | Stainless steel |
| Cable glands | PA with neoprene seal |
| Mounting ring | Polysulphone, glass fibre reinforced |

Wetted parts

| | |
|---------------------|--|
| Seals | <ul style="list-style-type: none"> For flowmeter with G 2" process connection: <ul style="list-style-type: none"> FKM EPDM (conform to FDA) For flowmeter with clamp process connection: (to be ordered separately, detailed information can be found in chapter “10.5. Ordering chart accessories” on page 19.) <ul style="list-style-type: none"> EPDM FEP |
| Clamp | Stainless steel 1.4404/316L |
| Electrodes | <ul style="list-style-type: none"> Stainless steel 1.4404/316L Alloy C22 |
| Sensor holder | <ul style="list-style-type: none"> PVDF Stainless steel 1.4404/316L |
| Earth ring | <p>Only with version with flow sensor in PVDF:</p> <ul style="list-style-type: none"> Stainless steel 1.4404/316L Alloy C22 |
| Electrode holder | Only with version with flow sensor in stainless steel: PEEK (conform to FDA) |
| Dimensions | Detailed information can be found in chapter “4. Dimensions” on page 8. |
| Surface quality | For clamp process connection: Ra <0.8 µm |
| Measuring principle | Electromagnetic |
| Sensor element | Electrodes |
| Compatibility | <ul style="list-style-type: none"> For flowmeter with G 2" process connection: Any pipe from DN 06...DN 400 which is fitted with Bürkert S020 Insertion fitting with G 2" sensor connection. For flowmeter with clamp process connection: Any pipe from DN 32...DN 100 which is fitted with Bürkert S020 Insertion fitting with clamp sensor connection. <p>For the selection of the nominal diameter of the Insertion fittings, see data sheet Type S020 ▶.</p> |
| Pipe diameter | <ul style="list-style-type: none"> For flowmeter with G 2" process connection: DN 06...DN 400 For flowmeter with clamp process connection: DN 32...DN 100 |
| Measuring range | <ul style="list-style-type: none"> Flow rate: 0.4...75000 l/min Flow velocity: 0.2...10 m/s |

Performance data

| | |
|-----------------------|---|
| Measurement deviation | <ul style="list-style-type: none"> Teach-In: ±0.5 % of the measured value¹⁾ at Teach-In flow rate value Standard K-factor: ±3.5 % of the measured value¹⁾ |
| Linearity | ±0.5 % of full scale ¹⁾ |

| | |
|--|---|
| Repeatability | $\pm 0.25\%$ of the measured value ¹⁾ |
| 4...20 mA output uncertainty | $\pm 1\%$ of range |
| Electrical data | |
| Operating voltage | 18...36 V DC $\pm 0.5\%$, filtered and regulated (3 wires) |
| Power source (not supplied) | Limited power source according to UL/EN 60950-1 standards or limited energy circuit according to UL/EN 61010-1 §9.4 |
| DC reverse polarity protection | Yes |
| Current consumption | ≤ 300 mA (at 18 V DC) |
| Input (DI1) | <ul style="list-style-type: none"> Supply voltage: 18...36 V DC Input impedance: 15 kΩ min. pulse duration: 200 ms Galvanic insulation, protected against polarity reversals of DC and voltage spikes |
| Outputs | <ul style="list-style-type: none"> Current (analogue output AO1): <ul style="list-style-type: none"> 4...20 mA Sink or source (by wiring) 22 mA to indicate a fault Max. loop impedance: 1300 Ω at 36 V DC; 1000 Ω at 30 V DC; 700 Ω at 24 V DC; 450 Ω at 18 V DC Transistor (digital output DO1): <ul style="list-style-type: none"> Type: NPN or PNP (wiring dependent), open collector Function: pulse output (by default), user configurable 0...250 Hz, 5...36 V DC, 100 mA max. Duty cycle (pulse duration/period) if frequency > 2 Hz: $\frac{1}{2}$ Min. pulse duration if frequency < 2 Hz: 250 ms Galvanic insulation, protected against polarity reversals of DC and short-circuits Relay (digital outputs DO2 and DO3): <ul style="list-style-type: none"> 2 normally open, freely adjustable (hysteresis by default) Non UL recognized device: 250 V AC/3 A or 40 V DC/2 A (resistive load) UL recognized device: 30 V AC/42 V_{peak}/2 A or 60 V DC/1 A Max. cutting power of 750 VA (resistive load) Life span of min. 100000 cycles |
| Voltage supply cable | <ul style="list-style-type: none"> Shielded External diameter (cable): 6...12 mm (1 cable per cable gland) or 4...5 mm when using a multi-way seal (2 cables per cable gland) Cross section of wires: 0.5...1.5 mm² |
| Medium data | |
| Fluid temperature | <ul style="list-style-type: none"> Version with flow sensor in PVDF: 0...+80 °C (+32...+176 °F) (depends on fitting) Version with flow sensor in stainless steel: -15...+110 °C (+5...+232 °F) (depends on fitting) <p>Detailed information can be found in chapter "5.1. Pressure temperature diagram" on page 11 and in the data sheet of the fitting, see data sheet Type S020 ►.</p> |
| Fluid pressure | <ul style="list-style-type: none"> Version with flow sensor in PVDF: max. PN 10 (145.1 PSI) Version with flow sensor in stainless steel: <ul style="list-style-type: none"> Max. PN 10 (145.1 PSI) (with plastic fitting) Max. PN 16 (232.16 PSI) (with metal fitting) <p>Detailed information can be found in chapter "5.1. Pressure temperature diagram" on page 11 and in the data sheet of the fitting, see data sheet Type S020 ►.</p> |
| Conductivity | Min. 20 μ S/cm |
| Viscosity | <1000 mPa.s |
| Process/Port connection & communication | |
| Process connection | <ul style="list-style-type: none"> G 2" for use with Type S020 Insertion fitting Clamp for use with Type S020 Insertion fitting or any pipe equipped with our clamp sensor connection. <p>See data sheet Type S020 ► for more information.</p> |
| Electrical connection | 2 cable glands M20 x 1.5 |

Approvals and certificates

Standards

Degree of protection^{2.)} according to IEC/EN 60529 IP65 under the following conditions: device wired, cover screwed tight and cable glands mounted and tightened or with blind plug if not used

Directives

CE directives 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).

Pressure Equipment Directive Complying with Article 4, Paragraph 1 of 2014/68/EU directive
Detailed information on the pressure equipment directive can be found in chapter **"2.2. Pressure Equipment Directive"** on page 6.

Certificate

- FDA declaration of conformity (for stainless steel or PVDF sensor with FKM or EPDM seal)
- ECR1935/2004 declaration (only for stainless steel sensor with EPDM seal)

Certification UL-Recognized for US and Canada

Environment and installation

Ambient temperature

- Operation: -10...+60 °C (+14...+140 °F)
- Storage: -20...+60 °C (-4...+140 °F)

Relative air humidity ≤ 80 %, without condensation

Height above sea level Max. 2000 m

Operating conditions Continuous

Equipment mobility Fixed

Application range Indoor and outdoor (protect the device against electromagnetic interference, ultraviolet rays and, when installed outdoors, against the effects of climatic conditions)

Installation category Category I according to UL/EN 61010-1

Pollution degree Degree 2 according to UL/EN 61010-1

1.) Under reference conditions i.e. measuring fluid = water, ambient and water temperature = 20 °C (68 °F), while maintaining the minimum inlet and outlet distances and the appropriate internal diameters of the pipes.

2.) Not evaluated by UL

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2. Approvals

2.1. Certification UL

| Certificate | Description |
|-------------|---|
| | <p>UL-Recognized for USA and Canada Products are UL-certified products and comply also with the following standards:</p> <ul style="list-style-type: none"> • UL 61010-1 • CAN/CSA-C22.2 No.61010-1 |

2.2. Pressure Equipment Directive

The device conforms to Article 4, Paragraph 1 of the Pressure Equipment Directive 2014/68/EU under the following conditions:

Device used on a pipe

Note:

- The data in the table is independent of the chemical compatibility of the material and the fluid.
- PS = maximum admissible pressure, DN = nominal diameter of the pipe

| Type of fluid | Conditions |
|--|-------------------------------------|
| Fluid group 1, Article 4, Paragraph 1.c.i | DN ≤ 25 |
| Fluid group 2, Article 4, Paragraph 1.c.i | DN ≤ 32 or PS*DN ≤ 1000 |
| Fluid group 1, Article 4, Paragraph 1.c.ii | DN ≤ 25 or PS*DN ≤ 2000 |
| Fluid group 2, Article 4, Paragraph 1.c.ii | DN ≤ 200 or PS ≤ 10 or PS*DN ≤ 5000 |

3. Materials

3.1. Chemical Resistance Chart – Bürkert resistApp

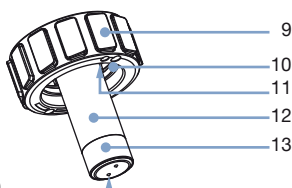
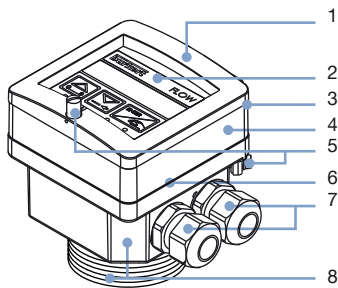
Bürkert resistApp – Chemical Resistance Chart

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.

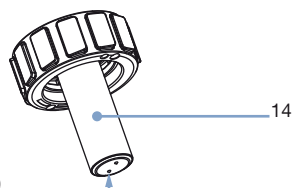
[Start Chemical Resistance Check](#)

3.2. Material specifications

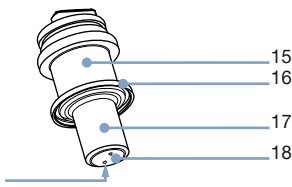
Flowmeter with



- G 2" process connection and sensor holder in stainless steel or



- Clamp process connection and with sensor holder in stainless steel



| No. | Element | Material |
|-----|----------------------|--|
| 1 | Lid | <ul style="list-style-type: none"> PC for version with flow sensor in PVDF PSU for version with flow sensor in stainless steel |
| 2 | Front panel foil | Polyester |
| 3 | Seal | Silicone |
| 4 | Cover | <ul style="list-style-type: none"> PC for version with flow sensor in PVDF Black PPA, glass fibre reinforced for version with flow sensor in stainless steel |
| 5 | Screws | Stainless steel |
| 6 | Seal | NBR |
| 7 | Cable glands | PA with neoprene seal |
| 8 | Housing | <ul style="list-style-type: none"> PC, glass fibre reinforced for version with flow sensor in PVDF Black PPA, glass fibre reinforced for version with flow sensor in stainless steel |
| 9 | Nut | <ul style="list-style-type: none"> PC for version with flow sensor in PVDF PPA glass fibre reinforced for version with flow sensor in stainless steel |
| 10 | Mounting ring (open) | Polysulphone, glass fibre reinforced |
| 11 | Seal | <ul style="list-style-type: none"> FKM (approved FDA) EPDM included, but not mounted (conform to FDA) |
| 12 | Sensor holder | PVDF |
| 13 | Earth ring | <ul style="list-style-type: none"> Stainless steel 1.4404/316L or Alloy C22 |
| 14 | Sensor holder | Stainless steel 1.4404/316L |
| 15 | Holder | Stainless steel 1.4404/316L |
| 16 | Clamp | Stainless steel 1.4404/316L |
| 17 | Sensor holder | Stainless steel 1.4404/316L |
| 18 | Electrode holder | PEEK (conform to FDA) |
| 19 | Electrodes | <ul style="list-style-type: none"> Stainless steel 1.4404/316L or Alloy C22 |

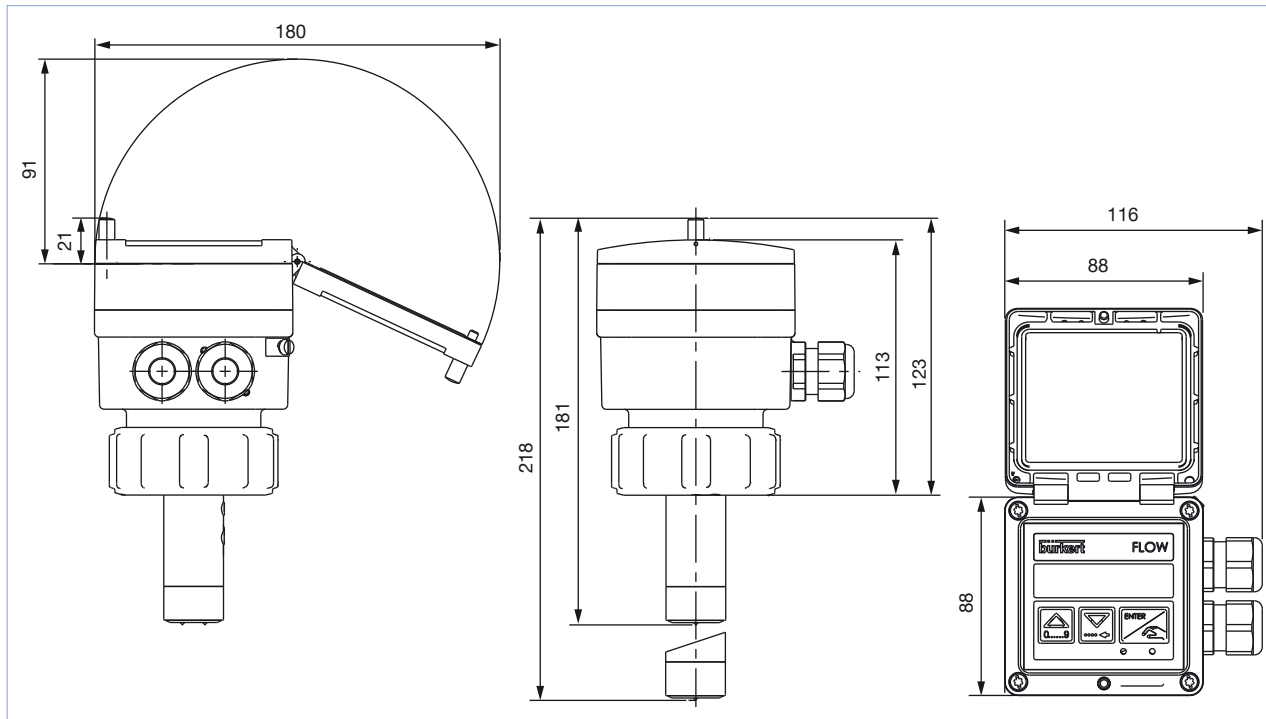
4. Dimensions

4.1. Insertion flowmeter with G 2" process connection

Note:

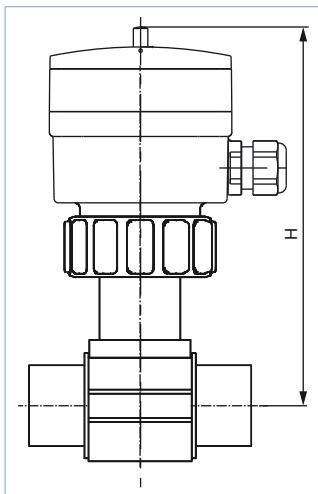
- Dimensions in mm
- The length of the sensor finger depends on the fitting used.

See [data sheet Type S020](#) ▶ for more information or chapter ["9.2. Combination of the flowmeter with available S020 Insertion fittings DN"](#) on page 16.



4.2. Insertion flowmeter with G 2" process connection installed in a S020 fitting

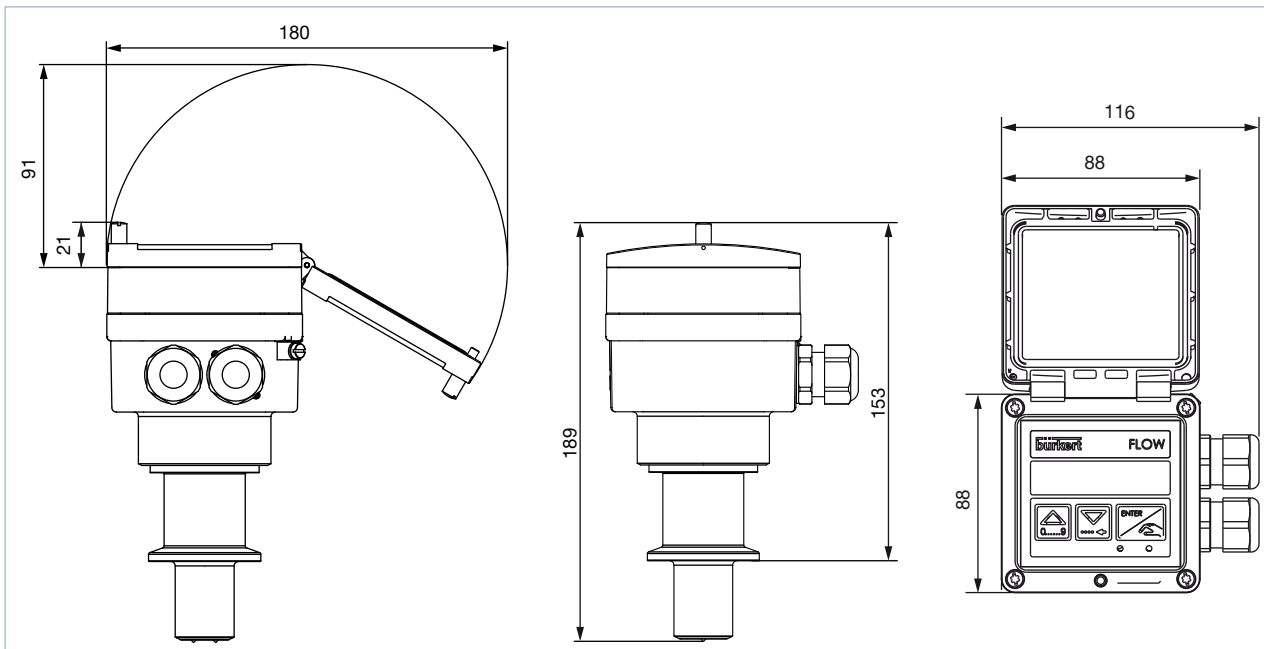
Note:
Dimensions in mm



| DN | H | | | |
|-----|-----------|--------|----------------|--------------|
| | T-Fitting | Saddle | Plastic spigot | Metal spigot |
| 06 | 182 | - | - | - |
| 08 | 182 | - | - | - |
| 15 | 187 | - | - | - |
| 20 | 185 | - | - | - |
| 25 | 185 | - | - | - |
| 32 | 188 | - | - | - |
| 40 | 192 | - | - | 188 |
| 50 | 198 | 223 | - | 193 |
| 65 | 198 | 222 | 206 | 199 |
| 80 | - | 226 | 212 | 204 |
| 100 | - | 231 | 219 | 214 |
| 110 | - | 227 | - | - |
| 125 | - | 234 | 254 | 225 |
| 150 | - | 244 | 261 | 236 |
| 180 | - | 268 | - | - |
| 200 | - | 280 | 282 | 257 |
| 250 | - | - | 300 | 317 |
| 300 | - | - | 312 | 336 |
| 350 | - | - | 325 | 348 |
| 400 | - | - | 340 | - |

4.3. Insertion flowmeter with clamp process connection

Note:
Dimensions in mm

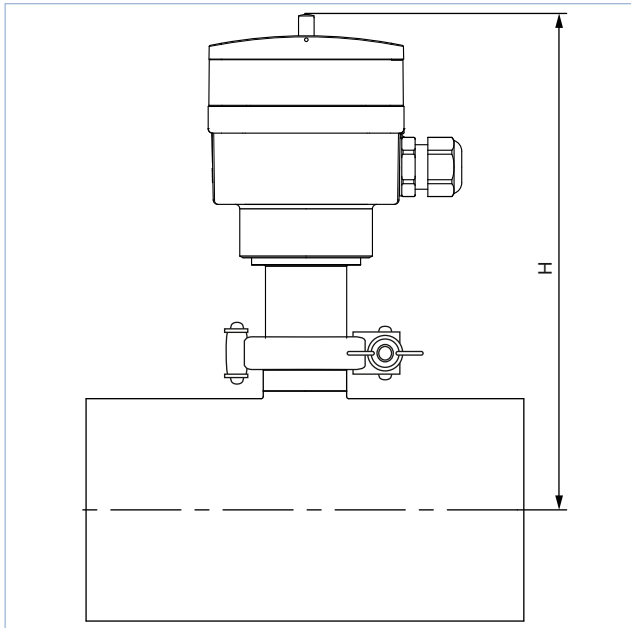


DTS 1000011093 EN Version: AG Status: RL (released | freigegeben | valide) printed: 16.09.2021

4.4. Insertion flowmeter with clamp process connection installed in a S020 fitting

Note:

Dimensions in mm



| DN | H |
|-----|-----------|
| | T-Fitting |
| 32 | 200 |
| 40 | 205 |
| 50 | 210 |
| 65 | 218 |
| 80 | 224 |
| 100 | 230 |

5. Performance specifications

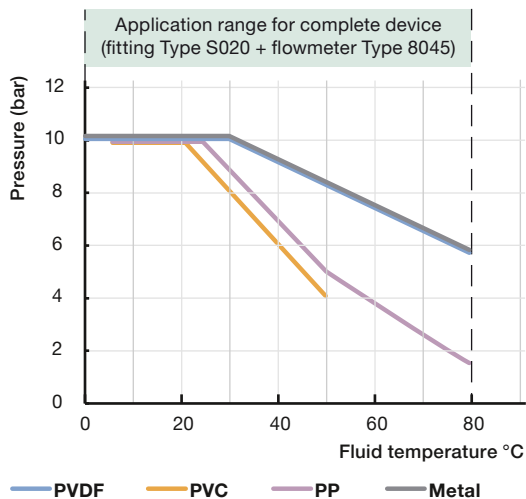
5.1. Pressure temperature diagram

Insertion flowmeter with a PVDF sensor

Note:

Please be aware of the fluid pressure/temperature dependence according to the respective fitting + flowmeter material as shown in the diagrams.

See [data sheet Type S020](#) ▶.

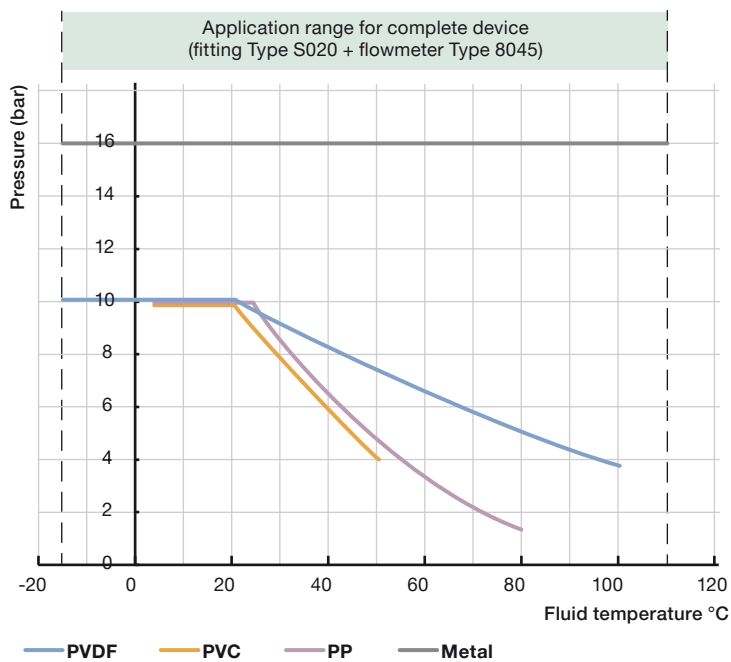


Insertion flowmeter with a stainless steel sensor

Note:

Please be aware of the fluid pressure/temperature dependence according to the respective fitting + flowmeter material as shown in the diagrams.

See [data sheet Type S020](#) ▶.



6. Product installation

6.1. Installation notes

Note:

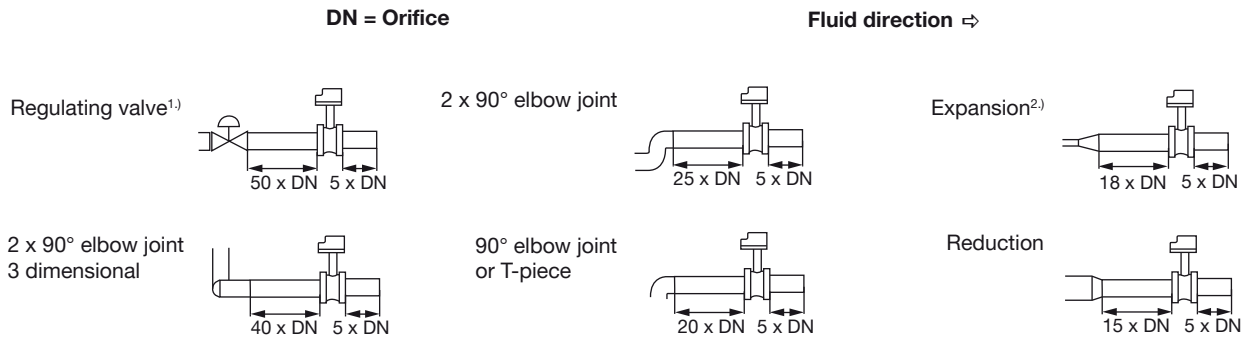
The flowmeter is not designed for gas and steam flow measurement.

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 specifies 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 specified minimum inlet and outlet distances.

Make sure that the measuring conditions at the point of measurement are calm and problem-free.

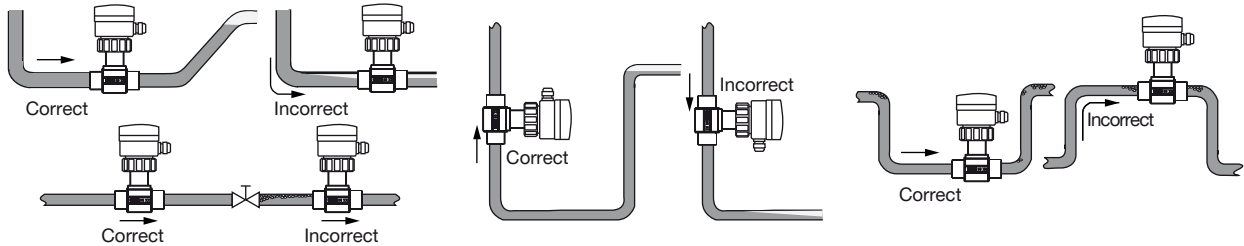


1.) If the valve cannot be mounted after the measuring device, the minimal distances have to be respected.

2.) If an expansion cannot be avoided, the minimal distances have to be respected.
Please note minimum flow velocity

The flowmeter can be installed into either horizontal or vertical pipes.

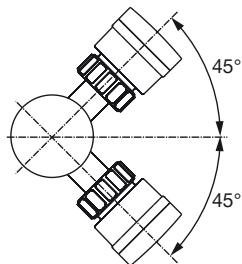
Important criteria for this are; ensure that the measurement pipe is fully filled and that the measurement pipe is free of bubbles.



Pressure and temperature ratings must be respected according to the selected fitting material. The suitable pipe size is selected using the diagram for selecting the nominal diameter of the fitting, see **data sheet Type S020** ▶ for more information.

6.2. Mounting options

It is advisable to mount the flowmeter at a 45° angle to the horizontal centre of the pipe to avoid having deposits on the electrodes and false measurements due to air bubbles



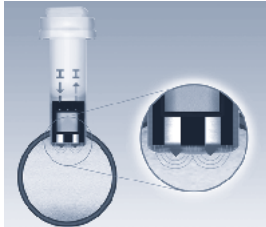
7. Product operation

7.1. Measuring principle

The E-shaped magnetic system inside the sensor induces a magnetic field into the fluid, which is perpendicular to the direction of flow. Two electrodes are in galvanic contact with the liquid.

Based on the Faraday law a voltage can be measured between these electrodes once a liquid (min. conductivity of 20 $\mu\text{S}/\text{cm}$) flows along the pipe. This voltage is proportional to the flow velocity.

Using the K-factor for the individual pipe diameter the speed of flow is converted into volume per time.

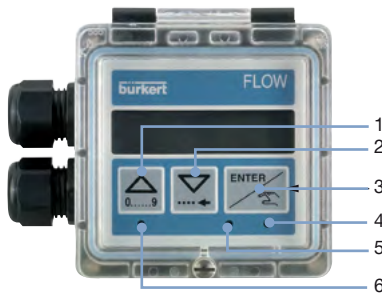


7.2. Functional overview

Display and operating keys

The display is used to:

- Read the value of certain parameters e.g. the measured flow rate, the main totalizer
- Set parameters of the device by means of 3 keys
- Read the configuration of the device
- Get notification of some events.

| Display and operating keys | No. | Description |
|---|-----|---|
|  | 1 | "Back" key: <ul style="list-style-type: none"> • To change the value (0...9) of the selected digit • To go back to the previous function |
| | 2 | "Next" key: <ul style="list-style-type: none"> • To select the digit at the left • To go to the next function • To read messages |
| | 3 | "Confirm" key: <ul style="list-style-type: none"> • To confirm the function displayed • To confirm the parameters set |
| | 4 | Status LED of relay DO3 (LED ON = contact closed) |
| | 5 | Status LED of relay DO2 (LED ON = contact closed) |
| | 6 | Status of device <ul style="list-style-type: none"> • Green: the device operates correctly. • Orange: a warning messages is generated in the information menu. • Red: A fault message is generated and a 22 mA current is sent on the current output if activated. • Blinking, whatever the colour: <ul style="list-style-type: none"> – The DI1 digital input is active or – A check for the correct behaviour of the outputs is running or – A flow zero point calibration procedure is running or – The daily totalizer is kept at zero |

The device can be calibrated by means of the K-factor (conversion coefficient) of the fitting used, or via the Teach-In function. User adjustments, such as engineering units, output and filter are carried out on site.

Operating levels

The device has 2 operating levels:

- The process level
- The configuration level, which comprises the parameters, the test and the information menus

| Operating level | Functions |
|----------------------------------|---|
| Process | <ul style="list-style-type: none"> • Indication of <ul style="list-style-type: none"> – The value of the measured flow – The value of the 4...20 mA output – The value of the main totalizer – The value of the daily totalizer • Reset the daily totalizer • Access to the Parameters, Test and Information menus of the Configuration level |
| Configuration - parameters menu | To make the settings needed for operation: <ul style="list-style-type: none"> • Language • Engineering units (International measuring units) • K-factor/Teach-In function • 4...20-mA-current output (AO1) • Detection of flow direction possible • Transistor output (DO1) • 2 relays (DO2 and DO3 - if equipped) • ON/OFF digital input (DI1 - if equipped) • Filter (damping) • Reset both totalizers • Electric network frequency • Low flow "Cut Off" • Brightness of the display (backlight) |
| Configuration - test menu | <ul style="list-style-type: none"> • To adjust the Offset and Span of the 4...20 mA current output • To calibrate the flow zero point of the device • To check the correct operating of the outputs • To set the coefficient Kw of the flow sensor to adjust the device accuracy • To set the flow rate range outside which a warning message is generated |
| Configuration - Information menu | To read the fault and warning messages generated |

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8. Product design and assembly

8.1. Product assembly

Note:

- The 8045 flowmeter can easily be installed into any Bürkert Insertion fitting system (S020) by just fixing the main nut.
- The S020 Insertion fitting ensures simple installation into pipes from DN 06...DN 400.

See **data sheet Type S020** ▶ for more information.

The device is equipped with a PVDF or stainless steel measurement sensor which comprises two electrodes and a magnetic system and is available in long or short version (dependent on the size of the used fitting). The sensor holder is plugged-in to the housing, which contains containing the electronic module.

The connection of the device to the process is made depending on the version, either by a G 2" nut or a clamp.

The electrical connection is provided via two cable glands on a 6 pin terminal block.

Compact flowmeter with a G 2" process connection



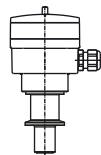
Insertion fitting with a G 2" sensor connection Type S020



Complete device with a G 2" process connection for flow measurement Type 8045

Fitting in stainless steel with a G 2" sensor connection Type S020 (only example)

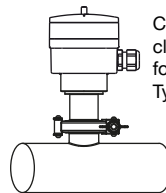
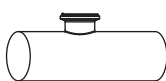
Compact flowmeter with a clamp process connection



Clamp collar and seal (accessories, to be ordered separately)



Insertion fitting with a clamp sensor connection Type S020



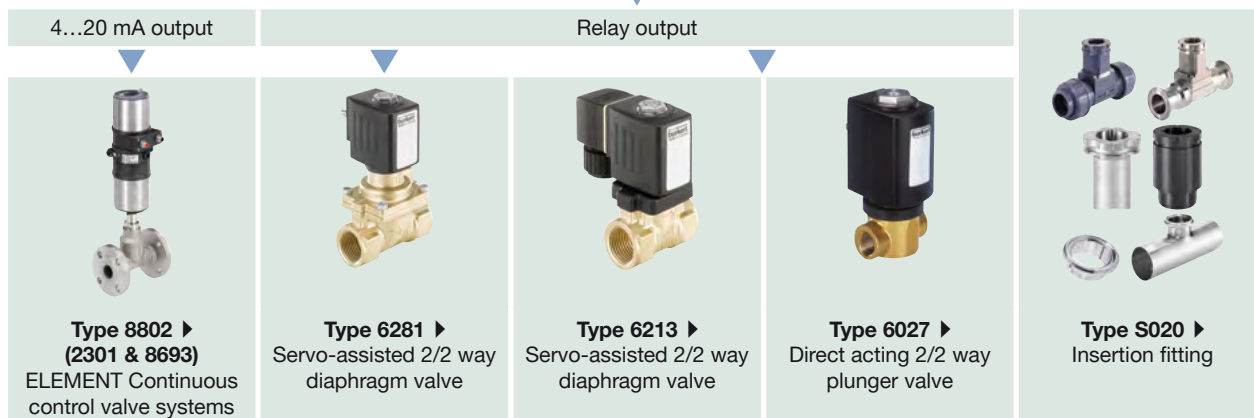
Complete device with a clamp process connection for flow measurement Type 8045

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9. Networking and combination with other Bürkert products

9.1. Networking and combination of the flowmeter with other Bürkert products

Example:




9.2. Combination of the flowmeter with available S020 Insertion fittings DN

| Fitting with G 2" process connection | | DN06 | DN08 | DN32 | DN50 | DN65 | DN100 | DN200 | DN350 | DN400 |
|---------------------------------------|-----------------|------|------|--------------|-------------|--------------|-------------|-------------|-------|-------|
| Available S020 fittings DN | T-fitting | 1.) | | short sensor | | | | | | |
| | Welding socket | | | | | short sensor | | long sensor | | |
| | Fusion spigot | | | | | short sensor | | long sensor | | |
| | Screw-on spigot | | | | | | long sensor | | | |
| | Saddle | | | | long sensor | | | | | |
| Fitting with clamp process connection | | | | | | | | | | |
| T-fitting or welding socket | | | | | | | | | | |

1.) DN06 and DN08: S020 in stainless steel only and 8045 with stainless steel sensor recommended

10. Ordering information

10.1. Bürkert eShop – Easy ordering and quick delivery



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10.2. Recommendation regarding product selection

Insertion flowmeter with G 2" process connection

A complete 8045 flowmeter consists of a 8045 flowmeter with G 2" process connection and a Bürkert S020 Insertion fitting with G 2" sensor connection .

See [data sheet Type S020](#) ▶ for more information.

Two different components must be ordered in order to select a complete device. The following information is required:

- **Article no.** of the desired compact flowmeter with G 2" process connection Type 8045 (see chapter "[Insertion flowmeter with G 2" process connection](#)" on page 18)
- **Article no.** of the selected S020 Insertion fitting with G 2" sensor connection (see [data sheet Type S020](#) ▶)

Insertion flowmeter with clamp process connection


A complete 8045 flowmeter consists of a 8045 flowmeter with clamp process connection and a Bürkert S020 Insertion fitting with clamp sensor connection .

See [data sheet Type S020](#) ▶ for more information.

Four different components must be ordered in order to select a complete device. The following information is required:

- **Article no.** of the desired flowmeter with clamp process connection Type 8045 (see chapter "[Insertion flowmeter with clamp process connection](#)" on page 18)
- **Article no.** of the selected S020 Insertion fitting with clamp sensor connection (see [data sheet Type S020](#) ▶)
- **Article no.** of the selected fitting/flowmeter seal, in EPDM or FEP (see chapter "[10.5. Ordering chart accessories](#)" on page 19)
- **Article no.** of the clamp collar (see chapter "[10.5. Ordering chart accessories](#)" on page 19)

10.3. Bürkert product filter



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10.4. Ordering chart

Insertion flowmeter with G 2" process connection

Note:

All these following versions have

- A FKM process seal (but one EPDM seal is contained in the kit 551775 which is supplied with each flowmeter.)
- An 18...36 V DC operating voltage
- As minimum
 - A 4...20 mA current output (AO1) and
 - A digital output (DO1)

| Digital input | Relay output | Materials | | Sensor version | Certificates | | UL certification | Electrical connection | Article no. | | | |
|---------------|--------------|-----------|--|----------------|---------------------------------------|----------------------------|------------------|--------------------------|---------------|---------------|---------------|--------|
| | | Housing | Sensor / Earth ring / Electrode | | FDA | ECR1935/2004 ¹⁾ | | | | | | |
| - | - | PC | PVDF / Stainless steel / Stainless steel | Short | Yes | - | - | 2 cable glands M20 x 1.5 | 426498 | | | |
| | | | | Long | | | UL-Recognized | | 570470 | | | |
| | | | PVDF / Alloy C22 | Short | - | | - | | 426499 | | | |
| | | | | Long | - | | UL-Recognized | | 570471 | | | |
| | | 1 (DI1) | 2 (DO2, DO3) | PPA | Stainless steel / - / Stainless steel | | Short | | Yes | - | - | 558675 |
| | | | | | | | Long | | | UL-Recognized | 570484 | |
| | | | | | | | Short | | | - | UL-Recognized | 570485 |
| | | | | | | | Long | | | UL-Recognized | 570485 | |
| - | - | PPA | Stainless steel / - / Stainless steel | Short | Yes | - | - | 426506 | | | | |
| | | | | Long | | UL-Recognized | 570472 | | | | | |
| | | | | Short | | - | UL-Recognized | 426507 | | | | |
| | | | | Long | | UL-Recognized | 570473 | | | | | |
| | | 1 (DI1) | 2 (DO2, DO3) | PPA | Stainless steel / - / Stainless steel | Short | Yes | - | - | 449670 | | |
| | | | | | | Long | | UL-Recognized | 570478 | | | |
| | | | | | | Short | | - | UL-Recognized | 449672 | | |
| | | | | | | Long | | UL-Recognized | 570480 | | | |
| 1 (DI1) | 2 (DO2, DO3) | PPA | Stainless steel / - / Stainless steel | Short | Yes | - | - | 449671 | | | | |
| | | | | Long | | UL-Recognized | 570479 | | | | | |
| | | | | Short | | - | UL-Recognized | 449673 | | | | |
| | | | | Long | | UL-Recognized | 570481 | | | | | |

1.) Only if the FKM seal mounted as standard at factory is replaced with the EPDM seal included in the delivery.

Insertion flowmeter with clamp process connection

Note:

All these following versions

- Have as minimum
 - a 18...36 V DC operating voltage
 - a 4...20 mA current output (AO1) and
 - a digital output (DO1)
- Are supplied with one kit 565384














| Digital input | Relay output | Materials | | | Certificates | | Electrical connection | Article no. |
|---------------|--------------|-----------|-----------------------------------|--|--------------|-----------------------------|--------------------------|-------------|
| | | Housing | Sensor /electrode | Fitting/flowmeter seals ^{1.)} | FDA | ECR1935/2004 ^{2.)} | | |
| No | No | PPA | Stainless steel / stainless steel | EPDM or FEP | Yes | Yes | 2 cable glands M20 x 1.5 | 564797 |
| 1 (DI1) | 2 (DO2, DO3) | | | | | | | 564798 |

1.) Has to be ordered separately.

2.) Only if mounted with EPDM seal.

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10.5. Ordering chart accessories

| Description | Article no. |
|---|--|
| For flowmeter with G 2" or clamp process connection | |
| Set with 2 cable glands M20 × 1.5 + 2 neoprene flat seals for cable gland or plug + 2 screw plugs M20 × 1.5 + 2 multi-way seals 2 × 6 mm | 449755  |
| Set with 2 reductions M20 × 1.5 /NPT ½" + 2 neoprene flat seals for cable gland or plug + 2 screw plugs M20 × 1.5 | 551782  |
| 3 points calibration certificate (device combined with a S020 fitting, only for DN ≤ 200) | 550676  |
| FDA declaration of conformity (for stainless steel or PVDF sensor with FKM or EPDM seal) | 803724  |
| For flowmeter with G 2" process connection | |
| Set with 1 stopper for unused cable gland M20 × 1.5 + 1 multiway seal 2 × 6 mm for cable gland + 1 green FKM seal for the sensor + 1 mounting instruction sheet | 558102  |
| Mounting ring (open) for S020 fitting | 619205  |
| PC nut for S020 fitting | 619204  |
| PPA nut for S020 fitting | 440229  |
| Set with 1 green FKM and 1 black EPDM seal | 552111  |
| For flowmeter with clamp process connection | |
| Set with 1 stopper for unused cable gland M20 × 1.5 + 1 multiway seal 2 × 6 mm for cable gland | 565384  |
| 1 EPDM fitting/flowmeter seal | 730837  |
| 1 FEP fitting/flowmeter seal | 730839  |
| Clamp collar | 731164  |

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