

8031



## Flow sensor for continuous low-flow measurement and batch control

- Cost attractive solution for low-flow rates and solid-free liquids
- Wetted parts made of ECTFE, Saphir, coated stainless steel, FKM or EPDM for use in aggressive liquids
- 3-wire system with paddle-wheel and Hall sensor up to 80 °C, 6 bar
- Frequency output proportional to the flow rate, PLC-compatible

Type 8031 can be combined with...



**Type 8025T**

Remote Universal  
flow transmitter



**Type 8025B**

Remote batch  
controller



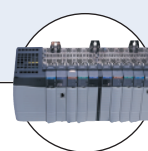
**Type 8611**

PI controller



**Type 8630**

TopControl



**PLC**

The compact low-flow sensor Type 8031 with paddle-wheel and Hall sensor is specially designed for use in aggressive and solid-free liquids.

The particular cost attractive measuring principle is based on a local flow velocity measurement. The sensor produces a flow proportional frequency signal which can easily be transmitted and processed.

We recommend here particularly the connection to the Bürkert Universal transmitter Type 8025 (see separate data sheet).

### General data

#### Materials

Housing, Paddle-wheel	POM or ECTFE
Axis	Coated stainless steel or sapphire
Bearings	POM or Rubin
Magnets	ECTFE encapsuled or blank
Seal	FKM, EPDM or FFKM

#### Electrical connections

Cable, 1 m length (3 x 0.14 LiYY)

#### Process connection

G1/4" or Tube spigot 8/6 or 9 mm

#### Measuring range

10 to 100 l/h (2.6 to 27 gph)

20 to 250 l/h (5.3 to 66 gph)

#### K-factor

10200 pulse/litre (range 10 to 100 l/h)

3400 pulse/litre (range 20 to 250 l/h)

#### Fluid temperature

0 to 80°C

#### Fluid pressure max.

10 bar at 20°C

#### Accuracy

± 2% o. FS\*

#### Repeatability

0.8% o. FS\*

#### Viscosity

1 to 10 cSt.

### Electrical data

#### Power supply (V+)

5... 24 V DC

#### Current consumption

max. 11 mA at 24 V DC

#### Output

push-pull (complementary output) between V+ (white wire) and signal (green wire) or between GND (brown wire) and signal (green wire)

#### Frequency

0 to 300 Hz

### Environment

#### Ambient temperature

0 up to +80°C

#### Storage temperature

-10 up to +80°C

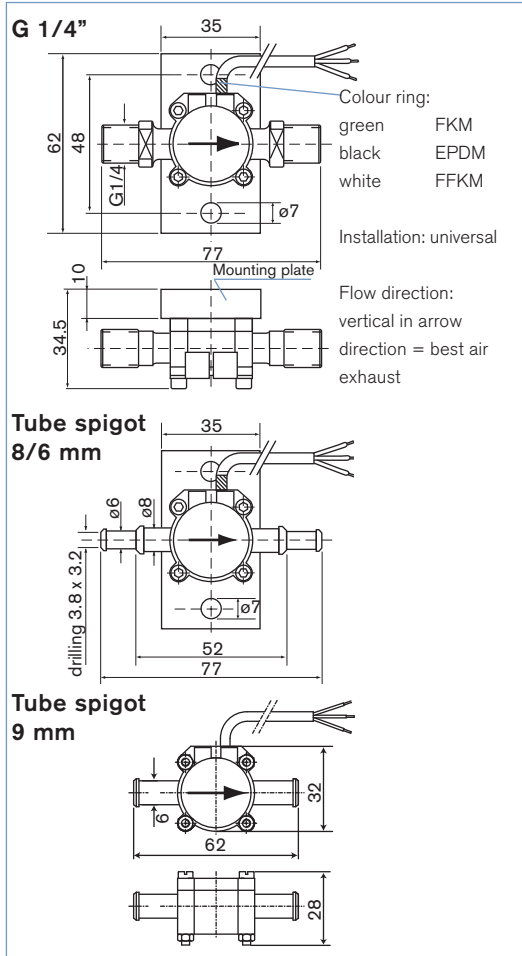
### Standards and approvals

#### Protection class

IP65

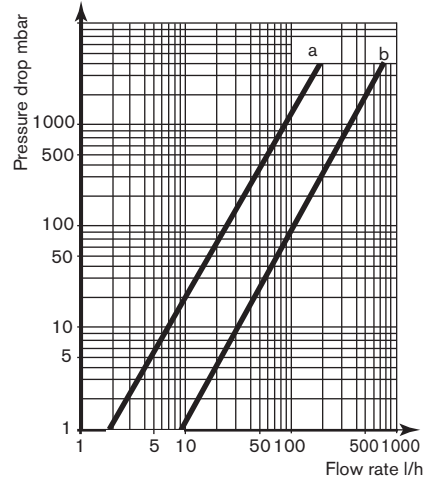
\* o.FS = of full scale

## Dimensions

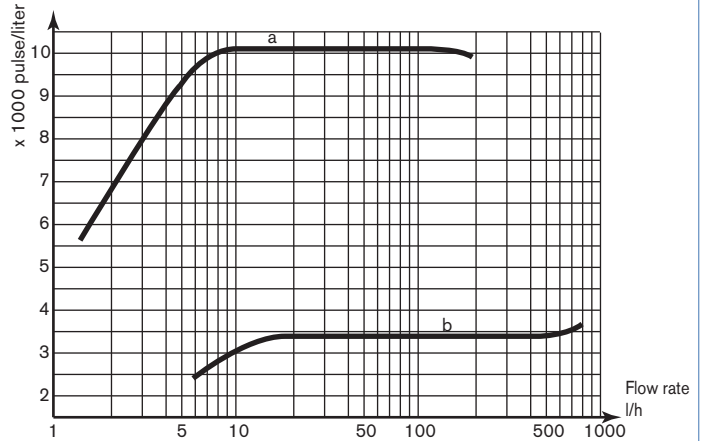


## Pressure drop and K-factor curve

### Pressure drop



### K-factor curve



## Ordering chart for sensor Type 8031

Version	Output	Measuring range	Process connection	Housing, Paddle-wheel material	Axis material	Gasket	Item no.
Without mounting plate	Frequency push-pull	10 to 100 l/h	Tube spigot 8/6 mm	POM	Coated stainless steel	FKM	783 717
			G 1/4"	POM	Coated stainless steel	FKM	783 719
		20 to 250 l/h	Tube spigot 9 mm	POM	Coated stainless steel	FKM	783 718
			G 1/4"	POM	Coated stainless steel	FKM	783 720
With mounting plate	Frequency push-pull	10 to 100 l/h	G 1/4"	ECTFE	Sapphire	FKM	783 721
			G 1/4"	ECTFE	Sapphire	EPDM	783 722
			G 1/4"	ECTFE	Sapphire	FFKM	783 723
			G 1/4"	ECTFE	Sapphire	FKM	783 724
			G 1/4"	ECTFE	Sapphire	EPDM	783 725
			G 1/4"	ECTFE	Sapphire	FFKM	783 726
		20 to 250 l/h	G 1/4"	ECTFE	Coated stainless steel	FKM	437 982
			G 1/4"	ECTFE	Coated stainless steel	EPDM	438 531
			G 1/4"	ECTFE	Coated stainless steel	FKM	438 532
			G 1/4"	ECTFE	Coated stainless steel	EPDM	437 524

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[www.burkert.com](http://www.burkert.com)

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

We reserve the right to make technical changes without notice.  
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