



## 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



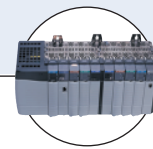
**Type 8611**

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

<b>Electrical connections</b>	Cable, 1 m length (3 x 0.14 LiYY)
-------------------------------	-----------------------------------

<b>Process connection</b>	G1/4" or Tube spigot 8/6 or 9 mm
---------------------------	----------------------------------

<b>Measuring range</b>	10 to 100 l/h (2.6 to 27 gph) 20 to 250 l/h (5.3 to 66 gph)
------------------------	--

<b>K-factor</b>	10200 pulse/litre (range 10 to 100 l/h) 3400 pulse/litre (range 20 to 250 l/h)
-----------------	---

<b>Fluid temperature</b>	0 to 80°C
--------------------------	-----------

<b>Fluid pressure max.</b>	10 bar at 20°C
----------------------------	----------------

<b>Accuracy</b>	± 2% o. FS*
-----------------	-------------

<b>Repeatability</b>	0.8% o. FS*
----------------------	-------------

<b>Viscosity</b>	1 to 10 cSt.
------------------	--------------

### Electrical data

<b>Power supply (V+)</b>	5... 24 V DC
--------------------------	--------------

<b>Current consumption</b>	max. 11 mA at 24 V DC
----------------------------	-----------------------

<b>Output</b>	push-pull (complementary output) between V+ (white wire) and signal (green wire) or between GND (brown wire) and signal (green wire)
---------------	--

<b>Frequency</b>	0 to 300 Hz
------------------	-------------

### Environment

<b>Ambient temperature</b>	0 up to +80°C
----------------------------	---------------

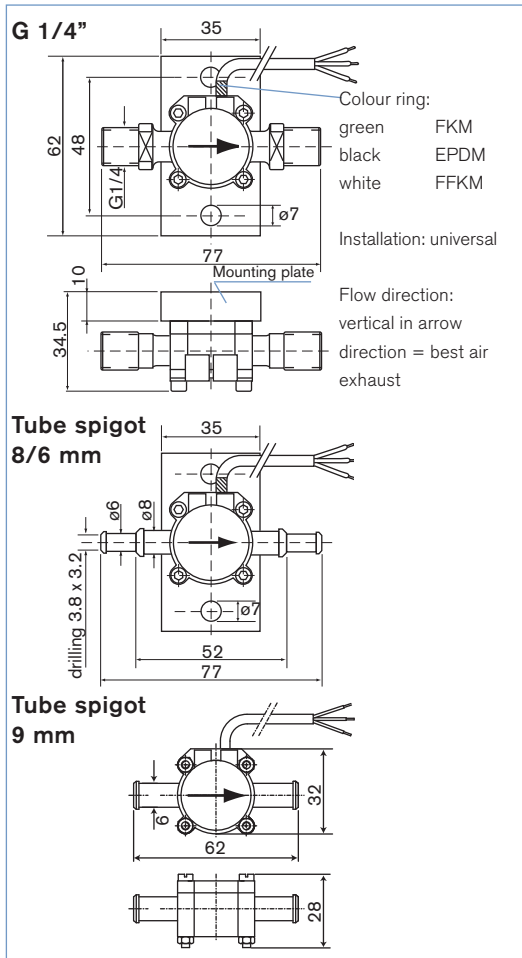
<b>Storage temperature</b>	-10 up to +80°C
----------------------------	-----------------

### Standards and approvals

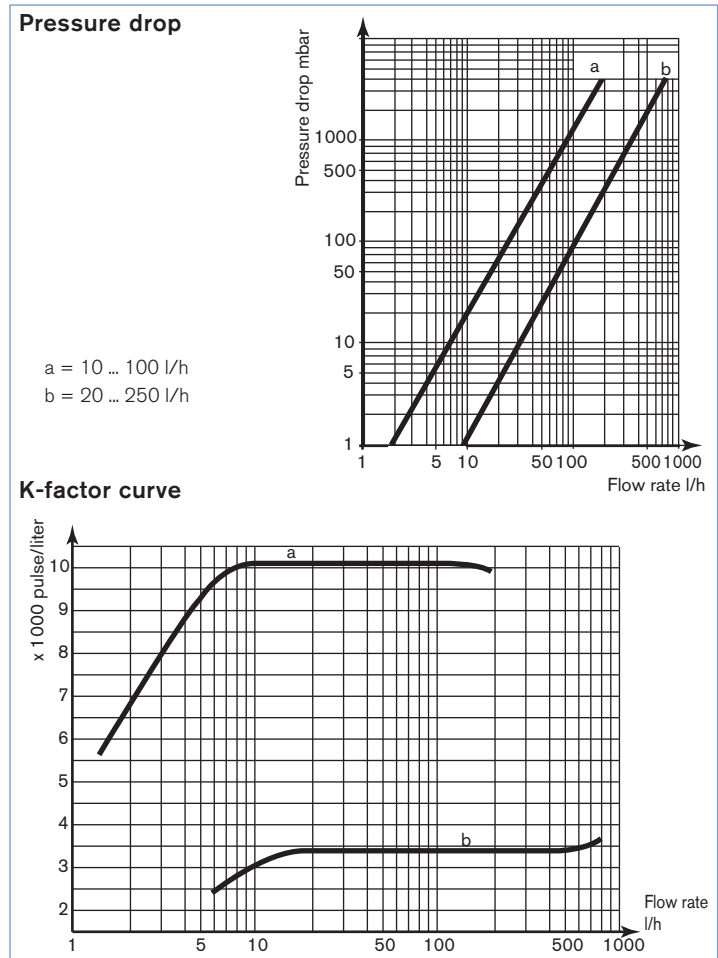
<b>Protection class</b>	IP65
-------------------------	------

\* o.FS = of full scale

Dimensions



Pressure drop and 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	
		20 to 250 l/h	G 1/4"	ECTFE	Sapphire	FKM	783 724	
			G 1/4"	ECTFE	Sapphire	EPDM	783 725	
			G 1/4"	ECTFE	Sapphire	FFKM	783 726	
		10 to 100 l/h	G 1/4"	ECTFE	Coated stainless steel	FKM	437 982	
			G 1/4"	ECTFE	Coated stainless steel	EPDM	438 531	
			20 to 250 l/h	G 1/4"	ECTFE	Coated stainless steel	FKM	438 532
				G 1/4"	ECTFE	Coated stainless steel	EPDM	437 524

To find your nearest Bürkert office, click on the orange box →

[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.  
© Christian Bürkert GmbH & Co. KG

1405/9\_EU-en\_00891780