



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



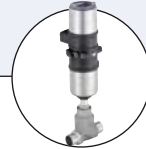
Type 8025B

Remote batch controller



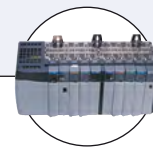
Type 8611

PI controller



Type 8802

ELEMENT control valve systems



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 × 0.14 LiYY)
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Process connection	G ¼" or Tube spigot 8/6 or 9 mm
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Measuring range	10 to 100 l/h (2.6 to 27 gph) 20 to 250 l/h (5.3 to 66 gph)
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K-factor	10200 pulse/litre (range 10 to 100 l/h) 3400 pulse/litre (range 20 to 250 l/h)
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Fluid temperature	0 to 80 °C
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Fluid pressure max.	10 bar at 20 °C
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Accuracy	± 2% o. FS*
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Repeatability	0.8% o. FS*
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Viscosity	1 to 10 cSt.
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Electrical data

Power supply (V+)	5... 24 V DC
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Current consumption	max. 11 mA at 24 V DC
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Output	push-pull (complementary output) between V+ (white wire) and signal (green wire) or between GND (brown wire) and signal (green wire)
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Frequency	0 to 300 Hz
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Environment

Ambient temperature	0 up to + 80 °C
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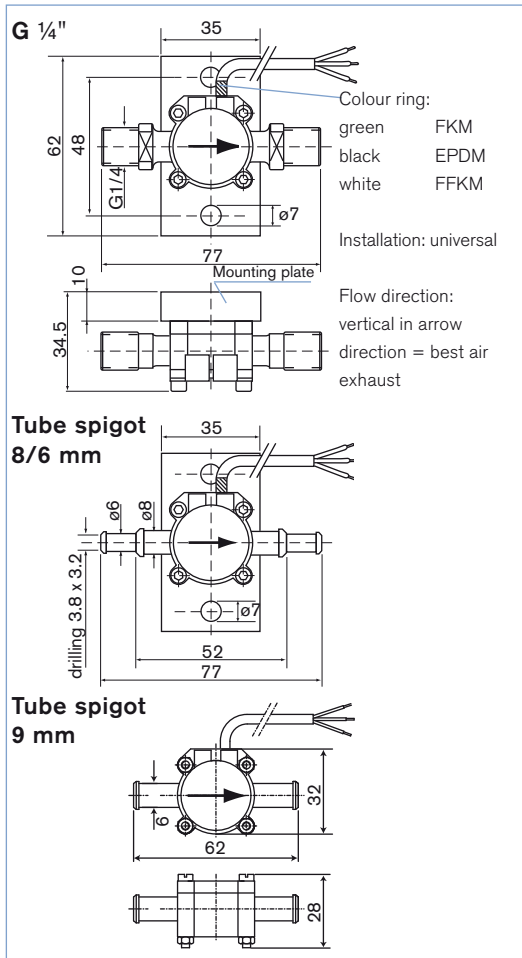
Storage temperature	- 10 up to + 80 °C
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Standards and approvals

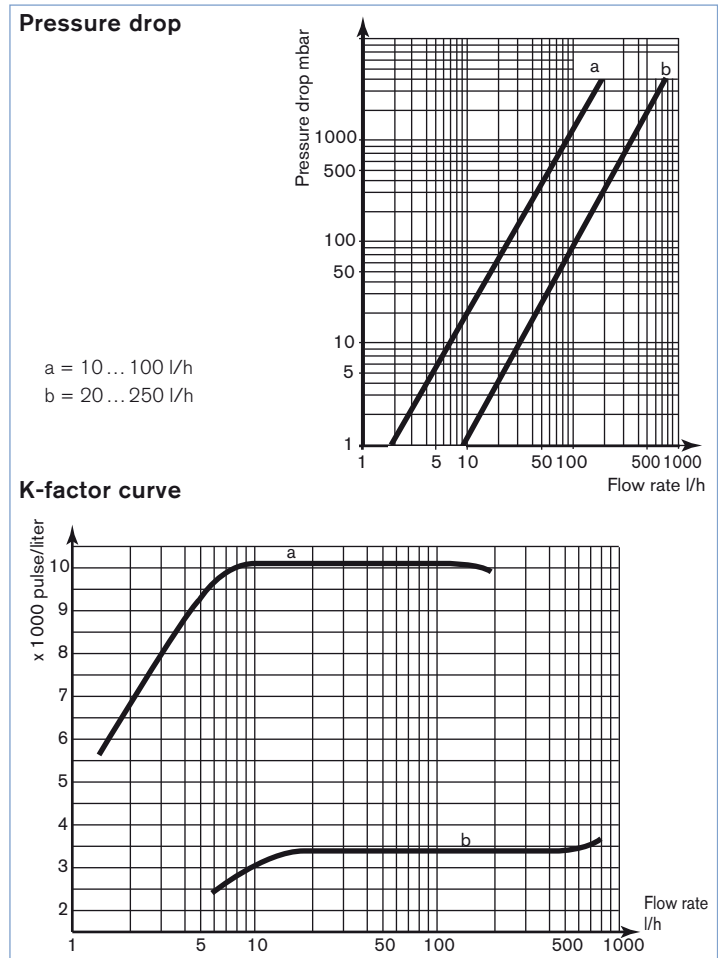
Protection class	IP65
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* o.FS = of full scale

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	Article no.
Without mounting plate	Frequency push-pull	10 to 100 l/h	Tube spigot 8/6 mm	POM	Coated stainless steel	FKM	783717
			G 1/4"	POM	Coated stainless steel	FKM	783719
	20 to 250 l/h	Tube spigot 9 mm	POM	Coated stainless steel	FKM	783718	
		G 1/4"	POM	Coated stainless steel	FKM	783720	
With mounting plate	Frequency push-pull	10 to 100 l/h	G 1/4"	ECTFE	Sapphire	FKM	783721
			G 1/4"	ECTFE	Sapphire	EPDM	783722
			G 1/4"	ECTFE	Sapphire	FFKM	783723
			G 1/4"	ECTFE	Sapphire	FKM	783724
		20 to 250 l/h	G 1/4"	ECTFE	Sapphire	EPDM	783725
			G 1/4"	ECTFE	Sapphire	FFKM	783726
		10 to 100 l/h	G 1/4"	ECTFE	Coated stainless steel	FKM	437982
			G 1/4"	ECTFE	Coated stainless steel	EPDM	438531
		20 to 250 l/h	G 1/4"	ECTFE	Coated stainless steel	FKM	438532
			G 1/4"	ECTFE	Coated stainless steel	EPDM	437524

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

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