

with paddle-wheel and Hall sensor up to 55°C, 5 bar



## Design

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 low-flow transmitter type 8025 (see separate data sheet).

The sensor is delivered with external thread G 1/4" process connection.

## Advantages / Benefits

- ▶ Cost attractive solution for low flow rates and solid-free liquids
- ▶ Wetted parts of Halar/ Saphir/Viton or EPDM for use in aggressive liquids
- ▶ 3-wire system with paddle-wheel and Hall sensor
- ▶ Frequency output proportional to the flowrate
- ▶ PLC-compatible

## Applications

### Flow Measurement

Chemical industry  
Pharmaceutical industry  
Beverage and food industry  
Water treatment

### Batch-Control

Chemical dosing  
Ideal system solutions for filling systems

**bürkert**  
Easy Fluid Control Systems

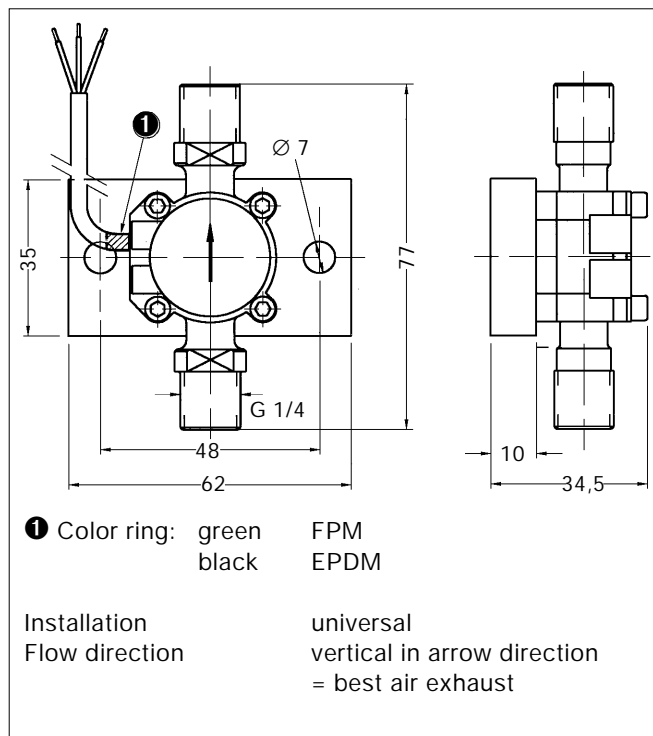
# Flow Sensor

for continuous low-flow measurement and batch control

## Type 8031

### Plastic-INLINE

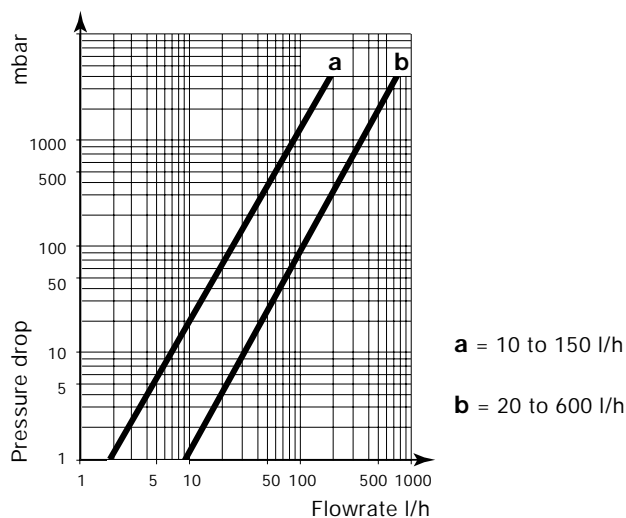
#### Dimensions



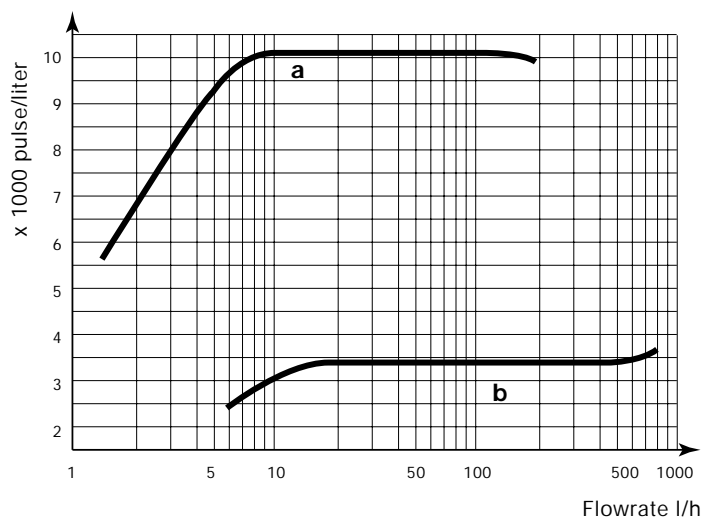
#### Technical data

Ambient temperature	-10 to 55°C (14 to 131°F)
Storage temperature	-10 to 80°C (14 to 176°F)
Fluid pressure	5 bar at 22°C (70 at 77°F)
Max. pressure	15 bar at 22°C (215 at 77°F)
Enclosure	IP 65
Relative humidity	80%
Viscosity of fluid	1 to 10 cst
Measuring range	10 to 150 l/h (2.6 to 40 gph) 20 to 600 l/h (5.3 to 160 gph)
Accuracy	2% (full scale)
Repeatability	0,8% (full scale)
K-factor	10200 pulse/liter 3400 pulse/liter
Output signal	Open collector NPN Pull-up resistance of 2,2kΩ standard feature between +VDC (white wire) and signal (green wire)
Frequency	0 to 780 Hz
Voltage supply	12...24 VDC
Current consumption	max. 15 mA at 24V
<b>Materials</b>	
Housing	ECTFE (Halar)
Paddle wheel	ECTFE (Halar)
Axis and bearings	saphir
Magnets	ECTFE (Halar) encapsulated
Gasket	Viton/EPDM

#### Pressure drop



#### K-factor curve



#### Ordering Chart Low-Flow Sensor Type 8031

Specifications	Process connection	Gasket	ITEM - NO.
Low-flow sensor 10 to 150 l/h (2.6 to 40 gph)	G 1/4"	Viton	783 721 V
Low-flow sensor 10 to 150 l/h (2.6 to 40 gph)	G 1/4"	EPDM	783 722 W
Low-flow sensor 20 to 600 l/h (5.3 to 160 gph)	G 1/4"	Viton	783 724 Y
Low-flow sensor 20 to 600 l/h (5.3 to 160 gph)	G 1/4"	EPDM	783 725 Z

Delivered with 1 meter cable 3 x 0,14 LiYY

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

We reserve the right to make technical changes without notice.  
710-GB/ 2-0002