

With Paddle-Wheel and Hall Sensor up to 175°F, 70 PSI



Advantages / Benefits

- ▶ **Cost attractive solution for low flow rates and solid-free liquids**
- ▶ **Wetted parts of Halar/ Sapphire/FPM (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**
- ▶ **CE Approval**

Design

The compact low-flow Hall sensor, Type 8031 with inline rotor is specially designed for aggressive and solid-free liquids.

Inline rotor technology is based on a local flow velocity measurement. The sensor produces a frequency signal, proportional to flow which can be easily transmitted and processed.

The Type 8031 is ideally suited for connection to the Burkert low-flow transmitter Type 8025 (see separate datasheet).

The sensor comes standard with a G1/4" external thread connection.

Applications

Flow Measurement

Chemical industry
Pharmaceutical industry
Beverage and food industry
Water treatment

Batch-Control

Chemical dosing
Ideal system solutions for filling systems

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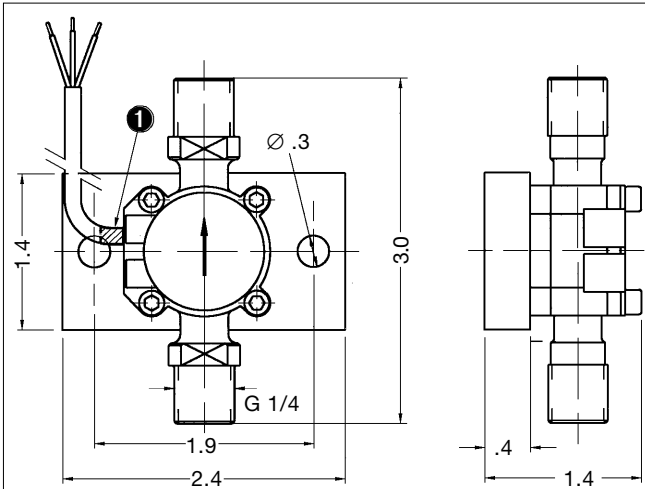
burkert
Easy Fluid Control Solutions

Flow Sensor

For Continuous Low-Flow Measurement And Batch Control

Type 8031
Plastic-INLINE

Dimensions



① Color ring: green FPM (Viton)
black EPDM

Installation universal
Flow direction vertical in arrow direction

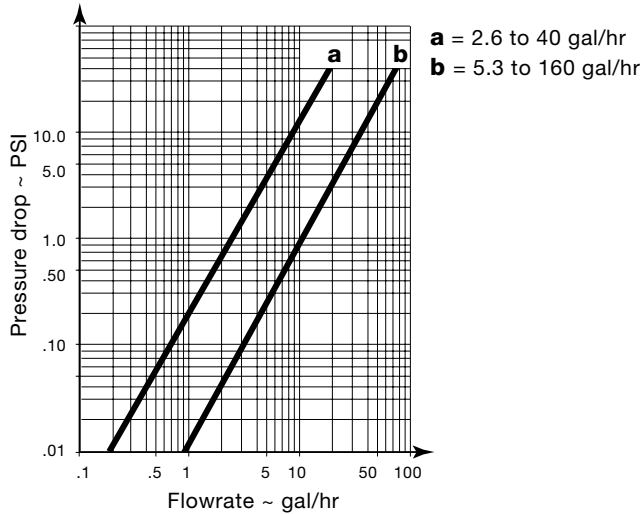
Technical Data

Ambient temperature	14°F to 131°F
Storage temperature	14°F to 176°F
Fluid pressure	70 PSI at 77°F
Max. pressure	215 PSI at 77°F
Enclosure	NEMA 4 (IP 65)
Relative humidity	80%
Viscosity of fluid	1 to 10 cst
Measuring range	2.6 to 40 gal/hr 5.3 to 160 gal/hr
Accuracy	2% (full scale)
Repeatability	0.8% (full scale)
K-factor	2695 (pulse/gallon) 898 (pulse/gallon)
Output signal	Open collector NPN Pull-up resistance of 2.2k 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

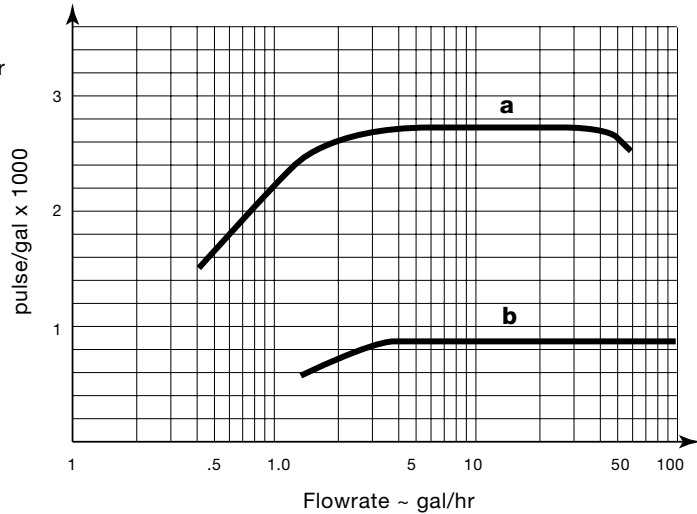
Materials

Housing	ECTFE (Halar)
Inline Rotor	ECTFE (Halar)
Axis and bearings	saphir
Magnets	ECTFE (Halar) encapsulated
Gasket	FPM (Viton)/EPDM

Pressure Drop



K-Factor Curve



Ordering Chart Low-Flow Sensor Type 8031

Specifications	Process	Gasket connection	ITEM - NO.
Low-flow sensor 2.6 to 40 gal/hr	G 1/4"	FPM	783 721 V
Low-flow sensor 2.6 to 40 gal/hr	G 1/4"	EPDM	783 722 W
Low-flow sensor 5.3 to 160 gal/hr	G 1/4"	FPM	783 724 Y
Low-flow sensor 5.3 to 160 gal/hr	G 1/4"	EPDM	783 725 Z

Delivered with 3 feet, jacketed 3-conductor, 22AWG wire

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

We reserve the right to make technical changes without notice.
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