

## Disposable PVDF Flow Sensor with Tubeholder System

Outstanding performance in pharmaceutical, medical, and biotechnological single-use applications

This flowmeter for disposable PVDF turbine flow tubes has low flow capabilities in a wide range of flow processes and is mainly developed to perform a fast exchange of the flow tube in single-use applications (for hygienic reasons in e.g. pharmaceutical- and bio-medical industries). Despite the name single-use, these devices are also suitable for long-term measurement.

## **CHARACTERISTICS**

- · Performs a fast exchange of the flow tubes
- · High resolution square wave output
- Measuring with revolutionary infrared turbine rotor reflection
- · PVDF wetted parts for high chemical resistance
- · Also suitable for opaque liquids
- Meet all requirements of US Pharmacopeia Class VI
- BSE/TSE certificate available
- PVDF flow cells gamma stable up to 50 kGy
- Tube can be sterilized up to 140 °C



MODEL	0045 Low Flow	0045	0085	0250
Inner diameter in mm	4.6	4.6	9.3	25.4
Linear flow range	0.07 – 1.0 L/min	0.1 – 2.0 L/min	1.0 – 20.0 L/min	10.0 – 200.0 L/min
Minimum flow	0.02 L/min	0.03 L/min	0.5 L/min	3.0 L/min
Accuracy	1% of reading	1% of reading	1% of reading	1% of reading
Repeatability	< 0.15%	< 0.15%	< 0.15%	< 0.15%
Wetted materials	PVDF / Ruby	PVDF / Ruby	PVDF / Ruby	PVDF / Ruby
Tube connection	7 mm hose barb / 1/8" NPT	7 mm hose barb / 1/8" NPT	12 mm hose barb	32 mm hose barb
Tube length in mm	53	53	62	90
Liquid temperature in °C	-20 to +80	-20 to +80	-20 to +80	-20 to +80
Max. pressure at 20°C in bar	25	25	20	10
Viscosity in cSt.	0.8 - 10	0.8 - 10	0.8 - 10	0.8 - 10
Approx. K-factor in pulses/L	130,000	100,000	4,800	250
Power supply	5 - 24 Vdc	5 - 24 Vdc	5 - 24 Vdc	5 - 24 Vdc
Output signal	5 - 24 V square wave	5 - 24 V square wave	5 - 24 V square wave	5 - 24 V square wave
Power consumption	34 mA at 5 V	34 mA at 5 V	34 mA at 5 V	34 mA at 5 V
Default cable	PVC 1 meter	PVC 1 meter	PVC 1 meter	PVC 1 meter

All data based on water and under ideal laboratory test conditions. The specifications can vary among the different local process conditions. Other specifications on request | Patent US5388466 | Subject to change without notice | V.052021