



When every drop counts.

## 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	0125	0250
Inner diameter in mm	4.6	4.6	9.3	14.0*	25.4
Linear flow range	0.07 – 1.0 L/min	0.1 – 2.0 L/min	1.0 – 20.0 L/min	3.0 – 40.0 L/min*	10.0 – 200.0 L/min
Minimum flow	0.02 L/min	0.03 L/min	0.5 L/min	1.5 L/min*	3.0 L/min
Accuracy	1% of reading	1% of reading	1% of reading	1% of reading	1% of reading
Repeatability	< 0.15%	< 0.15%	< 0.15%	< 0.15%	< 0.15%
Wetted materials	PVDF / Ruby	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	19 mm hose barb	32 mm hose barb
Tube length in mm	53	53	62	84*	90
Liquid temperature in °C	-20 to +80	-20 to +80	-20 to +80	-20 to +80	-20 to +80
Max. pressure at 20°C in bar	25	25	20	10*	10
Viscosity in cSt.	0.8 - 10	0.8 - 10	0.8 - 10	0.8 - 10	0.8 - 10
Approx. K-factor in pulses/L	130,000	100,000	4,800	1,800*	250
Power supply	5 - 24 Vdc	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	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	34 mA at 5 V
Default cable	PVC 1 meter	PVC 1 meter	PVC 1 meter	PVC 1 meter	PVC 1 meter

\*Preliminary values for the new 0125 PVDF flow 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.072021

