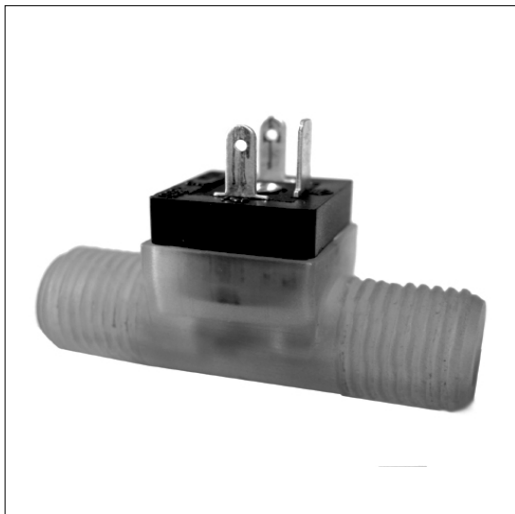


Turbine meter type Vision® 1000

For low viscous and non aggressive liquids



Features

- Low cost
- Flow range: 0,1 – 2,5 l/min
- Simple construction
- Length 45 mm, weight 10 g
- High repeatability
- Digital output
- Temperature range -20 to + 100°C
- Operating pressure 25 bar

Description

The liquid turbine meters of the series Vision® 1000 are for the exact measuring of small quantities of liquids. The actual flow as well as the already passed flow can be measured.

Principle of measurement

Flow causes the bladed rotor of the Vision® 1000 to turn at an angular velocity directly proportional to the velocity of the fluid measured. As the blades pass beneath a magnetic pickup coil, a frequency signal is generated. Each pulse is equivalent to a discrete volume of fluid. The frequency pulse is directly proportional to the rotor angular velocity and the flow rate. The waves are readily transmitted to local or remote electrical instrumentation.

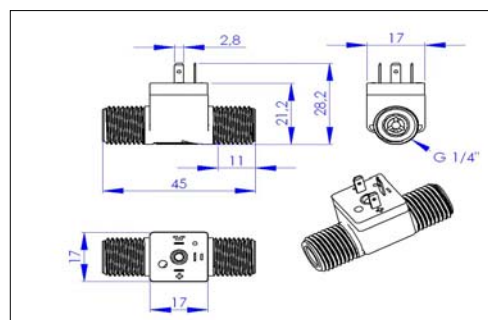
Advantages

The large number of pulses gives a good resolution. As the mass of the turbine are very small the response time is very short. It is not necessary to install a straight length of pipeline at the upstream side. The simple mechanical construction of the sensor Vision® 1000 guarantees a long lifespan without any loss of accuracy. Pressure pulses do not affect the measuring system.

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Dimensions (in mm)



Technical data

Flow rate	0,1 – 2,5 l/min	
K-factor	22.000 pulses/liter.	
Flow medium	Liquids without soiling, we recommend to filter with approx. 20 to 40 micros.	
Line pressure	25 bar (100 bar bursting pressure).	
End connection	G ¼" or NPT ¼" (recommended tightening moment approx. 6Nm).	
Operating temperature	-20 to +100°C	
Accuracy	+/- 3% of transient value	
Repeatability	Better than 0,5%	
Viscosity	Up to approx. 15cSt	
Pressure drop	See the table below	
Electrical connection	Connector MICRO-EN 60529 or 3 flat connectors 2,8 x 0,5.(point plate)	
Power supply	5 – 24 VDC	
Power consumption	Approx. 8mA	
Output signal	Frequency open collector (NPN sinking).	
Output current	Max. 20mA	
Materials	Body	Grilamid TR55 (PA12)
	Turbine	PA12 Ferrite
	Bearings	PTFE / Graphite
Dimensions of sealing	Inside Ø 7 mm, outside Ø 13 mm	
	Thickness 2 mm, hardness approx. ca. 70Sh A	

