

## **VISION TURBINE FLOW METERS**

### **SPECIFICATIONS**





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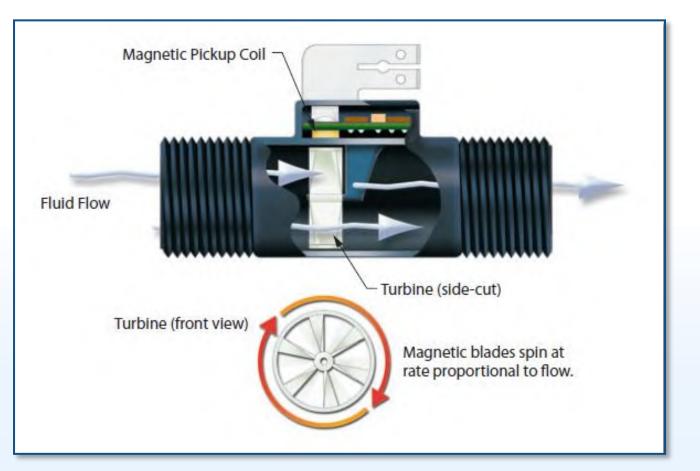
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#### **CONSTRUCTION AND OPERATING PRINCIPLE**

Rotor (made of ferromagnetic PPS) is turned by the liquid force in proportion to the flow

Turbine and bearings: Fluid passes sideways

Hall effect sensor or coil supplies pulses for digital or analog signal processing





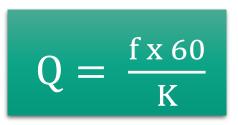
#### **OPERATING PRINCIPLE**

Liquid turns a bladed turbine inside the meter housing at an angular velocity directly in proportion to the velocity of the measured liquid.

As the blades pass beneath a magnetic pickup coil, a frequency signal is generated.

The provided pulses are specified as K factor.

Each pulse is equivalent to a discrete volume of liquid. The frequency pulse is in direct proportion to the turbine angular velocity and the flow rate.



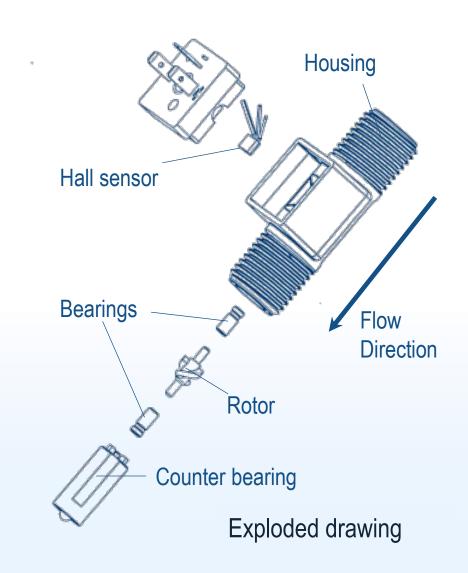
Q = Flow rate (l/min)
f = Frequency in Hz
K = K-factor (PPL)



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#### **ADVANTAGES**

- ✓ High resolution (large number of pulses)
- ✓ Fast response time (small mass)
- ✓ No flow straightener required
- ✓ No straight pipe run required
- ✓ Flexibility: Installation in any position
- Long lifespan without any loss of accuracy (simple mechanical construction)
- Pressure spikes (less than burst pressure rating) do not affect the measurements





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#### **PRODUCT RANGE**

	VISION 1000	VISION 2000					VISION 3000	
Туре	1005 2F66	2006 4F44	2006 2F66	2008 4F17	2008 4F22	2008 4F44	2008 2F66	3012 4F16
Measuring range I/min	0.1 – 2.5	1 - 10	0.5 - 5	2 - 35	1 – 25	1 – 15	0.5 – 7.5	5 – 65
K factor PPL*	22,000	3,300	6,900	750	1,000	2,200	4,700	210
Size DN (mm)	5	6	6	8	8	8	8	12
*PPL = pulses/liter								



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#### **PICKUP OPTIONS**

	Hall effect sensor	Coil		
Input power:	5 – 24 VDC	2 – 5,5 V		
Power consumption:	Approx. 8 mA	2,5 – 5 µA		
Output (Hz):	NPN sinking open collector	Push-Pull		
Output current:	Max. 20 mA Pull-up resistor required	± 30 mA		
Operation	All Standard VISION	For battery-powered displays		



VISION with coil: with Battery logo



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# **THANK YOU!**



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