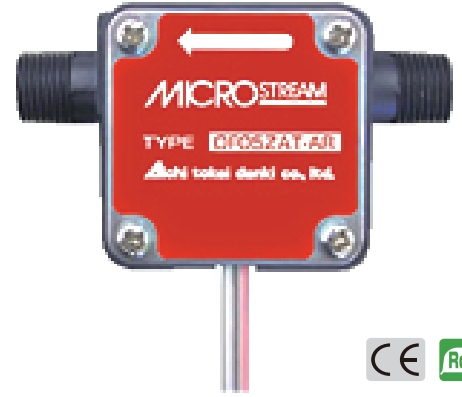


OF-Z Flow Sensor for Liquid

OF-Z flow sensor is suitable for measuring oil (heavy oil, light oil, heating oil, etc.). It is a flow sensor with elliptic gears that measures microflow with accuracy.



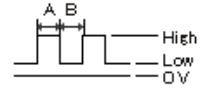
Feature

- Measures heavy, light, heating oil, etc.
- Measures the microflow range with superior manufacturing technology.
- Good at measuring pulsating flow.
- Amplifier built-in magnetic sensor, which is strong against noise, is output in proportion to the flow velocity.
- Pulse output by open collectors or voltage pulse.
- Measures a wide range of flow rate with high accuracy.
- Simple structure due to the elliptic gears employed as a measuring principle.
- Capable of measuring various liquids.
- RoHS complaint.

Specifications

Model		OF05ZAT	OF10ZAT	OF05ZZT	OF10ZZT
Flow rate range	Liquid viscosity 0.3 – 0.8mPa·s	0.085– 0.85L/min	0.7 – 5L/min	0.085– 0.85L/min	0.7 – 5L/min
	Liquid viscosity 0.8 – 2.0mPa·s	0.05 – 0.85L/min	0.35 – 5L/min	0.05 – 0.85L/min	0.35 – 5L/min
	Liquid viscosity 2.0 – 5.0mPa·s	0.017– 0.85L/min	0.17 – 5L/min	0.017– 0.85L/min	0.17 – 5L/min
	Liquid viscosity 5.0 – 200mPa·s	0.085– 0.85L/min	0.085– 5L/min	0.085– 0.85L/min	0.085– 5L/min
Accuracy		±2%RS(In the standard installation position)			
Measurable liquid	Types of measurable liquid	Please decide based on the major materials exposed to the fluid, which are described below.			
	Major measurable liquid	Cold and hot water and heating, light and heavy oil		Mildly acidic and mildly alkaline liquid	
Maximum operating pressure		0.5MPa(When the liquid is at 20°C).			
Pressure loss		4 kPa or less	10 kPa or less	4 kPa or less	10 kPa or less
Fluid temperature range		-10 to +70°C (No condensing)			
Responsiveness		-10 to +70°C 35~85%RH(No condensing)			

Output signal	Voltage pulse output	Voltage pulse 3 wire Length of wire: Approx. 480 mm Voltage pulse duty ratio $2/8 < A/B < 8/2$ When voltage is applied at 12 VDC or less, High: 10 VDC or more Low: 1 VDC or less			
	Open collector output	Open collector pulse (Capacity: 6 mA DC or less) Length of 4 lead wire: Approx. 600 mm			
Pulse constant		0.46mL/P	2.5mL/P	0.46mL/P	2.5mL/P
Maximum frequency		Approx. 30Hz	Approx. 33Hz	Approx. 30Hz	Approx. 33Hz
Minimum pulse width		Approx. 0.0065s	Approx. 0.006s	Approx. 0.0065s	Approx. 0.006s
Applied voltage range		3 – 24VDC *1			
Power consumption		0.2VA or less			
Structure		Splash-proof structure (IP64 compatible) for indoor use			
Connection		R1 / 4	R1 / 2	R1 / 4	R1 / 2
Mass		Approx. 100 g	Approx. 140 g	Approx. 100 g	Approx. 140 g
Major materials of the part exposed to liquid	Case	PPS			
	Rotor	PPS			
	O-ring	NBR		FKM	
	Shaft	SUS304		SiC	



- If the fluid might contain fine particles, please install the filter with a #80 mesh screen or higher before the flow sensor.
- Do not measure gasoline, sodium hydroxide (caustic soda), oxygenated water (Oxydol) and acidum hydrochloricum (strong acid fluid).
- *1. Apply the same voltage to the sensor power supply (red – black) and pulse output (blue and white – black).
- (Applicable only for open collector output)

Order Form

OF	**	Z	*	T	-	*	R	
Type								OF
	Diameter							05, 10
		Z						A
			Constituent material					A, Z
				T				T
					-			-
						Output		A: voltage pulse M: open collector
							R	R