

Differential pressure flow sensor

E8Y-□-F□

An electronic compact flowmeter with high cost performance

- Real time flow monitoring
- Differential pressure sensing
- Sensing flow range: 0.3 to 3 l/min, 2 to 20 l/min
- Lineup of vertical-mounting type and horizontal-mounting type



Ordering Information

Flow range	Digital output	Type	Model
0.3 to 3 l/min	NPN open collector	Vertical-mounting	E8Y-A5C-F03V
		Horizontal-mounting	E8Y-A5C-F03H
2 to 20 l/min		Vertical-mounting	E8Y-A5C-F20V
		Horizontal-mounting	E8Y-A5C-F20H

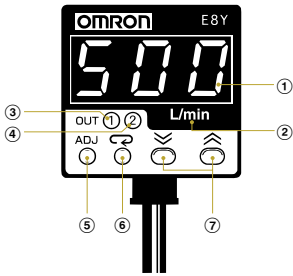
Ratings

Item	Model	E8Y-A5C-F03V/H	E8Y-A5C-F20V/H
Power supply voltage		12 to 24 VDC ±10% with a ripple (p-p) of 10% max.	
Current Consumption		50 mA max.	
Sensing method		Differential pressure sensing	
Rated volume range		0.3 to 3 l/min	2 to 20 l/min
Withstand volume		5 l/min	40 l/min
Applicable fluid		Non-corrosive gas and non-flammable gas	
Digital output	Output form	NPN open collector (NO/NC)	
	Load current	100 mA	
	Output applied voltage	30 VDC max.	
	Residual voltage	1 V max. with a load current of 100 mA or 0.4 V max. with a load current of 16 mA	
Display	Repetition precision	±3.0%F.S.	
	Indicator lamp	3 digit red LED the yellow LED indicator (OUT1: when digital output is ON: lit) the yellow LED indicator (OUT2: when digital output is ON: lit)	
Response speed		0.5s max.	
Linearity		±3.0%F.S.	
Setting resolution		0.01 l/min	0.1 l/min
Protective circuits		Reverse polarity connection, load short-circuiting	
Ambient temperature		-10°C to 55°C (14°F to 131°F) with no icing	
Ambient operating humidity		25% to 85% (with no condensation)	
Storage temperature		-25°C to 65°C (-13°F to 149°F)	

Performance

Temperature influence	±3.0%F.S. max.
Ambient humidity	±3.0%F.S. max.
Degree of protection	IEC Standard IP40
Dielectric strength	1,000 VAC at 50/60 Hz for 1 minute
Insulation resistance	50 MΩ min.(at 500 VDC) between current carry parts and case
Vibration resistance	Endurance: 10 to 500 Hz, 1.0-mm double amplitude or 150 m/s ² , 3 times each for 11 min. in X, Y and Z directions
Shock resistance	Endurance: 300 m/s ² (30G) 3 times each to X, Y and Z directions
Pressure port	R(PT) 1/8 female screw or 4.5 dia. pipe
Cable	Vinyl-insulated round cable 4 dia.; Standard length: 2 m
Weight	Approx. 160 g

Nomenclature



Display

(1) Numerical value/menu indication
Displays the measured pressure and some menu settings.

(2) measurement Unit
set up by l/min

(3) OUT 1 indication LED
In measurement mode, it lights when OUT 1 output is on.
In setting mode, it flashes when OUT 1 is being set.

(4) OUT 2 indication LED
In measurement mode, it lights when OUT 2 output is on.
In setting mode, it flashes when OUT 2 is being set.

Operation Key

(5) ADJ
In measurement mode, it adjusts the Zero Point.

In setting mode, it shifts to measurement mode.

(6) MODE
Selects the current number setting or menu option.

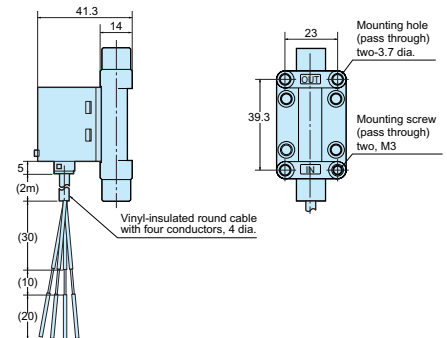
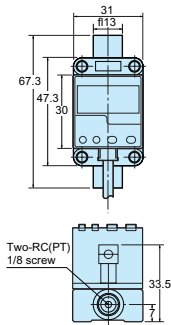
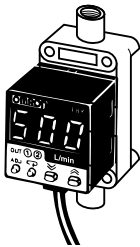
(7) UP/DOWN
In measurement mode, pushing the DOWN key displays the ON and OFF points of OUT 1; pushing the UP key displays the ON and OFF points of OUT 2. In setting mode, the UP and DOWN keys increase or decrease the numeric value, respectively, or scroll through the menu options.

Dimensions (Unit: mm)

Sensors

Vertical-mounting type

E8Y-A5C-F03V
E8Y-A5C-F20V



Horizontal-mounting type

E8Y-A5C-F03H
E8Y-A5C-F20H

