

E8Y-□-F□

A Compact Electronic Flowmeter with Superior Cost Performance

- Realtime flow monitoring.
- Excellent environmental resistance and simplified differential pressure sensing.
- Sensing flow range: 0.3 to 3 l/min, 2 to 20 l/min.
- Lineup of Vertical-mounting Models (-F□V) and Horizontal-mounting Models (-F□H).



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

Specifications

Temperature influence	±0.3%/°C max.
Humidity influence	±3%FS max.
Degree of protection	IP40 (IEC)
Dielectric strength	1,000 VAC at 50/60 Hz for 1 minute
Insulation resistance	100 MΩ min. (at 500 VDC) between current-carrying parts and case
Vibration resistance	Destruction: 10 to 150 Hz, 0.75-mm single amplitude or 100 m/s ² , 4 times each for 8 min in X, Y, and Z directions
Shock resistance	Destruction: 300m/s ² , 3 times each in X, Y, and Z directions
Pressure port	Rc(PT) 1/8 screw
Cable	4-dia. vinyl-insulated round cable, Standard length: 2 m
Weight	Approx. 160 g

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		Simplified 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
Withstand pressure		50 kPa	
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	1.0 V max. with a load current of 100 mA or 0.4 V max. with a load current of 16 mA	
	Repeat accuracy	±3.0%FS	
Display	Display	3-digit 7-segment red LED	
	Indicator lamp	Orange LED indicator (OUT1: lit when digital output is ON) Orange LED indicator (OUT2: lit when digital output is ON)	
Response speed		0.5 s max.	
Linearity		±3.0%FS	
Setting resolution		0.01 l/min	0.1 l/min
Protection circuits		Reverse polarity protection, load short-circuit protection	
Ambient temperature		Operating: -10 to 55°C (with no icing)	
Ambient humidity		Operating: 25% to 85% (with no condensation)	
Storage temperature		-25 to 65°C	

Pressure Sensors

Sensing Guide

Pressure Sensors

Other Information

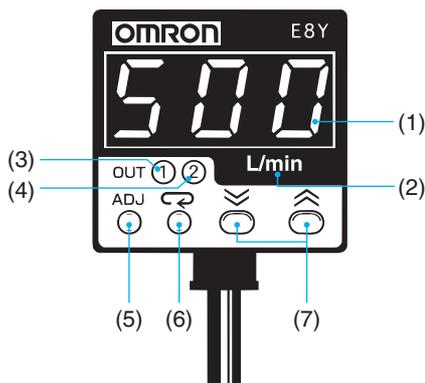
E8F2

E8MS /E8M

E8Y

E8Y-□-F□

Nomenclature



Display

(1) Numerical value/menu indication

Displays the measured pressure and some menu settings.

(2) Measurement Unit

Measurement units are set to 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

In measurement mode, it shifts to the setting mode and selects the current 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 and decrease the numeric value, respectively, or scroll through the menu options.

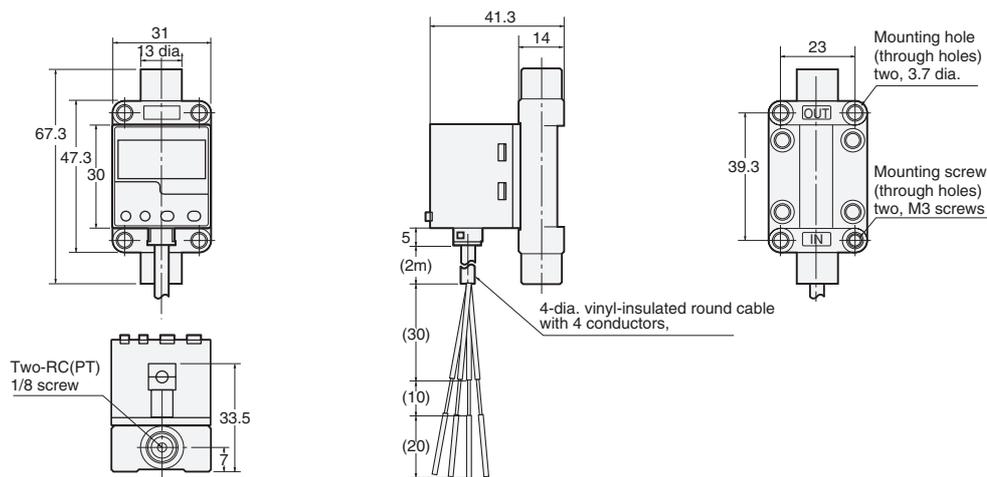
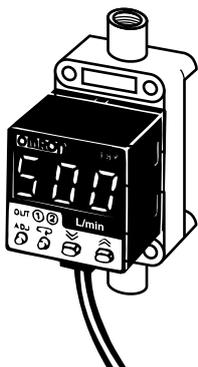
Dimensions

(Unit: mm)

Sensors

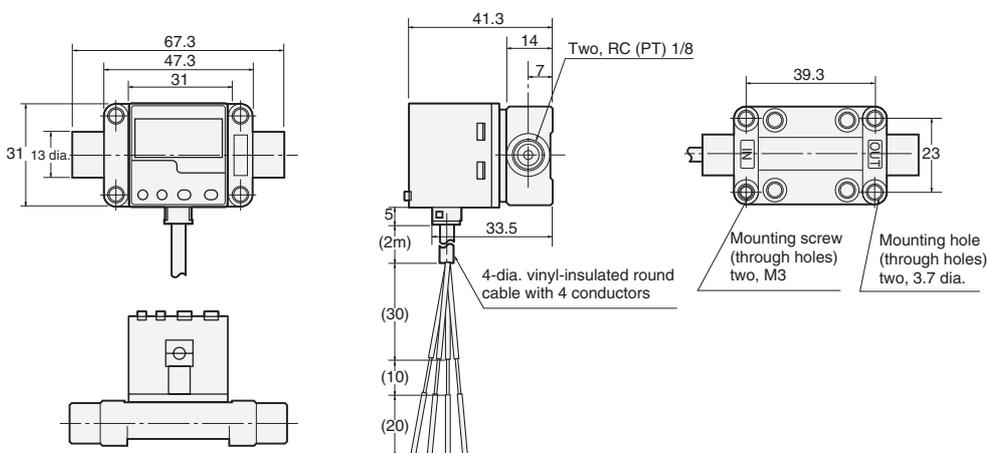
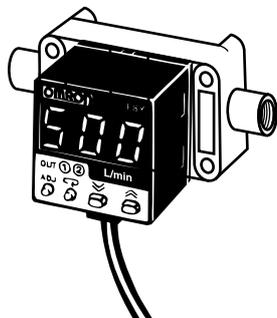
Vertical-mounting Type

E8Y-A5C-F03V
E8Y-A5C-F20V



Horizontal-mounting Type

E8Y-A5C-F03H
E8Y-A5C-F20H



Refer to the *E8Y Pressure Sensor Datasheet* (Cat. No. F045) for details.

Cat. No. F834-E1-01

In the interest of product improvement, specifications are subject to change without notice.

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Sensors

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Other
Information

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