

## MEMS Flow Sensor

D6F-□A5/D6F-□A6

### High-accuracy Sensing with a Compact Body for 10 to 50 L/min Flow Rates.

- Accurately detects a mass flow rate of 10 to 50 L/min.
- A compact size of 30 × 78 × 30 mm (D × W × H).

RoHS Compliant



## Ordering Information

### Sensor

Flow rate	Model number	Minimum order
0 to 10 L/min	D6F-10A5-000	1
	D6F-10A6-000	
0 to 20 L/min	D6F-20A5-000	
	D6F-20A6-000	
0 to 50 L/min	D6F-50A5-000	
	D6F-50A6-000	

### Cable (Order Separately)

Terminal	Wires	Housing	Model number
MOLEX-50079	AWG 26	MOLEX-51021	D6F-CABLE1

## Absolute Maximum Ratings

Item	Symbol	Rating	Unit
Power supply voltage	Vcc	26.4	VDC
Output voltage	Vout	6	VDC

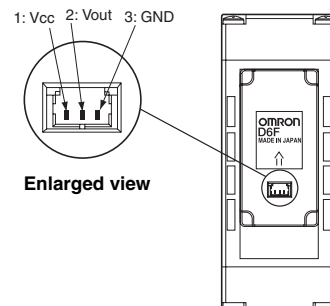
## Performance

Item	Model number	D6F-10A5-000/ -10A6-000	D6F-20A5-000/ -20A6-000	D6F-50A5-000/ -50A6-000
Flow rate		0 to 10 L/min (normal) (See note.)	0 to 20 L/min (normal) (See note.)	0 to 50 L/min (normal) (See note.)
Case material		Thermoplastic resin		
Operating conditions	Applicable fluid	Air (The fluid must be clean, dry gas, with no dust or oil mist.)		
	Max. allowable pressure	500 kPa		
	Operating temperature	-10 to 60°C (with no condensation or icing)		
	Operating humidity	85% max. (with no condensation or icing)		
	Storage temperature	-30 to 80°C (with no condensation or icing)		
	Storage humidity	85% max. (with no condensation or icing)		
Power supply voltage		10.8 to 26.4 VDC		
Output signal		Analog output, 1 to 5 VDC (non-linear output)		
Current consumption		Without load: Vcc = 12 to 24 VDC, Vss = 0 V, 25°C, 15 mA max.		
Insulation resistance		Between Sensor outer cover and lead terminals: 20 MΩ min. (at 500 VDC)		
Withstand voltage		Between Sensor outer cover and lead terminals: 500 VAC, 50/60 Hz min. for 1 min (leakage current: 1 mA max.)		

**Note:** "L/min (normal)" is the volume flow rate at 0°C and 101.3 kPa.

## Connections

Pin No.	1: Vcc 2: Vout 3: GND
Connectors	Molex 51021
Terminal	Molex 50079
Wires	AWG26 or AWG28

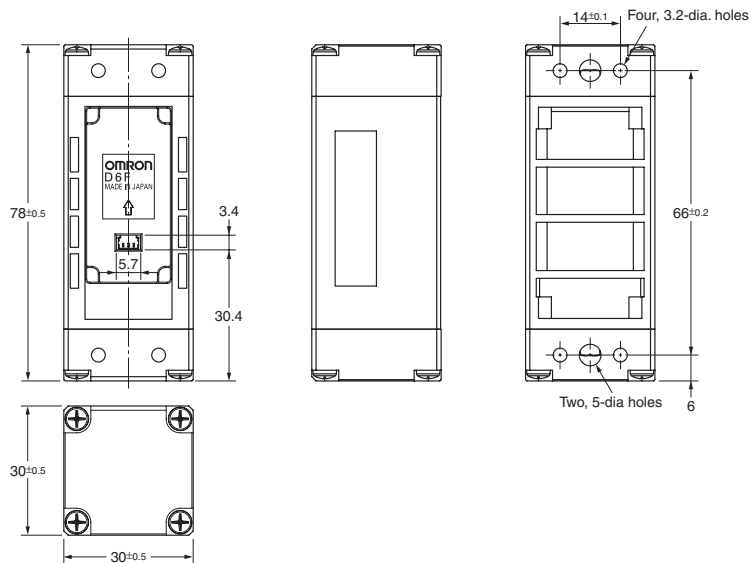


# Dimensions

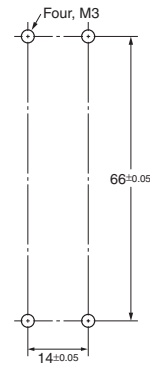
(Unit: mm)

## Sensor

D6F-10A5-000  
D6F-20A5-000  
D6F-50A5-000

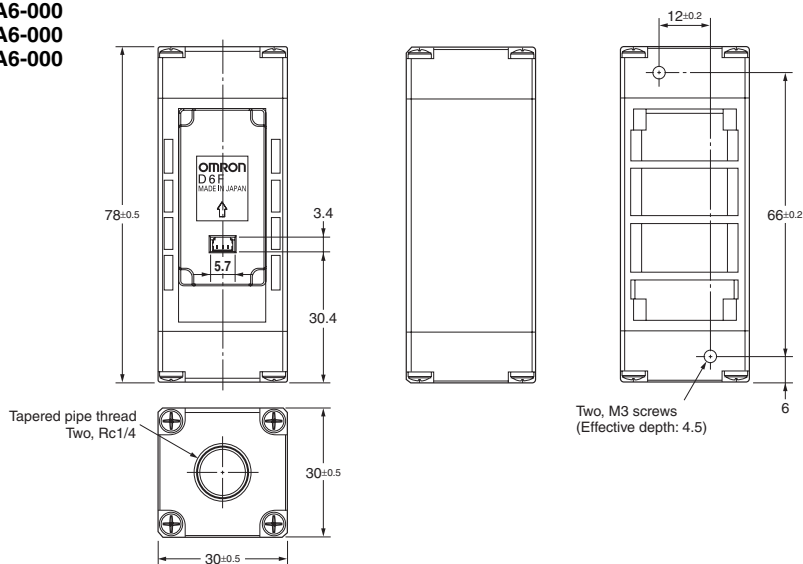


## Mounting Hole Dimensions

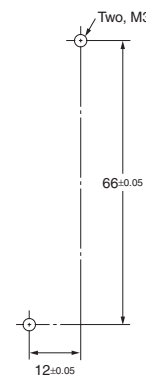


## Sensor

D6F-10A6-000  
D6F-20A6-000  
D6F-30A6-000

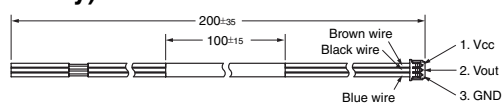


## Mounting Hole Dimensions



## Cable (Order Separately)

D6F-CABLE1



# Safety Precautions

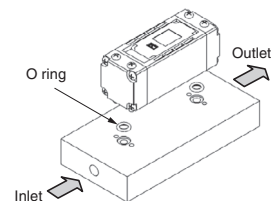
## Precautions for Correct Use

### Installing the D6F-□A5-000

Use M3 panhead screws for mounting, and tighten them to a maximum torque of 0.59 N·m. Incorrect mounting may cause product failure and make it impossible to obtain correct measurements.

Install O-rings for sealing the fluid inflow and outflow points.

## Installation Example



**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. A182-E1-01    **In the interest of product improvement, specifications are subject to change without notice.**

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