

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 $30 \times 78 \times 30$ 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	e			0 to 50 L/min (nor- mal) (See note.)	
Case ma	iterial	Thermoplastic resin			
Operat-	Applicable fluid	Air (The fluid must be clean, dry gas, with no dust or oil mist.			
ing condi- tions	Max. allowable pressure	500 kPa			
tions	Operating temperature	-10 to 60°C (with no condensation or icing) 85% max. (with no condensation or icing) -30 to 80°C (with no condensation or icing)			
	Operating humidity				
	Storage temperature				
Storage humidity 85% r		85% max. (with no	5% max. (with no condensation or icing)		
Power s	upply voltage	10.8 to 26.4 VDC			
Output s	signal	Analog output, 1 to 5 VDC (non-linear output)		ıtput)	
Current	consumption	Without load: Vcc = 12 to 24 VDC, Vss = 0 V, 25°C, 15 m/s max.		= 0 V, 25°C, 15 mA	
Insulatio	on resistance	Between Sensor outer cover and lead terminals: 20 M Ω min (at 500 VDC)		minals: 20 M Ω min.	
Withstar	nd voltage	Between Sensor outer cover and lead terminals: 500 VAC, 50/60 Hz min. for 1 min (leakage current: 1 mA max.)			

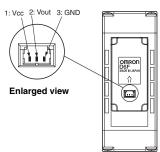
Note: "L/min (normal)" is the volume flow rate at 0°C and 101.3 kPa.

Connections

Pin No. 1: Vcc 2: Vout

3: GND

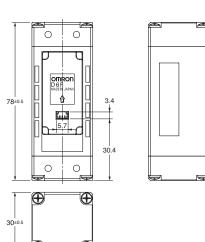
Connectors Molex 51021
Terminal Molex 50079
Wires AWG26 or AWG28

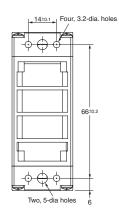


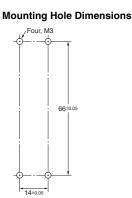
Dimensions (Unit: mm)

Sensor

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

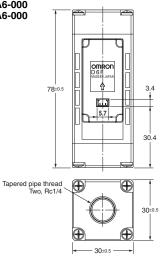






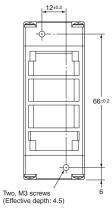
Sensor

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



30±0.5



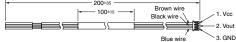


Mounting Hole Dimensions



Cable (Order Separately)

D6F-CABLE1



Safety Precautions

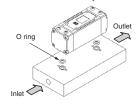
Precautions for Correct Use

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



DOI - A3/DOI - A0)6F-□A5/D6F-□A6 ——	OMRON	
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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.

OMRON Corporation

Electronic Components Company

Semiconductor Division H.Q. **Micro Devices Division** 686-1 Ichimiyake, Yasu, Shiga, 520-2326 JAPAN Tel: (81)77-587-7486/Fax: (81)77-587-7503

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