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MEMS Flow Sensor D6F-01/02/05

High Accuracy Mass Flow Sensing

- Small size
- Fast response
- Applicable to air, non-corrosive gas, natural gas
- Applications include: medical respiratory equipment, analysis apparatus, combustion control



Ordering Information

Case	Gas	Flow range	Notes	Model
PPS	Air*	0-1L/min	Integral orifice	D6F-01A1-110
		0-2L/min		D6F-02A1-110
Aluminum	LNG* (13A)	0-5L/min		D6F-05N2-000

Ratings

■ Absolute Maximum Rating

Item	Symbol	Rating	Unit
Power supply	V _{cc}	26.4	VDC
Output voltage	V _{OUT}	6	VDC

Recommendation Condition

Item	Symbol	Condition	Min.	Тур.	Max.	Unit
Power supply	V _{cc}	—	10.8	_	26.4	VDC
Operating temperature	T _{ORR}	_	-10	_	60	°C
Output voltage (max.)	V _{OH}	V_{CC} = 12 to 24 VDC I _{OH} = 5 mA	5	_	5.7	VDC
Output voltage (min.)	V _{OL}	V_{CC} = 12 to 24 VDC I _{OH} = 5mA	0		1	VDC

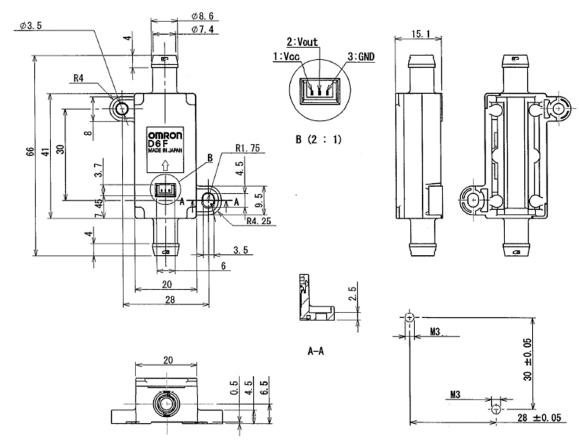
Characteristics

Model	D6F-01A1-110	D6F-02A1-110	D6F-05N2-000	
Rated quality range	0-1L/min	0-1L/min		
Joint type	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Press-fit type (Press-fit min. external diameter: 7.4 mm, Press-fit max. external diameter: 8.6 mm) (passage diameter: 4 mm)		
Case material	PPS	PPS		
Applicable gas	Air*	Air*		
Withstand pressure	200kPa (about 30 psi)			
Repeat accuracy	±3% F.S. max			
Operating temperature	-10 to 60 degrees (with no icing or condensation)			
Operating humidity	Under 85% RH (with no icing or condensation)			
Storage temperature	-40 to 80 degrees (with no icing or condensation)			
Storage humidity	Under 85% RH (with no ice or no dew)			
Output signal	Analog Output 1-5 VDC			
Current consumption	No-Load V_{cc} = 12 to 24 VDC, V_{ss} = 0V 25 deg. C, max 15 mA			
Insulation resistance	More than 20M Ohm (500 VDC, between lead terminal and case)			
Dielectric strength	500 VAC, 50/60 Hz, for 1 minute. (Leakage current typ <1 mA.) Between the lead terminals and the base			
Orifice	Integral	Integral	Not applicable	

Dimensions

Unit: mm

D6F-01A1-110 D6F-02A1-110

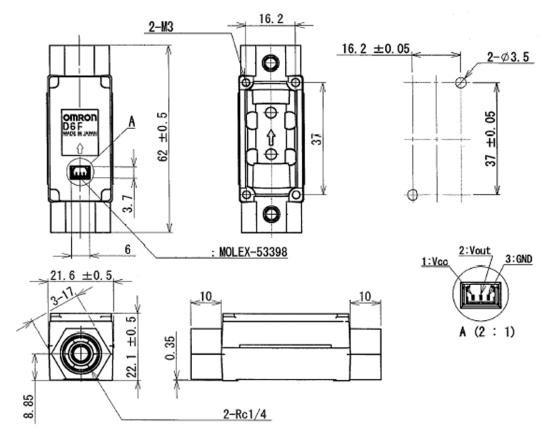


Note: Mount using an M3 pan head screw, tightened to 0.59 N•m max. torque.

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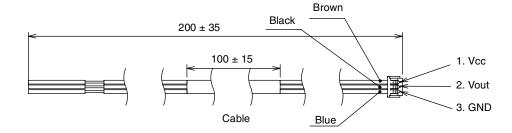
Unit: mm

D6F-05N2-000



Note: Mount using an M3 pan head screw, tightened to 0.59 N•m max. torque.

Applicable Cable for D6F



Housing: Molex - 51021 Terminal: Molex - 50079 Wire: 26-28 AWG

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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.



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