

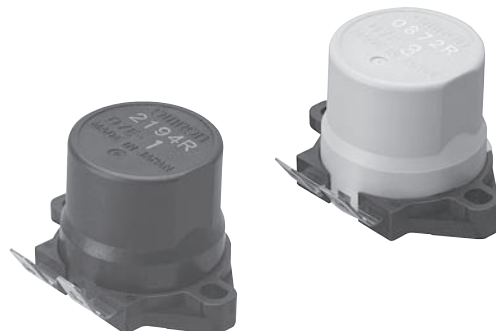
# D7E

## Sealed Vibration Sensors and Tilt Sensor

### Quickly Detect Vibration or Tilting to Help Prevent Secondary Disasters. Affordable Vibration/Tilt Sensors with Sealed Structure

- Sealing performance to IP67 degree of protection (switch section).
- Applicable to stoves, oil heaters, and other applications that require resistance to harsh environments.
- A Tilt Sensor is also provide in the lineup.

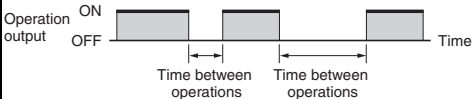
RoHS Compliant



### Ordering Information

Type	Model
Vibration Sensors	D7E-1
	D7E-2
	D7E-5
Tilt Sensor	D7E-3

### Performance

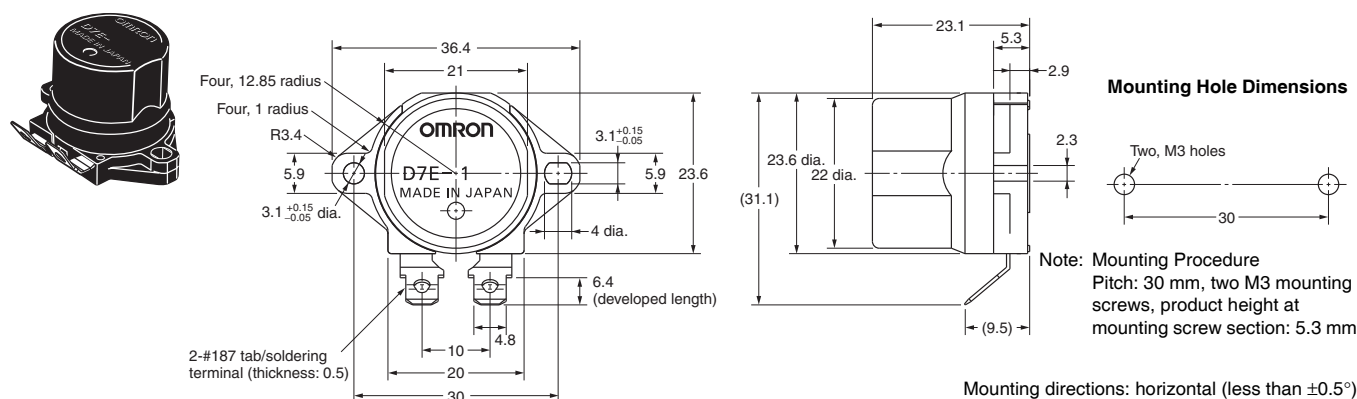
Model		D7E-1	D7E-2	D7E-5	D7E-3
Item	Type	Vibration Sensors			Tilt Sensor
Operating characteristic	Acceleration range	130 to 200 gals*	100 to 170 gals*	120 to 195 gals*	---
	Operating angle	---			50° to 80°
	Off time	50 ms min. (for periods of 0.3 s, 0.5 s, and 0.7 s at 200 gals for the D7E-1, 170 gals for the D7E-2, and 195 gals for the D7E-5) 			---
Output	Contact form	SPST-NC			
	Electrical ratings	0.1mA at 5 VDC to 100mA at 30 VDC, resistive load			
	Contact resistance	Initial value: 100mΩ max.			
Basic specifications	Electrical life expectancy	5,000 operations (at 10 to 20 operations/min with resistive load of 100 mA at 30 VDC)			
	Degree of protection	IP67 (switch section)			
	Operating temperature	-25 to 60°C (with no icing or condensation)			
	Storage temperature	-25 to 60°C (with no icing or condensation)			-25 to 70°C (with no icing or condensation)
	Operating humidity	45% to 95%			
	Dielectric strength	250 VAC, 50/60 Hz for 1 min			

\* These are the accelerations for operation at periods of 0.3 s, 0.5 s, and 0.7 s measured with the horizontal vibration method.  
Mounting standard: ±30' (±0.5°).

Note: Ask your OMRON representative for details.

### ■ Dimensions (Unit: mm)

D7E-□



## ■ Safety Precautions

- If the mounting surface is not level, deformation from mounting may adversely affect operating characteristics.  
Do not use a mounting surface with warpage of more than 0.3 mm. Use M3 mounting screws and tighten them to 0.39 to 0.59 N·m.  
Use washers or other means to prevent loosening of the screws when mounting.
- Do not subject the Sensor to direct sunlight.
- Also, OMRON is not responsible for the deterioration of functions caused by washing with water, submersion in water, oil leaks, or contact with organic solvents.
- Do not use the Sensor in any location where vibration would adversely affect the operating acceleration or other mechanical characteristics (such as locations affected by opening and closing of doors, locations with passing vehicles, or other locations that are subject to vibration or shock from equipment or other sources).

**D7E**

**Electronic and Mechanical Components Company**

## Regional Contact

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<https://www.components.omron.com/>

## Asia-Pacific

<https://ecb.omron.com.sg/>

**Korea**

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**China**

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[D7E-1](#) [D7E-3](#) [D7E-2](#)