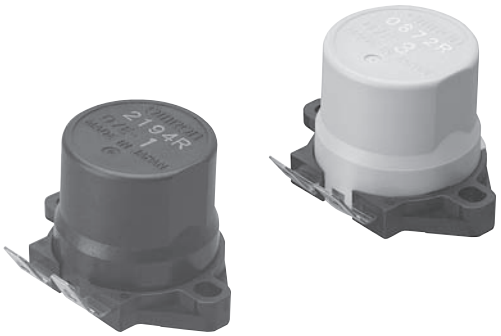
D7E

Sealed Vibration Sensors and Tilt Sensor

Quickly Detect Vibration or Tilting to Help Prevent Secondary Disasters. Affordable Vibration/Tilt Sensors That Take Sealing into Consideration

- **Applicable to stoves, oil heaters, and other applications that require resistance to harsh environments.**
- **A Tilt Sensor is also provide in the lineup.**



■Ordering Information

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

■Performance

Item	Model / Type	D7E-1	D7E-2	D7E-5	D7E-3
		Vibration Sensors			Tilt Sensor
Operating characteristic	Acceleration range	130 to 200 gals *1	100 to 170 gals *1	120 to 195 gals *1	---
	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) Operation output ON / OFF — Time Time between operations / Time between operations			---
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	--- *2			
	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			

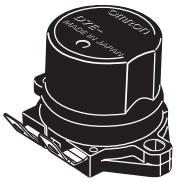
*1. These are the accelerations for operation at periods of 0.3 s, 0.5 s, and 0.7 s measured with the horizontal vibration method.
Mounting standard: ±30' (±0.5°).

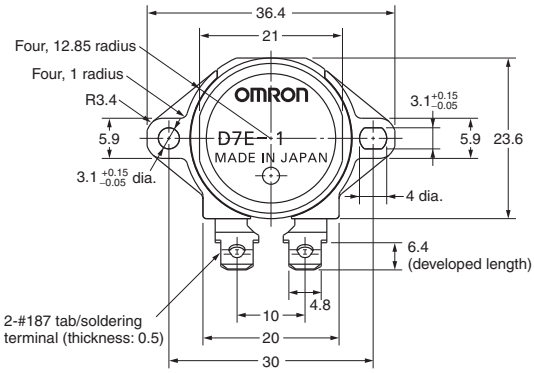
*2. The degree of protection confirms that this product has undergone and passed an IP65 test conducted in OMRON's laboratory under controlled conditions, in accordance with the test methods of the following standards.
IEC 60529 and JIS C0920
Due to the product structure, this inspection of the degree of protection does not guarantee the product's compliance with IP65.

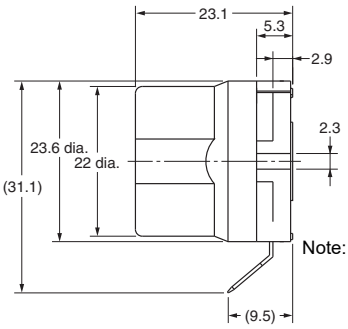
Note: Ask your OMRON representative for details.

■Dimensions (Unit: mm)

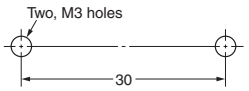
D7E-□







Mounting Hole Dimensions



Note: Mounting Procedure
Pitch: 30 mm, two M3 mounting screws, product height at mounting screw section: 5.3 mm

Mounting directions: horizontal (less than ±0.5°)

■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).
- Do not use underwater or in dusty locations.
- Using the Sensor in conditions where it is constantly exposed to moisture or dust, or with moisture or dust adhered to it may result in malfunction.
- Sudden changes in temperature may result in moisture entering the interior of the Sensor due to respiratory effects.
- The waterproof and dustproof performance of the Sensor may deteriorate depending on the usage environment.
- In order to ensure safe use of the Sensor for your desired application, please perform validation of the Sensor's waterproof and dustproof structure in your usage environment.

Please check each region's Terms & Conditions by region website.

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Device & Module Solutions Company

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D7E-1 D7E-3 D7E-2 D7E-5