# Detection Switch D2X

## **Switch with Crimp Connector**

- Reduced wiring time with AMP crimp-type connectors
- Snap-fit attachment for easy installation
- Actuator operates from either side, allowing mounting in either direction
- High contact force and wiping action for greater contact reliability
- Rated load 0.1 A at 30 VDC
- RoHS Compliant



## **Ordering Information**

Actuator	Terminal	Contact OF	Model
			Standard Model
Center mounted rotary lever	Crimp-type connector	50 g	D2X-C

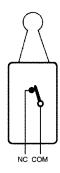
## **Specifications**

## **■** Characteristics

Electrical ratings		0.1 A, 30 VDC (resistive load)	
Operating speed		0.1 mm to 100 mm/second (0.004 to 3.94 in/second)	
Operating frequency	Mechanical	60 operations per minute (OT: full stroke)	
	Electrical	30 operations per minute (0.1 A at 30 VDC)	
Contact resistance		200 m $Ω$	
Insulation resistance		100 M $\Omega$ min. at 250 VDC	
Dielectric strength		250 VAC, 50/60 Hz for 1 minute between contacts of same polarity	
		250 VAC, 50/60 Hz for 1 minute between each terminal and ground	
Vibration	Malfunction durability	10 to 55 Hz, 1.5 mm double amplitude	
Shock	Malfunction durability	300 m/s² minimum (approx. 30 g minimum)	
Ambient temperature	Operating	-10° to 70° C	
Humidity	Operating	45% to 85% RH max. with no icing	
Service life	Mechanical	1 million operations minimum (OT: full stroke)	
	Electrical	50,000 operations minimum (rated load)	
Weight		Approx. 1 g	

Note: Data shown are of initial value.

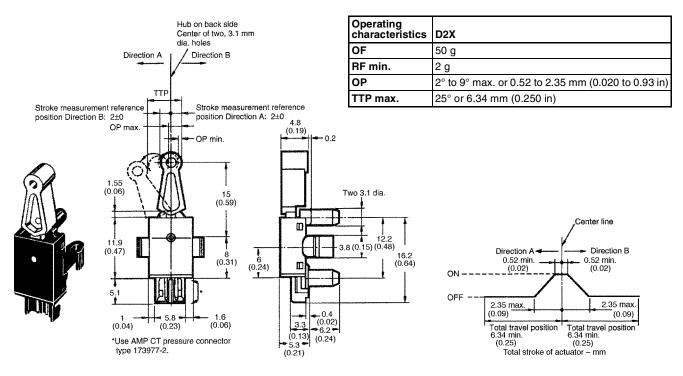
## **■** Contact Form



## **Dimensions**

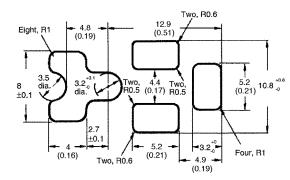
Unit: mm (inch)

## ■ D2X

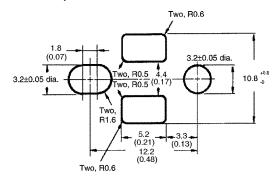


## **■** Mounting Holes

#### With 1.6 mm panel thickness



#### With 1.2 mm panel thickness



**Note: 1.** Unless otherwise specified, a tolerance of  $\pm$  0.2 mm applies to all dimensions.

2. The tolerance of the center of each hole is  $\pm$  0.07 mm.

## **Precautions**

For proper operation, follow these guidelines:

Set the dog or cam stroke so the actuator does not receive excessive force when the switch is actuated. When the actuator is released, the dog or cam must be off the actuator head.

Set the dog or cam so that it will press the head of the lever in the traveling direction of the lever.

Do not allow the lever to be pressed beyond the TTP.

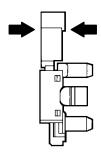
### **■** Correct Use

#### **Operating Object**

The operating object must fully press the lever when the operating object travels and must be perfectly separated from the lever when the operating object is in the free position. The operating object must not be pressed excessively to exceed the TTP, otherwise the D2X may be damaged. Be sure that the operating object imposes a proper load on the lever according to the motion of the lever.

#### **Lever Load**

Do not impose loads in the following directions on the lever, otherwise the Switch may be damaged or malfunction.



## **■** Wiring Connector

Use the following type CT connectors of AMP for wiring.

Press-fit connector: 173997-2 Crimp-style connector housing: 179228-2 Crimp-style connector contact: 179227-1

The above connectors are not sold by Omron. Contact the following offices for these connectors:

#### AMP

Japan

Phone: 81-44-844-8111

• U.S.A

Phone: 1-800-522-6752

• Great Britain

Phone: 44-208-954-2356

Hong Kong

Phone: 852-2735-1628

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