D2X
Detection Switch

A Switch with Crimp-type Connectors that Greatly Reduces Wiring Work

- **Clip-on wiring via crimp-type connectors.**
- **Snap-fit attachment for easy installation.**
- **Operation possible from either side to enable mounting in either direction.**

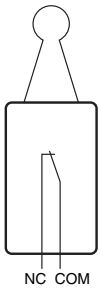


List of Models

Mode
D2X-C

Contact Form

●SPST-NC



Contact Specifications

Contact	Specification	Slide
	Material	Gold plated
Minimum applicable load (reference value) *		5 VDC 1 mA

* Please refer to "**●Using Micro Loads**" in "**Precautions**" for more information on the minimum applicable load.

Ratings

Rated voltage	Resistive load
30 VDC	0.1 A

Note. The above rating values apply under the following test conditions.
(1) Ambient temperature: 20±2°C
(2) Ambient humidity: 65±5%
(3) Operating frequency: 30 operations/min

Characteristics

Permissible operating speed		0.1 mm to 100 mm/s
Permissible operating frequency	Mechanical	60 operations/min
	Electrical	30 operations/min
Insulation resistance		100 MΩ min. (at 250 VDC with insulation tester)
Contact resistance (initial value)		200 mΩ max.
Dielectric strength	Between terminals of the same polarity	250 VAC 50/60 Hz for 1 min
	Between current-carrying metal parts and ground	250 VAC 50/60 Hz for 1 min
Vibration resistance	Malfunction	10 to 55 Hz, 1.5 mm double amplitude
Shock resistance	Destruction	500 m/s² {approx. 50G} max.
	Malfunction	300 m/s² {approx. 30G} max.
Durability *	Mechanical	1,000,000 operations min. (60 operations/min)
	Electrical	50,000 operations min. (30 operations/min)
Degree of protection		IEC IP00
Ambient operating temperature		-10°C to +70°C (at ambient humidity of 60% max.) (with no icing or condensation)
Ambient operating humidity		45% to 85% (for +5°C to +35°C)
Weight		Approx. 1 g

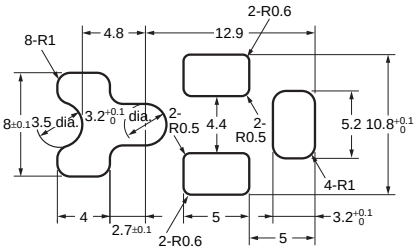
Note. The data given above are initial values.
* For testing conditions, consult your OMRON sales representative.

Downloaded from Arrow.com.

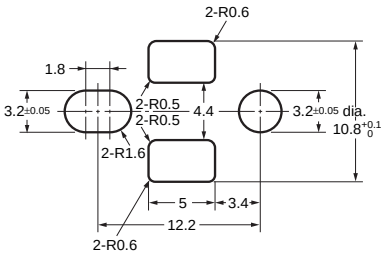
Mounting Holes (Unit: mm)

Refer to the following diagram for mounting hole dimensions, and make sure that the burr is placed to backside of Mounting Plate.

When thickness of the plate (t) is 1.6 mm.



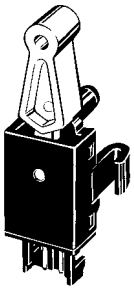
When thickness of the plate (t) is 1.2 mm.

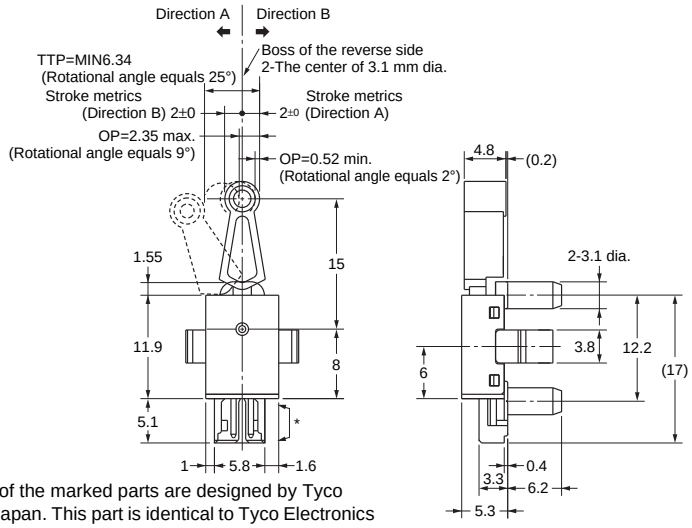


Note 1. Allowable deviation from the center is ±0.07 mm.
Note 2. Unless otherwise specified, a tolerance of ±0.1 mm applies to all dimensions.

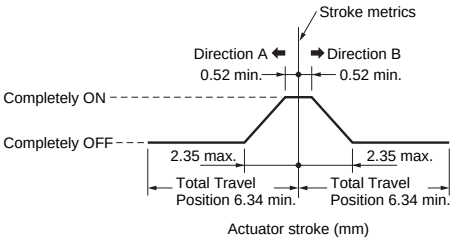
Dimensions (Unit: mm) and Operating Characteristics

D2X-C





Operating Force	OF	Max.	0.49 N {50 gf}
Releasing Force	RF	Min.	0.02 N {2 gf}
Operating Position	OP		0.52 to 2.35 mm
Total Travel Position	TTP	Min.	6.34 mm



* Dimensions of the marked parts are designed by Tyco Electronics Japan. This part is identical to Tyco Electronics Japan's CT connectors (dipole type) in size.

Note 1. Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.
Note 2. The operating characteristics are for cases where the actuator operates in the A (⬅) direction or B (➡) direction.

Precautions

★ Please refer to "Basic Switches Common Precautions" for correct use.

Correct Use

●Terminal Connection

Do not use the Switch with Connector mounted and weight load applied to the Connector and lead wire, otherwise it may rattle or may result in connection failure.

Wiring Connector

- Use the CT Connector made by Tyco Electronics Japan for wiring.
  [Crimp-style connector housing: 179228-2, Crimp-style connector contact: 179227-4]
- The above connectors are not sold by OMRON.
  Contact the offices mentioned in the right for more information on the connectors.

Tyco Electronics Corporation, TE Connectivity Ltd.
■For products and technical support, contact the
Web: http://www.te.com/support-center/

Downloaded from Arrow.com.

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

OMRON Corporation
Device & Module Solutions Company

Regional Contact

Americas
https://components.omron.com/us

Europe
https://components.omron.com/eu

Asia-Pacific
https://components.omron.com/ap

China
https://components.omron.com.cn

Korea
https://components.omron.com/kr

Japan
https://components.omron.com/jp

© OMRON Corporation 2007-2022 All Rights Reserved.
In the interest of product improvement, specifications are subject to change without notice.

Cat. No. B094-E1-05
1122 (0207)

Downloaded from Arrow.com.