D2RW

Sealed Reed Basic Switch

- Achieving strong watertightness by sealing the internal switch and its conductor block
- The internal reed switch circuit block is separated from the mechanical actuator block, enabling the circuit block to be entirely sealed
- Use of a reed switch maintains high contact reliability with micro load range

Sealed Reed Basic Switch
D2RW

Extended life logic level switching with watertight circuitry

- Suitable for micro loads to 1 million operations minimum.
- Internal Reed Switch sealed to IP67 ensures stable operation.
- Extended humidity operating range, up to 95% RH.
- Industry standard mounting for miniature basic switches.
- Available with internally fitted levers.

Ordering Information

■ Model Number Legend

D2RW-01□
1 2

1. **Ratings**
   01: 0.25 A at 100 VDC; 100 μA at 5 VDC
2. **Actuator**
   None: Pin plunger
   L1: Hinge lever
   L2: Hinge roller lever
   L3: Simulated roller lever

■ List of Models

Actuator	Model
Pin plunger	**D2RW-01**
Hinge lever	**D2RW-01L1**
Hinge roller lever	**D2RW-01L2**
Simulated roller lever	**D2RW-01L3**

Specifications

■ Ratings

Switching voltage	100 VDC max.
Switching current	0.25 A max.
Contact capacity	10 W max.

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

■ Characteristics

Operating speed	0.1 mm to 1 m/s (pin plunger models)
Operating frequency	Mechanical: 150 operations/min max. Electrical: 30 operations/min max.
Insulation resistance	100 MΩ min. (at 100 VDC) between terminals of same polarity 100 MΩ min. (at 500 VDC) between current-carrying metal parts and ground
Contact resistance (initial value)	300 mΩ max.
Dielectric strength (see note 2)	200 VDC for 1 min between terminals of the same polarity 500 VAC, 50/60 Hz for 1 min between current-carrying metal parts and ground
Vibration resistance (see note 3)	Malfunction: 10 to 55 Hz, 1.5-mm double amplitude
Shock resistance (see note 3)	Destruction: 500 m/s^2 {approx. 50 G} max. Malfunction: 200 m/s^2 {approx. 20 G} max.
Durability (see note 4)	Mechanical: 1,000,000 operations min. (30 operations/min.) Electrical: 1,000,000 operations min. (15 operations/min.) (100 mA at 24 VDC)
Degree of protection	IEC IP67 (internal Reed Switch only; case sealed to IP40)
Degree of protection against electric shock	Class I
Proof tracking index (PTI)	175
Ambient operating temperature	-10°C to 60°C (at ambient humidity of 60% max.) (with no icing or condensation)
Ambient operating humidity	95% max. (for 5°C to 35°C)
Weight	Approx. 20 g (pin plunger models)

Note: 1. The data given above are initial values.

2. The dielectric strength values shown in the are for models with a separator.

3. For the pin plunger models, the above values apply for use at both the free position and total travel position. For the lever models, they apply at the total travel position. Contact opening or closing time is within 1 ms.

4. For testing conditions, contact your OMRON sales representative.

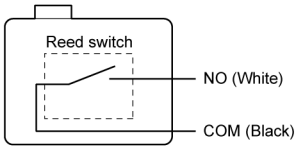
■ Contact Specifications

Internally mounted reed switch

Minimum applicable load	100 μA at 5 VDC

■ Contact Form

SPST-NO



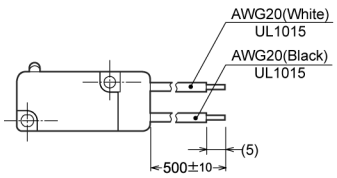
Note: Lead wire colors are indicated in parentheses.

Dimensions

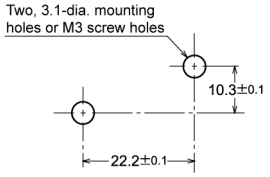
Note: All units are in millimeters unless otherwise indicated.

■ Terminals

Molded Lead Wires



■ Mounting Holes

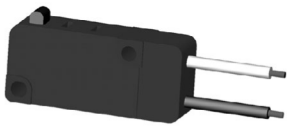


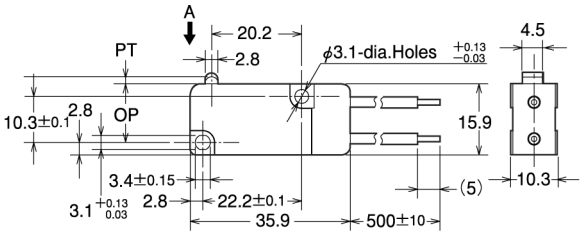
■ Dimensions and Operating Characteristics

Note: 1. All units are in millimeters unless otherwise indicated.
2. Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.
3. The operating characteristics are for operation in the A direction (⬇).

Pin Plunger Models

D2RW-01

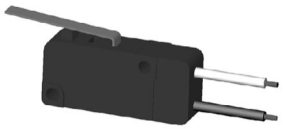


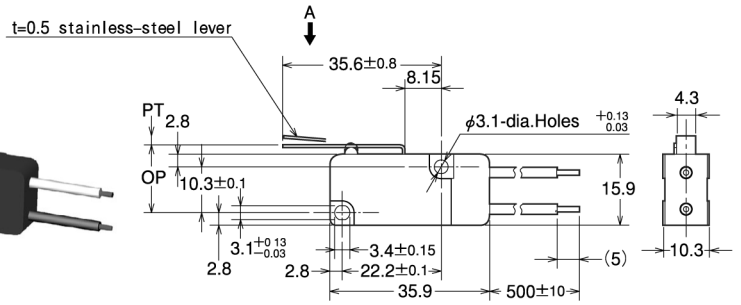


OF max. **RF min.**	1.5 N {153 gf} 0.1 N {10 gf}
PT max. **OT min.** **MD max.**	1.6 mm 0.6 mm 0.8 mm
OP	14.7±0.6 mm

Hinge Lever Models

D2RW-01L1

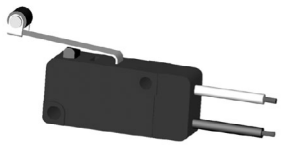


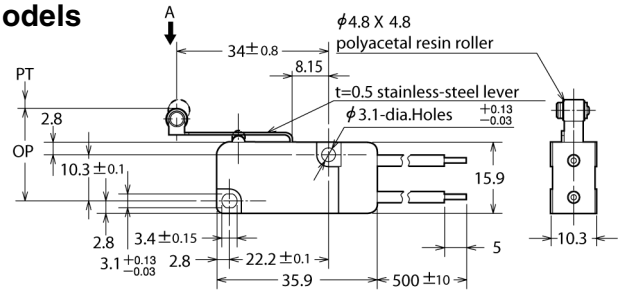


OF max. **RF min.**	0.75 N {76 gf} 0.05 N {5 gf}
PT max. **OT min.** **MD max.**	4.0 mm 1.0 mm 1.6 mm
OP	15.2±1.5 mm

Hinge Roller Lever Models

D2RW-01L2

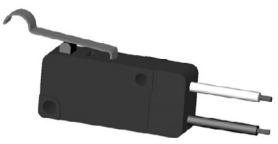


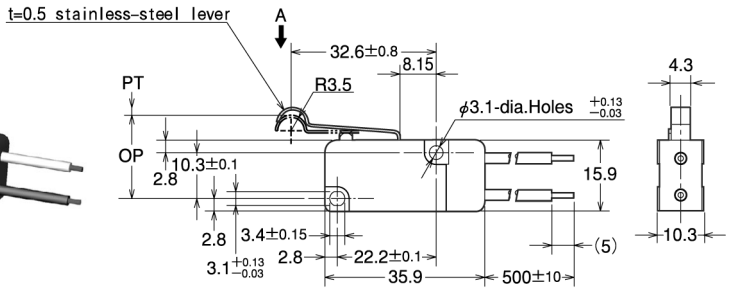


OF max. **RF min.**	0.75 N {76 gf} 0.05 N {5 gf}
PT max. **OT min.** **MD max.**	4.0 mm 1.0 mm 1.6 mm
OP	20.7±1.5 mm

Simulated Roller Lever Models

D2RW-01L3





OF max. **RF min.**	0.75 N {76 gf} 0.05 N {5 gf}
PT max. **OT min.** **MD max.**	4.0 mm 1.0 mm 1.6 mm
OP	18.7±1.5 mm