

# **Double Action Hand Switch**

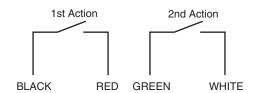
- Good operating feeling with snap action mechanism
- Easy to grip by hand
- Long stroke achieved by unique mechanism
- Having longtime experience in various applications



# Category

Product code
C2U

## **Contact Form**



# **Operating Characteristics (initial)**

Items	Abbr.	Unit	Specification
Operating force1	OF1	N	4.90±1.47
Operating force2	OF2	N	15.69±2.94
Pretravel 1	PT1	mm	(3.5) *
Pretravel 2	PT2	mm	(11.5) *
Total travel	TT	mm	(15) *

<sup>\*</sup> reference value

# Ratings

Resistive load	
30 VDC	2 A
125 VAC	2 A

# **Characteristics**

Operating speed		1 mm to 1000 mm/sec	
Operating frequency	Mechanical	120 ops/min max.	
	Electrical	60 ops/min max.	
Insulation resistance (at 500 VDC)	Between terminals of same polarity		
	Between terminals of different polarity	100 M $\Omega$ min.	
	Between non-live metal parts and ground		
Contact resistance (initi	ct resistance (initial) *1 $2 \Omega$ max. (at wire terminal)		
Dielectric strength	Between terminals of same polarity	1.000 VAC 50/60 Hz for 1 min.	
	Between terminals of different polarity	1,000 VAC 50/60 H2 101 1 IIIIII.	
	Between non-live metal parts and ground	1,500 VAC 50/60 Hz for 1 min.	
Vibration resistance *2	Malfunction	Frequency: 10 to 55 Hz 1.5mm Double amplitude	
Shock resistance *2	Malfunction	300 m/s² max.	
Durability	Mechanical	500,000 operations min. (at 60 ops/min.)	
	Electrical	200,000 operations min. (at 30 ops/min.)	
Degree of protection		IEC IP00	
Ambient operating temperature		-10 to +40°C (at 60% RH max.) (with no icing or condensation)	
Ambient operating humidity		75% RH max. (for +5 to +35°C)	
Weight		Approx. 158 g	

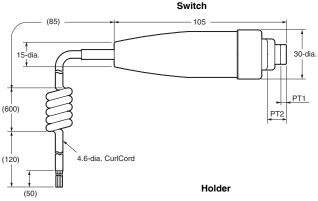
Note: The data given above are initial values.

<sup>\*1.</sup> Measured by voltage drop method at 1 A, 6 to 8 VDC \*2. Close or open circuit of contact is 1 ms max.

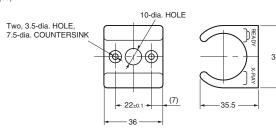
C<sub>2</sub>U

**Dimensions** (Unit: mm)

C2U



Color of wire		
OF1	Black - Red	
OF2	Green - White	



Note: 1. The switch and the holder are supplied together.

- 2. Unless otherwise specified, a tolerance of  $\pm 0.8$  mm applies to all dimensions.
- 3. ( ) dimensions are reference value.

#### **Precautions**

## **★Refer to General Information.**

### **Warning Indications**

Precautions for Safe Use	Supplementary comments on what to do or avoid doing, to use the product safely.
Precautions for Correct Use	Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction, or undesirable effects on product performance.

#### **Precautions for Safe Use**

Use the Switch within the rated voltage and current ranges, otherwise the Switch may have a shortened life expectancy, radiate heat, or burn out. This particularly applies to the instantaneous voltages and currents when switching.

#### **Precautions for Correct Use**

#### Wiring

- The rough standard for soldering work is as follows.
- Capacity of soldering iron: 60 W Soldering time: 3 sec max.

#### Washing

 The Switches are not sealed, and cannot be washed. Doing so will cause the washing agent, together with flux or dust particles on the PCB, to enter the Switch, resulting in malfunction.

#### Application / Storage Environment

 Do not use the Switch in locations that are subject to toxic gas, silicon, excessive dust, excessive dirt, high temperatures, high humidity, sudden temperature changes, water splashes, or oil splashes.

Otherwise, damage resulting by contact failure of the Switch contacts, corrosion, or other causes, or other functional failure may occur.

- The operating characteristics, contact resistance, insulation resistance and dielectric strength of the Switches should be inspected before the usage, if there is the following conditions;
- If they are stored more than 1 year after the production.
- If they are fallen down.
- If condensation occurs.
- If they had been left out of the storage environmental conditions.

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

**OMRON Corporation Device & Module Solutions Company** 

# **Regional Contact**

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