

### 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 like X-ray equipment

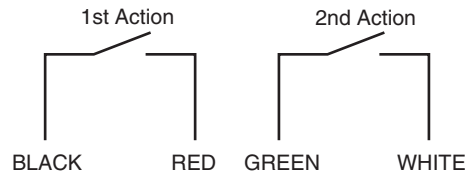
RoHS Compliant



#### 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) *

\* 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	100 MΩ min.
	Between terminals of different polarity	
	Between non-live metal parts and ground	
Contact resistance (initial) *1		2 Ω 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	
	Between non-live metal parts and ground	
Vibration resistance *2	Malfunction	Frequency: 10 to 55 Hz 1.5mm Double amplitude
Shock resistance *2	Malfunction	300 m/s <sup>2</sup> 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.

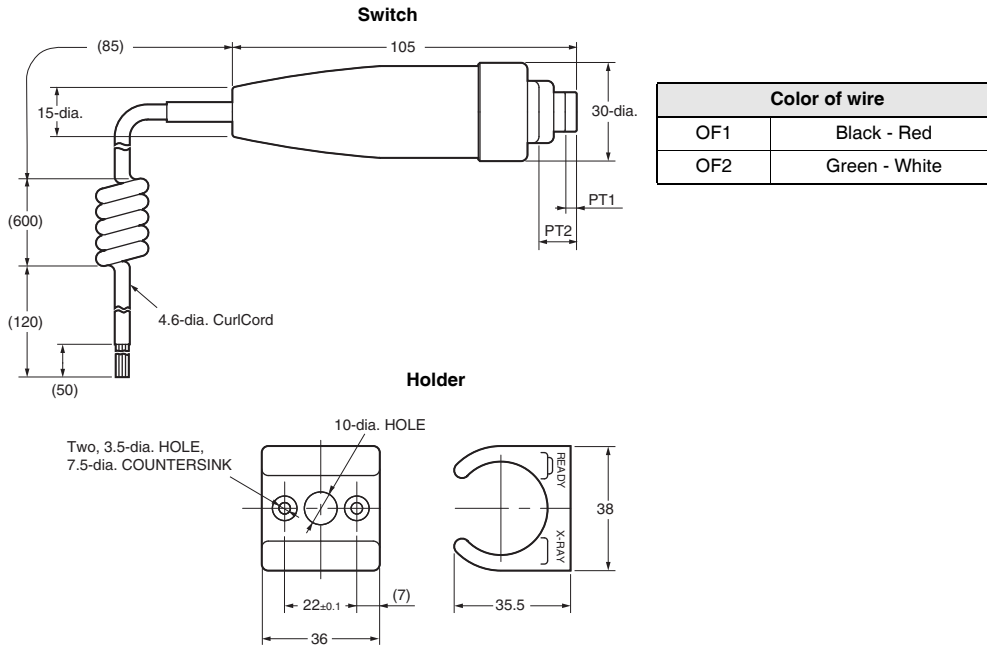
\*1. Measured by voltage drop method at 1 A, 6 to 8 VDC

\*2. Close or open circuit of contact is 1 ms max.

## Dimensions

(Unit: mm)

### C2U



- 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

<b>Precautions for Safe Use</b>	Supplementary comments on what to do or avoid doing, to use the product safely.
<b>Precautions for Correct Use</b>	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.

- Application examples provided in this document are for reference only. In actual applications, confirm equipment functions and safety before using the product.
- Consult your OMRON representative before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, and other systems or equipment that may have a serious influence on lives and property if used improperly. Make sure that the ratings and performance characteristics of the product provide a margin of safety for the system or equipment, and be sure to provide the system or equipment with double safety mechanisms.

**Note: Do not use this document to operate the Unit.**