

C8EF

Connector Switch

Easily connect with bus-bar type switch


- <Bus-bar connection> Easy connection with Bus-bar by only inserting.
- <Both sides connection> Able to connect from both L&R sides.
- <High reliable SW> Internal SW D2F is proven in Automotive market.

RoHS Compliant



List of Models

Due to the idiosyncrasies of the automotive parts industry, a business decision is required on individual items to determine when to start supply. Contact your OMRON representative for information on individual models.

Actuator	Terminals	Ratings Contact Form	0.1
Leaf lever 	Bus-bar	1C	C8EF-01L1

Contact Specifications

Contact	Specification	Crossbar
	Material	Gold alloy
	Gap	0.25 mm
Minimum applicable load (see note)		5 VDC 1 mA

Note: For more information on the minimum applicable load, refer to *Using Micro Loads*.

Ratings

Rating voltage	Resistive load
12 VDC	0.1 A

Note: The rating values apply under the following test conditions.

1. Ambient temperature: $20 \pm 2^\circ\text{C}$
2. Ambient humidity: $65 \pm 5\%$
3. Operating frequency: 30 operations/min

Characteristics

Permissible operating speed		5 mm to 500 mm/s (pin plunger models)
Permissible operating frequency	Mechanical	60 operations/min max.
	Electrical	30 operations/min max
Insulation resistance		100 MΩ max. (at 500 VDC)
Contact resistance (initial value)		100 mΩ max.
Dielectric strength *1	Between terminals of the same polarity	600 VAC 50/60 Hz 1min
	Between current-carrying metal parts and ground	1,500 VAC 50/60 Hz 1min
	Between terminals and non-current-carrying metal parts	1,500 VAC 50/60 Hz 1min
Vibration resistance	Malfunction	10 to 55 Hz, 1.5mm double amplitude
Shock resistance	Destruction	1,000 m/s ² max.
	Malfunction	300 m/s ² max.
Durability *2	Mechanical	1,000,000 operations min. (60 operations/min)
	Electrical	100,000 operations min. (30 operations/min)
Degree of protection		IEC IP30
Ambient operating temperature		-30 to +80°C (at 60%RH max.) (with no icing or condensation)
Ambient operation humidity		85%RH max. (for +5 to +35°C)
Weight		Approx. 1.6 g

Note: The data given above are initial values.

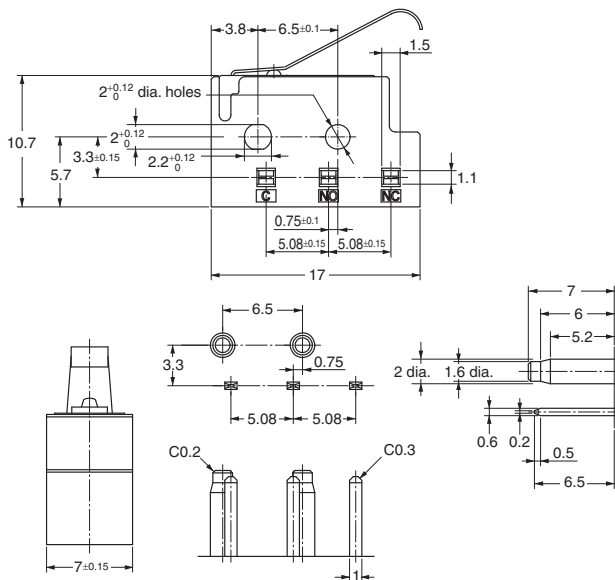
*1. The values for dielectric strength shown are for models with a Separator.
Refer to your OMRON website.

*2. For testing conditions, consult your OMRON sales representative.

Dimensions (Unit: mm) / Operating Characteristics

● Bus-bar C8EF-01L1

Detection Switches



Operating Force	OF Max.	0.54 N {55 gf}
Releasing Force	RF Min.	0.04 N {4 gf}
Free Position	FP Max.	13.6 mm
Operating Position	OP Max.	10.4 ± 0.8 mm
Total Travel Position	TTP Max.	7.6 mm

Note: The setting of the rib shape for the switch fixation is recommended on the boss side.

Note: Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.

Precautions

Please refer to "Safety Precautions for All Detection Switches" on page 15 for correct use.

Correct Use

●Mounting

- Turn OFF the power supply before mounting or removing the Switch, wiring, or performing maintenance or inspection. Failure to do so may result in electric shock or burning.
- For M2-screw mounting models, use M2 mounting screws with plane washers or spring washers to securely mount the Switch. Tighten the screws to a torque of 0.08 to 0.1 N·m. Exceeding the specified torque may result in deterioration of the sealing or damage.

●Using Micro Loads

- Even when using micro load models within the operating range shown below, if inrush/surge current occurs, it may increase the contact wear and so decrease durability. Therefore, insert a contact protection circuit where necessary.