

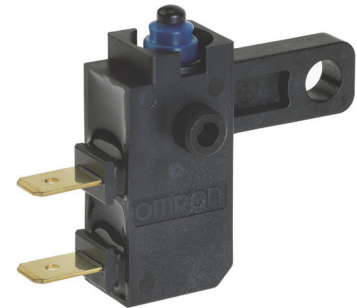
Two Wheeler Brake Lamp Switch

C8EA-D

High reliability and Silent operating by sliding contact structure

- LED specialized stop switch for front brake
- Compact & lightweight
- High insulation performance by the seal structure and the insulation distance
- Compatible with current products

RoHS Compliant



Model Number Legend

Some model number elements cannot be used in conjunction.


If you have any desired model with a specification not in this model number legend, contact your OMRON sales representative. We will consider if a requested model can be manufactured by modifying existing models.

C8EA- -

1 2 3 4 5

- | | |
|--|---|
| <p>1. Model</p> <p>DR : Right pitch
DL : Left pitch</p> <p>2. Ratings</p> <p>3 : For LED load</p> <p>3. Contact Form</p> <p>2 : SPST-NC</p> | <p>4. Terminals</p> <p>1 : #187, pitch 9.2, with terminal cover</p> <p>5. Option Code</p> |
|--|---|

List of Models

Actuator	Terminals	Model Contact Form	Right pitch	Left pitch
Pin plunger 	9.2 mm pitch	SPST-NC	C8EA-DR321	C8EA-DL321

If you have any desired model with a specification not in the above list, contact your OMRON sales representative. We will consider if a requested model can be manufactured by modifying existing models.

Contact Specifications

Contact	Specification	Slide
	Material	Silver Plated
Minimum applicable load (see note)		12 VDC 10 mA

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

Ratings

Rating voltage	Lamp load
12 VDC	500 mA

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

1. Ambient temperature: 20 ± 2°C
2. Ambient humidity: 65 ± 5%
3. Operating frequency: 15 operations/min

■ Characteristics

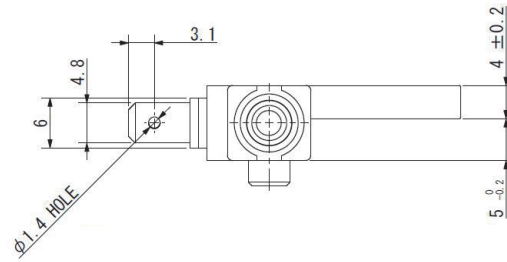
Item		
Permissible operating speed		1mm to 500 mm/s (pin plunger models)
Permissible operating frequency	Mechanical	30 operations/min max.
	Electrical	15 operations/min max.
Insulation resistance		100 M Ω min. (at 500 VDC)
Contact resistance (initial value)		200 m Ω max.
Dielectric strength *1	Between terminals of the same polarity	500 VAC 50/60 Hz 1min
	Between terminals and non-current-carrying metal part	500 VAC 50/60 Hz 1min
Vibration resistance	Malfunction	50 to 500 Hz, 20 G
Durability *2	Mechanical	300,000 operations min. (at 30 ops./min)
	Electrical	300,000 operations min. (at 15 ops./min)
Degree of protection		IEC IP67
Ambient operating temperature		-30 to +70°C (at 60% RH max.) (with no icing or condensation)
Ambient operation humidity		95% RH max. (for +5 to +35°C)
Weight		Approx. 4.5 g

Note: The data given above are initial values.

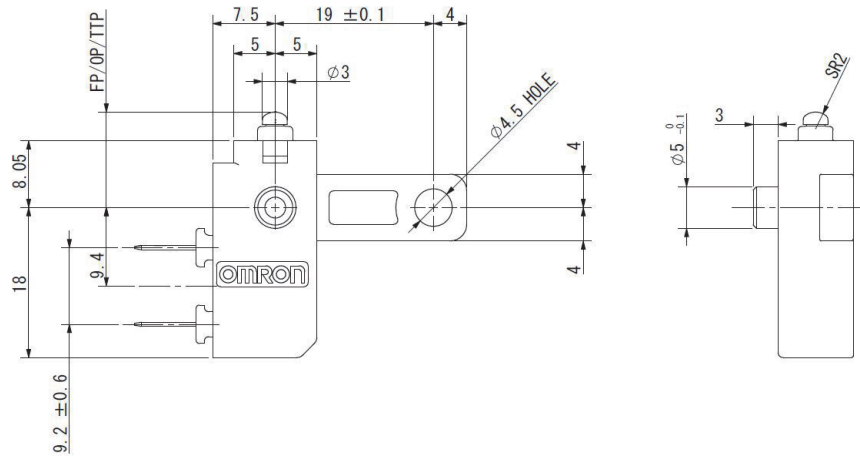
- *1. The values for dielectric strength shown are for models with a Separator.
Refer to your OMRON website.
- *2. For testing conditions, consult your OMRON sales representative.

■Dimensions (Unit: mm) / Operating Characteristics

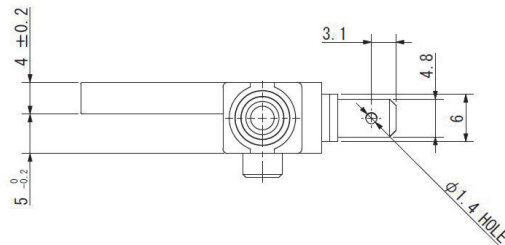
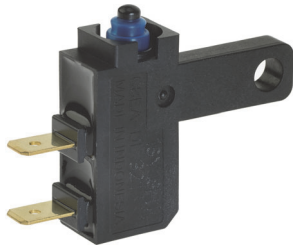
●C8EA-CR321



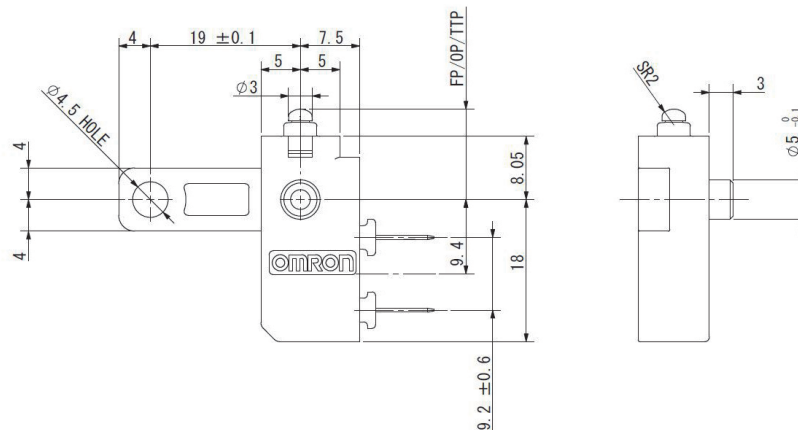
Operating Force	OF	Max.	3.14 N {320 gf}
Total Travel Force	TTF	Max.	4.51 N {460 gf}
Free Position	FP	Max.	11.5 ± 0.3 mm
Operating Position	OP	Max.	10.2 ± 0.5 mm
Total Travel Position	TTP	Max.	8.05 mm



●C8EA-CL321



Operating Force	OF	Max.	3.14 N {320 gf}
Total Travel Force	TTF	Max.	4.51 N {460 gf}
Free Position	FP	Max.	11.5 ± 0.3 mm
Operating Position	OP	Max.	10.2 ± 0.5 mm
Total Travel Position	TTP	Max.	8.05 mm



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

■Precautions

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

Cautions

●Degree of Protection

- Do not use this product underwater.
- Do not operate the Switch when it is exposed to water spray, or when water drops adhere to the Switch surface, or during sudden temperature changes, otherwise water may intrude into the interior of the Switch due to a suction effect.
- Prevent the Switch from coming into contact with oil and chemicals.
Otherwise, damage to or deterioration of Switch materials may result.
- Do not use the Switch in areas where it is exposed to silicon adhesives, oil, or grease. Otherwise faulty contact may result due to the generation of silicon oxide.

●Side-actuated (Cam/Dog) Operation

- When using a cam or dog to operate the Switch, factors such as the operating speed, operating frequency, push-button indentation, and material and shape of the cam or dog will affect the durability of the Switch. Confirm performance specifications under actual operating conditions before using the Switch in applications.

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 M4-screw mounting models, use M4 mounting screws with plane washers or spring washers to securely mount the Switch. Tighten the screws to a torque of MAX 1.65 N·m. Exceeding the specified torque may result in deterioration of the sealing or damage.

●Operating Body

- Use an operating body with low frictional resistance and of a shape that will not interfere with the sealing rubber, otherwise the plunger may be damaged or the sealing may deteriorate.

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

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Electronic and Mechanical Components Company

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