

Economical, Miniature Limit Switch Boasting Rigid Construction

- The Head, Box, and Cover mate with ridged surfaces to maintain strength.
- A unique Head structure provides a large OT for smooth operation.
- Easy-to-wire conduit opening design.
- Ideal for application in printing machines, forming machines, and light machines.
(High Switches with high sealing characteristics, such as WL or D4C Switches, in locations subject to oil, water, or precipitation.)
- Models with grounding terminals conform to the CE marking.
- Approved by CCC (Chinese standard).
(Ask your OMRON representative for information on approved models.)

Be sure to read *Safety Precautions* on page 4 to 5 and *Safety Precautions for All Limit Switches*.

Model Number Structure

Model Number Legend (Not all combinations are possible. Ask your OMRON representative for details.)

HL-5□□
(1)(2)

(1) Actuators

- 000: Roller lever
- 030: Adjustable roller lever
- 050: Adjustable rod lever
- 100: Sealed plunger
- 200: Sealed roller plunger
- 300: Coil spring

(2) Ground Terminal Specifications

- Blank : Without ground terminal
- G : With ground terminal/M5 tapping on the rear side

Ordering Information

Actuator	Model
Roller lever	HL-5000 *
Adjustable roller lever	HL-5030 *
Adjustable rod lever	HL-5050 *
Sealed plunger	HL-5100 *
Sealed roller plunger	HL-5200
Coil spring	HL-5300

* HL-5000 Limit Switches are offered with a choice of ground terminal/M5 tapping on the rear side conforming to various standards. When placing an order, add the code to the model number to indicate if ground terminal/M5 tapping on the rear side is required.
-G: with ground terminal/M5 tapping on the rear side.



For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Specifications

Approved Standards

Agency	Standard	File No.
CCC (CQC)	GB/T14048.5	Contact your OMRON representative for details.

Note: Ask your OMRON representative for information on approved models.

Ratings

Rated voltage	Non-inductive load (A)				Inductive load (A)			
	Resistive load		Lamp load		Inductive load		Motor load	
	NC	NO	NC	NO	NC	NO	NC	NO
125 VAC	5	1.5	0.7	3	2	1		
250 VAC	5	1	0.5	3	1.5	0.8		
12 VDC	5	3	4	3				
24 VDC	5	3	4	3				
125 VDC	0.4	0.2	—	—	—	—		
250 VDC	0.4	0.2	—	—	—	—		

- Note: 1. The above figures are for steady-state currents.
2. Inductive loads have a power factor of 0.4 min. (AC) and a time constant of 7 ms max. (DC).
3. Lamp load has an inrush current of 10 times the steady-state current.
4. Motor load has an inrush current of 6 times the steady-state current.

Inrush current	NC	24 A max.
	NO	12 A max.

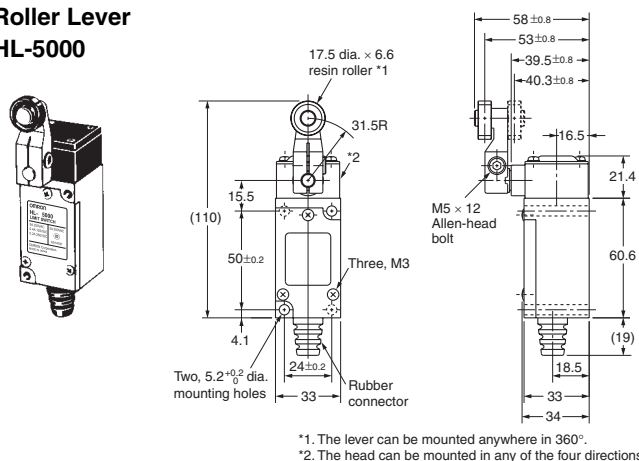
Approved Standard Ratings CCC (GB/T14048.5)

Applicable category and ratings
AC-15 3 A/250 VAC

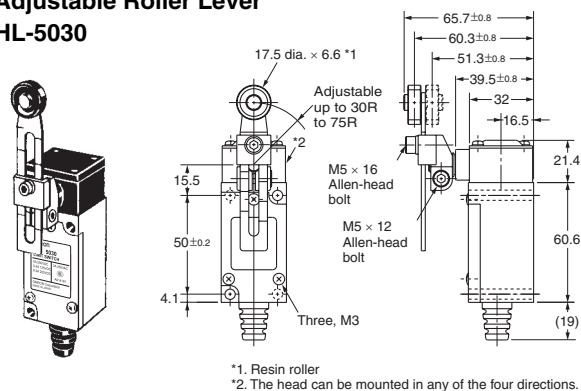
Dimensions and Operating Characteristics

Switches (Dimensions not shown are the same as roller lever models.)

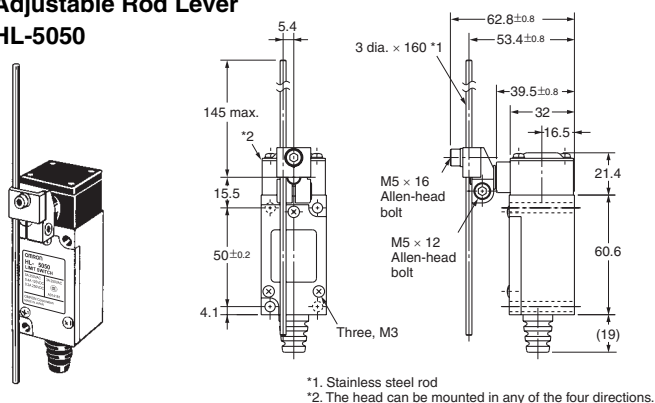
Roller Lever HL-5000



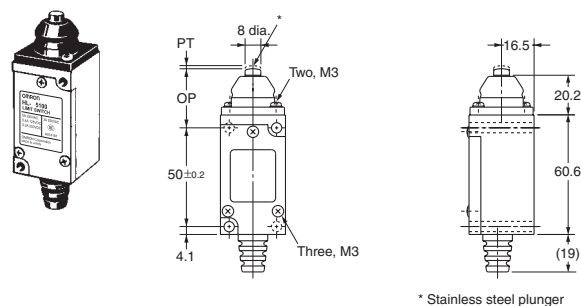
Adjustable Roller Lever HL-5030



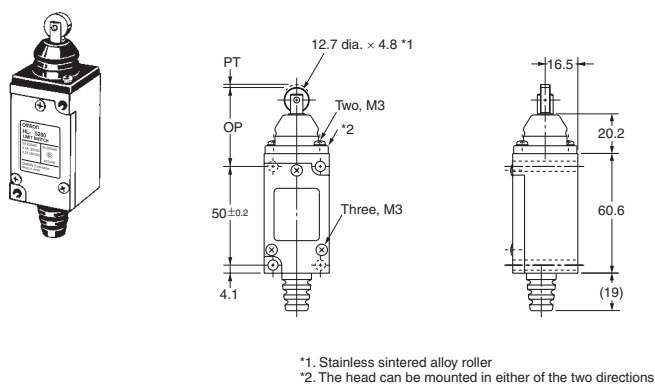
Adjustable Rod Lever HL-5050



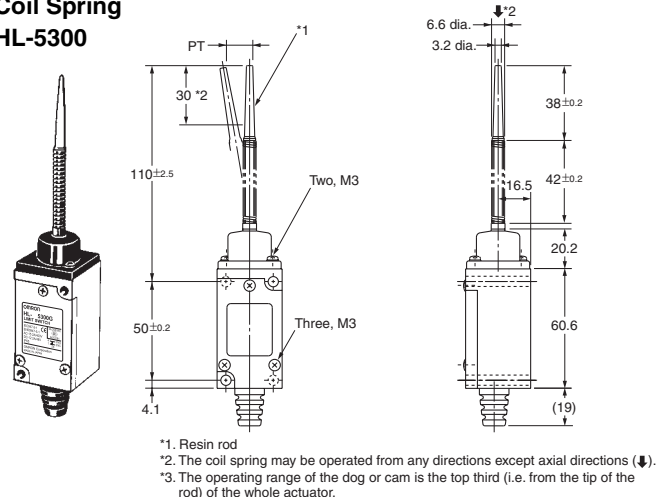
Sealed Plunger HL-5100



Sealed Roller Plunger HL-5200



Coil Spring HL-5300



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

Operating characteristics	Model	HL-5000	HL-5030 *	HL-5050 *	HL-5100	HL-5200	HL-5300
Operating force	OF max.	7.35 N	7.35 N	7.35 N	8.83 N	8.83 N	1.47 N
Release force	RF min.	0.98 N	0.98 N	0.98 N	1.47 N	1.47 N	—
Pretravel	PT max.	20°	20°	20°	1.5 mm	1.5 mm	30 mm
Overtravel	OT min.	50°	50°	50°	4 mm	4 mm	—
Movement Differential	MD max.	12°	12°	12°	1 mm	1 mm	—
Operating position	OP	—	—	—	30±0.8 mm	40±0.8 mm	—

* Measured with the types of the 31.5-mm arm or rod length.

OF and RF measured at the arm length of 75 mm for HL-5030, and 145 mm for HL-5050 (reference values).

	HL-5030	HL-5050
OF	3.09 N	1.60 N
RF	0.41 N	0.22 N