

LXW-5

Series Micro Switches

Thank you very much for using the C-Lin Brand micro switches. Please read the instruction manual before use!

23A003E1

I. Overview

The LXW-5 series micro switches are widely applied in food machinery, automatic packaging machines, machine tools, conveying machinery, automatic production line control, and light industrial machinery with strict protection requirements.

II. Main Features

1. Rated Switching Capacity: 15A

a) 15A at 125VAC, 250VAC

b) 1/8HP at 125VAC; 1/4HP at 250VAC

c) 1/2A at 125VDC; 1/4A at 250VDC

2. High Precision & Long Service Life

a) Operating Position (OP) precision reaches up to $\pm 0.5\text{mm}$ (for pin-button models).

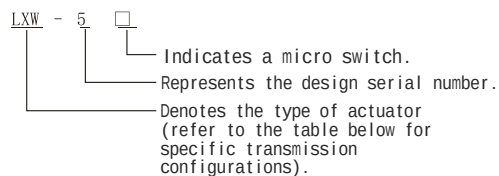
b) Mechanical service life: Over 20 million cycles (for pin-button models).

3. Versatile Transmission Modes: Customizable transmission levers or devices are available per customer requirements.

4. Convenient Wiring: M4 screw terminals offer optional washers (anti-slip toothed washer [-B3], cup washer [-B], spring washer [-B5]) for flexible selection.

5. Enhanced Safety: Terminal protective covers are optionally available.

III. Model Designation and Its Interpretation



Various Transmission Configurations

Transmission Type	Schematic Diagram	Transmission Type	Schematic Diagram
Pin-button Type (LXW-511Z)		Reed Roller Lever Type (LXW-515S)	
Slim Plunger Button Type (LXW-515C)		Lever Type (LXW-511N1, LXW-511N2)	
Short Plunger Button Type (LXW-511D)		Roller Lever Type (LXW-511G1, LXW-511G2)	
Panel-mounted Plunger Type (LXW-511M)		Unidirectional Roller Lever Type (LXW-515B)	
Panel-mounted Roller Plunger Type (LXW-511Q1, LXW-511Q2)		Micro Pivot Cable Lever Type (LXW-515R)	
Reed Lever Type (LXW-515X)			

IV.Ratings

Rated Voltage	Non-inductive Load				Inductive Load				Inrush Current (A)	
	Resistive Load		Lamp Load		Inductive Load		Motor Load			
	NC	NO	NC	NO	NC	NO	NC	NO	NC	NO
125VAC	15		3	1.5	15		5	2.5	≤ 30 Max	≤ 15 Max
250VAC	15		2.5	1.25	15		3	1.5		
500VAC	3		1.5	0.75	2.5		1.5	0.75		
8VDC	15		3	1.5	15		5	5		
14VDC	15		3	1.5	10		5	5		
30VDC	6 (2)		3	1.5	5		5	5		
125VDC	0.4		0.4	0.4	0.05		0.05	0.05		
250VDC	0.2		0.2	0.2	0.03		0.03	0.03		

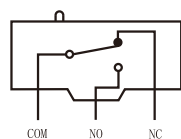
-3-

V.Performance

Operating Speed	0.01mm ~1m/s	
Operation Frequency	Mechanical: 240 cycles/min	Electrical: 20 cycles/min
Contact Resistance	$\leq 15\text{m}\Omega$ (initial)	
Insulation Resistance	$\geq 100\text{M}\Omega$ (under DC 500V)	
Withstand Voltage	Between non-consecutive terminals: 1,000VAC, 50/60Hz, lasting 1 minute Between current-carrying parts & ground: 2,000VAC, 50/60Hz, lasting 1 minute	
Vibration	(10Hz~20Hz): 1.5mm double amplitude, endurance without false operation (10Hz~55Hz).	
Shock	Mechanical endurance: 1,000m/sec ² Endurance without false operation: 300m/sec ²	
Ambient Temperature	General type: -25°C~+80°C Sealed type: -15°C~+80°C	
Ambient Humidity	General type: $\leq 85\%$ RH Sealed type: $\leq 95\%$ RH	
Service Life	Mechanical: $\geq 1,000,000$ cycles- Electrical: $\geq 300,000$ cycles	
Protection Grade	IP65	

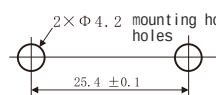
-4-

VI.Contact Configuration

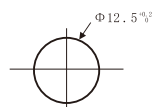


Changeover Type

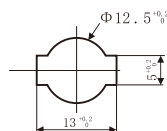
VII.Installation Diagrams



Mounting Holes and Machining Dimensions

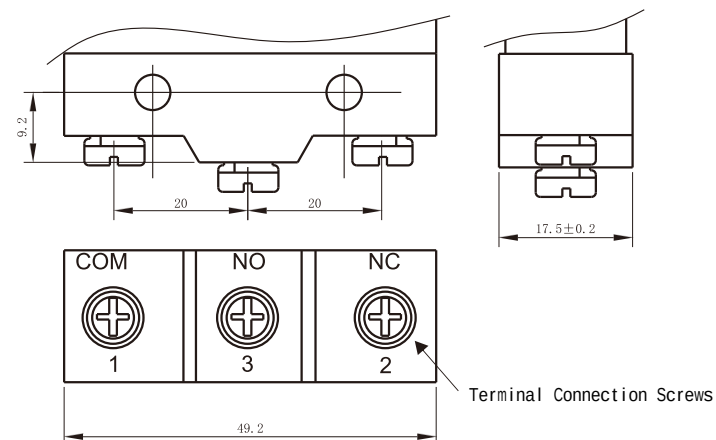


Panel-mounted Plunger Type



Panel-mounted Roller Plunger Type

VIII.Dimensional Drawing of Terminal Connection Area



-6-

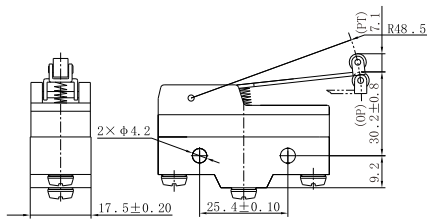
-5-

IX.Appearance and Dimensions



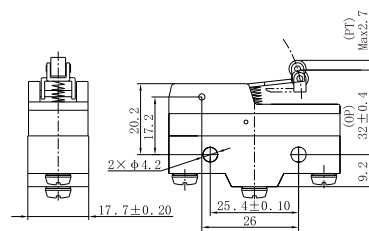
LXW-511G1

Operating Characteristics
 Operating Force (max OF): 160g
 Reset Force (min RF): 22g
 Pre-travel (PT, max): 7.1mm
 Differential Travel (MD, max): 1.02mm
 Over-travel (OT, min): 4mm
 Free Position (FP): 36.5mm
 Operating Position (OP): 30.2±0.8mm



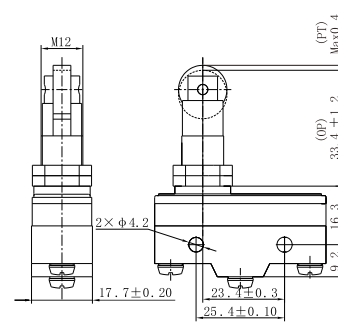
LXW-511G2

Operating Characteristics
 Operating Force (max OF): 160g
 Reset Force (min RF): 42g
 Pre-travel (PT, max): 2.7mm
 Differential Travel (MD, max): 0.5mm
 Over-travel (OT, min): 2.4mm
 Operating Position (OP): 30.2±0.4mm



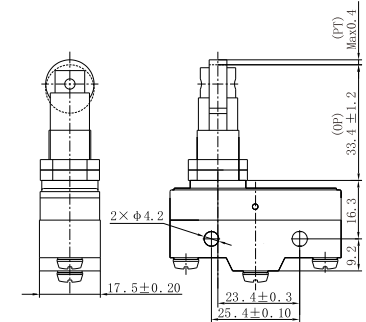
LXW-511Q1

Operating Characteristics
 Operating Force (max OF): 350g
 Reset Force (min RF): 114g
 Pre-travel (PT, max): 0.4mm
 Differential Travel (MD, max): 0.05mm
 Over-travel (OT, min): 3.58mm



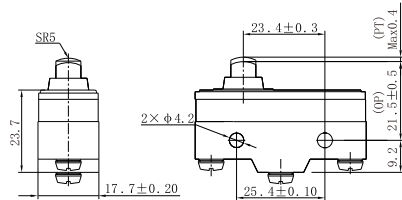
LXW-511Q2

Operating Characteristics
 Operating Force (max OF): 350g
 Reset Force (min RF): 114g
 Pre-travel (PT, max): 0.4mm
 Differential Travel (MD, max): 0.05mm
 Over-travel (OT, min): 3.58mm



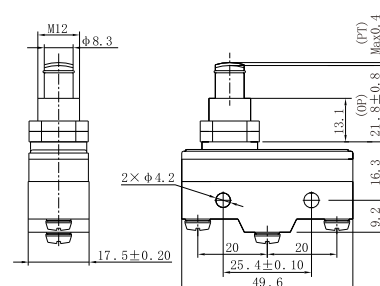
LXW-511D

Operating Characteristics
 Operating Force (max OF): 350g
 Reset Force (min RF): 114g
 Pre-travel (PT, max): 0.4mm
 Differential Travel (MD, max): 0.05mm
 Over-travel (OT, min): 1.6mm
 Operating Position (OP): 21.5±0.5mm



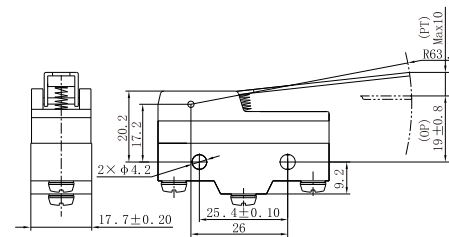
LXW-511M

Operating Characteristics
 Operating Force (max OF): 350g
 Reset Force (min RF): 114g
 Pre-travel (PT, max): 0.4mm
 Differential Travel (MD, max): 0.05mm
 Over-travel (OT, min): 5.5mm



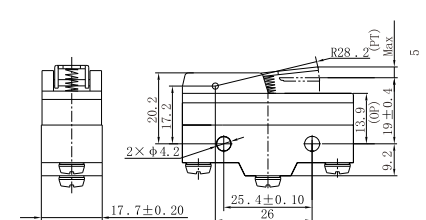
LXW-511N1

Operating Characteristics
 Operating Force (max OF): 70g
 Reset Force (min RF): 14g
 Pre-travel (PT, max): 10mm
 Differential Travel (MD, max): 1.27mm
 Over-travel (OT, min): 5.6mm
 Free Position (FP): 28.2mm
 Operating Position (OP): 19±0.5mm



LXW-511N2

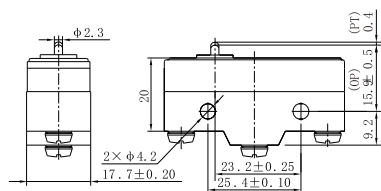
Operating Characteristics
 Operating Force (max OF): 100g
 Reset Force (min RF): 28g
 Pre-travel (PT, max): 5mm
 Differential Travel (MD, max): 1mm
 Over-travel (OT, min): 2mm
 Operating Position (OP): 19±0.4mm





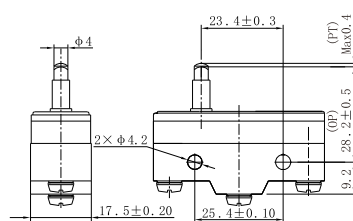
LXW-511Z

Operating Characteristics
 Operating Force (max OF): 350g
 Reset Force (min RF): 114g
 Pre-travel (PT, max): 0.4mm
 Differential Travel (MD, max): 0.05mm
 Over-travel (OT, min): 0.13mm



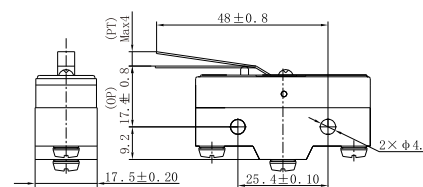
LXW-515C

Operating Characteristics
 Operating Force (max OF): 350g
 Reset Force (min RF): 114g
 Pre-travel (PT, max): 0.1mm
 Differential Travel (MD, max): 0.05mm
 Over-travel (OT, min): 1.6mm
 Operating Position (OP): 28.2±0.5mm



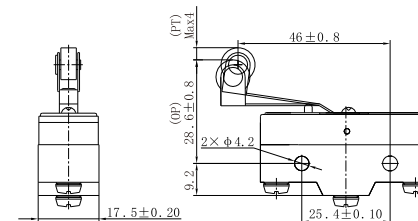
LXW-515X

Operating Characteristics
 Operating Force (max OF): 300g
 Reset Force (min RF): 50g
 Pre-travel (PT, max): 4mm
 Differential Travel (MD, max): 1.3mm
 Over-travel (OT, min): 1.6mm
 Free Position (FP): 20.6mm
 Operating Position (OP): 17.4±0.8mm



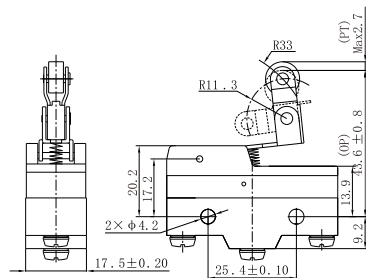
LXW-515S

Operating Characteristics
 Operating Force (max OF): 300g
 Reset Force (min RF): 50g
 Pre-travel (PT, max): 4mm
 Differential Travel (MD, max): 1.3mm
 Over-travel (OT, min): 1.6mm
 Free Position (FP): 31.8mm
 Operating Position (OP): 28.6±0.8mm



LXW-511B

Operating Characteristics
 Operating Force (max OF): 160g
 Reset Force (min RF): 42g
 Pre-travel (PT, max): 2.7mm
 Differential Travel (MD, max): 0.5mm
 Over-travel (OT, min): 2.4mm
 Operating Position (OP): 43.1±0.8mm



LXW-515R

Operating Characteristics
 Operating Force (max OF): 10g
 Reset Force (min RF): 42g
 Pre-travel (PT, max): 2.7mm
 Differential Travel (MD, max): 0.5mm
 Over-travel (OT, min): 2.4mm
 Free Position (FP): 32.5mm
 Operating Position (OP): 30.2±0.4mm

