

VERTICAL LIMIT SWITCH

VXT-LS-T22 & VXT-LS-T22M

Vertical (Roller) Wheel Plunger Type

VXT-LS-T22 · Standard / Conduit Entry

VXT-LS-T22M · M12 Connector Entry

A roller-plunger limit switch with a vertically-mounted metal-ball roller for top-down cam actuation. The rolling contact minimises friction and extends actuator life under repeated tripping.



VXT-LS-T22 (standard) | VXT-LS-T22M (M12 connector)

Key Features

- Double-circuit type limit switch (1NO + 1NC)
- High mechanical strength — intensive plastic with aluminium die-cast body
- Small size, water-proof & oil-proof construction (IP65)
- Built-in contact box with double-spring for long mechanical life
- Smooth operation with larger over-travel distance
- Conduit design for convenient cabling
- Wide range of actuators for different applications
- Electrical life: 500,000+ operations (250V / 6A resistive load)

Typical applications: Top-down cam sensing, vertical slides, indexing and feed mechanisms.

CE CCC TÜV IP65

Manufactured in a facility that maintains CE | CCC (GB/T 14048.5) compliance standards.

Technical Specifications

General Specifications

Operation Speed	5mm ~ 0.5m/s
Operating Frequency	30 operations/min (electrical)
Contact Resistance	25mΩ max. (initial value)
Insulation Resistance	100MΩ min. (at 500VDC)
Minimum Working Load	DC24V 10mA min.
Rated Insulation Voltage (Ui)	300V
Rated Impulse Withstand Voltage (Uimp)	4kV
Conventional Free Air Heating Current (Ith)	10A

Environmental Specifications

Ambient Temperature	-20°C to +70°C (with no icing)
Humidity	<95% RH
Vibration	10–55Hz, 1.5mm double amplitude
Shock (Mechanical)	1,000 m/s ² (approx. 100G)
Shock (Malfunction)	300 m/s ² (approx. 30G)
Protection Rating	IP65

Electrical Life & Durability

Electrical Life	500,000+ operations (250V / 6A resistive load)
Dielectric Strength	1000VAC, 50/60Hz · 1 min — between terminals of same polarity
	1500VAC, 50/60Hz · 1 min — between current-carrying & non-current-carrying parts
	1500VAC, 50/60Hz · 1 min — between each terminal and ground

Safety Certification Ratings

CCC (GB/T 14048.5)	AC-15 : 6A / 250V
TÜV (EN 60947-5-1)	DC-13 : 0.3A / 220V

Electrical Ratings

Voltage	Resistive	Lamp	Inductive	Motor
AC125V	6A	NC 1.5A / NO 0.7A	3A	NC 2A / NO 1A
AC250V	6A	NC 1A / NO 0.5A	3A	NC 1.5A / NO 0.8A
DC12V	6A	3A	4A	3A
DC24V	6A	3A	4A	3A
DC125V	NC 0.4A / NO 0.2A	—	—	—
DC50V	NC 0.4A / NO 0.2A	—	—	—

Surge current — NC: max. 24A | NO: max. 12A. Figures denote consistent (steady-state) current levels.

VXT-LS-T22 / VXT-LS-T22M — Operating Data

Operating Characteristics	
Operating Force OF (Max.)	9 N
Release Force RF (Min.)	1.5 N
Pre-travel PT (Max.)	1.8 mm
Over-travel OT (Min.)	4 mm
Movement Differential MD (Max.)	1 mm
Total Travel TT (Min.)	5.5 mm
Operating Position OP	37 ± 0.8 mm

Linear actuator — travel values in millimetres.

Dimensions	
Overall Height	112 mm
Body Width	21 ± 0.2 mm
Body Depth	29 mm
Body Height	56 ± 0.2 mm
Total Depth	63.5 mm
Top Plate Width	20 mm (inner 10.2)
Actuator	Vertical Roller: Ø12.6 × 3.8 mm (Metal Ball)
Plunger Extension	39.5 mm
Mounting Screws	4 × M5×P0.8, depth ≥ 7.5 mm
Mounting Holes	4 × Ø4.2 mm
Conduit Entry	Standard / M12
Conduit Base	15.5 × 25.2 mm
Side Clearance	22.5 mm

Contact Form & Wiring



Contact form: 1NO + 1NC (double circuit) · Terminals — Pin 14 (NO), Pin 13 (NO), Pin 11 (NC), Pin 12 (NC)

Ordering Information

Vertical (Roller) Wheel Plunger Type

Standard / conduit (cable-gland) entry

VXT-LS-T22

M12 quick-disconnect connector entry

VXT-LS-T22M

Notes

1. Inductive load refers to a power factor of 0.4 (AC) or a time constant of <7ms (DC).
2. Lamp load may experience surge currents up to 10× the normal rating.
3. Motor load may experience surge currents up to 6× the normal rating.
4. Where NC / NO values are equal, a single value is shown.
5. Shock specifications exclude the coil-spring type.

Specifications subject to change without notice. Please verify the latest specifications before ordering.