



Explosion Proof Limit Switch

User Manual

I. Scope of Application and Operating Conditions

1.1 Scope of Application

The LX5-□□ explosion-proof limit switch (hereinafter referred to as the switch) is mainly applicable to Zone 1 or Zone 2 explosive gas environments, specifically IIA-IIB class, T1-T6 group gas locations, and is suitable for hazardous locations containing explosive gas mixtures.

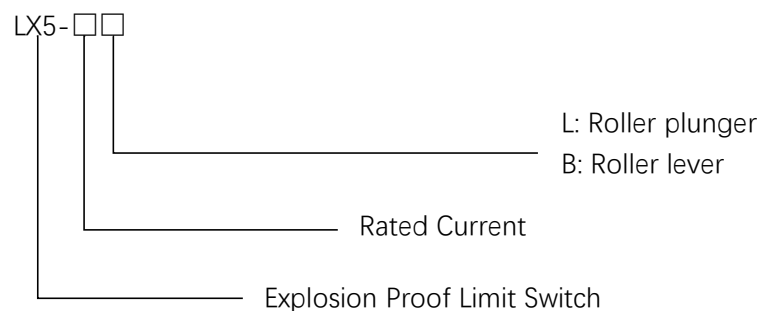
1.2 Operating Conditions

1.2.1 The switch shall operate normally under the following conditions:

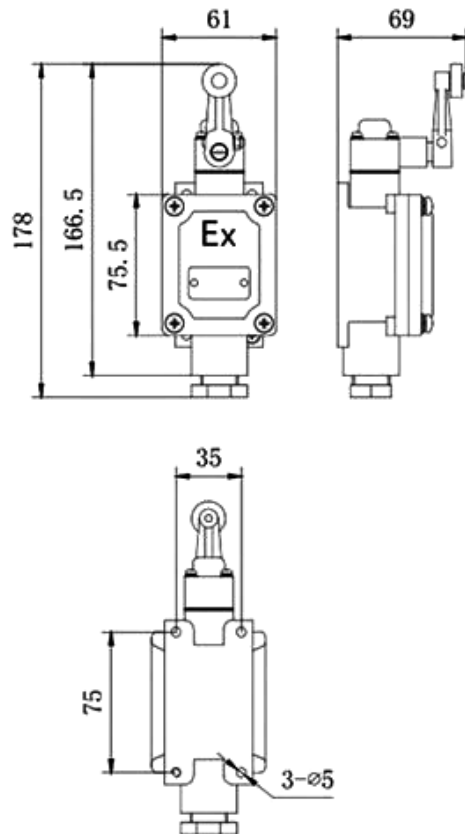
- a. Altitude not exceeding 1800 meters.
- b. Ambient temperature $-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$.
- c. Average relative humidity of ambient air $\leq 95\%$ ($+25^{\circ}\text{C}$).
- d. Zone 1 or Zone 2 explosive gas environment, IIA-IIB version T1-T6 group, gas location, applicable to explosion hazard locations containing explosive gas mixtures.
- e. In an environment free from corrosive substances that damage insulation.
- f. In a location free from significant shaking and impact vibration.
- g. In locations with splashing or water spray.
- h. In locations free from gases or vapors that significantly damage electrical insulation.
- i. Pollution degree: Level 3
- j. Installation category: Class II

II. Product Model Meaning

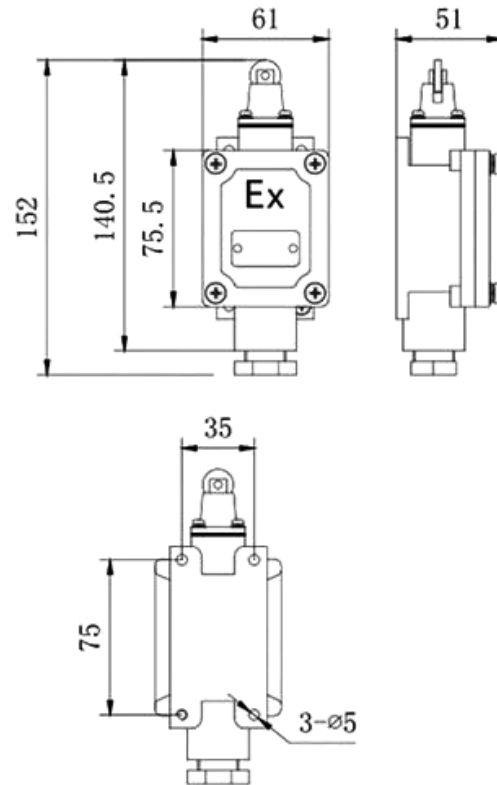
2.1 Model Composition



LX5-B (Roller lever)



LX5-L (Roller plunger)



2.2 Explosion-proof Mark

Explosion-proof Mark: Ex db IIB T6 Gb

III. Structural Overview

The switch housing is made of cast aluminum alloy with a powder-coated surface.

IV. Main Technical Parameters

Model	Name	Rated Voltage	Rated Current	Explosion-proof Mark	Inlet Thread
LX5-5B	Explosion-proof	AC: 220/380V	5A	Ex db IIB T6 Gb	G1/2
LX5-5L	Limit Switch				

V. Installation, Use, and Precautions

5.1 Before installation, check whether the basic data listed on the switch nameplate meets the actual usage conditions.

5.2 After wiring, carefully inspect the explosion-proof surface. If there are any bumps or scratches, treat them according to relevant regulations. After passing inspection, apply 204-1 anti-rust oil.

5.3 Regardless of the wiring method, the rubber sealing ring must be tightened to ensure its sealing performance.

5.4 During inspection and maintenance, "opening the cover while energized" is strictly prohibited, and the upstream power supply must be disconnected simultaneously.

5.5 When replacing components in a switch, ensure that the component conforms to its instruction manual.

5.6 During maintenance and repair, properly protect all explosion-proof mating surfaces and strictly prohibit damage to them.

5.7 The casing must be reliably grounded before energizing.

5.8 If damage to the explosion-proof surfaces is found during maintenance and repair, contact the manufacturer immediately for replacement. Explosion-proof surfaces are not expected to require maintenance.

5.9 The cable outer diameter is $\Phi 8$ - $\Phi 9$, and the tightening torque of the entry device is 18 N·m.