

Explosion-Proof Sound and Light Alarm



AT-ESS02

Installation and Operation Manual

I. Product Introduction

I. Product Overview

The AT-ESS02 Explosion-Proof Audible and Visual Alarm is a non-addressable alarm device. Its explosion-proof performance meets the requirements of the GB3836 and GB12476 standard series. It has passed inspection by nationally authorized testing organizations

This alarm is suitable for use in Zone 1 and Zone 2 hazardous areas containing explosive gas atmospheres of Group II A, B, C, with temperature classes T1 to T6. Zone 21 and Zone 22 explosive dust atmospheres.

The AT-ESS02 is an essential component in explosion-proof fire alarm systems. Upon an emergency, such as a fire, the fire alarm control panel sends a signal activating the alarm, which emits intense audible and visual signals to warn on-site personnel.

II. Product Features

- 1 Can be used with manual call points to form a simple audible and visual alarm system.
- 2 Compatible with fire alarm control panels from any domestic or international manufacturer.
- 3 The sound transmission component utilizes an advanced stainless steel wire mesh flameproof element, offering low sound attenuation, high flow capacity, robust mechanical strength, and a high safety factor.
- 4The visual indicator consists of multiple ultra-bright LEDs, providing a clear warning signal, long service life, and low power consumption.

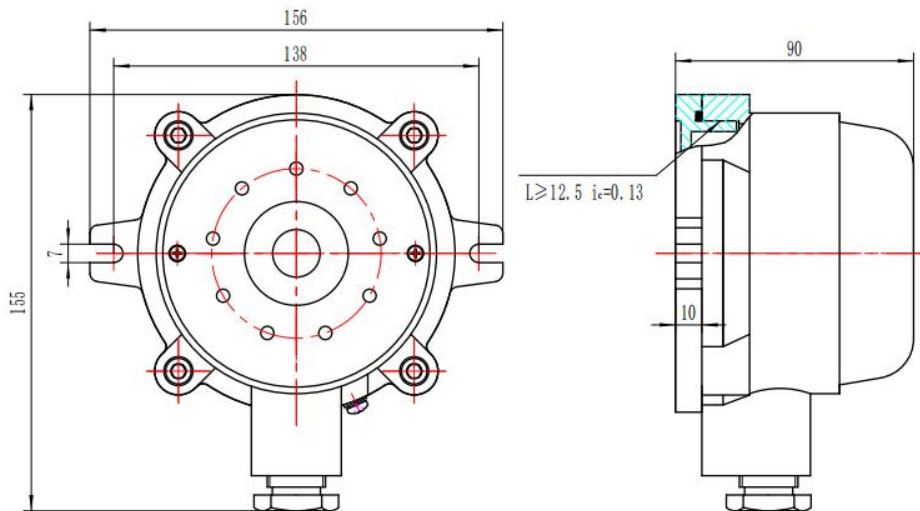
III. Main Technical Parameters

Parameter	Specification
Explosion-proof Mark	Ex db IIC T6 Gb / Ex tb IIIC T85°C Db
Operating Voltage	DC 24V
Alarm Current	≤ 250 mA
Sound Pressure Level	75 dB ~ 95 dB
Sound Pattern	Fire Alarm Tone
Ingress Protection (IP)	IP65 or IP54
Ambient Temperature	-20 °C ~ +50 °C
Relative Humidity	≤ 95% (Non-condensing)
Atmospheric Pressure	80 kPa ~ 110 kPa
Conduit Entries	M25 x 1.5-6H / G3/4"
Weight	1.5 kg

IV. Dimensions, Installation, and Wiring

1 For physical dimensions and installation cutout details, refer to the diagram below.

2Wiring: Loosen the screws to open the housing cover. Connect the DC 24V power cables to the terminal block (polarity is not sensitive).



V. Important Precautions

DO NOT disassemble the unit while it is powered on in a hazardous area.

During installation, **do not damage** the flameproof joint surfaces and keep them clean. Tighten the flameproof joint screws evenly and ensure no foreign objects are present on the sealing surfaces.

For long-term use, inspect the alarm's performance regularly. If the unit fails or is damaged, it **must be repaired by qualified personnel only**.