



AVS1 Ultraviolet Probe



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AVS1 Ultraviolet Probe

Overview

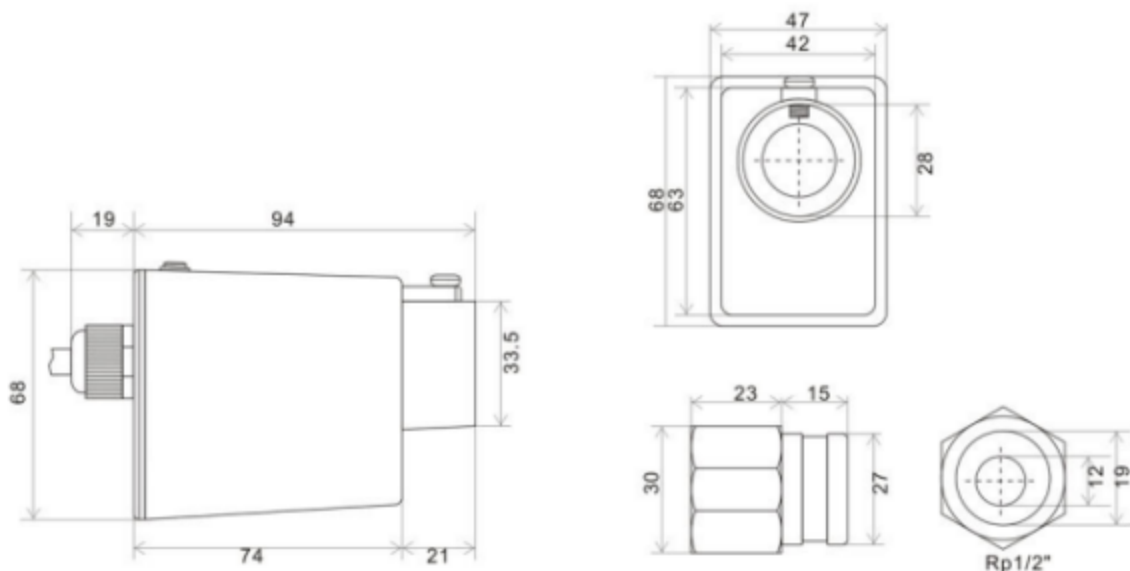
- It is insensitive to sunlight, infrared and light.
- There is anti-disturbance and anti-short-circuit protection in the flame signal line.
- It can adapt to a wide range of ambient temperature, -40 °C to 80 °C.
- It is used for flame detection of all kinds of atmospheric burners and flame retardant air burners.
- It can be used with burner controller AFD258, AFS258, AFS244, AIC06, AL-SMB, AFW15 and so on.
- AVS 1 shall be equipped with a heat-proof glass adapter (which has its own cold air cooling interface).
- The maximum distance from the AVS1 flame detector to the burner controller is 50 meters.
- It is equipped with non-detachable 4-core cable.



Technical Parameters

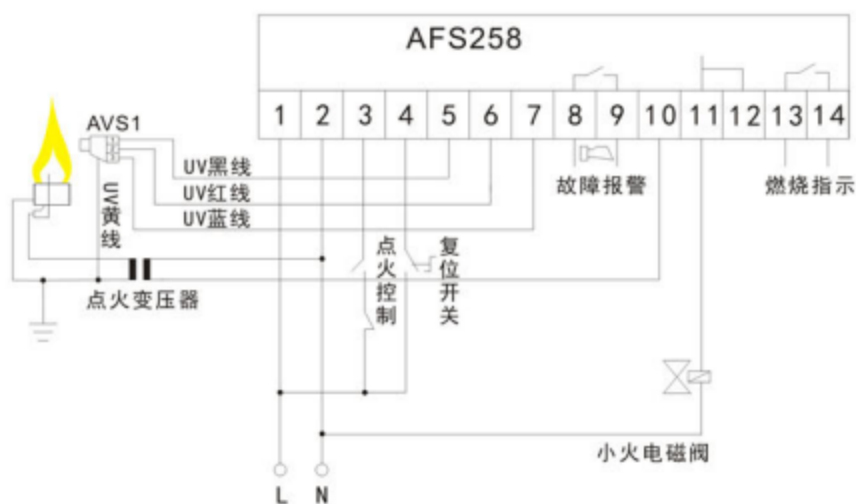
- Supply voltage: 220~240VAC 50Hz
- Spectral range: 190-270nm
- Maximum sensitivity: 210±10nm
- Photosensitive service life: 10000Hrs
- Detection distance: <1.2m
- Operating temperature: -40~+80° C
- Wiring: 4-wire system, length 1m

Installation dimension drawing

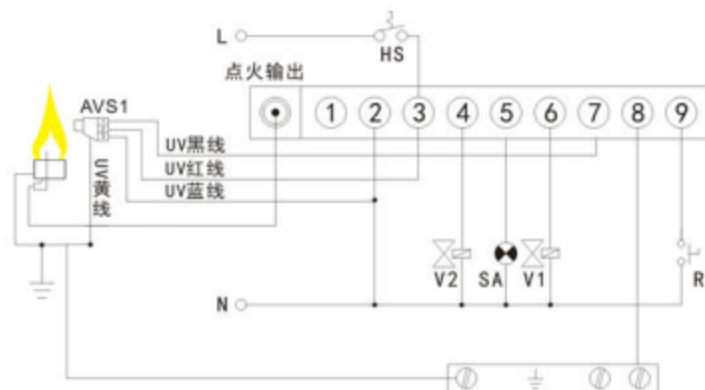


Wiring

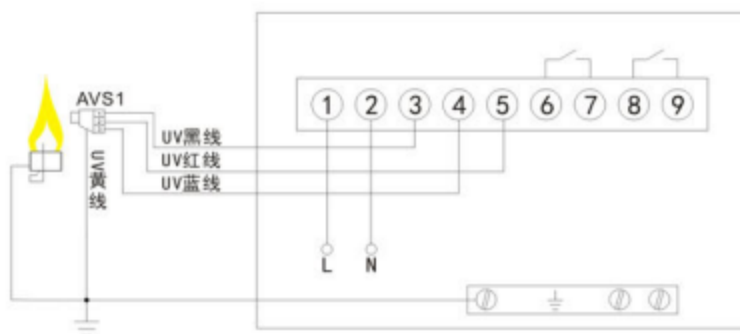
AVS1 wiring definition: 1. Black line: detection line; 2. Red line: live wire (L); 3. Blue line: zero line (N); 4. Yellow line: grounded



Wiring diagram of UV probe and AFS258



Wiring diagram of UV Probe Head and AIC06-B



Wiring diagram of UV Probe Head and AFW15-T

Precautions for Installation

- AVS 1 cannot be installed in the following environments
 - a. Where there are special chemicals and corrosive gases (ammonia, sulfur, chlorine, ethylene, acid gas, etc.).
 - b. In water, in humid (humidity not exceeding 90%) or in dewy environment.
 - c. Places where the temperature is too high and vibrates frequently.
- The controller wiring connected to the probe must distinguish the neutral live wire, and the controller must be well grounded.
- The flame detection line is up to 50 meters long (without interference).

Troubleshooting

Fault	Causes	Solutions
There is no flame in the burner, but there is a detection signal	The probe is subject to interference from other burners, such as furnace wall reflections	Adjust the probe position
	The probe is damp	Probe drying treatment, e.g. drying with hot air
	End of probe service life	Replace the probe
The burner has a flame, but it is not detectable	The probe detection window is covered by dust	Clean up the dust
	The probe is too far away from the flame	Adjust the detection distance
	The controller has failed	Replace the controller
	The probe body is damaged	During the warranty period, return to the factory for repair
The flame signal is unstable	The probe cable to the controller is too long or interfered	Shorten the cable length or shield the signal line