

AUD900

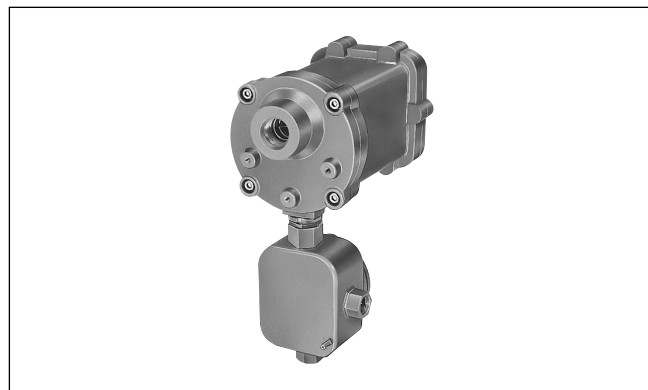
Explosion-proof Advanced Ultraviolet Flame Detector with Adjustable Sensitivity

Overview

This device is an explosion-proof, high-sensitivity ultraviolet flame detector with adjustable sensitivity that is used for oil burners, gas burners, and multi-fuel oil and gas (etc.) burners.

Use this device together with the R4075C burner controller with self-check circuit (discontinued), R4332A (discontinued), R4332B (discontinued), R4334A (discontinued) plus the R7476A amplifier, or with the AUR76H flame monitor with built-in amplifier.

With the sensor's built-in shutter, incoming light from the flame is blocked approximately 75 times per minute, allowing continuous checking of the flame detection circuits in this device and the amplifier.



Features

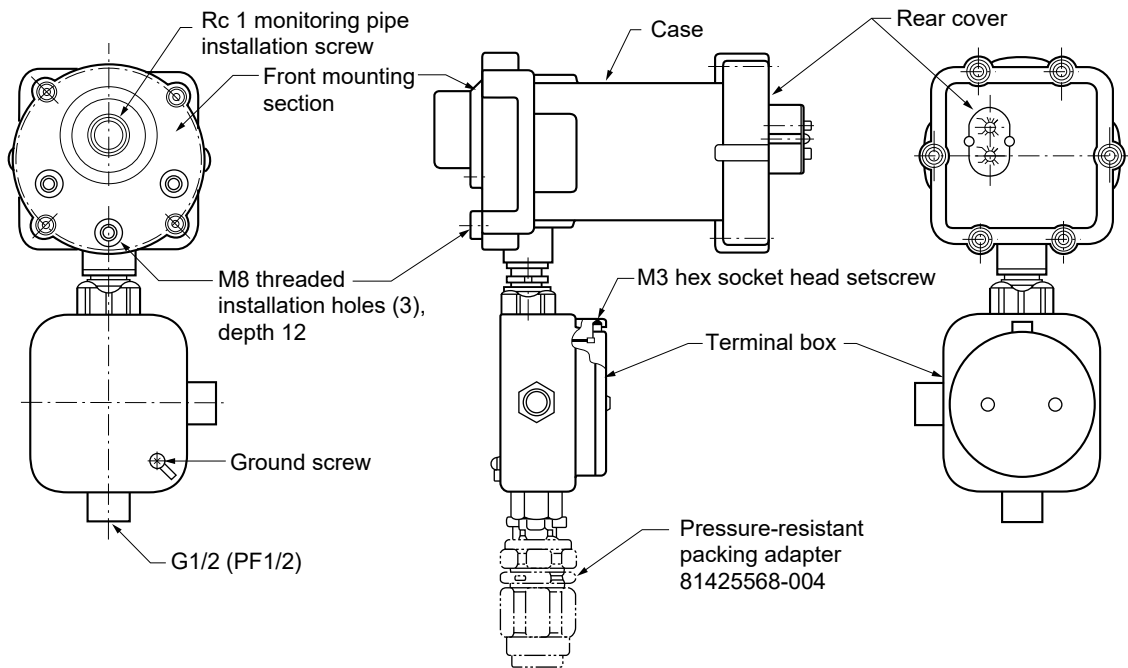
- This device has two sensitivity adjustment functions. Each sensitivity adjustment function can be set separately. Sensitivity can be switched by an external switch.
- Flame detection signal is output at 0–35 V DC, so without the need for special cables, the wiring distance to the burner controller can be longer.
- Monitoring window quartz lens prevents the exhaust gas, soot, or heat of the combustion chamber from entering this device.
- Maintenance and inspection are easy because with a plug-in type internal design, wiring can be done with screw terminals.

Specifications

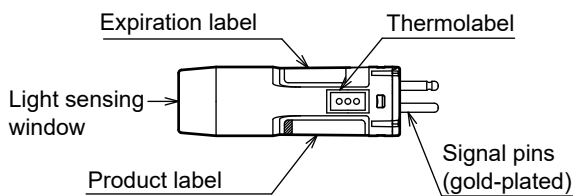
Model No.	AUD900C0000_
Rated power	100 V AC, 50/60 Hz
Power consumption	7 W or less (including shutter)
Applicable flame types	City gas, natural gas, propane, butane, kerosene, heavy oil, coke oven gas, hydrogen, naphtha, ethylene, hydrochloric acid/ammonia combustion, etc.
Allowable voltage	85 to 110 % of rated voltage
Shutter input voltage	Rated power 100/110 V AC, 50/60 Hz Allowable range 85 to 121 V AC
Allowable ambient temperature	-20 to +60 °C
Storage ambient temperature	-20 to +70 °C
Ambient humidity	40 °C, 90 % RH or less
Vibration resistance	5 m/s ² max., 10 to 60 Hz in each of x, y, and z directions)
Structure class	Pressure-resistant explosion-proof structure (d2G4), Technology Institution of Industrial Safety Certification
Protective structure	IP67
Sensitivity selection switch capacity	Use 48 V DC, 20 mA for switching between sensitivities A and B.
Sensitivity adjustment range	Flame monitoring time duty 0 to 98 % (same as C7076D) Sensitivity control has a lock nut
Case material	Aluminum
Case color	AUD900C0000D/Y: silver AUD900C0000E/H: dark beige
Weight	Approx. 8.9 kg
Mounting	Mounting on a monitoring pipe using Rc1 threads or on the front flange using M8 screws. The terminal box should point downward.
Wiring	Pressure-resistant packing type with pressure-resistant packing adapter (81425568-004, sold separately)*
Accessories	M3 hex wrench (1), hook wrench for terminal box (1)

* Other types cannot be treated as certified explosion-proof.

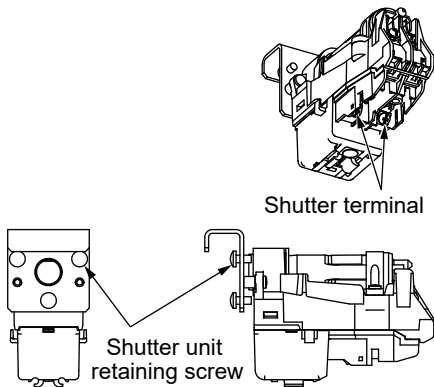
Parts



• Tube unit (AUD20) structure



• Maintenance kit (AUD70) structure



Compatible devices

Model No.	Compatible burner controller	Compatible amplifier
AUD900C0000_	R4075C (discontinued), R4332A (discontinued), R4332B (discontinued), R4334A (discontinued)	R7476
	AUR76H flame monitor (with built-in amplifier)	

Optional devices and maintenance parts (sold separately)

Optional devices	Part	Part No.
	Analog flame meter	FSP136A100
Maintenance Parts	Maintenance kit	AUD70A300D
	Rear gasket	81443091-002
	Terminal box O-ring	81443091-003
	Pressure-resistant packing adapter	81425568-004*

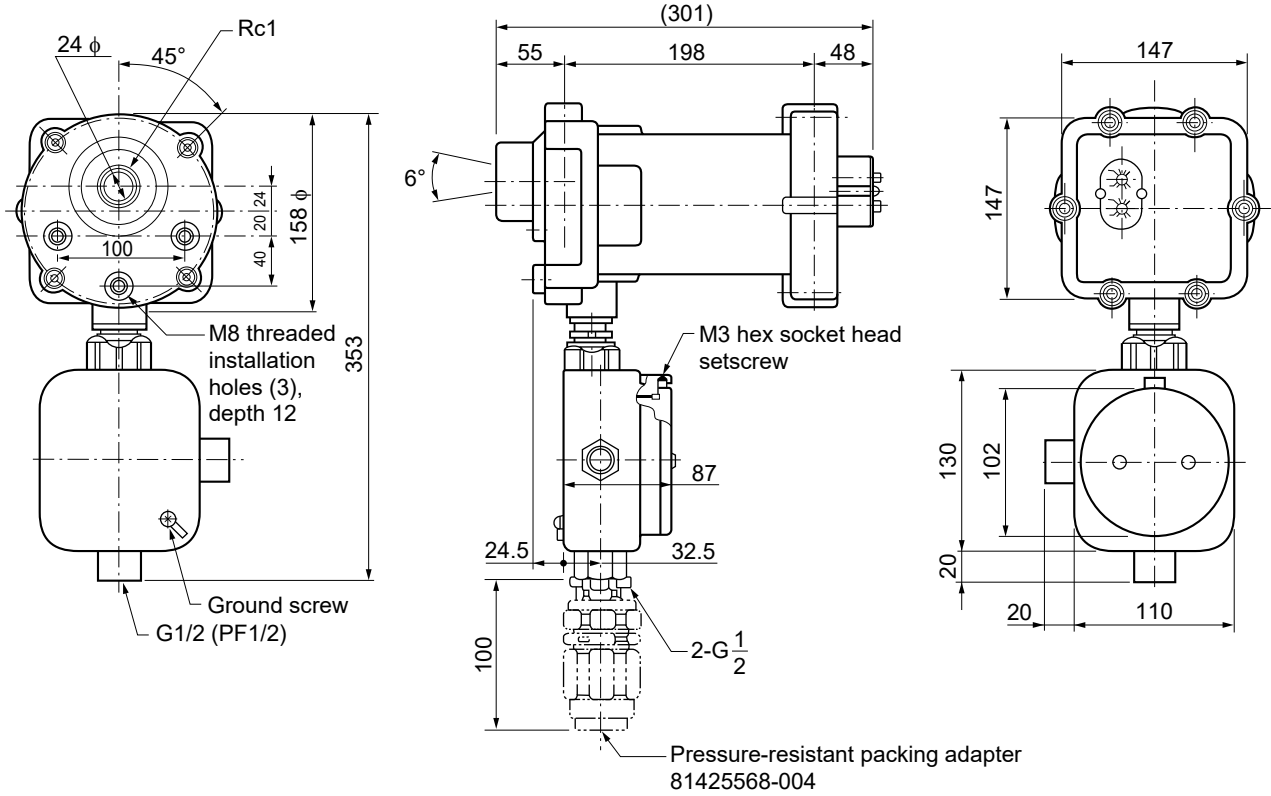
* Compatible cable diameter 7.0–12.0 mm

Model selection guide

Model No.	Specifications
AUD900C0000D	With inspection certificate
AUD900C0000Y	With traceability certificate
AUD900C0000E	With heavy corrosion-resistant coating and inspection certificate
AUD900C0000H	With heavy corrosion-resistant coating and traceability certificate

External dimensions

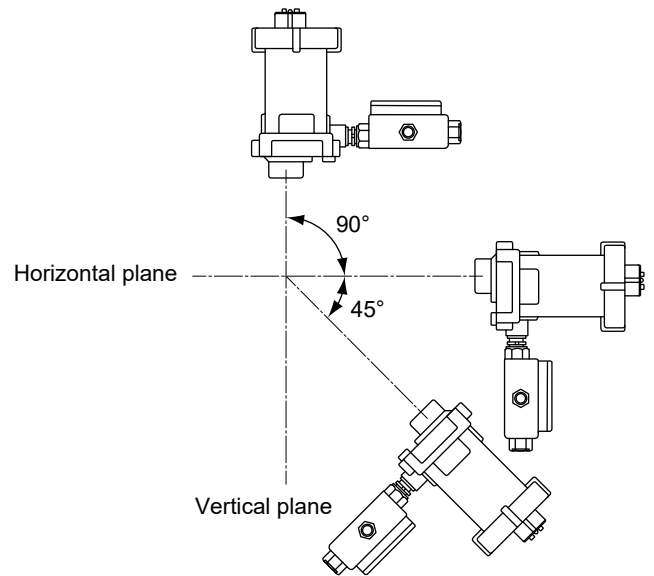
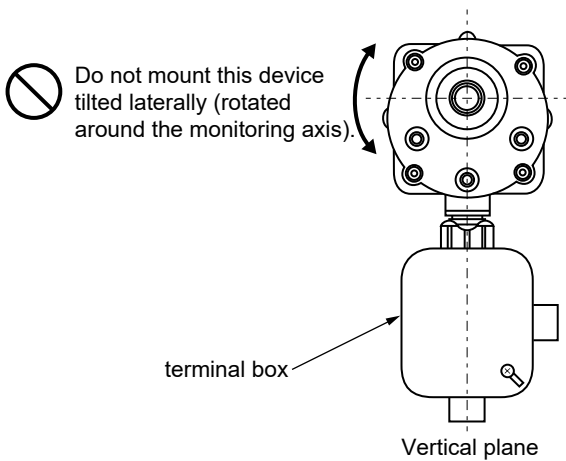
(Unit: mm)



Mounting orientation

Install this device as shown below. If it is not installed correctly, the built-in self-checking shutter will be damaged.
Do not install rotated to the left or right.
Install this device with the terminal box pointing downward so that the axis of the device is in a vertical plane.

Allowable range of the mounting angle from the horizontal plane is a maximum of 90° upward and 45° downward.



⚠ Handling Precautions

- Even if mounting angle exceeds 45°, a shutter boosting transformer is not required.

Please read "Terms and Conditions" from the following URL
before ordering and use.
<https://www.azbil.com/products/factory/order.html>

Specifications are subject to change without notice.

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