

## Advanced Ultraviolet Flame Detector Model AUD100/110/120

# Introducing a New azbil Flame Detector for Batch Operation With Improved Usability, Longer Life, and Higher Reliability

This flame detector is designed exclusively for use in batch operations and incorporates a UV sensor produced by azbil's proprietary manufacturing processes and approved by our strict inspection standards.



### Tube Unit Model AUD15



Development of this new azbil UV sensor was base on experience gained from our Flame Detector for continuous operation model AUD300

- The compact model AUD15 is built into a molded package for easier handling, eliminating the need for an aluminum cover.
- The model AUD15's service life is 5 years, a significant increase from the previous model's 3 years, thanks to enhanced reliability (total operating hours: 25,000).
- The model AUD15 can be used as a replacement for our existing ultraviolet batch operation sensors.

#### Socket Model AUD100/110/120

Model AUD100





Retention force has been increased to reduce any looseness caused by repeated plugging and unplugging, providing enhanced reliability when used with the tube unit.

- The model AUD100 is a lead-wire model and can operate in high temperature environments up to 120°C.
- The model AUD110 is a terminal-block model allowing for direct cable connections, eliminating the need to use a relay box.
- The model AUD120 can be mounted on a 1/2" monitoring pipe. It is suitable for small mounting space.
- Tube units for all models are replaceable.

## Model AUD15 Close-Up



## Specifications

Item	Description				
Applicable type of fuel*1	City gas, natural gas, propane gas, kerosene, heavy oil, coke oven gas, hydrogen, chlorine, ammonia. naphtha, ethylene, etc.				
Mass/Model No.	AUD100C	AUD110C	AUD120C120_	AUD120C121_	
	Approx. 120 g (with the AUD15: approx. 140 g)	Approx. 120 g (with the AUD15: approx. 140 g)	Approx. 130 g (with the AUD15: approx. 150 g)	Approx. 140 g (with the AUD15: approx. 160 g)	
Materials	Aluminum	Socket: Aluminum Terminal block: Heat-resistant resin (PBT + GF30)(black)	Aluminum		
Ambient temperature	−20 to +120 °C				
Ambient storage temperature	-20 to +70 °C				
Ambient humidity	90 % RH at 40 °C (without condensation)				
Allowable pressure	35 kPa				
Protection	IP65 (JIS C 0920/IEC 60529) with pipes and wires connected				
Mounting nut	G1 (R1 and 1-11BSP are connectable)				
Lead wires	AWG #18 (approx. 1.2 mm²) flame retardant cross-linked polyethylene insulated cable, approx. 1800 mm long (blue and white) (for the model AUD100C/120C only)				
Conduit	G1/2 (1/2-14BSPP is connectable). Not for use with AUD120C120				
Flame signal wire	Standard: 2.0 mm², 600 Vac cable with PVC insulation ("IV cable"). Max. length: approx. 200 m				

<sup>\*1.</sup> For applications using coke oven gas, hydrogen, chlorine, ammonia. naphtha, ethylene, etc., in which the burner structure may impose restrictions on the mounting of the flame detector, it is necessary to check that flame monitoring is reliable.

#### Model No.

	Model No.	
Advanced Ultraviolet Flame Detector	Lead-wire model without the model AUD15	AUD100C100_
	Lead-wire model with the model AUD15	AUD100C1000-A15
	Terminal block model without the model AUD15	AUD110C100_
	Terminal block model with the model AUD15	AUD110C1000-A15
	Without G1/2 conduit adapter. Model AUD15 sold separately.	AUD120C120_
	With G1/2 conduit adapter. Model AUD15 sold separately.	AUD120C121_
Tube Unit (ultraviolet photoelectric tube)		AUD15C1000

Replace the blank (  $\_$  ) in the model number with one of the four choices below. 0:  $\;$  Standard

D: Inspection certificate Tropicalization treatment

B\*: Inspection certificate + Tropicalization treatment

## Maintenance / Optional parts

Name	Model No.
Seal adapter	81403159
G1/2 Adapter (G1/2 → G1 conversion)	FSP100R15000
Flame simulator	FSP300C100
Lens unit (the focal distance 70 mm)	FSP100L70000
Lens unit (the focal distance 70 mm) + Inspection certificate	FSP100L7000D
Lens unit (the focal distance 30 mm)	FSP100L30000
Lens unit (the focal distance 30 mm) + Inspection certificate	FSP100L3000D

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https://www.azbil.com/products/factory/order.html

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### **Azbil Corporation**

Advanced Automation Company

1-12-2 Kawana, Fujisawa Kanagawa 251-8522 Japan URL: https://www.azbil.com

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<sup>\*</sup> Only model AUD110