Advanced Ultraviolet Flame Detector Socket for the AUD15 Tube Unit | AUD100 series

The AUD100 series consists of dedicated sockets designed to monitor batch operation oil or gas burner combustion by detecting ultraviolet light emitted by the AUD15 tube unit.
Three models are available to meet wiring and installation requirements: the AUD100C lead-wire model, the AUD110C terminal block model, and the AUD120C slim model.

AUD120C

AUD100C

AUD110C

AUD15

Specifications

Applicable types of flame*	City gas, natural gas, propane gas, kerosene, heavy oil, coke oven gas, hydrogen, chlorine, ammonia, naphtha, ethylene, etc.			
Weight	AUD100C	AUD110C	AUD120C120#	AUD120C121#
	Approx. 120 g (with AUD15 assembled: approx. 140 g)	Approx. 120 g (with AUD15 connected: approx. 140 g)	Approx. 130 g (with AUD15 connected: approx. 150 g)	Approx. 140 g (with AUD15 connected: approx. 160 g)
Materials	Aluminum	Socket: aluminum Terminal: heat resistant resin (PBT+GF30) (black)	Aluminum	
Insulation resistance	At least 50 MΩ with a 500 Vdc megger (However, the tube unit must be removed.)			
	(Voltage-applied location: between each lead wire and socket metal part)	(Voltage-applied location: between each terminal and socket metal part)	(Voltage-applied location: between each lead wire and socket metal part)	
Dielectric strength	Must operate normally after sine wave 1,500 Vac 50/60 Hz is applied for 1 minute or 1,800 Vac for 1 second. (However, the AUD15 tube unit must be removed.)			
	(Voltage-applied location: between each lead wire and socket metal part)	(Voltage-applied location: between each terminal and socket metal part)	(Voltage-applied location: between each lead wire and socket metal part)	
Ambient operating temperature	-20 to +120 °C		-20 to +105 °C	
Ambient storage temperature	-20 to +70 °C			
Ambient operating humidity	90%RH at 40 °C (without condensation)			
Allowable pressure	35 kPa			
Protection	IP65 (JIS C 0920/IEC 60529) with pipes and wires connected			
Vibration resistance	4.9 m/s² or less (10 to 55 Hz for 2 hours in each in X, Y, and Z directions)			
Mounting	G1 (R1 and 1-11BSP are connectable)		G1/2 (R1/2 is connectable)	
Lead wires	AWG #18 (approx. 1.2 mm²) flame retardant cross-linked polyethylene insulated cable, approx. 1,800 mm long (blue and white) (AUD100/120)			
Conduit	G1/2 (1/2-14BSPP is connectable), excluding AUD120C120*			
Flame signal wire requirements and extension distance	Requirements: 600 V vinyl insulation wires, IV wires with 2.0 mm², max. 200 m			

*. 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 the flame monitoring is reliable.

Model No. configuration

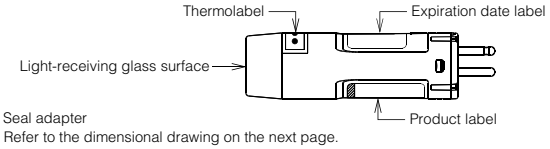
Name	Model No.
Lead wire model, without AUD15	AUD100C100□
Lead wire model, with AUD15	AUD100C100□-A15
Terminal block model, without AUD15	AUD110C100□
Terminal block model, with AUD15	AUD110C100□-A15
Without G1/2 electric wire conduit adapter, without AUD15	AUD120C120□
With G1/2 electric wire conduit adapter, without AUD15	AUD120C121□

□: 0 Standard product
D Inspection results included (with data)
T* Tropical treatment
B* Inspection results included (with data) + tropical treatment
*. AUD110C only

Optional parts (sold separately)

Name	Model No.
Tube unit (ultraviolet photoelectric tube)*1	AUD15C1000
Seal adapter*2	81403159
G1/2 adapter	FSP100R15000
Flame simulator	FSP300C100
Lens unit (focal length: 70 mm)	FSP100L70000
Lens unit (focal length: 70 mm) + inspection results	FSP100L7000D
Lens unit (focal length: 30 mm)	FSP100L30000
Lens unit (focal length: 30 mm) + inspection results	FSP100L3000D

*1. AUD15C1000



*2. Seal adapter
Refer to the dimensional drawing on the next page.

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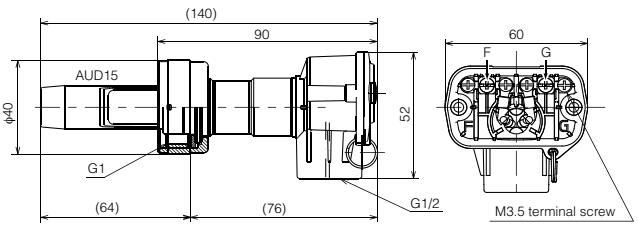
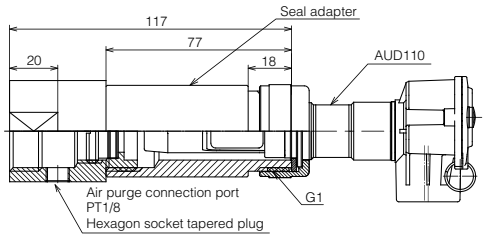
External dimensions

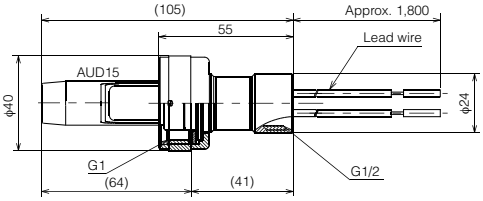
AUD110C100□: when AUD15 is assembled



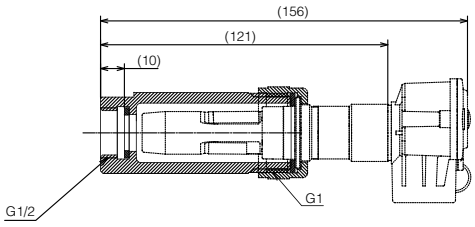
Seal adapter (model No.: 81403159) (Unit: mm)



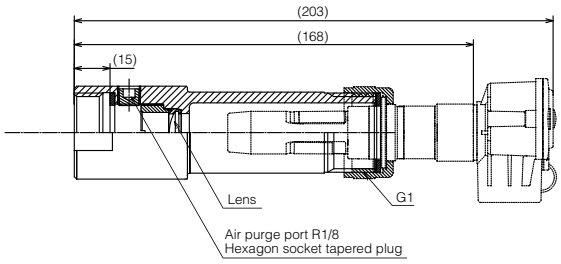
AUD100C100□: when AUD15 is assembled



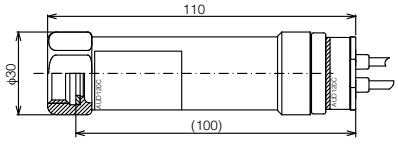
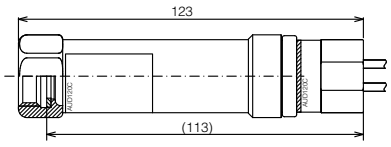
G1/2 adapter (model No.: FSP100R15000)



Lens unit (model No.: FSP100L□000)



AUD120C120□



AUD120C121□