

SP. NO.

Yamatake Corporation

製品仕様書
SPECIFICATIONS

1. Description

The AUD500C is an explosion-proof advanced UV sensor consisting of the UV sensing device itself (the tube unit), which detects ultraviolet rays generated by combustion flame, and the shutter unit, which performs a continuous self-check. This sensor is used in combination with a dedicated burner controller and a UV relay.

2. Model Numbers

2.1. Configuration

Model No.	Cable Length	Additional Treatment
AUD500C21010	3m	None
AUD500C2101D		Inspection certificate provided
AUD500C21010T		Tropicalization
AUD500C2101DT		Tropicalization and inspection certificate provided
AUD500C21110	10m	None
AUD500C2111D		Inspection certificate provided
AUD500C21110T		Tropicalization
AUD500C2111DT		Tropicalization and inspection certificate provided

2.2. Maintenance parts

Description	Model No.
Tube unit	AUD10C2100
Shutter unit	AUD50A2100
Maintenance kit	AUD60A2110

2.3. Combined amplifier

Description	Model No.
Advanced UV relay	AUR300C、AUR350C
Dynamic self-checking burner controller	AUR400C、AUR450C

2.4. Dedicated combination adapter (To be ordered separately)

Model No.	Description	Mass
81441151-001	G2 $\frac{1}{4}$ internal thread to R1 external thread with R $\frac{1}{8}$ hole for air-purge	350g

7 04

6 03

5 03

4 03

3 03

2 03

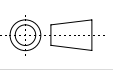
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DATE担当
BY検閲
APPD.日付 DATE
8-9-'06図番
NO.

AD14453E

改番 REV
04

1 / 7

作成 DR. I.Harada		尺度 SCALE ~	記入のない公差 TOL.UNLESS NOTED ~
検図 CHK Futamura	形番 MODEL	AUD500C21*1*	
認可 APPD Yamada	名称 NAME	Explosion-Proof Type Advanced UV Sensor	
日付 DATE 8-9-'06	図番 NO.	AD14453E	改番 REV 04

SP.NO.

Yamatake Corporation

製品仕様書 SPECIFICATIONS

3. General Specifications

3.1. Dimensions

Refer to external dimensions.

3.2. Cable

Material: Silicone rubber
 Number of cores: 4: yellow (G), blue (F), white (S1), white (S2)
 Rated voltage: 600V
 Cross sectional area: 0.75mm²
 Length: 3m (Model No.; AUD500C210****)
 10m (Model No.; AUD500C211****)
 Outside diameter: 11.3 dia.

Name		Color of lead-wires
Shutter drive	S1	White
	S2	White
Tube unit (Polarity)	F	Blue
	G	Yellow

3.3. Mass (weight) Approx. 2.5kg

3.4. Material Aluminum

3.5. Main body color Purple

3.6. Approval

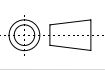
Flameproof explosion-protected construction	Ex d IIC T4
Explosion-protected construction	Ex
Flameproof type (enclosure)	d
Electrical apparatus group	II
Classification of gas or vapor	C
Classification of maximum surface temperature	T4
Explosion-proof Certification No.	
Technology Institution of Industrial Safety	TC17035
NEPSI	GYJ 06241

3.7. Method of connecting external conductor (accessory)

Flameproof packing type cable gland (G1/2)

3.8. Mounting thread size for sighting pipe

G2 $\frac{1}{4}$

作成 DR.		尺度 SCALE	記入のない公差 TOL.UNLESS NOTED
I.Harada		~	~
検図 CHK	形番		
Futamura	MODEL AUD500C21*1*		
認可 APPD	名称		
Yamada	NAME Explosion-Proof Type Advanced UV Sensor		
日付 DATE	図番		改番 REV
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頁 改番
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改番 REV
03 2/7

SP. NO.

Yamatake Corporation

製品仕様書 SPECIFICATIONS

5. Electrical Specifications

5.1. Dielectric strength

Between case and blue lead-wire,
between case and yellow lead-wire,
between case and white lead-wire,
and between case and white lead-wire:
1500Vac for 1 minute or 1800Vac for 1 second at each of the above locations.
(The amplifier must be dismantled.)

5.2. Insulation resistance

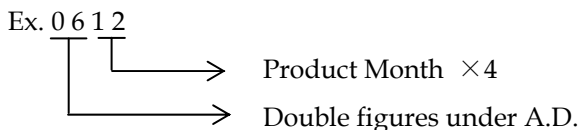
Between case and blue lead-wire,
between case and yellow lead-wire,
between case and white lead-wire,
and between case and white lead-wire:
50 MΩ min. by 500Vdc megger at each of the above locations.
(The amplifier must be dismantled.)

6. Effective Service Life

6.1. Tube unit

The service life of the tube unit, AUD10C, is 3 years (based Date Code of a product) or 25,000 operation hours.

Notice: Date Code



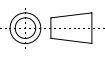
作成 DR.		尺度 SCALE	記入のない公差 TOL. UNLESS NOTED
I. Harada		~	~
検図 CHK	形番 MODEL AUD500C21*1*		
Futamura	名称 NAME Explosion-Proof Type Advanced UV Sensor		
認可 APPD	Yamada		
03	ECO06-2863	11-20-'06	Harada Futamura
02	ECO06-2892	10-23-'06	Harada Futamura
01	ECO06-2330	8-30-'06	Harada Futamura
頁 改番	改番	来歴	日付
REV.	RECORD	:	DATE
		担当	検閲
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		日付 DATE	8-9-'06
		図番 NO.	AD14453E
		改番 REV	03
			4/7

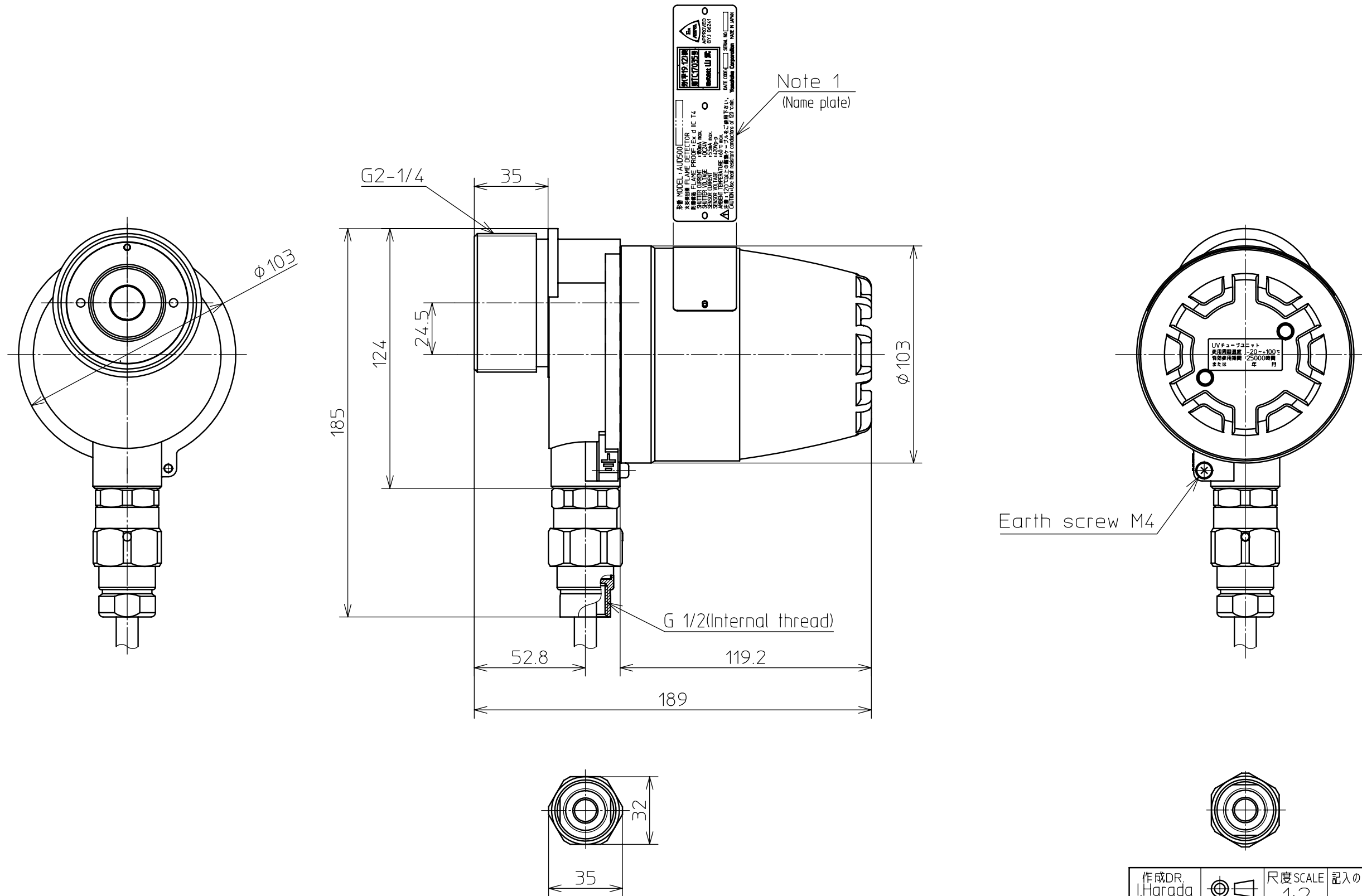
SP.NO.

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製品仕様書
SPECIFICATIONS

- (7) Before wiring the AUD500C, be sure to turn the power OFF. If a terminal is touched accidentally, electric shock or damage may result.
- (8) Special attention must be paid to the polarity of the flame detector wires when connecting them to terminal F and terminal G. The blue lead-wire goes to terminal F and the yellow lead-wire to terminal G.
- (9) Use the original carton for shipping and storage of this device.
- (10) Wire the signal cable of the flame detector through a separate conduit, without mixing with other signal lines or power lines.
- (11) Before wiring put the cable gland, washer and packing in that order on the cable and after wiring assemble these parts and tighten the cable gland until the cable is fastened, and then tighten the set screw. Finally, attach the cable clamp.
- (12) Connect the high-voltage cable from the ignition transformer firmly. Contact failure may generate high-frequency electrical noise, resulting in faulty operation. Install the ignition transformer on the burner body or directly on a metal part connected electrically with the burner body.
- (13) The UV flame sensor is made of a glass tube. Avoid vibration and shock. Do not transport burner or combustion equipment with the UV sensor (especially the tube unit) attached. When transporting the burner or combustion equipment, use the original packaging material.
- (14) Before replacing the tube unit (AUD10C), shutter unit (AUD50A) or maintenance kit (AUD60A), be sure to turn the power OFF. Note that Terminal F and Terminal G are still electrically charged up to 1 minute after the power has been turned OFF.

					作成 DR. I.Harada		尺度 SCALE ~	記入のない公差 TOL.UNLESS NOTED ~
					検図 CHK Futamura	形番 MODEL	AUD500C21*1*	
	03	ECO06-2863	11-20-'06	Harada	Futamura	名称 NAME	Explosion-Proof Type Advanced UV Sensor	
	02	ECO06-2892	10-23-'06	Harada	Futamura	認可 APPD Yamada		
	01	ECO06-2330	8-30-'06	Harada	Futamura	日付 DATE 8-9-'06	図番 NO.	AD14453E
頁 改番	改番 REV.	来歴 RECORD	日付 DATE	担当 BY	検閲 APPD.	日付 DATE 8-9-'06	改番 REV 03	6/7



Note 1
(Name plate)

Earth screw M4

Note 1. Position of name plate is not specified.

作成DR. I.Harada 8-9-'06	検図CHK. S.Miura 8-9-'06	認可APPD Y.Saito 8-9-'06	日付DATE 8-9-'06	来歴 RECORD	日付 DATE	担当 BY	検閲 APPD.	尺度SCALE 1:2	記入のない公差 TOL. UNLESS NOTED
04	ECO07-3866	12-22-'07	Futamura	T.Yamada				形番 MODEL	AUD500C21*1*
03	ECO06-2863	11-20-'06	I.Harada	Uchiyumi				名称 NAME	Explosion-Proof Type Advanced UV Sensor
02	ECO06-2892	10-23-'06	I.Harada	S.Miura				図番 NO.	AD14453E
改番 REV.								改番REV. 04	7/7

SP. NO.

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製品仕様書 SPECIFICATIONS

“RESTRICTIONS ON USE”

This product has been developed, designed and manufactured in accordance with the standards of explosion-protected electrical apparatus.

When using this product in application requiring particular safety, special care should be taken to implement a fail-safe and/or redundant design concept as well as a periodic maintenance program.

The notified body and/or the applicable standards may vary by the model number. Be sure to confirm the specification for the details.

		01	JEO03-0457	6-23-03	Harada	Miura
1	01	00	First issue	12-2-02	Harada	Miura
頁	改番	改番	来歴	日付	担当	検閲
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