

## DISSOLVED OXYGEN ANALYZER/TRANSMITTER

Model: ODM-110A

### FEATURES

- Microprocessor based 4-wire transmitter suitable for field installation. The unit features isolated inputs and outputs, digital display and rainproof construction.
- Simple span calibration:  
The instrument can be calibrated in one action by virtue of memory resistant saturated DO (Dissolved Oxygen) data stored in the memory. The built-in stabilization determination function enables the unit to be accurately calibrated preventing operator error.
- Automatic determination of electrode quality:  
During calibration, the electrode quality is automatically evaluated. An error message is generated when the electrode quality deteriorates to an unacceptable level.
- Output range adjustment, the output range can be easily reconfigured.
- Output signal can be frozen during maintenance work. By switching to ST-BY (Stand By) mode the output value can be held to avoid disruption to the process control system.
- Facility to receive external contact switching signal to hold output (for example, during electrode cleaning etc).

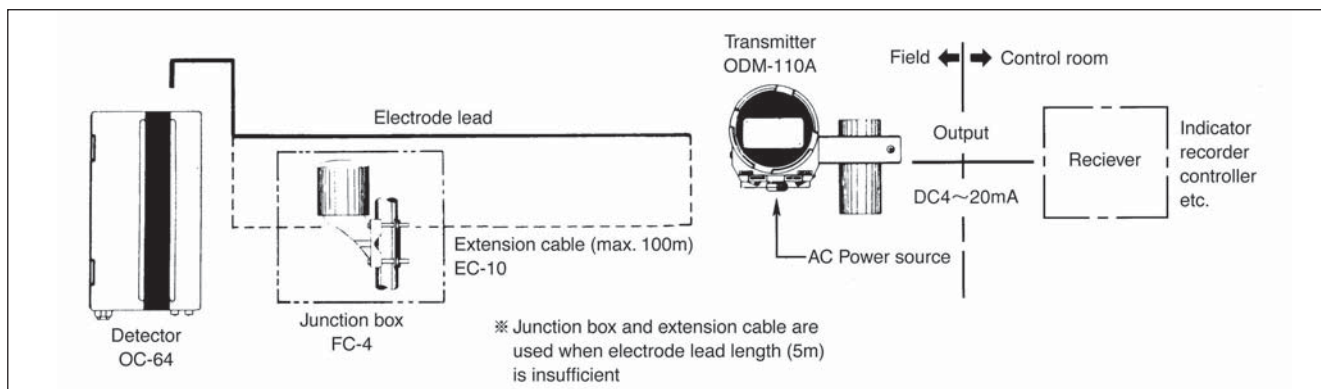
### STANDARD SPECIFICATIONS

<b>Product Name</b>	: DO analyser/Transmitter (for industrial use).
<b>Model</b>	: ODM-110A.
<b>Measurement Range</b>	: 0~20, 50, 100, 200, 100, 200, 500, 1000 & 2000µg/L (output range)
<b>Indication</b>	: Digital indication on LCD.
<b>Resolution</b>	: 0.1µg/L (over 0~500µg; 1µg/L).
<b>Linearity</b>	: Within ±1%FS, with equivalent input. (0~20µg/L range; ±0.5µg/L, 0~50µg/L range; ±1µg/L).
<b>Temp. Compensation Range</b>	: 0~45°C.
<b>Temperature Compensation Accuracy</b>	: Within ±3%FS to 0~45°C. (Dependant on equivalent input of electrode).
<b>Output</b>	: DC 4~20mA Isolated (load resistance 650Ω or less).



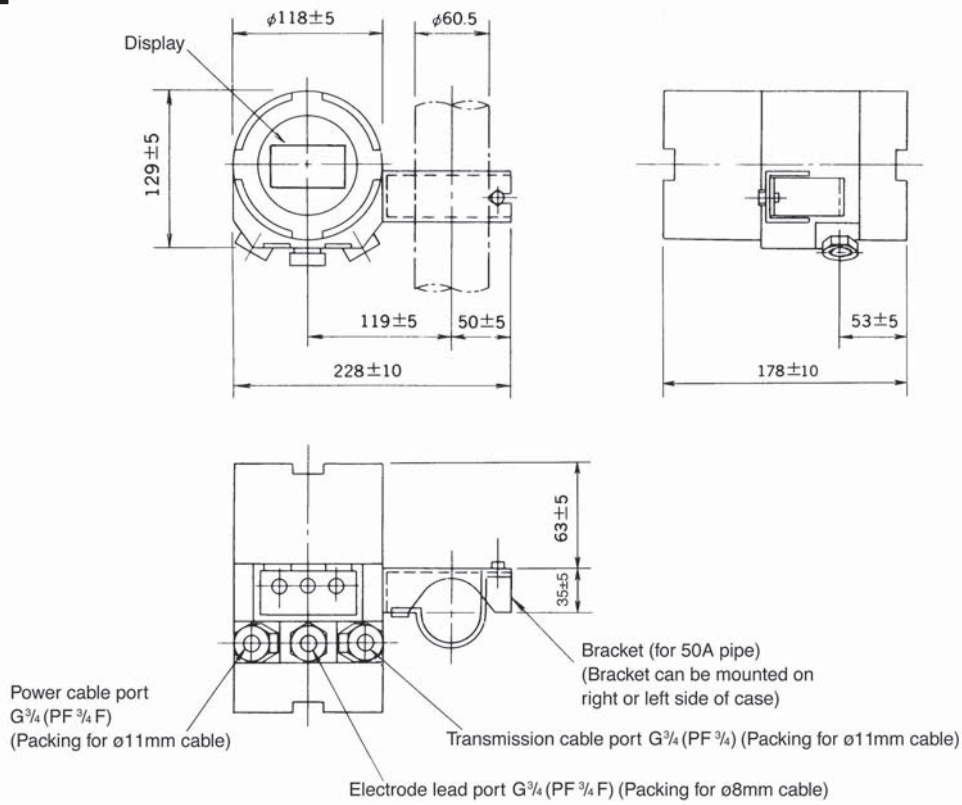
<b>Ambient Conditions</b>	: -20~55°C, 99%RH or less.
<b>Power Supply</b>	: AC 90~132V 50/60Hz or AC 180~264V 50/60Hz.
<b>Power Consumption</b>	: Approx. 3VA.
<b>Weight</b>	: Approx. 3kg.
<b>Installation</b>	: Outdoor Installation, IP55.
<b>Mounting</b>	: Mounted on a 50A pipe.
<b>Cable Port</b>	: G <sup>3/4</sup> (PF <sup>3/4</sup> F) 3 ports.
<b>Materials of Construction</b>	
Main Body	: Aluminium Alloy.
Window	: Resin.
<b>Paint Colour</b>	: Metallic silver and blue.

### SYSTEM CONFIGURATION



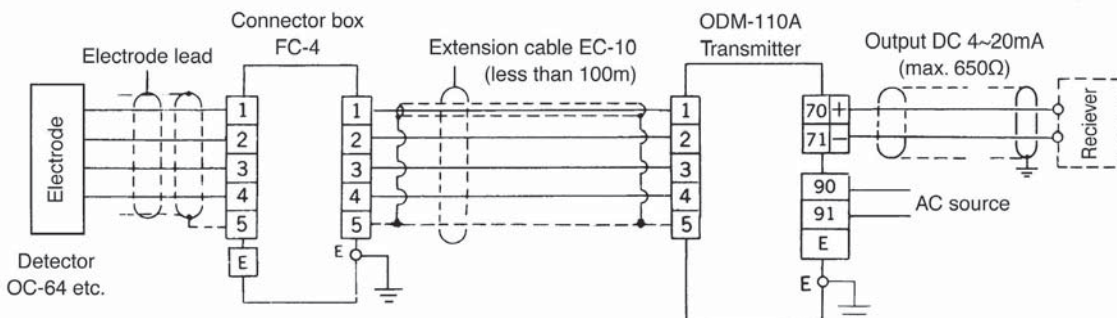
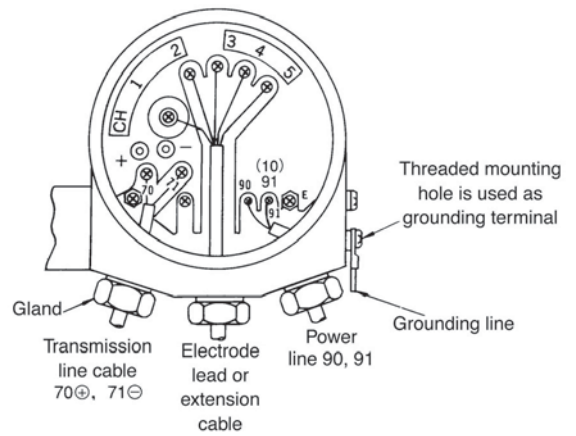
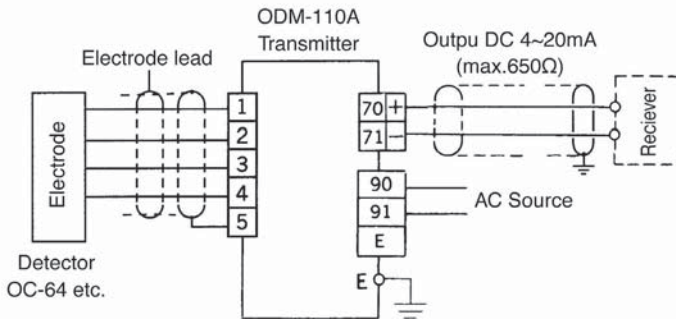
## DIMENSIONS

Units: mm

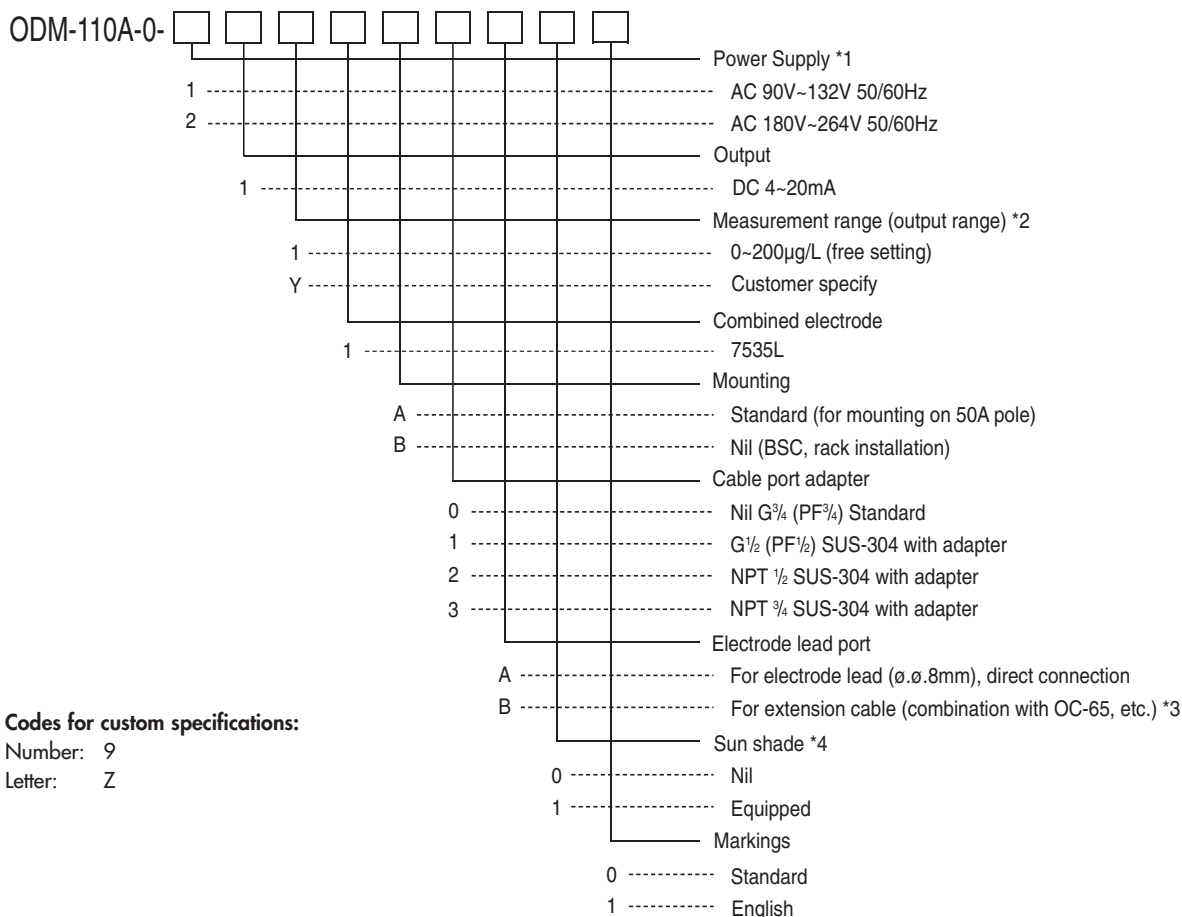


## WIRING CONNECTIONS

## TERMINAL CONNECTIONS



## PRODUCT CODE



### Codes for custom specifications:

Number: 9  
Letter: Z

### Notes:

- \*1. Multi-voltage power supply either AC100V-based or AC200V-based.
- \*2. Measurement (output) range: It is possible to set seven ranges freely with the unit [mg/L]. [0~20/50/100/200/500/1000/2000 µg/L]. If the setting is not specified then range will be 0~200 µg/L. If a specific range is required then select Product Code Y:SPECIFY and then input the required range.
- \*3. If intermediate terminals are used, it is not possible to provide sample cut-off signal.
- \*4. The instrument should be installed in ambient temperatures not exceeding 45°C and protected from strong sunlight.

### Caution:

1. Cannot generate sample cut-off contact switching signal. If necessary, order Models OBM-300/OC-65 transmitter/detector combination.
2. Temperature compensation resistance of combined electrode is 10 KΩ, [TC=10 KΩ].

**RELATED EQUIPMENT**

**Electrode (Polarograph system)**

Models 7535L, 7538L (for sanitation) etc.

**Detector:**

Models OC-64, OC-65, BOC-64 etc.

**JUNCTION BOX**

When the transmitter is installed remotely to the sensor (mainly for panel mounted transmitters) and the standard electrode lead length is too short, a junction box is required.

- Model** : FC-4
- Construction** : Field installation, spray proof (JIS CO920)
- Mounting** : 25~50A Pipe, wall or panelmount
- Material** : ABS resin
- Finish** : Matted chromium plating, metallic silver
- Weight** : Approx. 0.9kg
- Applicable extension cable** : EC-10

**EXTENSION CABLE**

The extension cable is a special cable specifically manufactured for use with pH analysers. It is used for connection between transmitter and junction box. Maximum cable length is 100m. The cable must not be spliced.

Model	EC-10
Overall diameter	8mm
Insulation	Polyethylene and PVC
Sheath	PVC
Insulation resistance between core conductors	At least 10MΩ/100m
Standard length	5m~100m (in 5m steps)
Weight	Approx. 0.5kg/5m

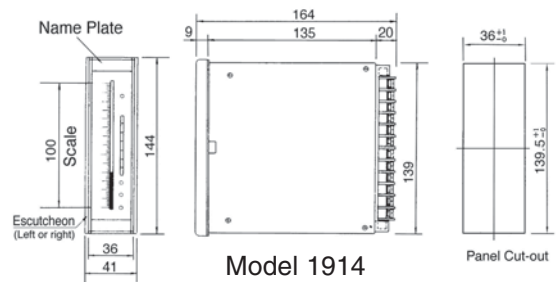
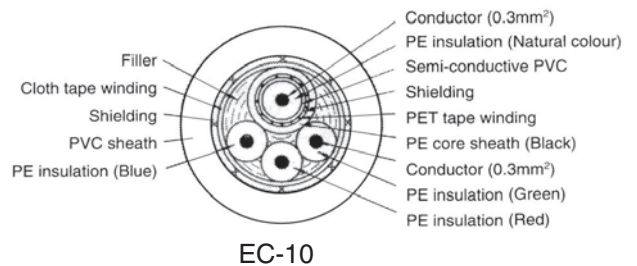
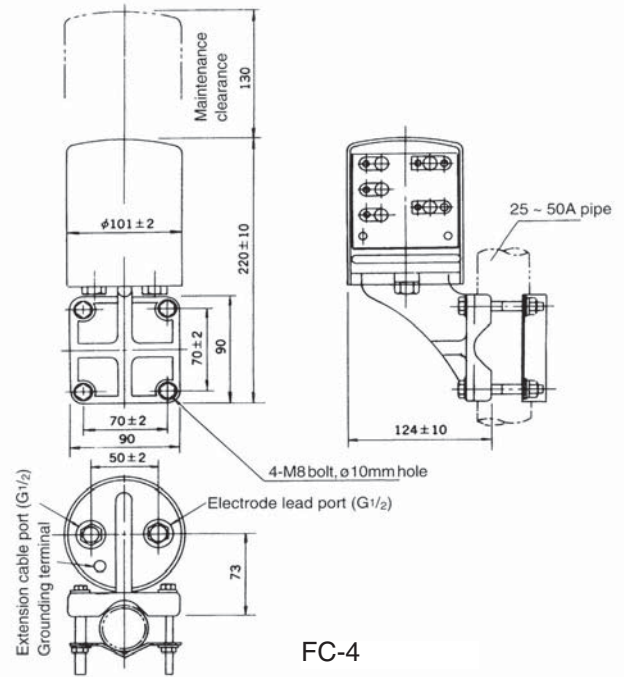
**BARGRAPH METER RELAY**

- Model** : 1914
- Output Signal** : 4~20mA DC
- Alarm Outputs** : High-high, high, low, low-low. (Contact rating: 125V, 0.5A)
- Scale** : Specify with purchase order.
- Scale Length** : 100mm
- Display** : Red LED, 101 dots.
- Power Requirements** : 85~264V AC, 50/60Hz
- Power Consumption** : Approx. 7VA
- Ambient Conditions** : 0~45°C, 40~80% RH
- Weight** : Approx 420g

**SUN-SHADE**

(For protection from direct sun-light)

- Material** : 304 Stainless Steel
- Mounting** : 50A Pipe bracket



**DKK-TOA CORPORATION**

International Operations:  
 DKK-TOA Corporation  
 29-10, 1-Chome, Takadanobaba, Shinjuku-ku, Tokyo 169-8648 Japan  
 Tel: +81-3-3202-0225 Fax: +81-3-3202-5685



**CAUTION** Do not operate products before consulting instruction manual.