

CP SERIES - TRACE DO TRANSMITTER

Model: DCP-21T

FEATURES

- Rigid aluminium enclosure with free angle mounting
- Built-in microprocessor offering numerous benefits including ease-of-use, free-range setting, auto-calibration, electrode diagnostics etc.
- Front operation and front wiring access
- Intrinsically safe with IEC (Ex) approval.

SPECIFICATIONS

Product Name	: Dissolved Oxygen Analyzer/Transmitter
Model Nos.	: DCP-21T SDCP-21T (intrinsically safe version)
Measurement Object	: Dissolved Oxygen (DO)
Measurement Method	: Polarographic Method
Measurement Ranges	
DO	: 0~2000µg/L
O ₂	: 0~25%
*SAT	: 0~100%
Temp.	: 0~100°C
*SAT (Saturation Ratio) is expressed as percent value of actual dissolved oxygen content in sample versus saturated dissolved oxygen content at a given sample temperature.	
Display	: LCD digital indication
Minimum displayed value	
DO	: 0.1µg/L
O ₂	: 0.1%
SAT	: 0.1%
Temperature	: 0.1°C
Output Signal	: 2-wire system, 4~20mA DC, isolated
Output range	
DO	: 0~20/50/100/200/500/1000/ 2000 µg/L selectable
O ₂	: None
SAT	: None
Temperature	: None
Max. Load Resistance	: 750Ω for power supply voltage 24V DC (Max. Load Resistance (Ω)= 50 x "Power Supply Voltage" - 450)
Power Supply	: 24V DC (Operative in a range of 9~30 V DC depending on load resistance.)
Power Consumption	: Max. 0.6VA
Repeatability	: Within ±0.8% FS or Within ±0.4 g/L for 0~20µg/L, Within ±0.8µg/L for 0~50, (by equivalent input).
Linearity	: within ±1% FS or within ±5µg/L for 0~20µg/L range, Within ±1µg/L for 0~50µg/L range (by equivalent input.)
Temperature Compensation Range	: 0~45°C



Temperature Sensor	: Thermistor, 10kΩ at 25°C
Ambient Conditions	: -20~55°C, max. 99%RH
Enclosure	: IP65
Mounting	: 50A or 2" (O.D. 60.5mm) pipe mount or wall mounting
Materials	: Enclosure; Aluminium alloy casting, window; Glass
Cable Entry	: 2-cable glands (ø6~ø12) 1-spare port (NPT½), adapters available on request
Colour	: Blue
Weight	: 2kg
Sunshade	: An optional sunshade is available for installation in strong sunlight

SPECIAL FUNCTIONS

DO adjusting function:

Ability to adjust to laboratory test value and to compensate measurement value for saline solutions.

Burn-out function (Alarm announcement):

When the sample temperature is outside 0~50°C range, the measurement is stopped. When any abnormal memory data is detected, the output signal is shifted to the lower or upper limit to announce abnormal conditions.

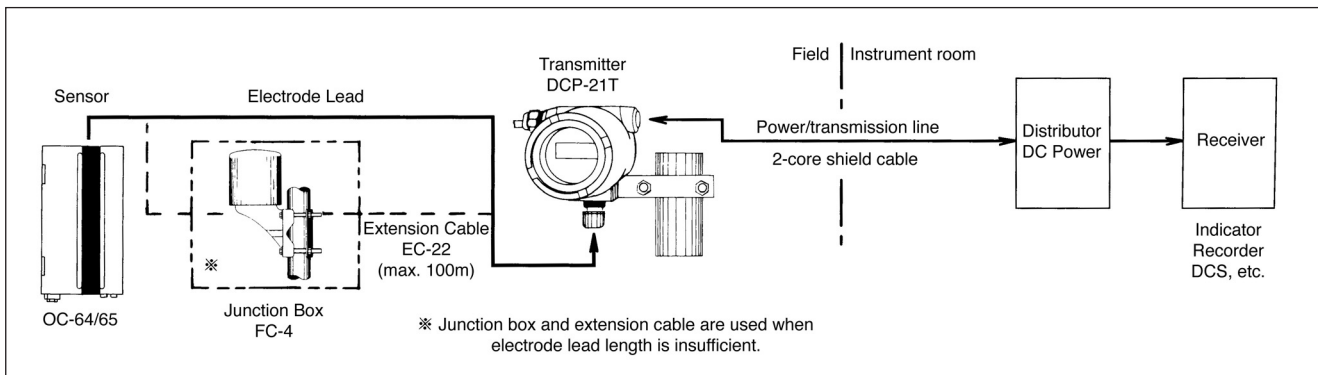
Measure/maintenance mode Selection:

When in maintenance mode, the display indicates the real-time measured value but the output signal will be held at pre-set dummy value or a through value.

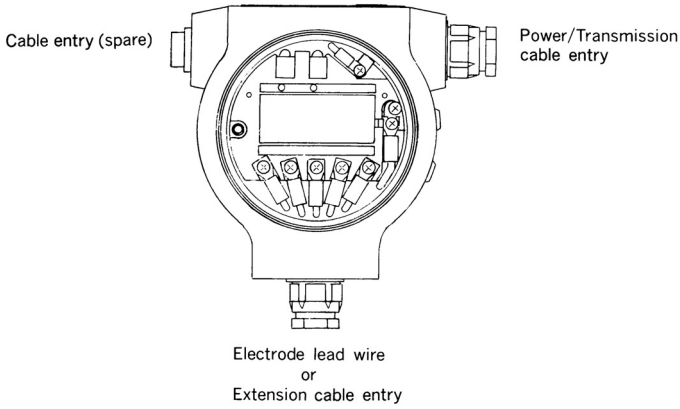
Notes:

For using extension cable (model EC-10) and junction box (Model FC-4) for long distances between the electrode and the transmitter.

SYSTEM CONFIGURATION

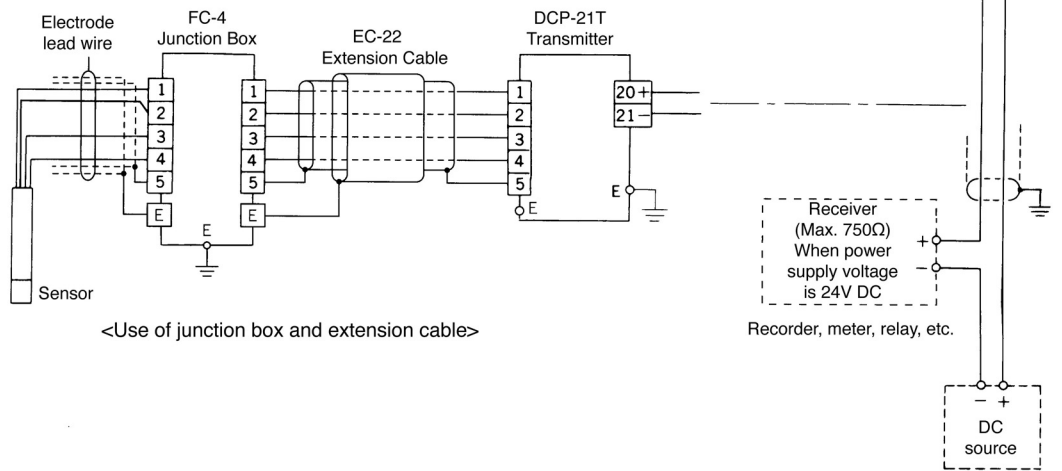
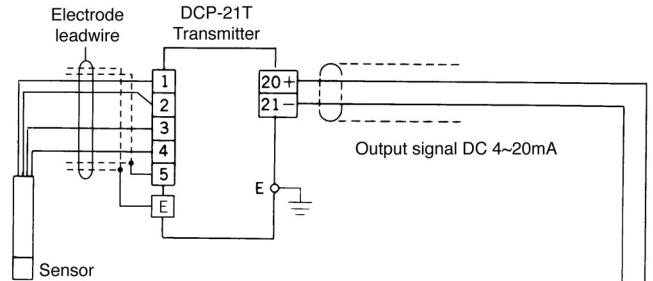


TERMINAL LAYOUT

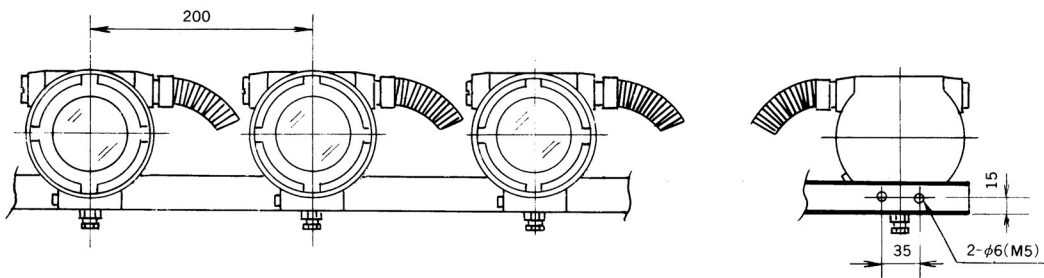


WIRING DIAGRAM

<Direct electrode connection>

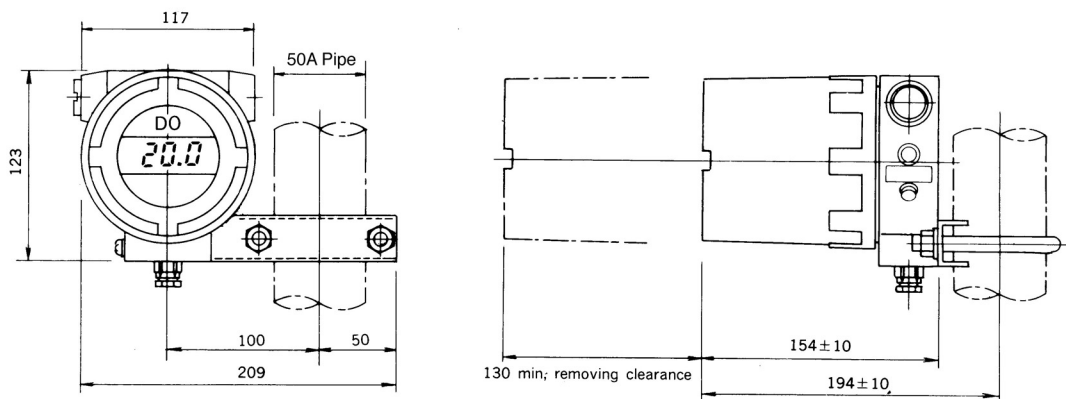


INSTALLATION

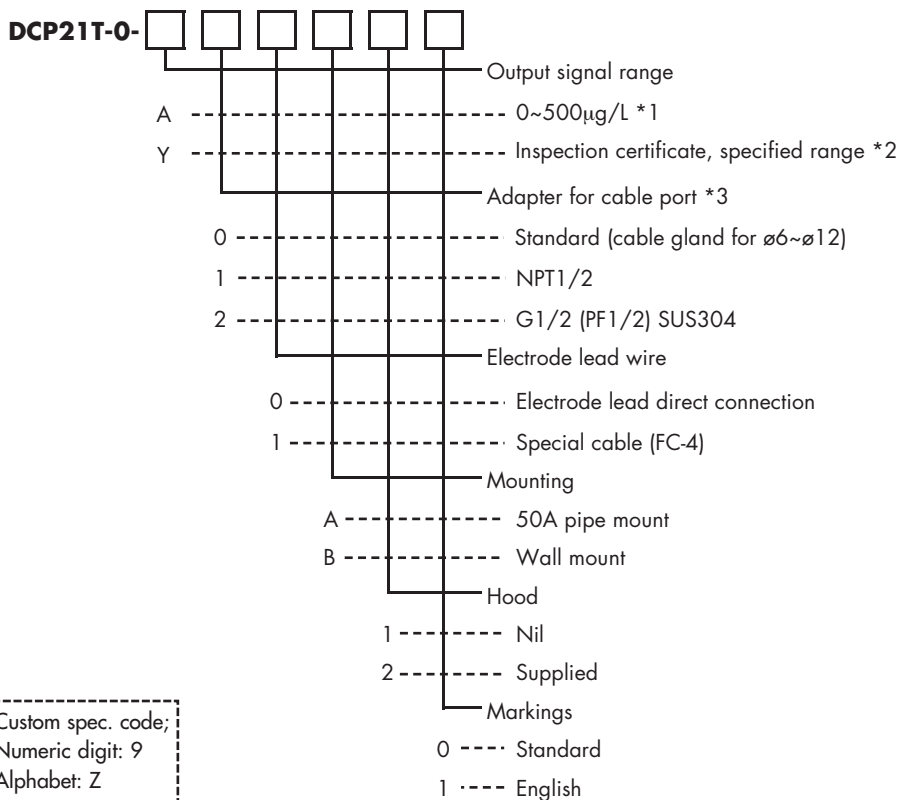


DIMENSIONS

Unit: mm



PRODUCT CODE



Product Code Notes:

- *1) If factory testing certificate is required please specify "other range" even if 0~500µg/L range is required.
 - *2) Please specify range from the following: 0~20, 50, 100, 200, 500, 1000, 2000µg/L
 - *3) The instrument will ship with standard cable gland installed even if other cable-entry type has been selected. The standard cable glands act as dust seals during shipment and storage. The following cable entry options are available:-
 - Standard: Cable gland (Ø6~Ø12), 2 ports. Additional cable entry (NPT1/2"), 1 port.
 - NPT1/2 inch: remove the cable gland or dust seal of conduit piping entry and use NPT1/2 inch threaded entry.
 - G1/2 inch : remove the cable gland or dust seal of the conduit piping entry and insert the G1/2 inch adapter included.
- Cable entry ports that do not have conduit attached should be left with factory installed glands which will act as seal protection for the unused cable entries.

Additional Notes:

- Note 1:
Temperature compensation resistance of applicable DO electrode is 10KΩ (at 25°C)
- Note 2:
Measurement ranges are:
 DO: 2000µg/L (0~20,50,100,200,500,1000,2000µg/L)
 O₂: 0~25%
 SAT: 0~100% } display only
 Temp.: 0~100°C
- Minimum indications are:
 DO: 0.1µg/L
 O₂: 01%
 SAT: 0.1%
 Temp.: 0.1°C

RELATED EQUIPMENT

Power units and combined meter-relays/power units are available from DKK-TOA. To be specified on order placement.

• Power unit

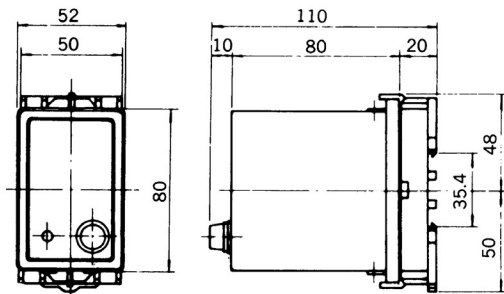
- Model : PA-24
 - Output Voltage Rating : 24VDC +3V, -1V
 - Output Current Rating : 2~22mA (Not suitable for parallel connection of two instruments)
 - Power Requirements : 100V AC ±10%, 50/60Hz
 - Ambient Temperature : -5~55°C
 - Construction : Indoor use, plug-in type
 - Weight : Approx. 300g
- *4~20mA DC output signal is available from the terminal block.

• Bargraph Meter-relay with 24V power Supply

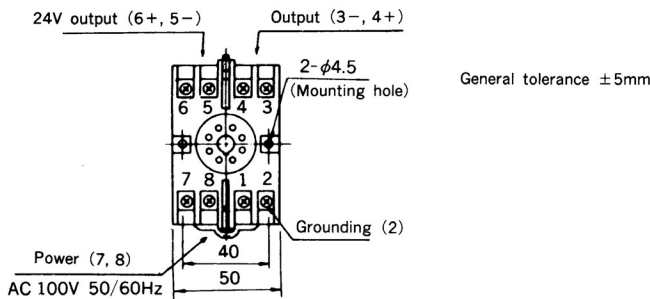
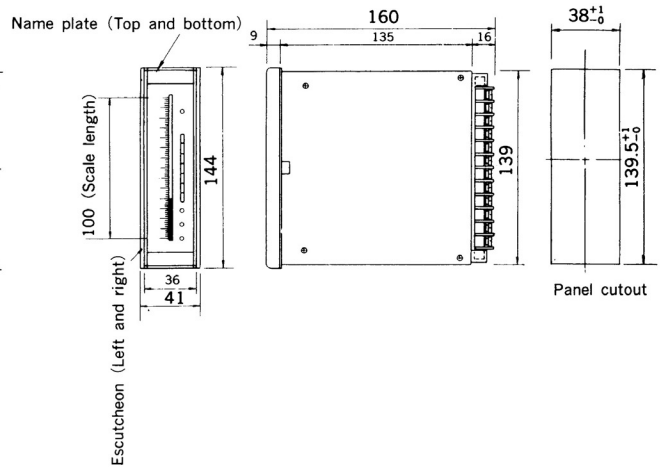
- Model : BMR-24
- Output Voltage : 24V DC ±1V
- Alarms : Four contacts, High-high, High, Low and Low-low limits.
- Alarm Contact rating : 125V, 0.5A
- Scale : Client to specify their requirements
- Scale Length : 100mm
- Indication element : Red colour LED, 101 dots
- Power Requirements : 85~264V AC, 50/60Hz
- Power Consumption : Approx. 5VA
- Ambient Conditions : 0~45°C, 40~80%RH
- Weight : Approx. 450g

DIMENSIONS Unit: mm

PA-24



■ BMR-24



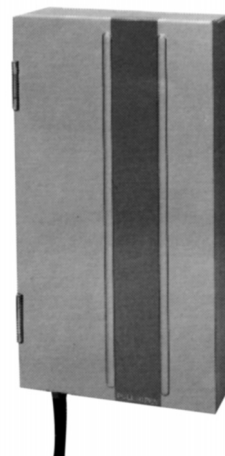
• DO Sensor for Pure Water Measurement - Models: OC-64/OC-65

FEATURES

- Suitable for measurement of boiler water in power plants.
- Flow-out enables accurate measurement
- Trace sample
- OC-65 is equipped with the sample cut-off detector.

STANDARD SPECIFICATIONS

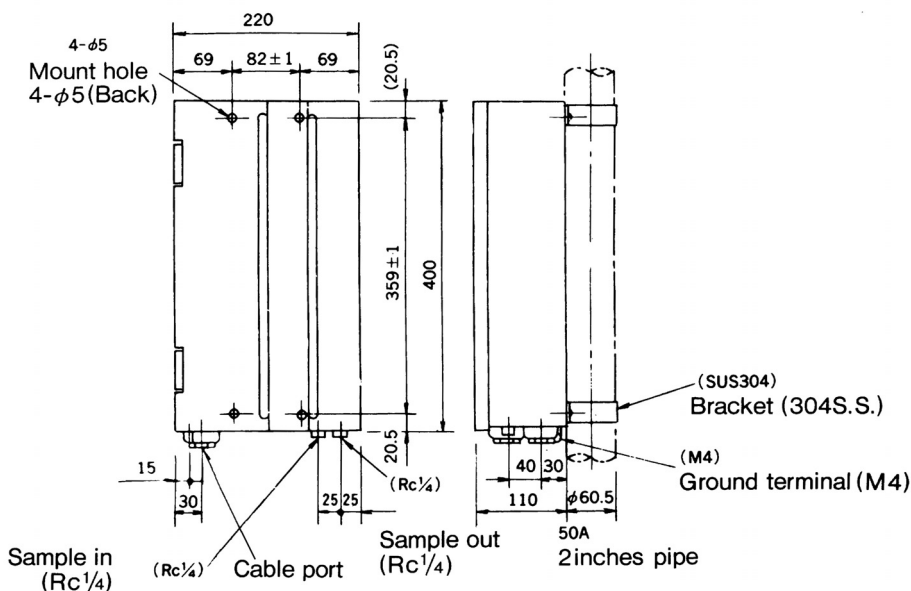
Product Name	: DO sensor for pure water measurement
Model No	: OC-64
Sample Conditions	
Temperature	: 0~45°C
Flow rate	: Constant flow rate within 100~300mL/min.
Pressure	: Inlet pressure; 0.05MPa or less
Outlet pressure	: Open to atmospheric pressure
Connection Ports	: Rc $\frac{1}{4}$ " (Both sample inlet and outlet)
Applicable Electrode	: 7535L, lead wire ELW-21
Ambient Temperature	: 0~40°C
Ambient Humidity	: Max. 90%RH
Dimensions	: Approx. 4kg, refer to dimensions drawing.



Mounting	: Wall mount, or 2" pipe mount
Materials	
Case	: PVC coated SPCC
Measurement cell	: Heat resistant PVC
Tubing	: Nylon
Construction	: Rain proof type (JIS C 0920)
Surface colour	: Metallic silver and blue

DIMENSIONS

units: mm



DKK-TOA CORPORATION



Do not operate products before consulting instruction manual.

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Information and specifications are for a typical system and are subject to change without notice.