FEATURES

- Muiti input (Pulse voltage, Contact, Open collector, DC 4~20mA)
- High response
- Peak hold function (Highest & Lowest)
- Pulse output (OC, Contact, Pulse voltage)
- 1Point alarm & Dead band set
- Isolation current output(4~20mADC)
- Sensor power source DC12V(DC24V) in STD specification

SPECIFICATIONS

- **mA input : DC 4~20mA**
- **Pulse Input**
  - Low level voltage : 0.7VDC or less
  - High level voltage : 1.5VDC or more
  - Max high voltage : 30VDC
  - Input resistance : 150 kΩ

Range Code	Input Hz	Minimum setting range
Range 1	0.000~1.000 Hz	0.100 Hz
Range 2	0.000~9.999 Hz	1.00 Hz
Range 3	0.00~99.9 Hz	10.0 Hz
Range 4	0.0~999.9 Hz	100 Hz
Range 5	0.0000~9.999kHz	1.000 Hz
Range 6	0.00~40.00kHz	10.00 kHz

*Others is order made

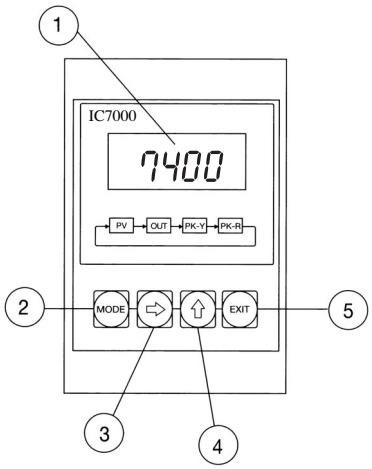
- **Measuring and display cycle** : Minimum 1s. more short according to input frequence
- **CMRR (Common Mode Rejection Ratio)** : 140dB or more
- **NMRR (Normal Mode Rejection Ratio)** : 60dB or more
- **Moving average filter by selection :** None, Average4, Average8, Average16
- **Built-in sensor power source** : DC12V 30mA±0.5%
- **Accuracy** : ± 0.2%FS

- **Isolation voltage output (Option)**
  - Voltage :0-10 VDC
  - Minimum load resistance : 1kΩ or more
  - Insulation resistance : Input-Output, 100kΩ or more (500VDC)
- **Isolation current output**
  - Current : 4~20mA DC
  - Maximum load resistance : 600Ω
  - Insulation resistance : Input~Output, 100kΩ or more (500VDC)
- **Pulse output**
  - Open collector output: Max 100Hz, DC50V/within 50mA
  - Voltage Output: Max 100Hz, Lo(DCOV), Hi(DC24V)
  - Relay contact output : Max 5Hz same as alarm
- **Alarm output**
  - Contact output type : Normal open, Normal close
  - Max switching power : 60W 125VA
  - Max switching voltage : 220VDC, 250VAC
  - Max switching Current : 2A DC, AC
  - Max Carrying current : 3A DC, AC

B

- **Ambient temperature & Humidity**
  - Operation : -10℃~60℃, 10%~90%
  - Storage : -20℃~70℃, 5%~95%
- **Power supply**
  - Voltage : AC110/220V (50/60Hz) by SW
    DC24V (Option)
  - Power consumption : 4VA Max
- **Insulation resistance** : 100㏁ 500VDC
  (FG-Input, FG-Power,
  Power-Input, Input-Output)
- **Etc**
  - Weight : 500g
  - Mounting : Panel mount
  - Dimension :50(W)×80(H)×102(D)mm

PARTS NAME



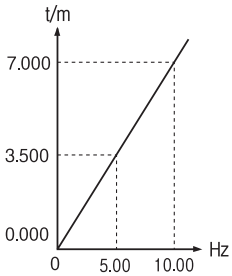
① Measured value display
② "MODE" key : storage the set data and change the operation menu
③ "⇨"Key : enter into the data setting mode and modify the changed location
④ "⇧" Key: change the data value
⑤ "EXIT" Key : out of mode

MAJOR FUNCTION

- Display scaling function

This Function changes and sets the display value according to scale and input range.

ExA) In case of input range 0~10Hz and Flow is 0~7t/h setting to

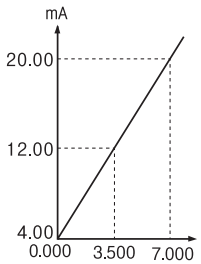


Setting to
Range code : 3 (0~99.99Hz)
High Range : 10.00 Hz
Low Range : 0.00 Hz
High Scale : 7.000
Low Scale : 0.000

- Current output scaling function

This function is that 4~20mA output value is changed by output scale.

Ex) In case of display value 0.000~7.000t/h, Output 4~20mA setting to



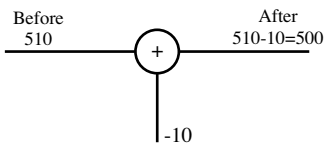
High Scale : 7.000
Low Scale : 0.000

- Sensor compensation function

The function is useful for compensating error by long sensor line or changed zero point by aged sensor.

Ex) Before sensor adjust = 510

After sensor adjust = measured value + compensated value
= 510 - 10 = 500



Compensated Value

- Pulse output scaling function

If input is mA (Range 0), it sets pulse number per hour when full Scale (20mA)

Ex) Setting 3600, it outputs 3600pulse a hour (1 pulse a second) when 20mA current inputs. If input is pulse (Range : 1-6), it sets a rate of input versus output.

Ex) Setting 100, It output 1pulse when 100pulse inputs.

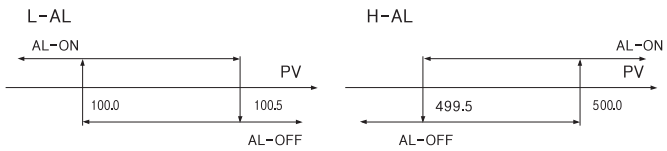
• Alarm function

Alarm type : High, Low

Ex) AL-1:High alarm value 500.0, alarm dead band setting 0.5

The high alarm(AL-1) is ON when the present value(PV) is 500.0 or more, and OFF when 499.5 or less.

The high alarm(AL-2) is OFF when the present value(PV) is 100.5 or more, and ON when 100.0 or less.



• Function (mV, Volt, mA type)

Lin	Pass the input as it is. Used for general input type and linearity input.
root	Pass the input after √. Used for flow rate by orifice.
Lnt	Like level measuring, when it does not display measuring under zero, it always can display zero by using limit function.

• Filter function

Filter is moving average filter and it has 4 kinds of function.

None : it displays the change of input without filter.

AV-4, 8, 16 : it displays in recent input No 4, 8, 16 sample average.

Setting filter function delays reponse. Do not use filter when high speed response is needed.

When output and display value are changed by irregular input, it is possible to get regular input and display value by using filter function.

ORDERING CODE

IC-74 A B C D

A INPUT
0. Pulse input
1. 4~20mA input

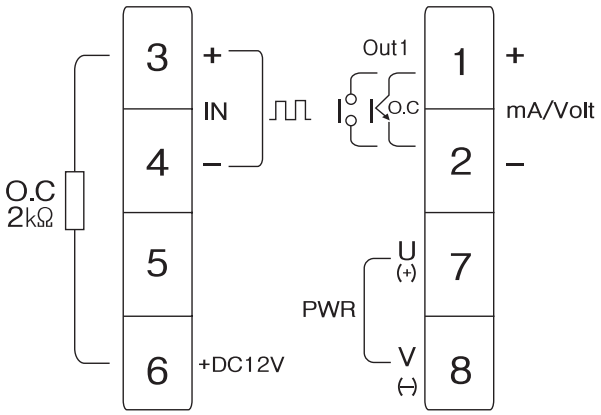
B ANALOG OUTPUT
0. Isolation current output 4~20mADC
1. Isolation current output 4~20mADC + Relay contact.
2. Isolation current output 4~20mADC + OC pulse output
3. Isolation current output 4~20mADC + Voltage pulse output
4. Isolation current output 4~20mADC + Relay contact pulse output
5. Etc (consult to the factory)

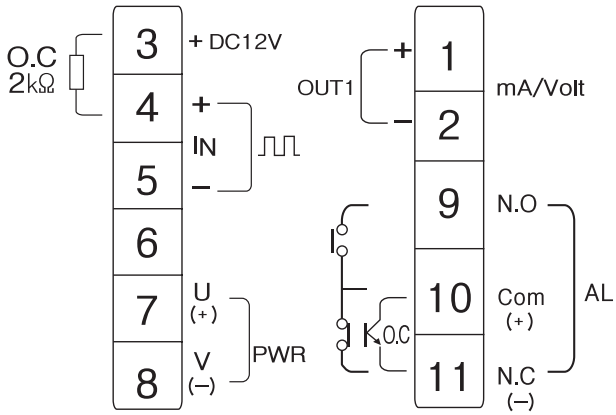
C POWER
0. AC 110V/220V by S/W
1. DC 24V (Option)

D Pulse input range (Table.1)

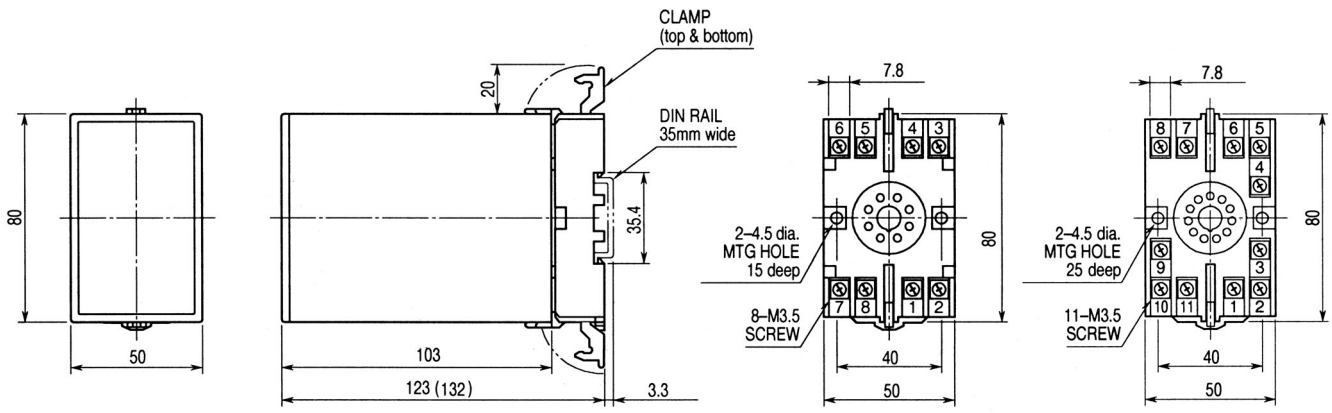
B

TERMINAL DIAGRAM





DIMENSION & PANEL CUT



•When mounting, no extra space is needed between units.