

DAEHAN SENSOR



Digital Liquid Indicate
with level controller

DPC – Series
Level Indicator with analog output

Product Name
DPC – 10



ISO 9001 인증업체

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SPECIFICATIONS

Introduction

This DPC-10 Series Level Controller gets 4-20mA current signal output from the sensor installed in the tank and displays the level of the liquid in the tank as percentage (0~100%) at 0.1 unit, length of mm, or volume of liter.

User can select one 4~20mA Analog Output (Meter), two Alarm Relays, or one Control Relay as per user's purpose and circumstance.

It is easy to read the values even in dark place or long distance for a 5-digit 7-segment LED is installed on the front panel.

Also, it is able to monitor the status at site without using meter.

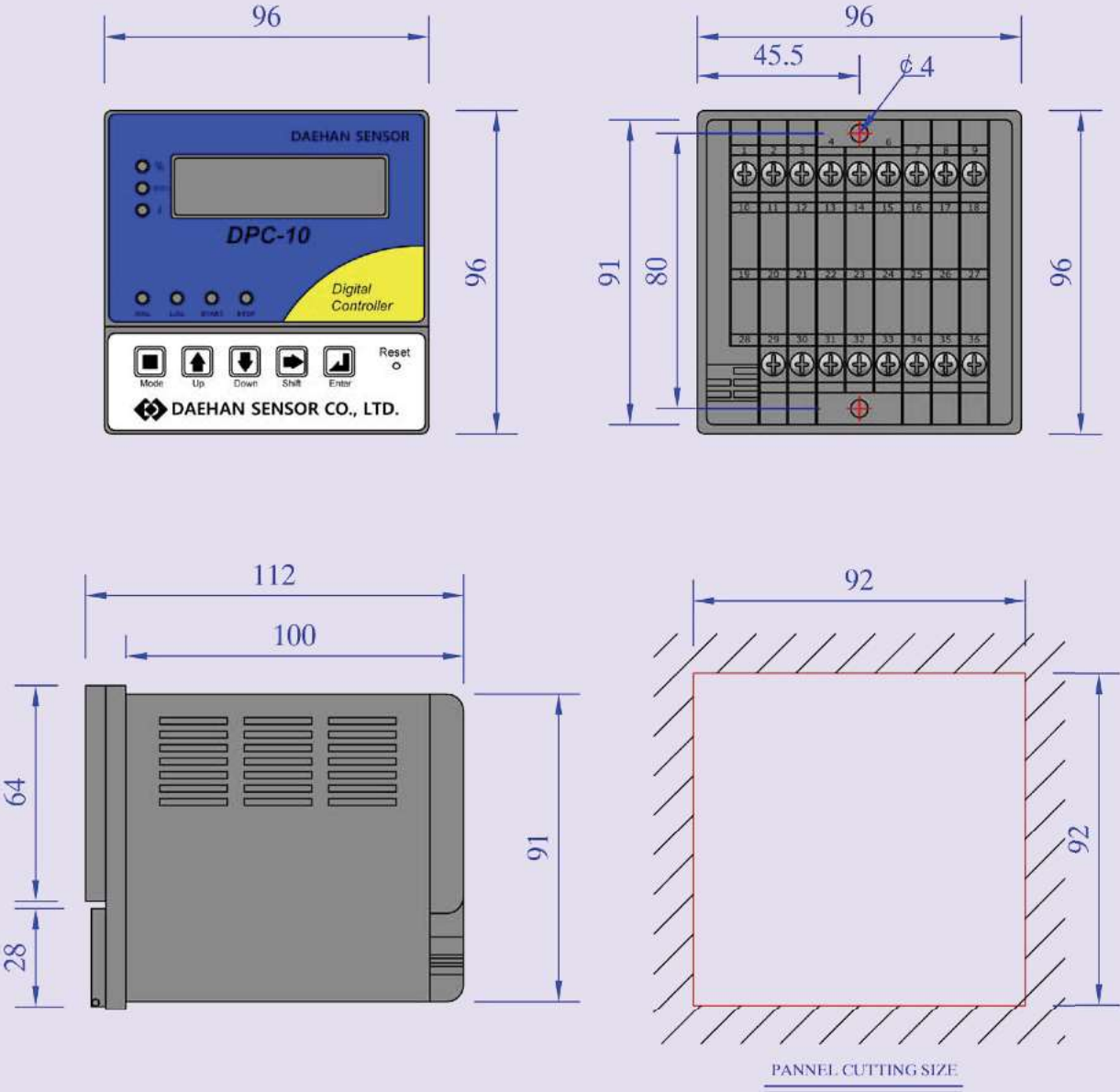
You can change the display by using the fie keys on the front panel including Reset.

It keeps all of the current value set by the user, even when the power is turned off because it is stored in the internal non-volatile memory.

Specification

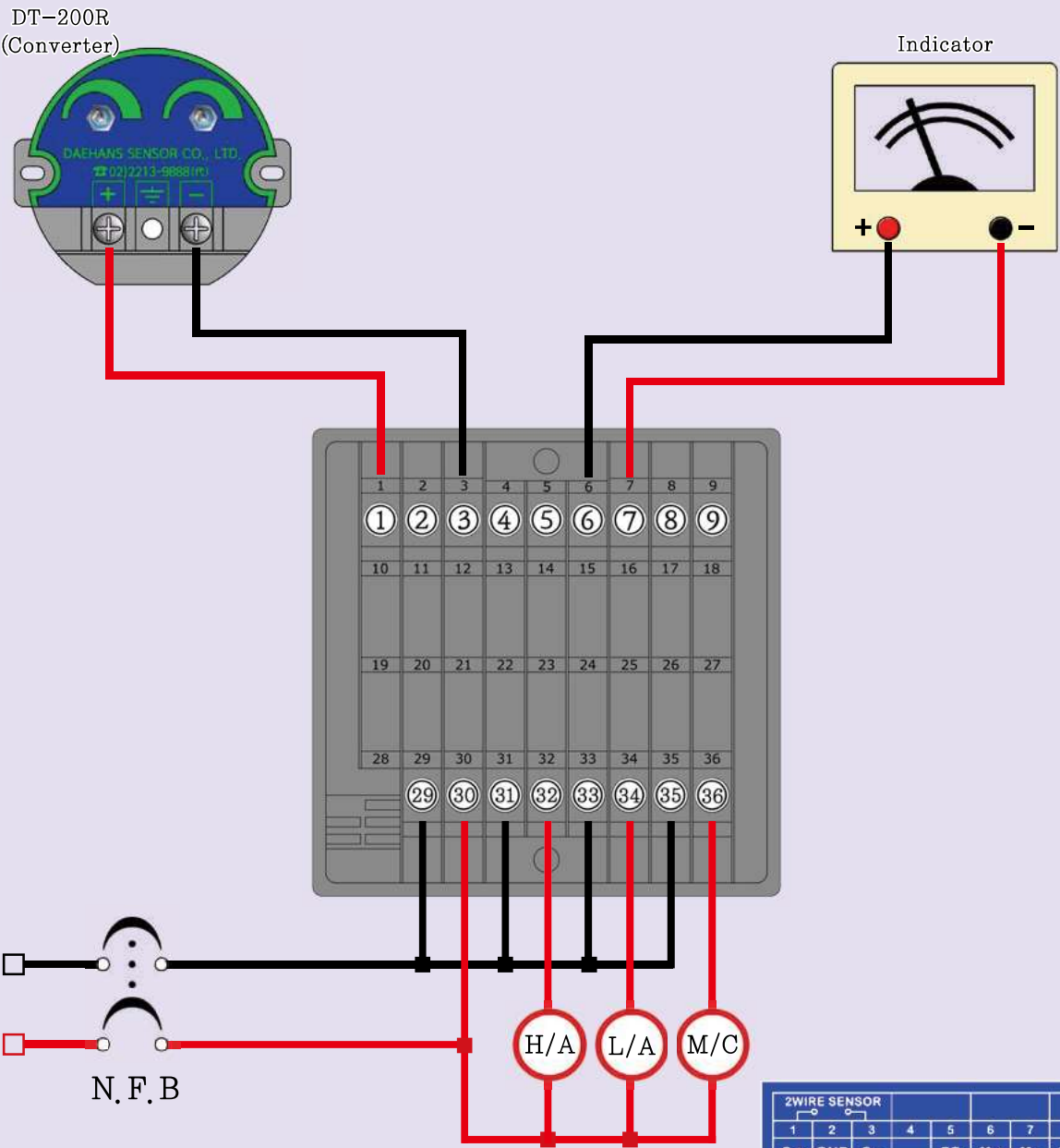
- ▶ Display ----- 5-Digit 8.0mm(0.315-inch) High 7-segment L.E.D
- ▶ Display update Rate ----- 0.25 seconds
- ▶ Transducer Supply ----- 24VDC 250m
- ▶ Operating Temperature ----- 0°C ~ 60°C
- ▶ Dimensions ----- 96mm (Wide) x 96mm (High) x 100mm (Deep)
- ▶ Material ----- Polycabonate & A.B.S
- ▶ Input Impedance ----- 215Ω (Ohms)
- ▶ Accuracy ----- 12bit 0.1%
- ▶ Isolation ----- Non - isolated
- ▶ Max. Switching Current Capacitor ----- 1250VA / 150W
- ▶ Max. Switching Voltage ----- 250VDC / 30VDC
- ▶ Max. Switching Current ----- 5A

Dimensions



Wiring Connection

Wiring to a [Two Wire – Current Loop]

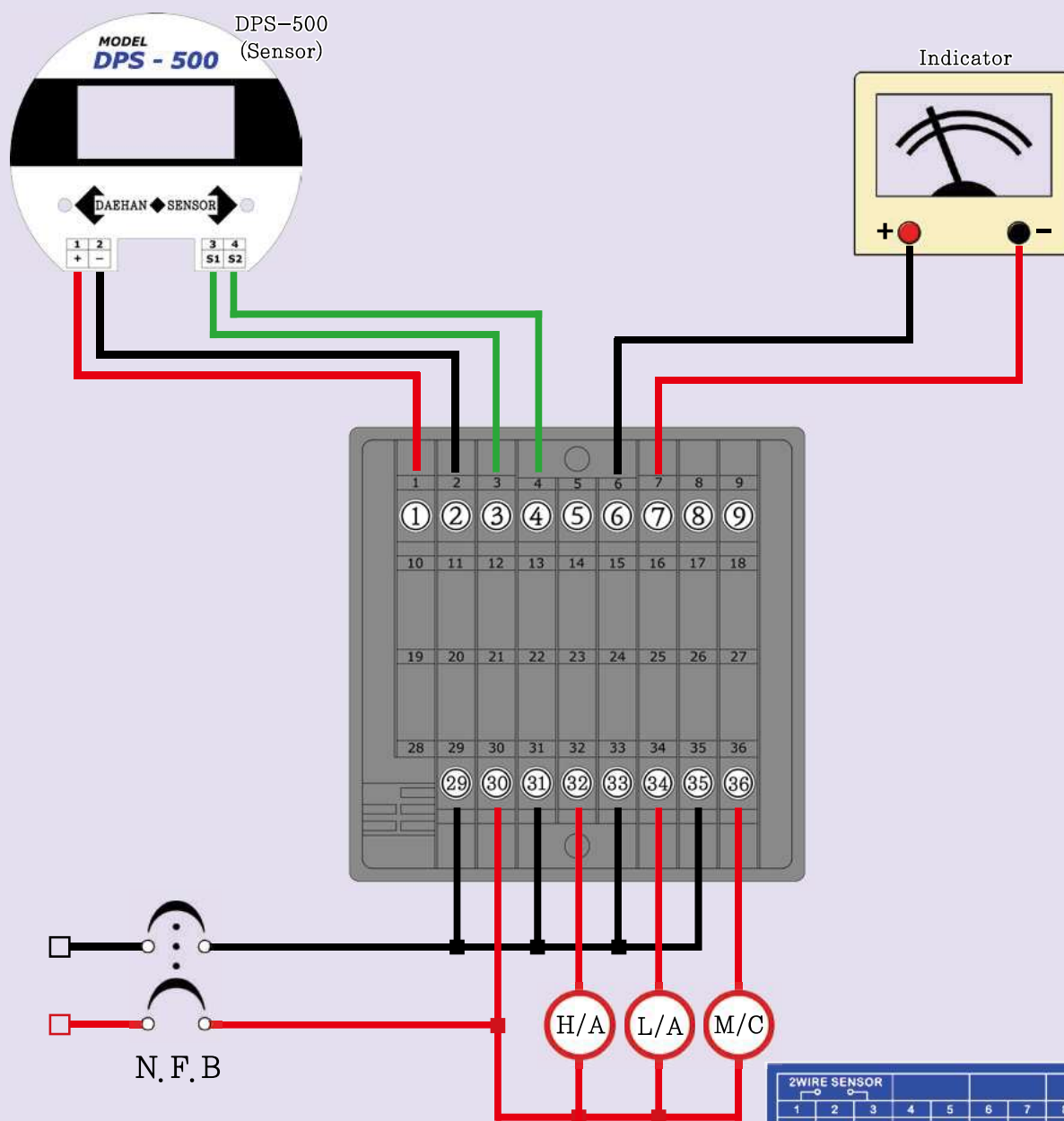


2WIRE SENSOR								
1	2	3	4	5	6	7	8	9
S +	GND	S -		FG	M +	M -	T +	T -
3WIRE SENSOR								
28	29	30	31	32	33	34	35	
OV	220V	H	H	L	L	A	C	

Terminal – Features & description

Wiring Connection

Wiring to a [Four Wire – Current Input]



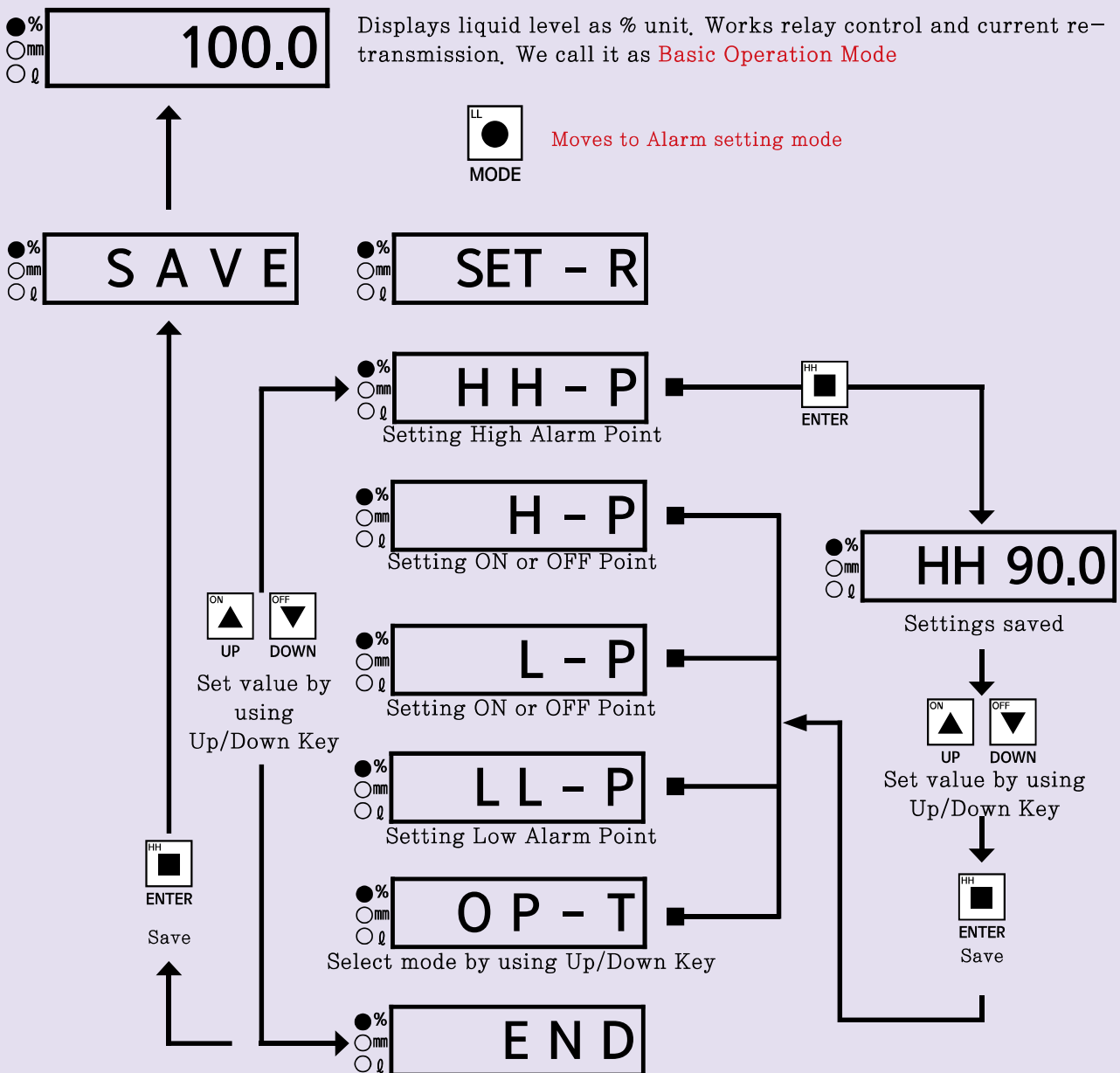
2WIRE SENSOR								
1	2	3	4	5	6	7	8	9
S +	GND	S -		FG	M +	M -	T +	T -
3WIRE SENSOR								
	28	29	30	31	32	33	34	35
	OV	220V	H	H	L	L	A	C

Terminal – Features & description

Operation

This mode is to set the position of control contact point and alarm contact point. You can set the position of ONn and OFF points of control contact point and two alarm contact points as High Alarm Point (HH-P) and Low Alarm Point (LL-P). You need to set correctly for as per working mode (supply or drain), the ON and OFF control contact point works contrary.

For example, in case of supply, the High Point (H-P) becomes OFF point of control contact point and the Low Point (L-P) becomes ON point. And in case of eject (drain), the High Point (H-P) becomes ON point of control contact point and the Low Point (L-P) becomes OFF point.



▶ The default setting of supply is as 90.00%(HH-P), 70.00%(H-P), 50.00%(L-P), 30.00%(LL-P).

▶ The value should be HH-P > H-P > L-P > LL-P. If the sequence is set incorrectly, error occurs.

Display Operation

1. If the setting is not correct or in case of malfunction, 'Error' message displays.
And the message is as below.

☒ %
☐ mm
☐ ℓ

100.0

Display (%)
It displays the current status as a percent display LED lights on the left.

☐ %
☒ mm
☐ ℓ

3000.0

Display (mm)
It displays the current status as a millimeter display LED lights on the left.

☐ %
☐ mm
☒ ℓ

50000.0

Display (ℓ)
It displays the current status as a Liter display LED lights on the left.

2. Relay Output Operation

There is an output of high alarm when the value is over 'HH-P' setting.
There is an output of low alarm when the value is under 'LL-P' setting.

The Control contact point becomes "ON" when the value is under "L-P"
(in case of supply mode)

The Control contact point becomes "OFF" when the value is under "H-P"
(in case of supply mode)

The Control contact point becomes "ON" when the value is under 'H-P'
(in case of eject mode)

The Control contact point becomes "OFF" when the value is under "L-P"
(in case of eject mode)

3. Analog Output Operation

This function is to re-transmit the value of current level to other equipment.
When you want to change the output for the setting is not correct, please refer to an extra calibration manual.

The current output include self power, there is no need of extra power supply.

Check & A/S

If you find any abnormal system during operation, please try to check below points.

1. Is the power connected to AC110V or AC220V correctly?
2. Is the wiring to the sensor made correctly?
3. Is the contact with the relay built up through correct sequence?
4. Is the current input from the sensor correct?
5. Is there any malfunction around the unit?

If the trouble still exists, please kindly contact below.

* Installation and operation manual is subject to change without prior notice for quality improvement.

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