

LCD function

The LCD module is used for field adjustment to fine tune all the parameter settings before measuring pressure and temperature. The internal and external buttons can be utilized in safe or hazardous areas.

Products with LCD



The LCD is wired directly into the terminals, which can be viewed through the lens

Openings in safe area



Internal LCD buttons function in safe areas, open the cover, use the internal buttons for programming and operation

Button operation hazardous area

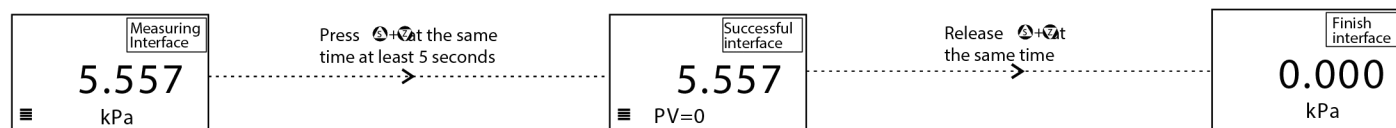


External button operation in dangerous area, slide open the nameplate, use the external buttons for programming and operation

Keys operation

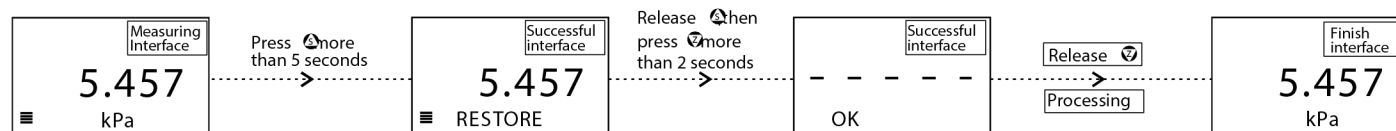
For example, factory setting parameters; pressure range -10~100kPa, display unit kPa, operate in the atmosphere.

Set PV=0

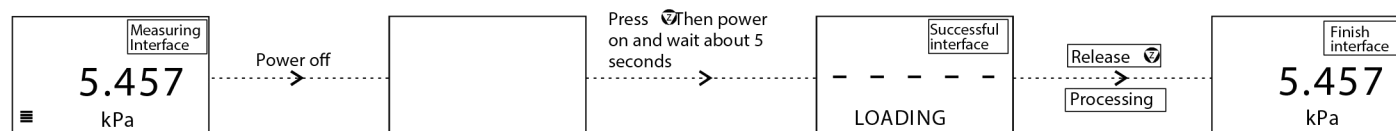


Factory reset

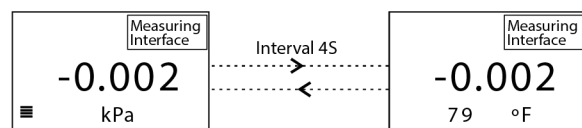
Method 1:



Method 2:

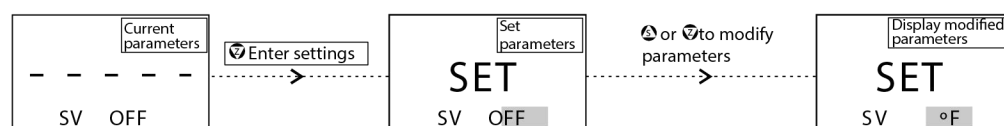


Sensor temperature display(SV: temperature & PV: pressure)dynamic switching, default temperature unit : °F



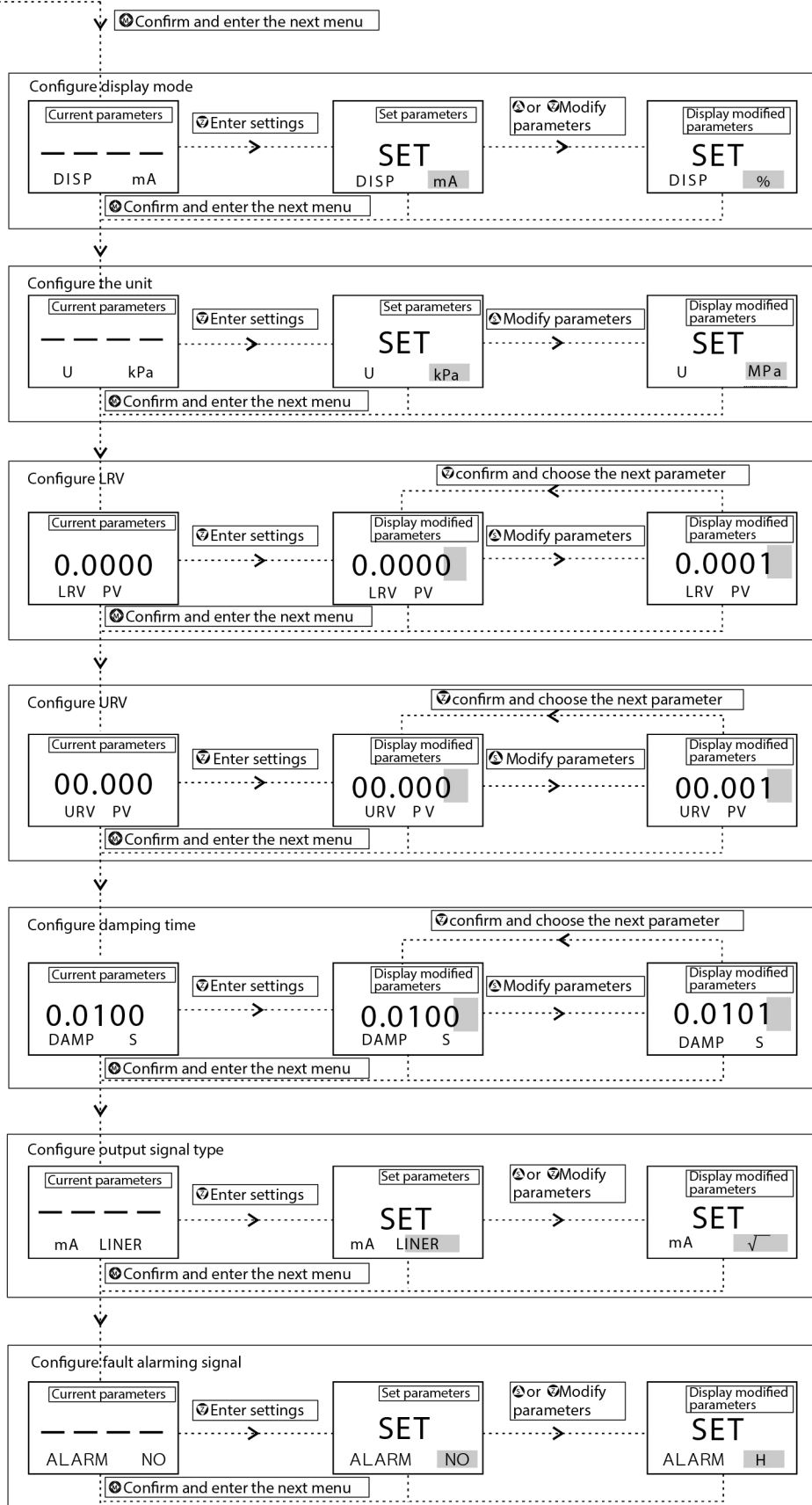
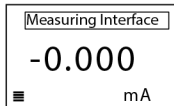
(Note 1)

SV display mode:



Detailed operating instructions

Measuring Interface



Parameters table

Display mode

%	Percentage
PV	Process variable
mA	Current

Square root display mode

%	√ %
PV	√ kPa
mA	√ mA

Units

(Δ , ∇ , ∇)

kPa
MPa
bar
psi
mmHg
mmH2O
mH2O
inH2O
ftH2O
inHg
mHg
TORR
mbar
g/cm2
kg/cm2
Pa
ATM
osi
mm
m

Lower range value

-19999-99999

Upper range value

-19999-99999

Damping time

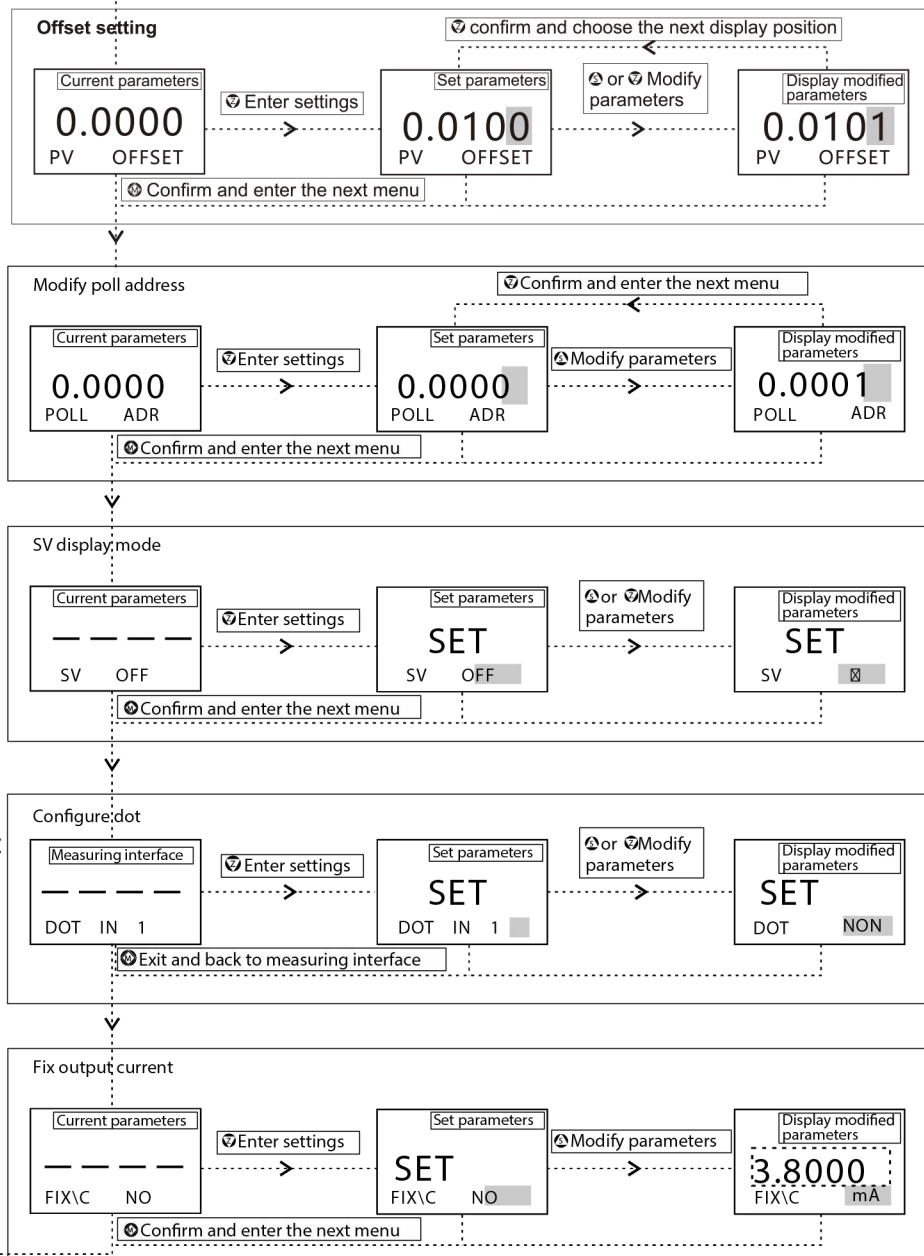
0-1005

Output signal type

√	Square root
LINER	Linearity

Fault alarm signal

No	Saturation output to 20.8mA or 3.8mA
H	20.8mA
L	3.8mA



Fault alarm signal

- 1) -1.2 | URL-LRL | spvoffset ≤1.2 | URL-LRL |
- 2) When current pressure < poffset, and poffset > 0, then current pressure = poffset;
- 3) When current pressure < 0, and poffset ≠ 0, then current pressure = 0

Optional address 0-15

0: Broadcast address

1-15: Non-broadcast address (fixed analog output to 4mA)

Display mode

OFF	None
☒	Celsius
☐	Fahrenheit
☐	Kelvin

Dot options

NON	No decimals
1	Max one decimals
2	Max two decimals
3	Max three decimals

Loop current output

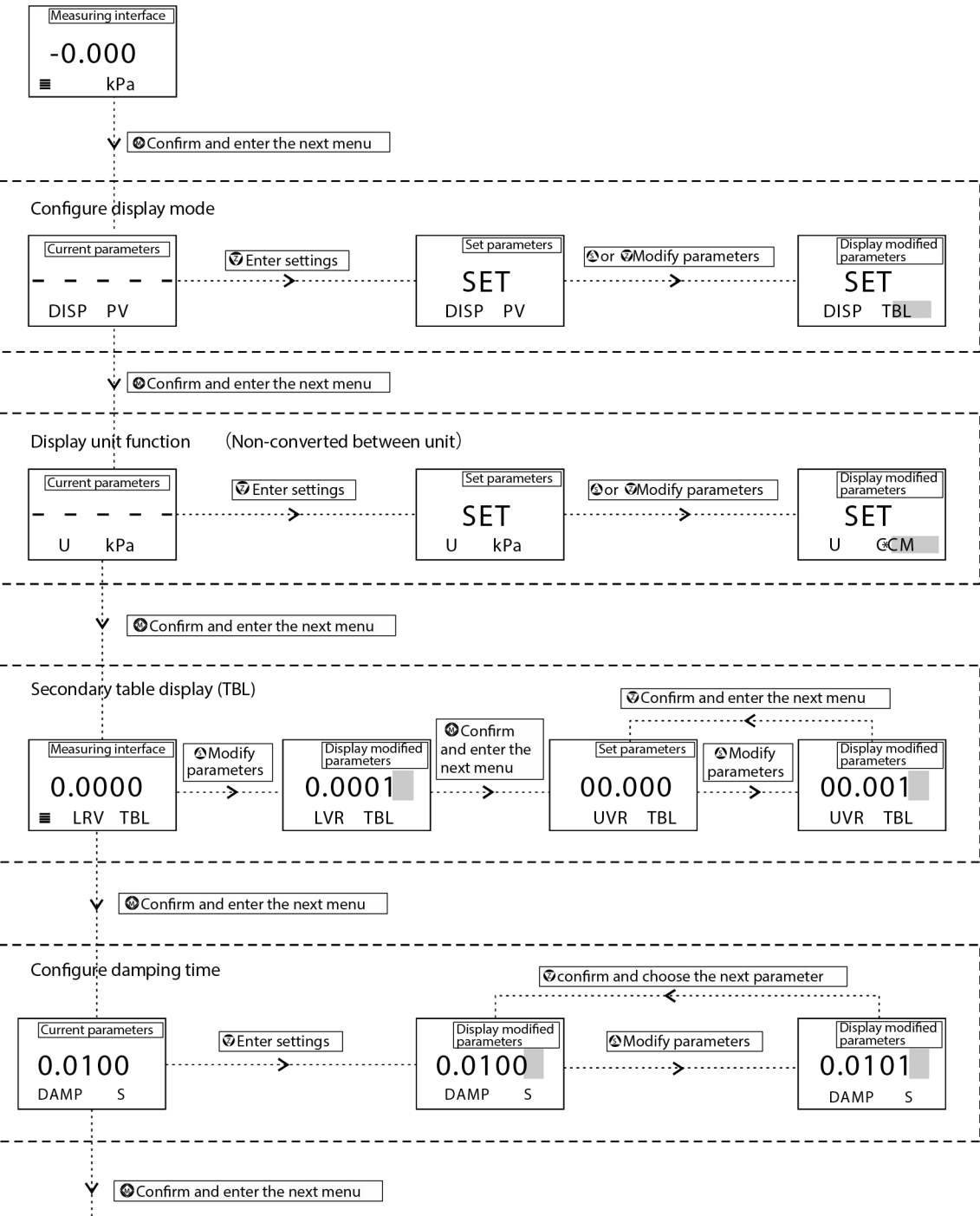
NO	Not fixed
3.8000	Fixed to 3.8mA
4.0000	Fixed to 4mA
8.0000	Fixed to 8mA
12.000	Fixed to 12mA
16.000	Fixed to 16mA
20.000	Fixed to 20mA
20.800	Fixed to 20.8mA

Expert menu

Expert menu



Detailed operation instructions



Display mode

%	Percentage
PV	Process variable
mA	Current
TBL	Secondary display table(note 2)

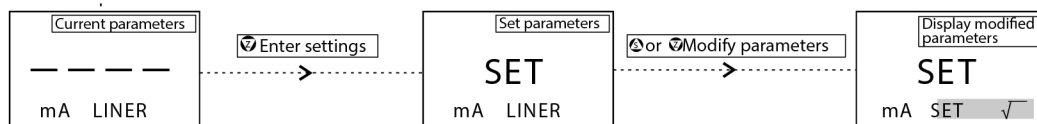
7 units: CMM CMH CFM
CCM LPM m3/h min/h

LRV TBL	Set 4mA corresponding value
URV TBL	Set 4mA corresponding value

Damping time

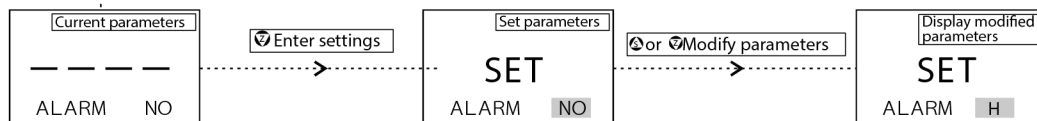
0-100S

Configure output type (Square root output initial value configurable)



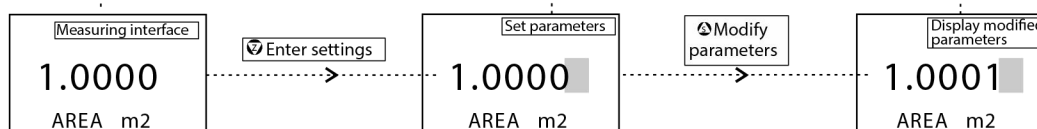
Confirm and enter the next menu

Configure fault alarming signal



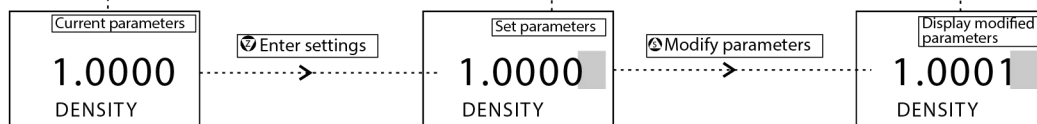
Confirm and enter the next menu

Configure area value



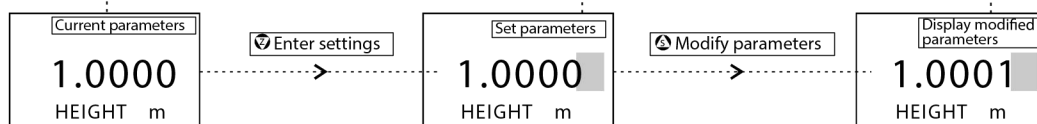
Confirm and enter the next menu

Configure density value (Only suitable for processing units: mm, m, m/s)



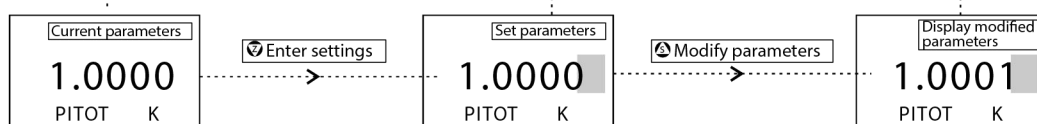
Confirm and enter the next menu

Configure center distance of diaphragm (Only suitable for processing units: g/cm³)



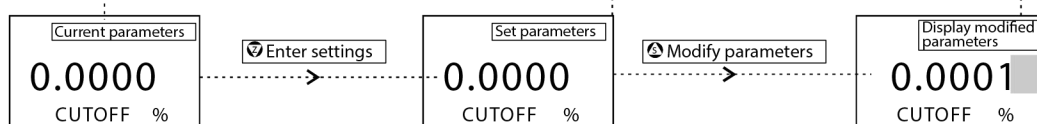
Confirm and enter the next menu

Configure pitot tube coefficient (Only suitable for processing units: m/s)



Confirm and enter the next menu

Configure cutting value of small signal



Confirm and enter the next menu

Parameters table

Output type

√	Square root
LINER	LINER
SET√	Set initial value of square root output

Fault alarm signal

No	Saturation output to 20.8mA or 3.8mA
H	20.8mA
L	3.8mA

Used for U=GALLON value calculation
GALLON=AREA*(HEIGHT+P) / G

Density correction for level measurement

Center distance of diaphragm

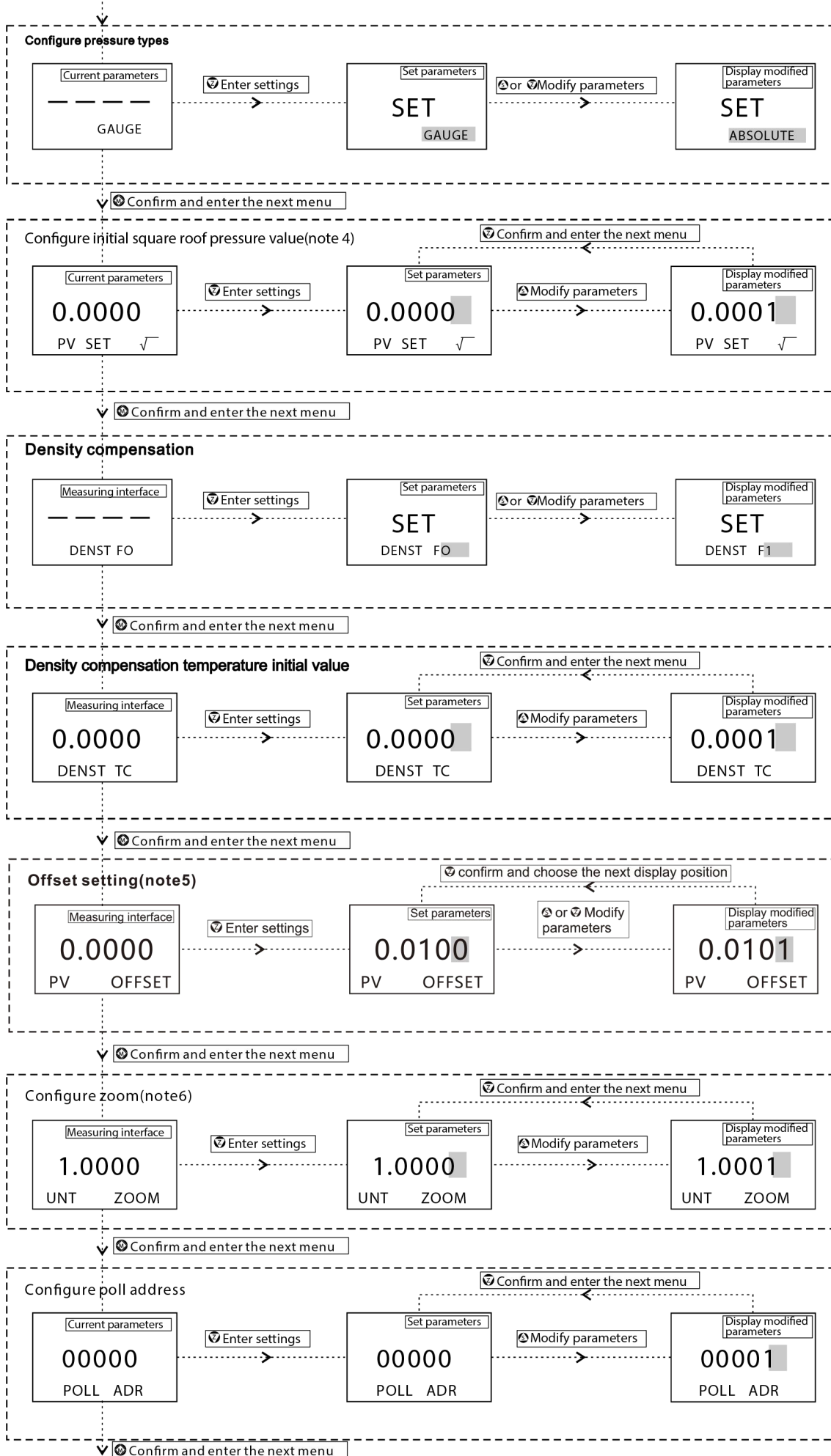
0.0001-99999

Used for both temperature & volume calculation
HEIGHT: Initial deviation height

Configuring range of cutting value

0-100

Used for zero deviation signal cut to 0 as a percentage of full scale



Pressure types

GAUGE	Gauge, Differential
ABSOLUTE	Absolute Pressure

Set range

0-0.008

Compensation type

F0	None
F1	1st coefficient
F2	2nd coefficient

Set range

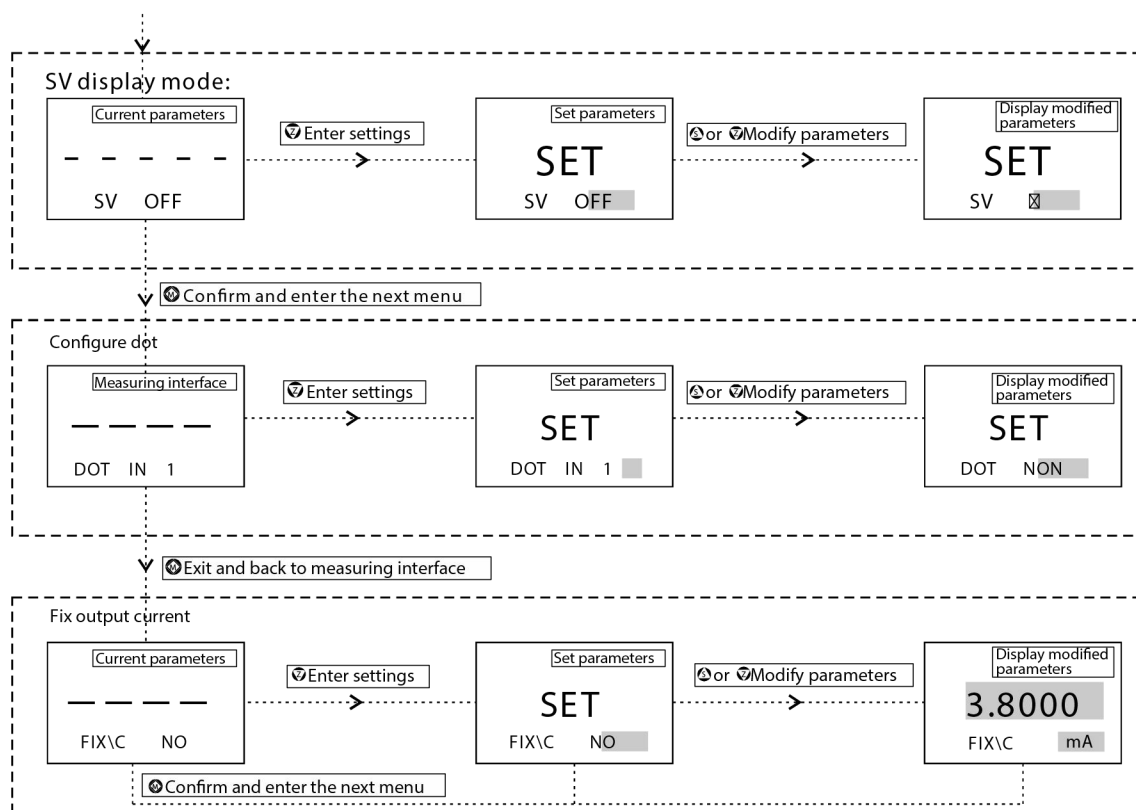
-45-125°C

TC unit: °C
Compensation starts when the value is over the set value

Fault alarm signal

- 1) -1.2 | URL-LRL | ≤ poffset ≤ 1.2 | URL-LRL |
- 2) When current pressure < poffset, and poffset > 0, then current pressure = poffset;
- 3) When current pressure < 0, and poffset ≠ 0, then current pressure = 0

Optional address 0-15
0: Broadcast address
1-15: Non-broadcast address
(fixed analog output to 4mA)



Display mode

OFF	None
°C	Celsius
°F	Fahrenheit
K	Kelvin

Dot options

NON	No decimals
1	Max one decimals
2	Max two decimals
3	Max three decimals

Loop current output

NO	Not fixed
3.8000	Fixed to 3.8mA
4.0000	Fixed to 4mA
8.0000	Fixed to 8mA
12.000	Fixed to 12mA
16.000	Fixed to 16mA
20.000	Fixed to 20mA
20.800	Fixed to 20.8mA

Note 1: 79 is the temperature value, not the value on the main screen.

Note 2: When the calibration range and unit are not clear, the corresponding values of 4mA and 20mA can be set according to the output current, 4mA corresponds to the LRV of the required unit, 20mA corresponds to the URV of the required unit), units can be chosen.

Note 3: When measuring the liquid level or for vacuum measurement, since the liquid level cannot be negative or the vacuum value cannot be less than 0, the absolute pressure mode should be enabled to ensure that the output is not less than 4mA or the PV is not less than 0.

Note 4: Default square curve: The square curve is a polyline. By setting the starting point value, when over this value, the output type will be square root.

Note 5: Directly subtract the percentage of the set value full-scale full-scale output (16mA) from the original output, subject to the initial temperature value.

Note 6: In some multi-device occasions, the instrument display needs to be consistent, and this setting value can be used to make the LCD display value consistent, but does not change the loop output value.