

# ECP1 Pressure Guage



## DESCRIPTION

With the piezoresistive pressure sensor, as soon as changes in environmental pressure are detected, the thin film deformation on the pressure sensor changes too, and the piezoresistive material on the thin film experiences deformation accordingly. The resistance changes as such as well. Such resistance change, once read and processed through the Wheatstone bridge and the amplifier circuit, can be used to measure the size of pressure.

## SPECIFICATIONS

Working power	DC 12~36V
Power consumption	<50mA (@24V unloaded)
Working temp.	- 10 to 60°C
Working medium	Liquid/Slight corrosive liquid/air
Precision	± 1.5%F.S.
Temp. coefficient	±0.1%F.S./°C (25°C as the baseline)
NPN/PNP output current	Maximum pressure tolerance of 30 V/100 mA and breakover residual voltage of < 1.5 V
NPN/PNP protective current	180mA
NPN/PNP short-circuit protection	YES
Delay time	1.5 ms ∙ 20 ms ∙ 100 ms ∙ 500 ms ∙ 1,000 ms ∙ 2,000 ms ∙ 5,000 ms
Current Output	4~20mA Max.Load resistance When the power voltage is 12V: 300Ω When the power voltage is 24V: 500Ω Linearity: ±1%F.S. Precision: ±2.5%F.S. (Ambient temperature of 25 ± 3°C)
Display unit	MPa ∙ kPa ∙ kgf / cm <sup>2</sup> ∙ bar ∙ psi
Display method	Dual-color LED
Display color	Red/Green
Number of digits displayed	4 (7 segments)
Action indicator	It is lit when the output is ON OUT1 ∙ OUT2 ∙ Red
Dimensions	61mm*61mm

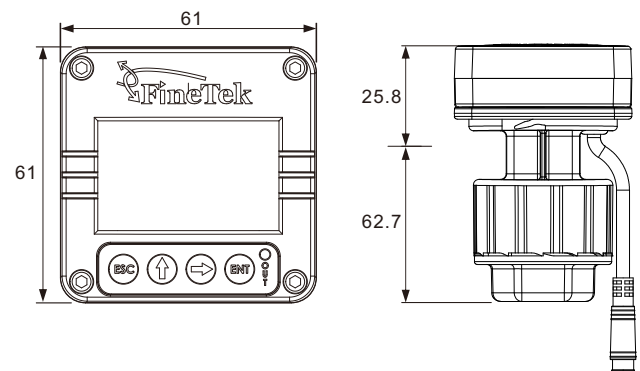


## FEATURES

- Dual-color LED and red-text alarm displays
- Analog 4–20 mA output that allows continuous detection of pressure values
- Anti-corrosion structural design that is suitable for minimally corrosive solution
- Quick release mount to facilitate calibration and replacement
- Dual NPN/PNP output that makes pressure control quicker and more convenient
- IO-Link compatibility to make system integration easier

## DIMENSION

(Unit: mm)

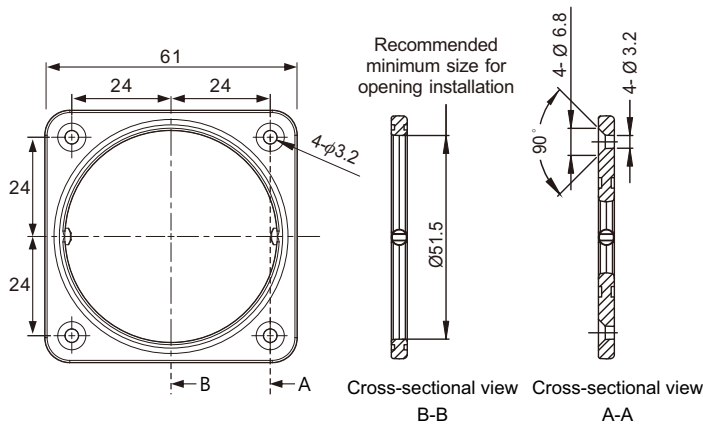


## APPLICATIONS

This product is applied to a modularized pressure meter where air, water, and solution with a pH value are used.

## HOLE DIMENSION

(Unit: mm)



On the installation disc, it is required to make diagonal holes with a diameter of 3.2 mm according to the cross-sectional view B-B above; use the countersunk screws to hold the disk onto the equipment.

In addition, it is required to make holes with a diameter greater than 51.5 and smaller than 54 mm according to the forgoing drawing to allow buckling and fixation once the display pressure meter is inserted into the installation disc.

## ORDERING INFORMATION

ECP 1 <sup>05</sup> <sup>06</sup>   0 0 - <sup>09</sup> <sup>10</sup> <sup>11</sup> <sup>12</sup> <sup>13</sup>      P A <sup>16</sup> <sup>17</sup> <sup>18</sup> <sup>19</sup>

<sup>05</sup> <sup>06</sup> Medium

00: Air      10: Liquid

<sup>09</sup> <sup>10</sup> Housing material

18: PP

<sup>11</sup> <sup>12</sup> Diaphragm

00: No diaphragm (air)

53: Viton (general liquid)

21: PTFE (solution with a pH value)

<sup>13</sup> Pressure range

A: 0~5kgf/cm<sup>2</sup>

B: 0~10kgf/cm<sup>2</sup>

C: 0~20kgf/cm<sup>2</sup>

<sup>16</sup> <sup>17</sup> Connection - size

A2: 1/4"

A4: 3/8"

A5: 1/2"

<sup>18</sup> <sup>19</sup> Connection - thread

04: PF female

