# Autrol Field Indicator 

MODEL<br>Al-100<br>...> Multi-programable unit selection<br>...) Easy calibration<br>...> Easy button configuration<br>...) Programable user difine unit

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## Autrol Field Indicator

## Overview

Autrol Field Indicator, Model Al-100, is an Indicator for converting and displaying received 4 to 20 mA current input to setting range.
The Indicator is available to indicate 5 digit numbers, 6 digit letters and 4 type special symbols on LCD.
It has main functions such as Displaying 4 to 20 mA current, Easy Configuration, Changing Square Root function and User Define Units.
Al-100 does not need separated power and it operates looppowered 4 to 20 mA .
The minimum operating current is 3.6 mA and maximum operating voltage is 2 Vdc .
User define function, E-Unit (Engineering Unit), can modify the unit letters that user wants to indicate on LCD as well as basic selectable units.

## Features

» Intuitive \& Logical Interface
» 4 ~ 20mA Loop Power
» LCD Display
» Low Voltage Drop
» User Interface (2 Button)
» Flexible Wide Range. (-99999 to 99999)
»Easy Calibration
» User Define Units, Modified Various Units

## Dimension



## Applications

" Remote Monitoring with 4~20mA input
» Chemical, Steel, Paper, Thermal
» Oil \& Gas
» Petro-chemical, Water treatment plants
» Connect with all Autrol series for APT3100, APT3200, ATT2100, ALT6100 series.


## Autrol Field Indicator

## Technical Specifications

## a Range

» Input Signal Range

- 4 to 20 mA nominal
» Operating Range
- 3.4 to 24 mA
a Maximum overload Current
-100mA
a Voltage drop
- 1.5 Vdc Typical, 2.0 Vdc Maximum


## a Indication range

--99999 ~ 99999
5 digit + 1 Sign(-)
7 -segment characters.

## a Temperature Limits

" Storage

- -40 to $+85^{\circ} \mathrm{C}\left(-40\right.$ to $+185^{\circ} \mathrm{F}$ )
"Operating
$\cdot-20$ to $+70^{\circ} \mathrm{C}\left(-4\right.$ to $\left.+158^{\circ} \mathrm{F}\right)$


## a Relative humidity

-100\%RH

## a Update time

- Sensor Update Time 0.75 sec
- Display Update Time 1.5 sec


## a Resolution

- $\pm 0.02 \%$


## a Accuracy

$\cdot \pm 0.2 \%$ of Calibrated span(16mA)

## Define Unit

| Num | Display_Unit | Num | Display_Unit |
| :---: | :---: | :---: | :---: |
| 01 | \% | 21 | $\mathrm{ft}^{3} / \mathrm{m}$ |
| 02 | mA | 22 | Gal/m |
| 03 | V | 23 | $1 / \mathrm{m}$ |
| 04 | Ohm | 24 | \|Gal/m |
| 05 | cnt | 25 | $\mathrm{m}^{3} / \mathrm{h}$ |
| 06 | InHzO | 26 | Gal/S |
| 07 | lnHg | 27 | MGal/d |
| 08 | FtHzO | 28 | I/S |
| 09 | mmHzO | 29 | $\mathrm{Ml} / \mathrm{d}$ |
| 10 | mmHg | 30 | $\mathrm{ft}^{3} / \mathrm{S}$ |
| 11 | PSI | 31 | $\mathrm{ft}^{3} / \mathrm{d}$ |
| 12 | BAR | 32 | $\mathrm{m}^{3} / \mathrm{s}$ |
| 13 | mBAR | 33 | $\mathrm{m}^{3} / \mathrm{d}$ |
| 14 | $\mathrm{g} / \mathrm{cm}^{2}$ | 34 | IGal/h |
| 15 | $\mathrm{Kg} / \mathrm{cm}^{2}$ | 35 | IGal/d |
| 16 | PA | 36 | ${ }^{\text {' }}$ ' |
| 17 | KPA | 37 | `F \\ \hline 18 & MPA & 38 & `R |
| 19 | TORR | 39 | K |
| 20 | ATM | 40 | NONE |

## Ordering Information

| ITEM | Code | Description |
| :---: | :---: | :---: |
| Electrical Connection | 1 | 1/2-14NPT |
|  | 2 | G1/2 (Adapter) |
|  | x | Special |
| Harzard Location Certification | ко | Maker Standard (IP67) |
|  | K1 | Korea Approval (KC) Flameproof |
|  | K2* | Korea Approval (KC) Intrinsic Safety |
|  | E1* | ATEX Flameproof |
|  | E2* | ATEX Intrinsic Safety |
|  | F1* | FM Flameproof |
|  | F2* | FM Intrinsic Safety |
| Units | $\square \square$ | $01 \sim 40$ (Refer. to "Define Units") |
| Options | ST | Stainless steel Housing |
|  | BA | Stainless steel bracket (Angle type) with SUS Bolt \& Nuts |
|  | BF | Stainless steel bracket (Flat type) with SUS Bolt \& Nuts |

## - Menu Configurations



The digits or letters will be flickering like a cursor, which it needs to be changed after getting into Sub-Menu's.
A flickering number will be increased after pressing 'Zero' button. A flickering number will be decreased after pressing 'Span' button. If you press 'zero+span', the cursor will move to right.
Setting is done when the cursor is at the low order positin. (at the end of right side)

To finish inputting, press 'zero+span', then choose SAVE or CANCEL and go back to previous menu.
A flickering digit will move to the right after pressing 'Zero+Span'.
To finish Configuration Digit setting, selecting 'SAVE' or 'CANCEL' after pressing 'Zero \& Span' button at the same time.

## - Electrical Connections



## Dimensions of Transmitter (mm)

Vertical Mounting Type 2"Pipe Mounting Bracket


Horizontal Mounting Type 2"Pipe Mounting Bracket


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[^0]:    AUTROL* ${ }^{*}$ AUTROL ${ }^{\text {TM }}$ are trade mark of smart transmitter brand series to measure Pressure, Temperature and Level, which is manufactured \& owned by DUON System Co., Ltd(hereafter DUON) since 1989. AUTROL*, AUTROL™ series also provide services of electric appliance installation, repair of electric, magnetic measuring instruments, electric appliance repair, repair of instruments and appliances for measuring and testing, repair of computer hardware, repair of electronic application machines and apparatus, repair of instruments and appliances for rotating, repair of electric power distribution machines and apparatus, repair of control machines and apparatus, computer hardware maintenance and administration, computer hardware installation. APT3500-Differential and high accuracy pressure Transmitter APT3100-Differential pressure Transmitter, APT3200-Gauge \& Absolute pressure Transmitter, APT2100-Temperature Transmitter, A1100-Field Indicator.

