AUTROL® AMERICA
AUTOMATION CONTROL

AI 100

Smart Field Indicator

INDICATOR

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Flow | Level | Temperature | Pressure | Valves | Analyzers | Accessories | TekValSys

AI-100

Autrol Field Indicator

Overview

Autrol Field Indicator, Model AI-100, is an Indicator for converting and displaying received 4 to 20 mA current input to set 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 20mA current, Easy Configuration, Changing Square Root function and User Define Units.
AI-100 does not need separated power and it operates loop-powered 4 to 20mA.
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.

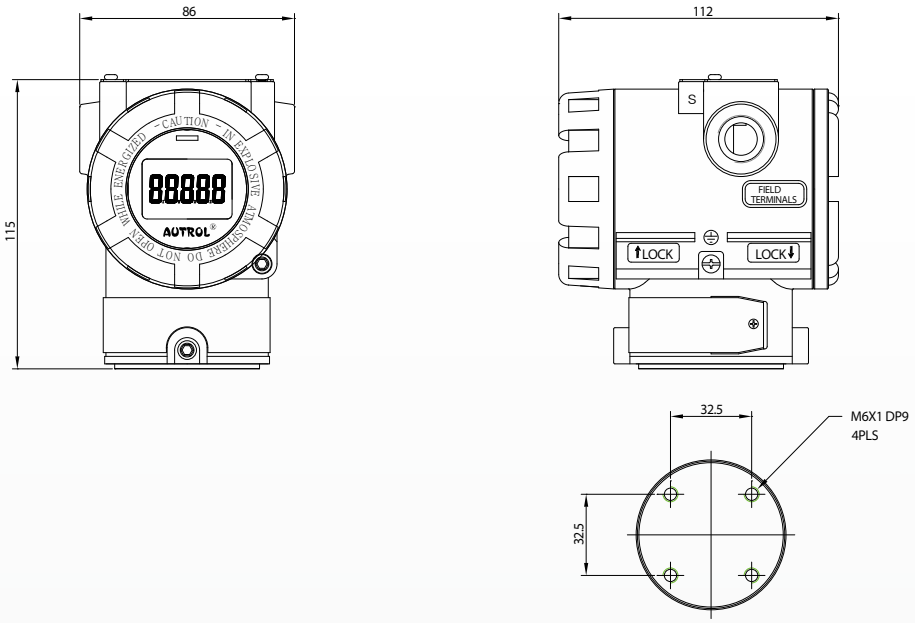
Features

» 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

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.

Dimension



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Technical Specifications

¤ **Range**

» Input Signal Range

• *4 to 20 mA nominal*

» Operating Range

• *3.4 to 24 mA*

¤ **Maximum overload Current**

• 100mA

¤ **Voltage drop**

• 1.5Vdc Typical, 2.0 Vdc Maximum

¤ **Indication range**

• -99999 ~ 99999

5 digit + 1 Sign(-)

7-segment characters.

¤ **Temperature Limits**

» Storage

• *-40 to +85°C (-40 to +185°F)*

» Operating

• *-20 to +70°C (-4 to +158°F)*

¤ **Relative humidity**

• 100%RH

¤ **Update time**

• Sensor Update Time 0.75 sec

• Display Update Time 1.5 sec

¤ **Resolution**

• ± 0.02%

¤ **Accuracy**

• ±0.2% of Calibrated span(16mA)

Define Unit

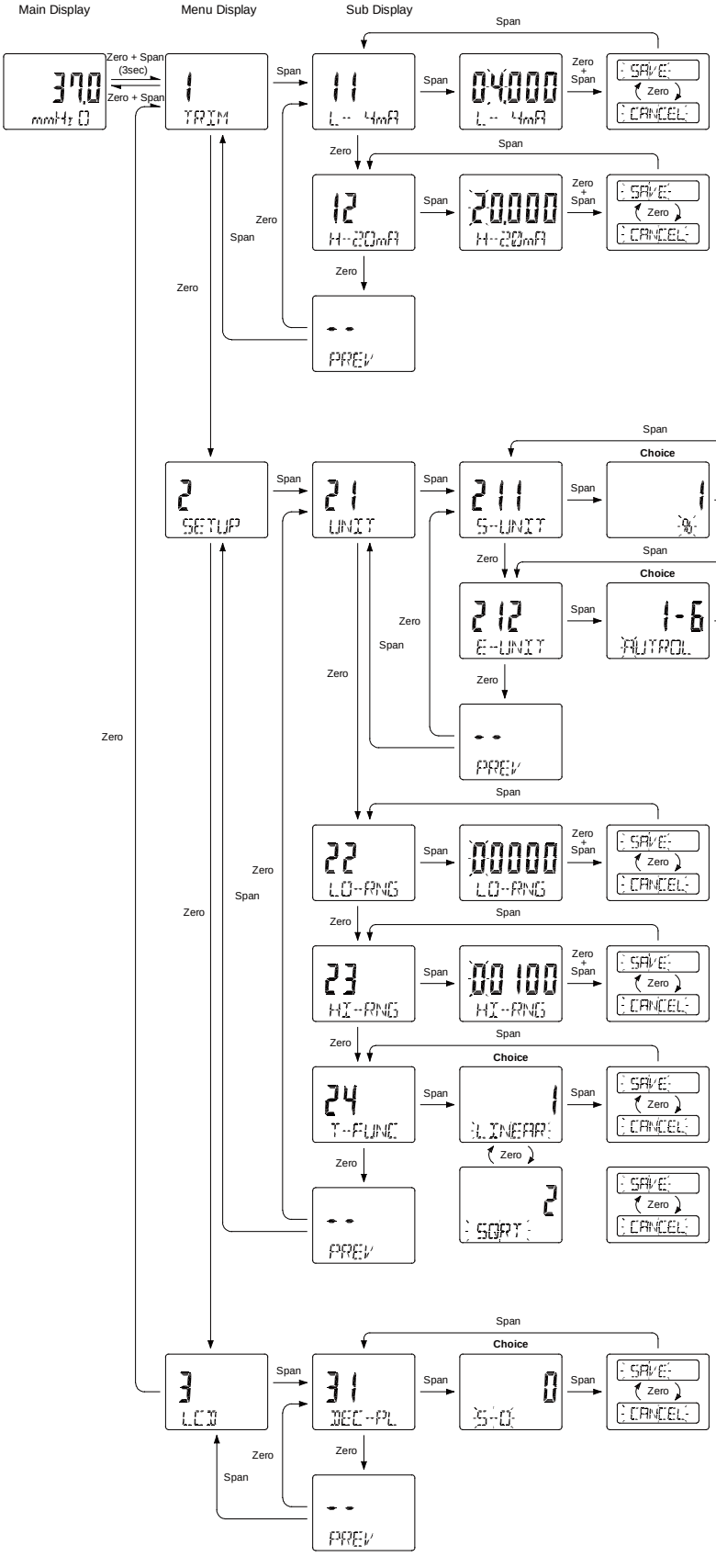
Num	Display_Unit	Num	Display_Unit
01	%	21	ft^3/m
02	mA	22	Gal/m
03	V	23	l/m
04	Ohm	24	IGal/m
05	cnt	25	m^3/h
06	InHzO	26	Gal/S
07	InHg	27	MGal/d
08	FtHzO	28	l/S
09	mmHzO	29	Ml/d
10	mmHg	30	ft^3/S
11	PSI	31	ft^3/d
12	BAR	32	m^3/S
13	mBAR	33	m^3/d
14	g/cm^2	34	IGal/h
15	Kg/cm^2	35	IGal/d
16	PA	36	`C
17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

Ordering Information

ITEM	Code	Description
Electrical Connection	**1**	1/2 - 14 NPT
	2	G1/2 (Adapter)
	X	Special
Harzard Location Certification	**K0**	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	☐☐	01 ~ 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

Note : " * " before order.

Menu Configurations



» Configuration Digit Setting

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)

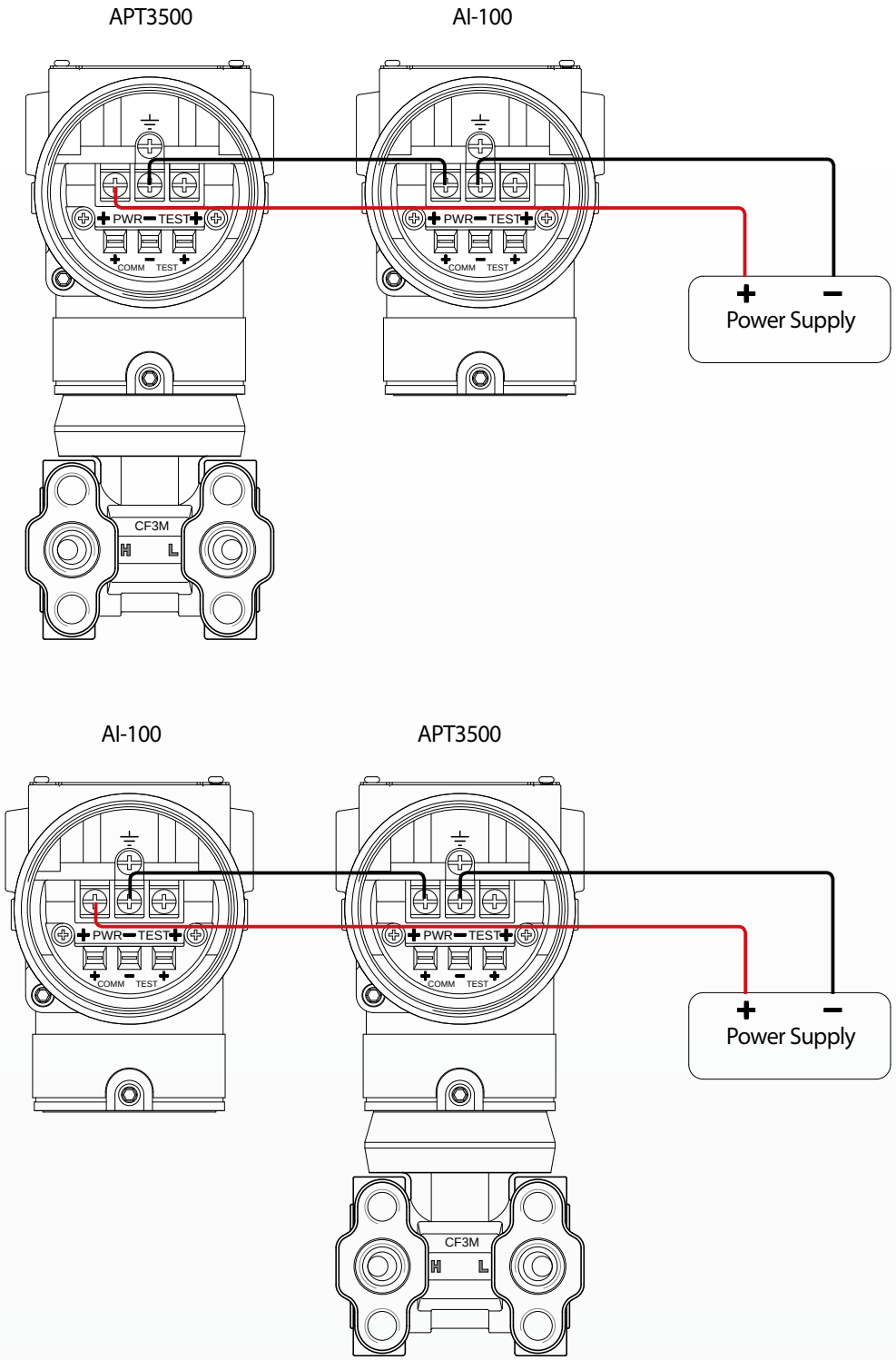
To finish inputting, press 'zero+span', then choose SAVE or CANCEL and go back to previous menu.

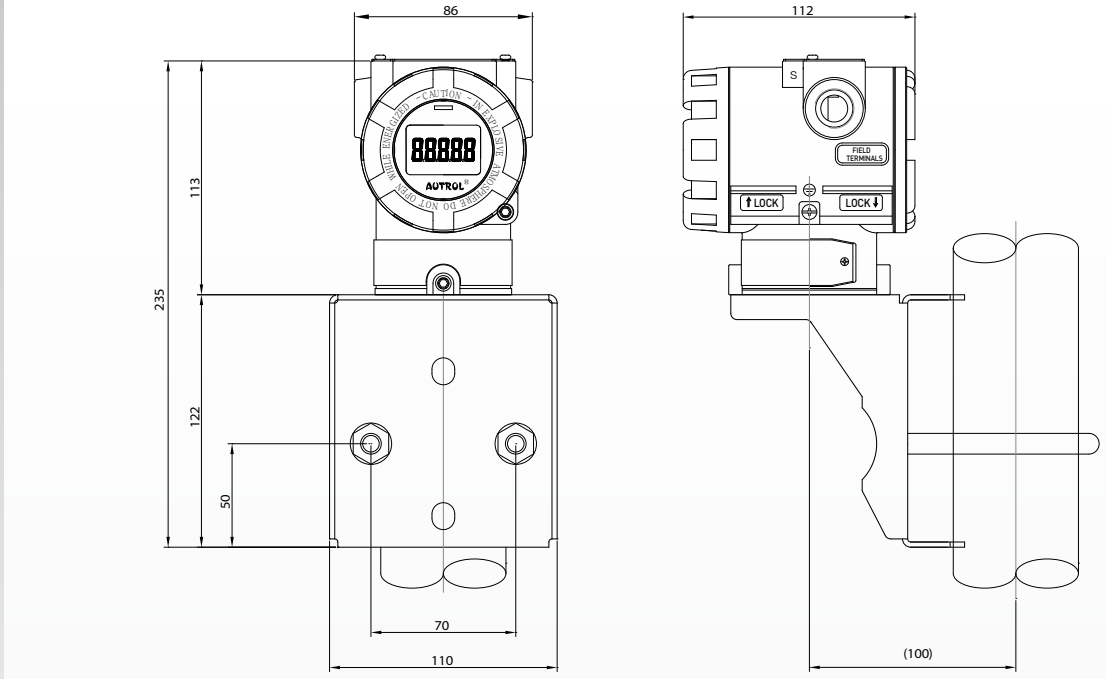
A flickering digit will move to the right after pressing 'Zero+Span'.

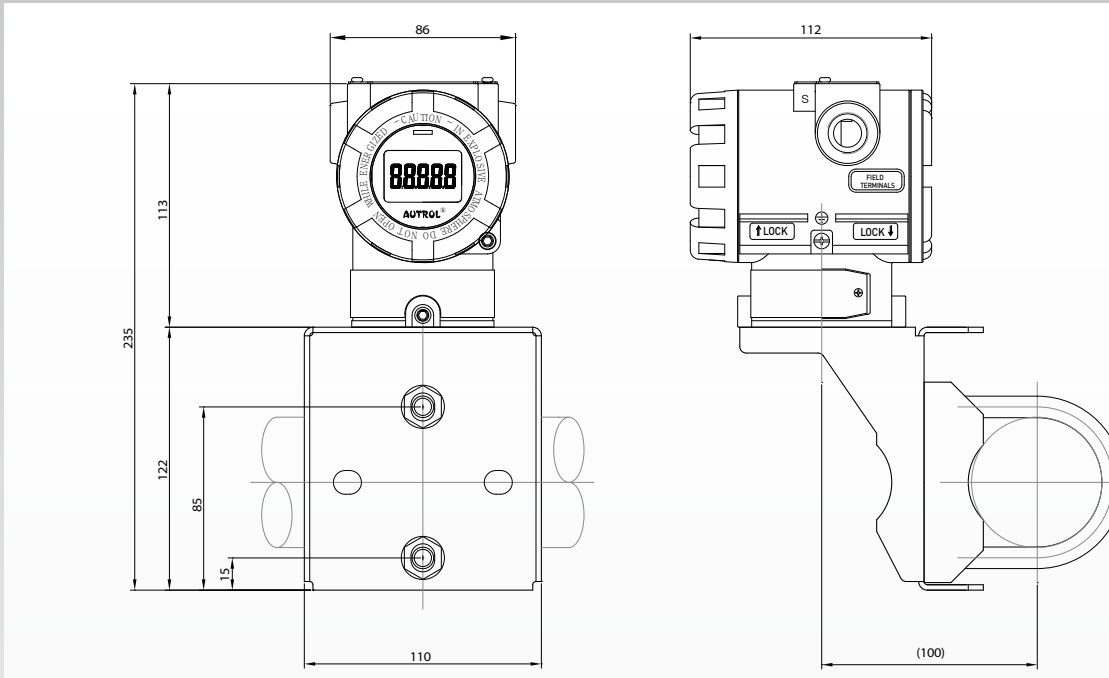
To finish Configuration Digit setting, selecting 'SAVE' or 'CANCEL' after pressing 'Zero & Span' button at the same time.

And then go back to previous menu.

Electrical Connections







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