

MYPIN

FA Series Frequency/Line-speed / Tachometer Instruction Manual

Thanks a lot for selecting the products! Before operating this instrument, please carefully read this manual and fully understand its contents. If have problems, please contact our sales or distributors whom you buy from. This manual is subject to change without prior notice.

Warning

Please do not turn on the power supply until all of the wiring is completed. Otherwise electrical shock, fire or malfunction may result.

Do not wire when the power is on. Do not connect the unused terminals. Do not turn on the power supply when cleaning this instrument. Do not disassemble, repair or modify the instrument. This may cause electrical shock, fire or malfunction. Use this instrument in the scope of its specifications. Otherwise fire or malfunction may result.

Caution

The instruments should be installed to avoid strong noise resources. If the signal cable is too long, we would suggest you use shield cables.

Please do not install the signal together with the power.

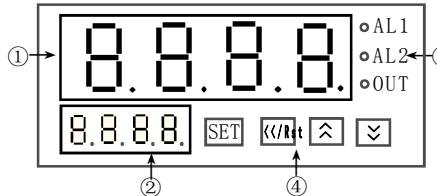
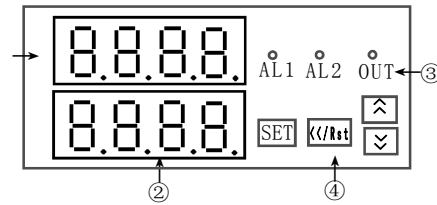
To avoid using the instruments in environment of strong shock or concussion.

To avoid using the instrument in environment of dust or flammable gas.

Features

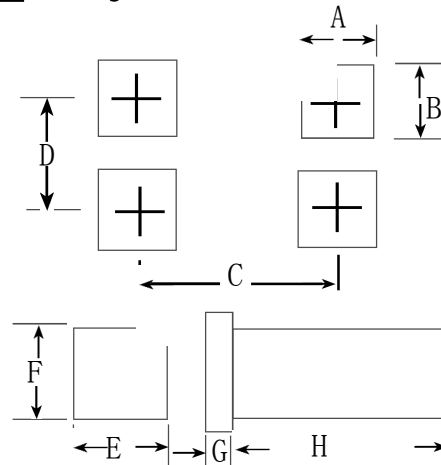
1. Can measure frequency, techo and line-speed
2. 4, 5, 6 digit LED display
3. Use high quality MICROCHIP control CPU
4. Input and output is optical isolated
6. Power fail protection for at least 10 years
7. Widely applied in chemical, machine, light industrial etc.,

Name of parts



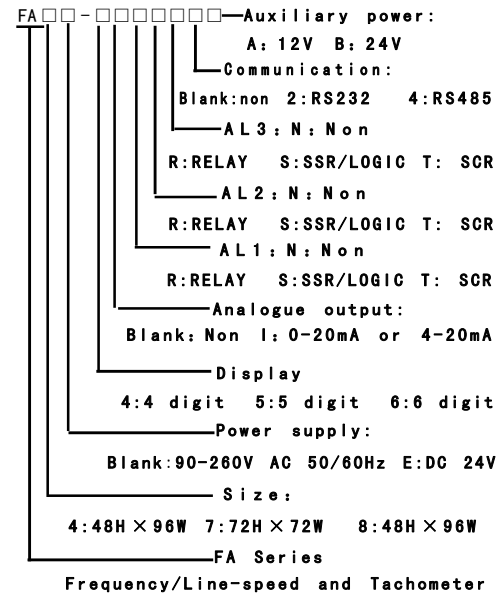
- ① Actual speed/preset parameter
- ② AL1 preset value/preset values accordingly to parameters showed in up LED
- ③ Indicator lamps:
AL1:alarm 1 AL2:alarm 2
OUT:output
ON:active OFF:inactive
- ④ Operation keys:
SET:Select/Confirm key
<</Rst:shift key
⤴:UP key ⤵:DOWN key

Mounting and Sizes



Sizes Model	A	B	C	D	E	F	G	H
FA4	44.5+0.5	45+0.5	65	65	48	48	8	80
FA7	67.5+0.5	67.5+0.5	95	95	72	72	12	100
FA8	91+0.5	43.5+0.5	65	115	96	48	12	100

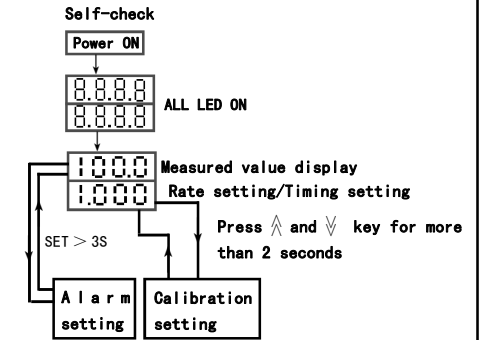
Ordering Code



Specifications

Power	90-260VAC /220V 50/60Hz/24/12V DC cosp:<5VA
Display LED	0.1-9999,0.1-99999 depend on digits display
Display range	0.1-9999、0.1-99999
Measure range	0.01HZ-10KHZ
Accuracy	0.1%F.S ± 2digit
Alarm	Pulse, square wave, 5V ≤ V ≤ 30V
Input signals	0 ≤ L ≤ 2V, up edge contact
Input impedance	≥ 10K Ω
Auxiliary power	DC 24V/12V 30mA max
Withstand voltage strength	≥ 100M Ω (DC 500V Between power terminal and the housing)
Insulation resistance	AC 1500V 1min (Between power terminal and the housing)
Operation environment	temperature: 0-50℃ humidity: 35-85%RH
Weight	FA4: about 250g FA7/FA8: about 350g

Parameter setting



Note:

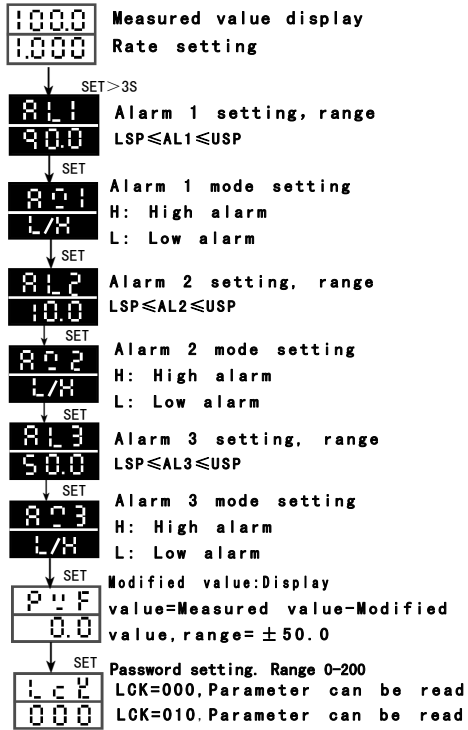
☆ Parameters setting steps:

- A: Press <</Rst key, LED flashes and you can shift the digit
- B: Press ⤴ ⤵ key to modify the numerals
- C: Press SET key to confirm

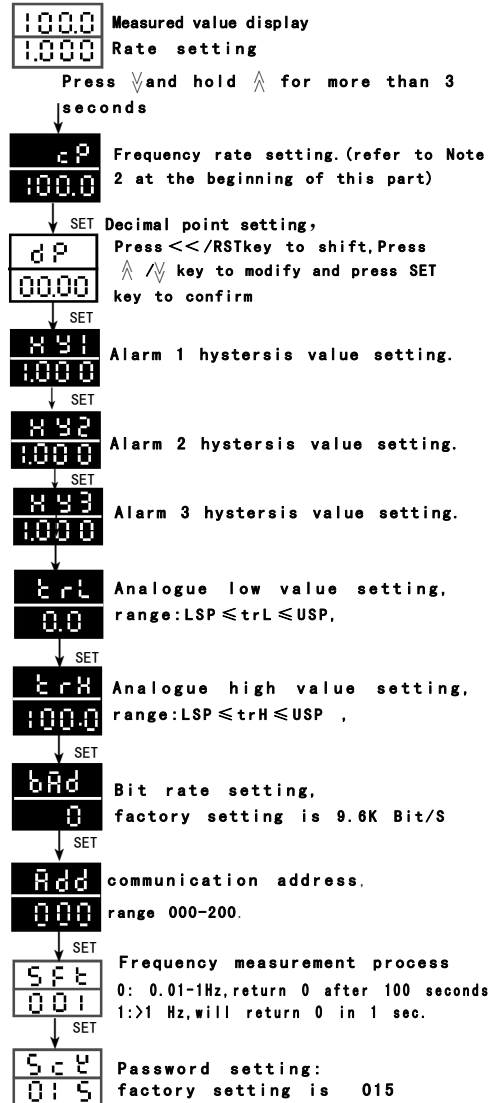
☆ Frequency settings:

1. For frequency measurement, the rate is usually setted to 1.000.
2. For tacho measurement, the rate depends on the pulses of one cycle. eg. each cycle has n pulses, then the rate should be setted to n.
3. For line speed measurement, the rate depends on the counting unit of pulse. eg. every 1m perimeter has 10 pulse, then the rate should be setted to 1/10=0.1m.

Alarm parameter setting

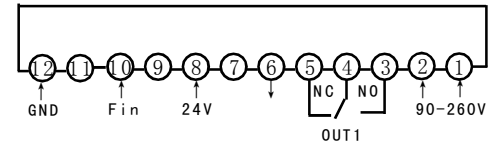


★ Note: The parameters in black color are available for those models with alarm only.

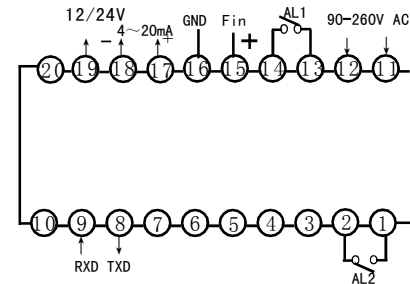


★ Note: The parameters in black color are available for those models with alarm or analogue only.

Terminal configurations



★ Diagram for FA without alarms



★ Diagram for FA with alarms

(If any changed, please refer to the product showing.)

Application Examples

Device with roller and belt, circumference of roller=0.5cm, sensor is rotary encoder with 10 impulses per rotation.

1. Request meter to display frequency of roller: modulus=0.1(1/10).
2. Request meter to display tacho of roller, modulus=impulse per rotation=10. Tacho=(measuring value+no. of pulse per rotation)*60=(measuring value*60)+10.
3. Request meter to display the speed of the belt, eg. the linespeed per minute, unit meter/minute
Modulus=(roller circumference+no. of pulse per rotation)=0.0+10=0.05
Linespeed=measuring value * modulus * 60s = measuring value * 0.05 * 60 = 3 (Viz. modulus=3)
User can set and adjust the value of modulus according to the real application.

Complete products contains

- ★1 copy of user manual,
- ★1 inspection QC label,
- ★2 installing brackets,

We are responsible for the overall repairment for the failure of manufacturing quality within 12 months since the date of purchase. Repair fee will be charged accordingly for damage caused by improper use. The product has life-long warranty.

Main Products

- Timer
- Time relay
- Temperature controller
- Panel meter
- Frequency/Tacho/Line-speed meter
- Proximity sensor
- Photo-electrical sensor
- Transmitter
- Sensor meter
- Power adjustor