Instruction Manual (AC-NE series)

HOKUYO

Installation

(1) Do not install the equipment in places as follows:

- Places where the equipment is exposed to water, oil or dust.
- Places where solvent vapor or corrosive gas exists.
- Other places where the tempetature, humidity, vibration or impact exceeds the rated degree.

(2) How to install:

- The panel cutting is shown in fig. 1.
- Remove the clamping wire by slightly widening the root.
- Insert the counter from the panel front and then set the clamping wire in the original position. (fig. 2)
- The counter will be tightly secured by pushing-up the clamping wire along the counter panel.

(3) How to install with the frame: (optional adaptor)

- Insert the counter from the panel front and put the frame on it. Secure the frame with the setscrews. (fig. 3)
  In this method, the clamping wire is not needed.

Connection

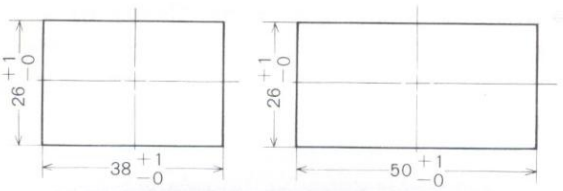
(1) How to connect:

- It is desirable to use twisted wires of about 0.5sq.~1.25sq.
- Use a soldering iron of 40W~60W. Finish soldering in a short time. (about 5 sec)

(2) How to use solderless terminals: (optional adaptor)

- For the terminal plate installing procedure, refer to fig. 4.

fig. 1 Panel cutting



AC-NEA3、AC-NEA4　　AC-NEA5、AC-NEA6

fig. 2 Installing method

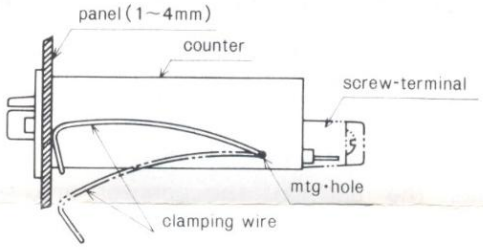


fig. 3 Installation with frame

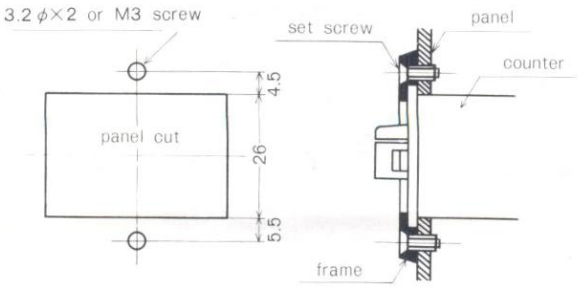
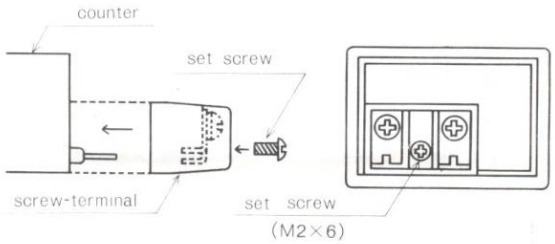


fig. 4 How to install screw-terminal

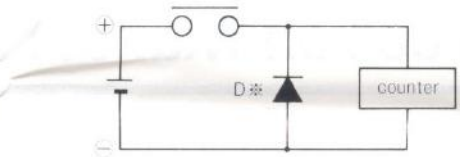


(3) Pulse generator, and precautions

- In the case of a dc counter, contact protection for the pulse generator is required. (fig. 5)
- An ac counter is equipped with a rectifier. It is also provided with a surge absorbing circuit.
  However, when a considerable surge is possible during operation, please check with us.
- When obtaining pulses by means of a limit switch, be careful ot the cam shape. (fig. 6)
  In case of (a), bouncing at rise and fall will cause excess pulses to be generated.
  In cases of (b) and (c), there is a chance of counting failure because each is too short at ON and OFF even when the number of pulses is less than that at the maximum counting speed.

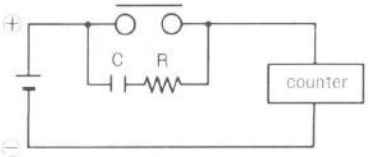
fig. 5 Contact protection for pulse generator (dc counter)

- 10counts/sec or less



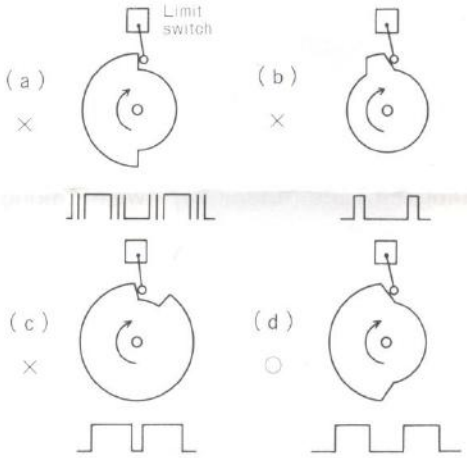
Diode (D) should be used with reverse voltage (VRRM ≧ 1000V)

- 20counts/sec or less



	R (Ω)	C (μF)
12V-dc	20	0.3
24V-dc	50	0.2
100V-dc	100	0.05

fig. 6 Camshape of pulse generator



■ Control and Maintenance

- Keep the reset button depressed until all digits are set to "0"
- When depressing the reset button, do pulse cutting beforehand.
- When the digits of the counter are soiled, clean them with soft cloth moistened with a neutral detergent.
  (Do not use organic solvents or caustic soda.)
- Do not supply oil to the counter.
  Oil may affect the resin parts or cause troubles due to dust sticking.

■ Main Specifications

Rated voltage	12V-dc, 24V-dc, 100V-dc	100V-ac, 200V-ac
Allowable fluctuation	Rated voltage −15% or +10%	
Counting	1 count/pulse (1/2 at ON, 1/2 at OFF)	
● Power consumed	2.6W	3.6 VA
● Max. counting speed	20 counts/sec.	10 counts/sec.
● Minimum ON time	25 msec.	50 msec.
● Minimum OFF time	25 msec.	50 msec.
● Life	100,000,000 counts	
Ambient temp. & humidity	−10℃ ~ +40℃ Relative humid. : 85% or less (Not freezing)	
Insulation resistance	20 MΩ or over (500V-dc megger)	
Dielectric strength	1500V-ac 1 minute	
Impact resistance	30G (durable), 5G (misoperation)	
Vibration resistance	4mm amplitude at 16.7Hz (durable) 0.5mm amplitude at 10~55Hz (misoperation)	