

LA8N SERIES

DIN W48 × H24mm, Indication only, LCD Counter

Features

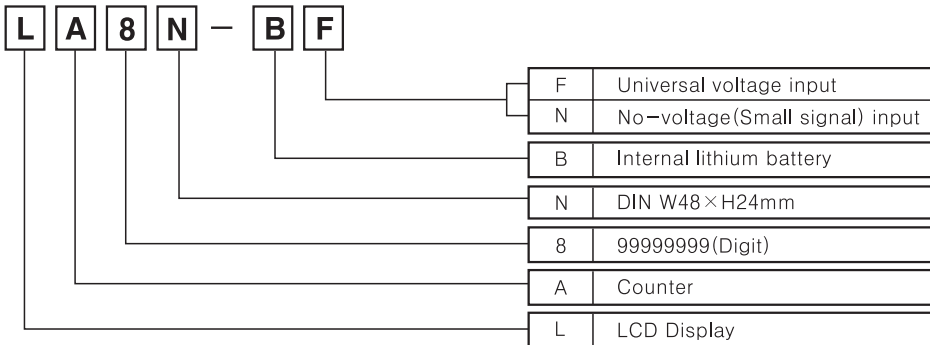
- **Upgraded version of LA7N series**
- Small size and count up mode only
- Internal lithium battery
- Signal input
 - No-voltage input ☞ Please use reliable contacts enough to flow 3VDC 5μA of current.
 - Universal voltage input ☞ "H" : 6-240VDC, 24-240VAC
"L" : 0-2.4VDC, 0-2VAC
- Screw Terminal type (Terminal protection cover)
- LCD Display
- Built-in Microprocessor
- Protection structure IP66



⚠ Please read "Caution for your safety" in operation manual before using.



Ordering information



Specifications

※ It is available from May, 2007.

Series	LA8N-BN	LA8N-BF
Digit	8digits	
Display	LCD Zero Blanking type (Height : 8.7mm)	
Operation method	Count up mode	
Power supply	Internal lithium battery	
Input type	No-voltage input	Universal voltage input
Counting speed	Selectable 1cps / 30cps / 1kcps	20cps
Count input	Residual voltage at short-circuit : Max. 0.5V	Start : 24-240VAC / 6-24VDC Hold : 0-2VAC / 0-2.4VDC
Reset input	No-voltage input	
Min. signal width of Reset	Min. 20ms	
Battery life cycle	Over 7 years (at 20°C)	
External switch	SW1 (★1), SW2 (★2)	SW1 (★1)
Insulation resistance	Min. 100MΩ (at 500VDC)	
Dielectric strength	(★3) 2000VAC 60Hz for 1 minute	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 1 hour
	Malfunction	0.3mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 10 minutes
Shock	Mechanical	300m/s ² (Approx. 30G) in X, Y, Z directions for 3 times
	Malfunction	100m/s ² (Approx. 10G) in X, Y, Z directions for 3 times
Ambient Temperature	-10 ~ +55°C (at non-freezing status)	
Storage Temperature	-25 ~ +65°C (at non-freezing status)	
Ambient humidity	35 ~ 85%RH	
Approval		
Unit weight	Approx. 58g	

(★1) SW1 is front reset switch to Lock.

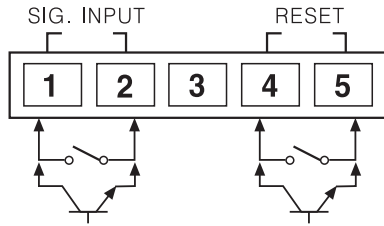
(★2) SW2 is a switch setting counting speed.

(★3) No-voltage input: Between all terminals and case, Universal voltage input: Between input terminal and reset input terminal, all terminals and case

Miniature LCD Counter

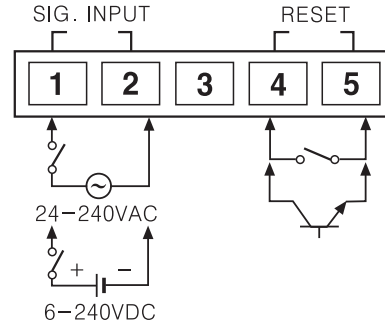
Connections

●No-voltage input



- ※Use reliable contacts enough to flow $5\mu\text{A}$ of current.
- ※Terminal 2 and 5 are connected inside.(Non-isolation)

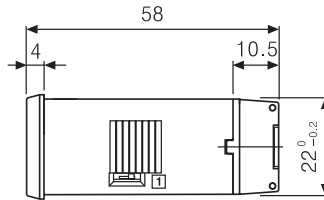
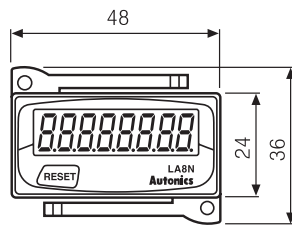
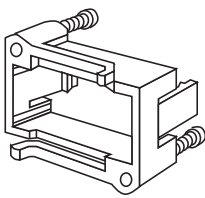
●Universal voltage input



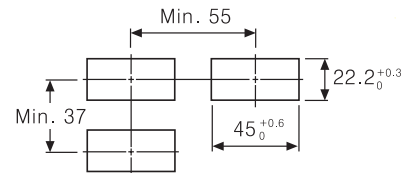
- ※Terminal 1, 2 and 4, 5 are isolated.

Dimensions

●Bracket



●Panel cut-out

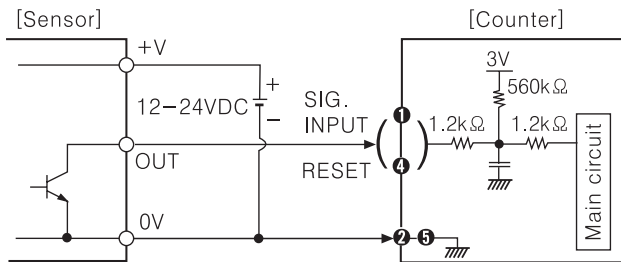


(Unit:mm)

Input connections

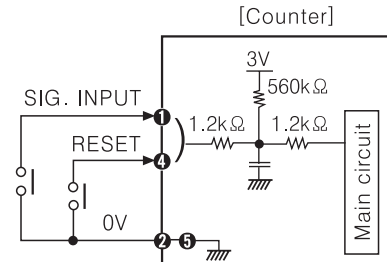
○No-voltage input (Standard sensor: NPN open type sensor)

●Solid-state input



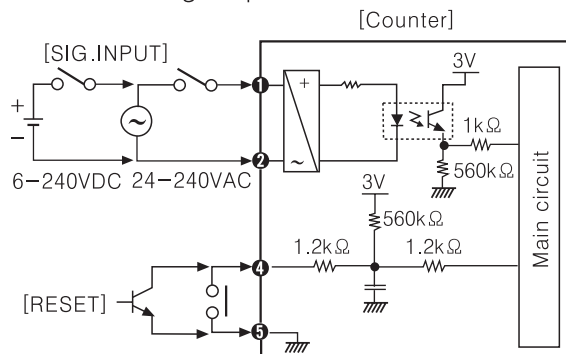
- ※When applying power to terminal No ① and ④, input terminal circuit can be broken and a malfunction can occur. (NPN output, PNP output, PNP open collector output type sensor cannot be used.)
- ※② and ⑤ are connected at inside.

●Contact input



- ※Please use reliable contacts enough to flow 3VDC $5\mu\text{A}$ of current.

○Universal voltage input



- ※AC type proximity sensor cannot be used as the source of count input signals.
- ※Input terminal ①, ② and Reset terminal ④, ⑤ are insulated inside.
- ※It is not possible to reset with AC power or DC power.
- ※When relay contact is used as the source of Reset signal, please use reliable contacts enough to flow 3VDC $5\mu\text{A}$ of current.

(A)
Counter

(B)
Timer

(C)
Temp.
controller

(D)
Power
controller

(E)
Panel
meter

(F)
Tacho/
Speed/
Pulse
meter

(G)
Display
unit

(H)
Sensor
controller

(I)
Switching
power
supply

(J)
Proximity
sensor

(K)
Photo
electric
sensor

(L)
Pressure
sensor

(M)
Rotary
encoder

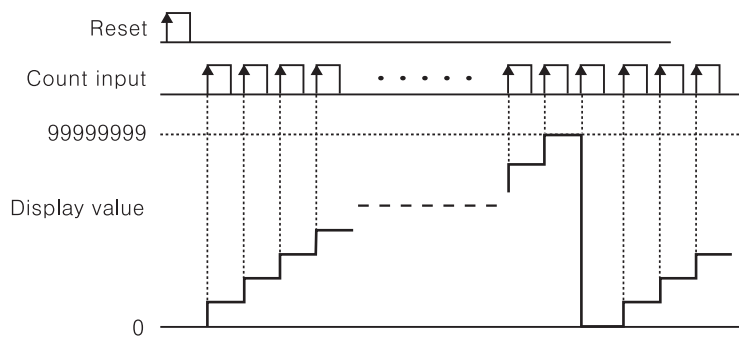
(N)
Stepping
motor &
Driver &
Controller

(O)
Graphic
panel

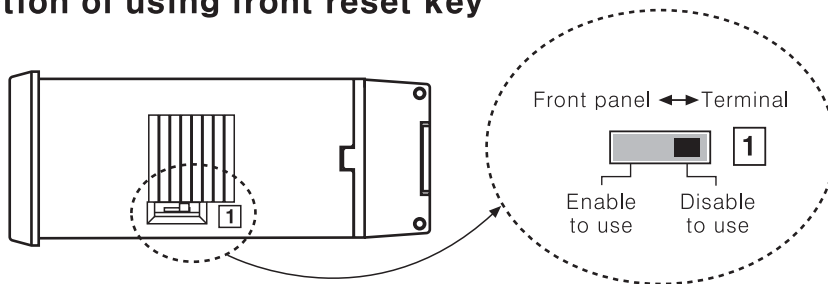
(P)
Production
stoppage
models &
replacement

LA8N SERIES

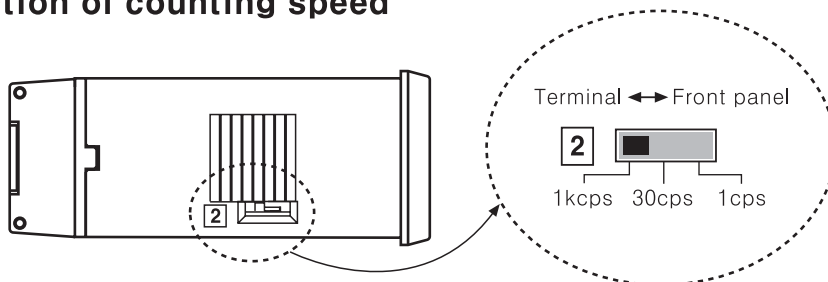
Counter operation mode



Selection of using front reset key



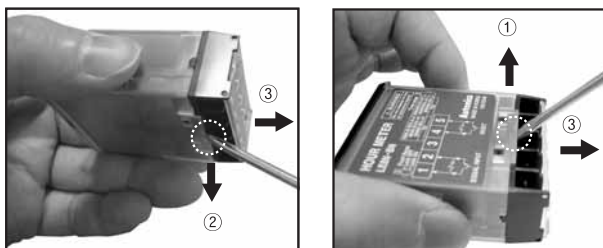
Selection of counting speed



※ Please supply Reset signal (Front to external reset terminal) after changing counting speed during the operation.

Case detachment and battery replacement

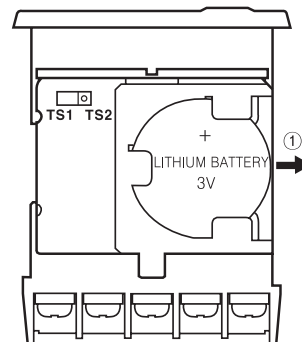
Case detachment



※ Hold up Lock part toward ①, ② of the product with the tool and pull toward ③, the case is detached.

⚠ Please be careful to use with tools, it may cause injury.

Battery replacement



- 1) Detach the case.
- 2) Push the battery and detach toward ①.
- 3) Insert the battery with correct alignment of polarity pushing toward opposite of ①.

※ Battery is optional.

※ Do not burn up or disassemble the lithium battery.