

LA8N SERIES

DIN W48 × H24mm, Indication only, LCD Counter

■ Features

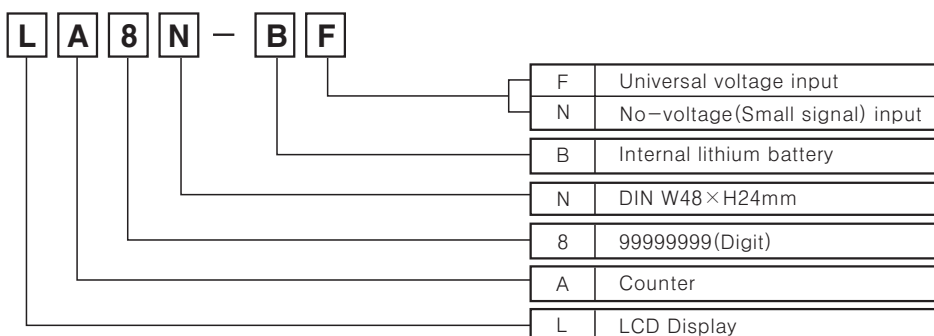
- Upgraded version of LA7N series
- Small size and count up mode only
- Internal lithium battery
- Signal input
 - No-voltage input ⇨ Please use reliable contacts enough to flow 3VDC 5 μ A of current.
 - Universal voltage input ⇨ "H" : 6–240VDC, 24–240VAC
"L" : 0–2.4VDC, 0–2VAC
- Screw Terminal type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



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



■ Ordering information



■ Specifications

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	<ul style="list-style-type: none"> • Impedance at short-circuit : 10kΩ (ON), residual voltage : Max. 0.5V • Impedance at open-circuit : 500kΩ (OFF) 	High : 24–240VAC / 6–240VDC Low : 0–2VAC / 0–2.4VDC
RESET input	No-voltage input	
Min. signal width of RESET	Min. 20ms	
Battery life cycle	Over 7 years (Approx. 20 $^{\circ}$ C)	
External switch	SW1(★1), SW2(★2)	SW1(★1)
Insulation resistance	Min. 100M Ω (at 500VDC mega)	
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 $^{\circ}$ C (at non-freezing status)	
Storage Temperature	-25 ~ +65 $^{\circ}$ C (at non-freezing status)	
Ambient humidity	35 ~ 85%RH	
Approval		
Unit weight	Approx. 58g	

(★1) SW1 is a switch ENABLE / DISABLE the front RESET.

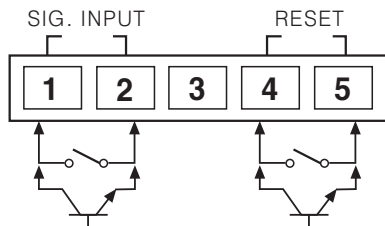
(★2) SW2 is a switch setting counting speed.

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

Compact LCD Counter

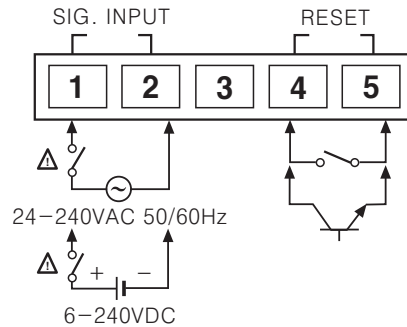
Connections

●No-voltage input



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

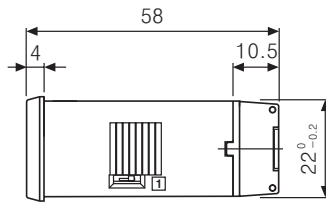
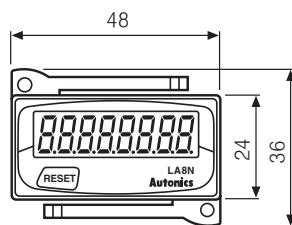
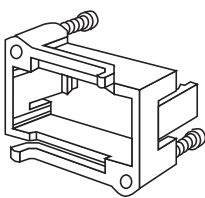
●Universal voltage input



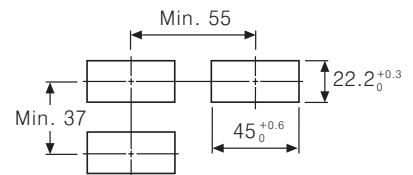
- ※Terminal 1, 2 and 4, 5 are isolated.

Dimensions

●Bracket



●Panel cut-out

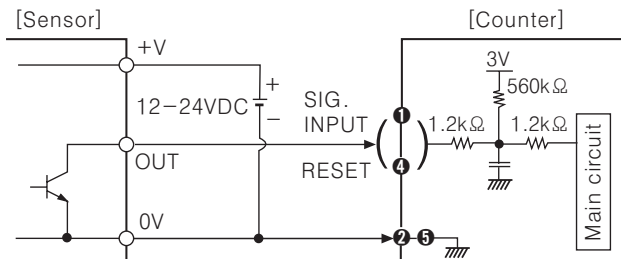


(Unit:mm)

Input connections

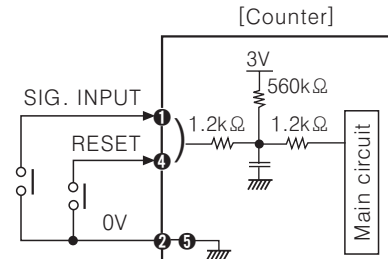
○No-voltage input (Standard sensor: NPN open type sensor)

●Solid-state input



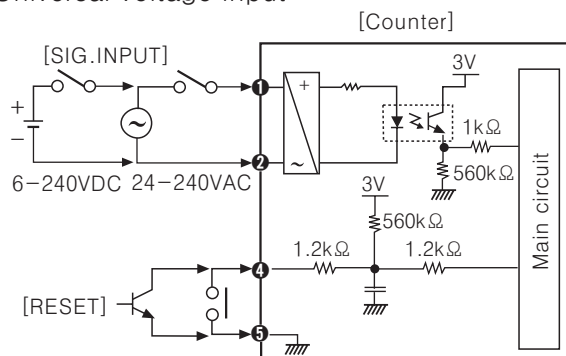
- ※When power is applied to terminal No ① and ④, input terminal circuit can be broken and a malfunction can occur. (NPN output, PNP output, PNP open collector output type sensor cannot be used.)
- ※② and ⑤ are connected inside.

●Contact input



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

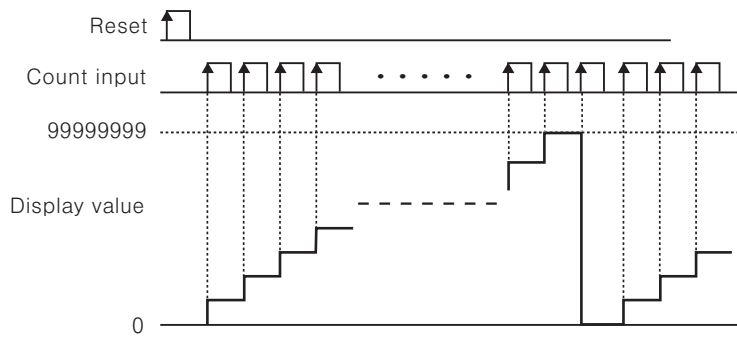
(M)
Rotary
encoder

(N)
Stepping
motor &
Driver &
Controller

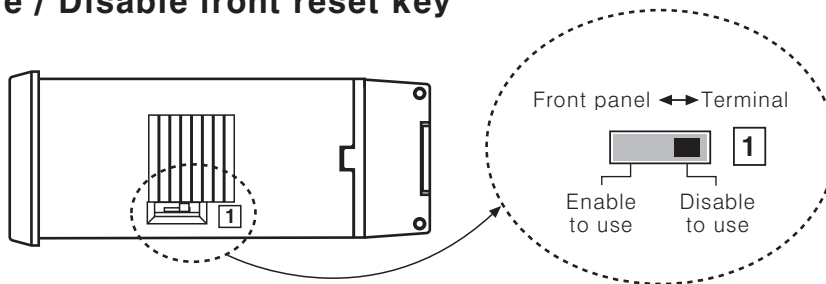
(O)
Graphic
panel

(P)
Production
stoppage
models &
replacement

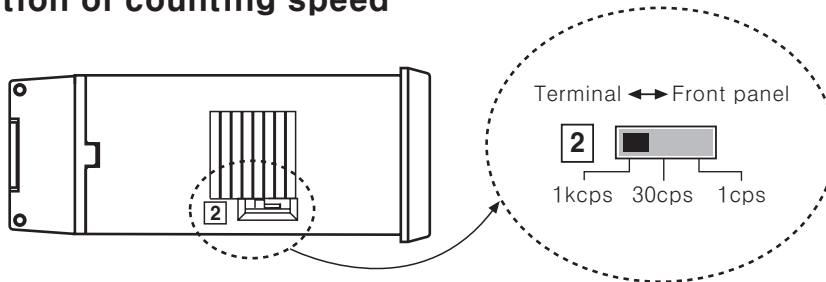
■ Counter operation mode



■ Enable / Disable front reset key



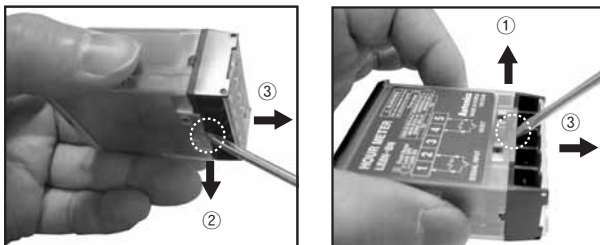
■ Selection of counting speed



- ※ Please supply RESET signal (Front or external reset terminal) after changing counting speed during the operation.
- ※ There is no SW2 in LA8N-BF. (20cps)

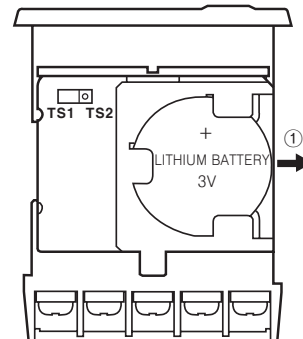
■ Case detachment and battery replacement

● 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 of the injury caused by tools.

● Battery replacement



- 1) Detach the case.
 - 2) Push the battery and detach toward ①.
 - 3) Insert new battery with correct alignment of polarity pushing toward opposite of ①.
- ※ Battery is sold separately.
 - ※ Do not burn up or disassemble the lithium battery.