

Compact LCD Pulse Meter

DIN W48 × H24mm, Indication only, LCD Pulse Meter(RPM, RPS, Hz)

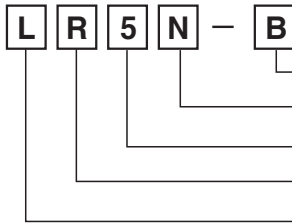
■ Features

- Upgraded version of LR7N series
- Display up to 10000RPM
- Display RPM, RPS of rotator
- Display AC Frequency
- IP66 rated (Front panel only)



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

■ Ordering information



B	Internal lithium battery
N	DIN W48 × H24mm
5	10000(Digit)
R	Pulse meter
L	LCD Display

■ Specifications

Series		LR5N-B			
Input type		No-voltage input	Voltage input 1		Voltage input 2
Input signal level		• Impedance at short-circuit:10kΩ (ON), residual voltage:Max. 0.5V • Impedance at open-circuit:500kΩ (OFF)	DC	Voltage : 4.5-30VDC Voltage : 0-2VDC	Voltage : 30-240VAC
			AC	Voltage : 3-30VAC	
Battery life cycle		Over 3 years(at 20℃)			
Display method		LCD Zero Blanking type (Height : 8.7mm)			
Digit		5 digits			
Display range	RPM	1 ~ 10000RPM			
	0.1RPM	0.1 ~ 1000.0RPM			
	RPS	1 ~ 1000RPS			
	Hz	1 ~ 1000Hz			
	0.1Hz	0.1 ~ 100.0Hz			
Display accuracy		F.S. ±0.1% ±1digit			
Insulation resistance		Min. 100MΩ (at 500VDC mega)			
Dielectric strength		2000VAC 50/60Hz 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℃ (at non-freezing status)			
Storage Temperature		-25~ 65℃ (at non-freezing status)			
Ambient humidity		35 ~ 85%RH			
Unit weight		Approx. 58g			

(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

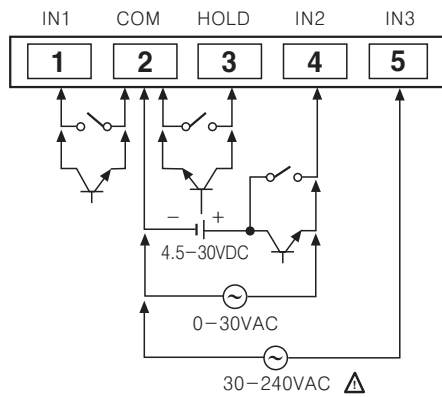
(N) Stepping motor & Driver & Controller

(O) Graphic panel

(P) Production stoppage models & replacement

LR5N-B

Connections



※Please use reliable contacts enough to flow $5\mu\text{A}$ of current when using input signal or reset signal as a contact.

※IN1 ⇨ No-voltage input

IN2 ⇨ Voltage input

• DC voltage input

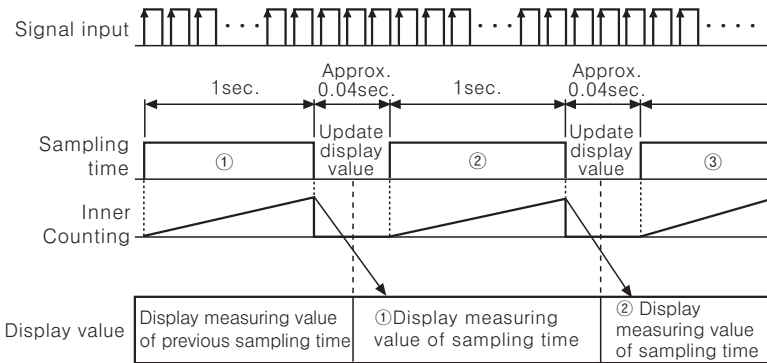
• AC voltage input : Display AC frequency.

IN3 ⇨ AC voltage input : Display AC frequency.

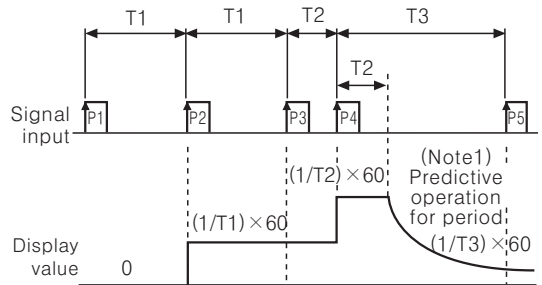
※Choose one among IN1, IN2 and IN3 to use.

Operation chart

●Setting RPS, Hz



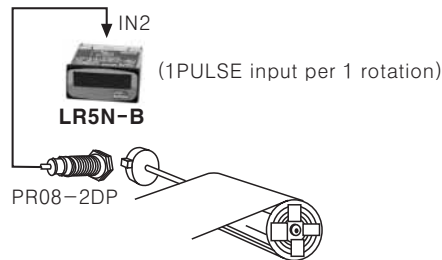
●Setting RPM, 0.1RPM, 0.1Hz



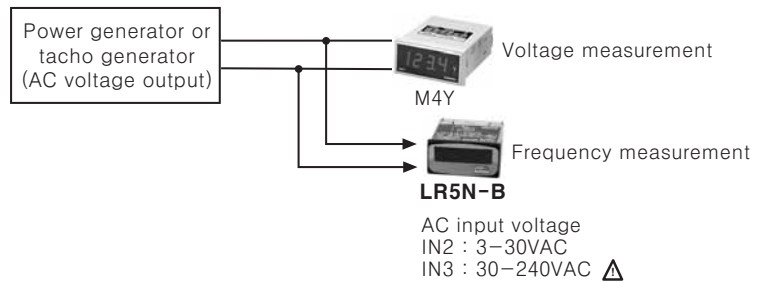
※ (Note1) Predictive operation for period : It displays predicted RPM value for input signal after regular time (T_2) when input signal is slower than current RPM.

Operation mode (Frequency/Revolution)

●Revolution



●AC frequency



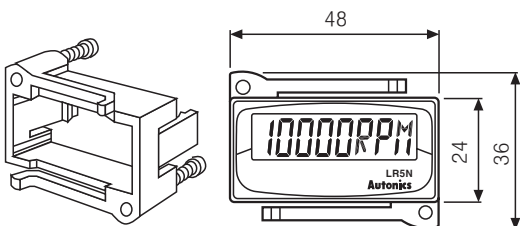
●Display and unit

Display	Frequency		Revolution		
	Hz	0.1Hz	RPM	0.1RPM	RPS
Unit	Hz	0.1Hz	RPM	0.1RPM	RPS

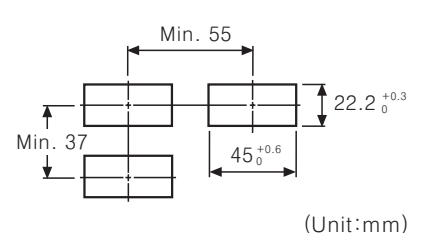
※Default unit : RPS

Dimensions

●Bracket



●Panel cut-out

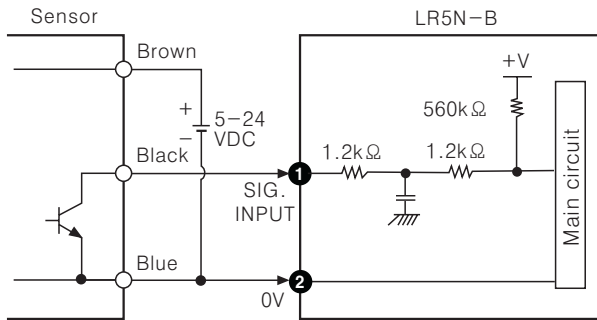


(Unit:mm)

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Input connections

- Standard input sensor
- : Encoder with NPN open collector output type



Function description

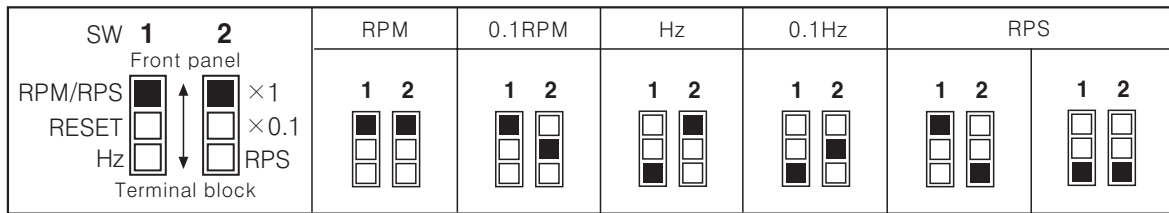
● RESET

It initializes an unit and front LED display and unit are not indicated when set switch1 as RESET.

● HOLD

It stops display value by short circuit HOLD terminal when it is hard to read the value because of frequent input changes.

Display range selection

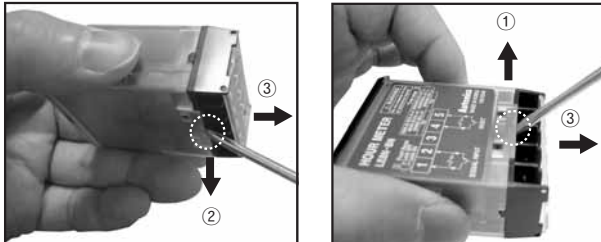


● Display range selection

- ① Select one among $\times 1$, $\times 0.1$ and RPS by SW2.
 - ② Shift SW1 to RESET.
 - ③ Select one between RPM/RPS and Hz by SW1.
- ※ If set display range and front display LED unit are not same, shift SW1 to RESET and select RPM/RPS or Hz.

Case detachment and battery replacement

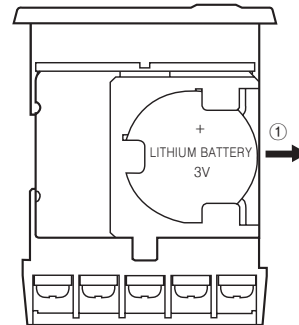
● Case detachment



※ 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.

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- (B) Timer
- (C) Temp. controller
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