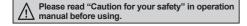
DIN W48×H24mm, Indication Only, LCD Pulse Meter (RPM, RPS, Hz)

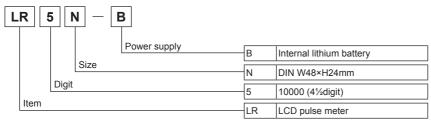
Features

- Upgraded version of LR7N series
- Easy of 1 pulse input method per 1 revolution
- Display up to 10000RPM
- No need power supply by internal battery
- Protection structure IP66 (Front panel only)
- Displays RPM, RPS of rotator
- Displays AC line frequency





Ordering Information



Specifications

<u> </u>	Cilications								
Model		LR5N-B							
Input meth	nod	No-voltage input		Voltage input 1			Voltage input 2		
Input signal level		Short-residual voltage : Max. 0.5V Max. short-circuit impedance : Max. 10kΩ Max. open-circuit impedance		DC	High input voltage range : 4.5-30VDC Low input voltage range : 0-2VDC		Voltage: 30-240VAC		
		: Min. 500kΩ		AC	Voltage:3-30VAC				
Power		No-power [includes lithium battery (replaceable)]							
Battery life cycle		Over 3 years at 20°C (replaceable)							
Dispaly method		LCD Zero blanking method (character height:8.7mm)							
Display digits		5 digit							
Display range and Display accuracy		Display range				Display accuracy			
		RPM 1 to 10000RPM				1 to 5000RPM: F.S.±0.05%±1digit			
						5001 to 10000RPM: F.S.±0.1%±1digit			
		0.1RPM	0.1 to 1000.0RPM			F.S±0.05%±1digit			
		Hz	1 to 1000Hz						
		0.1Hz	0.1 to 100.0Hz			F.S±0.1%±1digit			
		RPS	1 to 1000RPS						
HOLD function		Includes (external HOLD function)							
Insulation resistance		100M Ω (at 500VDC megger)							
Dielectric strength		2,000VAC 50/60Hz for 1 min. (cutoff current=10mA)							
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz (for 1min.) in each X, Y, Z direction for 1 hour							
Vibration	Malfunction	0.3mm amplitude at frequency of 10 to 55Hz (for 1min.) in each X, Y, Z direction for 10 min.							
Shock	Mechanical	300m/s² (approx. 30G) in each X, Y, Z direction for 3 times							
SHOCK	Malfunction	100m/s² (approx. 10G) in each X, Y, Z direction for 3 times							
Envisor I	Ambient temperature	-10 to 55°C, Storage: -25 to 65°C							
mont	Ambient humidity	, ,							
Protection structure		IP66 (when using waterproof rubber for front panel), Terminal cover (finger protector)							
Weight**1		Approx. 91.5g (approx. 59g)							

X1: The weight includes packaging. The weight in parentheses is for unit only.

*Environment resistance is rated at no freezing or condensation.

(A) Photoelectric Sensors

(B) Fiber Optic

(C) Door/Area Sensors

> (D) Proximity Sensors

(E) Pressure Sensors

(F) Rotary Encoders

(G) Connectors/ Sockets

(H)

(H) Temperature Controllers

(I) SSRs / Power Controllers

Counters

K) Timers

anel

(M) Tacho / Speed / Pulse

N) Display

(O)

ensor ontrollers

(P) Switching Mode Power Supplies

(Q) Stepper Motors & Drivers & Controllers

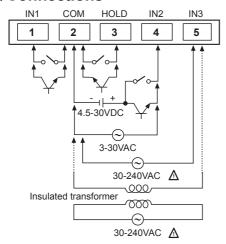
(R) Graphic/ Logic Panels

Field Network Devices

T) Software

Autonics M-3

Connections



※Please use reliable contacts enough to flow 5µA of current when using input signal or reset signal as a contact.

XIN1 - No-voltage input

IN2 - Voltage input

DC voltage input

· AC voltage input: Display AC frequency.

IN3 - AC voltage input: Display AC frequency.

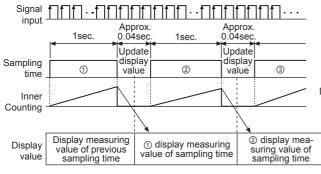
XChoose one among IN1, IN2 and IN3 to use.

∆Caution for IN3 input

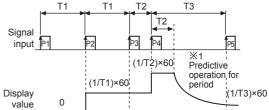
: If apply high voltage over 50VAC, it may cause an electric shock. Insulated transformer whose turn ratio is 1:1 must be installed, or countermeasures must be provided.

Operation Charts

Setting RPS, Hz



Setting RPM 0.1, RPM 0.1Hz



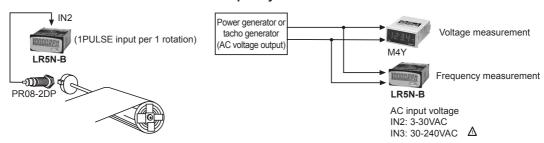
X1. It implements Predictive operation for period without Auto zero time setting function (If there is no pulse input within setting time, it displays the value as zero forcibly). If there is any input signal within certain time (T2), CPU considers input to be supplied, display value is decreased continuously.

Operation Mode (Frequency/Revolution)

□ Frequency (Hz, 0.1Hz) = f, Revolution (RPM, 0.1RPM)= f × 60, Revolution (RPS)= f

Revolution

AC frequency



• Display value and unit

Display	y Frequency		Revolution			
Unit	Hz	0.1Hz	RPM	0.1RPM	RPS (factory default)	

M-4 Autonics

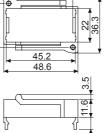
Compact LCD Pulse Meter

Dimensions

Panel cut-out

58 SW1 (SW2 is in the opposite side)

 Bracket ω 28.



32.4 26.4 10

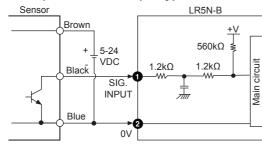
Input Connections

ΜÏ

• Standard input sensor

: NPN open collector output type

45^{+0.6}



Function Description

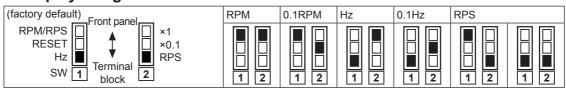
RESET

It initializes an unit and front LCD display. There 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

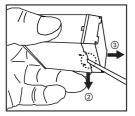


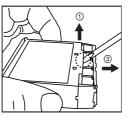
- ① Select one among ×1, ×0.1 and RPS by SW2.
- ② Shift SW1 to RESET.
- 3 Select one again between RPM/RPS and Hz by SW1.

XIf set display range and front display LCD unit are not same, shift SW1 to RESET and select RPM/RPS or Hz.

Case Detachment And Battery Replacement

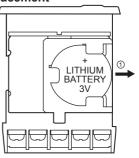
Case detachment





**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.
- **X**Battery is sold separately.
- XDo not burn up or disassemble the lithium battery.

(unit: mm) (A) Photoelectric Sensors

(C) Door/Area Sensors

(D) Proximity Sensors

(E) Pressure Sensors

(F) Rotary Encode

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M-5 **Autonics**