

High Precision Contact Linear Speed Tachometer



Model: ES-2100L

Applications

This Speedometer is a compact and lightweight handheld speedometer.

This Speedometer is provided with two display units enabling speed display at two different measurement timings.

Features

- * Memory function, for storing and reading 20 sets of measurement results. Including CH1 Value, CH2 Value, Maximum Value. Larger amount of memory can be customized.
- * Maximum hold function.
- * Averaging function, for averaging with desired number of times up to 200 times. The measurement interval is 10 ms.
- * Low battery indicator function.
- * Distance measurement function.
- * Selectable bluetooth printer function, measurement data can be printed directly.
- * Can be connected with computer by USB Cable or Bluetooth Adapter, realizing data transport function.

Specifications

Measurement Section	
Measurement method	Contact method
Measurement range	Speed measurement: 0.1~2,000.0m/min
	Rotational speed measurement: 1~20,000r/min
	Distance measurement: 0~999mm
	Note: Measurement is possible for up to 5,000mm. Measurement values of 999mm or larger can not be guaranteed.
Measurement accuracy	±1 count
Measurement time	10ms
Measurement unit	m/min, r/min, mm
Auto power-off function	Turns OFF the power in 180 seconds after last operation.
Measurement value hold function	CH1 Value, CH2 Value, MAX Value
Averaging function	Performs averaging desired number of times (1 to 200 times)
Memory function	Stores up to 20 sets of measurement results, larger amount of memory can be customized.

Specifications

Detection Section	
Number of pulses	400pulses/rotation, slit reflection method
Light source	Infrared LED
Light-receiving element	Photo diode
Allowable	5kg in radial direction, 5kg in thrust direction
Bearing life	2x10 ⁷ r/min-h(maximum load within specification)

Display Section	
Display unit	5-digit backlight LCD (upper and lower display)
Update time	100ms
Resolution	0.1 (m/min: Number of averagings 10 or more)
	1 (r/min: Number of averagings 10 or more)
	1 (mm)

Analog Output Section	
Contents	Instantaneous value (averaging result output)
Voltage range	0 to F.S. / 0 to 1V
Conversion method	10 bits D/A conversion
Linearity	±1% F.S.
Output update time	10ms
Output connector	Φ2.5 pin jack

Pulse Output Section	
Output method	Transistor output (open collector)
Withstand voltage	14V
Number of pulses	800/rotation
Logic	Negative logic
Pulse width	Approx 0.5 to 1.2μs
Output connector	Φ2.5 pin jack

General Specifications	
Power supply	2x1.5v AA/UM-3 battery
Operating temperature	0~45 °C
Storage temperature	-10~60 °C
Operating humidity	35~85%RH
Storage humidity	35~85%RH
Dimensions	211x80x36mm
Weight (Including batteries)	270g
Standard Accessories	Main Unit, Circumferential Ring, Screwdriver, Rotating Contact Tip, Instruction Manual, Carrying Case
Optional Accessories	Lengthening Rod for Rotating Contact Tip, Trigger Unit, Bluetooth Printer, USB Cable & Software, Bluetooth Adapter & Software