## Best Suitable for D, F, G, J, K classes of resistance, and coating conveyor of axial type resistor



- Fast measurement (FAST:about 2.1msec. [60Hz] /2.5msec. [50Hz])
- Measuring range:  $0 \sim 999 \text{m} \Omega$  and  $0.01 \Omega \sim 99.9 \text{M} \Omega$
- 4 Terminal Measurement less than  $0 \sim 99.9 \text{k} \Omega$ , 2 Terminal Measurement (over  $100 \text{k} \Omega$ )
- Available to percentage measurement by digital setup for standard resistance value
- Number of non-defective products' digital counter is built-in
- Contact-check function is selectable from premeasurement/postmeasurement/OFF
- Shift outputs and solenoid power outputs (DC24V 1A)
- Standard equipments of check circuit for measuring current and abnormal voltage

## **Specifications**

Measuring range and Accuracy (at23°C±5°C)

Range	Measuring range	Measuring current	A	Indication range				
	weasuring range		SLOW	FAST	Indication range			
1Ω	0.01 Ω ~ 0.999 Ω	200mA	within $\pm \alpha \pm 2$ digit	within $\pm \beta \pm (3+n)$ digit				
10Ω	1 Ω ~ 9.99 Ω	100mA	within $\pm 0.03\% \pm 1$ digit	within $\pm 0.03\% \pm (2+n)$ digit				
100Ω	10 Ω ~ 99.9 Ω	10mA		within $\pm 0.02\% \pm (2+n)$ digit	±9.99%			
1kΩ	100 Ω ~ 999 Ω	TOMA						
10kΩ	1kΩ~ 9.99kΩ	1mA	within $\pm 0.02\% \pm 1$ digit					
100kΩ	10kΩ~ 99.9kΩ	100 <i>µ</i> A						
1MΩ	100kΩ~ 999kΩ	10 µ A		within $\pm 0.1\% \pm (2+n)$ digit				
10M Ω	1MΩ~ 9.99MΩ	1μΩ	within $\pm 0.04\% \pm 1$ digit	within $\pm 0.4\% \pm (2+n)$ digit				
100M Ω	10M Ω ~ 99.9M Ω	0.1 <i>μ</i> A	within $\pm 0.2\% \pm 2$ digit					
	mΩ CHECK (0∼999mΩ)	100mA	within $\pm 0.15\% \pm 1$ digit	within $\pm 0.2\% \pm 2$ digit	0∼999mΩ			

 $st \alpha$ :(500/setup value m  $\Omega$ ) × 0.01%,  $\beta$ :(500/ setup value m  $\Omega$ ) × 0.02%, n: when measuring time is F1, n=1, when measuring time is F2, n=0)

Measuring time	Power source	Remote start			Free running	
	frequency	SLOW	FAST-1 (F1)	FAST-2 (F2)	SLOW	FAST
	60Hz	about 16.7msec.	about 2.1msec.	about 4.2msec.	30 times/sec.	30 times/sec.
	50Hz	about 20.0msec.	about 2.5msec.	about 5msec.	25 times/sec.	25 times/sec.

※Judgment time (from input start signal to output EOC signal) adds about 1.5msecond for the measuring time above (slightly differ from a range)
※When before contact check, it adds about 3.5msecond, and adds about 0.7msecond after contact-check for the judgment time above.

Open-circuit voltage of measuring terminal	less than 15V
Measuring method	2 Terminal Measurement (More than 100k $\Omega)~$ 4 Terminal Measurement (less than 99.9k $\Omega$ )
Setting range for measurement value	Both upper and lower limit $\pm 0.00\% \sim \pm 9.99\%$ In a case of m $\Omega$ CHECK: 000m $\Omega \sim$ 999m $\Omega$
Operation condition	[Temp.] $5^{\circ}C \sim +40^{\circ}C$ [Humidity] less than 85%
Power supply	AC100V~240V selectable, 50/60Hz, about 40VA
Outer dimension	about 333 (W) $\times$ 85 (H) $\times$ 245 (D) mm (excluding protruding parts such as rubber legs, etc.)
Weight	about 3.5kg

## The Outline

AX-175A can easily measure a wide range of resistance from 0.01  $\Omega$  to 99.9M  $\Omega_{\rm J}$  ultra fast speed, and high accuracy.

The unit is indicated the measured value as a digital and outputs signal outside to judge HI, GO, LO decision. It can be switched a measuring speed, electable from two types of FAST, a type of SLOW.

Contact-check function as a standard equipment: When measure 4 terminals, either one contact failure occurs, judges a defect, outputs a defective signal with C.E. (Contact Error) signal outside regardless of its measured value at the same time.

The behavior of contact-check is selectable from premeasurement/postmeasurement/OFF.

Besides, a checking circuit to observe an abnormal measuring current always has set, and outputs NG judgment when terminal trouble of contact condition occurred during measurement.

Shift circuit, solenoid power supply corresponds to DC24V (high speed operation can be by setup), and quality product counter are built in.