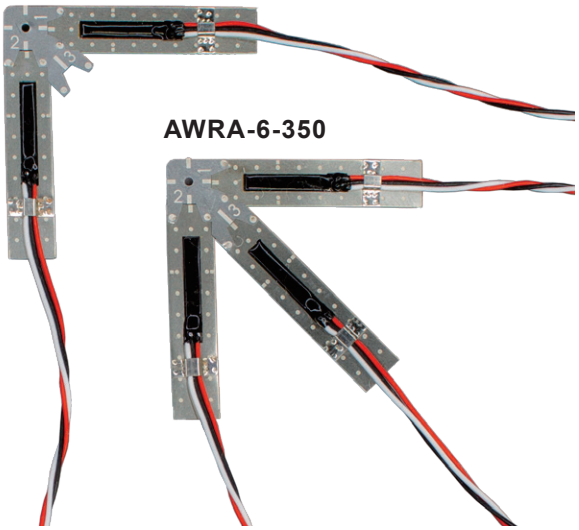
AW series High temperature Weldable strain gauge

AW-6-350/AWCA-6-350/AWRA-6-350

This gauge has a high temperature strain gauge bonded on the Stainless steel base (Thickness: 0.08mm) with excellent corrosion resistance with heat curing adhesive. 2-axis and 3-axis types are also newly added to the lineup.

AW-6-350

AWCA-6-350



AWRA-6-350

●Features

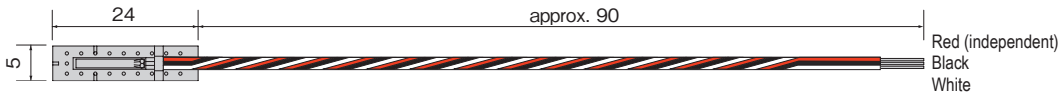
- Measurement in high temperatures up to 300ºC
- Measurement of specimens to which adhesion does not apply
- Long-term measurement
- When a strain gauge rosette is applied, calculation of magnitudes and directions of principal strains (Rosette Analysis)

Strain Gauge Characteristics

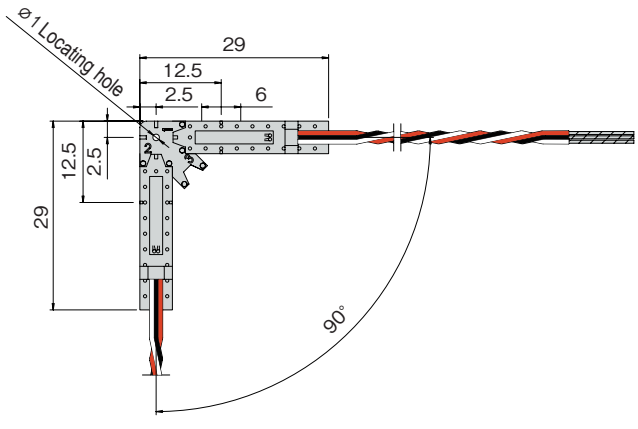
Type	Gauge Length (mm)	Gauge base		Operating temperature range	Temperature compensation range	Test specimen	Applicable coefficient of linear thermal expansion	Resistance (Ω)
		Dimension (mm)	Material					
AW-6-350-11-4FB01LT	6	L24×W5	SUS304	−196 ～ +300℃	+10 ～ +100℃	Mild steel	11×10^{-6}/℃	350
AWCA-6-350-11-4FB01LT	6	L29×W29						
AWRA-6-350-11-4FB01LT	6	L29×W29						

Leadwire Φ0.2mm Twisted cross-linked fluorinated resin(PTFE) sheathed leadwire of 0.1m standard (Quarter bridge with 3-wire)
* Lead wire lengths other than the standard length are available on request. (Made to order.)
Minimum order quantity is 5 strain gauges.

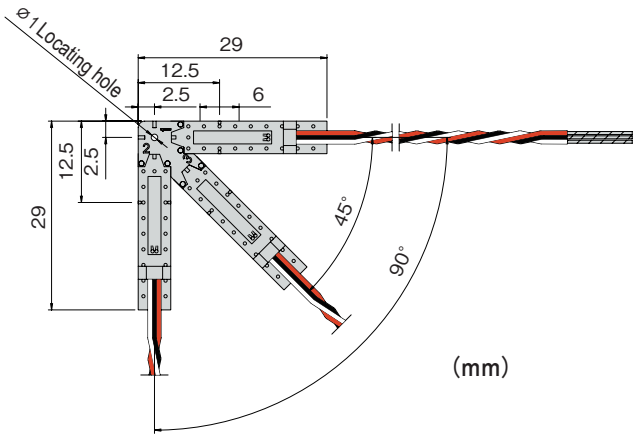
AW-6-350



AWCA-6-350



AWRA-6-350



(mm)

Tokyo Measuring Instruments Laboratory Co., Ltd.

Spot Welder W-50RC

W-50RC SPOT WELDERThis is a spot welder used for installing weldable strain gauges and fixing leadwires.
The welding energy is controlled in two ranges of 1~10 and 5~50 watt second. Its short welding pulse width of approximately 5 millisecond causes very little thermal damage on the material to be welded. The welding energy is not influenced by changes in the power source voltage owing to the adoption of stabilizing circuit. Electrical cables are stored inside the housing for convenience in field applications.

Specifications

Welding energy	Two ranges of 1 to 10 watt second and 5 to 50 watt second (continuously variable) 60 watt second at maximum (AC110V 50Hz)
Output voltage	Approx. 32 V at maximum
Output pulse width	Approx. 5 millisecond
Welding interval	2 welds/second at maximum (at 50 watt second)
Continuous use time	Approx. 15 minutes (at 1 weld/second, 30 watt second, 23°C±5°C)
Welding holder	Holder type III
Welding force	4.9 to 19.6 N
Welding tip	Fixing part Φ3 mm, Tip Φ1 mm
Welding cable length	2m
Environment	0 to 50°C, 85%RH or less (no condensation)

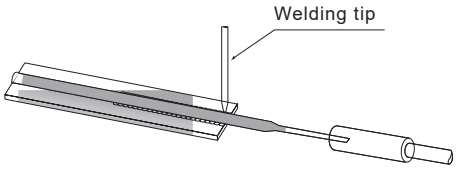
Power supply Rated voltage Maximum power consumption	 AC90 to 110V 50/60Hz or AC220V±10% 50/60Hz 550 VA peak (160 millisecond) 210 VA/ 2 times/second
Dimensions	300(W) × 200(H) ×195(D) mm (except projecting parts)
Weight	Approx. 13 kg

Standard accessories

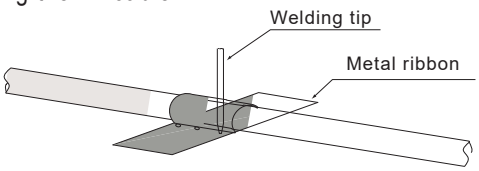
- Operation manual 1
- AC power cable 1
- Welding tip 3
- Electrode protection cap 2
- Abrasive paper(#400) 5
- Hexagonal wrench (width across flats 2.5 mm) 1
- Shoulder belt 1

Installation example

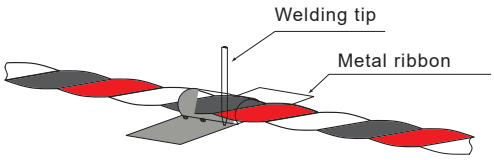
Installing weldable gauges



Fixing the MI cable



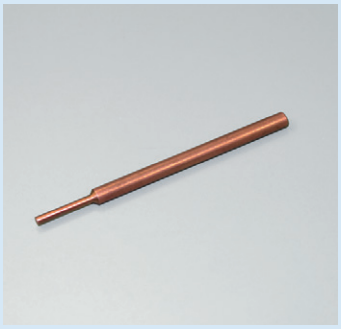
Fixing of fluorocarbon resin coated leadwires



Related Products

Stainless steel ribbon
Designed to fix cables

Size 5mm x 10m x 0.08mm
10mm x 10m x 0.08mm



Welding tips (W-50RDK)

Gauge mounter electrode

ISO 9001:2015 CERTIFICATION intertek
UKAS MANAGEMENT SYSTEMS 014

Approval Certificate **ISO9001**
Design and manufacture of strain gauges, strain measuring equipment and transducers

The contents of this catalog are subject to change without prior notice.
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