

EVO9050A-X

Resistance Standards



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wekomm

Technical Data

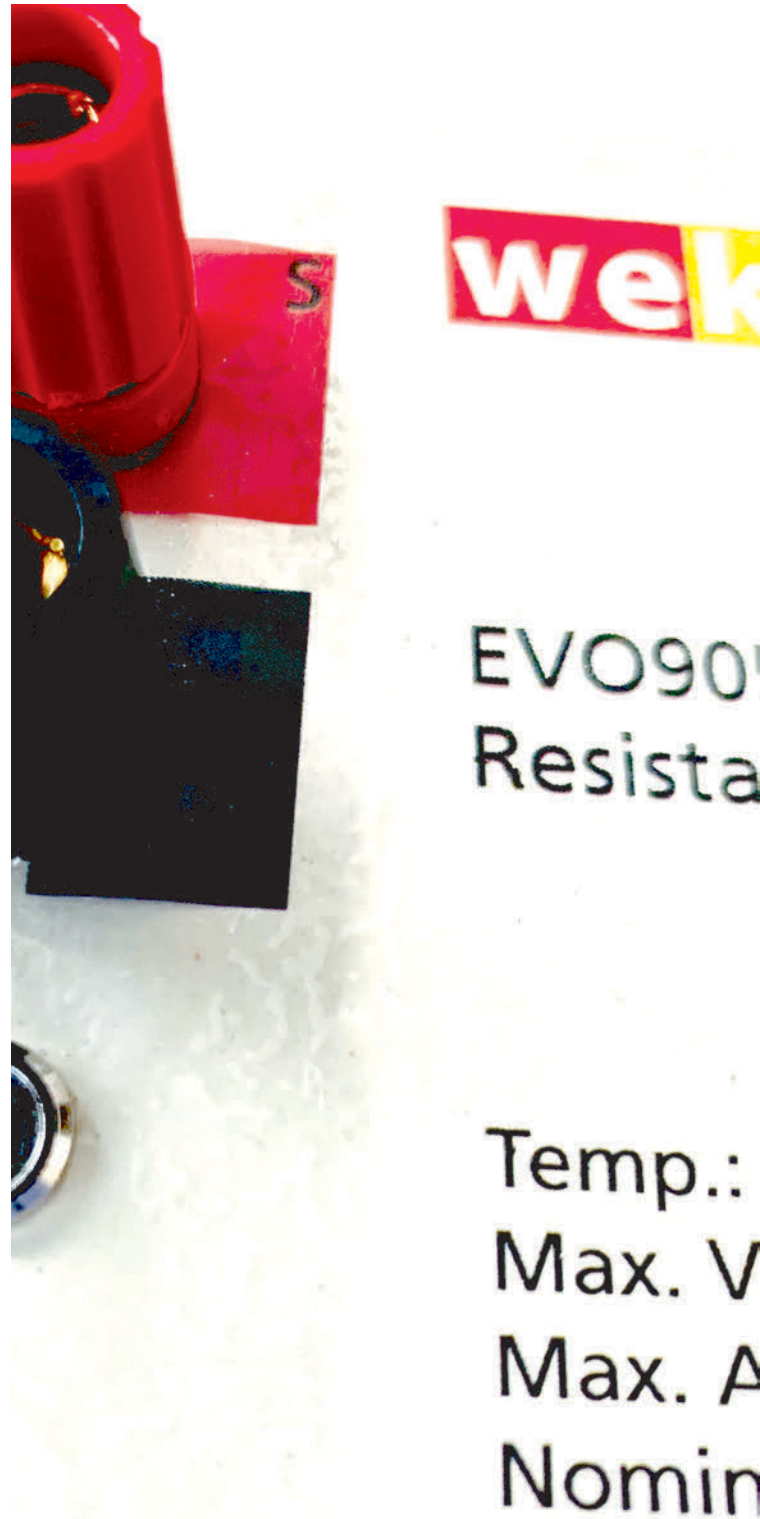
Applications

- Transfer Standards
- Working Standards
- Reference Resistors
- Calibration

Features

- Mechanically robust and stable
- No special requirements for operation temperatures
- No oil bath required
- Long term stability better 1ppm / year
- Low impacted from temperature hysteresis
- Temperature stability typically better than 1 ppm / °C
- Operational range from 20°C to 30°C
- Low Cost
- Made in Germany

High performance, precision and stability for a budget friendly price - these are the key elements defining the new EVO9050A series resistors. These standard resistors are the result of many years in research and development. Every component for this product is based on experience to deliver the best performance in it's class. The resistive elements are based on the wekomm ARR-modules, our new Adjustable Reference Resistors which allow to meet a specific target value with sub-ppm precision together with reference stability. No compromise is made at the quality and used components. The binding posts are made from Copper-Tellurium for low thermal effects and gold coated for best electrical contact. A rugged aluminum case protects the standard resistor from harsh environments and offers a maximum of mechanical stability. Each resistance standard comes with a calibration certificate, on request an ISO 17025 accredited calibration is available. The issued certificate of calibration is part of delivery. The EVO9050A series is divided into two ranges, the standard range covers the decade values, the extended range allows to offer a broad vari-



Picture shows a prototype device.
Final product might differ

ety of non standard values. The EVO9050A series is the perfect workhorse for daily use in laboratory and calibration applications.

standard range

Model	Nominal value Ω	Adjustment to nominal ($\mu\Omega/\Omega$)		Drift per year*1 ($\mu\Omega/\Omega$)		Resistance change 18°C-28°C from 23°C ($\mu\Omega/\Omega/^\circ\text{C}$)		maximum current mA	maximum voltage V	Accredited Calibration*2
		max	typ	max	typ	max	typ			
		EVO9050A-10	10	30	10	10	5			
EVO9050A-100	100	10	3	5	2	2	1	50	10	*2
EVO9050A-1K	1K	10	3	5	2	2	1	50	10	*2
EVO9050A-10K	10K	10	3	5	2	2	1	10	10	*2
EVO9050A-100K	100K	30	10	10	5	5	3	2	50	*2

extended range

EVO9050A-5	5	50	10	10	5	5	3	100	5	*2
EVO9050A-20	20	50	10	5	5	5	3	100	5	*2
EVO9050A-50	50	10	5	5	2	3	1	50	10	*2
EVO9050A-200	200	10	5	5	2	3	1	50	10	*2
EVO9050A-2K	2K	10	5	5	2	3	1	10	10	*2
EVO9050A-5K	5K	10	5	5	2	3	1	10	10	*2
EVO9050A-20K	20K	30	10	10	5	5	3	2	50	*2
EVO9050A-50K	50k	30	10	10	5	5	3	2	50	*2
EVO9050A-200K	200K	30	10	10	5	5	3	2	50	*2

*1 After sufficient stabilization time, typical one year

*2 Uncertainty depending on CalLab - for specifications or special requirements contact us prior to ordering

Ordering Information

Model:

EVO9050A-10 10 Ω resistance standard
EVO9050A-100 100 Ω resistance standard
EVO9050A-1K 1K Ω resistance standard
EVO9050A-10K 10K Ω resistance standard
EVO9050A-100K 100K Ω resistance standard

EVO9050A-5 5 Ω resistance standard
EVO9050A-20 20 Ω resistance standard
EVO9050A-50 50 Ω resistance standard
EVO9050A-200 200 Ω resistance standard
EVO9050A-2K 2K Ω resistance standard
EVO9050A-5K 5K Ω resistance standard
EVO9050A-20K 20K Ω resistance standard
EVO9050A-50K 50K Ω resistance standard
EVO9050A-200K 200K Ω resistance standard

Operation temperature:

20°C to 30°C

Storage temperature:

0°C to 40°C

repetitive Error (Hysteresis):

30°C to 20°C to 30°C:

neglectable Error

Size:

10cm (H) x 10cm(W) x 11,5cm(D)

Weight:

0,8kg - 1,5 kg

depending on model



Picture shows a prototype device. Final product might differ

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