

ELECTRICAL INSTRUMENTS

STANDARD RESISTORS ON REQUEST: certificate of calibration of our laboratory

Fixed value standard resistances, high-accuracy used as standard in laboratory. SAMAR certificate of calibration is supplied with each standard resistor. The standard production includes sample resistances multiple of 10.

(On request various values and precision described below and boxes containing several values at your choice.)

Type	Nominal value Ω	Max. Current In air A	Max current In oil A	Power dissipation in air W	Precision % $T=20 \pm 0.5^\circ\text{C}$	Max deviation from nominal value $T=20 \pm 0.5^\circ\text{C}$ %
RC80/1	0.0001	300	600	9	± 0.01	± 0.05
RC80/2	0.001	75	200	5.6	± 0.01	± 0.02
RC80/3	0.01	30	70	9	± 0.005	± 0.01
RC80/4	0.1	5	15	2.5	± 0.002	± 0.005
RC80/5	1	1.5	4	2.25	± 0.002	± 0.005
RC80/6	10	0.5	2.5	2.5	± 0.002	± 0.005
RC80/7	100	0.2	0.5	4	± 0.002	± 0.005
RC80/8	1,000	0.07	0.15	5	± 0.002	± 0.005
RC80/9	10,000	0.015	0.03	2.25	± 0.002	± 0.005
RC80/10	100,000	0.005	0.01	2.5	± 0.005	± 0.01
RC80/11	1,000,000	0.0005	0.01	0.25	± 0.005	± 0.02
RC80/12	10,000,000	$V_{\max}=500V$	$V_{\max}=500V$		± 0.005	± 0.02



- Long term stability: +/- 10 ppm per year
- The resistances from 0.0001 to 10 Ω are 4 terminals. The potential terminals are screwed with plug connection. Current terminals are of electrolytic copper widely sizeable.
- The resistances from 100 Ω to 10 M Ω are two electrolytic copper terminals with 2 screws, one for current and one for voltage

VERSION HIGH VALUES SERIES RC80/M



Nominal voltage 500V

TYPE	Nominal value M Ω	Tolerance at 20 °C %
RC80/M2	10	± 1
RC80/M3	100	± 1
RC80/M4	1,000	± 1
RC80/M5	10,000	± 1
RC80/M6	100,000	± 1
RC80/M7	1,000,000	± 5
RC80/M8	10,000,000	± 5
RC80/M9	100,000,000	± 10

BASIC VERSION SERIES RC-E 50 Use in air



Type	Nominal value Ω	Max current in air A	Power dissipation in air W	Precision % $T=20 \pm 0.5^\circ\text{C}$	Max deviation from nominal value % $T=20 \pm 0.5^\circ\text{C}$
RC-E 50/00	0.0001	100	1	± 0.05	± 0.1
RC-E 50/0	0.001	30	1	± 0.01	± 0.05
RC-E 50/1	0.01	10	1	± 0.01	± 0.05
RC-E 50/2	0.1	3	1	± 0.01	± 0.05
RC-E 50/3	1	1	1	± 0.01	± 0.05
RC-E 50/4	10	0.3	1	± 0.01	± 0.05
RC-E 50/5	100	0.1	1	± 0.01	± 0.05
RC-E 50/6	1,000	0.03	1	± 0.01	± 0.05
RC-E 50/7	10,000	0.01	1	± 0.01	± 0.05
RC-E 50/8	100,000	0.003	1	± 0.01	± 0.05
RC-E 50/9	1,000,000	0.001	1	± 0.01	± 0.05
RC-E 50/10	10,000,000	$V_{\max}=500V$	$V_{\max}=500V$	± 0.01	± 0.05

- Resistances realized in manganine with temperature coefficient of ± 20 ppm/ $^\circ\text{C}$ (independent from temperature between 15 and 30 $^\circ\text{C}$)
- Long term stability: $\leq \pm 50$ ppm per year
- The resistances from 0.0001 to 0.1 Ω are 4 terminals, two potential and two current.
- The resistances from 1 Ω to 10 M Ω are wrapped in an ant-inductive way and are two terminals with 2 screws for potential and current.

EDUCATIONAL VERSIONS

Same values as the model RC-E 50 but precision: 0.5%

