

## Resistance wire on mini bobbin RD



### General Data

Resistor allow as specified in DIN 46 461 (CuNi44)

Specific electrical resistance 0.49 ( $\Omega \times \text{mm} / \text{m}$ )

Average temperature constant of the electrical resistor at 20°C = 0.00004-0.00008

Average linear thermal expansion coefficient between 20 - 100 °C =  $13.5 \times 10^{-6}$

Melting temperature 1220-1270 °C

Maximum permissible wire temperature up to 600 °C

### Advantages

Resistant in specific resistance

Influence of the temperature or inherent heating on the resistance value practically insignificant (max. 0.8 % at 100 °C temperature rise)

Firmly adhering surface oxide coating withstands any temperature change and protects against further oxidation under continuous load

Very easy to machine thanks to softness and malleability

Suitable for soft soldering, hard soldering or welding

### Applications

Resistance wire for the production of technical resistances, shunts and for general laboratory needs.



## Resistance wire on mini bobbin **RD**

**30**  
abundant

**Technische Daten**

Typ	Resistance	highest wire temperature	Mean linear coefficient of thermal expansion between 20 - 100 °C	Mean temperature coefficient of resistance at 20 °C	Melting point	Specific electrical resistance	Current intensity for wire temperature (100°C)	Current intensity for wire temperature (200°C)	Current intensity for wire temperature (300°C)	Wire diameter	Weight	Length
RD 50/0,1	62.400 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	0.237 A	0.396 A	0.537 A	0.10 mm	0.05 kg	715 m
RD 50/0,2	15.600 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	0.560 A	0.940 A	1.280 A	0.20 mm	0.05 kg	178 m
RD 50/0,3	6.930 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	0.940 A	1.570 A	2.120 A	0.30 mm	0.05 kg	79 m
RD 50/0,4	3.900 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	1.340 A	2.240 A	3.080 A	0.40 mm	0.05 kg	45 m
RD 50/0,6	1.730 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	2.210 A	3.700 A	5.000 A	0.60 mm	0.05 kg	20 m
RD 50/0,8	0.975 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	3.190 A	5.330 A	7.210 A	0.80 mm	0.05 kg	11 m
RD 50/1,0	0.624 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	4.220 A	7.050 A	9.550 A	1.00 mm	0.05 kg	7 m
RD 50/1,2	0.433 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	5.300 A	8.850 A	12.000 A	1.20 mm	0.05 kg	5 m
RD 100/0,1	62.400 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	0.237 A	0.396 A	0.537 A	0.10 mm	0.10 kg	1430 m
RD 100/0,2	15.600 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	0.560 A	0.610 A	1.280 A	0.20 mm	0.10 kg	357 m
RD 100/0,3	6.930 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	0.940 A	1.570 A	2.120 A	0.30 mm	0.10 kg	158 m
RD 100/0,4	3.900 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	1.340 A	2.240 A	3.080 A	0.40 mm	0.10 kg	89 m
RD 100/0,6	1.730 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	2.210 A	3.700 A	5.000 A	0.60 mm	0.10 kg	39 m
RD 100/0,8	0.975 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	3.190 A	5.330 A	7.210 A	0.80 mm	0.10 kg	22 m
RD 100/1,0	0.624 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	4.220 A	7.050 A	9.550 A	1.00 mm	0.10 kg	14 m
RD 100/1,2	0.433 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	5.300 A	8.850 A	12.000 A	1.20 mm	0.10 kg	9.9 m
RD 100/1,5	0.277 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	7.000 A	11.700 A	15.800 A	1.50 mm	0.10 kg	6.3 m
RD 100/2,0	0.156 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	10.000 A	16.800 A	22.700 A	2.00 mm	0.10 kg	3.5 m
RD 100/3,0	0.069 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	16.600 A	27.800 A	37.700 A	3.00 mm	0.10 kg	1.5 m
RD 100/4,0	0.039 Ω/m	to 600 °C	13,5x10 <sup>-6</sup>	0,00004-0,00008	1220-1270 °C	0.49 (Ωx mm <sup>2</sup> )/m	23.900 A	40.000 A	54.000 A	4.00 mm	0.10 kg	0.8 m

1.1

1.2

1.3

1.4

1.5