

Wirewound resistor coated with vitreous enamel

Description

Elliptical shape, High surface load, Submerged collars, Designed for severe environment condition

Mechanical characteristics

IP00, Soldering terminals, Suitable for grouping

Applications

Harmonic filter, Neutral grounding, Charge/discharge capacitor, Heating

Market

Railways, Industrial Automation, Energy

Special version

Ohmic values out of range, Special tolerance on resistance (2%, 1%), Adjustable version, Low inductance, Intermediate grip

Active materials

Depending on the ohmic value the used alloy may be NiCr or CuNi44

RSE



31 W ÷ 91 W



ELECTRICAL CHARACTERISTICS

refers to room temperature 25°C

ID	Rated Power	Min Resistance	Max Resistance	Min res.not-inductive version	Max res.not-inductive version	Max resistance for traction	Limit Voltage
Unit	W	Ω	Ω	Ω	Ω	Ω	V
RSE 31	31	4,3	18k	16	4k3	3k9	700
RSE 53	53	9,1	39k	39	10k	8k2	1000
RSE 68	68	13	56k	56	13k	13k	1500
RSE 91	91	18	75k	75	18k	15k	1500
Insulation resistance 500 VDC		≥100 MΩ		Temp. Coefficient Resistance		40÷170 10 ⁻⁶ /°C	
Max Overload 10" / 5"		5xP _r / 10xP _r		Dielectric strength 50Hz; 60"		1000 V	

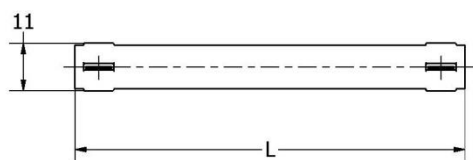
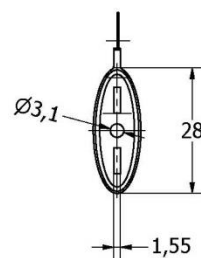
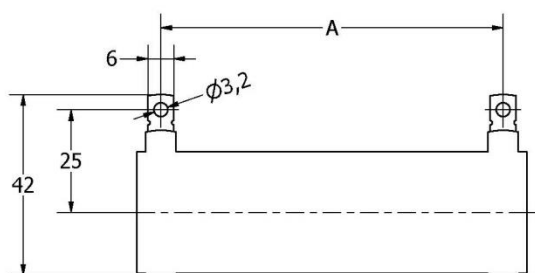
TEST	Conditions	Requirements	Typical value and drifts
Short time overload	10 Pr during 5 sec. Max Voltage 6.000 V or 2.5 times the limit voltage	2% ±0,05 ohm	0,5%
Climatic sequence	-55°C+200°C 5 Cycles MIL STD 202 Test 107 D	3%±0,05 ohm Insulation Resistance>100MΩ	0,5%
Humidity (steady state)	56 Days at 95% RH	2% Insulation Resistance>100MΩ	0,5%
Moisture	10 Cicles 55°C -10°C Rel umidity 95% ÷ 100% MIL STD 202 Test 106 D	2% Insulation Resistance 100MΩ	0,5%
Load life	Cycle 90° on – 30° off 1.000 h a Pr and 25°C	5%	1,5%
Salt spray	Procedure MIL STD 202 Test 101 D	No Pollutions or corrosion	OK
Terminals strenght	Traction 40 N Torque 60 Ncm	Resistance 1%±0,05 ohm	<0,2%

MECHANICAL DATA

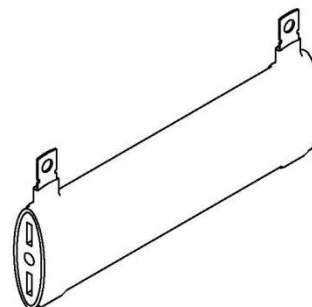
Dimensions [mm]	A	L	BRACKETS	Weight [g]
RSE 31	40	51	SP1; SP3; SPD	23
RSE 53	79	90	SP1; SP3; SPD	47
RSE 68	109	120	SP1; SP3; SPD	62
RSE 91	142	153	SP1; SP3; SPD	84

DRAWING

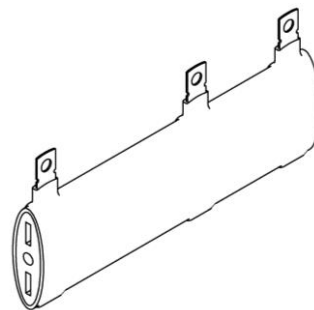
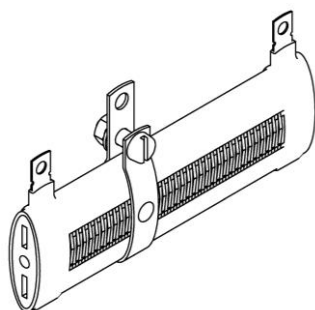
Unless otherwise specified, applicable standard of general tolerances for linear and angular dimensions is ISO 2768-1 class c; applicable standard for ceramic parts is DIN 40680-1 (general dimension) class g and DIN 40680-22 (shape) class g.



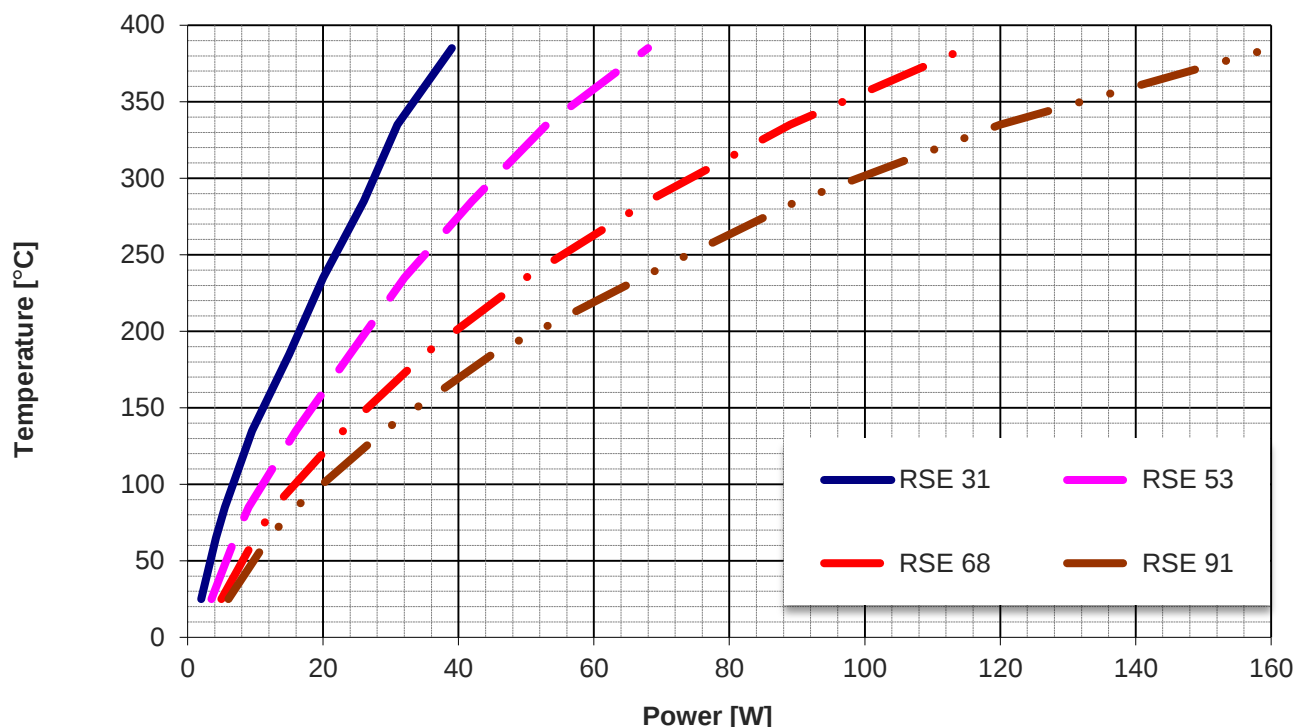
ADJUSTABLE VERSION



INTERMEDIATE GRIP



SURFACE TEMPERATURE CHARACTERISTIC



Except where stated otherwise, Rated power is given at 20 °C ambient temperature. The maximum power that can be dissipated decreases with the increase of ambient temperature. Derating drops to zero at 350°C ambient temperature from nominal rating at 25%.

Marking

The resistor is marked on the collar with indelible ink high temperature

FAIRFIELD RSE 31 150R 5% WW/YY (week / year)

Packing

The resistor is packed in a way to preserve incidental damages due to transport. The resistor is made by ceramic parts, accidental fall can damage it, handle with care.

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Ordering information

RSE/Y XXX RRRR 5%

Y N : not inductive version

R : adjustable version

P : intermediate grip

T : traction version

XXX Model / Rated power

RRRR Resistance value (nominal at 20°C)

Example

RSE 31 150R 5%

RSE is the name of the product

31 is the model that corresponds, for RSE family, to the rated power, in this case 31 W

150R means 150 Ω that is the nominal ohmic value at 20°C

5% is the tolerance on the ohmic value, in this case the value of the resistor is accepted when is within 142.5 Ω ÷ 157.5 Ω