

Tape wound resistor coated with vitreous enamel

Description

Tubular ceramic support

Mechanical characteristics

IP00, Terminals for screw connection, Cylindrical shape

Applications

Harmonic filter, Neutral grounding, Charge/discharge capacitor, Load bank

Market

Railways, Industrial automation, Energy

Special version

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

Active materials

Depending on the ohmic value the used alloy may be NiCr or CuNi44 or CuNi11

RSPO



152 W ÷ 1500 W



ELECTRICAL CHARACTERISTICS

refers to room temperature 25°C

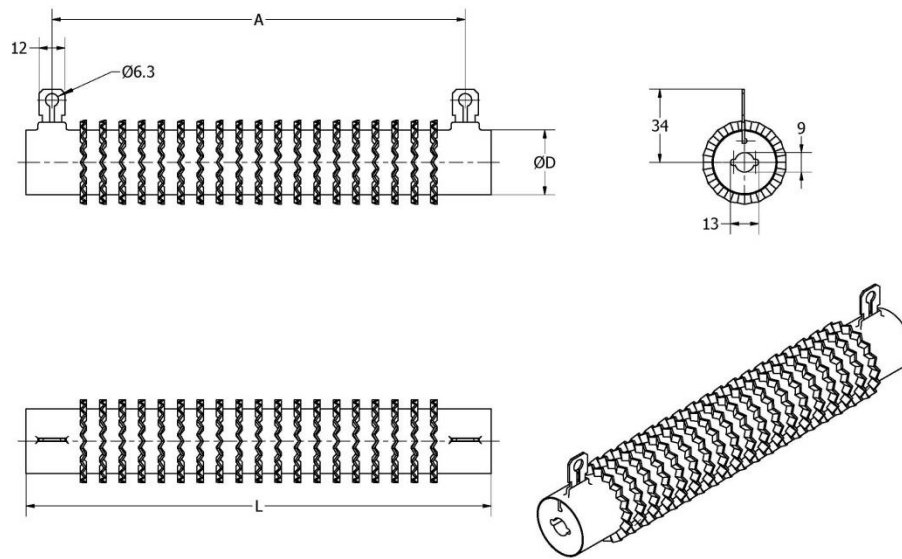
ID	Rated Power	Min resistance	Max resistance	Limit Voltage
Unit	W	Ω	Ω	V
RSPO 152	152	0,068	7,5	1500
RSPO 155	155	0,082	9,1	1500
RSPO 240	240	0,15	16	2000
RSPO 300	300	0,2	22	2500
RSPO 370	370	0,27	30	3000
RSPO 420	420	0,3	33	3000
RSPO 500	500	0,39	43	3000
RSPO 600	600	0,51	56	3000
RSPO 750	750	0,62	68	3000
RSPO 1000	1000	0,82	91	3000
RSPO 1500	1500	1,1	120	3000
Insulation resistance 1.000 VDC		≥100 MΩ	Temp. Coefficient Resistance	20÷450 10 ⁻⁶ /°C
Max Overload 10"		5xP _r	Dielectric strength 50Hz; 60"	3000 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 RSPO 152-420

Dimensions [mm]	A	D	L	BRACKETS	Weight [g]
RSPO 152	76	29	100	SQ/SC 23	170
RSPO 155	84	29	108	SQ/SC 23	180
RSPO 240	141	29	165	SQ/SC 23	290
RSPO 300	191	29	215	SQ/SC 23	370
RSPO 370	241	29	265	SQ/SC 23	460
RCPO 420	276	29	300	SQ/SC 23	520

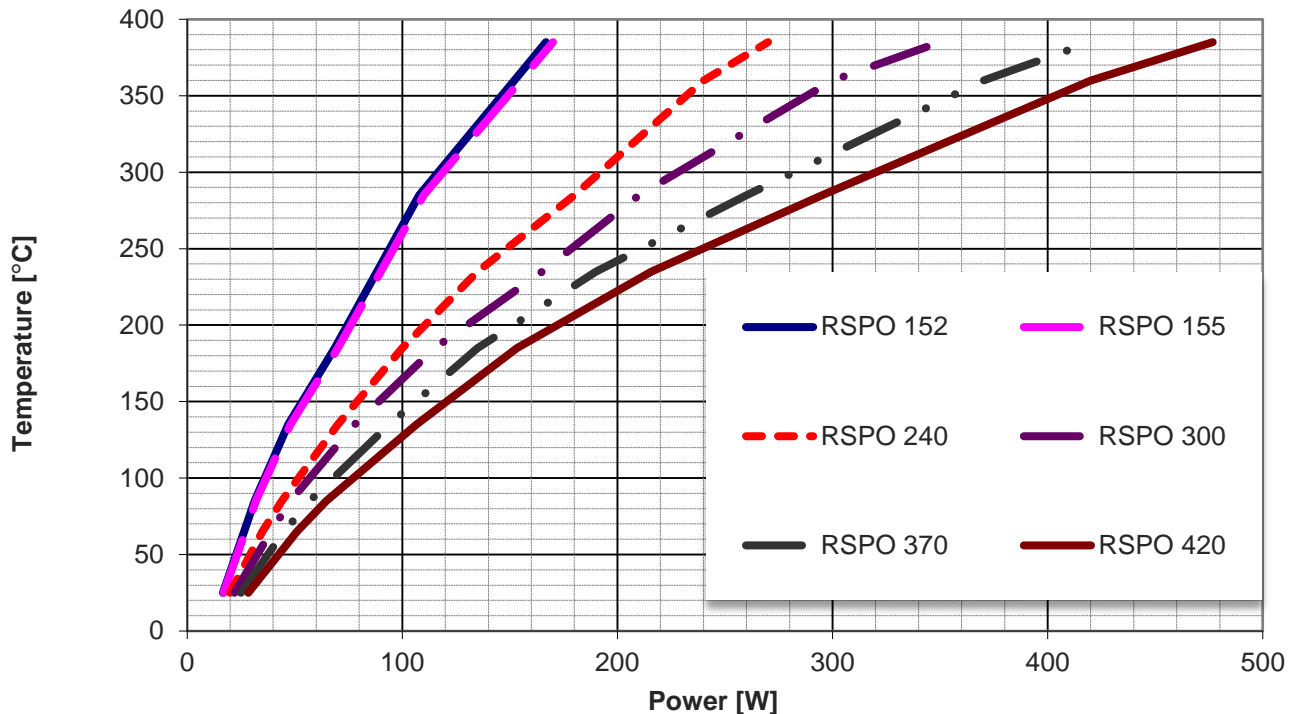
DRAWING

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



SURFACE TEMPERATURE CHARACTERISTICS

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%.



www.fairfield.com - info@fairfield.com

Phone +39 02 48407171 - Fax +39 02 48407157

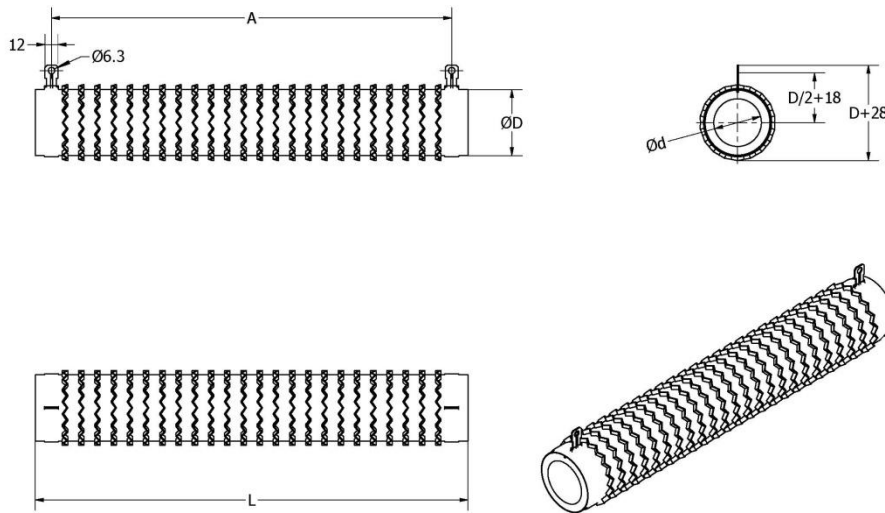
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MECHANICAL DATA RSPO 500-1500

Dimensions [mm]	A	D	d	L	BRACKETS	Weight [g]
RSPO 500	270	40	18,5	300	SQ/SC 30	1000
RSPO 600	270	50	28	300	SO 50	1500
RSPO 750	270	60	44	300	SO 60	1250
RSPO 1000	370	60	44	400	SO 60	2000
RSPO 1500	470	60	44	500	SO 60	2500

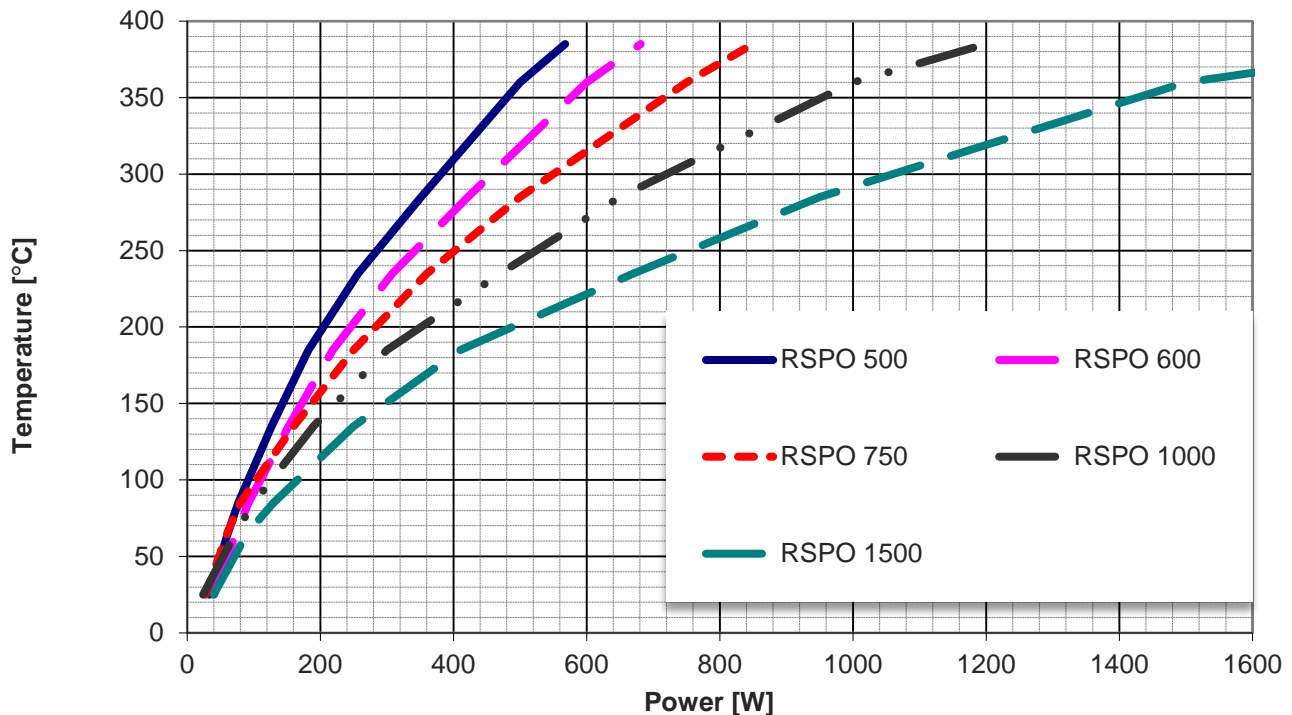
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Marking

The resistor is marked on the collar with indelible ink high temperature
FAIRFIELD RSPO 1500 10R 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

RSPO/Y XXX RRRR 5%
Y R : adjustable version

XXX Model / Rated power i.e. 240 : 240 W

RRRR Resistance value (nominal at 20°C)

Example

RSPO/R 240 15R 5%

RSPO is the name of the product

R means the adjustable version

240 is the model that corresponds, for RSPO family, to the rated power, in this case 240 W

15R means 15 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 14.25 Ω + 15.75 Ω

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