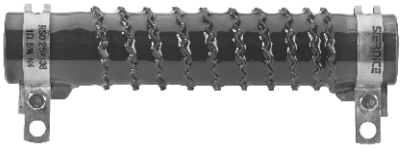
Fixed Wirewound Enamelled Corrugated Tape Resistors Very High Dissipation



AN Collars

CS Collars

FEATURES

- 160 W to 1 kW at 25 °C
- Compliant to RoHS directive 2002/95/EC

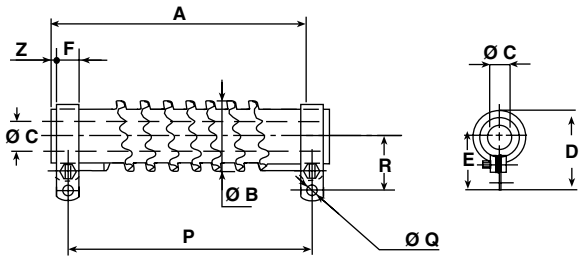
RoHS COMPLIANT

The remarkable dissipation power of this series is the result of an original winding method using corrugated edge-wound tape, thus forming a very active radiator. The enamelling follows the contour of the resistive element and provides effective insulation and support for the winding.
The tubular core is of special ceramic, capable of withstanding high thermal shock and overload of short duration.

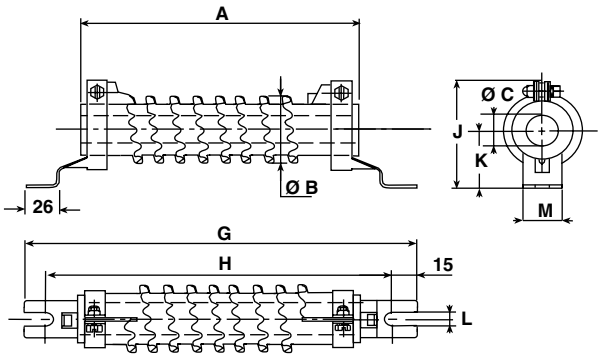
NF F 16101, 10/1988 and 16102, 04/1992: Not applicable (our parts are made of metallic and refractory materials).

DIMENSIONS in millimeters

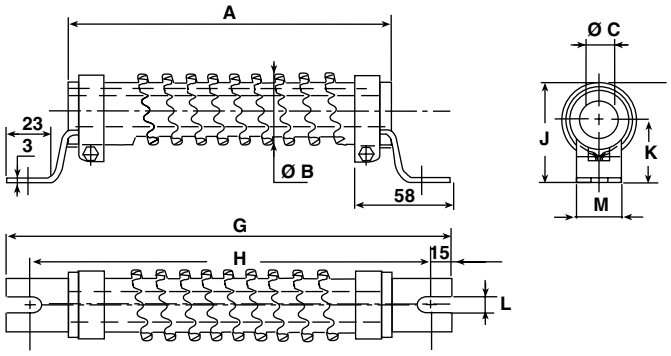
SCREWED STAINLESS STEEL 304 I "AN" TYPE 1



SCREWED STAINLESS STEEL 304 I "CS" TYPE 1



SCREWED STAINLESS STEEL 304 I "CS" TYPE 2



DIMENSIONS in millimeters

RSO SERIES	CONNECTIONS		A ± 2	Ø B MAX.	Ø C MIN.	D MAX.	E	F + 0.5 + 0	G - 4/+ 0	H - 4/+ 0	J
25 x 138	AN type 1	CS type 1	138	39	12.6	54	33.5 ± 1	9	199	169	50 ± 1.5
25 x 168	AN type 1	CS type 1	168	39	12.6	54	33.5 ± 1	9	229	199	50 ± 1.5
30 x 250	AN type 1	CS type 1	250	44	17.4	62	36 ± 1	13	317	287	60 ± 1.5
40 x 370	AN type 2	CS type 2	370	54.5	22.3	85.5	57 ± 1.5	18	432	405	73.8
50 x 373	AN type 2	CS type 2	373	65	27.1	97	63 ± 1.5	18	432	405	79

RSO SERIES	CONNECTIONS		K	L + 0.5	M ± 0.5	P	Q	R	Z	AVERAGE UNIT WEIGHT IN g	
										AN	CS
25 x 138	AN type 1	CS type 1	27 ± 1	6.5	24	117 ± 2	5.7	28.5 ± 1	6	160	205
25 x 168	AN type 1	CS type 1	27 ± 1	6.5	24	147 ± 2	5.7	28.5 ± 1	6	190	235
30 x 250	AN type 1	CS type 1	30 ± 1	9	25	227 ± 2.5	5.7	31 ± 1	5	350	400
40 x 370	AN type 2	CS type 2	45 ± 1.5	9	30	332 ± 3	9.2	45 ± 1.5	10	960	1040
50 x 373	AN type 2	CS type 2	45 ± 1.5	9	30	332 ± 3	9.2	51 ± 1.5	11.5	1375	1455

MECHANICAL SPECIFICATIONS

Mechanical Protection	Enamel
Resistive Element	Ni-Cr wire
Connections	AN CS supporting collars
Average Unit Weight	160 to 1455 g

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits	- 55 °C + 450 °C
Climatic Category	- 55 °C/+ 200 °C/56 days

ELECTRICAL SPECIFICATIONS

Resistance Range	0.068 Ω to 68 Ω (E12 preferred series)
Standard Resistance Tolerance	$R_n \geq 1\ \Omega \pm 5\ \%$ $R_n < 1\ \Omega \pm 10\ \%$
Power Rating	160 W to 1 kW at 25 °C
Temperature Coefficient	180 ppm/°C (typical)

PERFORMANCE

TESTS	CONDITIONS	REQUIREMENTS	TYPICAL VALUES AND DRIFTS
Short Time Overload	10 P_r during 5 s	2 % or 0.05 Ω	1 %
Thermal Shock	Load at P_r followed by cold temp. exposure at - 55 °C/15 s	2 % or 0.05 Ω	1 %
Climatic Sequence	Phase A: + 200° Phase C: - 55° Phase D: 5 cycles	3 % or 0.05 Ω	1 %
Load Life	90/30' cycle 1000 h at P_r 25 °C	5 %	2 %

SPECIAL FEATURES

RSO STYLE	25 x 138	25 x 168	30 x 250	40 x 370	50 x 373
Power Rating at 25 °C	160 W	200 W	350 W	700 W	1000 W
Resistance Ohmic Range (E12 Series)	0.068 Ω 12 Ω	0.10 Ω 18 Ω	0.22 Ω 33 Ω	0.33 Ω 56 Ω	0.39 Ω 68 Ω

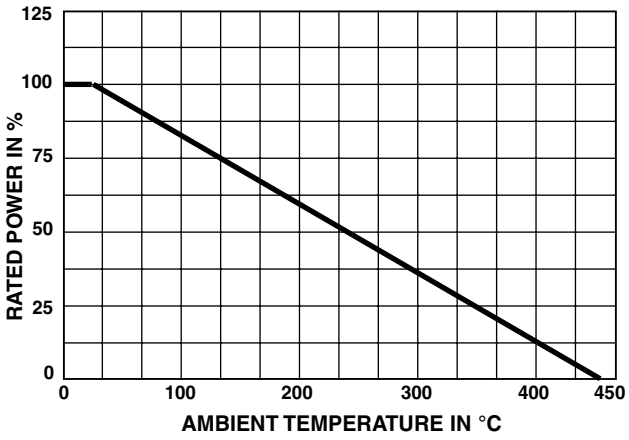
RECOMMENDATIONS FOR USE

OVERLOAD:
The RSO resistors are capable of withstanding overloads of about 10 P_r for a maximum period of 5 s; they can resist momentarily even greater overloads.

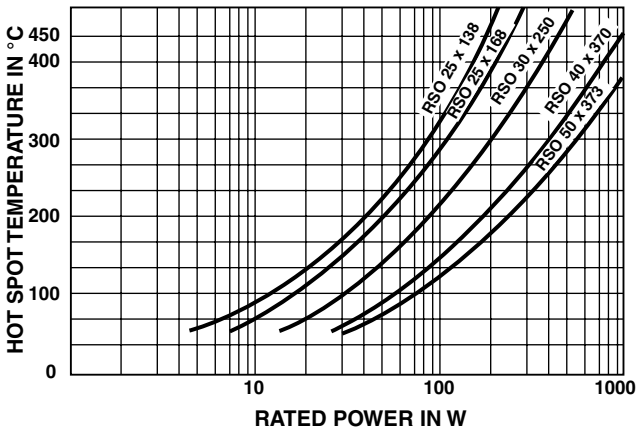
Particular requirements should be submitted to Vishay Sfernice.

Fixed Wirewound Enamelled Corrugated Tape Resistors
Very High Dissipation

POWER RATING



TEMPERATURE RISE



MARKING

Vishay Sfernice trademark, model, style, nominal resistance (in Ω), tolerance (in %), manufacturing date.

PACKAGING

Box: Fixed quantity depending on size and collars

ORDERING INFORMATION

RSO	25 x 168	XXX	CS	U82	± 10 %	B02NA	e
MODEL	STYLE	SPECIAL DESIGN Method N° Optional	CONNECTIONS	OHMIC VALUE Custom items are subject to extra-charge and min. order. Please see price list.	TOLERANCE	PACKAGING	LEAD (Pb)-FREE

SAP PART NUMBERING GUIDELINES

RSO	25168	C	R820	K	N
MODEL	STYLE	CONNECTIONS	OHMIC VALUE	TOLERANCE	PACKAGING

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