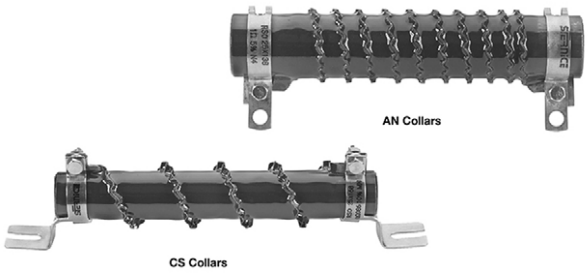
Wirewound Resistor, Industrial High Power, Enamelled Corrugated Tape, Tubular



FEATURES

- 160 W to 1 kW at 25 °C
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

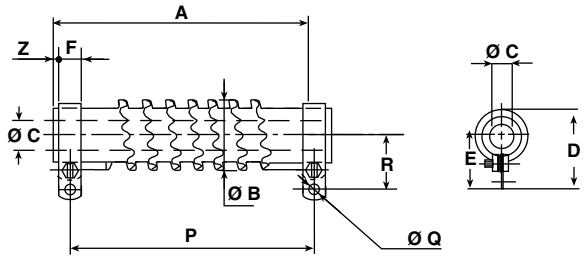
RoHS COMPLIANT

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 enameling 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.

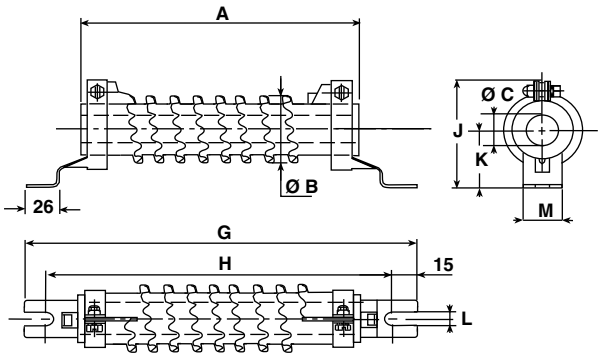
NF F 16101, 10/1988 and 16102, 04/1992: Not applicable (our parts are made of metallic and refractory materials).

DIMENSIONS in millimeters

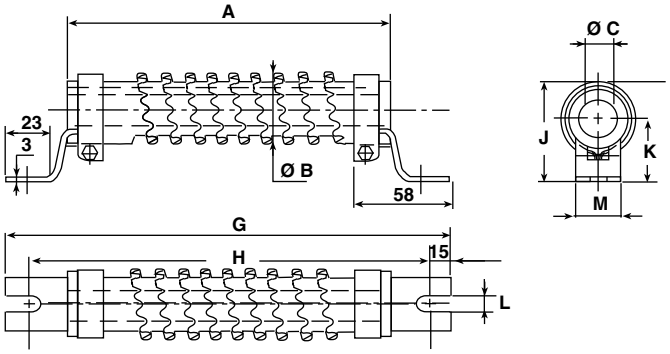
SCREWED STAINLESS STEEL 304 I "AN" TYPE 1



SCREWED STAINLESS STEEL 304 I "CS" TYPE 1



SCREWED STAINLESS STEEL 304 I "CS" TYPE 2



For technical questions, contact: sferfixedresistors@vishay.com

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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

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	SIZE	RESISTANCE RANGE Ω	RATED POWER $P_{25\,°C}$ W	TOLERANCE ± %
RSO 25 x 138	25138	0.068 to 12	160	10
RSO 25 x 168	25168	0.10 to 18	200	10
RSO 30 x 250	30250	0.22 to 33	350	10
RSO 40 x 370	40370	0.33 to 56	700	10
RSO 50 x 373	50373	0.39 to 68	1000	10

MECHANICAL SPECIFICATIONS

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

TECHNICAL SPECIFICATIONS

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

ENVIRONMENTAL SPECIFICATIONS

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

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 %

RECOMMENDATIONS FOR USE

OVERLOAD:

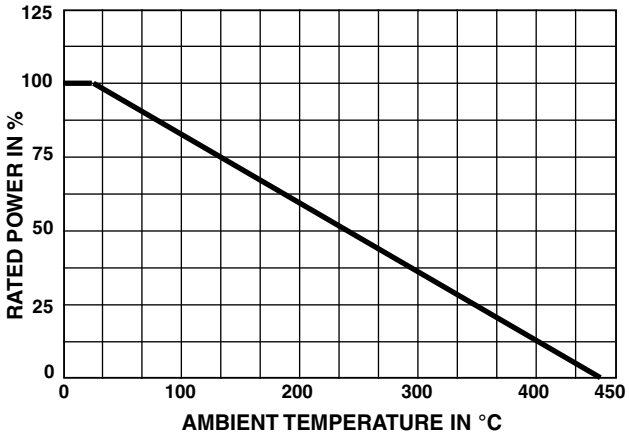
The RSO resistors are capable of withstanding overloads of about 10 P_r for a maximum period of 5 s; they can resist momentarily even greater overloads.

Particular requirements should be submitted to Vishay Sfernice.

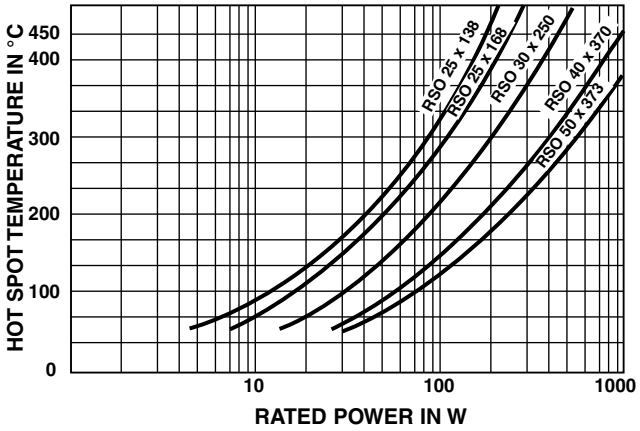
For technical questions, contact: sferfixedresistors@vishay.com

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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	CONNECTIONS	OHMIC VALUE	TOLERANCE	PACKAGING	LEAD (Pb)-FREE
		Method N° Optional		Custom items are subject to extra-charge and min. order. Please see price list.			

SAP PART NUMBERING GUIDELINES

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

RELATED DOCUMENTS

APPLICATION NOTES	
Packaging Information	www.vishay.com/doc?50033
Accessories	www.vishay.com/doc?50021

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