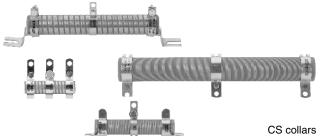
Vishay Sfernice



RoHS

COMPLIANT

Adjustable Wirewound Vitreous Resistors Low Ohmic Values (0.10 Ω available)



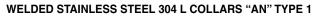
FEATURES

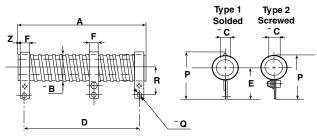
- High power rating: 16 W to 600 W at 25 °C
- Heavy overloads 10 Pn 15 s ≤ 1 %
- Low ohmic values 0.10 Ω available
- High long term stability drift < 1.5 % after 1000 h
- · Excellent withstanding of thermal shock • Mechanical strength
- Fire proof
- Compliant to RoHS directive 2002/95/EC

RSSD medium and high power resistors are noted for their ability to withstand heavy transient and severe shock and vibration conditions. They complement the ohmic range of Vishay styles RW, RWST and RA in the low value area, and can be tapped by means of adjustable collars. Standard RSSD resistors have a single adjustable collar.

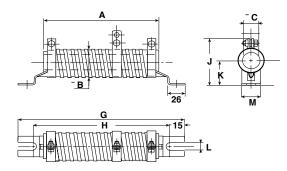
NF F 16101, 10/1988 and 16102, 04/1992: Not applicable (our parts are made of metallic and refractory materials).

DIMENSIONS

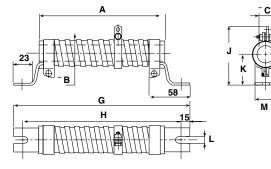




SCREWED STAINLESS STEEL 304 L COLLARS "CS" TYPE 1



SCREWED STAINLESS STEEL 304 L COLLARS "CS" TYPE 2



DIMENSIONS in millimeters RSSD STYLE 8 × 34 10 × 50 13 × 70 16 × 94 20 × 117 AN AN AN AN AN Connection type 1 CS* type 1 type 1 type 1 type 1 34 50 94 117 $A \pm 2$ 70 Ø B max. 10 11.5 14.5 18 22 Ø C min. 4.1 5 6.7 9.2 12.6 D 27 ± 2 40 ± 2 56 ± 2 78 ± 2 98 ± 2 E 20 ± 05 22 ± 0.5 24 ± 0.5 26.5 ± 0.5 31 ± 0.7 F +0.55 6.35 6.35 6.35 6.35 +0 Ρ 28 ± 1 31 ± 1 34 ± 1 38 ± 1 42 ± 1 ØQ 3.2 4.2 4.2 4.2 4.2 R 16 ± 0.5 18 ± 0.5 20 ± 0.5 21 ± 0.5 24 ± 0.7 Z approx. 1.5 3.5 4 5 1 Average unit AN weight in g 10 22 38 55 80

CS connections on request

DIMENSIONS in millimeters							
RSSD STYLE		25 × 138	25 × 168	30 × 250	40 × 370	50 × 373	
		AN type 1	AN type 1	AN type 1	AN type 2	AN type 2	
Connection		CS type 1	CS type 1	CS type 1	CS type 2	CS type 2	
A ± 2		138	168	250	370	373	
Ø B max.		27	27	32	43	53	
Ø C min.		16.4	16.4	21.3	22.3	27.1	
D		117 ± 2	147 ± 2	227 ± 2.5	332 ± 3	332 ± 3	
E		33.5 ± 1	33.5 ± 1	36 ± 1	57 ± 1.5	63 ± 1.5	
F + 0.5 + 0		9	9	13	18	18	
G - 4 - 0		199	229	317	432	432	
H - 4 - 0		169	199	287	405	405	
J		50 ± 1.5	50 ± 1.5	60 ± 1.5	69 max.	80 max.	
К		27 ± 1	27 ± 1	30 ± 1	45 ± 1	51 ± 1.5	
L ± 0.5		6.5	6.5	9	9	9	
M ± 0.5		24	24	25	30	30	
Р		51 ± 1.5	51 ± 1.5	55 ± 1.5	81.5 max.	92.5 max.	
ØQ		5.7	5.7	5.7	9.2	9.2	
R		28.5 ± 1	28.5 ± 1	31 ± 1	45 ± 1.5	51 ± 1.5	
Z approx.		6	6	5	10	11.5	
Average unit	AN	90	115	240	845	1270	
weighť in g	CS	135	160	290	925	1350	

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For technical questions, contact: sfer@vishay.com

Document Number: 50020 Revision: 30-Jun-09



Adjustable Wirewound Vitreous Resistors Low Ohmic Values (0.10 Ω available)

Vishay Sfernice

MECHANICAL SPECIFICATIONS

Mechanical Protection Resistive Element Connections Vishay Sfemice Special cement Nickel alloy wire AN collars CS supporting collars 10 g to 1350 g

Average Unit Weight

ENVIRONMENTAL SPECIFICATIONS

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

ELECTRICAL SPECIFICATIONS					
Resistance Range	0.12 Ω to 560 Ω (E12 series)				
Standard Resistance	$R \geq$ 10 Ω ± 5 %				
Tolerance	$1 \ \Omega \leq R \leq 10 \ \Omega \pm 10 \ \%$ $0.1 \ \Omega \leq R < 1 \ \Omega \pm 20 \ \%$				
Power Rating	14 W to 600 W at 25 °C				
Temperature Coefficient	+ 75 ppm/°C (typical)				

PERFORMANCE						
TESTS	CONDITIONS	REQUIREMENTS	TYPICAL VALUES AND DRIFTS			
Short Time Overload	10 Pr during 5 s	2 %	1 %			
Climatic Sequence	- 55 °C + 200 °C 5 cycles	3 %	1 %			
Thermal Shock	Load at 100 % Pr followed by cold - 55 °C/15	2 % or 0.05 Ω	1 %			
Load Life	90/30 cycle 1000 h at Pr at + 25 °C	5 %	1.5 %			

SPECIAL FEATURES											
RSSD TYPE		8 × 34	10 × 50	13 × 70	16 × 94	20 × 117	25 × 138	25 × 168	30 × 250	40 × 370	50 × 373
Power Rating	Continuous	16 W	25 W	42 W	70 W	100 W	140 W	200 W	280 W	450 W	600 W
at 25 °C	Reduced	14 W	22 W	38 W	62 W	90 W	125 W	170 W	240 W	360 W	450 W
Resistance Ohm (E12, E24 Series) with 1 Tapping		0.12 Ω 10 Ω	0.12 Ω 22 Ω	0.12 Ω 43 Ω	0.33 Ω 75 Ω	0.22 Ω 100 Ω	0.10 Ω 150 Ω	0.12 Ω 220 Ω	0.22 Ω 360 Ω	0.47 Ω 470 Ω	0.68 Ω 560 Ω
Maximum Number of Additional Tap		0	1	1	1	1	1	2	2	4	4
Reduction % of 0 Value by Tapping		23	21	14	11	10	8	6.5	6	5.7	5.7

ADDITIONAL TAPPINGS

Are supplied with their adjustable collars fastened but not set to any specific value. Please note that, on request, all tappings can be adjusted by VISHAY SFERNICE. For adjustment purposes we would need to be advised of the ohmic values, and tolerances of the sections in successive order in addition to their sum Rn.

The permissible maximum value for an adjustment should take into account the possible negative tolerance of Rn.

Please consult VISHAY SFERNICE regarding the acceptable tolerance.

RECOMMENDATIONS FOR USE

Maximum Current Strength:

The ohmic value and the power decrease as the connections are brought together. To avoid overload, the maximum current strength that is permissible for Rn should never be exceeded:

 $I_{max.} = \sqrt{Pr/Rn}$

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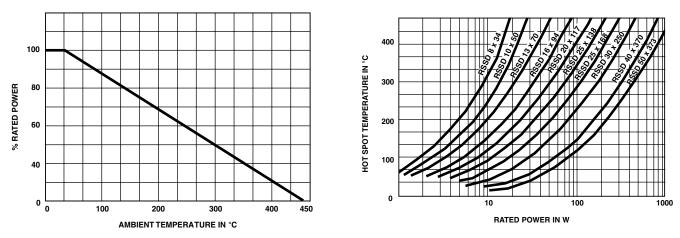
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TEMPERATURE RISE



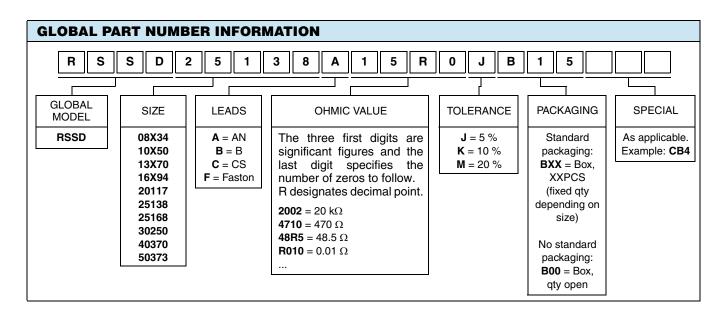
POWER RATING CHART



MARKING

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

ORDERING INFORMATION									
RSSD	10 × 50		AN	10U	5 %	BA25	е		
MODEL	STYLE	SPECIAL DESIGN	CONNECTIONS	OHMIC VALUE	TOLERANCE	PACKAGING	LEAD (Pb)-FREE		
		Method No		Custom items are subject to extra-charge and			(-)		
		Optional		min. order. Please see price list.					





Vishay

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