Vishay Sfernice

Adjustable Wirewound Vitreous Resistors

Low Ohmic Values



CS collars

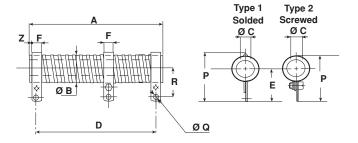
FEATURES

- 16W to 600W at 25°C
- · High power rating
- · Heavy overloads
- Low ohmic values
- · Great endurance
- · Excellent withstanding of thermal shock
- · Mechanical strength
- · Fire proof

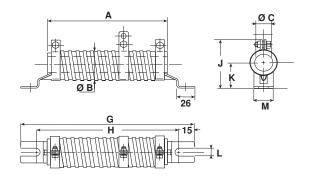
RSSD medium and high power resistors are noted for their ability to withstand heavy transient and severe shock and vibration conditions. They complement the ohmic range of Vishay styles RW, RWST and RA in the low value area, and can be tapped by means of adjustable collars. Standard RSSD resistors have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

DIMENSIONS

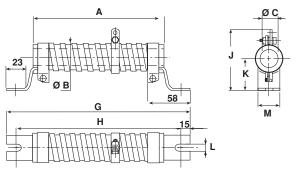
WELDED STAINLESS STEEL 304 L COLLARS "AN" TYPE 1



SCREWED STAINLESS STEEL 304 L COLLARS "CS" TYPE 1



SCREWED STAINLESS STEEL 304 L COLLARS "CS" TYPE 2



DIMENSIONS in millimeters						
RSSD STYLE	8 x 34	10 x 50	13 x 70	16 x 94	20 x 117	
Connection	AN	AN	AN	AN	AN	
	type 1	type 1 type 1 type 1		type 1		
			CS*			
A ± 2	34	50	70	94	117	
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 + 0.5	5	6.35	6.35	6.35	6.35	
Р	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	1.5	3.5	4	5	
Average unit AN	10	22	38	55	80	
weight in g						

^{*}CS connections on request

DIMENSIC	NS in n	nillimete	rs			
RSSD STYLE	25 x 138 25 x 168 30 x 25		30 x 250	40 x 370	50 x 373	
Connection	AN type 1	AN type 1	AN type 1	AN type 2	AN type 2	
	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.	
K	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 AN	90	115	240	845	1270	
unit weight in g CS	135	160	290	925	1350	



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MECHANICAL SPECIFICATIONS

Mechanical Protection Vishay Sfernice Special cement

Resistive Element nickel alloy wire Connections AN collars

CS supporting collars

Average Unit Weight 10 to 1350g

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits $-55^{\circ}\text{C} + 450^{\circ}\text{C}$

Climatic Category - 55°C/+ 200°C/56 days

ELECTRICAL SPECIFICATIONS					
Resistance Range	0.12Ω to 560Ω (E12-E24 series)				
Standard Resistance	R ≥ 10Ω± 5%				
Tolerance	1Ω≤R < 10Ω± 10% R < 1Ω± 20%				
Power Rating	14W to 600W at 25°C				
Temperature Coefficient	+ 75ppm/°C (typical)				

PERFORMANCE							
TESTS	CONDITIONS	REQUIREMENTS	TYPICAL VALUES AND DRIFTS				
Short Time Overload	10Pr during 5s	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 0.05Ω	1%				
Load Life	90'/30' cycle 1000h at Pr at + 25°C	5%	1.5%				

SPECIAL F	EATURES										
RSSD TYPE		8 x 34	10 x 50	13 x 70	16 x 94	20 x 117	25 x 138	25 x 168	30 x 250	40 x 370	50 x 373
Power Rating	Continuous	16W	25W	42W	70W	100W	140W	200W	280W	450W	600W
at 25°C	Reduced	14W	22W	38W	62W	90W	125W	170W	240W	360W	450W
Resistance Ohr		0.12Ω	0.12Ω	0.12Ω	0.33Ω	0.22Ω	0.10Ω	0.12Ω	0.22Ω	0.47Ω	0.68Ω
Range (E12, E2 with 1 Tapping	24 Series)	10Ω	22Ω	43Ω	75Ω	100Ω	150Ω	220Ω	360Ω	470Ω	560Ω
Maximum Numl of Additional Tapping	ber	0	1	1	1	1	1	2	2	4	4
Reduction % of Value by Tappin		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:

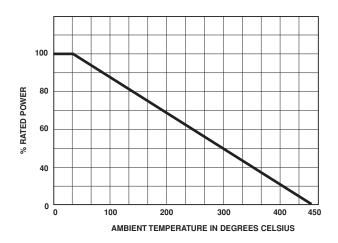
I max. =
$$\sqrt{\frac{Pr}{Rn}}$$

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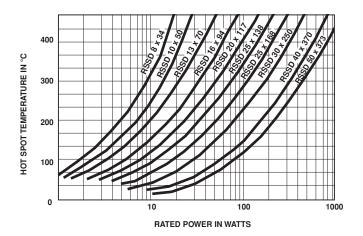
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POWER RATING CHART



TEMPERATURE RISE



MARKING

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

20 Ω ± 5%
TOLERANCE
Custom items are subject to extra charge and min. order. Please see price list.
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Legal Disclaimer Notice



Vishay

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