

Adjustable Wirewound Vitreous Resistors Low Ohmic Values



CS collars

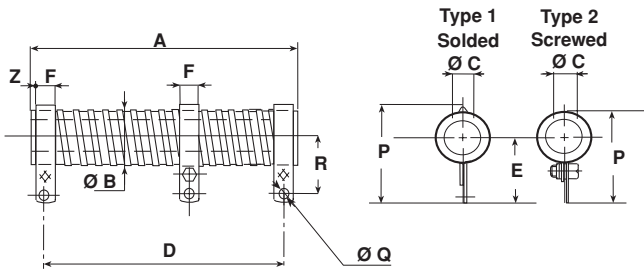
FEATURES

- 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

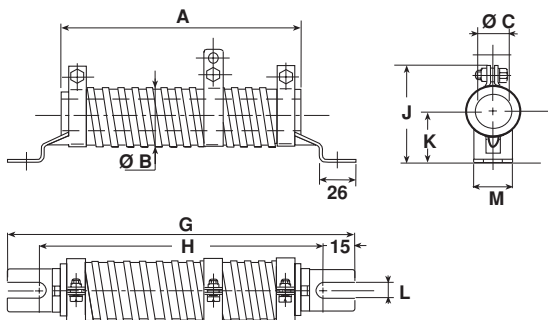
RSSD medium and high power resistors are noted for their ability to withstand heavy transient and severe shock and vibration conditions. They complement the ohmic range of Vishay styles RW, RWST and RA in the low value area, and can be tapped by means of adjustable collars. Standard RSSD resistors have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

DIMENSIONS

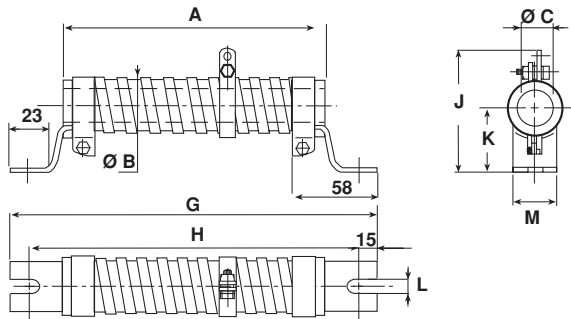
WELDED STAINLESS STEEL 304 L COLLARS "AN" TYPE 1



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 type 1	AN type 1	AN type 1 CS*	AN type 1	AN type 1
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 ± 0.5	22 ± 0.5	24 ± 0.5	26.5 ± 0.5	31 ± 0.7
F +0.5 / -0	5	6.35	6.35	6.35	6.35
P	28 ± 1	31 ± 1	34 ± 1	38 ± 1	42 ± 1
Ø Q	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 weight in g	10	22	38	55	80

*CS connections on request

DIMENSIONS in millimeters					
RSSD STYLE	25 x 138	25 x 168	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
P	51 ± 1.5	51 ± 1.5	55 ± 1.5	81.5 max.	92.5 max.
Ø Q	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 weight in g	90	115	240	845	1270
Average unit CS weight in g	135	160	290	925	1350

**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°C + 450°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 FEATURES

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 at 25°C	Continuous	16W	25W	42W	70W	100W	140W	200W	280W	450W	600W
	Reduced	14W	22W	38W	62W	90W	125W	170W	240W	360W	450W
Resistance Ohmic Range (E12, E24 Series) with 1 Tapping		0.12Ω	0.12Ω	0.12Ω	0.33Ω	0.22Ω	0.10Ω	0.12Ω	0.22Ω	0.47Ω	0.68Ω
		10Ω	22Ω	43Ω	75Ω	100Ω	150Ω	220Ω	360Ω	470Ω	560Ω
Maximum Number of Additional Tapping	0	1	1	1	1	1	2	2	4	4	
Reduction % of Ohmic 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.

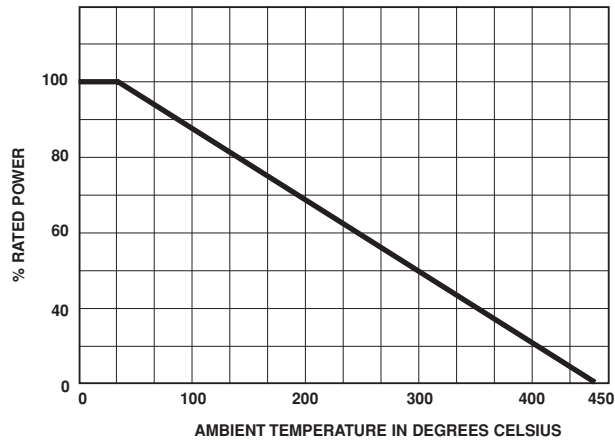
The permissible maximum value for an adjustment should take into account the possible negative tolerance of Rn. Please consult VISHAY SFERNICE regarding the acceptable tolerance.

RECOMMENDATIONS FOR USE**Maximum Current Strength:**

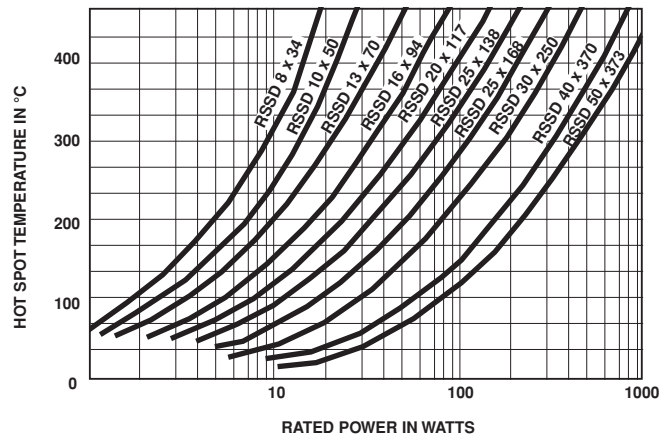
The ohmic value and the power decrease as the connections are brought together. To avoid overload, the maximum current strength that is permissible for Rn should never be exceeded:

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

POWER RATING CHART



TEMPERATURE RISE



MARKING

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

ORDERING INFORMATION

RSSD	10 X 50	AN	20 Ω	\pm 5%
MODEL	STYLE	SPECIAL DESIGN	CONNECTIONS	TOLERANCE
		Method N° Optional	Custom items are subject to extra charge and min. order. Please see price list.	