Fixed Wirewound High Power Vitreous Resistors with Terminal Collars or Bands

FEATURES

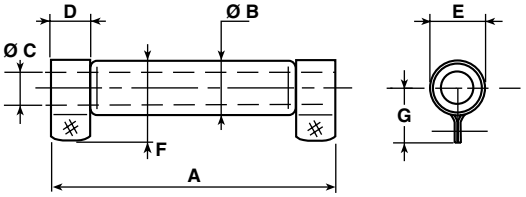
- 10 W to 80 W at 25 °C
- NF C 93-214
- RB 13 x 70 RB 20 x 117
- High power up to 80 W at 25 °C
- High long term stability drift < 2.5 % after 5000 h
- Great mechanical strength
- Fire proof
- Environmental performance
- Thermal shock strength 0.5 % (100 % h at - 25 °C)

RoHS COMPLIANT

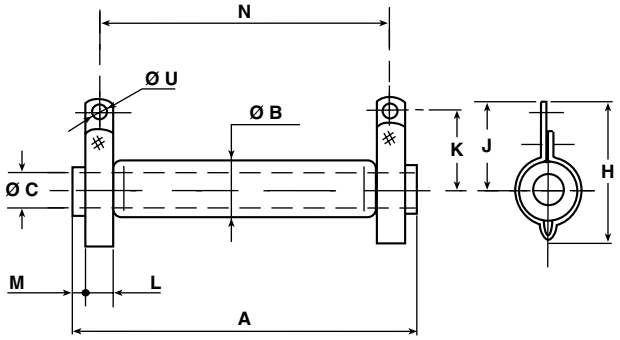
The RW wirewound power resistors are extremely well suited to professional applications, where high power and excellent endurance are required. They meet all requirements of NF C 93-214 specifications and five sizes cover the power range from 10 W to 80 W. Non inductive types are available, by using the special RWNI winding. For higher power or extremely severe conditions of use, see the RWST series.

DIMENSIONS in millimeters

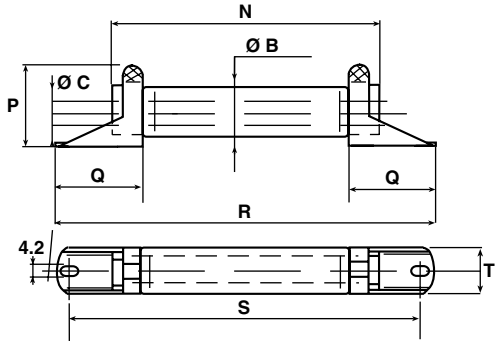
WELDED STAINLESS STEEL 304 L BAND "B"



WELDED STAINLESS STEEL 304 L COLLARS "AN"

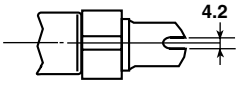


WELDED STAINLESS STEEL 304 L COLLARS "CR"



RW STYLE		8 x 34	10 x 50	13 x 70	16 x 94	20 x 117
CONNECTIONS	Collar	AN	AN	AN	AN	AN
	Collar	-	CR	CR	-	-
	Collar	-	-	CS	-	-
	Band	-	B	B	B	B
A ± 2		34	50	70	94	117
Ø B max.		11.5	13	16	19.5	23
Ø C min.		4.1	5	5	9	9
D	+ 0.5 / + 0	-	8	10.5	12	14
E		-	11 ± 0.5	14 ± 0.5	17.5 ± 0.5	21 ± 0.7
F max.		-	21	24.5	28	33
G		-	14 ± 0.5	16 ± 0.5	18 ± 0.5	21 ± 0.7
H		28 ± 1.0	31 ± 1.0	34 ± 1.0	38 ± 1.0	42 ± 1.5
J		19.5 ± 0.5	22 ± 0.5	24 ± 0.5	25 ± 0.5	28 ± 0.7
K		16 ± 0.5	18 ± 0.5	20 ± 0.5	21 ± 0.5	24 ± 0.7
L	+ 0.5 / + 0	5	6.35	0.6	0.6	0.8
M ± 1.5		1	1.5	3.5	4	6
N ± 2		27	40	56	78	98
P ± 1		-	19.5	22.5	-	-
Q ± 0.5		-	19.5	20.5	-	-
R ± 2		-	72	91	-	-
S ± 2		-	62	81	-	-
T		-	12	15	-	-
Ø U		3.2	4.2	4.2	4.2	4.2

WELDED STAINLESS STEEL 304L COLLARS "CS"



MECHANICAL SPECIFICATIONS

Mechanical Protection	Enamel
Resistive Element	Ni-Cr wire
Connections	B band AN - CR - CS collars
Average Unit Weight	10 to 100 g

ENVIRONMENTAL SPECIFICATIONS

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

ELECTRICAL SPECIFICATIONS	
Resistance Range	1 Ω to 68 kΩ (E12 peferred series value)
Resistance Tolerances **Standard**	± 5 %
Power Rating	10 W to 80 W at 25 °C
Temperature Coefficient	75 ppm/°C (typical)
Dielectric Strength	1000 V_{RMS} (AN collars)
Insulation Resistance	100 MΩ (500 V_{DC}) AN collars
Shelf Life	0.1 % year (typical)

PERFORMANCE			
TESTS	**CONDITIONS**	**REQUIREMENTS**	**TYPICAL VALUES AND DRIFTS**
Short Time Overload	10 Pr during 5 seconds Voltage limited at < 5000 V current limited at 5 A	2 % or 0.05 Ω	0.5 %
Climatic Sequence	- 55 °C + 200 °C 5 cycles	3 % or 0.05 Ω Insulation resistance > 100 MΩ	0.5 %
Humidity **(Steady State)**	56 days 95 % relative humidity	2 % or 0.05 Ω Insulation resistance > 100 MΩ	0.5 %
Thermal Shock	Load at 100 % Pr followed by cold temp. exposure at - 55 °C	2 % or 0.05 Ω	0.5 %
Shock	severity 50 9 shocks/each side	1 % or 0.05 Ω	0.25 %
Vibration	severity 55B	1 % or 0.05 Ω	0.25 %
Terminal Strength	Collar AN Traction 40 N Band B Torque 60 Ncm	1 % or 0.05 Ω	0.5 %
Load Life	90'/30' cycle 1000 hours at Pr 25 °C	5 %	1000 h 1.5 % 5000 h 2.5 %

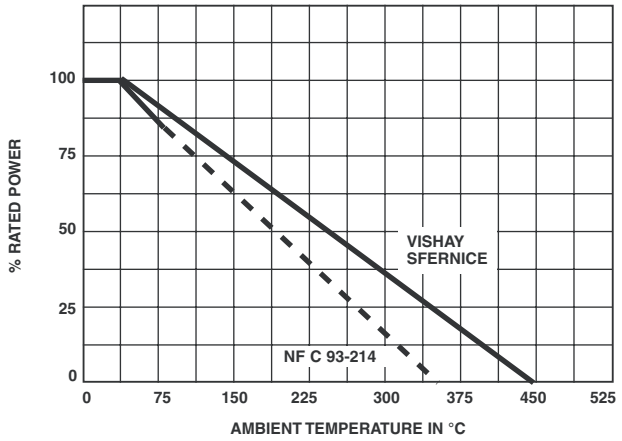
SPECIAL FEATURES					
RW STYLE	**8 x 34**	**10 x 50**	**13 x 70**	**16 x 94**	**20 x 117**
Designation NF C 93-214	-	-	RB 13 x 70	-	RB 20 x 117
Power Rating at 25 °C	10 W	17 W	28 W	44 W	72 W
Maximum Power Rating at 25 °C	13 W	20 W	32 W	50 W	80 W
Ohmic Range (E12, E24 series)	1 Ω 10 kΩ	1 Ω 27 kΩ	2.2 Ω 56 kΩ	2.2 Ω 56 kΩ	2.7 Ω 68 kΩ
Limiting Element Voltage	300 V	450 V	650 V	900 V	1100 V
Critical Resistance	6.9 kΩ	10 kΩ	13.2 kΩ	16 kΩ	15.1 kΩ

NON INDUCTIVE WINDING

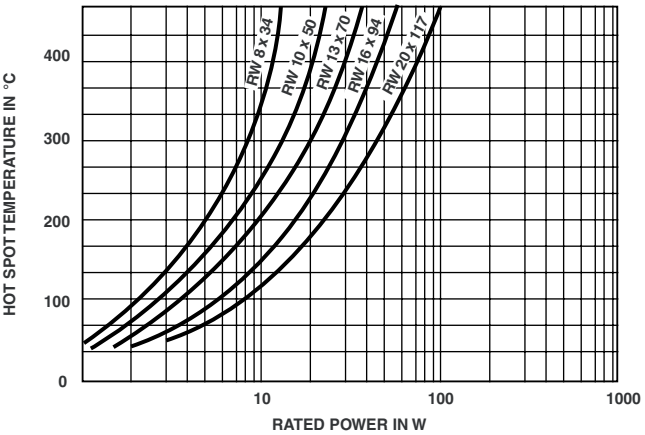
For high frequencies, low self induction resistors are available with special windings.
RWNI designation.

MODEL AND STYLE	**RWNI 8 x 34**	**RWNI 10 x 50**	**RWNI 13 x 70**	**RWNI 16 x 94**	**RWNI 20 x 117**
Ohmic range	4.7 Ω 100 Ω	4.7 Ω 220 Ω	4.7 Ω 620 Ω	10 Ω 1.2 kΩ	10 Ω 2.2 kΩ

POWER RATING CHART



TEMPERATURE RISE



MARKING

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

ORDERING INFORMATION

RW	20 × 117	NI		AN	68 Ω	± 5 %	B020	e
MODEL	STYLE	NON-INDUCTIVE WINDING Optional	SPECIAL DESIGN 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

RW	20117	A	680	J	B15
MODEL	STYLE	CONNECTIONS	OHMIC VALUE	TOLERANCE	PACKAGING

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