

Fixed Wirewound High Power Vitreous Resistors with Terminal Collars or Bands



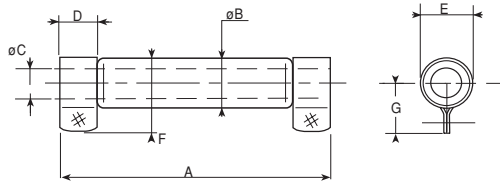
FEATURES

- 10 Watt to 80 Watt at 25°C
- NF C 93-214
- RB 13 x 70 RB 20 x 117
- High power
- Outstanding endurance
- Great mechanical strength
- Fire proof
- Environmental performance
- Thermal shock strength

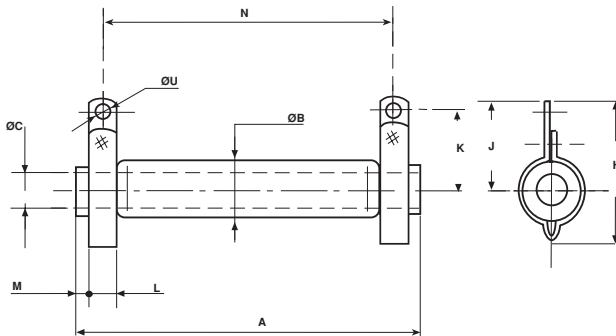
The RW wirewound power resistors are extremely well suited to professional applications, where high power and excellent endurance are required. They meet all requirements of NF C 93-214 specifications and five sizes cover the power range from 10W to 80W. Non inductive types are available, by using the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

DIMENSIONS in millimeters

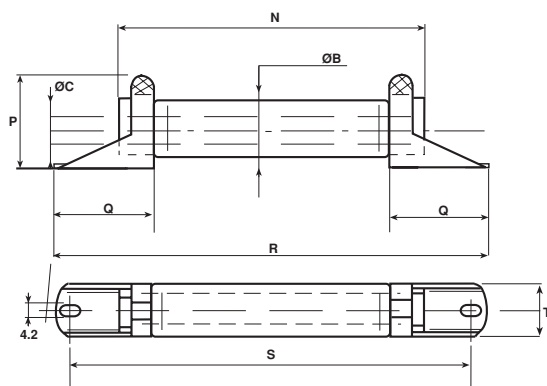
WELDED STAINLESS STEEL 304 L BAND "B"



WELDED STAINLESS STEEL 304 L COLLARS "AN"

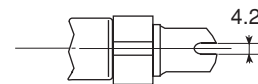


WELDED STAINLESS STEEL 304 L COLLARS "CR"



RW STYLE	8 x 34	10 x 50	13 x 70	16 x 94	20 x 117
Collar	AN	AN	AN	AN	AN
Collar	–	CR	CR	–	–
Connections	–	–	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	31 ± 1	34 ± 1	38 ± 1	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			
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 304 L COLLARS "CS"





**Fixed Wirewound High Power Vitreous Resistors
With Terminal Collars or Bands**

Vishay Sfernice

MECHANICAL SPECIFICATIONS

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

ENVIRONMENTAL SPECIFICATIONS

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

ELECTRICAL SPECIFICATIONS

Resistance Range	1Ω to 68kΩ (E12-E24 preferred series value)
Resistance Tolerances	
Standard	± 5%
Power Rating	10W to 80W at 25°C
Temperature Coefficient	75ppm/°C (typical)
Dielectric Strength	1000VRMS (AN collars)
Insulation Resistance	100MΩ (500VDC) AN collars
Shelf Life	0.1% year (typical)

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

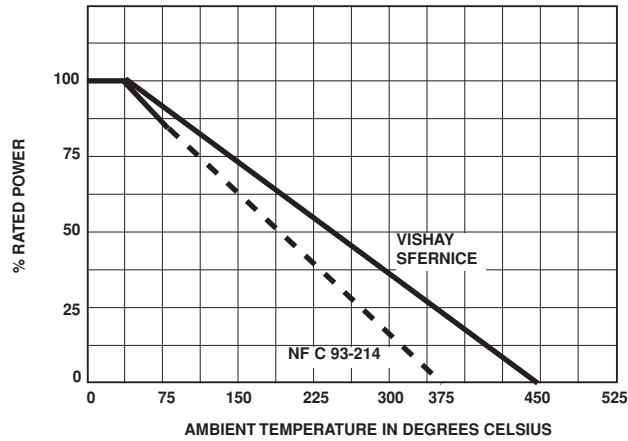
SPECIAL FEATURES					
RW STYLE	8 x 34	10 x 50	13 x 70	16 x 94	20 x 117
Designation NF C 93-214	-	-	RB 13 x 70	-	RB 20 x 117
Power Rating at 25°C	10W	17W	28W	44W	72W
Maximum Power Rating at 25°C	13W	20W	32W	50W	80W
Ohmic Range (E12, E24 series)	1Ω 10kΩ	1Ω 27kΩ	2.2Ω 56kΩ	2.2Ω 56kΩ	2.7Ω 68kΩ
Limiting Element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

NON INDUCTIVE WINDING

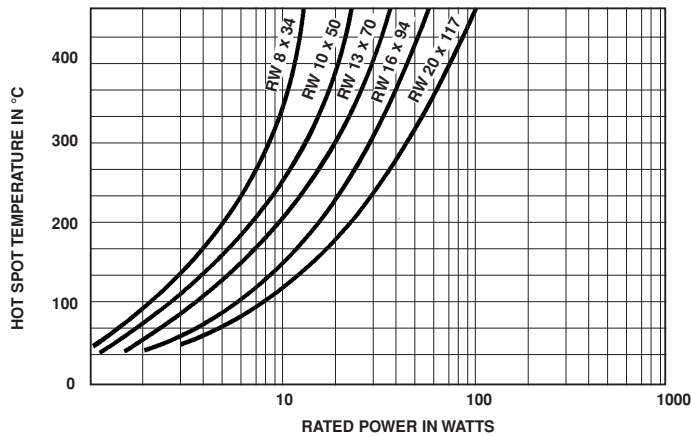
For high frequencies, low self induction resistors are available with special windings.
RWNI designation.

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	4.7Ω 100Ω	4.7Ω 220Ω	4.7Ω 620Ω	10Ω 1.2kΩ	10Ω 2.2kΩ

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 x 117	NI		AN	68Ω	$\pm 5\%$
MODEL	STYLE	NON-INDUCTIVE BOBINAGE	SPECIAL DESIGN	CONNECTIONS	OHMIC VALUE	TOLERANCE
		Optional	Optional		Custom items are subject to extra-charge and min. order. Please see price list.	