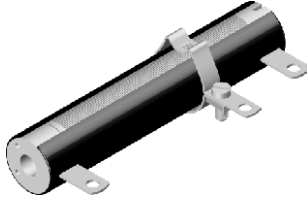


## Vitreous Wirewound Resistors



### FEATURES

- All welded construction
- Ceramic core
- Models acc. MIL-R-26 available
- Complete vitreous coating for perfect humidity protection
- Available in adjustable = "E" or non inductive design = "Ni"
- TCR 100...180 ppm/K - WM110 (Class 3)



STANDARD ELECTRICAL SPECIFICATIONS							
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING $P_{40^{\circ}\text{C}}$ W	LIMITING VOLTAGE V	RESISTANCE RANGE (1) $\Omega$	TOLERANCE $\pm \%$	E-SERIES	
RW010440	RW 10 x 44	18	400	1R0 - 3R9	10	E 12	
				4R3 - 36K	10	E 12	
				7R5 - 36K	5	E 24	
RW010441	RW 10 x 44 E	11		1R0 - 6R2	10	E 12	
				6R8 - 1K6	10	E 12	
				6R8 - 1K6	5	E 24	
RW010442	RW 10 x 44 Ni	11		6R2 - 2K4	10	E 12	
				6R2 - 2K4	5	E 24	
RW012250	RW 12 x 25	11		120	R39 - 3R3	10	E 12
			3R6 - 13K		10	E 12	
			33R - 13K		5	E 24	
RW012380	RW 12 x 38	15	350		1R0 - 3R6	10	E 12
					3R9 - 33K	10	E 12
					5R6 - 33K	5	E 24
RW012381	RW 12 x 38 E	14			-	-	-
					4R3 - 1K5	10	E 12
					5R6 - 1K5	5	E 24
RW012382	RW 12 x 38 Ni	14		5R6 - 2K2	10	E 12	
				5R6 - 2K2	5	E 24	
RW012510	RW 12 x 51	25		600	1R0 - 3R9	10	E 12
			4R3 - 56K		10	E 12	
			5R6 - 56K		5	E 24	
RW012511	RW 12 x 51 E	17	1R0 - 6R2		10	E 12	
			6R8 - 2K4		10	E 12	
			6R8 - 2K4		5	E 24	
RW012512	RW 12 x 51 Ni	17	9R1 - 3K6		10	E 12	
			9R1 - 3K6		5	E 24	

### Note

(1) Values in the first line of 10 % tolerance are produced with corrugated ribbon.



<b>STANDARD ELECTRICAL SPECIFICATIONS</b>							
<b>GLOBAL MODEL</b>	<b>HISTORICAL MODEL</b>	<b>POWER RATING <math>P_{40\text{ }^\circ\text{C}}</math> W</b>	<b>LIMITING VOLTAGE V</b>	<b>RESISTANCE RANGE <sup>(1)</sup> <math>\Omega</math></b>	<b>TOLERANCE <math>\pm</math> %</b>	<b>E-SERIES</b>	
RW012760	RW 12 x 76	45	1000	2R0 - 7R5	10	E 12	
				8R2 - 91K	10	E 12	
				8R2 - 91K	5	E 24	
RW012761	RW 12 x 76 E	27		2R0 - 12R	10	E 12	
				13R - 4K3	10	E 12	
				13R - 4K3	5	E 24	
RW012762	RW 12 x 76 Ni	27		16R - 6K2	10	E 12	
				16R - 6K2	5	E 24	
RW020760	RW 20 x 76	70		1000	1R0 - 11R	10	E 12
			12R - 75K		10	E 12	
			12R - 75K		5	E 24	
RW020761	RW 20 x 76 E	42	1R0 - 18R		10	E 12	
			20R - 6K8		10	E 12	
			20R - 6K8		5	E 24	
RW020762	RW 20 x 76 Ni	42	24R - 10K		10	E 12	
			24R - 10K		5	E 24	
RW201020	RW 20 x 102	90	1400		3R - 16R	10	E 12
				18R - 110K	10	E 12	
				18R - 110K	5	E 24	
RW201021	RW 20 x 102 E	55		3R - 27R	10	E 12	
				30R - 10K	10	E 12	
				30R - 10K	5	E 24	
RW201022	RW 20 x 102 Ni	55		36R - 15K	10	E 12	
				36R - 15K	5	E 24	
RW301020	RW 30 x 102	130		1600	2R7 - 22R	10	E 12
			24R - 160K		10	E 12	
			24R - 160K		5	E 24	
RW301021	RW 30 x 102 E	80	2R7 - 22R		10	E 12	
			43R - 15K		10	E 12	
			43R - 15K		5	E 24	
RW301520	RW 30 x 152	220	2500		4R7 - 30R	10	E 12
					33R - 200K	10	E 12
					33R - 200K	5	E 24
RW301521	RW 30 x 152 E	130		4R7 - 30R	10	E 12	
				75R - 24K	10	E 12	
				75R - 24K	5	E 24	

**Note**

<sup>(1)</sup> Values in the first line of 10 % tolerance are produced with corrugated ribbon.

STANDARD ELECTRICAL SPECIFICATIONS						
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING $P_{40^{\circ}\text{C}}$ W	LIMITING VOLTAGE V	RESISTANCE RANGE <sup>(1)</sup> $\Omega$	TOLERANCE $\pm$ %	E-SERIES
RW302030	RW 30 x 203	300	3600	6R8 - 43R	10	E 12
				47R - 270K	10	E 12
				47R - 270K	5	E 24
RW302031	RW 30 x 203 E	180	3600	6R8 - 43R	10	E 12
				100R - 36K	10	E 12
				100R - 36K	5	E 24
RW302670	RW 30 x 267	400	5000	8R2 - 68R	10	E 12
				75R - 390K	10	E 12
				75R - 390K	5	E 24
RW302671	RW 30 x 267 E	240	5000	8R2 - 68R	10	E 12
				150R - 47K	10	E 12
				150R - 47K	5	E 24
RW303050	RW 30 x 305	480	6000	10R - 68R	10	E 12
				75R - 300K	10	E 12
				75R - 300K	5	E 24
RW303051	RW 30 x 305 E	290	6000	10R - 68R	10	E 12
				160R - 56K	10	E 12
				160R - 56K	5	E 24
RW000290 <sup>(2)</sup>	RW 29	11	400	7R5 - 3K3	5	E 24
RW000300 <sup>(2)</sup>	RW 30	11	120	33R - 1K1	5	E 24
RW000310 <sup>(2)</sup>	RW 31	14	350	5R6 - 3K	5	E 24
RW000320 <sup>(2)</sup>	RW 32	17	600	5R6 - 4K7	5	E 24
RW000330 <sup>(2)</sup>	RW 33	26	1000	8R2 - 8K2	5	E 24
RW000350 <sup>(2)</sup>	RW 35	55	1400	18R - 20K	5	E 24
RW000360 <sup>(2)</sup>	RW 36	78	1600	24R - 30K	5	E 24
RW000370 <sup>(2)</sup>	RW 37	113	2500	33R - 47K	5	E 24
RW000380 <sup>(2)</sup>	RW 38	159	3600	47R - 68K	5	E 24
RW000470 <sup>(2)</sup>	RW 47	210	5000	75R - 91K	5	E 24

**Notes**

<sup>(1)</sup> Values in the first line of 10 % tolerance are produced with corrugated ribbon.

<sup>(2)</sup> Model according to MIL-R-26.



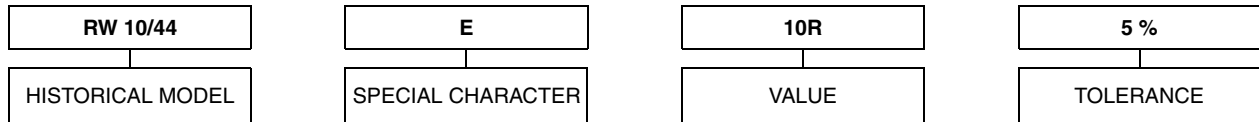
**GLOBAL PART NUMBER INFORMATION**

New Global Part Numbering: RW0104411009JLX000 (preferred part number format)

R W 0 1 0 4 4 1 1 0 0 9 J L X 0 0 0

MODEL	SIZE	SPECIAL CHARACTER	VALUE	TOLERANCE	PACKAGING	SPECIAL
RW	01044 = 10/44 01225 = 12/25 01238 = 12/38 01251 = 12/51 01276 = 12/76 02076 = 20/76 20102 = 20/102 30102 = 30/102 30152 = 30/152 30203 = 30/203 30267 = 30/267 30305 = 30/305 00029 = 29 00030 = 30 00031 = 31 00032 = 32 00033 = 33 00035 = 35 00036 = 36 00037 = 37 00038 = 38 00047 = 47	0 = Neutral 1 = E 2 = NI 7 = FST C = E FST H = NI FST Z = Value overflow (BV)  (Note: NI is also known as SWI)	<b>3 digit value</b> <b>1 digit multiplier</b> <b>MULTIPLIER</b> 7 = $\times 10^{-3}$ 8 = $\times 10^{-2}$ 9 = $\times 10^{-1}$ 0 = $\times 10^0$ 1 = $\times 10^1$ 2 = $\times 10^2$ 3 = $\times 10^3$ 4 = $\times 10^4$	J = $\pm 5.0\%$ K = $\pm 10.0\%$	(see Packaging table)	The 5 digit BV number will be encoded using a 36 character code. This code contains numbers 0...9 and letters A...Z (36 characters total) and allows to encode at least 46 655 five digit BV numbers. <b>000 = Standard</b>

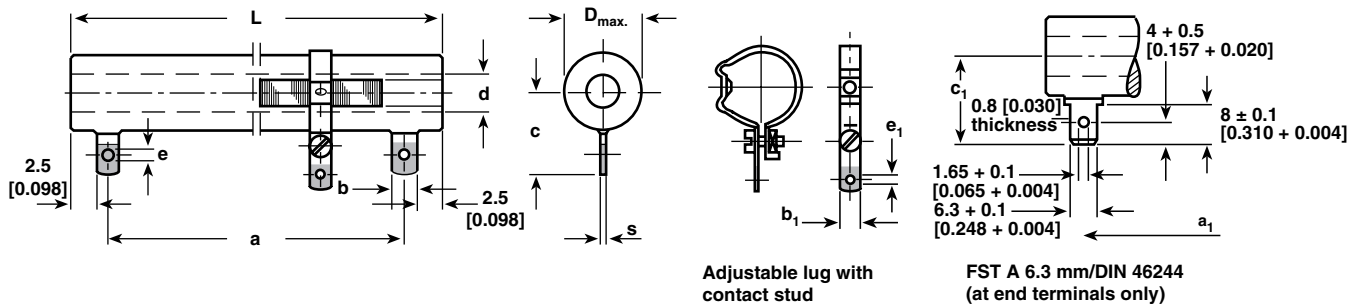
Historical Part Number Example: RW 10/44 E 10R 5% (will continue to be accepted)



**PACKAGING TABLE**

SAP	DESCRIPTION	TYPE
LX	Loose pack, without quantity	all
ZX	Special pack (with BV #), without quantity  <b>Note:</b> LX = B29 on Dale legacy ZX = S51 on Dale legacy	all

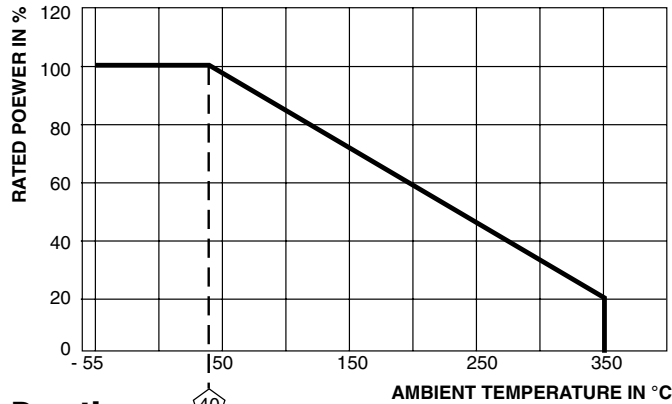
**DIMENSIONS** in millimeters [inches]



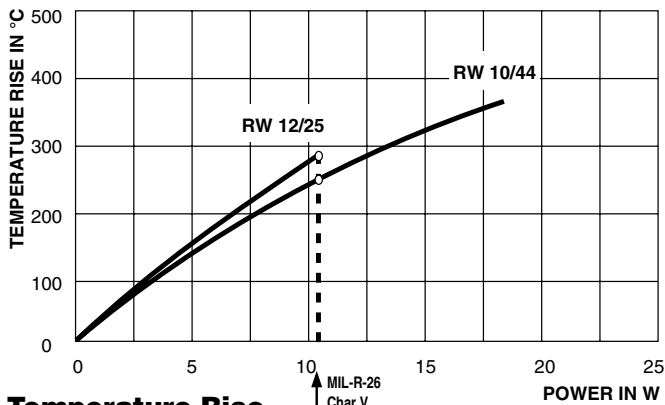
MODEL		DIMENSIONS in millimeters [inches]					
		RW 10/44 RW 10/44 E RW 10/44 Ni RW 29 <sup>(2)</sup>	RW 12/25  RW 30 <sup>(2)</sup>	RW 12/38 RW 12/38 E RW 12/38 Ni RW 31 <sup>(2)</sup>	RW 12/51 RW 12/51 E RW 12/51 Ni RW 32 <sup>(2)</sup>	RW 12/76 RW 12/76 E RW 12/76 Ni RW 33 <sup>(2)</sup>	RW 20/76 RW 20/76 E RW 20/76 Ni
MM	D <sub>max.</sub> <sup>(1)</sup>	12.7 (15.7) [0.5 (0.618)]	15.1 (18.1) [0.595 (0.713)]	15.1 (18.1) [0.595 (0.713)]	15.1 (18.1) [0.595 (0.713)]	15.1 (18.1) [0.595 (0.713)]	23 (26) [0.906 (1.024)]
	L ± 1.6 mm	44.4 [1.748]	25.4 [1.000]	38.1 [1.500]	50.8 [2.000]	76.2 [3.000]	76.2 [3.000]
	a	33.4 [1.315]	14.4 [0.570]	27.1 [1.070]	39.8 [1.570]	65.2 [2.570]	63.2 [2.490]
	a <sub>1</sub>	31.4 [1.236]	-	25.1 [0.990]	37.8 [1.490]	63.2 [2.490]	63.2 [2.490]
	b	6 [0.236]	6 [0.240]	6 [0.240]	6 [0.240]	6 [0.240]	8 [0.310]
	b <sub>1</sub>	5 [0.197]	-	5 [0.200]	5 [0.200]	5 [0.200]	5 [0.200]
	c	16.5 [0.650]	17.5 [0.690]	17.5 [0.690]	17.5 [0.690]	17.5 [0.690]	22 [0.870]
	c <sub>1</sub>	18.5 [0.728]	-	19 [0.750]	19 [0.750]	19 [0.750]	23 [0.910]
	d	4.5 [0.177]	5.5 [0.220]	5.5 [0.220]	5.5 [0.220]	5.5 [0.220]	12 [0.470]
	e	3.2 [0.126]	3.2 [0.130]	3.2 [0.130]	3.2 [0.130]	3.2 [0.130]	4.2 [0.170]
	e <sub>1</sub>	2.8 [0.110]	-	3.2 [0.130]	3.2 [0.130]	3.2 [0.130]	3.2 [0.130]
	s	0.6 [0.024]	0.6 [0.020]	0.6 [0.020]	0.6 [0.020]	0.6 [0.020]	0.8 [0.030]
	Weight (g)	10	10	10	15	15	30
MODEL		RW 20/102 RW 20/102 E RW 20/102 Ni RW 35 <sup>(2)</sup>	RW 30/102 RW 30/102 E  RW 36 <sup>(2)</sup>	RW 30/152 RW 30/152 E  RW 37 <sup>(2)</sup>	RW 30/203 RW 30/203  RW 38 <sup>(2)</sup>	RW 30/267 RW 30/267 E  RW 47 <sup>(2)</sup>	RW 30/305 RW 30/305 E
MM	D <sub>max.</sub> <sup>(1)</sup>	23 (26) [0.906 (1.024)]	33.3 (36.3) [1.310 (1.430)]	33.3 (36.3) [1.310 (1.430)]	33.3 (36.3) [1.310 (1.430)]	33.3 (36.3) [1.310 (1.430)]	33.3 (36.3) [1.310 (1.430)]
	L ± 1.6 mm	101.6 [4.000]	101.6 [4.000]	152.4 [6.000]	203.2 [8.000]	266.7 [10.50]	304.8 [12.00]
	a	88.6 [3.490]	88.6 [3.490]	139.4 [5.490]	190.2 [7.490]	253.7 [9.990]	291.8 [11.49]
	a <sub>1</sub>	88.6 [3.490]	88.6 [3.490]	139.4 [5.490]	190.2 [7.490]	253.7 [9.990]	291.8 [11.49]
	b	8 [0.310]	8 [0.310]	8 [0.310]	8 [0.310]	8 [0.310]	8 [0.310]
	b <sub>1</sub>	5 [0.200]	8 [0.310]	8 [0.310]	8 [0.310]	8 [0.310]	8 [0.310]
	c	22 [0.870]	31 [1.220]	31 [1.220]	31 [1.220]	31 [1.220]	31 [1.220]
	c <sub>1</sub>	23 [0.910]	27 [1.060]	27 [1.060]	27 [1.060]	27 [1.060]	27 [1.060]
	d	12 [0.470]	18.5 [0.730]	18.5 [0.730]	18.5 [0.730]	18.5 [0.730]	18.5 [0.730]
	e	4.2 [0.170]	4.2 [0.170]	4.2 [0.170]	4.2 [0.170]	4.2 [0.170]	4.2 [0.170]
	e <sub>1</sub>	3.2 [0.130]	4.2 [0.170]	4.2 [0.170]	4.2 [0.170]	4.2 [0.170]	4.2 [0.170]
	s	0.8 [0.030]	0.8 [0.030]	0.8 [0.030]	0.8 [0.030]	0.8 [0.030]	0.8 [0.030]
	Weight (g)	62	136	200	260	330	430

**Notes**

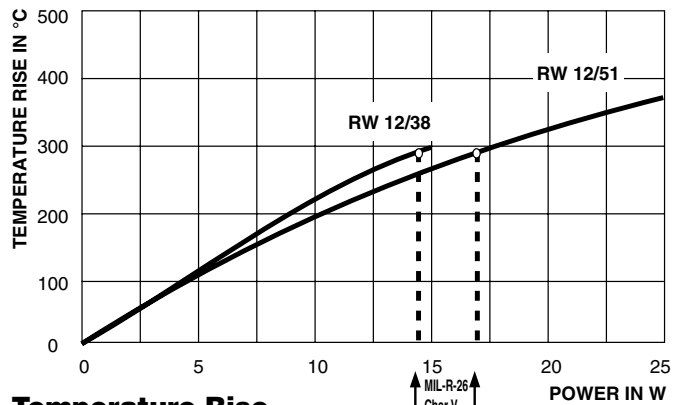
<sup>(1)</sup> Numbers in (parenthesis) represent the Dimension D<sub>max.</sub> for resistor produced with corrugated ribbon.  
<sup>(2)</sup> Model according to MIL-R-26.



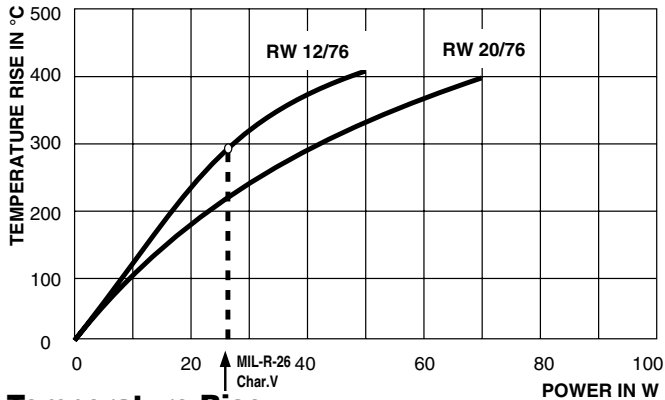
**Derating**



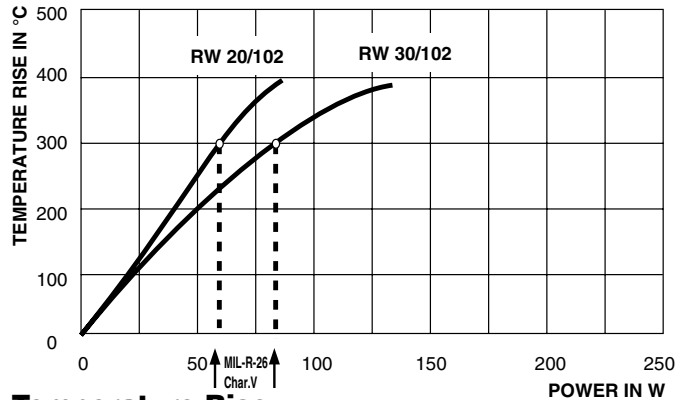
**Temperature Rise**



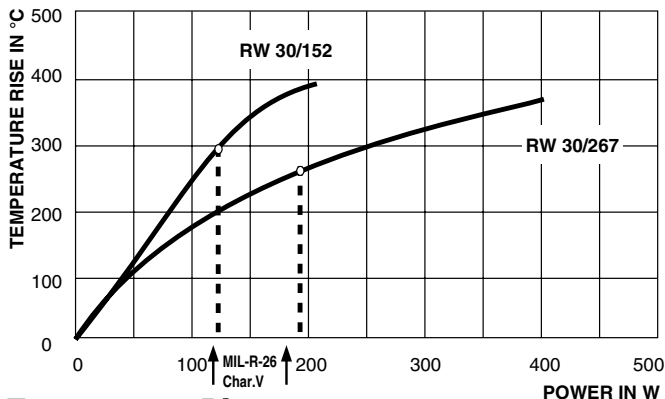
**Temperature Rise**



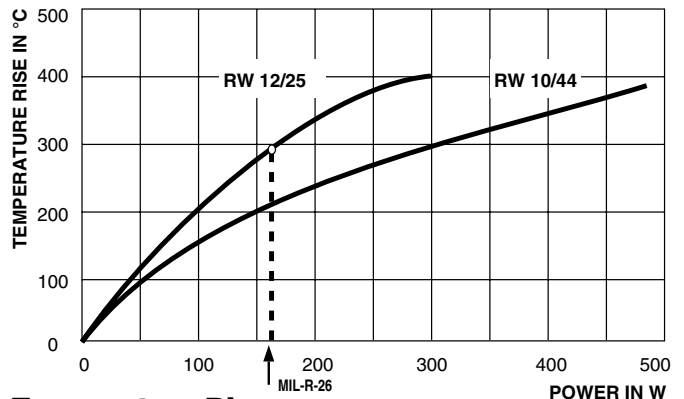
**Temperature Rise**



**Temperature Rise**



**Temperature Rise**



**Temperature Rise**



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