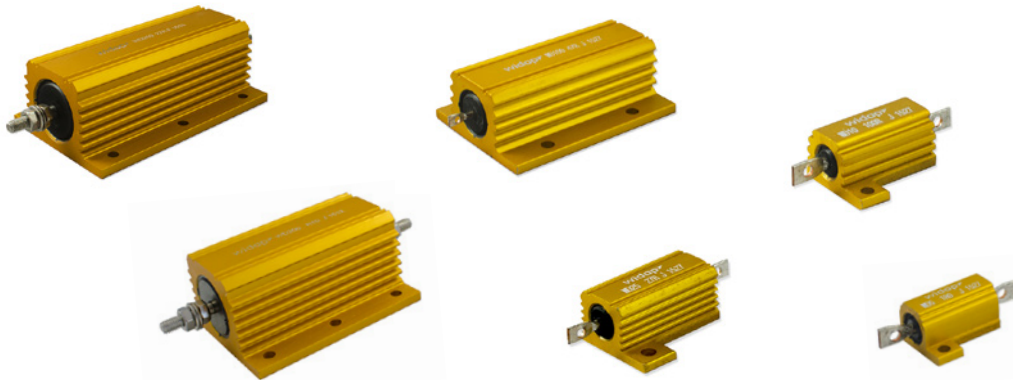


# Aluminium housed wire-wound resistors

## Series WD



### General description

The WD style is a range of high quality, high stability Aluminium housed power resistors designed for direct heat sink attachment. A wide range of resistance values is available in the 5 to 300W power ratings. Design of higher wattage resistors for special applications can be done with ease.

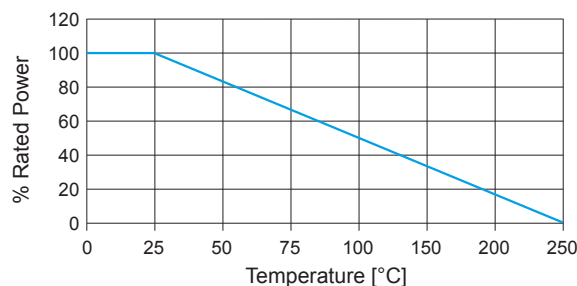
### Features

- Excellent heat transfers and small dimensions
- Good electrical stability, reliability and mechanically very rigid
- Non inductive version available
- Values from R01 to 150 K
- Custom terminations, mounting arrangements possible
- RoHS compliant

### General series characteristics

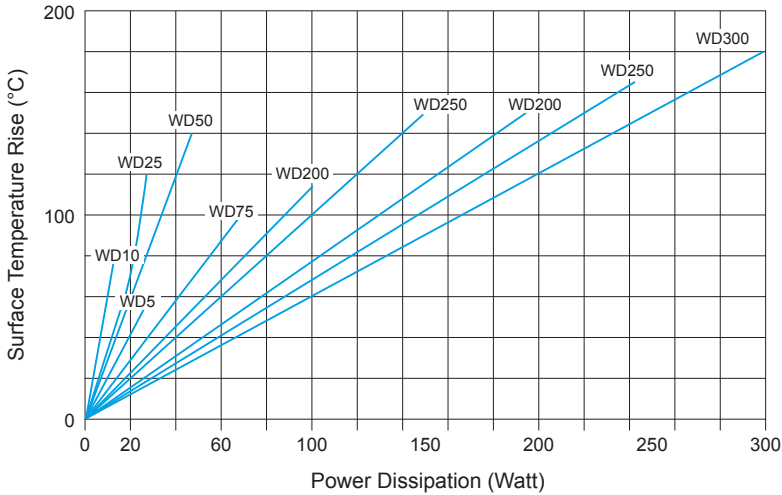
Characteristic	Condition	Compliance
Tolerance (Other tolerance available on request)	For values less than 1 $\Omega$ For values greater than 1 $\Omega$	$\pm 5\%$ $\pm 0.25$ to $\pm 5\%$
Temperature co-efficient (Lower TCR available on request)	For values less than 100 $\Omega$ For values greater than 100 $\Omega$	60 ppm / $^{\circ}\text{C}$ 30 ppm / $^{\circ}\text{C}$
Insulation resistance	Dry/Normal	10 G $\Omega$ min
Change in resistance – short time overload – when storage	10 x rated voltage for 5 sec After 3 years	$\pm 0.5\%$ $< \pm 1\%$
Operating temperature	From -55 $^{\circ}\text{C}$ to 250 $^{\circ}\text{C}$	

### Power derating

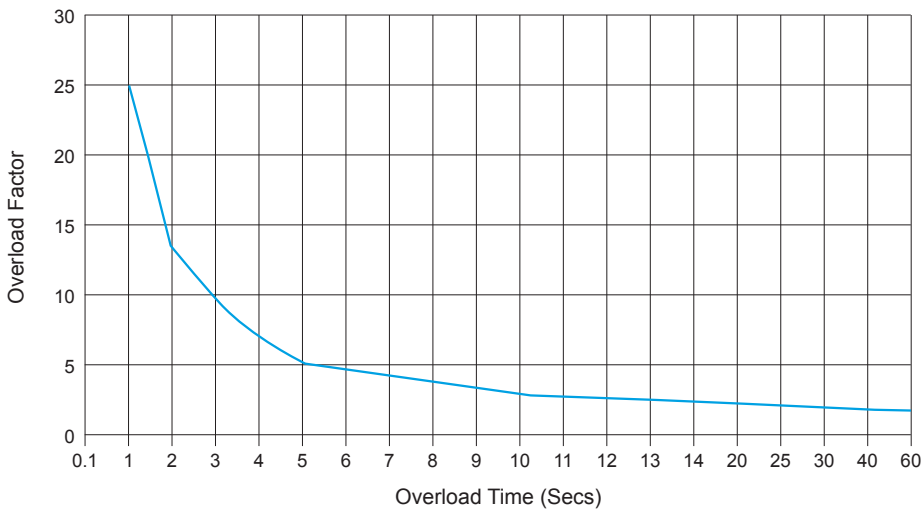


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### Temperature Profile



### Power Overload



### Versions

WDXX	Standard
WDNXX	Non-Inductive Version
WDXXM	Connection with plug (WD25-WD150 only)
WDXXE4	Connection with bolt M4 (WD100 and WD150)

### Ordering example

#### Standard versions

WD\_Type\_version\_ohmvalue\_tolerance  
WD25 27R 1%(F)

#### Optional versions

WD25M 27R 1%(F)  
WDN25 33R 1%(F)

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# Aluminium housed wire-wound resistors

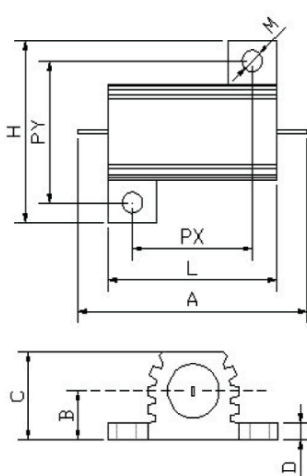
## Series WD

### Electrical specifications

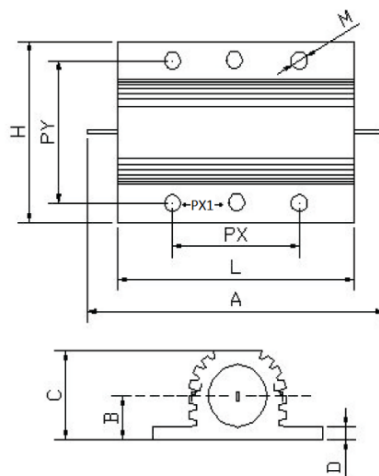
Series	Power rating on standard heat sink @ 25 °C	Power rating with no heat sink @ 25 °C	Resistance range	Limiting element voltage (DC / AC rms)	Dielectric strength (AC peak)	Weight approx. (g)	Standard heat sink	
							Area (cm <sup>2</sup> )	Thickness (mm)
WD5	10	5	R10 - 10K	160	1'400	5	400	1
WD10	15	8	R10 - 15K	260	1'400	7	400	1
WD25	25	12.5	R01 - 36K	550	2'500	15	550	1
WD50	50	20	R01 - 86K	1'250	2'500	30	550	1
WD75	75	45	R10 - 68K	1'400	5'000	85	1'000	3
WD100	100	50	R10 - 100K	1'900	5'000	115	1'000	3
WD150	150	55	R10 - 100K	2'500	5'000	175	1'000	3
WD200	200	50	R10 - 50K	1'900	5'000	475	3'750	3
WD250	250	60	R10 - 65K	2'200	5'000	600	4'800	3
WD300	300	75	R10 - 75K	2'500	5'000	700	5'800	3

### Mechanical specifications

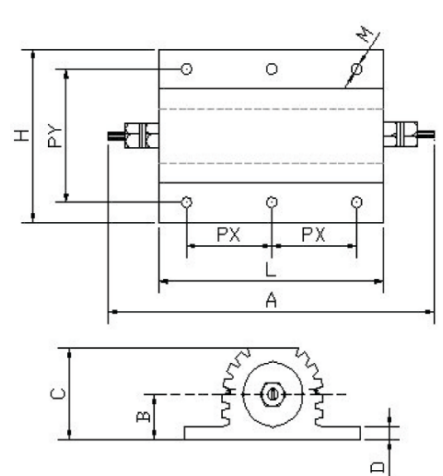
Series	L ± 0.5	A max.	H	PX ± 0.3	PX1	PY ± 0.3	M ± 0.5	B max.	C max.	D
WD5	16.8	31	17	11.3	-	12.4	2.4	4.5	9	2.5
WD10	20.1	36.5	21	14.3	-	15.9	2.4	5.5	11	2.5
WD25	27.3	51.8	28	18.3	-	19.8	3.2	7.5	15	3
WD50	50.1	72.5	30	39.7	-	21.4	3.2	8.5	17	3
WD75	48.9	71	48	29	-	37.0	4.4	12	26	4
WD100	65.4	87.5	48	35	-	37.0	4.4	12	26	4
WD150	97	122	48	29	29	37.0	4.4	12	26	4
WD200	89	143	73	35	-	57.2	5.1	20.5	45	5.5
WD250	114	163	73	44.5	-	57.2	5.1	20.5	45	5.5
WD300	127	180	73	52	-	59.0	6.6	20.5	45	5.5



**WD5-50**



**WD75-150**



**WD200-300**

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