

# Flame Proof Ribbon Wire Wound Fixed Resistors

## RGR-Type (RoHS-compliant products)

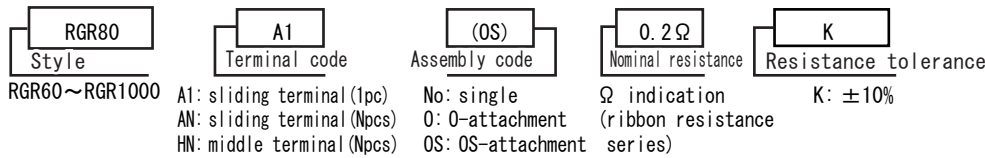
### Introduction

Resistance wire itself plays the role of fins, ensuring good heat dissipation and making the resistor ideal for low resistance and high power applications.

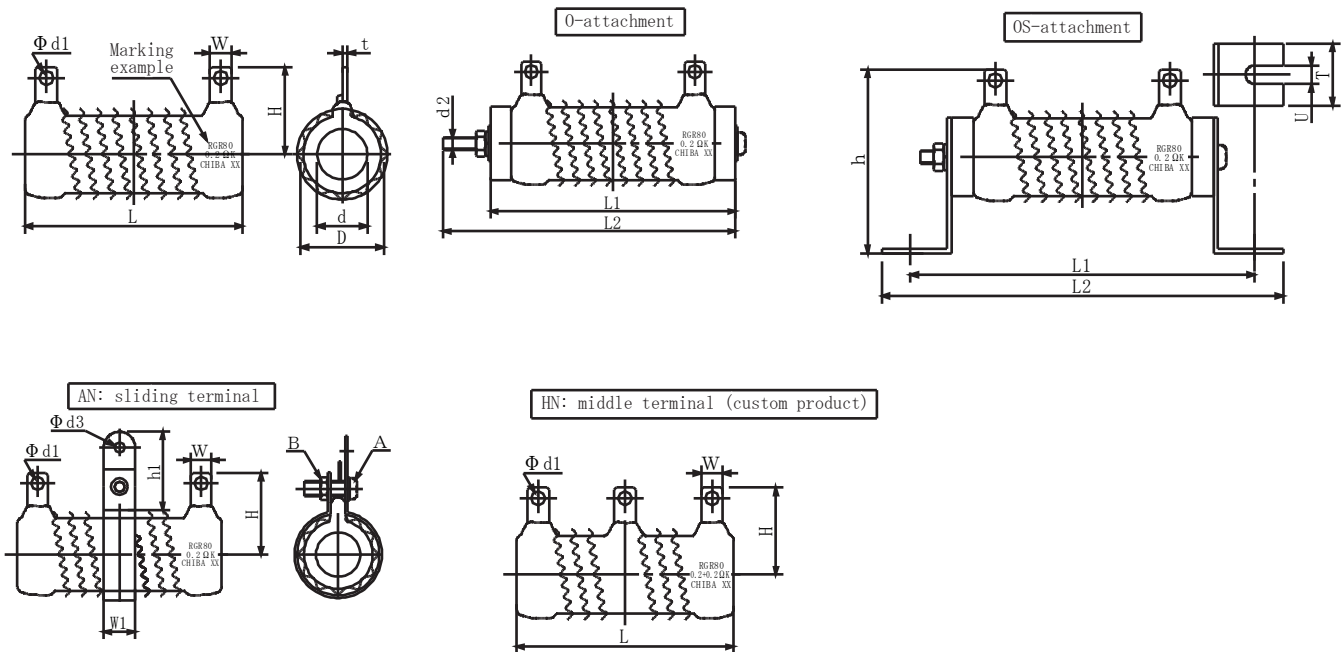
### Characteristic

Test items	Test method	Specified value
Resistance temperature charact	Normal – 125°C	<20Ω:±400ppm/°C ≥20Ω:±260ppm/°C
Short-time overload	10 x rated power for 5 sec.	±(2%+0.05Ω)
Insulation resistance	DC 500V megger	20MΩ or higher
Withstanding voltage	AC2000V for single and S attachment AC3000V for OS and O attachment	±(0.1%+0.05Ω) No breakdown
Terminal strength	44N for 30 sec.	No mechanical damage
Moisture load life	40°C 90-95% 1/10 x rated power for 500 hrs.	±(3%+0.05Ω)
Rated load	Rated voltage for 30 min.	350°C or lower ±(0.5%+0.05Ω)
Load life	Rated power for 500 hrs. 1.5 hrs. ON – 0.5 hrs OFF	±(5%+0.05Ω)
Heat resistance	350°C for 2 hrs.	No mechanical damage
Thermal shock	Rated power for 30 min. -55°C for 15 min.	±(2%+0.05Ω)

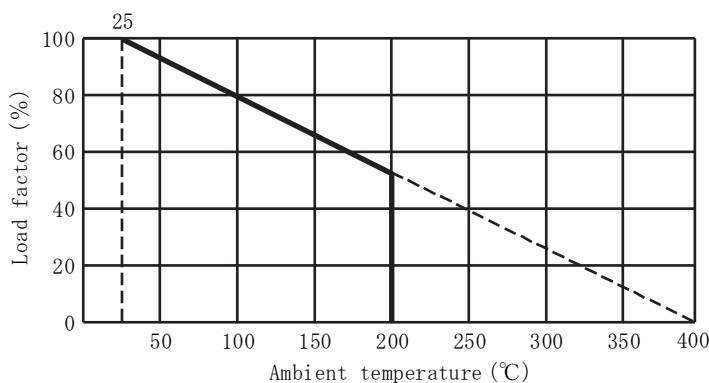
### Type descriptions



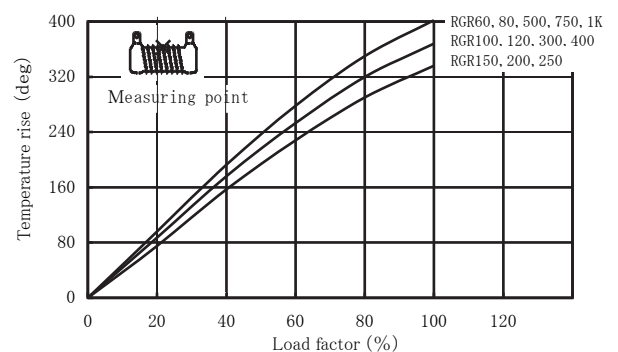
(\* All types except A1 are customized. Please consult the manufacturer.



### Load derating curve



### Temperature rise curve (reference)



## ■ Dimensions & Resistance range

Style	Power rating (W)	Resistance Range ( $\Omega$ )	Dimensions (mm)										
			L	D	H	d	W $\pm 0.5$	d1	t	d2	h	U	T
RGR60	90	0.02~3	90 $\pm$ 1.5	38MAX.	37 $\pm$ 3	16 $\pm$ 1.0	10	5.2 $\pm$ 0.2	1.2	M4	62	6 $\pm$ 0.3	27 $\pm$ 0.3
RGR80	120	0.02~4	115 $\pm$ 1.5	"	"	"	"	"	"	"	"	"	"
RGR100	150	0.03~6	140 $\pm$ 2.0	"	"	"	"	"	"	"	"	"	"
RGR120	180	0.03~8	165 $\pm$ 2.0	"	"	"	"	"	"	"	"	"	"
RGR150	225	0.04~8	195 $\pm$ 2.0	"	"	"	"	"	"	"	"	"	"
RGR200	300	0.06~10	254 $\pm$ 2.0	"	"	"	"	"	"	"	"	"	"
RGR250	375	0.08~15	305 $\pm$ 2.0	"	"	"	"	"	"	"	"	"	"
RGR300	450	0.08~15	254 $\pm$ 2.0	52MAX.	44	25 $\pm$ 1.5	13	6.0 $\pm$ 0.5	2	—	84	10.0	40
RGR400	600	0.10~20	330 $\pm$ 2.0	"	"	"	"	"	"	—	"	"	"
RGR500	750	0.15~25	300 $\pm$ 2.0	72MAX.	49	30	"	"	"	—	99	"	58
RGR750	1000	0.15~30	300 $\pm$ 2.0	88MAX.	62	50	"	"	"	—	112	"	"
RGR1000	1300	0.20~40	300 $\pm$ 2.0	115MAX.	75	70	"	"	"	—	160	8.5	100

Style	O (*2)		OS		Sliding terminal			Screw	Nut	Weight (g) (*2)	Standard nominal resistance series
	L1	L2	L1	L2	W1 $\pm 0.5$	d3	h1	A	B		
RGR60	102	115	118	140	10	5.2	(25)	M4*15	1種	—	10
RGR80	127	140	143	165	"	"	"	"	"	140	15
RGR100	152	165	168	190	"	"	"	"	"	175	20
RGR120	177	190	193	215	"	"	"	"	"	200	25
RGR150	207	220	223	245	"	"	"	"	"	250	30
RGR200	266	280	282	304	"	"	"	"	"	300	40
RGR250	317	330	333	355	"	"	"	"	"	340	50
RGR300	—	—	304	334	15	0.6	(29)	M5*25	"	655	60
RGR400	—	—	380	410	"	"	"	"	"	850	80
RGR500	—	—	350	380	"	"	"	"	"	1100	
RGR750	—	—	358	388	"	"	"	"	"	1600	
RGR1000	—	—	389	440	"	"	"	"	"	3300	

(\*1) The weight is for resistors without assembly.

(\*2) The O-attachment cannot be used from RGR300 and above.