

Vitreous Wirewound Resistors with Corrugated Ribbon



FEATURES

- All welded construction
- High power rating up to 1000 W
- Corrugated ribbon construction aids rapid cooling
- Complete vitreous coating for perfect humidity protection
- Adjustable design available = "E"
- Material categorization: For definitions please see www.vishay.com/doc?99912



RoHS
COMPLIANT
HALOGEN
FREE

STANDARD ELECTRICAL SPECIFICATIONS						
MODEL	POWER RATING $P_{40^\circ\text{C}}$ W WM 50 WM 110	POWER RATING $P_{40^\circ\text{C}}$ W WM 10	RESISTANCE RANGE ⁽¹⁾ Ω TCR + 650 ppm/K to + 750 ppm/K WM 10	RESISTANCE RANGE ⁽¹⁾ Ω TCR - 10 ppm/K to - 80 ppm/K WM 50	RESISTANCE RANGE ⁽¹⁾ Ω TCR + 100 ppm/K to + 180 ppm/K WM 110	TOLERANCE \pm %
GBS 20/100 GBS 20/100 E	80 50	50	0.13 to 0.51	0.56 to 2.2	1.3 to 6.2	10, 5
GBS 20/165 GBS 20/165 E	160 100	100	0.27 to 1.0	1.1 to 4.7	2.4 to 12	10, 5
GBS 20/265 GBS 20/265 E	300 180	180	0.47 to 1.8	2.0 to 7.5	4.3 to 22	10, 5
GBS 30/100 GBS 30/100 E	150 90	90	0.10 to 0.43	0.47 to 3.3	1.0 to 8.2	10, 5
GBS 30/133 GBS 30/133 E	200 120	120	0.15 to 0.62	0.68 to 5.1	1.5 to 12	10, 5
GBS 30/165 GBS 30/165 E	250 150	150	0.20 to 0.91	1.0 to 6.8	2.0 to 16	10, 5
GBS 30/215 GBS 30/215 E	300 200	200	0.27 to 1.1	1.2 to 9.1	2.7 to 24	10, 5
GBS 30/265 GBS 30/265 E	375 250	250	0.30 to 1.3	1.5 to 11	3.9 to 27	10, 5
GBS 30/330 GBS 30/330 E	450 350	350	0.39 to 1.8	2.0 to 15	5.1 to 36	10, 5
GBS 45/370 GBS 45/370 E	750 550	550	0.75 to 3.0	3.3 to 24	8.2 to 56	10, 5
GBS 60/370 GBS 60/370 E	1000 700	700	0.91 to 3.9	4.3 to 33	10 to 75	10, 5

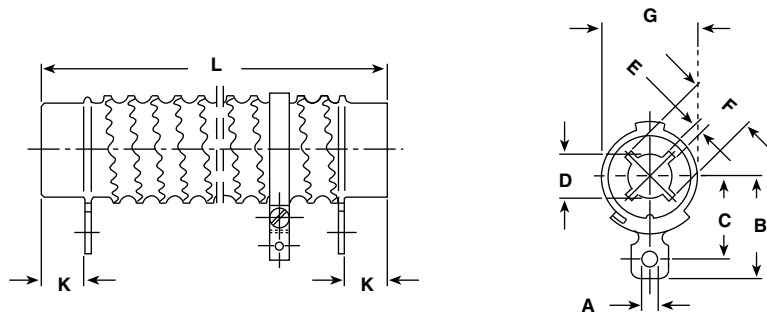
Notes

- For available "Mounting Accessories for Resistors", please see: www.vishay.com/doc?21015
- ⁽¹⁾ Resistance value to be selected for ± 10 % tolerance from E12 and for ± 5 % from E24

PART NUMBER AND PRODUCT DESCRIPTION																	
Part Number: GBS60AA03750KLX000																	
G	B	S	6	0	A	A	0	3	7	5	0	K	L	X	0	0	0
MODEL	VARIANT/ TERMINAL	TCR/MATERIAL		VALUE 2 digit value 1 digit multiplier MULTIPLIER	TOLERANCE CODE	PACKAGING CODE	SPECIAL										
GBS202S = GBS 20/100 GBS204L = GBS 20/165 GBS207D = GBS 20/265 GBS302S = GBS 30/100 GBS303P = GBS 30/133 GBS304L = GBS 30/165 GBS305Z = GBS 30/215 GBS307D = GBS 30/265 GBS3096 = GBS 30/330 GBS45AA = GBS 45/370 GBS60AA = GBS 60/370	0 = Neutral 1 = E Z = Value overflow (BV)	1 = - 10 ppm/K to - 80 ppm/K WM 50 Class 1 3 = 100 ppm/K to 180 ppm/K WM 110 Class 3 4 = 650 ppm/K to 750 ppm/K WM 10 5 = SWI	8 = *10 ⁻² 9 = *10 ⁻¹ 0 = *10 ⁰	J = ± 5.0 % K = ± 10.0 %	LX = Loose pack, without quantity ZX = Special pack (with BV #), without quantity	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. 000 = Standard											
Product Description: GBS60/370 110 75R 10 % LX																	
GBS60/370	110	75R		10 %	LX												
MODEL ⁽¹⁾	TCR/MATERIAL ⁽¹⁾	VALUE ⁽¹⁾		TOLERANCE CODE ⁽¹⁾	PACKAGING DESCRIPTION ⁽²⁾												

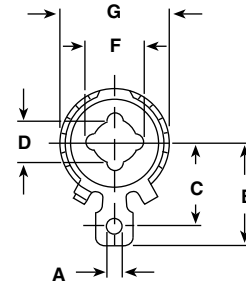
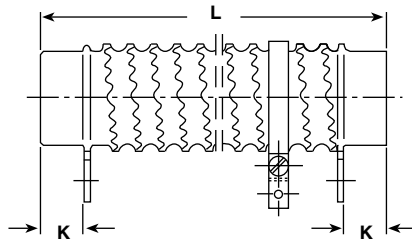
Notes

- (1) See "Part Number" above
 (2) See "Packaging Code" above

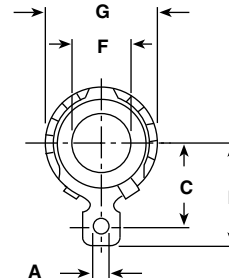
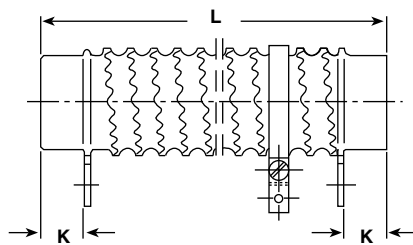
DIMENSIONS


GBS 20/...

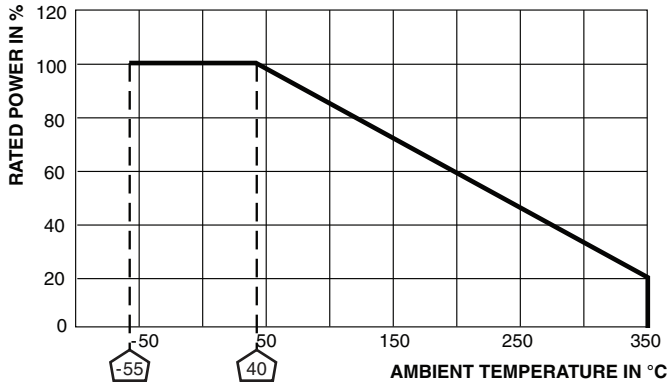
MODEL	DIMENSIONS in millimeters [inches]									MASS (g)
	L	K	A	B	C	D	E	F	G	
GBS 20/100 GBS 20/100 E	100 ± 2.5 [3.937 ± 0.098]	15 [0.591]	4.2 [0.165]	26.5 [1.043]	22 [0.866]	10 [0.394]	1.5 [0.059]	14 [0.551]	24 [0.945]	100
GBS 20/165 GBS 20/165 E	165 ± 4 [6.496 ± 0.157]	15 [0.591]	4.2 [0.165]	26.5 [1.043]	22 [0.866]	10 [0.394]	1.5 [0.059]	14 [0.551]	24 [0.945]	150
GBS 20/265 GBS 20/265 E	265 ± 6.6 [10.433 ± 0.260]	15 [0.591]	4.2 [0.165]	26.5 [1.043]	22 [0.866]	10 [0.394]	1.5 [0.059]	14 [0.551]	24 [0.945]	250

DIMENSIONS (continued)

GBS 30/...

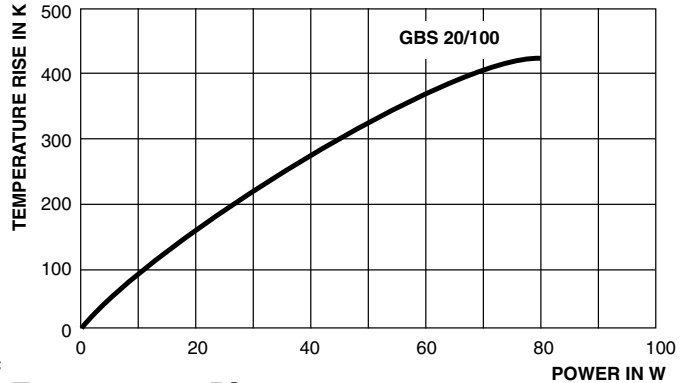
MODEL	DIMENSIONS in millimeters [inches]								MASS (g)
	L	K	A	B	C	D	F	G	
GBS 30/100 GBS 30/100 E	100 ± 2.5 [3.937 ± 0.098]	15 [0.591]	5.2 [0.205]	34 [1.339]	28 [1.102]	14 [0.551]	18.5 [0.728]	37 ± 1 [1.457 ± 0.039]	200
GBS 30/133 GBS 30/133 E	133 ± 3.3 [5.236 ± 0.130]	15 [0.591]	5.2 [0.205]	34 [1.339]	28 [1.102]	14 [0.551]	18.5 [0.728]	37 ± 1 [1.457 ± 0.039]	250
GBS 30/165 GBS 30/165 E	165 ± 4 [6.496 ± 0.157]	15 [0.591]	5.2 [0.205]	34 [1.339]	28 [1.102]	14 [0.551]	18.5 [0.728]	37 ± 1 [1.457 ± 0.039]	300
GBS 30/215 GBS 30/215 E	215 ± 5.4 [8.465 ± 0.213]	15 [0.591]	5.2 [0.205]	34 [1.339]	28 [1.102]	14 [0.551]	18.5 [0.728]	37 ± 1 [1.457 ± 0.039]	400
GBS 30/265 GBS 30/265 E	265 ± 6.6 [10.433 ± 0.260]	15 [0.591]	5.2 [0.205]	34 [1.339]	28 [1.102]	14 [0.551]	18.5 [0.728]	37 ± 1 [1.457 ± 0.039]	500
GBS 30/330 GBS 30/330 E	330 ± 8 [12.992 ± 0.315]	15 [0.591]	5.2 [0.205]	34 [1.339]	28 [1.102]	14 [0.551]	18.5 [0.728]	37 ± 1 [1.457 ± 0.039]	600



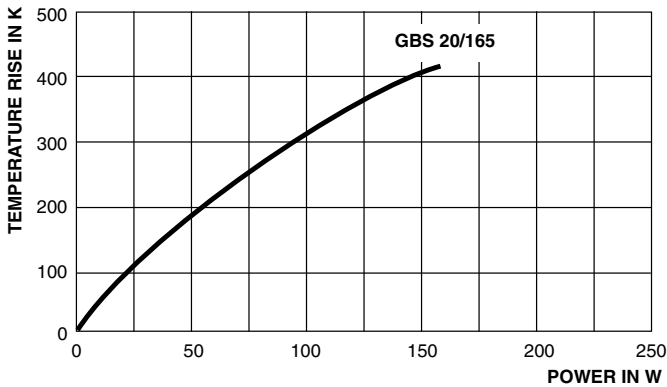
MODEL	DIMENSIONS in millimeters [inches]							MASS (g)
	L	K	A	B	C	F	G	
GBS 45/370 GBS 45/370 E	370 ± 9 [14.567 ± 0.354]	15 [0.591]	5.2 [0.205]	42.5 [1.673]	37 [1.457]	30 [1.181]	52 ± 1 [2.047 ± 0.039]	1000
GBS 60/370 GBS 60/370 E	370 ± 9 [14.567 ± 0.354]	15 [0.591]	5.2 [0.205]	51.5 [2.028]	45.5 [1.791]	45 [1.772]	67 ± 1 [2.638 ± 0.039]	1200



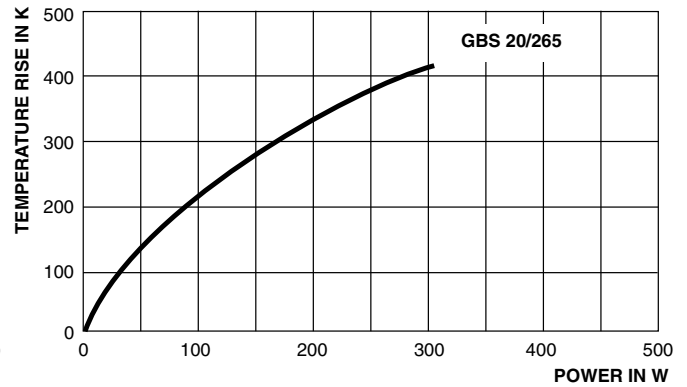
Derating



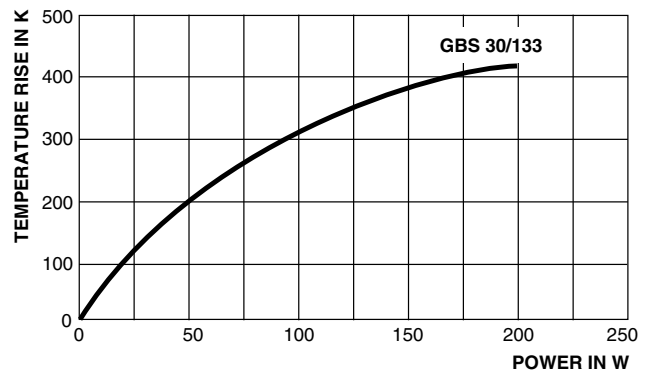
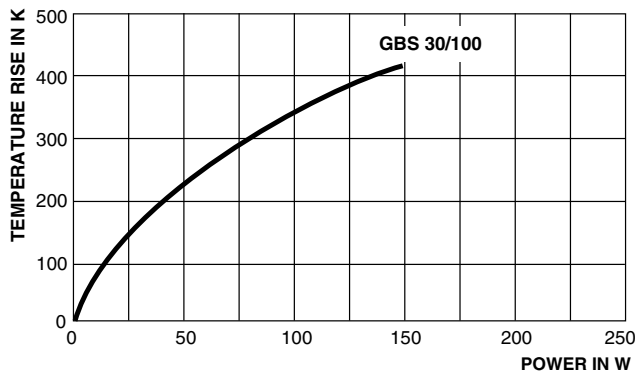
Temperature Rise

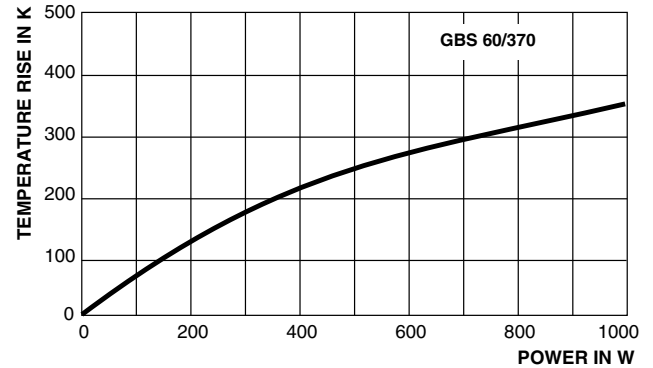
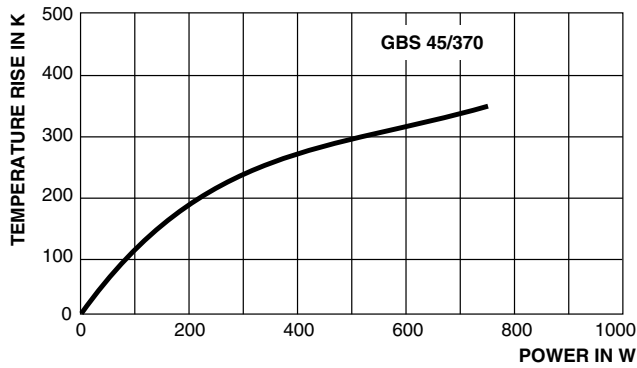
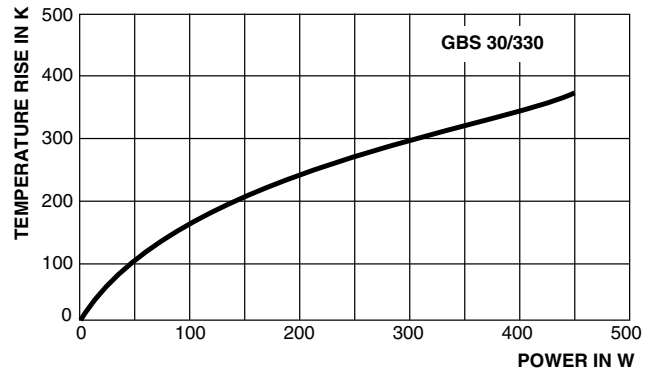
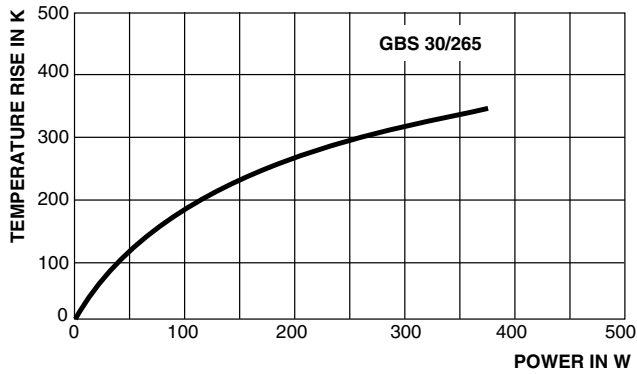
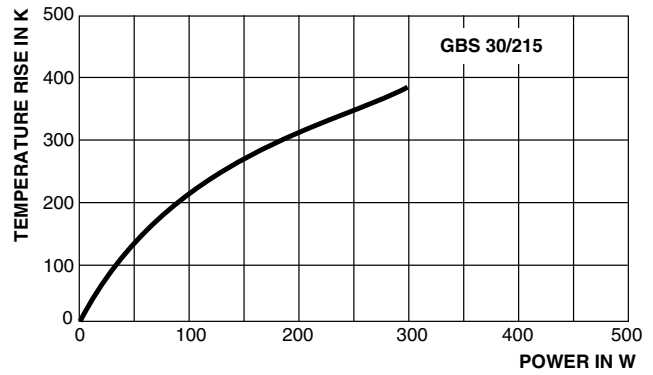
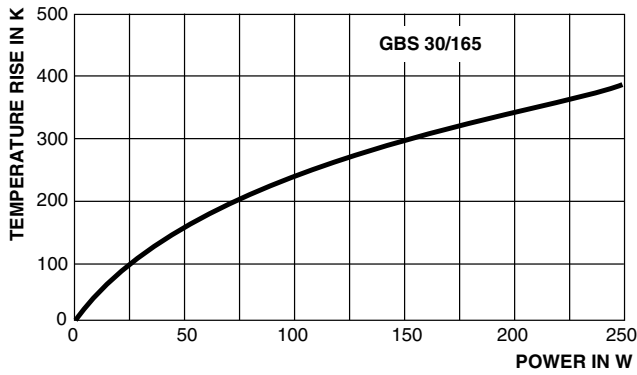


Temperature Rise



Temperature Rise







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