



SW Steel Worms

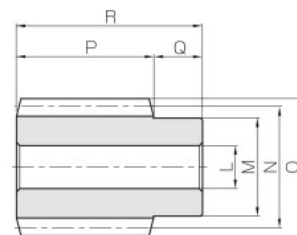
J Series

Module 1.5



Specifications	
Precision grade	KHK W 001 grade 4 *
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	(less than 194HB)
Surface treatment	Black oxide coating

* The precision grade of J Series products is equivalent to the value shown in the table.



W1

Catalog No.	Normal module	Number of starts	Lead angle	Hand thread	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width (R)	Hub width (L)
● J Series (Available-on-request)						LH7	M	N	O	P	Q	Q'
SW1.5-R1 ● SW1.5-R1J8 ● SW1.5-R1J10	m1.5	1	3°26'	R	W1 W1T W1K	8 8 10	20	25	28	30	10	—
SW1.5-R2 ● SW1.5-R2J8 ● SW1.5-R2J10		2	6°54'	R	W1 W1T W1K	8 8 10	20	25	28	30	10	—

[Caution on Product Characteristics] ① These worms produce axial thrust forces. See Page 362 for more details.

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 362) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.

② Gear tooth hardening of the worm reduces the precision (introduces errors in the lead and pressure angles). Avoid heat treating as it will create bad tooth contact causing abrasion of the wheel.



BG · CG

Bronze Worm Wheels & Gray Iron Worm Wheels

J Series

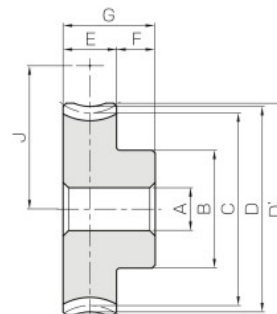
Module 1.5



Specifications	
Catalog No.	BG CG
Precision grade	KHK W 002 grade 4 *
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	CAC502 (formerly JIS PBC2) FC200 * *
Heat treatment	—
Tooth hardness	—

* The precision grade of J Series products is equivalent to the value shown in the table.
* * FC200's tensile strength (200N/mm²) is derived from test specimens and differs according to the product shape.

A _{H7}	Bore
B	Hub dia.
C	Pitch dia.
D	Throat dia.
D'	Outside dia.
E	Face width
F	Hub width
G	Total length
(H)	Web thickness
(I)	Web O.D.
J	Mounting distance



H1

NOTE 1 : Allowable torque based on worm speed (rpm)

Catalog No.	Reduction ratio	No. of teeth	Number of starts	Helix angle Hand thread	Shape	NOTE 1: Allowable torque based on worm speed (rpm)																Backlash (mm)	Weight (kg)
						A _{H7}	B	C	D	D'	E	F	G	J	Allowable torque (N·m) NOTE 1								
															30 rpm	100 rpm	300 rpm	600 rpm	900 rpm	1200 rpm			
BG1.5-20R1	20	20	1	3°26'	R H1	8	22	30.05	33	34.5	12	22	27.5	4.76	3.96	3.10	2.56	2.27	2.06	0.08~0.26	0.10		
BG1.5-20R2	10	20	2	6°54'		8	22	30.22	33	34.5	12	22	27.5	4.75	3.85	2.89	2.38	2.08	1.87		0.10		
BG1.5-30R1	30	30	1	3°26'		10	30	45.08	48	49.5	12	22	35	10.1	8.47	6.72	5.67	5.03	4.55		0.22		
BG1.5-30R2	15	30	2	6°54'		10	30	45.33	48	49.5	12	22	35	10.1	8.37	6.40	5.26	4.67	4.20		0.22		
BG1.5-40R1	40	40	1	3°26'		12	30	60.11	63	64.5	12	22	42.5	17.2	14.5	11.7	9.96	8.86	8.04		0.35		
BG1.5-50R1	50	50	1	3°26'		12	40	75.13	78	79.5	14	24	50	30.4	25.6	20.8	17.8	16.0	14.6		0.65		
CG1.5-30R1	30	30	1	3°26'		10	30	45.08	48	49.5	12	10	22	35	6.04	5.08	4.03	3.40	3.02		2.73	0.18	
CG1.5-40R1	40	40				12	30	60.11	63	64.5	12		22	42.5	10.3	8.71	7.01	5.98	5.31		4.83	0.28	
CG1.5-50R1	50	50				12	40	75.13	78	79.5	14		24	50	18.2	15.4	12.5	10.7	9.59		8.74	0.53	
CG1.5-60R1	60	60				12	40	90.16	93	94.5	14		24	57.5	25.5	21.6	17.6	15.1	13.7		12.4	0.73	
CG1.5-80R1	80	80				15	50	120.22	123	124.5	14		24	72.5	43.1	36.8	30.1	26.3	23.8		21.9	1.28	
CG1.5-100R1	100	100				15	50	150.27	153	154.5	14		24	87.5	64.4	55.6	45.8	40.1	36.4		33.6	1.93	

[Caution on Product Characteristics] ① Worm Wheels are profile shifted to create the proper center distance.

② The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see Page 358 for more details.

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 362) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.