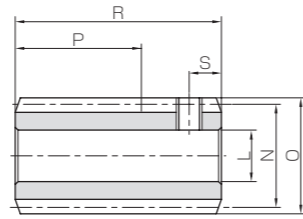




Specifications	
Precision grade	KHK W 001 grade 4
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	(less than 194HB)
Surface treatment	Black oxide coating



W2

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)
						L _{H8}	M					N	O	
KSW0.5-R1	m0.5	1	2°36'	R	W2	5	—	—	11	12	(10)	—	—	—
KSW0.5-R2		2	5°13'	R	W2	5	—	—	11	12	(10)	—	—	—
KSW0.8-R1	m0.8	1	3°17'	R	W2	6	—	—	14	15.6	(18)	—	—	—
KSW0.8-R2		2	6°34'	R	W2	6	—	—	14	15.6	(18)	—	—	—

- [Caution on Product Characteristics] ① For W2-shaped products, a set screw is included. When setting up the mating wheel, make sure no friction occurs within the set screw.
② These worms produce axial thrust forces. See Page 362 for more details.

Total length	Set Screw		Weight (kg)	Catalog No.
	R	S		
18	M3	3	0.010	KSW0.5-R1
18	M3	3	0.010	KSW0.5-R2
30	M4	5	0.029	KSW0.8-R1
30	M4	5	0.029	KSW0.8-R2

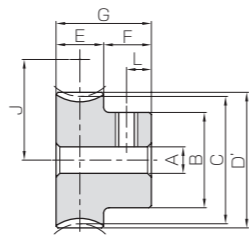
- [Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 362) when performing modifications and/or secondary operations for safety concerns.
② Gear tooth hardening of the worm reduces the precision (introduces errors in the lead and pressure angles). Avoid heat treating as it will create bad tooth contact causing abrasion of the wheel.

KBG
Bronze Worm Wheels

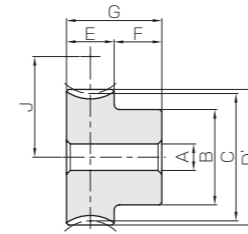
Bronze Worm Wheels



Specifications	
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)
Heat treatment	—
Tooth hardness	—



HAT



HA



Catalog No.	Reduction ratio	Normal module	No. of teeth	Number of starts	Helix angle	Hand thread	Shape	Bore		Hub dia.	Pitch dia.	Throat dia.	Outside dia.	Face width
								A _{H7}	B					
KBG0.5-20R1	20	m0.5	20	1	2°36'	R	HAT	4	9	10.01	—	11	5	
KBG0.5-20R2	10		20	2	5°13'	R	HAT	4	9	10.04	—	11	5	
KBG0.5-30R1	30		30	1	2°36'	R	HAT	4	12	15.02	—	16	5	
KBG0.5-30R2	15		30	2	5°13'	R	HAT	4	12	15.06	—	16	5	
KBG0.5-40R1	40		40	1	2°36'	R	HAT	5	15	20.02	—	21	5	
KBG0.5-50R1	50	m0.8	50	1	2°36'	R	HAT	5	20	25.03	—	26	5	
KBG0.5-60R1	60		60	1	2°36'	R	HAT	5	25	30.03	—	31	5	

Catalog No.	Reduction ratio	Normal module	No. of teeth	Number of starts	Helix angle	Hand thread	Shape	Bore		Hub dia.	Pitch dia.	Throat dia.	Outside dia.	Face width
								A _{H7}	B					
KBG0.8-20R1	20	m0.8	20	1	3°17'	R	HA	5	12	16.03	—	17.6	9	
KBG0.8-20R2	10		20	2	6°34'	R	HA	5	12	16.11	—	17.6	9	
KBG0.8-30R1	30		30	1	3°17'	R	HA	5	18	24.04	—	25.6	9	
KBG0.8-30R2	15		30	2	6°34'	R	HA	5	18	24.16	—	25.6	9	
KBG0.8-40R1	40		40	1	3°17'	R	HA	6	20	32.05	—	33.6	9	
KBG0.8-50R1	50	m0.8	50	1	3°17'	R	HA	8	25	40.06	—	41.6	9	
KBG0.8-60R1	60		60	1	3°17'	R	HA	8	25	48.08	—	49.6	9	

- [Caution on Product Characteristics] ① Worm Wheels are profile shifted to create the proper center distance.
② For products with a tapped hole, a set screw is included.
③ The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see Page 358 for more details.
④ If bore size is less than φ 4, the diameter tolerance is H8. If bore size is φ 5 or φ 6, and the hole length exceeds 3 times the diameter, the tolerance is also H8.

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

Hub width	Total length	Mounting distance	Set Screw		Allowable torque (N·m) NOTE 1						Backlash (mm)	Weight (kg)	Catalog No.
			Size	L	30 _{rpm}	100 _{rpm}	300 _{rpm}	600 _{rpm}	900 _{rpm}	1200 _{rpm}			
7	12	10.5	M3	3.5	0.27	0.23	0.19	0.15	0.14	0.13	0~0.16	0.0061	KBG0.5-20R1
7	12	10.5	M3	3.5	0.28	0.23	0.18	0.15	0.13	0.12	0~0.16	0.0061	KBG0.5-20R2
7	12	13	M3	3.5	0.58	0.50	0.41	0.34	0.30	0.28	0~0.16	0.014	KBG0.5-30R1
7	12	13	M3	3.5	0.59	0.49	0.39	0.32	0.29	0.26	0~0.16	0.014	KBG0.5-30R2
7	12	15.5	M4	3.5	0.99	0.85	0.71	0.60	0.54	0.50	0~0.16	0.023	KBG0.5-40R1
7	12	18	M4	3.5	1.50	1.28	1.08	0.92	0.83	0.77	0~0.16	0.039	KBG0.5-50R1
7	12	20.5	M4	3.5	2.10	1.80	1.52	1.31	1.19	1.09	0~0.16	0.059	KBG0.5-60R1

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

Hub width	Total length	Mounting distance	Allowable torque (N·m) NOTE 1						Backlash (mm)	Weight (kg)	Catalog No.
			30 _{rpm}	100 _{rpm}	300 _{rpm}	600 _{rpm}	900 _{rpm}	1200 _{rpm}			
9	18	15	1.05	0.88	0.71	0.58	0.52	0.48	0.04~0.22	0.023	KBG0.8-20R1
9	18	15	1.06	0.86	0.66	0.54	0.48	0.44	0.04~0.22	0.023	KBG0.8-20R2
9	18	19	2.23	1.89	1.53	1.29	1.15	1.06	0.04~0.22	0.055	KBG0.8-30R1
9	18	19	2.24	1.87	1.46	1.20	1.07	0.98	0.04~0.22	0.055	KBG0.8-30R2
9	18	23	3.81	3.24	2.67	2.26	2.02	1.87	0.04~0.22	0.087	KBG0.8-40R1
9	18	27	5.76	4.90	4.07	3.47	3.13	2.90	0.04~0.22	0.13	KBG0.8-50R1
9	18	31	8.06	6.88	5.73	4.90	4.46	4.12	0.04~0.22	0.18	KBG0.8-60R1

- [Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 362) when performing modifications and/or secondary operations for safety concerns.