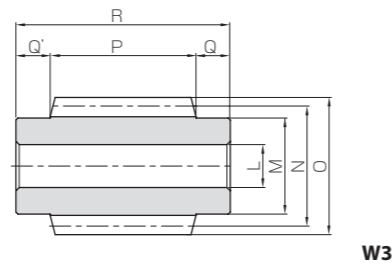




Specifications	
Precision grade	KHK W 001 grade 4
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	14° 30'
Material	S45C
Heat treatment	—
Tooth hardness	(less than 194HB)
Surface treatment	Black oxide coating



Catalog No.	Normal module	Number of starts	Lead angle	Hand thread	Shape	Bore		Pitch dia.	Outside dia.	Face width	Hub width (R)		Hub width (L)
						L _{H7}	M				O	P	
KSW5-R1	m5	1	4°06'	R	W3	25	56	70	80	85	20	20	20
KSW5-R2		2	8°13'	R	W3	25	56	70	80	85	20	20	
KSW6-R1	m6	1	4°18'	R	W3	30	64	80	92	100	25	25	25
KSW6-R2		2	8°38'	R	W3	30	64	80	92	100	25	25	

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

Total length	Set Screw		Weight (kg)	Catalog No.
	R	S		
125	—	—	2.86	KSW5-R1
125	—	—	2.86	KSW5-R2
150	—	—	4.38	KSW6-R1
150	—	—	4.38	KSW6-R2

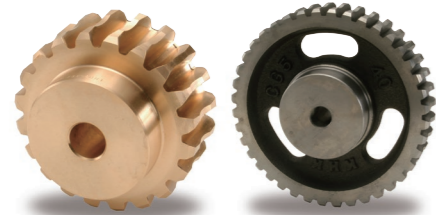
[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 362) when performing modifications and/or secondary operations for safety concerns.
 ② Gear tooth hardening of the worm reduces the precision (introduces errors in the lead and pressure angles). Avoid heat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

KBG · KCG Bronze Worm Wheels & Gray Iron Worm Wheels

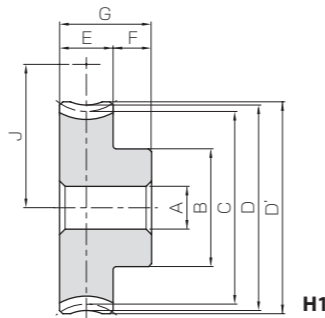
Module 5, 6

KBG · KCG

Bronze Worm Wheels & Gray Iron Worm Wheels



Specifications	
Catalog No.	KBG KCG
Precision grade	KHK W 002 grade 4
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	14° 30'
Material	CAC502 (formerly JIS PBC2) FC200 *
Heat treatment	—
Tooth hardness	—

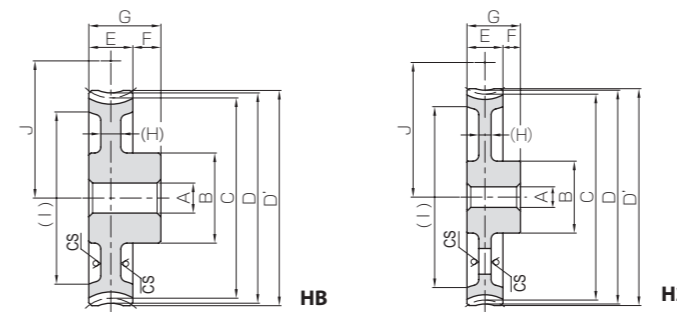


* FC200's tensile strength (200N/mm²) is derived from test specimens and differs according to the product shape.

Catalog No.	Reduction ratio	Normal module	No. of teeth	Number of starts	Helix angle	Hand thread	Shape	Bore		Pitch dia.	Throat dia.	Outside dia.	Face width
								A _{H7}	B				
KBG5-20R1	20	m5	20	1	4°06'	R	H1	22	75	100.26	110	113	45
KBG5-20R2	10		20	2	8°13'	R	H1	22	75	101.04	110	113	45
KBG6-20R1	20	m6	20	1	4°18'	R	H1	25	100	120.34	132	136	52
KBG6-20R2	10		20	2	8°38'	R	H1	25	100	121.38	132	136	52

Catalog No.	Reduction ratio	Normal module	No. of teeth	Number of starts	Helix angle	Hand thread	Shape	Bore		Pitch dia.	Throat dia.	Outside dia.	Face width
								A _{H7}	B				
KCG5-20R1	20	m5	20	1	4°06'	R	H1	22	75	100.26	110	113	45
KCG5-20R2	10		20	2	8°13'	R	H1	22	75	101.04	110	113	45
KCG5-30R1	30		30	1	4°06'	R	HB	22	75	150.38	160	163	45
KCG5-30R2	15		30	2	8°13'	R	HB	22	75	151.56	160	163	45
KCG5-40R1	40		40	1	4°06'	R	H2	22	90	200.51	210	213	45
KCG5-50R1	50	m5	50	1	4°06'	R	H2	22	90	250.61	260	263	45
KCG5-50R2	25		50	2	8°13'	R	H2	22	90	252.59	260	263	45
KCG5-60R1	60		60	1	4°06'	R	H2	22	100	300.77	310	313	45
KCG6-20R1	20	m6	20	1	4°18'	R	H1	25	100	120.34	132	136	52
KCG6-20R2	10		20	2	8°38'	R	H1	25	100	121.38	132	136	52
KCG6-30R1	30		30	1	4°18'	R	HB	25	100	180.51	192	196	52
KCG6-30R2	15		30	2	8°38'	R	HB	25	100	182.06	192	196	52
KCG6-40R1	40		40	1	4°18'	R	H2	25	100	240.68	252	256	52
KCG6-50R1	50	m6	50	1	4°18'	R	H2	25	100	300.85	312	316	52
KCG6-50R2	25		50	2	8°38'	R	H2	25	100	303.44	312	316	52
KCG6-60R1	60		60	1	4°18'	R	H2	25	120	361.02	372	376	52

[Caution on Product Characteristics] ① Worm Wheels are profile shifted to create the proper center distance.
 ② H2 Shape Worm Gears have elongated casting holes in the web (H).
 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.



* CS has a sand mold casting finish.

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}			
F	G	J	30 _{rpm}	100 _{rpm}	300 _{rpm}	600 _{rpm}	900 _{rpm}	1200 _{rpm}	0.20~0.40	3.89	KBG5-20R1
20	65	85	146	117	91.2	73.0	63.7	56.9			
20	65	85	146	115	85.8	68.4	58.8	52.2	0.20~0.40	3.89	KBG5-20R2
20	72	100	232	185	144	115	99.2	88.8	0.22~0.42	6.60	KBG6-20R1
20	72	100	235	183	136	109	92.3	82.0	0.22~0.42	6.60	KBG6-20R2

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

Hub width	Total length	Web thickness	Web O.D.	Mounting distance	Allowable torque (N·m) NOTE 1				Backlash (mm)	Weight (kg)	Catalog No.
					30 _{rpm}	100 _{rpm}	300 _{rpm}	600 _{rpm}			
F	G	(H)	(I)	J	30 _{rpm}	100 _{rpm}	300 _{rpm}	600 _{rpm}	0.20~0.40	3.18	KCG5-20R1
20	65	—	—	85	87.4	70.3	54.7	43.8			
20	65	—	—	85	87.9	68.9	51.5	41.0	0.20~0.40	3.18	KCG5-20R2
20	65	(13)	(127)	110	185	150	119	96.8	0.20~0.40	4.78	KCG5-30R1
20	65	(13)	(127)	110	187	150	114	90.6	0.20~0.40	4.78	KCG5-30R2
20	65	(16)	(172)	135	316	258	206	170	0.20~0.40	7.44	KCG5-40R1
20	65	(16)	(223)	160	477	390	315	261	0.20~0.40	9.79	KCG5-50R1
20	65	(16)	(223)	160	483	390	307	249	0.20~0.40	9.79	KCG5-50R2
20	65	(14)	(276)	185	668	548	443	369	0.20~0.40	12.0	KCG5-60R1
20	72	—	—	100	139	111	86.2	—	0.22~0.42	5.39	KCG6-20R1
20	72	—	—	100	141	110	81.8	—	0.22~0.42	5.39	KCG6-20R2
20	72	(15)	(155)	130	294	237	187	—	0.22~0.42	8.28	KCG6-30R1
20	72	(15)	(155)	130	299	238	181	—	0.22~0.42	8.28	KCG6-30R2
20	72	(15)	(213)	160	502	407	325	—	0.22~0.42	10.9	KCG6-40R1
20	72	(16)	(275)	190	760	615	496	—	0.22~0.42	14.0	KCG6-50R1
20	72	(16)	(275)	190	774	620	488	—	0.22~0.42	14.0	KCG6-50R2
20	72	(17)	(336)	220	1060	865	698	—	0.22~0.42	19.8	KCG6-60R1

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