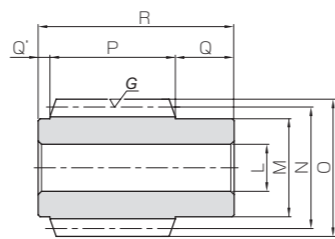




Specifications	
Precision grade	KHK W 001 grade 2 *
Reference section of gear	Axial
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	S45C
Heat treatment	Teeth induction hardened
Tooth hardness	50 ~ 60HRC
Surface treatment	Black oxide coated except for ground part

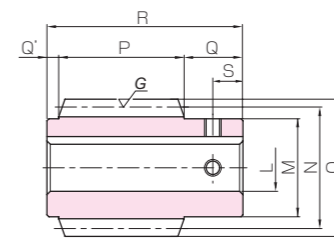
* The precision grade of J Series products is equivalent to the value shown in the table.



W3

Catalog No. ●: J Series (Available-on-request)	Axial 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					
KSWG2-R1 ● KSWG2-R1J12 ● KSWG2-R1J14	m2	1	3°41'	R	W3	12	25	31	35	32	15	3
					W3K	12						
					W3K	14						
KSWG2-R2 ● KSWG2-R2J12 ● KSWG2-R2J14	m2	2	7°21'	R	W3	12	25	31	35	32	15	3
					W3K	12						
					W3K	14						
KSWG2.5-R1 ● KSWG2.5-R1J15 ● KSWG2.5-R1J16 ● KSWG2.5-R1J17	m2.5	1	3°52'	R	W3	15	30	37	42	45	17	3
					W3K	15						
					W3K	16						
KSWG2.5-R2 ● KSWG2.5-R2J15 ● KSWG2.5-R2J16 ● KSWG2.5-R2J17	m2.5	2	7°42'	R	W3	15	30	37	42	45	17	3
					W3K	15						
					W3K	16						

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



W3K



Total length R	Keyway Width×Depth	Set Screw		Weight (kg)	Catalog No. ●: J Series (Available-on-request)
		Size	S		
50	4 x 1.8 5 x 2.3	M4	—	0.21	KSWG2-R1 ● KSWG2-R1J12 ● KSWG2-R1J14
			M4	7.5	
			M4	7.5	
50	4 x 1.8 5 x 2.3	M4	—	0.21	KSWG2-R2 ● KSWG2-R2J12 ● KSWG2-R2J14
			M4	7.5	
			M4	7.5	
65	5 x 2.3 5 x 2.3 5 x 2.3	M4	—	0.40	KSWG2.5-R1 ● KSWG2.5-R1J15 ● KSWG2.5-R1J16 ● KSWG2.5-R1J17
			M4	8.5	
			M4	8.5	
65	5 x 2.3 5 x 2.3 5 x 2.3	M4	—	0.40	KSWG2.5-R2 ● KSWG2.5-R2J15 ● KSWG2.5-R2J16 ● KSWG2.5-R2J17
			M4	8.5	
			M4	8.5	

[Caution on Secondary Operations]

- Please read "Caution on Performing Secondary Operations" (Page 362) when performing modifications and/or secondary operations for safety concerns.
- Due to the gear teeth being induction hardened, no secondary operations can be performed on tooth areas including the bottom land (approx. 2 to 3 mm).

[Caution on J series]

- As available-on-request products, requires a lead-time for shipping within 2 working-days (excludes the day ordered), after placing an order. Please allow additional shipping time to get to your local distributor.
- Number of products we can process for one order is 1 to 20 units. For quantities of 21 or more pieces, we need to quote price and lead time.
- Keyways are made according to JIS B1301 standards, Js9 tolerance.
- Areas of products which have been re-worked will not be black oxide coated.
- For products having a tapped hole, a set screw is included.

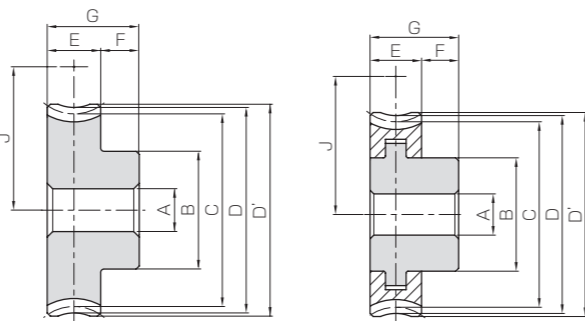


Specifications	
Precision grade	KHK W 002 grade 2 *
Reference section of gear	Rotating plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Material	CAC702 (formerly JIS A1/BC2) **
Heat treatment	—
Tooth hardness	—

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

** H4, H5 shape have a hub made from FC200 cast iron. FC200's tensile strength (200N/mm²) is derived from test specimens and does not represent that of the boss.

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



H1

H4

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

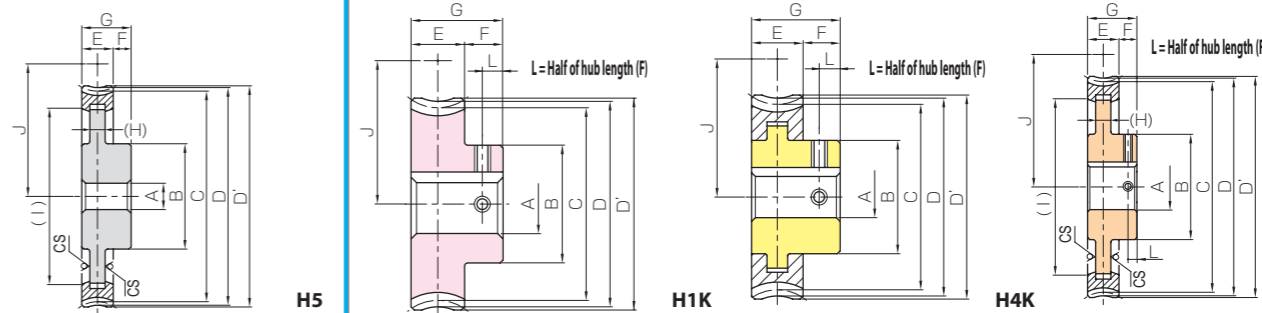
Catalog No.	Reduction ratio	No. of teeth	Number of starts	Helix angle	Hand thread	Shape	A _{H7}	B	C	D	D'	E	F	G	(H)	(I)	J	Allowable torque (N·m) NOTE 1							Backlash (mm)	Weight (kg)			
																		30 rpm	100 rpm	300 rpm	600 rpm	900 rpm	1200 rpm	1800 rpm					
																											0.11~0.24		
KAG2-20R1	20	20	1	3°41'	R	H1	33	40	44	46	—	—	—	—	—	—	—	35.5	21.0	17.5	13.6	11.2	9.84	8.94	7.75	0.11~0.24	0.26		
KAG2-20R2	10	20	2	7°21'	R	H1	33	40	44	46	—	—	—	—	—	—	—	35.5	20.7	16.8	12.6	10.3	8.93	8.05	6.89	0.11~0.24	0.26		
KAG2-30R1	30	30	1	3°41'	R	H4	40	60	64	66	—	—	—	—	—	—	—	45.5	44.3	37.3	29.6	24.8	21.9	19.8	17.4	0.11~0.24	0.51		
KAG2-30R2	15	30	2	7°21'	R	H4	40	60	64	66	—	—	—	—	—	—	—	45.5	44.0	36.5	27.8	22.8	20.1	18.0	15.7	0.11~0.24	0.51		
KAG2-40R1	40	40	1	3°41'	R	H4	45	80	84	86	—	—	—	—	—	—	—	55.5	75.8	64.0	51.4	43.6	38.5	34.9	30.7	0.11~0.24	0.85		
KAG2-50R1	50	50	1	3°41'	R	H5	50	100	104	106	—	—	—	—	—	—	(8)	(83)	65.5	115	96.8	78.4	66.9	59.5	54.2	47.6	0.14~0.27	1.05	
KAG2-60R1	60	60	1	3°41'	R	H5	55	120	124	126	—	—	—	—	—	—	(11)	(100)	75.5	160	136	110	94.6	84.9	77.2	68.1	0.14~0.27	1.52	
KAG2.5-20R1	20	20	1	3°52'	R	H1	12	35	50	55	57.5	—	—	—	—	—	—	—	43.5	34.6	28.5	22.3	18.3	16.0	14.6	12.5	0.14~0.27	0.39	
KAG2.5-20R2	10	20	2	7°42'	R	H1	12	35	50	55	57.5	—	—	—	—	—	—	—	43.5	34.2	27.4	20.6	16.8	14.5	13.1	11.1	0.14~0.27	0.39	
KAG2.5-30R1	30	30	1	3°52'	R	H4	12	40	75	80	82.5	—	—	—	—	—	—	—	56	73.2	61.0	48.3	40.5	35.5	32.2	28.1	0.14~0.27	0.79	
KAG2.5-30R2	15	30	2	7°42'	R	H4	12	40	75	80	82.5	—	—	—	—	—	—	—	56	72.7	59.6	45.5	37.2	32.6	29.4	25.3	0.14~0.27	0.79	
KAG2.5-40R1	40	40	1	3°52'	R	H5	15	45	100	105	107.5	—	—	—	—	—	—	(11)	(81)	68.5	125	105	84.0	71.2	62.5	57.0	49.5	0.14~0.27	1.11
KAG2.5-50R1	50	50	1	3°52'	R	H5	15	55	125	130	132.5	—	—	—	—	—	—	(12)	(106)	81	189	158	128	109	96.7	88.5	76.7	0.14~0.27	1.70
KAG2.5-60R1	60	60	1	3°52'	R	H5	15	60	150	155	157.5	—	—	—	—	—	—	(12)	(130)	93.5	265	222	180	154	138	126	110	0.14~0.27	2.32

[Caution on Product Characteristics] ① The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see Page 358 for more details.

② There may be space in the casting between the two materials, but it will not affect the joint strength.

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

- The tooth and the hub areas, fastened by casting, are designed to have higher hardness than other parts of the gear. However, please avoid areas other than the hub. Also, the strength may decrease if secondary operations are performed.



H5

H1K

H4K

H5K

To order J Series products, please specify; **Catalog No. + J + BORE**

Bore H7	* The product shapes of J Series items are identified by background color.																																			
	Keyway Js9		12		14		15		16		17		18		19		20		22		25		30		32		35									
	Screw size		4 x 1.8		5 x 2.3		5 x 2.3		5 x 2.3		5 x 2.3		5 x 2.3		5 x 2.3		5 x 2.3		5 x 2.3		5 x 2.3		5 x 2.3		5 x 2.3		5 x 2.3									
Catalog No.	M4														M5														M6				M8			
KAG2-20R1 J BORE	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K							
KAG2-20R2 J BORE	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K							
KAG2-30R1 J BORE	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K						
KAG2-30R2 J BORE	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K						
KAG2-40R1 J BORE	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K						
KAG2-50R1 J BORE	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K						
KAG2-60R1 J BORE	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K	H5K						
KAG2.5-20R1 J BORE	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K						
KAG2.5-20R2 J BORE	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K	H1K					
KAG2.5-30R1 J BORE	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K	H4K					
KAG2.5-30R2 J BORE	H4K	H4K	H4K</																																	