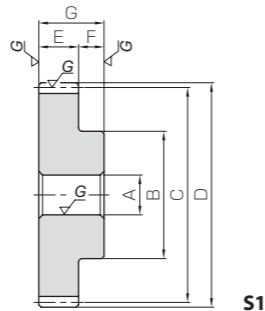




Specifications	
Precision grade	JIS grade N6 (JIS B1702-1: 1998) *
Reference section of gear	Rotating plane
Gear teeth	Standard full depth
Transverse pressure angle	20°
Helix angle	21°30'
Material	SCM440
Heat treatment	Thermal refined, tooth surface induction hardened
Tooth hardness	50 ~ 60HRC
Surface treatment	Black oxide coated except for ground part

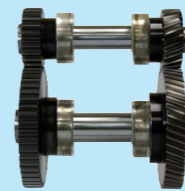
* The precision grade of J Series products is equivalent to the value shown in the table.



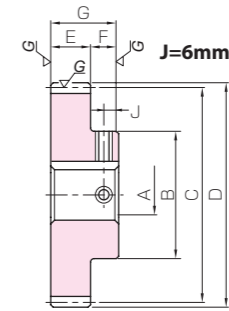
S1

Drop in Replacements for Spur Gears

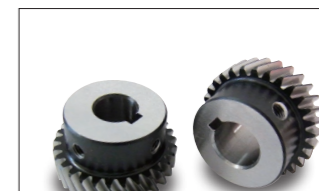
KKHG ground helical gears use a "transverse" module. The assembly distance is the same as spur gear pairs with the same module and number of teeth. Improved strength and low noise: Take the next step up from spur gears.



J Series



S1K



Ground Helical Gears

Catalog No.	No. of teeth	Direction of helix	Shape	Bore			Pitch dia.	Outside dia.	Face width	Hub width	Total Length	Allowable torque (N-m)		Allowable torque (kgf-m)		Backlash (mm)	Weight (kg)
				A _{H7}	B	C						Bending strength	Surface durability	Bending strength	Surface durability		
KKHG1.5-20R KKHG1.5-20L	20	R L	S1	A _{H7}	24	30	33	E	F	G	24	26.3	18.5	2.68	1.89	0.08~0.16	0.088
KKHG1.5-22R KKHG1.5-22L	22	R L			26	33	36					27.4	20.8	2.79	2.12		
KKHG1.5-24R KKHG1.5-24L	24	R L			28	36	39					30.9	25.3	3.15	2.58		
KKHG1.5-25R KKHG1.5-25L	25	R L			30	37.5	40.5					32.7	27.7	3.33	2.83		
KKHG1.5-26R KKHG1.5-26L	26	R L			32	39	42					34.5	30.2	3.52	3.08		
KKHG1.5-28R KKHG1.5-28L	28	R L			36	42	45					38.1	35.7	3.89	3.64		
KKHG1.5-30R KKHG1.5-30L	30	R L			38	45	48					41.8	41.6	4.26	4.24		
KKHG1.5-32R KKHG1.5-32L	32	R L			40	48	51					45.5	48.0	4.64	4.89		
KKHG1.5-36R KKHG1.5-36L	36	R L			45	54	57					52.9	62.2	5.40	6.35		
KKHG1.5-40R KKHG1.5-40L	40	R L			50	60	63					60.5	78.5	6.17	8.00		
KKHG1.5-48R KKHG1.5-48L	48	R L			50	72	75					75.8	117	7.73	12.0		
KKHG1.5-50R KKHG1.5-50L	50	R L			60	75	78					79.6	128	8.12	13.1		
KKHG1.5-52R KKHG1.5-52L	52	R L	60	78	81	83.5	140	8.51	14.2								
KKHG1.5-60R KKHG1.5-60L	60	R L	60	90	93	99.1	191	10.1	19.5								
KKHG1.5-70R KKHG1.5-70L	70	R L	60	105	108	114	256	11.6	26.1								
KKHG1.5-80R KKHG1.5-80L	80	R L	70	120	123	132	343	13.5	35.0								
KKHG1.5-90R KKHG1.5-90L	90	R L	70	135	138	151	442	15.4	45.1								
KKHG1.5-100R KKHG1.5-100L	100	R L	70	150	153	170	554	17.4	56.5								

- [Caution on Product Characteristics]
- The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 164 for more details.
 - The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair of identical gears in mesh.
 - These gears produce axial thrust forces. See Page 167 for more details.
 - Right handed and left handed helical gears in the same module are designed to mesh as a pair, but KKHG gears are not interchangeable with KSH type helical gears.

- [Caution on Secondary Operations]
- Please read "Caution on Performing Secondary Operations" (Page 166) 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).
 - While cutting off the entire hub may cause curvature deformation by residual stress, some products are straightened and annealed after refining the material.

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.															
	12	14	15	16	17	18	19	20	22	25	28	30	32	35	40	
Keyway Js9	4 x 1.8		5 x 2.3			6 x 2.8				8 x 3.3			10 x 3.3		12 x 3.3	
Screw size	M4				M5				M6				M8			
Catalog No.	* The product shapes of J Series items are identified by background color.															
KKHG1.5-20R J BORE KKHG1.5-20L J BORE	S1K															
KKHG1.5-22R J BORE KKHG1.5-22L J BORE	S1K															
KKHG1.5-24R J BORE KKHG1.5-24L J BORE	S1K	S1K	S1K													
KKHG1.5-25R J BORE KKHG1.5-25L J BORE	S1K	S1K	S1K	S1K	S1K											
KKHG1.5-26R J BORE KKHG1.5-26L J BORE	S1K	S1K	S1K	S1K	S1K											
KKHG1.5-28R J BORE KKHG1.5-28L J BORE			S1K	S1K	S1K	S1K	S1K	S1K								
KKHG1.5-30R J BORE KKHG1.5-30L J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K							
KKHG1.5-32R J BORE KKHG1.5-32L J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K							
KKHG1.5-36R J BORE KKHG1.5-36L J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K						
KKHG1.5-40R J BORE KKHG1.5-40L J BORE			S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K					
KKHG1.5-48R J BORE KKHG1.5-48L J BORE						S1K	S1K	S1K	S1K	S1K	S1K	S1K				
KKHG1.5-50R J BORE KKHG1.5-50L J BORE						S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
KKHG1.5-52R J BORE KKHG1.5-52L J BORE						S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K		
KKHG1.5-60R J BORE KKHG1.5-60L J BORE								S1K	S1K	S1K	S1K	S1K	S1K	S1K		
KKHG1.5-70R J BORE KKHG1.5-70L J BORE								S1K	S1K	S1K	S1K	S1K	S1K	S1K		
KKHG1.5-80R J BORE KKHG1.5-80L J BORE								S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	
KKHG1.5-90R J BORE KKHG1.5-90L J BORE								S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	
KKHG1.5-100R J BORE KKHG1.5-100L J BORE								S1K	S1K	S1K	S1K	S1K	S1K	S1K	S1K	

- [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, Js 9 tolerance.
 - Certain products which would otherwise have a very long tapped hole are counterbored to reduce the length of the tap.
 - 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.