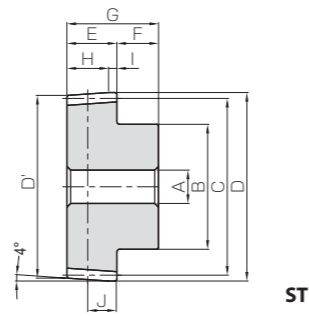


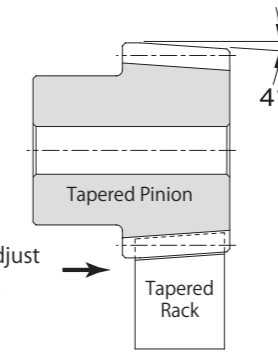


Specifications	
Precision grade	JIS grade N8 (JIS B1702-1:1998)
Gear teeth	Standard full depth
Pressure angle	20°
Material	SCM440
Heat Treatment	Thermal refining only
Tooth hardness	225 to 285HB
Surface treatment	Black oxide coating



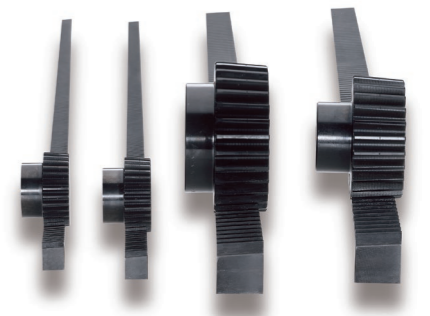
Catalog Number	Pitch mm (Module)	No. of teeth	Shape	Bore		Pitch dia.	Outside dia. (major)	Outside dia. (minor)	Total tooth width	Hub width	Total Length
				A _{H7}	B						
KKTSCP5-20 KKTSCP5-25 KKTSCP5-30 KKTSCP5-40	CP5 (1.5915)	20 25 30 40	ST	8	25	31.83	36.06	33.97	18	15	33
				10	32	39.79	44.02	41.92			
				10	38	47.75	51.98	49.88			
				12	45	63.66	67.89	65.8			
KKTSCP10-20 KKTSCP10-25 KKTSCP10-30 KKTSCP10-40	CP10 (3.1831)	20 25 30 40	ST	15	50	63.66	72.13	67.93	36	20	56
				20	60	79.58	88.04	83.85			
				20	75	95.49	103.96	99.76			
				20	80	127.32	135.79	131.59			

- [Caution on Product Characteristics]
- The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 241 for more details.
 - The backlash values shown in the table are the theoretical values when these gears and KSTRCP Tapered Racks are in mesh.



Moving it by 1 mm will adjust the backlash by 0.05 mm.

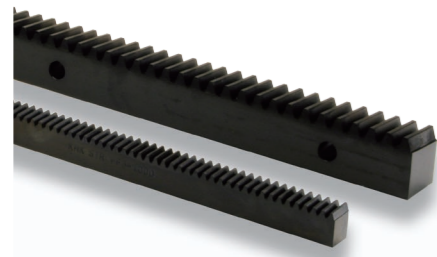
Tapered Spur Gears



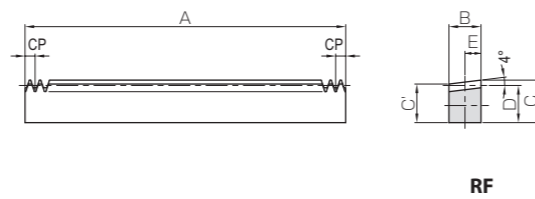
Reference face width	Adjustable width	Position of reference tooth	Distance traveled in one turn (mm)	Allowable torque (N·m)		Allowable torque (kgf·m)		Mounting distance (mm)	Backlash (mm)	Weight (kg)	Catalog Number	
				Bending strength	Surface durability	Bending strength	Surface durability					
15	3	10.5	100	41.2	8.13	4.20	0.83	33.30	0 ~ 0.11	0.16	KKTSCP5-20 KKTSCP5-25 KKTSCP5-30 KKTSCP5-40	
			125	55.6	14.0	5.67	1.43					37.28
			150	70.3	21.9	7.16	2.23					41.26
			200	100	43.3	10.2	4.41					49.21
30	6	21	200	329	71.2	33.6	7.26	62.10	0 ~ 0.12	1.13	KKTSCP10-20 KKTSCP10-25 KKTSCP10-30 KKTSCP10-40	
			250	445	122	45.3	12.4					70.06
			300	562	189	57.3	19.2					78.02
			400	801	371	81.7	37.8					93.93

- [Caution on Secondary Operations]
- Please read "Cautions on Performing Secondary Operations" (Page 26) when performing modifications and/or secondary operations for safety concerns.
 - Avoid performing secondary operations that narrow the tooth width, as it affects precision and strength.

Tapered Racks



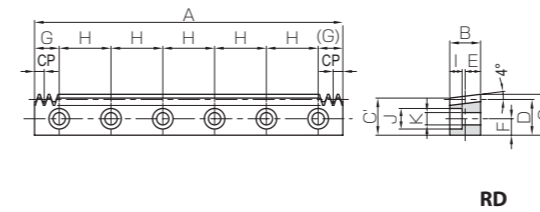
Specifications	
Precision grade	KHK R 001 grade 4
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat Treatment	—
Tooth hardness	(less than 95HRB)
Surface treatment	Black oxide coating



Catalog Number	Pitch mm (Module)	No. of teeth	Shape	Total Length	Face width	Height (major)	Height (minor)	Height to pitch line	Position of reference tooth
				A	B	C	C'	D	E
KSTRCPF5-1000 KSTRCPF10-1000	CP5 (1.5915) CP10 (3.1831)	200 100	RF	1000	15	19.5	18.45	17.38	7.5
					30	34.5	32.4	30.27	15

Catalog Number	Pitch mm (Module)	No. of teeth	Shape	Total Length	Face width	Height (major)	Height (minor)	Height to pitch line	Position of reference tooth	Mounting hole dimensions				
				A	B	C	C'	D	E	F	G	H	No. of holes	Screw size
KSTRCPFD5-1000 KSTRCPFD10-1000	CP5 (1.5915) CP10 (3.1831)	200 100	RD	1000	15	19.5	18.45	17.38	7.5	8	50	180	6	M5
					30	34.5	32.4	30.27	15	14	14	50	180	6

- [Caution on Product Characteristics]
- The allowable forces shown in the table are calculated values according to the assumed usage conditions. Please see Page 241 for more details.
 - The backlash of the CP Tapered Racks equates to the value of the mating gear shown in the table.
 - After attaching the racks to the base, please fasten with dowel pins. Clamping only with mounting screws could possibly cause the screws to be broken, due to a heavy load. For details, please see the assembly method to the mounting base on Page 243.
 - When connecting the racks for use, correctly adjust the joint pitch with identical products at hand or with an KSTRCP-100 rack product of the same pitch. Please read 2. Points of Caution in Assembling (Page 242) for details.



Allowable force (N)		Allowable force (kgf)		Weight (kg)	Catalog Number
Bending strength	Surface durability	Bending strength	Surface durability		
2290	468	233	47.7	2.05	KSTRCPF5-1000 KSTRCPF10-1000
9150	1870	933	191		

Counterbore dimensions			Allowable force (N)		Allowable force (kgf)		Weight (kg)	Catalog Number
I	J	K	Bending strength	Surface durability	Bending strength	Surface durability		
6	10	6	2290	468	233	47.7	2.01	KSTRCPFD5-1000 KSTRCPFD10-1000
10.8	17.5	11	9150	1870	933	191		

- [Caution on Secondary Operations]
- Please read "Cautions on Performing Secondary Operations" (Page 242) when performing modifications and/or secondary operations for safety concerns.
 - If gear tooth hardening, or thermal refining, is applied, the decarburization layer (approx. 0.5 mm thickness) on the rectangular surfaces cannot have the hardness you designate.
 - Avoid hardening Racks with bolt holes, due to deformation occurring at the mounting hole and the difficulty of straightening the rack after hardening.