



SSCP

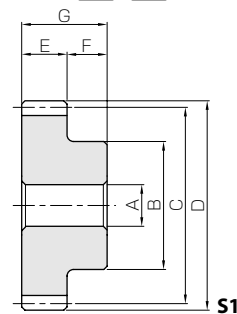
CP

Steel Spur Gears

Circular Pitch 2.5 ~ 20



Specifications	
Precision grade	JIS grade N8 (JIS B1702-1: 1998) JIS grade 4 (JIS B1702: 1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	less than 194HB



Catalog No.	Pitch mm (Module)	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length
				A _{H7}	B	C	D	E	F	G
SSCP2.5-20 SSCP2.5-25 SSCP2.5-30 SSCP2.5-40	CP2.5 (0.7958)	20	S1	6	13	15.92	17.51	10	10	20
25		8		17	19.89	21.49				
30		8		21	23.87	25.46				
40		10		28	31.83	33.42				
SSCP5-20 SSCP5-25 SSCP5-30 SSCP5-40	CP5 (1.5915)	20	S1	8	25	31.83	35.01	15	15	30
25		10		32	39.79	42.97				
30		10		38	47.75	50.93				
40		12		45	63.66	66.85				
SSCP10-20 SSCP10-25 SSCP10-30 SSCP10-40	CP10 (3.1831)	20	S1	15	50	63.66	70.03	30	20	50
25		20		60	79.58	85.94				
30		20		75	95.49	101.86				
40		20		80	127.32	133.69				
SSCP15-20 SSCP15-25 SSCP15-30	CP15 (4.7746)	20	S1	22	75	95.49	105.04	50	27	77
25		25		100	119.37	128.92				
30		25		110	143.24	152.79				
SSCP20-20 SSCP20-25 SSCP20-30	CP20 (6.3662)	20	S1	25	100	127.32	140.06	60	30	90
25		30		130	159.15	171.89				
30		30		150	190.99	203.72				

[Caution on Product Characteristics]

- The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 401 for more details.
- The backlash values shown in the table are the theoretical values when these gears and SRCP Racks are in mesh.
- If the bore diameter is less than $\phi 4$, then the bore tolerance class is H8. If the bore diameter is $\phi 5$ or $\phi 6$, and the hole length (total length) exceeds 3 times the diameter, then the class is also H8.



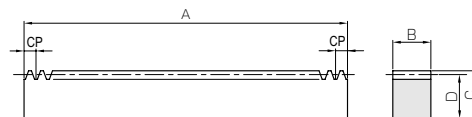
KRCPF

CP Thermal Refined Racks

Circular Pitch 5、10



Specifications	
Precision grade	KHK R 001 grade 4
Gear teeth	Standard full depth
Pressure angle	20°
Material	SCM440
Heat treatment	Thermal refining only
Tooth hardness	250 ~ 285HB*



* Due to the decarburization layer of about 0.5 mm thickness, the rectangular surface have less than HB187 hardness.

RF

Catalog No.	Pitch mm (Module)	No. of teeth	Shape	Total length	Face width	Height	Height to pitch line	Allowable force (N)		Allowable force (kgf)		Weight
				A	B	C	D	Bending strength	Surface durability	Bending strength	Surface durability	(kg)
KRCPF5-1000	CP5 (1.5915)	200	RF	1000	15	20	18.41	3660	1040	373	106	2.17
KRCPF10-1000	CP10 (3.1831)	100	RF	1000	30	35	31.82	14600	4480	1500	457	7.49

[Caution on Product Characteristics]

- The allowable forces shown in the table are the calculated values according to the assumed usage conditions. Please see page 401 for more details.
- Backlash of racks vary depending on mating pinions. Please calculate the backlash in accordance with the backlash of the mating pinion and values in the table "Backlash of Rack Tooth (Amount of Tooth-Thinning)" (Page 375).

[Caution on Secondary Operations]

- Please read "Caution on Performing Secondary Operations" (Page 402) when performing modifications and/or secondary operations for safety concerns. Haguruma Kobo, the KHK's system for quick modification of KHK stock gears is also available.
- 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.

Distance traveled in one turn (mm)	Allowable torque (N-m)		Allowable torque (kgf-m)		Backlash (mm)	Weight (kg)	Catalog No.
	Bending strength	Surface durability	Bending strength	Surface durability			
50	4.14	0.48	0.42	0.049	0.05~0.20	0.022	SSCP2.5-20
62.5	5.58	0.83	0.57	0.085	0.07~0.22	0.034	SSCP2.5-25
75	7.06	1.30	0.72	0.13	0.07~0.22	0.054	SSCP2.5-30
100	10.1	2.64	1.03	0.27	0.07~0.22	0.098	SSCP2.5-40
100	24.8	3.52	2.53	0.36	0.08~0.24	0.14	SSCP5-20
125	33.5	6.06	3.42	0.62	0.09~0.26	0.22	SSCP5-25
150	42.3	9.45	4.32	0.96	0.09~0.26	0.33	SSCP5-30
200	60.4	18.7	6.16	1.91	0.09~0.26	0.54	SSCP5-40
200	198	30.8	20.2	3.14	0.13~0.33	0.99	SSCP10-20
250	268	52.7	27.3	5.37	0.15~0.36	1.49	SSCP10-25
300	339	81.7	34.5	8.33	0.15~0.36	2.26	SSCP10-30
400	483	160	49.3	16.4	0.15~0.36	3.66	SSCP10-40
300	744	116	75.9	11.9	0.18~0.45	3.52	SSCP15-20
375	1000	199	102	20.3	0.20~0.48	5.76	SSCP15-25
450	1270	308	130	31.4	0.20~0.48	8.04	SSCP15-30
400	1590	264	162	26.9	0.20~0.51	7.50	SSCP20-20
500	2140	449	219	45.8	0.22~0.55	12.0	SSCP20-25
600	2710	693	276	70.7	0.22~0.55	17.2	SSCP20-30

- [Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 402) when performing modifications and/or secondary operations for safety concerns. Haguruma Kobo, the KHK's system for quick modification of KHK stock gears is also available.
- ② Avoid performing secondary operations that narrow the tooth width as it affects precision and strength.

KRCPF

CP Thermal Refined Racks

Spur Gears

Helical Gears

Internal Gears

Racks

CP Racks & Pinions

Miter Gears

Bevel Gears

Screw Gears

Worm Gear Pair

Bevel Gearboxes

Other Products