



SUSCP

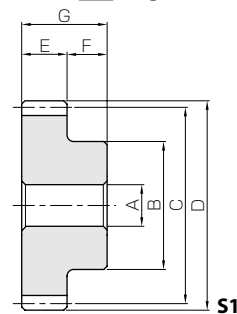
CP

Stainless Steel Spur Gears

Circular Pitch 5, 10



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	SUS303
Heat treatment	—
Tooth hardness	less than 187HB



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
SUSCP5-20 SUSCP5-25 SUSCP5-30	CP5 (1.5915)	20 25 30	S1	8 10 10	25 32 38	31.83 39.78 47.74	35.01 42.97 50.93	15	15	30
SUSCP10-20 SUSCP10-25 SUSCP10-30	CP10 (3.1831)	20 25 30	S1	15 20 20	50 60 75	63.66 79.57 95.49	70.03 85.94 101.86	30	20	50

[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 SURCPF Racks are in mesh.

Spur Gears

Helical Gears

Internal Gears

Racks

CP Racks & Pinions

Miter Gears

Bevel Gears

Screw Gears

Worm Gear Pair

Bevel Gearboxes

Other Products



SURCPF · SURCPFD

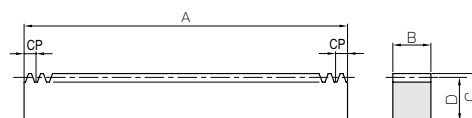
CP

Stainless Steel Racks

Circular Pitch 5, 10



Specifications	
Precision grade	KHK R 001 grade 5
Gear teeth	Standard full depth
Pressure angle	20°
Material	SUS304
Heat treatment	Solution heat treatment
Tooth hardness	less than 187HB



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 (kg)
				A	B	C	D	Bending strength	Surface durability	Bending strength	Surface durability	
SURCPF5-500 SURCPF5-1000	CP5 (1.5915)	100 200	RF	500 1000	15	20	18.41	1090	263	111	26.8	1.08 2.16
SURCPF10-500 SURCPF10-1000	CP10 (3.1831)	50 100	RF	500 1000	30	35	31.82	4370	1050	445	107	3.73 7.46

Catalog No.	Pitch mm (Module)	No. of teeth	Shape	Total length	Face width	Height	Height to pitch line	Mounting hole dimensions			No. of mounting holes	Mounting screw size
				A	B	C	D	E	F	G		
SURCPFD5-1000 SURCPFD10-1000	CP5 (1.5915) CP10 (3.1831)	200 100	RD RD	1000 1000	15 30	20 35	18.41 31.82	8 14	50 50	180 180	6 6	M5 M10

[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).
- For products made of stainless steel, heat treatment* and passivation ** solutions are applied. Passivation is a rust-resistance treatment, but it is not effective on the machined surface and not a totally rustproof solution.
 - * Heat Treatment Solution
Heat treatment by the carbon formed on the surface during blank manufacturing is made to infiltrate the material interior.
 - ** Passivation
Immersion of the metal in a nitric acid solution to make it more rust-resistant.
- 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.

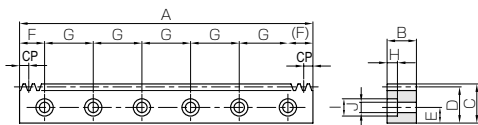
Distance traveled in one turn (mm)	Allowable torque (N-m)		Allowable torque (kgf-m)		Backlash (mm)	Weight (kg)	Catalog No.
	Bending strength	Surface durability	Bending strength	Surface durability			
100	13.7	2.50	1.40	0.25	0.08~0.26	0.14	SUSCP5-20 SUSCP5-25 SUSCP5-30
125	18.5	4.31	1.89	0.44	0.09~0.28	0.22	
150	23.4	6.72	2.39	0.68	0.09~0.28	0.32	
200	110	21.9	11.2	2.23	0.13~0.35	0.98	SUSCP10-20 SUSCP10-25 SUSCP10-30
250	148	37.4	15.1	3.82	0.15~0.38	1.48	
300	187	58.0	19.1	5.92	0.15~0.38	2.24	

- [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.

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CP Stainless Steel Racks



RD

Counterbore dimensions			Allowable force (N)		Allowable force (kgf)		Weight (kg)	Catalog No.
H	I	J	Bending strength	Surface durability	Bending strength	Surface durability		
6	10	6	1090	263	111	26.8	2.12 7.25	SURCPFD5-1000 SURCPFD10-1000
10.8	17.5	11	4370	1050	445	107		

- [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.