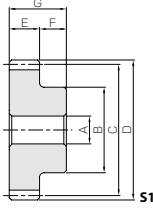


**CP Stainless Steel Spur Gears**

**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)
Pitch	CP5 CP10
Face width (E)	15 30
Hub width (F)	15 20
Total length (G)	30 50
Screw offset (J)	7.5 10



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

Catalog No.	Pitch mm (Module)	No. of teeth	Shape	Bore				Pitch dia.	Outside dia.	Distance traveled in one turn (mm)	Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)
				A <sub>H7</sub>	B	C	D				Bending strength	Surface durability	Bending strength	Surface durability		
SUSCP5-20 SUSCP5-25 SUSCP5-30	CP5 (1.5915)	20 25 30	S1	8	25	31.83	35.01	100	13.7	2.50	1.40	0.25	0.14	0.09~0.26	0.14 0.22 0.32	
				10	32	39.78	42.97	125	18.5	4.31	1.89	0.44				
				10	38	47.74	50.93	150	23.4	6.72	2.39	0.68				
SUSCP10-20 SUSCP10-25 SUSCP10-30	CP10 (3.1831)	20 25 30	S1	15	50	63.66	70.03	200	110	21.9	11.2	2.23	0.98	0.14~0.36	0.98 1.48 2.24	
				20	60	79.57	85.94	250	148	37.4	15.1	3.82				
				20	75	95.49	101.86	300	187	58.0	19.1	5.92				

- [Caution on Product Characteristics]
- The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see Page 227 for more details.
  - The backlash values shown in the table are the theoretical values when these gears and SURCPF Racks are in mesh.
  - Please read "Caution on Performing Secondary Operations" (Page 228) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.
  - Avoid performing secondary operations that narrow the tooth width, as it affects precision and strength.

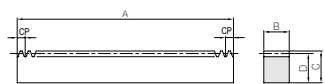
[Caution on Secondary Operations]

**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				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	15	20	18.41	1090	263	111	26.8	1.08
				1000	15	20	18.41	1090	263	111	26.8	1.08
SURCPF10-500 SURCPF10-1000	CP10 (3.1831)	50 100	RF	500	30	35	31.82	4370	1050	445	107	3.73
				1000	30	35	31.82	4370	1050	445	107	3.73

Catalog No.	Pitch mm (Module)	No. of teeth	Shape	Total length				Mounting hole dimensions			No. of mounting holes	Mounting screw size
				A	B	C	D	E	F	G		
● SURCPFD5-500J SURCPFD5-1000	CP5 (1.5915)	100 200	RD	500	15	20	18.41	8	25	150	4	M5
				1000	15	20	18.41	8	50	180	6	M5
● SURCPFD10-500J SURCPFD10-1000	CP10 (3.1831)	50 100	RD	500	30	35	31.82	14	25	150	4	M10
				1000	30	35	31.82	14	50	180	6	M10

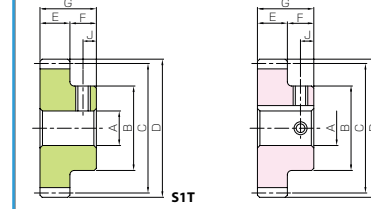
- [Caution on Product Characteristics]
- The allowable forces shown in the table are the calculated values according to the assumed usage conditions. Please see Page 227 for more details.
  - Backlash of racks vary depending on mating pinions. Please calculate the backlash in accordance with the backlash of the mating pinion and values in the table "Backlash of Rack Tooth (Amount of Tooth-Thinning)" (Page 191).
  - 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.

**SUSCP**

**CP Stainless Steel Spur Gears**

Newly added

**J Series**



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	8	10	12	14	15	16	17	18	19	20	22	25	28	30	32	35	40	45				
Screw size	—	4 x 1.8				5 x 2.3				6 x 2.8				8 x 3.3				10 x 3.3		12 x 3.3		14 x 3.8	
Catalog No.	M5	M4				M5				M6				M8				M10					
SUSCP5-20 J BORE																							
SUSCP5-25 J BORE																							
SUSCP5-30 J BORE																							
SUSCP10-20 J BORE																							
SUSCP10-25 J BORE																							
SUSCP10-30 J BORE																							

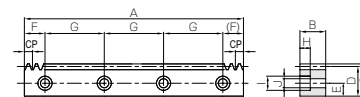
- [Caution on J series]
- As available-on-request products, requires a lead-time for shipping within 2 working-days (excludes the day ordered), after placing an order. Please allow additional shipping time to get to your local distributor.
  - Number of products we can process for one order is 1 to 20 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.
  - Certain products which would otherwise have a very long tapped hole are counterbored to reduce the length of the tap. (Products marked with "\*" are tap size).
  - For products having a tapped hole, a set screw is included.
  - The use of S1T shaped set screws for fastening gears to a shaft, is a method only applicable to light load usage. For secure fastening, please use dowel pins, in combination.

**SURCPF · SURCPFD**

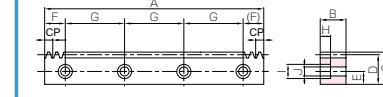
**SURCPFD**

**J Series**

**CP Stainless Steel Racks**



RD



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	1.06 2.12	● SURCPFD5-500J SURCPFD5-1000
10.8	17.5	11	4370	1050	445	107	3.59 7.25	● SURCPFD10-500J SURCPFD10-1000

- [Caution on Secondary Operations]
- Please read "Caution on Performing Secondary Operations" (Page 228) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.
- [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.