



Spur
Gears

Helical
Gears

Internal
Gears

Racks

CP Racks
& Pinions

Miter
Gears

Bevel
Gears

Screw
Gears

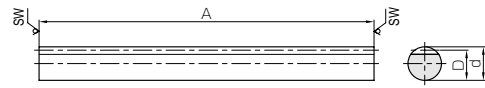
Worm
Gear Pair

Bevel
Gearboxes

Other
Products



Specifications	
Precision grade	KHK R 001 grade 4
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	Stress relief annealing
Tooth hardness	less than 95HRB



* SW Saw Blade Finished

R2

Catalog No.	Pitch mm (Module)	Effective no. of teeth	Shape	Total length A	Outside dia. d _{h9}	Height to pitch line D	Allowable force (N)		Allowable force (kgf)		Weight (kg)
							Bending strength	Surface durability	Bending strength	Surface durability	
SROCP2.5-500	CP2.5 (0.7958)	200	R2	505	10	9.2	474	91.8	48.3	9.36	0.30
SROCP5-500	CP5 (1.5915)	99	R2	505	15	13.41	1650	324	169	33.1	0.65
SROCP10-1000	CP10 (3.1831)	99	R2	1010	30	26.82	6610	1300	674	132	5.16

[Caution on Product Characteristics] ① The allowable forces shown in the table are the calculated values according to the assumed usage conditions. Please see page 401 for more details.

② 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).

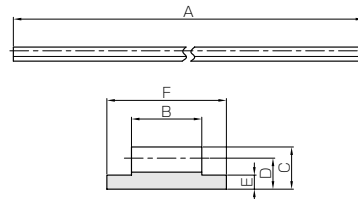
[Caution on Secondary Operations]

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 Please avoid hardening Round Racks. It causes contortion and deformation, and straightening processes are difficult to apply.



Specifications	
Precision grade	KHK R 001 grade 8
Gear teeth	Standard full depth
Pressure angle	20°
Material	SS400
Heat treatment	—
Tooth hardness	less than 187HB



R3

Catalog No.	Pitch mm (Module)	Shape	Total length	Face width	Height	Height to pitch line	Thickness of base	Width of base	Allowable force (N)		Allowable force (kgf)	Weight (kg)
			A	B	C	D	E	F	Bending strength	Bending strength		
FRCP5-2000	CP5 (1.5915)	R3	2000	10	6	4.41	2	17	801	81.7	0.91	
FRCP5-3000		R3	3000	10	6	4.41	2	17	801	81.7	1.37	
FRCP5-4000		R3	4000	10	6	4.41	2	17	801	81.7	1.83	

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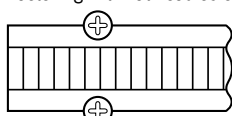
② When using the metal flexible rack with a 20 tooth pinion, allow a minimum radius of curvature of 150 mm for the teeth on the exterior and 300 mm for the teeth in the interior side.

③ Metal Flexible racks are not suitable for use when positioning accuracy is required.

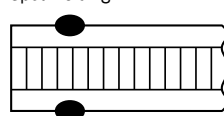
④ The tolerance of the height (C) is 0 to -0.15 and the tolerance of the width of the base (F) is 0 to -0.1.

Example: Fastening of FRCP Metal Flexible Racks

Fastening with flat head screws



Spot welding



(Overhead view of Flexible Racks)