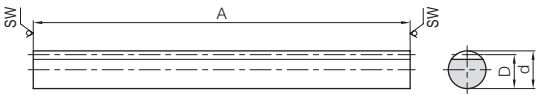
SROCP Circular pitch 2.5, 5, 10
CP Round Racks

Specifications	
Precision grade	KHK R 001 grade 4
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	(less than HB210)
Surface treatment	Black oxide coating



SW: Sawing surface

R2

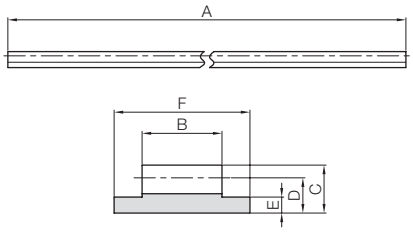
Catalog Number	Pitch mm (Module)	Effective number of teeth	Shape	Total Length A	Outside dia. d_{h9}	Height to pitch line D	Allowable force (N) Bending strength	Allowable force (N) Surface durability	Allowable force (kgf) Bending strength	Allowable force (kgf) Surface durability	Backlash (mm)	Weight (kg)
SROCP2.5-500	**CP2.5**(0.7958)	200	R2	505	10	9.2	474	91.8	48.3	9.36	0.00~0.14	0.30
SROCP5-500	**CP5** (1.5915)	99		505	15	13.41	1650	324	169	33.1	0.09~0.25	0.65
SROCP10-1000	**CP10** (3.1831)	99		1010	30	26.82	6610	1300	674	132	0.14~0.35	5.16

[Caution on Product Characteristics] ① The allowable forces shown in the table are calculated values according to the assumed usage conditions. Please see Page 269 for more details.
② The backlash values shown in the table are the theoretical values for the backlash in the circumferential direction of SSCP pinions with the same pitch.

[Caution on Secondary Operations] ① Please read “Cautions on Performing Secondary Operations” (Page 270) when performing modifications and/or secondary operations for safety concerns.
KHK Quick-Mod Gears, the KHK system for quick modification of KHK stock gears, is also available.
② Avoid hardening round racks, due to twisting and deformation occurring and the difficulty of straightening the rack after hardening.

FRCP Circular pitch 5
CP Metal Flexible Racks

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)
Surface treatment	Black oxide coating

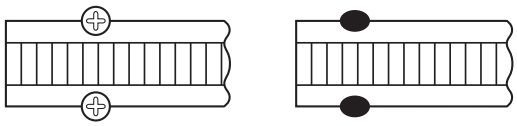


R3

Catalog Number	Pitch mm (Module)	Shape	Total Length A	Face width B	Height C	Height to pitch line D	Base thickness E	Base width F	Allowable force (N) Bending strength	Allowable force (kgf) Bending strength	Weight (kg)
FRCP5-2000	**CP5** (1.5915)	R3	2000	10	6	4.41	2	17	801	81.7	0.91
FRCP5-3000			3000								1.37
FRCP5-4000			4000								1.83

[Caution on Product Characteristics] ① The allowable forces shown in the table are calculated values according to the assumed usage conditions. Please see Page 269 for more details.
② When using the metal flexible rack in an arc, the minimum bending radius (R) is 150 mm for both the external and internal teeth. This increases the pitch errors and tooth profile errors which prevent the teeth from meshing at the normal center distance, so be sure to make adjustments before use.
③ It cannot be used where positioning accuracy is required.
④ The tolerance of height (size C) is 0 to -0.15, and the tolerance of base width (size F) is 0 to -0.1.

■ Installation Example of FRCP Metal Flex Rack



(View of Flexible Rack from the top)

Recommended Mating Pinions

SSCP

Please see Page 288 for more details.