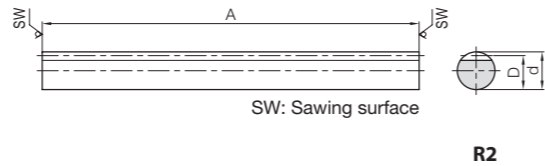




Specifications	
Precision grade	KHK R 001 grade 4
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	(less than 210HB)
Surface treatment	Black oxide coating



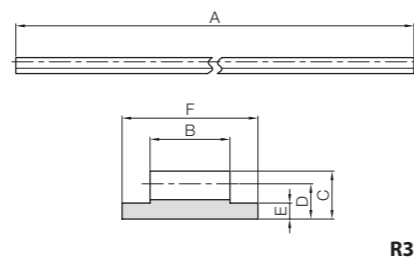
Catalog Number	Pitch mm (Module)	Effective number of teeth	Shape	Total Length			Allowable force (N)		Allowable force (kgf)		Backlash (mm)	Weight (kg)
				A	d <sub>h9</sub>	D	Bending strength	Surface durability	Bending strength	Surface durability		
<b>SROCP2.5-500</b>	<b>CP2.5</b> (0.7958)	200	R2	505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

[Caution on Product Characteristics] ① Because this is extruded material, the outer diameter may be out of H9 tolerance in sections.  
 [Caution on Secondary Operations] ① 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



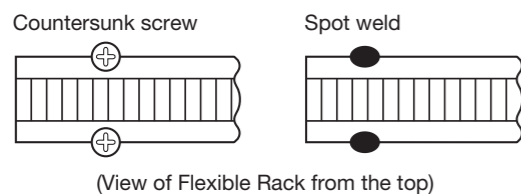
Specifications	
Precision grade	KHK R 001 grade 8
Gear teeth	Standard full depth
Pressure angle	20°
Material	SS400
Heat treatment	—
Tooth hardness	(less than 187HB)
Surface treatment	Black oxide coating



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

[Caution on Product Characteristics] ① When using the metal flexible rack in an arc, the minimum bending radius (R) is 150 mm for both the external and internal teeth. Using a smaller radius 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.  
 ② The tolerance of height (size C) is 0 to -0.15, and the tolerance of base width (size F) is 0 to -0.1.  
 ③ It cannot be used where positioning accuracy is required.

Installation Example of FRCP Metal Flex Rack



Recommended Mating Pinions



SSCP

Please see Page 294 for more details.

Ⓞ Note that products with an asterisk (\*) after the catalog number will no longer be manufactured after 20 June, 2026.

# Miter Gears

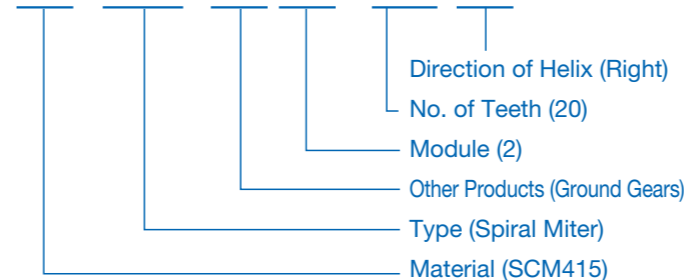
MMSGQ	MMSG	SMSG	MMSA/MMSB	MMS	SMS	SMA/SMB/SMC	MM
Ground Spiral Miter Gears	Ground Spiral Miter Gears	Ground Spiral Miter Gears	Finished Bore Spiral Miter Gears	Spiral Miter Gears	Spiral Miter Gears	Finished Bore Miter Gears	Miter Gears
Material: SCM415 m2-4 Page 314	Material: SCM415 m2-4 Page 316	Material: S45C m1-4 Page 318	Material: SCM415 m1-10 Page 320	Material: SCM415 m2-5 Page 322	Material: S45C m1-8 Page 324	Material: S45C m1-5 Page 326	Material: SCM415 m2-5 Page 328
LM	SM-H	SM	SAM-H	SAM	SUM	SUMA	PM
Sintered Metal Miter Gears	Hardened Miter Gears	Miter Gears	Hardened Angular Miter Gears	Angular Miter Gears	Stainless Steel Miter Gears	Finished Bore Stainless Steel Miter Gears	Plastic Miter Gears
Material: SMF5040 m0.8-1.5 Page 328	Material: S45C m1-8 Page 330	Material: S45C m1-8 Page 330	Material: S45C m1.5-3 Page 332	Material: S45C m1.5-3 Page 332	Material: SUS303 m1-4 Page 334	Material: SUS303 m1-4 Page 334	Material: MC901 m1-4 Page 336
DM	BB	Nissei KSP					
Injection Molded Miter Gears	Sintered Metal Bushings	Ground Spiral Miter					
Material: Duracon (R) (M90-44) m0.5-1.5 Page 336	Material: Oil-free copper alloy φ 5-8 Page 338	Material: SCM415 m1.5-6 Page 374					

Catalog Number of KHK Stock Gears

The Catalog Number for KHK stock gears is based on the simple formula listed below. Please order KHK gears by specifying the Catalog Numbers.

(Example) Miter Gears

M MS G 2 - 20 R



Material	Type
S S45C	M Straight Miter Gears
M SCM415	MS Spiral Miter Gears
SU Stainless Steel	AM Angular Miter Gears
L Sintered Metal Alloy	
P MC901	
D Polyacetal	
	<b>Other Information</b>
	G, GQ Ground Gears