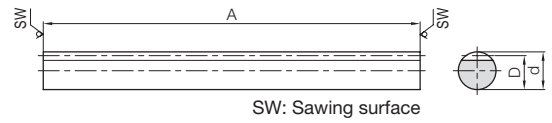




Spur Gears
 Helical Gears
 Internal Gears
 Racks
 CP Racks & Pinions
 Miter Gears
 Bevel Gears
 Screw Gears
 Worm Gears
 Gearboxes
 Other Products



| 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 |



R2

| Catalog Number | Pitch mm (Module) | Effective number of teeth | Shape | Total Length | Outside dia. | Height to pitch line | Allowable force (N) | | Allowable force (kgf) | | Backlash (mm) | Weight (kg) |
|---------------------|-----------------------|---------------------------|-------|--------------|-----------------|----------------------|---------------------|--------------------|-----------------------|--------------------|---------------|-------------|
| | | | | A | d _{h9} | D | 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 | 0.00~0.14 | 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.

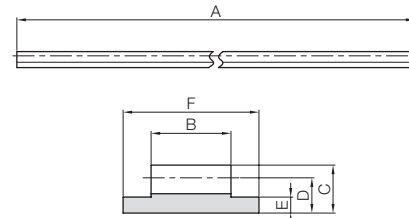
[Caution on Secondary Operations] ① Please read “Cautions on Performing Secondary Operations” (Page 270) when performing modifications and/or secondary operations for safety concerns.

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.



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

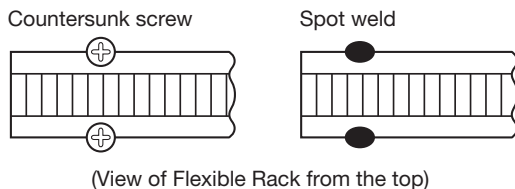
[Caution on Product Characteristics] ① The allowable forces shown in the table are calculated values according to the assumed usage conditions. Please see Page 269 for more details.

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



Recommended Mating Pinions



SSCP

Please see Page 288 for more details.