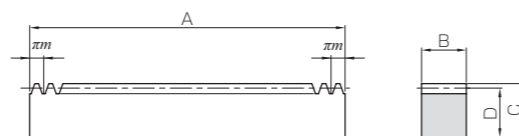


Specifications	
Precision grade	KHK R 001 Grade 4 *
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	Gear teeth laser hardened
Tooth hardness	55 ~ 65HRC **
Surface treatment	Black oxide coating



RF

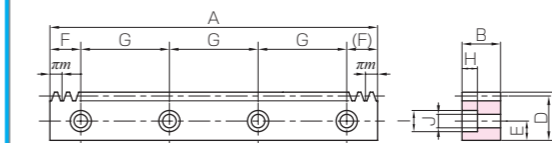
* The precision grade of these products is equivalent to the value shown in the table.
 ** Due to the decarburization layer of about 0.5 mm thickness, the rectangular surface have (less than HB187) hardness.

Catalog No.	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	
SRF1.5-1000HL SRF1.5-1500HL SRF1.5-2000HL	m1.5	212	RF	999.03	15	20	18.5	2160	961	220	98.0	2.18
320		1507.96										
435		2049.88										
SRF2-1000HL SRF2-1500HL SRF2-2000HL	m2	160		1005.31	20	25	23	3830	1730	391	177	3.63
240		1507.96										
326		2048.31										
SRF2.5-1000HL SRF2.5-1500HL SRF2.5-2000HL	m2.5	128		1005.31	25	30	27.5	5990	2740	611	280	5.43
192		1507.96										
261		2049.88										
SRF3-1000HL SRF3-1500HL SRF3-2000HL	m3	106		999.03	30	35	32	8620	3990	879	407	7.53
160		1507.96										
217		2045.17										
SRF4-1000HL SRF4-1500HL SRF4-2000HL	m4	80	1005.31	40	45	41	15300	7220	1560	736	12.9	
120		1507.96										
163		2048.31										
SRF5-1000HL SRF5-1500HL SRF5-2000HL	m5	64	1005.31	50	50	45	24000	11400	2440	1170	17.8	
96		1507.96										
130		2042.04										
SRF6-1000HL SRF6-1500HL SRF6-2000HL	m6	53	999.03	60	60	54	34500	16700	3520	1700	25.4	
80		1507.96										
108		2035.75										

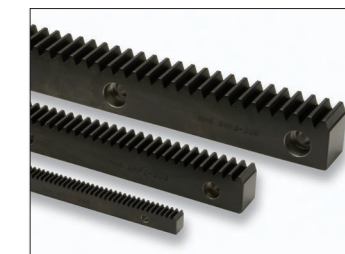
Catalog No.	Module	No. of teeth	Shape	Length	Face width	Height	Height to pitch line	Mounting hole dimensions				
								A	B	C	D	E
SRFD1.5-1000HLJ SRFD1.5-1500HLJ SRFD1.5-2000HLJ	m1.5	212	RD	999.03	15	20	18.5	8	49.51	180	6	M5
320		1507.96										
435		2049.88										
SRFD2-1000HLJ SRFD2-1500HLJ SRFD2-2000HLJ	m2	160		1005.31	20	25	23	10	52.65	180	6	M6
240		1507.96										
326		2048.31										
SRFD2.5-1000HLJ SRFD2.5-1500HLJ SRFD2.5-2000HLJ	m2.5	128		1005.31	25	30	27.5	12	52.65	180	6	M8
192		1507.96										
261		2049.88										
SRFD3-1000HLJ SRFD3-1500HLJ SRFD3-2000HLJ	m3	106		999.03	30	35	32	14	49.51	180	6	M10
160		1507.96										
217		2045.17										
SRFD4-1000HLJ SRFD4-1500HLJ SRFD4-2000HLJ	m4	80	1005.31	40	45	41	18	52.65	180	6	M12	
120		1507.96										
163		2048.31										
SRFD5-1000HLJ SRFD5-1500HLJ SRFD5-2000HLJ	m5	64	1005.31	50	50	45	20	62.65	220	5	M14	
96		1507.96										
130		2042.04										
SRFD6-1000HLJ SRFD6-1500HLJ SRFD6-2000HLJ	m6	53	999.03	60	60	54	23	59.51	220	5	M16	
80		1507.96										
108		2035.75										

[Caution on Product Characteristics] ① The allowable forces shown in the table are calculated values according to the assumed usage conditions. Please see Page 190 for more details.
 ② The backlash of racks differ depending on the size of the mating pinion. Please calculate the backlash from the backlash value of the mating pinion. Also, please refer to the data in the section called 'Backlash of Rack Tooth (Amount of Tooth Thinning)' on Page 193.

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 194) 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 Due to the gear teeth being laser hardened, no secondary operations can be performed on tooth areas. Please use wire EDM or other carbide tools to modify the length.



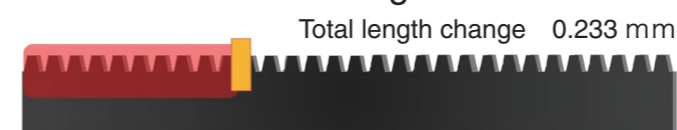
RD



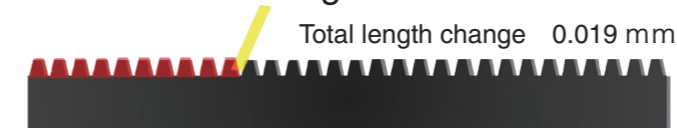
* Total length change just 1/12 compared to induction hardening! These hardened racks have minimal deformation due to heat treatment.

Laser hardened total length change

With induction hardening

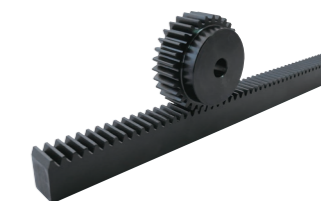


With laser hardening



* This is a measurement of the total length change (cumulative pitch) when induction hardening and laser hardening are applied to SRF3-1000.

Recommended Mating Pinions



SS-H Hardened Spur Gears

Please see Page 78 for more details.

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	2160	961	220	98.0	2.14	SRFD1.5-1000HLJ SRFD1.5-1500HLJ SRFD1.5-2000HLJ
7	11	7	3830	1730	391	177	3.58	SRFD2-1000HLJ SRFD2-1500HLJ SRFD2-2000HLJ
8.6	14	9	5990	2740	611	280	5.31	SRFD2.5-1000HLJ SRFD2.5-1500HLJ SRFD2.5-2000HLJ
10.8	17.5	11	8620	3990	879	407	7.32	SRFD3-1000HLJ SRFD3-1500HLJ SRFD3-2000HLJ
13	20	14	15300	7220	1560	736	12.6	SRFD4-1000HLJ SRFD4-1500HLJ SRFD4-2000HLJ
15.2	23	16	24000	11400	2440	1170	17.2	SRFD5-1000HLJ SRFD5-1500HLJ SRFD5-2000HLJ
17.5	26	18	34500	16700	3520	1700	24.6	SRFD6-1000HLJ SRFD6-1500HLJ SRFD6-2000HLJ

[Caution on J Series] ① As available-on-request products, these require a lead-time for shipping within 2 working days (excludes the day ordered) after placing an order.
 ② 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.
 ③ No black oxide is re-applied after adding secondary operation of adding mounting holes.