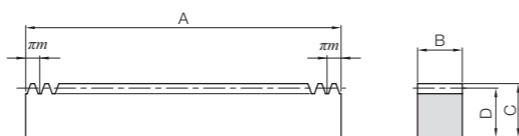


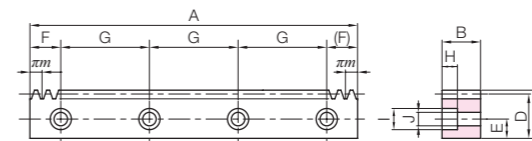
Specifications	
Precision grade	KHK R 001 Grade 4 *
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	Gear teeth laser hardened
Tooth hardness	55 to 65HRC
Surface treatment	Black oxide coating

\* The precision grade of these products is equivalent to the value shown in the table.



RF

J Series



RD

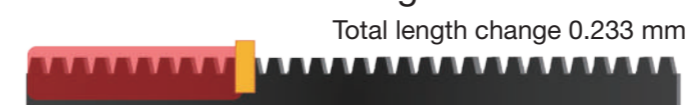


Catalog Number	Module	No. of teeth	Shape	Total Length				Allowable force (N)				Backlash (mm)	Weight (kg)
				A	B	C	D	Bending strength	Surface durability	Bending strength	Surface durability		
SRF1.5-1000HL	m1.5	212	RF	999.03	15	20	18.5	2160	961	220	98.0	0.09~0.25	2.18
SRF1.5-1500HL		320		1507.96									
SRF1.5-2000HL		435		2049.88									
SRF2-1000HL	m2	160		1005.31	20	25	23	3830	1730	391	177	0.11~0.28	3.63
SRF2-1500HL		240		1507.96									
SRF2-2000HL		326		2048.31									
SRF2.5-1000HL	m2.5	128		1005.31	25	30	27.5	5990	2740	611	280	0.13~0.31	5.43
SRF2.5-1500HL		192		1507.96									
SRF2.5-2000HL		261		2049.88									
SRF3-1000HL	m3	106		999.03	30	35	32	8620	3990	879	407	0.14~0.35	7.53
SRF3-1500HL		160		1507.96									
SRF3-2000HL		217		2045.17									
SRF4-1000HL	m4	80	1005.31	40	45	41	15300	7220	1560	736	0.18~0.42	12.9	
SRF4-1500HL		120	1507.96										
SRF4-2000HL		163	2048.31										
SRF5-1000HL	m5	64	1005.31	50	50	45	24000	11400	2440	1170	0.20~0.47	17.8	
SRF5-1500HL		96	1507.96										
SRF5-2000HL		130	2042.04										
SRF6-1000HL	m6	53	999.03	60	60	54	34500	16700	3520	1700	0.22~0.54	25.4	
SRF6-1500HL		80	1507.96										
SRF6-2000HL		108	2035.75										

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

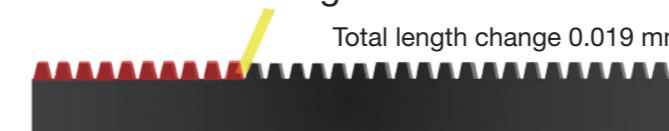
## Laser hardened total length change

With induction hardening



Total length change 0.233 mm

With laser hardening



Total length change 0.019 mm

\* 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- Hardened Spur Gears

Please see Page 106 for more details.

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

Counterbore dimensions			Allowable force (N)		Allowable force (kgf)		Backlash (mm)	Weight (kg)	Catalog Number
H	I	J	Bending strength	Surface durability	Bending strength	Surface durability			
6	10	6	2160	961	220	98.0	0.09~0.25	2.14	SRFD1.5-1000HLJ
								3.23	SRFD1.5-1500HLJ
								4.40	SRFD1.5-2000HLJ
7	11	7	3830	1730	391	177	0.11~0.28	3.58	SRFD2-1000HLJ
								5.36	SRFD2-1500HLJ
								7.29	SRFD2-2000HLJ
8.6	14	9	5990	2740	611	280	0.13~0.31	5.31	SRFD2.5-1000HLJ
								7.97	SRFD2.5-1500HLJ
								10.8	SRFD2.5-2000HLJ
10.8	17.5	11	8620	3990	879	407	0.14~0.35	7.32	SRFD3-1000HLJ
								11.1	SRFD3-1500HLJ
								15.0	SRFD3-2000HLJ
13	20	14	15300	7220	1560	736	0.18~0.42	12.6	SRFD4-1000HLJ
								18.8	SRFD4-1500HLJ
								25.6	SRFD4-2000HLJ
15.2	23	16	24000	11400	2440	1170	0.20~0.47	17.2	SRFD5-1000HLJ
								25.9	SRFD5-1500HLJ
								35.0	SRFD5-2000HLJ
17.5	26	18	34500	16700	3520	1700	0.22~0.54	24.6	SRFD6-1000HLJ
								37.2	SRFD6-1500HLJ
								50.2	SRFD6-2000HLJ