

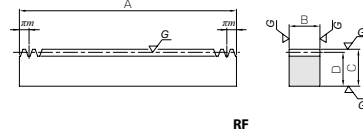
KRGF - H • KRGF-D - H Hardened Ground Racks

Module 1.5 ~ 3



Specifications	
Precision grade	KHK R 001 grade 1 *
Gear teeth	Standard full depth
Pressure angle	20°
Material	SCM440
Heat treatment	Thermal refined, teeth induction hardened
Tooth hardness	50 ~ 60HRC

* The precision grade of J Series products is equivalent to the value shown in the table.



* Standard tooth surface induction hardening is applied resulting in reasonably priced racks which have their surface durability increased by 50% than KRGCPE!

Catalog No.	Module	Effective no. of teeth	Shape	Total length				Face width		Height	Height to pitch line	Allowable force (N)		Allowable force (kgf)		Weight (kg)
				A	B	C	D	Bending strength	Surface durability			Bending strength	Surface durability			
KRGF1.5-500H KRGF1.5-1000H	m1.5	106 212	RF	499.51 999.03	15	20	18.5	3450	2110	150	20	352	215	1.09 2.18		
KRGF2-500H KRGF2-1000H	m2	80 160	RF	502.65 1005.31	20	25	23	6130	3750	150	25	625	382	1.82 3.63		
KRGF2.5-500H KRGF2.5-1000H	m2.5	64 128	RF	502.65 1005.31	25	30	27.5	9580	5870	150	30	977	598	2.71 5.43		
KRGF3-500H KRGF3-1000H	m3	53 106	RF	499.51 999.03	30	35	32	13800	8470	150	35	1410	863	3.76 7.53		

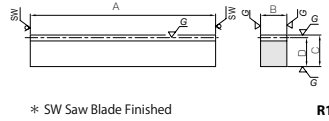
Catalog No.	Module	Effective no. of teeth	Shape	Total length				Face width			Height	Height to pitch line	Mounting hole dimensions			No. of mounting holes	Mounting screw size
				A	B	C	D	E	F	G							
• J Series (Available-on-request) • KRGF1.5-500HJ • KRGF1.5-1000HJ	m1.5	106 212	RD	499.51 999.03	15	20	18.5	8	24.76 49.51	150 180	4	6	M5				
• KRGF2-500HJ • KRGF2-1000HJ	m2	80 160	RD	502.65 1005.31	20	25	23	10	26.33 52.65	150 180	4	6	M6				
• KRGF2.5-500HJ • KRGF2.5-1000HJ	m2.5	64 128	RD	502.65 1005.31	25	30	27.5	12	26.33 52.65	150 180	4	6	M8				
• KRGF3-500HJ • KRGF3-1000HJ	m3	53 106	RD	499.51 999.03	30	35	32	14	24.76 49.51	150 180	4	6	M10				

KRG • KRGF • KRGD Thermal Refined Ground Racks

Module 1 ~ 3



Specifications	
Precision grade	KHK R 001 grade 1
Gear teeth	Standard full depth
Pressure angle	20°
Material	SCM440
Heat treatment	Thermal refining only
Tooth hardness	225 ~ 285HB



* SW Saw Blade Finished

* From improvements in our manufacturing processes, pricing is reduced by 20%! C-chamfering is widened for more convenience in installment.

Catalog No.	Module	Effective no. of teeth	Shape	Total length				Face width		Height	Height to pitch line	Allowable force (N)		Allowable force (kgf)		Weight (kg)
				A	B	C	D	Bending strength	Surface durability			Bending strength	Surface durability			
KRG1-100 KRG1-500	m1	29 159	R1	98 505	10	15	14	1530	641	156	65.3	0.11 0.55				
KRG1.5-100 KRG1.5-500	m1.5	20 105	R1	101 505	15	20	18.5	3450	1440	352	147	0.22 1.10				
KRG2-100 KRG2-500	m2	14 79	R1	98 505	20	25	23	6130	2560	625	261	0.35 1.82				
KRG2.5-100 KRG2.5-500	m2.5	11 63	R1	100 505	25	30	27.5	9580	4010	977	408	0.54 2.73				
KRG3-100 KRG3-500	m3	9 52	R1	101 505	30	35	32	13800	5770	1410	588	0.76 3.81				

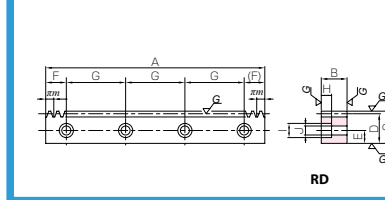
Catalog No.	Module	No. of teeth	Shape	Total length				Face width		Height	Height to pitch line	Allowable force (N)		Allowable force (kgf)		Weight (kg)
				A	B	C	D	Bending strength	Surface durability			Bending strength	Surface durability			
KRGF1-1000 KRGF1.5-1000	m1 m1.5	318 212	RF	999.03 999.03	15 20	20 25	18.5	3450 1440	641 352	156 147	65.3 261	1.49 2.18				
KRGF2-1000 KRGF2.5-1000	m2 m2.5	160 128	RF	1005.31 1005.31	20 25	25 30	23 27.5	6130 9580	2560 4010	625 977	261 408	3.63 5.43				
KRGF3-1000	m3	106	RF	999.03	30	35	32	13800	5770	1410	588	7.53				

Catalog No.	Module	No. of teeth	Shape	Total length				Face width			Height	Height to pitch line	Mounting hole dimensions			No. of mounting holes	Mounting screw size
				A	B	C	D	E	F	G							
KRGD1-500 KRGD1.5-500	m1 m1.5	159 106	RD	499.51 999.03	10 15	20 25	14 18.5	6	39.75 49.51	140 140	4	4	M4 M5				
KRGD2-500 KRGD2.5-500	m2 m2.5	80 64	RD	502.65 1005.31	20 25	25 30	23 27.5	10	41.32 41.32	140 140	4	4	M6 M8				
KRGD3-500	m3	53	RD	499.51	30	35	32	14	39.75	140	4	4	M10				

KRGF - H • KRGF-D - H

Ground Racks

J Series

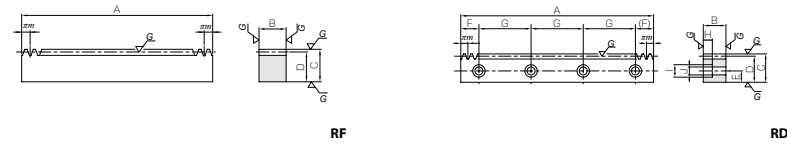


- [Caution on Product Characteristics] ① The allowable forces shown in the table are the calculated values according to the assumed usage conditions. Please see Page 189 for more details.
② The backlash of racks differ depending on the size of the mating pinion. Please calculate the backlash from the 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 191.
- [Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 192) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.
② Due to the gear teeth being induction hardened, no secondary operations can be performed on tooth areas including the bottom land (approx. 2 mm to 3 mm). Please use wire EDM or other carbide tools to modify the length.
- [Caution on J series] ① As available-on-request products, requires a lead-time for shipping within 2 working-days (excludes the day ordered), after placing an order. Please allow additional shipping time to get to your local distributor.
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.

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	3450	2110	352	215	1.07 2.14	• J Series (Available-on-request) • KRGF1.5-500HJ • KRGF1.5-1000HJ
7	11	7	6130	3750	625	382	1.78 3.58	• KRGF2-500HJ • KRGF2-1000HJ
8.6	14	9	9580	5870	977	598	2.64 5.31	• KRGF2.5-500HJ • KRGF2.5-1000HJ
10.8	17.5	11	13800	8470	1410	863	3.63 7.32	• KRGF3-500HJ • KRGF3-1000HJ

KRG • KRGF • KRGD Ground Racks

KRGD



* Ground racks with these specifications: Module 10, Total length (A) 1500 mm, Height (C) 120 mm or less, are also available by request as custom-made products.

- [Caution on Product Characteristics] ① The allowable forces shown in the table are the calculated values according to the assumed usage conditions. Please see Page 189 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 191.
③ After attaching the racks to the base, please fasten with dowel pins. Clamping only with mounting screws could possibly cause the screws to be broken, due to a heavy load.
- [Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 192) when performing modifications and/or secondary operations for safety concerns. KHK Quick-Mod Gears, the KHK's system for quick modification of KHK stock gears is also available.

Counterbore dimensions			Allowable force (N)		Allowable force (kgf)		Weight (kg)	Catalog No.
H	I	J	Bending strength	Surface durability	Bending strength	Surface durability		
5	8	4.5	1530	641	156	65.3	0.54	KRGD1-500
6	10	6	3450	1440	352	147	1.06	KRGD1.5-500
7	11	7	6130	2560	625	261	1.77	KRGD2-500
8.6	14	9	9580	4010	977	408	2.62	KRGD2.5-500
10.8	17.5	11	13800	5770	1410	588	3.59	KRGD3-500