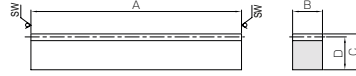




Specifications	
Precision grade	KHK R 001 grade 5
Gear teeth	Standard full depth
Pressure angle	20°
Material	SUS304
Heat treatment	Solution heat treatment
Tooth hardness	(less than 187HB)



\* SW Saw Blade Finished

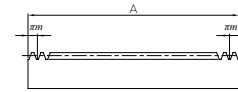
R1

Catalog No.	Module	Effective 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	
<b>SUR1-500</b>	<b>m1</b>	159	R1	505	10	12	11	457	99.4	46.6	10.1	0.43
<b>SUR1.5-500</b> <b>SUR1.5-1000</b>	<b>m1.5</b>	105 212	R1	505 1010	15	20	18.5	1030	237	105	24.2	1.09 2.19
<b>SUR2-500</b> <b>SUR2-1000</b>	<b>m2</b>	79 159	R1	505 1010	20	25	23	1830	436	187	44.5	1.81 3.63
<b>SUR2.5-500</b> <b>SUR2.5-1000</b>	<b>m2.5</b>	63 127	R1	505 1010	25	30	27.5	2860	698	292	71.2	2.71 5.42
<b>SUR3-500</b> <b>SUR3-1000</b>	<b>m3</b>	52 105	R1	505 1010	30	35	32	4120	1030	420	105	3.79 7.57
<b>SUR4-500</b> <b>SUR4-1000</b>	<b>m4</b>	39 79	R1	505 1010	40	45	41	7320	1870	746	191	6.47 12.9

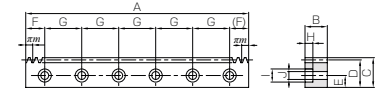
Catalog No.	Module	No. of teeth	Shape	Total length				Allowable force (N)		Allowable force (kgf)		Weight (kg)
				A	B	C	D	Bending strength	Surface durability	Bending strength	Surface durability	
<b>SURF1.5-1000</b>	<b>m1.5</b>	212	RF	999.03	15	20	18.5	1030	237	105	24.2	2.17
<b>SURF2-1000</b>	<b>m2</b>	160	RF	1005.31	20	25	23	1830	436	187	44.5	3.61
<b>SURF2.5-1000</b>	<b>m2.5</b>	128	RF	1005.31	25	30	27.5	2860	698	292	71.2	5.40
<b>SURF3-1000</b>	<b>m3</b>	106	RF	999.03	30	35	32	4120	1030	420	105	7.49
<b>SURF4-1000</b>	<b>m4</b>	80	RF	1005.31	40	45	41	7320	1870	746	191	12.9

Catalog No.	Module	No. of teeth	Shape	Total length				Mounting hole dimensions				No. of mounting holes	Mounting screw size
				A	B	C	D	E	F	G			
<b>SURFD1.5-1000</b>	<b>m1.5</b>	212	RD	999.03	15	20	18.5	8	49.52	180	6	M5	
<b>SURFD2-1000</b>	<b>m2</b>	160	RD	1005.31	20	25	23	10	52.66	180	6	M6	
<b>SURFD2.5-1000</b>	<b>m2.5</b>	128	RD	1005.31	25	30	27.5	12	52.66	180	6	M8	
<b>SURFD3-1000</b>	<b>m3</b>	106	RD	999.03	30	35	32	14	49.52	180	6	M10	
<b>SURFD4-1000</b>	<b>m4</b>	80	RD	1005.31	40	45	41	18	52.66	180	6	M12	

\* For products not categorized in our KHK Stock Gear series, custom gear production services with **short lead times** is available. For details see Page 8.



RF

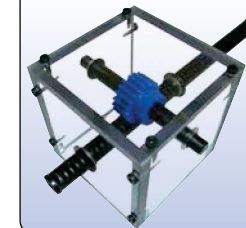


RD

- [Caution on Product Characteristics]
- The allowable forces shown in the table are the calculated values according to the assumed usage conditions. Please see Page 189 for more details.
  - 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.
  - For products made of stainless steel, heat treatment\* and passivation \*\* solutions are applied. Passivation is a rust-resistance treatment, but it is not effective on the machined surface and not a totally rustproof solution.
    - \* Heat Treatment Solution
    - Heat treatment by the carbon formed on the surface during blank manufacturing is made to infiltrate the material interior.
    - \*\* Passivation
    - Immersion of the metal in a nitric acid solution to make it more rust-resistant.
  - 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]
- 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		
6	10	6	1030	237	105	24.2	2.13	<b>SURFD1.5-1000</b>
7	11	7	1830	436	187	44.5	3.56	<b>SURFD2-1000</b>
8.6	14	9	2860	698	292	71.2	5.29	<b>SURFD2.5-1000</b>
10.8	17.5	11	4120	1030	420	105	7.28	<b>SURFD3-1000</b>
13	20	14	7320	1870	746	191	12.5	<b>SURFD4-1000</b>

GCU-R Rack Kit



Installment : Parallel axes gears  
Gear Type : Racks & Pinions  
Gears : SRO1.5-500  
PS1.5-20  
Weight : Approx. 1kg

Use of racks enables the conversion of rotation motion to linear motion. Applications include devices that provide lift.