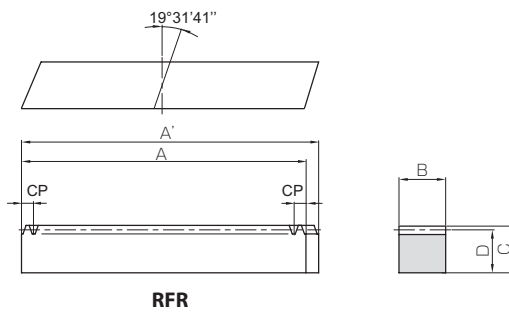




Specifications	
Precision grade	KHK R 001 grade 4
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Helix angle/direction	19° 31' 41" right helix
Material	S45C
Heat Treatment	—
Tooth hardness	(less than 194HB)
Surface treatment	Black oxide coating



Catalog Number	Module (front pitch mm)	No. of teeth	Shape	Total Length		Face width B	Height C	Height to pitch line D
				A	A'			
<b>KSRHEF1.5-1000R</b>	<b>m1.5</b> (CP5)	200	RFR	1000	1006.03	17	17	15.5
<b>KSRHEF2-1000R</b>	<b>m2</b> (CP6.667)	150			1008.51	24	24	22
<b>KSRHEF3-1000R</b>	<b>m3</b> (CP10)	100			1010.29	29	29	26
<b>KSRHEF4-1000R</b>	<b>m4</b> (CP13.333)	75			1013.83	39	39	35
<b>KSRHEF5-1000R</b>	<b>m5</b> (CP16.667)	60			1017.38	49	39	34
<b>KSRHEF6-1000R</b>	<b>m6</b> (CP20)	50			1020.93	59	49	43

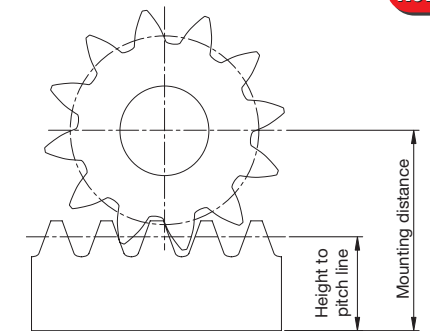
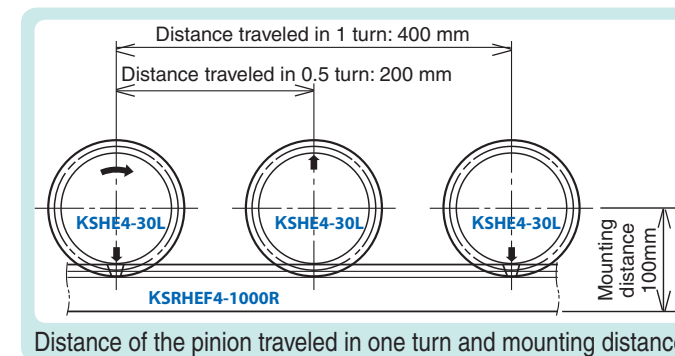
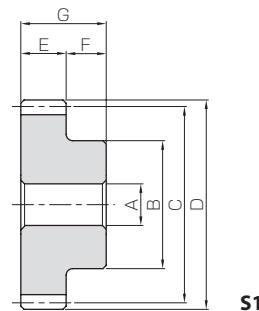
- [Caution on Product Characteristics]
- The allowable forces shown in the table are calculated values according to the assumed usage conditions. Please see Page 190 for more details.
  - Please use the KSHE Helical Gear for the mating pinion.
  - After attaching the racks to the base, please fasten with dowel pins. Clamping only with mounting screws could possibly cause the screws to be broken, due to a heavy load.
  - These gears produce axial thrust forces. Please see Page 167 for more details.

Allowable force (N)		Allowable force (kgf)		Weight (kg)	Catalog Number
Bending strength	Surface durability	Bending strength	Surface durability		
2410	425	245	43.3	2.06	<b>KSRHEF1.5-1000R</b>
4410	675	450	68.8	4.14	<b>KSRHEF2-1000R</b>
8210	1650	837	168	5.91	<b>KSRHEF3-1000R</b>
15200	2700	1550	275	10.7	<b>KSRHEF4-1000R</b>
22500	4110	2300	419	13.1	<b>KSRHEF5-1000R</b>
33400	7240	3410	738	19.9	<b>KSRHEF6-1000R</b>

- [Caution on Secondary Operations]
- Please read "Cautions on Performing Secondary Operations" (Page 194) when performing modifications and/or secondary operations for safety concerns.



Specifications	
Precision grade	JIS grade N8 (JIS B1702-1: 1998)
Reference section of gear	Normal plane
Gear teeth	Standard full depth
Normal pressure angle	20°
Helix angle/direction	19° 31' 41" left helix
Material	S45C
Heat Treatment	—
Tooth hardness	(less than 194HB)
Surface treatment	Black oxide coating



Mounting distance of profile helix gear and meshing rack

Catalog Number	Module (front pitch mm)	No. of teeth	Dislocation coefficient	Mounting distance	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width
						AH7	B	C	D	E	F
<b>KSHE1.5-20L</b>	<b>m1.5</b> (CP5)	20	+0.390	28	S1	10	25	31.83	36	18	14
<b>KSHE1.5-25L</b>		25	+0.404	32		12	35	39.79	44	18	14
<b>KSHE1.5-30L</b>		30	+0.418	36		15	40	47.75	52	18	14
<b>KSHE2-18L</b>	<b>m2</b> (CP6.667)	18	+0.451	42		12	30	38.20	44	25	16
<b>KSHE2-24L</b>		24	+0.268	48		15	45	50.93	56	25	16
<b>KSHE2-30L</b>		30	+0.085	54		18	55	63.66	68	25	16
<b>KSHE3-20L</b>	<b>m3</b> (CP10)	20	+0.390	59		20	55	63.66	72	30	20
<b>KSHE3-25L</b>		25	+0.404	67		20	70	79.58	88	30	20
<b>KSHE3-30L</b>		30	+0.418	75		25	85	95.49	104	30	20
<b>KSHE4-18L</b>	<b>m4</b> (CP13.333)	18	+0.201	74		20	65	76.39	86	40	25
<b>KSHE4-24L</b>		24	+0.268	87		20	90	101.86	112	40	25
<b>KSHE4-30L</b>		30	+0.335	100		25	110	127.32	138	40	25
<b>KSHE5-18L</b>	<b>m5</b> (CP16.667)	18	+0.451	84	25	85	95.49	110	50	25	
<b>KSHE5-24L</b>		24	+0.468	100	25	110	127.32	142	50	25	
<b>KSHE6-20L</b>	<b>m6</b> (CP20)	20	+0.390	109	30	110	127.32	144	60	28	
<b>KSHE6-25L</b>		25	+0.404	125	30	140	159.15	176	60	28	

- [Caution on Product Characteristics]
- The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 190 for more details.
  - The backlash values shown in the table are the theoretical values for the backlash in the normal direction of SRHEF Helical Racks with the same pitch.
  - These gears produce axial thrust forces. Please see Page 167 for more details.

Total Length G	Distance of the pinion traveled in one turn (mm)	Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog Number
		Bending strength	Surface durability	Bending strength	Surface durability			
32	100	35.6	5.89	3.63	0.60	0.08~0.20	0.16	<b>KSHE1.5-20L</b>
32	125	46.5	10.3	4.75	1.05		0.26	<b>KSHE1.5-25L</b>
32	150	57.6	16.3	5.87	1.66		0.36	<b>KSHE1.5-30L</b>
41	120	78.2	11.2	7.98	1.15	0.10~0.22	0.30	<b>KSHE2-18L</b>
41	160	107	24.4	10.9	2.48		0.56	<b>KSHE2-24L</b>
41	200	136	43.8	13.8	4.46		0.85	<b>KSHE2-30L</b>
50	200	238	45.7	24.2	4.66	0.12~0.26	1.06	<b>KSHE3-20L</b>
50	250	310	80.1	31.6	8.17		1.72	<b>KSHE3-25L</b>
50	300	384	127	39.2	12.9		2.47	<b>KSHE3-30L</b>
65	240	474	89.8	48.3	9.16	0.16~0.34	1.99	<b>KSHE4-18L</b>
65	320	687	183	70.0	18.6		3.76	<b>KSHE4-24L</b>
65	400	902	317	92.0	32.3		5.78	<b>KSHE4-30L</b>
75	300	978	171	99.7	17.4	0.18~0.38	3.91	<b>KSHE5-18L</b>
75	400	1380	354	141	36.1		6.95	<b>KSHE5-24L</b>
88	400	1900	402	194	40.9	0.20~0.44	8.05	<b>KSHE6-20L</b>
88	500	2480	705	253	71.9		12.8	<b>KSHE6-25L</b>

- [Caution on Secondary Operations]
- Please read "Cautions on Performing Secondary Operations" (Page 194) when performing modifications and/or secondary operations for safety concerns.
  - Avoid performing secondary operations that narrow the tooth width, as it affects precision and strength.