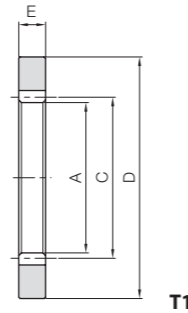




Specifications	
Precision grade	JIS grade N9 (JIS B1702-1: 1998)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	(less than 194HB)
Surface treatment	Black oxide coating



Catalog Number	Module	No. of teeth	Shape	Dimensions (mm)				Allowable torque (N-m)				Backlash (mm)	Weight (kg)
				A	C	D	E	Bending strength	Surface durability	Bending strength	Surface durability		
SIR2-120 SIR2-200	m2	120	T1	236	240	286	20	413	68.8	42.1	7.02	0.12~0.28	2.98
		200		396	400	446	20	677	110	69.0	11.2		
SIR2.5-120 SIR2.5-200	m2.5	120		295	300	355	25	807	138	82.3	14.0	0.14~0.31	5.55
		200		495	500	555	25	1320	220	135	22.5		
SIR3-120 SIR3-160	m3	120	T1	354	360	424	30	1390	244	142	24.9	0.15~0.35	9.28
		160		474	480	544	30	1840	315	188	32.1		

- [Caution on Product Characteristics]
- The backlash values shown in the table are the theoretical values for the normal direction for the internal ring in mesh with an SS spur gear.
 - The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see Page 209 for more details.
 - Please check for the involute interference, trochoid interference and trimming interference prior to using internal gears.

Established equipment and technology Custom gears are also available.

Module 0.5~4, Tooth diameter ϕ 150mm or more
Outside diameter ϕ 700mm or less, weight 40kg or less



Gear cutting by CNC Gear Shaper



Racks

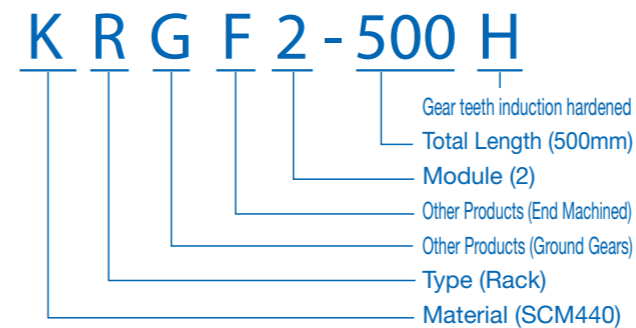
MRGF/MRGFD Hardened Ground Racks	KRGF-H/KRGFD-H Hardened Ground Racks	KRG/KRGF/KRGFD Thermal Refined Ground Racks	SRG/SRGF/SRGFD/SRGFK Hardened Ground Racks	KRF-H/KRFD-H Hardened Racks	SRF-H/SRFD-H Hardened Racks	SRF-HL/SRFD-HL Laser Hardened Racks	SRAF-HL/SRAF-D-HL/SRAF-K-HL Laser Hardened Square Racks
Material: SCM415 m1.5-3 Page 224	Material: SCM440 m1.5-3 Page 226	Material: SCM440 m1-3 Page 228	Material: S45C m0.5-6 Page 230	Material: SCM440 m1.5-5 Page 232	Material: S45C m1.5-6 Page 234	Material: S45C m1.5-6 Page 236	Material: S45C m1.5-4 Page 238
KRF/KRFD Thermal Refined Racks	SRAF/SRAF-D/SRAF-K Square Racks	SR Racks	SRF Steel Racks with Machined Ends	SRFD/SRFK Steel Racks with Bolt Holes	SUR/SURF/SURFD Stainless Steel Racks	DRF/DRFD/DRFK Plastic Racks	PR/PRF Plastic Racks
Material: SCM440 m1.5-5 Page 240	Material: S45C m1.5-4 Page 242	Material: S45C m0.5-10 Page 244	Material: S45C m0.5-10 Page 245	Material: S45C m0.5-6 Page 246	Material: SUS304 m1-4 Page 248	Material: Polyacetal m1-3 Page 250	Material: MC901 m1-3 Page 252
BSR Racks	SRO/SROS Round Racks	SURO Stainless Steel Round Racks	DR Molded Flexible Racks	SSDR/ARL/SRS Rack Clamps for Pinions/Rack Guide Rails For Molded Flexible Racks	KRHG/KRHGF/KRHGFD Ground Helical Racks	SRHEF-HL Laser Hardened Helical Racks	SRH/SRHF/SRHFD Helical Racks
Material: Free cutting brass (C3604) m0.5-1 Page 253	Material: S45C m1-5 Page 254	Material: SUS303 m1-3 Page 255	Material: Duracon (R) (M25-44) m0.8-2 Page 256	Material: S45C, etc. Page 256	Material: SCM440 m1-3 Page 258	Material: S45C m3-6 Page 260	Material: S45C m2, 3 Page 262
SRHEF Helical Racks	SHE-H Hardened Helical Gears	SHE Helical Gears	ZST/ZSTD Hardened Ground Helical Racks	ZSTP Ground Helical Gears	ZST-GL Assembly Gauges		
Material: S45C m1.5-6 Page 264	Material: S45C m1.5-6 Page 264	Material: S45C m1.5-6 Page 264	Material: DIN C45 (S45C equivalent) m2-6 Page 266	Material: SCM440 m2-6 Page 266	Material: S45C m1.5-6 Page 268		

M Includes Made to Order

Catalog Number of KHK Stock Gears

The Catalog Number for KHK stock gears is based on the simple formula listed below. Please order KHK gears by specifying the Catalog Numbers.

(Example) Racks



Material		Other Information	
M	SCM415	F	Racks with Machined Ends
K	SCM440	D	Racks with Bolt Holes
S	S45C	K	Racks with Drill Holes
SU	Stainless Steel	G	Ground Gears
BS	Brass	H	Gear teeth induction hardened
P	MC901	HL	Laser hardened
D	Polyacetal	ZST	Manufactured by Schneeberger
Type			
R	Racks		
RH	Helical Racks		
RO	Round Racks		
S	Spur Gears		
H	Helical Gears		