



R1 Shape (Type F)

Specifications

Precision grade	KHK R 001 grade 4
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C-D
Heat treatment	Stress relief annealing
Tooth hardness	Less than 95HRB
Surface treatment	Black oxide
Tooth surface finish	Cut
Datum reference surface for gear cutting	Bottom surface
Secondary Operations	Possible

Modules 1~3 300 Rack Type F

Catalog No.	Module m	Total length A	Face width B	Height C	Height to pitch line D	Effective No. of teeth	Shape	Allowable force (N) ^{NOTE 1}		Allowable force (kgf)		Weight (kgf)
								Bending strength	Surface durability	Bending strength	Surface durability	
SRF1 -300	1	301.59	10	12	11	96	R1	958.2	176.7	(0097.71)	(0018.02)	0.25
SRF1.5-300	1.5	301.59	15	20	18.5	64	R1	2156	420.9	(0219.90)	(0042.92)	0.73
SRF2 -300	2	301.59	20	25	23	48	R1	3833	775	(0390.90)	(0079.03)	1.2
SRF2.5-300	2.5	298.45	25	30	27.5	38	R1	5989	1242	(0610.70)	(0126.60)	1.8
SRF3 -300	3	301.59	30	35	32	32	R1	8624	1821	(0879.40)	(0185.70)	2.5

Modules 1~6 500 Racks Type F

SRF1 -500	1	499.51	10	12	11	159	R1	958.2	176.7	(0097.71)	(0018.02)	0.41
SRF1.5-500	1.5	499.51	15	20	18.5	106	R1	2156	420.9	(0219.90)	(0042.92)	1.19
SRF2 -500	2	502.65	20	25	23	80	R1	3833	775	(0390.90)	(0079.03)	1.89
SRF2.5-500	2.5	502.65	25	30	27.5	64	R1	5989	1242	(0610.70)	(0126.60)	2.59
SRF3 -500	3	499.51	30	35	32	53	R1	8624	1821	(0879.40)	(0185.70)	3.76
SRF4 -500	4	502.65	40	45	41	40	R1	15330	3325	(1563.00)	(0339.10)	6.27
SRF5 -500	5	502.65	50	50	45	32	R1	23960	5296	(2443.00)	(0540.00)	8.26
SRF6 -500	6	490.09	60	60	54	26	R1	34500	7735	(3518.00)	(0788.80)	12.3

Modules 1~10 1000 Racks Type F

SRF1 -1000	1	999.03	10	12	11	318	R1	958.2	176.7	(97.71)	(18.02)	0.8
SRF1.5-1000	1.5	999.03	15	20	18.5	212	R1	2156	420.9	(219.9)	(42.92)	2.2
SRF2 -1000	2	1005.31	20	25	23	160	R1	3833	775	(390.9)	(79.03)	3.6
SRF2.5-1000	2.5	1005.31	25	30	27.5	128	R1	5989	1242	(610.7)	(126.6)	5.3
SRF3 -1000	3	999.03	30	35	32	106	R1	8624	1821	(879.4)	(185.7)	7.5
SRF4 -1000	4	1005.31	40	45	41	80	R1	15330	3325	(1563)	(339.1)	12.5
SRF5 -1000	5	1005.31	50	50	45	64	R1	23960	5296	(2443)	(540)	17.5
SRF6 -1000	6	999.03	60	60	54	53	R1	34500	7735	(3518)	(788.8)	25.4
SRF8 -1000	8	1005.31	75	75	67	40	R1	44230	10380	(4510)	(1059)	39
SRF10 -1000 ^{NOTE 2}	10	1005.31	90	80	70	32	R1	66340	16100	(6765)	(1642)	50

Modules 1.5~6 1500 Racks Type F

SRF1.5-1500	1.5	1507.96	15	20	18.5	320	R1	2156	420.9	(219.9)	(42.92)	3.3
SRF2 -1500	2	1507.96	20	25	23	240	R1	3833	775	(390.9)	(79.03)	5.5
SRF2.5-1500	2.5	1507.96	25	30	27.5	192	R1	5989	1242	(610.7)	(126.6)	8.2
SRF3 -1500	3	1507.96	30	35	32	160	R1	8624	1821	(879.4)	(185.7)	11.4
SRF4 -1500	4	1507.96	40	45	41	120	R1	15330	3325	(1563)	(339.1)	19.4
SRF5 -1500	5	1507.96	50	50	45	96	R1	23960	5296	(2443)	(540)	26.6
SRF6 -1500	6	1507.96	60	60	54	80	R1	34500	7735	(3518)	(788.8)	38.3

Modules 1.5~6 2000 Racks Type F

SRF1.5-2000	1.5	2049.88	15	20	18.5	435	R1	2156	420.9	(219.9)	(42.92)	4.5
SRF2 -2000	2	2048.31	20	25	23	326	R1	3833	775	(390.9)	(79.03)	7.4
SRF2.5-2000	2.5	2049.88	25	30	27.5	261	R1	5989	1242	(610.7)	(126.6)	11
SRF3 -2000	3	2045.17	30	35	32	217	R1	8624	1821	(879.4)	(185.7)	15.4
SRF4 -2000	4	2048.31	40	45	41	163	R1	15330	3325	(1563)	(339.1)	26.4
SRF5 -2000	5	2042.04	50	50	45	130	R1	23960	5296	(2443)	(540)	35.9
SRF6 -2000	6	2035.75	60	60	54	108	R1	34500	7735	(3518)	(788.8)	51.8

* The blue catalog number designates a new product.

NOTE 1: The allowable forces shown in the table are the calculated values according to the assumed usage conditions. Please see page 155 for more details.

NOTE 2: The material of SRF10 is S45C which is machined rectangular section and not S45C-D (forged material).