



# Racks with Bolt Holes

## Specifications

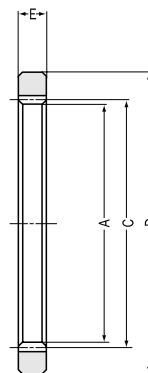
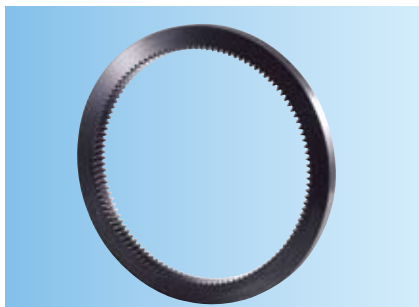
Precision grade	<b>KHK R 001 grade 4</b>	Tooth hardness	<b>Less than 95HRB</b>
Gear teeth	<b>Standard full depth</b>	Surface treatment	<b>Black oxide</b>
Pressure angle	<b>20°</b>	Tooth surface finish	<b>Cut</b>
Material	<b>S45C-D</b>	Datum reference surface for gear cutting	<b>Bottom surface</b>
Heat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

Counterbore dimensions				Shape	Allowable force (N) <sup>NOTE 2</sup>		Allowable force (kgf)		Weight (kgf)	Catalog No.
H	I	J	K		Bending strength	Surface durability	Bending strength	Surface durability		
6	10	6	9	R1	2156	420.9	( 219.9 )	( 42.92 )	2.1	<b>SRFD1.5-1000</b>
7	11	7	13	R1	3833	775	( 390.9 )	( 79.03 )	3.5	<b>SRFD2 -1000</b>
9	14	9	16	R1	5989	1242	( 610.7 )	( 126.6 )	5.3	<b>SRFD2.5-1000</b>
11	17.5	11	19	R1	8624	1821	( 879.4 )	( 185.7 )	7.2	<b>SRFD3 -1000</b>
14	20	14	26	R1	15330	3325	(1563 )	(339.1 )	12.4	<b>SRFD4 -1000</b>
16	23	16	34	R1	23960	5296	(2443 )	( 540 )	17	<b>SRFD5 -1000</b>
18	26	18	42	R1	34500	7735	(3518 )	(788.8 )	24	<b>SRFD6 -1000</b>
6	10	6	9	R1	2156	420.9	( 219.9 )	( 42.92 )	3.2	<b>SRFD1.5-1500</b>
7	11	7	13	R1	3833	775	( 390.9 )	( 79.03 )	5.4	<b>SRFD2 -1500</b>
9	14	9	16	R1	5989	1242	( 610.7 )	( 126.6 )	8	<b>SRFD2.5-1500</b>
11	17.5	11	19	R1	8624	1821	( 879.4 )	( 185.7 )	11.1	<b>SRFD3 -1500</b>
14	20	14	26	R1	15330	3325	(1563 )	(339.1 )	18.9	<b>SRFD4 -1500</b>
16	23	16	34	R1	23960	5296	(2443 )	( 540 )	25.9	<b>SRFD5 -1500</b>
18	26	18	42	R1	34500	7735	(3518 )	(788.8 )	36.2	<b>SRFD6 -1500</b>
6	10	6	9	R1	2156	420.9	( 219.9 )	( 42.92 )	4.4	<b>SRFD1.5-2000</b>
7	11	7	13	R1	3833	775	( 390.9 )	( 79.03 )	7.3	<b>SRFD2 -2000</b>
9	14	9	16	R1	5989	1242	( 610.7 )	( 126.6 )	10.9	<b>SRFD2.5-2000</b>
11	17.5	11	19	R1	8624	1821	( 879.4 )	( 185.7 )	15.2	<b>SRFD3 -2000</b>
14	20	14	26	R1	15330	3325	(1563 )	(339.1 )	25.9	<b>SRFD4 -2000</b>
16	23	16	34	R1	23960	5296	(2443 )	( 540 )	35.1	<b>SRFD5 -2000</b>
18	26	18	42	R1	34500	7735	(3518 )	(788.8 )	48.9	<b>SRFD6 -2000</b>

**NOTE 2:** The allowable forces shown in the table are the calculated values according to the assumed usage conditions. Please see page 155 for more details.



# SIR Corner Racks (Internal) <sup>Modules 2~3</sup>



T1 Shape

## Specifications

Precision grade	JIS N9 grade (JIS B1702-1: 1998) OLD JIS S grade (JIS B1702: 1974)
Gear teeth	<b>Standard full depth</b>
Pressure angle	<b>20°</b>
Material	<b>S45C</b>
Heat treatment	—
Tooth hardness	<b>Less than 194HB</b>
Surface treatment	<b>Black oxide</b>
Tooth surface finish	<b>Cut</b>
Datum reference surface for gear cutting	<b>Outside diameter</b>
Secondary Operations	<b>Possible</b>

### Module 2

Catalog No.	Module <i>m</i>	No. of teeth <i>z</i>	Outside dia. <i>A</i>	Pitch dia. <i>C</i>	Outside dia. of ring <i>D</i>	Face width <i>E</i> <sup>NOTE 5</sup>	Shape	Allowable force (N) <sup>NOTE 5</sup>		Allowable force (kgf)		Weight (kgf)
								Bending strength	Surface durability	Bending strength	Surface durability	
<b>SIR2-120</b>	2	120	236	240	286	20	T1	3444	573.6	(351.1)	(58.49)	3
<b>SIR2-200</b>	2	200	396	400	446	20	T1	3385	548.4	(345.2)	(55.92)	4.8

### Module 2.5

<b>SIR2.5-120</b>	2.5	120	295	300	355	25	T1	5380	917.4	(548.7)	(93.54)	5.5
<b>SIR2.5-200</b>	2.5	200	495	500	555	25	T1	5289	881.4	(539.3)	(89.88)	8.9

### Module 3

<b>SIR3-120</b>	3	120	354	360	424	30	T1	7748	1356	(790.1)	(138.3)	10
<b>SIR3-160</b>	3	160	474	480	544	30	T1	7663	1313	(781.5)	(133.9)	12.1

**NOTE 5:** The allowable torques shown in the table is the calculated values according to the assumed usage conditions. Please see page 148 for more details.