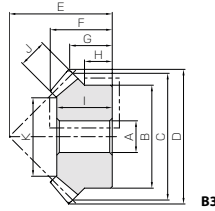




Specifications	
Precision grade	JIS B 1704 : 1978 grade 4
Gear teeth	Gleason
Pressure angle	20°
Helix angle	35°
Material	SCM415
Heat treatment	Carburizing
Tooth hardness	55 ~ 60HRC



B3

Catalog No.	Gear ratio	Module	No. of teeth	Direction of spiral	Shape	Bore		Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back length
						A <sub>H7</sub>	B					
MMS2-20R MMS2-20L	1	m2	20	R L	B3	12	34	40	42.31	35	22.14	16.15
MMS2.5-20R MMS2.5-20L		m2.5	20	R L	B3	15	42	50	53.2	45	28.63	21.6
MMS3-20R MMS3-20L		m3	20	R L	B3	16	52	60	63.99	50	30.78	21.99
MMS4-20R MMS4-20L		m4	20	R L	B3	20	65	80	84.99	65	39.13	27.5
MMS5-20R MMS5-20L		m5	20	R L	B3	25	85	100	106.25	75	42.99	28.13
MMS2-25R MMS2-25L	1	m2	25	R L	B3	12	45	50	52.4	40	24.19	16.2
MMS2.5-25R MMS2.5-25L		m2.5	25	R L	B3	16	55	62.5	65.54	50	30.24	20.27
MMS3-25R MMS3-25L		m3	25	R L	B3	20	65	75	78.77	60	37.57	24.39
MMS4-25R MMS4-25L		m4	25	R L	B3	25	85	100	104.7	80	49.14	32.35
MMS5-25R MMS5-25L		m5	25	R L	B3	28	100	125	130.86	100	60.59	40.43
MMS2-30R MMS2-30L	1	m2	30	R L	B3	12	45	60	62.42	50	29.27	21.21
MMS2.5-30R MMS2.5-30L		m2.5	30	R L	B3	16	60	75	78.04	62	36.08	26.02
MMS3-30R MMS3-30L		m3	30	R L	B3	20	70	90	93.61	75	45.25	31.8
MMS4-30R MMS4-30L		m4	30	R L	B3	28	100	120	124.71	95	54.28	37.35
MMS5-30R MMS5-30L		m5	30	R L	B3	28	130	150	155.9	120	68.2	47.95

- [Caution on Product Characteristics]
- ① A sets of miter gears must be identical in module and number of teeth, but opposite in spiral hands.
  - ② The allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 253 for more details.
  - ③ Dimensions of the outside diameter, the overall length and crown to back length are all theoretical values, and some differences will occur due to the corner chamfering of the gear tips.
  - ④ These gears produce axial thrust forces. See page 254 for more details.

\* 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.

Hub width H	Length of bore I	Face width J	Holding surface dia. K	Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
				Bending strength	Surface durability	Bending strength	Surface durability			
12	20	9	24.54	17.0	17.3	1.73	1.76	0.06~0.16	0.13	MMS2-20R MMS2-20L
16	26	11	30.89	32.7	33.7	3.34	3.44	0.07~0.17	0.26	MMS2.5-20R MMS2.5-20L
16	27	14	34.4	58.7	61.1	5.98	6.23	0.08~0.18	0.43	MMS3-20R MMS3-20L
17.5	35	18	49.08	136	144	13.9	14.7	0.12~0.27	0.92	MMS4-20R MMS4-20L
17.5	38	23	60.95	269	288	27.5	29.4	0.14~0.34	1.65	MMS5-20R MMS5-20L
12.5	21	12	28.06	29.1	36.3	2.96	3.70	0.06~0.16	0.25	MMS2-25R MMS2-25L
15	27	15	36.57	56.7	71.8	5.79	7.32	0.07~0.17	0.47	MMS2.5-25R MMS2.5-25L
17.5	33	20	39.43	104	133	10.6	13.6	0.08~0.18	0.81	MMS3-25R MMS3-25L
22.5	44	25	57.29	238	309	24.3	31.5	0.12~0.27	1.88	MMS4-25R MMS4-25L
25	50	30	65.15	454	595	46.3	60.7	0.14~0.34	3.39	MMS5-25R MMS5-25L
12.5	25	12	36.06	42.4	57.1	4.32	5.82	0.06~0.16	0.37	MMS2-30R MMS2-30L
17	32	15	47.57	82.8	113	8.44	11.5	0.07~0.17	0.76	MMS2.5-30R MMS2.5-30L
20	40	20	53.43	153	211	15.6	21.5	0.08~0.18	1.32	MMS3-30R MMS3-30L
25	50	25	79.29	348	488	35.5	49.8	0.12~0.27	3.07	MMS4-30R MMS4-30L
35	62	30	99.15	662	941	67.5	96.0	0.14~0.34	6.44	MMS5-30R MMS5-30L

- [Caution on Secondary Operations]
- ① Please read "Caution on Performing Secondary Operations" (Page 254) when performing modification 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.
  - ② In the illustration, the area surrounded with - - - line is masked during the carburization process and can be modified. However, care should be exercised since the hardness is high (approx. HRC40, maximum).

### GCU-M Miter Gear Kit



Installation : Intersecting axes gears  
 Gear Type : Miter Gears  
 Gears : SM2-25  
 PM2-25  
 Gear Ratio : 1  
 Weight : Approx. 1kg

Use of bevel gears allows the changing of the shaft angle by 90 degrees. Applications include the changing of the direction of power.