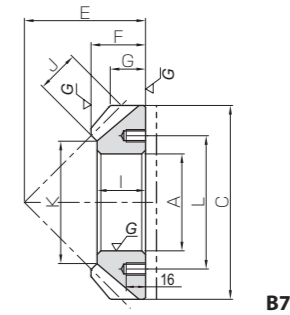
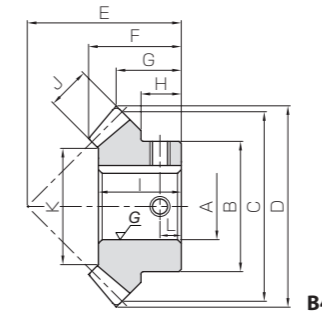
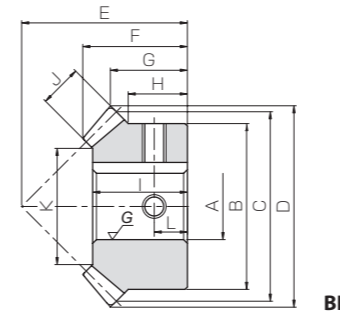
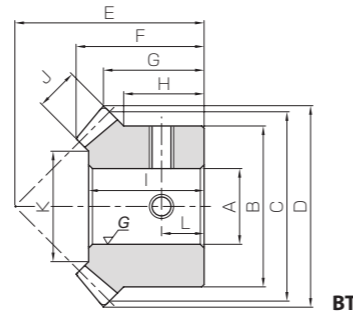




Specifications	
Precision grade	JIS B 1704: 1978 grade 4
Gear teeth	Gleason
Pressure angle	20°
Helix angle	35°
Material	SCM415
Heat treatment	Overall carburizing
Tooth hardness	55 ~ 60HRC



Catalog No.	Gear ratio	Module	No. of teeth	Direction of spiral	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back length	Hub width	Length of bore
						A _{H7}	B	C	D	E	F	G	H	I
KMMSA1-20R KMMSB1-20R KMMSA1-20L KMMSB1-20L	1	m1	20	R	BT	8	17	20	21.29	20	13.53	10.64	8.5	12.2
				L	BT	10								
KMMSA1.5-20R KMMSB1.5-20R KMMSA1.5-20L KMMSB1.5-20L	1	m1.5	20	R	BT	10	25	30	31.9	28	18.48	13.95	10.5	16.5
				L	BK	12								
KMMSA2-20R KMMSB2-20R KMMSA2-20L KMMSB2-20L	1	m2	20	R	BK	14	35	40	42.52	35	22.09	16.26	12.5	20
				L	BK	16								
KMMSA2.5-20R KMMSB2.5-20R KMMSA2.5-20L KMMSB2.5-20L	1	m2.5	20	R	BK	18	42	50	53.2	45	28.63	21.6	16	26
				L	BK	20								
KMMSA3-20R KMMSB3-20R KMMSA3-20L KMMSB3-20L	1	m3	20	R	BK	20	52	60	63.99	50	30.78	21.99	16	27
				L	BK	22								
KMMSA3.5-20R KMMSB3.5-20R KMMSA3.5-20L KMMSB3.5-20L	1	m3.5	20	R	B4	25	50	70	74.53	55	32.45	22.26	14	29
				L	B4	28								
KMMSA4-20R KMMSB4-20R KMMSA4-20L KMMSB4-20L	1	m4	20	R	B4	28	55	80	84.99	65	39.13	27.5	17	35
				L	B4	30								
KMMSA5-20R KMMSB5-20R KMMSA5-20L KMMSB5-20L	1	m5	20	R	B4	30	70	100	106.25	75	42.99	28.13	17	38
				L	B4	35								
KMMSA6-20R KMMSB6-20R KMMSA6-20L KMMSB6-20L	1	m6	20	R	B4	40	80	120	127.59	90	51.13	33.8	20	45
				L	B4	45								
KMMSA8-20R KMMSA8-20L	1	m8	20	R L	B7	80 80	—	160	—	100	45	29.16	—	40
KMMSA10-20R KMMSA10-20L	1	m10	20	R L	B7	100 100	—	200	—	125	58	36.48	—	50

Face width	Holding surface dia.	Keyway	Set Screw	Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
				Bending strength	Surface durability	Bending strength	Surface durability			
J	K	Width×Depth	Size	L						
4.5	11.67	—	2-M4	4.5	2.24	2.09	0.23	0.21	0.03~0.13	0.018 0.015
		—	2-M4							
7	17.2	4 x 1.8	2-M4	6	7.74	7.34	0.79	0.75	0.05~0.15	0.057 0.052
		—	2-M4							
9	24.54	5 x 2.3	2-M4	7	18.0	17.3	1.83	1.76	0.06~0.16	0.13 0.12
		—	2-M4							
11	30.89	6 x 2.8	2-M5	8	34.6	33.7	3.52	3.44	0.07~0.17	0.24 0.23
		—	2-M5							
14	34.4	6 x 2.8	2-M5	8	61.9	61.1	6.32	6.23	0.08~0.18	0.40 0.39
		—	2-M5							
16	42.75	8 x 3.3	2-M6	8	97.1	96.7	9.90	9.86	0.10~0.25	0.46 0.43
		—	2-M6							
18	49.08	8 x 3.3	2-M6	9	144	144	14.6	14.7	0.12~0.27	0.70 0.68
		—	2-M6							
23	60.95	8 x 3.3	2-M6	9	284	288	29.0	29.4	0.14~0.34	1.32 1.25
		—	2-M6							
27	73.63	12 x 3.3	2-M8	10	475	496	48.4	50.6	0.16~0.36	2.11 1.99
		—	2-M10							
35	101	—	6-M10	110	1080	1170	111	119	0.20~0.45	3.98 3.98
		—	6-M10							
45	122.72	—	6-M10	130	1660	1840	169	188	0.25~0.50	7.88 7.88
		—	6-M10							

- [Caution on Product Characteristics]
- ① A set 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 272 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 274 for more details.
 - ⑤ Although the dimensions of the keyway are made to the JIS (Js9) tolerance, there may be some deviations due to the effects of heat treatment.
 - ⑥ For products having a tapped hole (Except for B7-shaped products), a tapping screw is attached as an accessory.
- [Caution on Secondary Operations]
- ① These products which are hardened by carburizing allow no secondary machining. However, for B7 type gears, the area surrounded with - - - - line (in the illustration) is masked during the carburization process and can be modified. Care should be exercised since the hardness is high (approx. HRC40, maximum).

When installing B7 type (ring type) Spiral Miter Gears to the base, always secure the gears onto the mounting base with taper pins to absorb the rotational loads. Fastening and securing with only mounting screws could possibly cause the screws to snap due to heavy loads.

