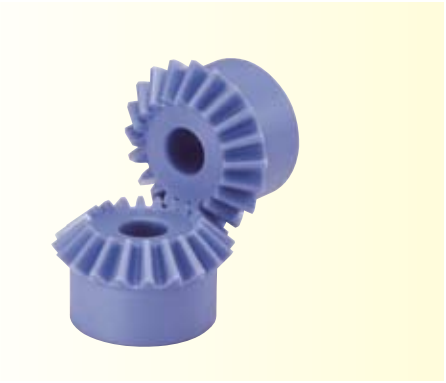
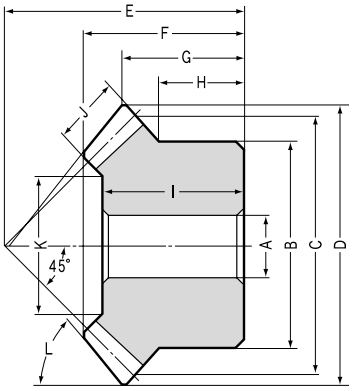
PM Plastic Miter Gears Modules 1~4





B3 Shape

■ 20 Tooth Miter Gears Modules 1~4

Catalog No.	Module	No. of teeth	Bore NOTE 1	Hub dia.	Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back length	Hub width	Length of bore	Face width	Holding surface dia.	Tip angle
	m	z	A	B	C	D	E	F	G	H	I	J	K	L
PM1 -20	1	20	6	16	20	21.41	20	13.95	10.71	8	12	5	9.86	49°48'
PM1.25-20	1.25	20	8	22	25	26.77	23	15.27	11.38	9	13	6	13.03	49°48'
PM1.5 -20	1.5	20	8	26	30	32.12	30	21.24	16.06	13	19	8	15.37	49°48'
PM2 -20	2	20	10	34	40	42.83	37	24.89	18.41	14	22	10	21.72	49°48'
PM2.5 -20	2.5	20	12	42	50	53.54	48	32.54	24.77	19	29	12	28.06	49°48'
PM3 -20	3	20	14	50	60	64.24	58	39.84	30.12	23	35	15	31.57	49°48'
PM3.5 -20	3.5	20	20	60	70	74.95	65	44.13	32.47	25	40	18	39.09	49°48'
PM4 -20	4	20	20	64	80	85.66	75	50.78	37.83	27	45	20	43.43	49°48'

■ 25 Tooth Miter Gears Modules 1~3

PM1 -25	1	25	6	20	25	26.41	23	15.16	11.21	8	14	6	15.03	48°51'
PM1.25-25	1.25	25	8	25	31.25	33.02	28	17.88	13.26	9.25	16	7	18.7	48°51'
PM1.5 -25	1.5	25	8	30	37.5	39.62	34	22.25	16.31	11.5	19	9	19.54	48°51'
PM2 -25	2	25	10	40	50	52.83	40	24.33	16.41	10	20	12	26.06	48°51'
PM2.5 -25	2.5	25	14	50	62.5	66.04	50	30.41	20.52	12.5	26	15	34.57	48°51'
PM3 -25	3	25	15	60	75	79.24	60	37.81	24.62	15	32	20	37.43	48°51'

CAUTION: 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.

NOTE 1: Significant variation in temperature or humidity can cause dimensional changes in plastic gears (MC Nylon gears). Please see the technical section on the characteristics of plastic gears (page 32).

Specifications

Precision grade	JIS B 1704 grade 4	Tooth hardness	115～120HRR
Gear teeth	Gleason	Surface treatment	—
Pressure angle	20°	Tooth surface finish	Cut
Material	MC901	Datum reference surface for gear cutting	Bore
Heat treatment	—	Secondary Operations	Possible

Shape	Allowable torque (N-m) NOTE 2		Allowable torque (kgf-m)		Backlash (mm)	Weight (kgf)	Catalog No.
	Bending strength	Surface durability	Bending strength	Surface durability			
B3	0.1795	—	(0.0183)	—	0.08 ～ 0.18	0.01	**PM1 -20**
B3	0.3472	—	(0.0354)	—	0.09 ～ 0.19	0.01	**PM1.25-20**
B3	0.6139	—	(0.0626)	—	0.1 ～ 0.2	0.01	**PM1.5 -20**
B3	1.437	—	(0.1465)	—	0.11 ～ 0.21	0.02	**PM2 -20**
B3	2.775	—	(0.283)	—	0.12 ～ 0.22	0.04	**PM2.5 -20**
B3	4.847	—	(0.4943)	—	0.13 ～ 0.23	0.07	**PM3 -20**
B3	7.746	—	(0.7899)	—	0.15 ～ 0.25	0.12	**PM3.5 -20**
B3	11.49	—	(1.172)	—	0.17 ～ 0.27	0.16	**PM4 -20**

Pitch Angle 45°

B3	0.2952	—	(0.0301)	—	0.08 ～ 0.18	0.01	**PM1 -25**
B3	0.5639	—	(0.0575)	—	0.09 ～ 0.19	0.01	**PM1.25-25**
B3	0.9954	—	(0.1015)	—	0.1 ～ 0.2	0.02	**PM1.5 -25**
B3	2.359	—	(0.2406)	—	0.11 ～ 0.21	0.03	**PM2 -25**
B3	4.609	—	(0.47)	—	0.12 ～ 0.22	0.06	**PM2.5 -25**
B3	8.154	—	(0.8315)	—	0.13 ～ 0.23	0.1	**PM3 -25**

Pitch Angle 45°

NOTE 2: The allowable torques shown in the table are the calculated values using the Lewis formula.