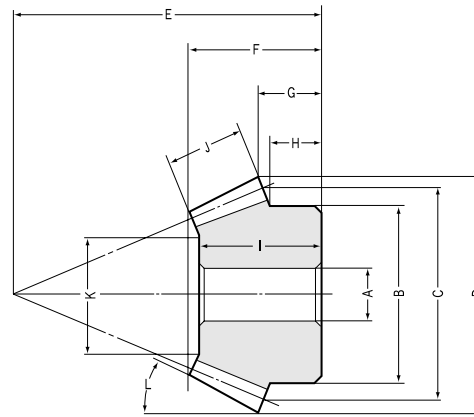
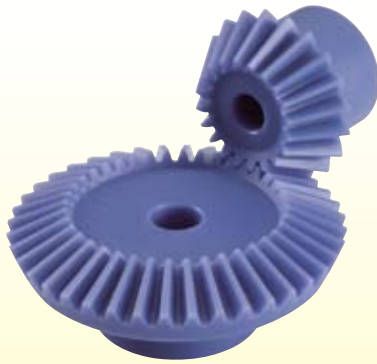




PB Plastic Bevel Gears Modules 1~3



B3 Shape

Gear Ratio 1.5 ■ Modules 1.5~3

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
	<i>m</i>	<i>z</i>	A	B	C	D	E	F	G	H	I	J
PB1.5-3020	1.5	30	10	30	45	46.24	28	18.53	13.93	8	16	9
PB1.5-2030		20	8	25	30	33.13	33	18.63	11.54	8.83	17	
PB2-3020	2	30	10	35	60	61.65	40	26.87	21.24	15	23	11
PB2-2030		20	10	35	40	44.18	45	25.06	16.39	13.33	22	
PB2.5-3020	2.5	30	15	45	75	77.07	50	34.22	26.55	18	30	15
PB2.5-2030		20	12	40	50	55.22	55	31.06	19.24	14.16	28	
PB3-3020	3	30	15	60	90	92.48	55	35.56	26.86	17	31	17
PB3-2030		20	15	50	60	66.27	70	40.48	27.09	21.66	37	

Gear Ratio 2 ■ Modules 1~3

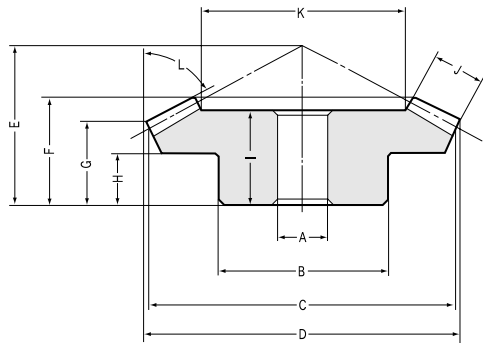
PB1-4020	1	40	8	25	40	40.59	22	15.07	12.59	8	12	6
PB1-2040		20	6	16	20	22.41	28	13.78	8.6	7	12	
PB1.25-4020	1.25	40	10	32	50	50.73	27	18.54	15.23	10	16	8
PB1.25-2040		20	8	22	25	28.01	36	18.66	11.75	10.25	17	
PB1.5-4020	1.5	40	10	38	60	60.88	35	25.01	20.88	15	22	10
PB1.5-2040		20	8	25	30	33.61	46	25.54	16.9	14.75	24	
PB2-4020	2	40	12	40	80	81.17	45	32.37	26.17	18	27	15
PB2-2040		20	12	32	40	44.81	60	34.16	21.2	18	32	
PB2.5-4020	2.5	40	15	50	100	101.47	55	39.73	31.47	20	35	20
PB2.5-2040		20	12	40	50	56.01	75	43.78	26.5	22.5	41	
PB3-4020	3	40	20	60	120	121.76	65	45.85	36.76	24	38	22
PB3-2040		20	16	50	60	67.22	90	50.81	31.8	27.5	47	

Gear Ratio 3 ■ Modules 1.5~3

PB1.5-4515	1.5	45	10	40	67.5	68.06	28	20.44	17.59	11	17	10
PB1.5-1545		15	8	18	22.5	26.51	47	23.19	13.92	12.5	22.5	
PB2-4515	2	45	12	60	90	90.75	40	30.4	26.12	17	26	15
PB2-1545		15	10	24	30	35.35	60	29.8	15.89	14	29	
PB2.5-4515	2.5	45	15	60	112.5	113.43	50	38.35	32.65	22	35	20
PB2.5-1545		15	12	30	37.5	44.18	75	38.41	19.86	17.5	37	
PB3-4515	3	45	20	80	135	136.12	55	40.74	34.18	20	35	23
PB3-1545		15	15	38	45	53.02	90	45.17	23.84	21.33	43	

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.

NOTE1: The bore tolerance at the time of production is H8. Significant variations in temperature or humidity can cause dimensional changes in plastic gears (MC Nylon). Please see page 32 for more details.



B4 Shape

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

Holding surface dia. K	Tip angle L	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			
27.37 17.05	59°16' 38°16'	B4 B3	1.337 0.7267	—	(0.1363) (0.0741)	—	0.1 ~ 0.2	18 9	PB1.5-3020 PB1.5-2030
37.56 21.34	59°16' 38°16'	B4 B3	3.076 1.673	—	(0.3137) (0.1706)	—	0.11 ~ 0.21	39 23	PB2 -3020 PB2 -2030
45.61 27.42	59°16' 38°16'	B4 B3	6.189 3.366	—	(0.6311) (0.3432)	—	0.12 ~ 0.22	82 40	PB2.5-3020 PB2.5-2030
57.14 34.71	59°16' 38°16'	B4 B3	10.49 5.707	—	(1.07) (0.582)	—	0.13 ~ 0.23	140 81	PB3 -3020 PB3 -2030

Pitch Angle Gear: 56°19' Pinion: 33°41'

26.58 9.17	65°36' 30°29'	B4 B3	0.6413 0.2403	—	(0.0654) (0.0245)	—	0.08 ~ 0.18	10 3	PB1 -4020 PB1 -2040
33.61 13.22	65°36' 30°29'	B4 B3	1.29 0.4844	—	(0.1315) (0.0494)	—	0.09 ~ 0.19	20 7	PB1.25-4020 PB1.25-2040
39.64 17.28	65°36' 30°29'	B4 B3	2.266 0.8502	—	(0.2311) (0.0867)	—	0.1 ~ 0.2	34 13	PB1.5 -4020 PB1.5 -2040
48.46 20.92	65°36' 30°29'	B4 B3	5.597 2.101	—	(0.5707) (0.2142)	—	0.11 ~ 0.21	70 30	PB2 -4020 PB2 -2040
60.28 24.56	65°36' 30°29'	B4 B3	11.12 4.173	—	(1.134) (0.4255)	—	0.12 ~ 0.22	160 60	PB2.5 -4020 PB2.5 -2040
73.81 29.61	65°36' 30°29'	B4 B3	18.76 7.042	—	(1.913) (0.7181)	—	0.13 ~ 0.23	240 100	PB3 -4020 PB3 -2040

Pitch Angle Gear: 63°26' Pinion: 26°34'

46.58 14.75	73°27' 22°17'	B4 B3	2.736 0.5874	—	(0.279) (0.0559)	—	0.1 ~0.2	40 6	PB1.5-4515 PB1.5-1545
59.04 19.13	73°27' 22°17'	B4 B3	6.798 1.46	—	(0.6932) (0.1489)	—	0.11~0.21	120 13	PB2 -4515 PB2 -1545
72.84 20.51	73°27' 22°17'	B4 B3	13.55 2.911	—	(1.382) (0.2968)	—	0.12~0.22	200 27	PB2.5-4515 PB2.5-1545
88.18 22.54	73°27' 22°17'	B4 B3	23.11 4.964	—	(2.357) (0.5062)	—	0.13~0.23	350 50	PB3 -4515 PB3 -1545

NOTE 2: The allowable torques shown in the table are the calculated values using the Lewis formula. Pitch Angle Gear: 71°34' Pinion: 18°24'