

Plastic Spur Gears

Pressure Angle 20°, Module 0.5, 0.8, 1.0, 1.5, 2.0, 2.5, 3.0

Material
GEABM MC Nylon
GEABP Polyacetal
GEABMS (With Metal Hub Insert, MC Nylon)
GEABMT (With Metal Hub Insert, Polyacetal)
GEABPS (With Metal Hub Insert, Polyacetal)

Accessory
 Set Screw (EN 1.1191 Equiv., Black Oxide)
 Set Screw (EN 1.4301 Equiv., Black Oxide)
 Set Screw (EN 1.7220 Equiv., Black Oxide)

Notes:
 *Set Screw is not included in products with Gear Shape A.
 *Adhesive is applied to metal hub insert and press-fit.
 *P dimension of GEABM (MC Nylon) may shrink due to its water-absorbing property.

Accuracy Previous JIS B 1702 Class 5 (New JIS B 1702-1 Class 9 Equiv.)

Part Number	Number of Teeth	B	Gear Shape	Shaft Bore Dia. Ph7 Selection		d Reference Dia.	D Tip Dia.	G Root Dia.	H	L	L1	L2	M (Coarse)	d1	*1. Allowable Transmission Force (N/m) Bending Strength		Unit Price			
				W/o Metal Hub Insert	With Metal Hub Insert										MC Nylon	Polyacetal	GEABM GEABP	GEABMS GEABPS	GEABMT GEABPT	
GEABM (MC Nylon)	*15	8	K	3-5	7.5	8.5	6.25	9	18	10	3	M3	P-4	0.08	0.33	2.25	2.45			
	*16				8	9	6.75	9						0.09	0.36	2.96	3.23			
	*18				9	10	7.75	10						0.11	0.42	3.28	3.59			
	*20				10	11	8.75	11						0.12	0.49	3.63	3.97			
	*24				12	13	10.75	13						0.15	0.61	4.24	4.63			
	*25				12.5	13.5	11.25	13.5						0.16	0.65	4.91	5.36			
	GEABP (Polyacetal)	*28	3	B	3-7	14	15	12.75	15	8	5	2.5	M3	P-4	0.06	0.24	6.19	7.15		
		*30				15	16	13.75	16						0.08	0.33	6.54	7.15		
		*32				16	17	14.75	17						0.09	0.36	7.54	8.24		
		*36				18	19	16.75	19						0.10	0.39	8.20	8.96		
		*40				20	21	18.75	21						0.11	0.44	8.91	9.73		
		*45				22.5	23.5	21.25	23.5						0.13	0.51	9.99	10.92		
GEABMS (With Metal Hub Insert, MC Nylon)		*48	3	B	3-7	24	25	22.75	24	7	5	2.5	M3	P-4	0.14	0.55	10.38	11.34		
		*50				25	26	23.75	25						0.15	0.59	11.86	12.95		
		*56				28	29	26.75	28						0.17	0.67	13.70	14.97		
		*60				30	31	28.75	30						0.18	0.73	14.85	16.23		
		*64				32	33	30.75	32						0.20	0.78	15.65	17.1		
		*70				35	36	33.75	35						0.22	0.86	16.54	18.1		
	GEABMT (Stainless Steel with Metal Hub Insert, MC Nylon)	*72	3	B	3-8	36	37	34.75	36	12	14	14	M3	P-4	0.22	0.89	19.54	21.35		
		*80				40	41	38.75	40						0.25	0.99	21.86	23.95		
		*90				45	46	43.75	45						0.28	1.13	24.76	27.76		
		*100				50	51	48.75	50						0.32	1.27	29.01	32.01		
		*120				60	61	58.75	60						0.39	1.54	35.07	39.07		
		*14				9.6	11.2	7.6	11.2						0.13	0.50	4.39	5.77		
GEABPS (With Metal Hub Insert, Polyacetal)		*15	7	K	4-7	11.2	12.8	9.2	12.8	20	13	3	M3	P-6	0.17	0.66	6.41	7.09		
		*16				12	13.6	10	13.6						0.18	0.73	7.28	8.08		
		*18				12.8	14.4	10.8	14.4						0.15	0.58	8.28	9.59		
		*20				14.4	16	12.4	16						0.17	0.67	9.59	10.84		
		*24				16	17.6	14	17.6						0.20	0.78	12.10	13.78		
		*25				19.2	20.8	17.2	20.8						0.25	0.98	14.78	17.40		
	GEABMS (With Metal Hub Insert, MC Nylon)	*28	5	B	6-9	20	21.6	18	21.6	14	9	14	M4	P-8	0.26	1.04	16.02	17.40		
		*30				22.4	24	20.4	24						0.30	1.20	17.40	19.52		
		*32				24	25.6	22	25.6						0.33	1.30	19.52	22.15		
		*36				25.6	27.2	23.6	27.2						0.36	1.42	22.15	25.76		
		*40				28.8	30.4	26.8	30.4						0.42	1.65	25.76	29.01		
		*45				32	33.6	30	33.6						0.47	1.88	29.01	32.73		
GEABMT (Stainless Steel with Metal Hub Insert, MC Nylon)		*48	5	B	6-9	36	37.6	34	37.6	14	9	14	M4	P-8	0.55	2.18	30.06	33.73		
		*50				38.4	40	36.4	40						0.59	2.36	33.73	37.45		
		*56				40	41.5	38	41.5						0.63	2.49	37.45	41.17		
		*60				44.8	46.4	42.8	46.4						0.72	2.85	41.17	45.01		
		*64				48	49.6	46	49.6						0.78	3.11	45.01	49.01		
		*70				51.2	52.8	49.2	52.8						0.84	3.33	49.01	53.27		
	GEABPS (With Metal Hub Insert, Polyacetal)	*72	5	B	6-11	56	57.6	54	57.6	16	11	11	M4	P-8	0.92	3.66	53.27	58.01		
		*80				57.6	59.2	55.6	59.2						0.95	3.78	58.01	63.01		
		*90				64	65.6	62	65.6						1.07	4.24	63.01	68.27		
		*100				72	73.6	70	73.6						1.21	4.83	68.27	73.78		
		*120				80	81.6	78	81.6						1.37	5.43	73.78	79.54		
		*14				9.6	11.2	7.6	11.2						0.13	0.50	4.39	5.77		
GEABMT (Stainless Steel with Metal Hub Insert, MC Nylon)		*15	12	K	6-10	15	17	12.5	17	25	13	3	M3	P-4	0.49	1.71	6.41	7.09		
		*16				16	18	13.5	18						0.54	1.89	7.09	7.89		
		*18				18	20	15.5	20						0.53	1.84	7.89	8.73		
		*20				20	22	17.5	22						0.61	2.13	8.73	9.61		
		*24				22	24	19.5	24						0.69	2.41	9.61	10.54		
		*25				24	26	21.5	26						0.77	2.69	10.54	11.51		
	GEABPS (With Metal Hub Insert, Polyacetal)	*26	10	A	8-14	25	27	22.5	27	20	10	4	M4	P-4	0.82	2.84	11.51	12.58		
		*28				26	28	23.5	28						0.86	3.00	12.58	13.73		
		*30				28	30	25.5	30						0.94	3.28	13.73	14.97		
		*32				30	32	27.5	32						1.03	3.56	14.97	16.29		
		*35				32	34	29.5	34						1.11	3.87	16.29	17.66		
		*36				35	37	32.5	37						1.25	4.34	17.66	19.18		
GEABMS (With Metal Hub Insert, MC Nylon)		*40	10	B	10-19	36	38	33.5	38	20	10	4	M4	P-4	1.30	4.51	19.18	20.75		
		*45				40	42	37.5	42						1.48	5.15	20.75	22.48		
		*48				45	47	42.5	47						1.71	5.95	22.48	24.36		
		*50				48	50	45.5	50						1.86	6.45	24.36	26.39		
		*55				50	52	47.5	52						1.96	6.80	26.39	28.57		
		*60				55	57	52.5	57						2.20	7.63	28.57	30.91		
	GEABMT (Stainless Steel with Metal Hub Insert, MC Nylon)	*64	10	B	10-24	60	62	57.5	62	20	10	4	M4	P-4	2.44	8.49	30.91	33.41		
		*70				70	72	67.5	72						2.88	10.02	33.41	36.07		
		*75				75	77	72.5	77						3.11	10.80	36.07	38.89		
		*80				80	82	77.5	82						3.33	11.59	38.89	41.86		
		*90				90	92	87.5	92						3.80	13.19	41.86	45.01		
		*100				100	102	97.5	102						4.27	14.84	45.01	48.36		
GEABPS (With Metal Hub Insert, Polyacetal)		*120	15	A	8-12	120	122	117.5	122	24	9	3	M3	P-4	5.18	17.99	48.36	51.86		
		*15				22.5	25.5	18.75	22.5						1.38	3.16	51.86	55.54		
		*16				24	27	20.25	24						1.53	3.50	55.54	59.37		
		*18				27	30	23.25	27						1.79	4.08	59.37	63.45		
		*20				30	33	26.25	30						2.07	4.73	63.45	67.78		
		*24				36	39	32.25	36						2.61	5.97	67.78	72.45		
	GEABMS (With Metal Hub Insert, MC Nylon)	*25	15	A	8-21	37.5	40.5	33.75	40.5	27	12	4	M4	P-4	2.76	6.30	72.45	76.36		
		*26				39	42	35.25	39						2.91	6.65	76.36	80.51		
		*28				42	45	38.25	42						3.18	7.27	80.51	84.91		
		*30				45	48	41.25	45						3.46	7.90	84.91	89.56		
		*32				48	51	44.25	48						3.76	8.59	89.56	94.45		
		*35				52.5	55.5	48.75	52.5						4.22	9.83	94.45	99.59		
GEABMT (Stainless Steel with Metal Hub Insert, MC Nylon)		*36	15	B	8-28	54	57	50.25	57	27	12	4	M4	P-4	4.38	10.00	99.59	104.91		
		*40				60	63	56.25	60						5.00	11.42	104.91	110.51		
		*45				67.5	70.5	63.75	67.5						5.78	13.20	110.51	116.36		
		*48				72	75	68.25	72						6.27	14.31	116.36	122.45		
		*50				75	78	71.25	75						6.60	15.08	122.45	128.78		
		*60				90	93	86.25	90						8.24	18.83	128.78	135.36		

*Number of Teeth with * is not With Metal Hub Insert Type. *1 Allowable Transmission Forces in the table are reference values calculated with prescribed conditions. For conditions, see P. 1498. Tooth width is calculated as 10mm. Module 0.5 with 40 ~ 50 teeth is calculated as tooth width 3mm.

Module 2.0, 2.5, 3.0

Part Number	Number of Teeth	B	Gear Shape	Shaft Bore Dia. Ph7 Selection		d Reference Dia.	D Tip Dia.	G Root Dia.	H	L	L1	L2	M (Coarse)	d1	*1. Allowable Transmission Force (N/m) Bending Strength		Unit Price		
				W/o Metal Hub Insert	With Metal Hub Insert										MC Nylon	Polyacetal	GEABM GEABP	GEABMS GEABPS	GEABMT GEABPT
GEABM (MC Nylon)	*12	20	A	10-12	24	28	19.0	18	34	14	4	M4	P-4	2.25	2.45	4.39	5.77		