



# Resin Spur Gears

— Pressure Angle 20° Module 0.5/0.8/1.0/1.5/2.0 —

For similar dimensions, refer to Mechanical Custom Components Catalog : P.119~124 CAD Data Folder Name : Spur\_Gears File Name gm Module No. of Teeth B Dim.

**RoHS**

Type	Gears	Core Rods
GEABM	MC Nylon	—
GEABMS	—	S45C
GEABP	—	—
GEABPS	—	S45C

**Tooth Shape : K Shape** **Tooth Shape : A Shape** **Tooth Shape : B Shape**

(with Core Rod) (with Core Rod)

Precision JIS B 1702 Class 4

⊕ P Dimension of GEABM (MC nylon) may shorten due to water absorption.

Catalog No. Type	Module	Teeth No.	B	Shaft Hole Dia. Ph7	Tooth Shape	d	D	H	L	ℓ <sub>1</sub>	ℓ <sub>2</sub>	M (Coarse)	d <sub>1</sub>	Unit Price		Qty. 1~4	
														GEABM, GEABP	GEABMS, GEABPS		
GEABM (MC Nylon)	0.5	15	8	3 4 5	K	7.5	8.5	9	18	10	3	M3	—	840	—	—	
		16				8	9	840						—			
		18				9	10	840									
		20				10	11	840									
		24				12	13	840									
		25	12.5	13.5	840	—											
		28	14	15	840												
		30	15	16	1,010												
		32	16	17	1,010												
		36	18	19	1,140												
	GEABP (Polyacetal)	3	30	5	6	B	15	16	10	10	5	2.5	M3	—	1,140	—	—
			32				16	17	1,140								
			36				18	19	1,140								
			40				20	21	1,140								
			45				22.5	23.5	1,140								
		48	24	25	1,270												
		50	25	26	1,270	—											
		12	7	4 5	K		9.6	11.2	11.2	20	13	—	M3	—	840	—	
		14	11.2	12.8			840										
		15	12	13.6			840										
16	12.8	14.4	840														
18	14.4	16	990														
GEABMS (With Core Rod, MC Nylon)	0.8	16	5	6 8	B	16	17.6	10	14	9	3	M3	—	990	—		
		20				19.2	20.8	1,180									
		24				20	21.6	1,180									
		25				22.4	24	1,180									
		28				24	25.6	1,300									
	30	24	25.6	1,300	—												
	32	28.8	30.4	1,410													
	36	32	33.6	1,410													
	40	36	37.6	1,640													
	45	38.4	40	1,670													
48	40	41.6	1,670	—													
15	12	6	A		15	17	—	25	13	3	M3	—	1,010	1,440			
16	16	18			1,020												
18	18	20			1,040												
20	20	22			1,070												
24	24	26		1,170													
GEABPS (With Core Rod, Polyacetal)	1.0	25	10	B	25	27	20	20	10	4	M4	—	1,200	1,630			
		26			26	22	1,220										
		30			30	32	1,380										
		35			35	37	1,570										
		36			36	38	1,680										
	40	40	42	1,990													
	45	45	47	2,120													
	48	48	50	2,410													
	50	50	52	2,440													
	52	52	54	2,440													
GEABMS (With Core Rod, MC Nylon)	1.5	16	8	B	16	17	20	24	9	3	M3	—	1,200	1,630			
		18			18	20	1,250										
		20			20	22	1,250										
		24			24	26	1,440										
		25			24	25	1,440										
	GEABPS (With Core Rod, Polyacetal)	10	30	10	B	30	33	25	20	10	4	M4	—	1,620	2,130		
			36			36	39	2,060									
			40			40	42	2,090									
			45			45	48	2,140									
			50			50	53	2,190									
GEABMS (With Core Rod, MC Nylon)		1.5	16	8	B	16	17	20	24	9	3	M3	—	1,250	1,730		
			18			18	20	1,250									
			20			20	22	1,440									
			24			24	26	1,620									
			25			24	25	1,620									
	GEABPS (With Core Rod, Polyacetal)	15	30	15	B	30	33	25	27	12	4	M4	—	2,060	2,560		
			36			36	39	2,090									
			40			40	42	2,090									
			45			45	48	2,140									
			50			50	53	2,190									
GEABMS (With Core Rod, MC Nylon)		2.0	16	12	B	16	17	20	24	9	3	M3	—	1,250	1,730		
			18			18	20	1,250									
			20			20	22	1,440									
			24			24	26	1,620									
			25			24	25	1,620									
	GEABPS (With Core Rod, Polyacetal)	20	30	20	B	30	33	25	34	14	4	M4	—	2,060	2,560		
			36			36	39	2,090									
			40			40	42	2,090									
			45			45	48	2,140									
			50			50	53	2,190									

⊕ Types with Core Rods are available for the numbers of teeth marked with \* only.

**Order Example** Catalog No. — Teeth No. — B — P — Production Time **3** Days Express **A** 500 yen/piece P.82

**GEABM1.0** — 20 — 10 — 8  
**GEABP1.5** — 40 — 15 — 16

**Volume Discount Rate** (Round down to the nearest one yen.) P.81

Quantity 1~4 5~9 10~14 15~29 Rate — 5% 10% 15% For orders larger than indicated values, please request for quotation.

⊕ Module 2.0 only **5** Days

⊕ A flat charge of 1,350 yen for 3 or more identical pieces.



# Bevel Gears

— Pressure Angle 20° Straight, Spiral Type Module 1.0/1.5 —

CAD Data Folder Name : Spur\_Gears File Name (KGEAST) kgs (KGEAPT) kgp Module No. of Teeth Gear Ratio

**RoHS**

Type	M	S	A
Straight Type	—	—	—
Spiral Type	—	—	—

**Type** **Straight Type** **Spiral Type**

Round Hole Round Hole+Tap Key Groove Hole+Tap Round Hole Round Hole+Tap Key Groove Hole+Tap

KGEASH KGEAST KGEASK KGEAPH KGEAPT KGEAPK  
 KGEASHB KGEASTB KGEASKB KGEAPHB KGEAPTB KGEAPKB  
 KGEASHG KGEASTG KGEASKG KGEAPHG KGEAPTG KGEAPKG

S45C Black Oxide Electroless Nickel Plating

Set Screws  
 ※Not attached for Round Hole Type.

**Shaft Hole Specifications**

Round Hole Round Hole+Tap Key Groove Hole+Tap

R=1:1 R=1:2

⊕ Key Groove Hole Dimension Details P.1940

⊕ Round Hole Type does not have taps.

Precision JIS B 1704 Class 4

**Straight Type**

Catalog No. Type	Module	Nominal	Shaft Hole Dia. Ph7 1 mm Increment		Teeth No.	R (Gear Ratio)	Matching Nominal	B	H	d	D	S	E	L	G	ℓ <sub>1</sub>	ℓ <sub>2</sub>	L <sub>1</sub>	A°	M (Coarse)	
			Round Hole	Key Groove Hole+Tap																	
Round Hole KGEASH KGEASHB KGEASHG	1.0	2020	6, 8	6, 8	20	1:1	2020	4.3	16	20	21.41	11.8	21	14.53	11.71	9	4.5	13	49° 3'	M4	
		2525	6, 8, 10	6, 8, 10	25	1:1	2525	5.3	20	25	26.41	15	23	14.7	11.21	8	4	13	48° 51'	M4	
		3030	8, 10, 12	8, 10, 12	30	1:1	3030	6.2	22	30	31.41	19.4	26	15.89	11.71	8	4.5	14.5	47° 42'	M4	
		2040	6, 8	8	20	1:2	2040	5.7	16	20	21.79	12.1	29.6	15.03	10.05	8.6	4	14	29° 8'	M4	
		4020	8, 10, 12	8, 10, 12	40	1:2	4020	8.0	24	40	40.89	28.4	31.8	15.02	12.69	8	4	13	66° 0'	M4	
	Round Hole+Tap KGEAST KGEASTB KGEASTG	1.5	2020	10, 12	10, 12	20	1:1	2020	6.8	24	30	32.12	17.7	28	18.53	14.06	10	5	16.5	49° 3'	M4
			2525	10~14	10~14	25	1:1	2525	7.5	30	37.5	39.62	23.7	34	21.26	16.31	11.5	5	19	48° 51'	M4
			3030	12~16	12~16	30	1:1	3030	9.3	33	45	47.12	29.6	38	22.83	16.56	12.34	6	21	47° 42'	M5
			1836	8, 10, 12	8	18	1:2	1836	9.8	22	27	29.68	12.2	40.74	22.96	14.41	12.5	6	21	29° 25'	M4
			3618	10~15	10~15	36	1:2	3618	9.8	30	54	55.34	34.3	26.75	18.54	14.59	10	5	15.5	66° 17'	M5

**Spiral Type (Twisting Angle 35°)**

Catalog No. Type	Module	Nominal	Shaft Hole Dia. Ph7 1 mm Increment		Twisting Direction	Teeth No.	R (Gear Ratio)	Matching Nominal	B	H	d	D	S	E	L	G	ℓ <sub>1</sub>	ℓ <sub>2</sub>	L <sub>1</sub>	A°	M (Coarse)	
			Round Hole	Key Groove Hole+Tap																		
Round Hole KGEAPH KGEAPHB KGEAPHG	1.0	2020	6, 8	8	L R	20	1:1	2020	4.5	16	20	21.12	11.3	21	14.43	11.56	9	4.5	13	50° 31'	M4	
		3030	10, 12	10, 12	(Left) (Right)	30	1:1	3030	6.2	22	30	31.09	19.4	26	15.67	11.54	9	4.5	14.5	48° 21'	M5	
		2040	8, 10, 12	8	L (Left)	20	1:2	2040	5.7	16	20	21.87	12.1	29.6	15	10.07	8.6	4	14	30° 13'	M4	
		4020	10, 12	10, 12	R (Right)	40	1:2	4020	8.0	24	40	40.41	28.4	31.8	14.57	12.21	8	4	13	65° 36'	M5	
		2020	10, 12	10, 12	L R	20	1:1	2020	7	24	30	31.85	17.2	28	18.44	13.93	10	5	16.5	50° 5'	M4	
	Round Hole+Tap KGEAPT KGEAPTB KGEAPTG	1.5	3030	12~16	12~16	(Left) (Right)	30	1:1	3030	9.3	33	45	46.79	29.7	38	22.64	16.4	12	6	21	47° 54'	M5
			1836	8, 10, 12	8	L (Left)	18	1:2	1836	9.8	22	27	30.09	12.2	40.74	22.96	14.51	12.49	6	21	30° 44'	M4
			3618	10~15	10~15	R (Right)	36	1:2	3618	9.8	30	54	54.76	34.3	26.75	18.01	14.01	9	4.5	15.5	65° 57'	M5

⊕ Shaft Hole Dia. 11 is not available. ⊕ Round Hole is not applicable to 3030, 2040 and 4020 of Spiral Type Module 1.0. ⊕ Select Spiral Type gears appropriately so that they make a right pair of L and R. ⊕ Bevel gears may not work properly when used as meshing gears for other manufacturers'. Please select a pair of bevel gears.

**Order Example** Catalog No. — Nominal — Teeth No. — Matching Teeth Number — Shaft Hole Dia. Ph7 — Twisting Direction — Production Time **3** Days

**KGEASH1.0** — 2020 — 10 — 3618 — 6 — 10 — R

Module	Nominal	Unit Price Qty. 1~10																		
		Straight Type						Spiral Type												
		Round Hole		Round Hole+Tap		Key Groove Hole+Tap		Round Hole		Round Hole+Tap		Key Groove Hole+Tap								
1.0	2020	1,480	1,630	1,850	1,920	2,110	2,400	2,160	2,370	2,700	1,720	1,890	2,150	2,150	2,370	2,690	2,400	2,640	3,000	
	2525	1,780	1,960	2,230	2,220	2,440	2,780	2,460	2,710	3,080	—	—	—	—	—	—	—	—	—	
	3030	2,120	2,340	2,660	2,560	2,820	3,200	2,810	3,090	3,510	—	—	—	—	3,070	3,380	3,840	3,320	3,650	4,150
	2040	1,850	2,040	2,320	2,290	2,520	2,860	2,530	2,790	3,170	—	—	—	—	2,560	2,820	3,200	2,810	3,0	