

Spur Gears - Bearing Built-In

Pressure Angle 20°, Module 1.0, 1.5, 2.0

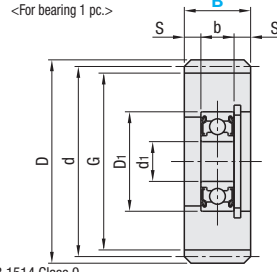
■ **Features:** Bearing built-in spur gears can be used for reversing rotations and synchronizing.



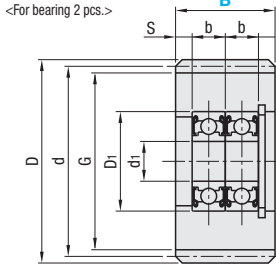
RoHS 10

Type	Material		Surface Treatment
	Main Body	Bearing	
GEABD	EN 1.1191 Equiv.	Steel	-
GEABDB			Black Oxide
GEABDG			Electroless Nickel Plating
GEABDM	MC Nylon	-	-

<For bearing 1 pc.>



<For bearing 2 pcs.>



* Bearing Accuracy: JIS B 1514 Class 0
⚙ Bearings are press-fit.

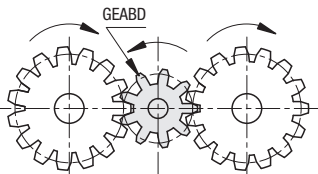
⚙ For Shafting, refer to cantilever shafts. (P. 883 ~ 906)

Part Number		Number of Teeth	B	d ₁	d Reference Dia.	D Tip Dia.	G Root Dia.	GEABD, GEABDB, GEABDG				GEABDM				Unit Price			
Type	Module							Bearing Number	D ₁	b	S	Bearing Number	D ₁	b	S	GEABD	GEABDB	GEABDG	GEABDM
GEABD GEABDB GEABDG GEABDM	1.0	20	12	5	20	22	17.5	695ZZx1	13	4	4	-	-	-	-			-	
		24		8	24	26	21.5	688ZZx1	16	5	3.5	-	-	-	-			-	
		25		8	25	27	22.5	698ZZx1	19	6	3	678ZZx1	12	3.5	4.25				
		30		10	30	32	27.5	6900ZZx1	22	6	3	6700ZZx1	15	4	4				
		35		10	35	37	32.5	6900ZZx1	22	6	3	6900ZZx1	22	6	3				
		40		12	40	42	37.5	6901ZZx1	24	6	3	6901ZZx1	24	6	3				
		48		12	48	50	45.5	6901ZZx1	24	6	3	6901ZZx1	24	6	3				
		50		12	50	52	47.5	6901ZZx1	24	6	3	6901ZZx1	24	6	3				
	60	12	60	62	57.5	6901ZZx1	24	6	3	6901ZZx1	24	6	3						
	1.5	15	15	5	22.5	25.5	18.75	695ZZx2	13	4	3.5	-	-	-	-			-	
		16		8	24	27	20.25	688ZZx1	16	5	5	-	-	-	-			-	
		20		10	30	33	26.25	6900ZZx1	22	6	4.5	6700ZZx2	15	4	3.5				
		24		10	36	39	32.25	6000ZZx1	26	8	3.5	6900ZZx1	22	6	4.5				
		25		10	37.5	40.5	33.75	6000ZZx1	26	8	3.5	6900ZZx1	22	6	4.5				
		26		10	39	42	35.25	6000ZZx1	26	8	3.5	6900ZZx1	22	6	4.5				
		28		12	42	45	38.25	6001ZZx1	28	8	3.5	6001ZZx1	28	8	3.5				
		30		12	45	48	41.25	6001ZZx1	28	8	3.5	6001ZZx1	28	8	3.5				
		40		12	60	63	56.25	6001ZZx1	28	8	3.5	6001ZZx1	28	8	3.5				
		48		15	72	75	68.25	6002ZZx1	32	9	3	6002ZZx1	32	9	3				
		50		15	75	78	71.25	6002ZZx1	32	9	3	6002ZZx1	32	9	3				
		60		15	90	93	86.25	6002ZZx1	32	9	3	6002ZZx1	32	9	3				
	2.0	15	20	8	30	34	25.5	698ZZx2	19	6	4	678ZZx2	12	3.5	6.5				
		20		10	40	44	35.5	6200ZZx1	30	9	5.5	6900ZZx2	22	6	4				
		24		12	48	52	43.5	6201ZZx1	32	10	5	6201ZZx1	32	10	5				
		25		12	50	54	45.5	6201ZZx1	32	10	5	6201ZZx1	32	10	5				
		30		15	60	64	55.5	6202ZZx1	35	11	4.5	6202ZZx1	35	11	4.5				
		32		15	64	68	59.5	6202ZZx1	35	11	4.5	6202ZZx1	35	11	4.5				
		36		15	72	76	67.5	6202ZZx1	35	11	4.5	6202ZZx1	35	11	4.5				
		40		15	80	84	75.5	6202ZZx1	35	11	4.5	6202ZZx1	35	11	4.5				
		48		20	96	100	91.5	6004ZZx1	42	12	4	6004ZZx1	42	12	4				
50		20		100	104	95.5	6004ZZx1	42	12	4	6004ZZx1	42	12	4					
60	25	120	124	115.5	6005ZZx1	47	12	4	6005ZZx1	47	12	4							

Ordering Example

Part Number	-	Number of Teeth	-	B
GEABD1.0	-	20	-	12

Example



Insert the Bearing Built-in Gear between two gears to synchronize rotation direction.

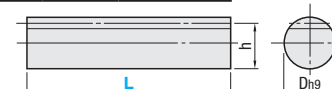
Round Rack Gears / Worm / Worm Wheel

L Fixed and Configurable, Pressure Angle 20°



RoHS 10

Type	Material	Surface Treatment
L Fixed	EN 1.1191 Equiv.	Black Oxide
L Configurable	EN 1.4305 Equiv.	-



L

h9

Accuracy: Accumulated Pitch Error (μm)

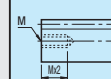
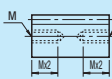
Module	Nominal, Overall Length L		
	~100	101-300	301-500
0.5-1.5	54 (76)	65 (92)	72 (101)
2.0-3.0	62 (86)	73 (102)	80 (112)

⚙ Values in () are for RGMAS and RGMASL.

L Fixed								L Configurable								
Part Number		Nominal	Effective Number of Teeth (Z)	D (h9)	(L)	h	Unit Price	Part Number		Overall Length L 1mm Increment	D (h9)	h	Unit Price			
Type	Module							Type	Module				L50-99	L100-199	L200-300	L301-500
RGMA (EN 1.1191 Equiv.)	0.5	300	192	8	301.59	7.5	RGMAL (EN 1.1191 Equiv.)	0.5	50~280	8	7.5					
	0.8	300	120		7.2											
	1.0	300	95	10	298.45	9		1.0	50~480	10	9					
		500	159		499.51						7.2					
	1.5	300	63	15	296.88	13.5		1.5	50~480	15	13.5					
		500	106		499.51											
	2.0	300	47	20	295.31	18		2.0	50~480	20	18					
		500	79		496.37											
	2.5	300	38	25	298.45	22.5		2.5	50~480	25	22.5					
		500	63		494.80											
	3.0	300	31	30	292.17	27		3.0	50~480	30	27					
		500	53		499.51											
RGMAS (EN 1.4305 Equiv.)	0.5	300	192	8	301.59	7.5	RGMASL (EN 1.4305 Equiv.)	0.5	50~280	8	7.5					
	0.8	300	120		7.2											
	1.0	300	95	10	298.45	9		1.0	50~480	10	9					
		500	159		499.51						7.2					
	1.5	300	63	15	296.88	13.5		1.5	50~480	15	13.5					
		500	106		499.51											
	2.0	300	47	20	295.31	18		2.0	50~480	20	18					
		500	79		496.37											
	2.5	300	38	25	298.45	22.5		2.5	50~480	25	22.5					
		500	63		494.80											
	3.0	300	31	30	292.17	27		3.0	50~480	30	27					
		500	53		499.51											

Ordering Example

Part Number	-	Nominal Length L
RGMA1.0	-	500
RGMAL0.8	-	205

Alterations Code	One End Tapped		Both Ends Tapped	
	MC		WMC	
Spec.				
	Ordering Code MC5		Ordering Code WMC5	
	Module M Selection		Module M Selection	
	0.5 3 4 5 0.8 3 1.0 4 5 1.5-3.0 4 5 6		0.5 3 4 5 0.8 3 1.0 4 5 1.5-3.0 4 5 6	

Alterations

Part Number	-	Nominal Length L	-	(MC, WMC)
RGMA1.0	-			