

Spur Gear

Pressure Angle 20°, Module 2.0 Shaft Bore Configurable Type

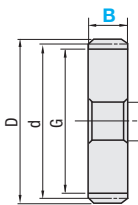


Type			Material	Surface Treatment	Accessory
Straight Bore	Straight Bore + Tap	Keyway, Keyway + Tap			
GEAHB	GEAB	GEAKB	EN 1.1191 Equiv.	-	Set Screw (EN 1.7220 Equiv., Black Oxide)
GEAHBB	GEABB	GEAKBB			
-	GEABG	GEAKBG			
GEAHS	-	GEAKS	EN 1.4301 Equiv.	-	Set Screw (EN 1.4301 Equiv.)

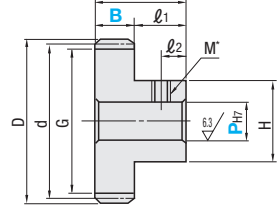
⚠ Set Screw is not included in Un-tapped Type products.

Gear Shape

Shape A



Shape B



Shaft Bore Specifications (Selectable Gear Shapes)

Straight Bore (Shape A, Shape B)	Straight Bore + Tap (Shape B)
Keyway (Shape A)	Keyway + Tap (Shape B)

⚠ Keyway Dimension Details **P.1498**

⚠ Positioning of keyway and teeth is not fixed.

Accuracy Previous JIS B 1702 Class 4 (New JIS B 1702-1 Class 8 Equiv.)

RoHS10

⚠ Tapped shaft bores are not available for Shape A.

For alterations on tooth width and hub dimensions, see **P.1513**.

Part Number		Number of Teeth	B	Gear Shape	Shaft Bore Dia. P _{H7} (1mm Increment)		d Reference Dia.	D Tip Dia.	G Root Dia.	H	L	l ₁	l ₂	M (Coarse)	*1. Allowable Transmission Force (N·m) Bending Strength	
Type	Module				Straight Bore	Keyway, Keyway + Tap									EN 1.1191 Equiv.	EN 1.4301 Equiv.
Straight Bore (Shape A, Shape B) GEAHB GEAHBB GEAHS	2.0	12	20	A	8		24	28	19	18	30	10	5	M5	19.75	11.27
		13			8~11	8N	26	30	21	20					22.65	12.92
		14					28	32	23						25.58	14.60
		15			8~15	8N~12N	30	34	25	24					28.65	16.35
		16			8~16		32	36	27	25					31.73	18.11
		17			8~19	8N~14N	34	38	29	28					34.89	19.91
		18			8~21	8N~16N	36	40	31	30					38.07	21.73
		19			8~21	8N~17N	38	42	33	31					41.27	23.55
		20			8~23	8N~18N	40	44	35	33					44.59	25.45
		21			8~23	8N~19N	42	46	37	34					47.87	27.32
		22			8~25	8N~21N	44	48	39	36					51.27	29.26
		23			8~25	8N~22N	46	50	41	37					54.57	31.14
		24			8~28	8N~23N	48	52	43	40					57.96	33.07
		25			8~29	8N~25N	50	54	45						61.43	35.05
		26			8~29	8N~25N	52	56	47	42					64.99	37.09
		27			8~31	8N~28N	54	58	49	45					68.39	39.02
		28			8~31	8N~28N	56	60	51						72.12	41.16
		29			8~32	8N~29N	58	62	53	47					75.35	43.00
		30			8~33	8N~30N	60	64	55	48					78.93	45.04
Straight Bore + Tap (Shape B) GEAB GEABB GEABG	2.0	32	20	B	8~35	8N~31N	64	68	59	50	34	14	7	M6	85.59	48.84
		34			10~35	10N~31N	68	72	63						93.52	53.37
		35			10~36	10N~33N	70	74	65	52					97.01	55.36
		36			10~38	10N~35N	72	76	67	55					100.13	57.14
		38					76	80	71						107.70	61.46
		40					80	84	75						114.52	65.35
		42			10~42	10N~38N	84	88	79	60					121.92	69.57
		44					88	92	83						129.46	73.88
		45					90	94	85						133.29	76.06
		46					92	96	87						137.15	78.26
Keyway (Shape A) Keyway + Tap (Shape B) GEAKB GEAKBB GEAKBG GEAKS	2.0	48	20	B	10~43	10N~40N	96	100	91	62	34	14	7	M6	144.35	82.38
		50					100	104	95						151.64	86.53
		52					104	108	99						158.99	90.73
		54					108	112	103						166.42	94.97
		55			12~45	12N~42N	110	114	105						170.54	97.32
		56					112	116	107						174.69	99.69
		58					116	120	111						181.50	103.58
		60					120	124	115						189.16	107.94
		62					124	128	119						196.02	111.86
		64			15~45	15N~42N	128	132	123						203.78	116.29
		65					130	134	125						207.23	118.26
		68					136	140	131						219.54	125.28
		70					140	144	135						226.51	129.26
		*72					144	148	139						233.49	
		*75			20~45	20N~42N	150	154	145						245.07	
		*80					160	164	155						263.82	
		*85					170	174	165						282.76	
		*90			20~49	20N~45N	180	184	175	70					301.90	
		*95					190	194	185						321.22	
		*100					200	204	195						262.11	

⚠ * marked number of teeth is not available for GEAKS and GEAKS.

⚠ Shaft bore diameter 9N is not available for Keyway Bore + Tap.

⚠ Specify 10K as the P dimension if keyway width of 4.0mm (height 1.8mm) for Keyway + Tap with shaft bore diameter of 10 is desired. **P.1498**

*1 Allowable Transmission Forces in the table are reference values calculated with prescribed conditions. For conditions, see **P.1498**.

Ordering Example

Part Number	-	Number of Teeth	-	B	-	Gear Shape	-	P
GEAKBG2.0	-	15	-	20	-	B	-	10N
GEAHB2.0	-	30	-	20	-	A	-	8

⚠ Gear shape will be "B" when not specified.

Number of Teeth	Unit Price									
	Straight Bore			Straight Bore + Tap			Keyway, Keyway + Tap			
	GEAHB	GEAHBB	GEAHS	GEAB	GEABB	GEABG	GEAKB	GEAKBB	GEAKBG	GEAKS
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
32										
34										
35										
36										
38										
40										
42										
44										
45										
46										
48										
50										
52										
54										
55										
56										
58										
60										
62										
64										
65										
68										
70										
72										
75										
80										
85										
90										
95										
100										

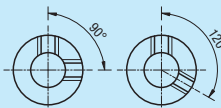
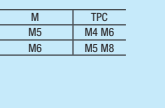
Alterations

Part Number	-	Number of Teeth	-	B	-	Gears (Shape)	-	P
GEAB2.0	-	15	-	20	-	B	-	8
GEAHS2.0	-	50	-	20	-	A	-	20

(KC90, KC120, TPC, DHL, DHR, WDH, LFC, LTC, KTC, KFC, QFC, QTC)

GEAB2.0 - 15 - 20 - B - 8 - KC120

GEAHS2.0 - 50 - 20 - A - 20 - WDH - Q25 - R25 - S6 - T5

Alterations	Set Screw	Tapped Hole Dimension	Stepped Hole	Both Ends Stepped Bore
Code	KC90, KC120	TPC	DHL, DHR	WDH
Spec.	KC90: Adds another set screw at 90° position. KC120: Adds another set screw at 120° position. ⚠ Not applicable to Shape A ⚠ Not applicable to Straight Bore Type.  M M5 M6 TPC M4 M6 M5 M8	Changes the tapped hole dimension. (Ordering Code) TPC4 ⚠ Not applicable to Shape A ⚠ Not applicable to Straight Bore Type.  M M5 M6 TPC M4 M6 M5 M8	Changes shaft bores to stepped bores. (Z:	