

# Spur Gear

Pressure Angle 20°, Module 1.0, Shaft Bore Configurable Type

■ Standard Type and Thin Type are available.

Type			Material	Surface Treatment	Accessory
Straight Bore	Straight Bore + Tap	Keyway, Keyway + Tap			
GEAHB	GEAB	GEAKB	S45C Equivalent	-	Set Screw (SCM435, Black Oxide)
GEAHBB	GEABB	GEAKBB		Black Oxide	
GEAHBG	GEABG	GEAKBG		Electroless Nickel Plating	
GEAHS	GEAS	GEAKS	SUS304	-	Set Screw (SUS304)

⊕ Set Screw is not included in Un-tapped Type products.  
 ⊕ Selectable Gear Shapes differ depending on the number of teeth. Check the spec. table.

**Gear Shape**

**Shape K** **Shape A** **Shape B**

⊕ Tapped shaft bores are not available for Shape A.

Shaft Bore Specifications (Selectable Gear Shapes)	
Straight Bore (Shape A, Shape B, Shape K)	Straight Bore + Tap (Shape B, Shape K)
Keyway (Shape A)	Keyway + Tap (Shape B)

⊕ For Tap, Keyway Dimension Details, see **P1532**.  
 ⊕ Positioning of keyway and teeth is not fixed.

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

■ Standard Type When desiring to fix the gear hub onto the shaft through MechaLock, see Keyless Type on **P1557**. For configuring the tooth width / hub dimensions, see **P1551**.

Part Number	Number of Teeth	B	Gear Shape	Shaft Bore Dia. Ph7 (1mm Increment)		d Reference Dia.	D Tip Dia.	G Root Dia.	H	L	l1	l2	M (Coarse)	Unit Price		
				Straight Bore + Tap	Keyway, Keyway + Tap									Straight Bore	Straight Bore + Tap	Keyway Keyway + Tap
Straight Bore (Shape A, Shape B, Shape K) GEAHB GEAHBB GEAHBG GEAHS	12	10	K	6-8		12	14	9.5	14	30	20 (B=10)	5	M4	S45C Equivalent	2.47	1.41
	*13					13	15	10.5	15					2.83	-	
	14					14	16	11.5	16					3.2	1.83	
	*15			15	17	12.5	17	3.58	2.04							
	*16			16	18	13.5	18	3.97	-							
	*17			17	19	14.5	19	4.36	-							
	*18		18	20	15.5	20	4.76	-								
	*19		19	21	16.5		5.16	-								
	20		20	22	17.5	16	5.57	3.18								
	*21		21	23	18.5		5.98	3.41								
	*22		22	24	19.5	18	6.41	-								
	23		23	25	20.5		6.82	-								
24	24	26	21.5	20	7.24	4.13										
*25	25	27	22.5		7.68	-										
26	26	28	23.5	22	8.12	4.64										
*27	27	29	24.5		8.55	-										
28	28	30	25.5	24	9.02	5.14										
*29	29	31	26.5		9.42	-										
30	30	32	27.5	27	9.87	5.63										
32	32	34	29.5	28	10.7	6.11										
*34	34	36	31.5		11.69	-										
35	35	37	32.5		12.13	6.92										
36	36	38	33.5		12.52	7.14										
38	38	40	35.5		13.46	7.68										
42	42	44	39.5	30	14.31	8.17										
*44	44	46	41.5		15.24	8.7										
45	45	47	42.5		16.18	-										
*46	46	48	43.5		16.66	9.51										
48	48	50	45.5	44	17.14	-										
50	50	52	47.5		18.04	10.3										
52	52	54	49.5		18.95	10.82										
54	54	56	51.5		19.87	11.34										
55	55	57	52.5	46	20.8	11.87										
56	56	58	53.5		21.32	12.16										
58	58	60	55.5		21.84	12.46										
60	60	62	57.5		22.69	12.95										
62	62	64	59.5		23.64	13.49										
64	64	66	61.5	50	24.5	13.98										
65	65	67	62.5		25.47	14.54										
66	66	68	63.5		25.9	14.78										
68	68	70	65.5		26.45	15.1										
70	70	72	67.5		27.44	15.66										
72	72	74	69.5	56	28.31	16.16										
75	75	77	72.5		29.19	16.66										
80	80	82	77.5		30.63	17.48										
84	84	86	81.5		32.98	18.82										
85	85	87	82.5		34.9	19.92										
90	90	92	87.5	60	35.35	20.17										
95	95	97	92.5		37.74	21.53										
96	96	98	93.5		40.15	22.91										
100	100	102	97.5		40.6	23.17										
110	110	112	107.5	70	42.59	24.31										
120	120	122	117.5		47.11	26.88										
					51.87	29.6										

- ⊗ \* marked number of teeth is not available for stainless steel type (GEAHS, GEAS 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 **P1532**.
- ⊕ Shaft bore diameter 6.35 is available for Straight Bore and Straight Bore + Tap. ⊕ The "\*" text on the above table means that any Shaft Bore Dia. is not selectable.
- \*1. Allowable Transmission Forces in the table are reference values calculated with prescribed conditions. For conditions, see **P1534**. Calculation is performed based on 10mm of the tooth width.

