

Induction Hardened Spur Gears - Ground

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

■ **Features:** Spur gears with hardened teeth which provide excellent strength, abrasion resistance and high precision. For Rack Gears - Ground, see **P.1529**.

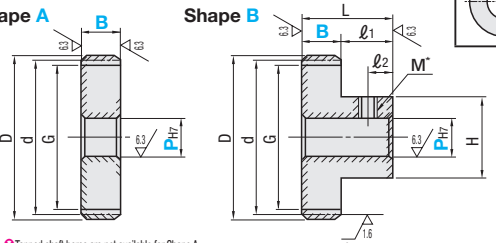


Type			Material	Surface Treatment	Hardness	Accessory
Straight Bore	Straight Bore + Tap	Keyway, Keyway + Tap				
GEAHBH	GEABH	GEAKBH	S45C Equivalent	Black Oxide	Tooth Induction Hardened 51 ~ 55HRC (Depth 1mm or more)	Set Screw (SCM435 Black Oxide)

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

Gear Shape

Shape A **Shape B**



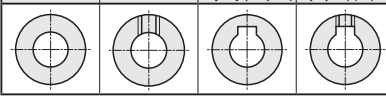
⚠ Tapped shaft bores are not available for Shape A.

/// [shaded] part has no surface treatment.

⚠ End surface of Shape A may not be surface treated as Shape A is made by cutting the hub of 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.

■ **Tapped Hole Dimension List**

Shaft Bore Dia. Ph7	M (Coarse)	Accessory Set Screw
6~12	M4	M4x3
13~17	M5	M5x4
18~30	M6	M6x5
31~45	M8	M8x6
46~56	M10	M10x8

Accuracy Previous JIS B 1702 Class 2
(New JIS B 1702-1 Class 6 Equivalent)

⚠ Accuracy before shaft bore machining.

Part Number		Number of Teeth	B	Gear Shape	Shaft Hole Dia Ph7 (1mm Increment)		d Reference Dia.	D Tip Dia.	G Root Dia.	H	L	ℓ1	ℓ2	*1. Allowable Transmission Force (N, m) Bending Strength	Unit Price 1 ~ 10 pc(s).		
Type	Module				Straight Bore Straight Bore + Tap	Keyway Keyway + Tap									Straight Bore	Straight Bore + Tap	Keyway Keyway + Tap
Straight Bore (Shape A, Shape B) GEAHBH Straight Bore + Tap (Shape B) GEABH Keyway (Shape A) Keyway + Tap (Shape B) GEAKBH	1.0	18	8	A B	6~10	-	18	20	15.5	15	18	10	5	4.76			-
		20			6~11	8N, 10N	20	22	17.5	17				5.57			
		22			8~14	8N~12N	22	24	19.5	18				6.42			
		24					24	26	21.5	20				7.27			
		25					25	27	22.5					7.69			
		26					26	28	23.5					8.12			
		28			10~17	10N~15N	28	30	25.5	25				9.02			
		30					30	32	27.5					9.87			
		32					32	34	29.5					10.79			
		35					35	37	32.5					12.13			
	36	10~21	10N~18N		36	38	33.5	30	12.52								
	40				40	42	37.5		13.07								
	45				45	47	42.5		15.18								
	48				48	50	45.5		16.44								
	50	12~24	12N~18N		50	52	47.5	35	17.23								
	60				60	62	57.5	21.50									
	70	12~28	12N~25N		70	72	67.5	40	25.74								
	80				80	82	77.5	29.98									
	100	15~35	15N~30N		100	102	97.5	50	38.72								
	1.5	15	15		10~12	10N	22.5	25.5	18.75	18	29	14	7	15.11			
		16			10~13	10N, 11N	24	27	20.25	19.5				16.74			
		18			10~15	10N~13N	27	30	23.25	22				20.08			
		20			10~16	10N~14N	30	33	26.25	24				23.51			
		24			12~19	12N~17N	36	39	32.25	28				30.56			
		25			12~21	12N~18N	37.5	40.5	33.75	30				32.39			
		26			12~22	12N~19N	39	42	35.25	32				31.16			
		28			15~25	15N~19N	42	45	38.25	36				34.58			
		30			15~26	15N~23N	45	48	41.25	38				37.84			
		32			15~28	15N~24N	48	51	44.25	40				41.03			
		35			15~29	15N~26N	52.5	55.5	48.75	42				46.51			
		36			15~31	15N~28N	54	57	50.25	45				48.00			
		40			15~35	15N~31N	60	63	56.25					54.90			
		45			18~35	18N~31N	67.5	70.5	63.75	50				63.90			
		48					72	75	68.25					69.20			
		50					75	78	71.25					72.69			
		60					90	93	86.25	60				90.68			
		70			20~42	20N~38N	105	108	101.25					108.59			

⚠ Shaft bore diameter 6.35 is available for Straight Bore and Straight Bore + Tap. ⚠ Shaft bore diameter 9N is not available for Keyway Bore + Tap.

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