

Spur Gear

Pressure Angle 20°, Module 0.5 Shaft Bore Configurable Type

Type	Material	Surface Treatment	Accessory	Shaft Bore Specifications (Selectable Gear Shapes)
Straight Bore	EN 1.1191 Equiv.	Black Oxide	Set Screw (EN 1.7220 Equiv. Black Oxide)	Straight Bore (Shape A, Shape B, Shape K)
Straight Bore + Tap	EN 1.4301 Equiv.	Electroless Nickel Plating	Set Screw (EN 1.4301 Equiv.)	Straight Bore + Tap (Shape B, Shape K)
GEABN				
GEABB				
GEABG				
GEAHB				
GEABS				

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

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

⚠ Tapped shaft bores are not available for Shape A.

Spur Gear

Pressure Angle 20°, Module 0.8 Shaft Bore Configurable Type

Type	Material	Surface Treatment	Accessory	Shaft Bore Specifications (Selectable Gear Shapes)
Straight Bore	EN 1.1191 Equiv.	Black Oxide	Set Screw (EN 1.7220 Equiv. Black Oxide)	Straight Bore (Shape A, Shape B, Shape K)
Straight Bore + Tap	EN 1.4301 Equiv.	Electroless Nickel Plating	Set Screw (EN 1.4301 Equiv.)	Straight Bore + Tap (Shape B, Shape K)
GEABN				
GEABB				
GEABG				
GEAHB				
GEABS				

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

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

⚠ Tapped shaft bores are not available for Shape A.

Part Number	Number of Teeth	B	Gears Shape	Shaft Bore Dia. Pr (1mm Increment)	d Reference Dia.	D Tip Dia.	G Root Dia.	H	L	l1	l2	M (Coarse)	*1. Allowable Transmission Force (N·m) Bending Strength			Unit Price				
													EN 1.1191 Equiv.	Free-Cutting Brass Bar	EN 1.4301 Equiv.	Straight Bore	GEABN (x1.0) GEABB (x1.1) GEABG (x1.2)	GEAHB	GEABS	
Straight Bore (Shape A, Shape B, Shape K) GEAHB	15	8	K	3-5	7.5	8.5	6.25	9	18	10	3	M3	0.72	0.16	0.41					
	16				8	9	6.75						0.79	0.17	0.45					
	18				9	10	7.75						0.95	0.21	0.54					
	20				10	11	8.75						1.12	0.24	0.64					
	24				10	11	8.75						0.42	0.09	0.24					
	25				12	13	10.75						0.54	0.12	0.31					
	Straight Bore + Tap (Shape B, Shape K) GEABN GEABB GEABG GEAB GEABS	26	3	A	3-6, 6.35	12.5	13.5	11.25	8	10	5	2.5	M3	0.58	0.13	0.33				
		28				13	14	11.75						0.61	0.13	0.35				
		30				14	15	12.75						0.68	0.15	0.39				
		32				15	16	13.75						0.74	0.16	0.42				
		35				16	17	14.75						0.80	0.17	0.46				
		36				17.5	18.5	16.25						0.91	0.20	0.52				
Straight Bore + Tap (Shape B, Shape K) GEABN GEABB GEABG GEAB GEABS	40	0.5	A	3-6, 6.35	18	19	16.75	10	20	7	20	M4	0.94	0.20	0.54					
	42				20	21	18.75						0.72	0.16	0.41					
	45				21	22	19.75						0.76	0.17	0.43					
	48				22.5	23.5	21.25						0.83	0.18	0.48					
	50				24	25	22.75						0.90	0.20	0.51					
	52				25	26	23.75						0.95	0.21	0.54					
	Straight Bore + Tap (Shape B, Shape K) GEABN GEABB GEABG GEAB GEABS	52	2	B	5-12	26	27	24.75	7	20	7	20	M3	0.99	0.22					
		60				30	31	28.75						1.18	0.26					
		70				35	36	33.75						1.42	0.31					
		80				40	41	38.75						1.65	0.36					
		100				50	51	48.75						2.13	0.46					
		120				60	61	58.75						2.59	0.56					

* marked number of teeth is not available for GEABS. ⚠ Shaft Bore Dia. 6.35 is available.

*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

GEAB0.5 - 20 - 3 - B - 3

GEAHB0.5 - 30 - 3 - A - 6

GEABS0.5 - 16 - 8 - K - 5

⚠ When gear shape is not specified, number of teeth 15 ~ 20 (B=8) will be Shape K, and number of teeth 20 ~ 120 (B=3, 2) will be Shape B.

Alterations	Set Screw	Side Through Hole	Tapped Hole Dimension
Code	KC90	KC120	KFC, KTC
Code	KC90	KC120	TPC
Spec.	Adds another set screw at 90° position. ⚠ Not applicable to Shape A. ⚠ Not applicable to Straight Bore Type.	Adds another set screw at 120° position. ⚠ Not applicable to Shape A. ⚠ Not applicable to Straight Bore Type.	Machines through holes on the side surface. (KFC, KTC: 1mm Increment, K: 0.5mm Increment) ⚠ Applicable to Shape A only. ⚠ P+K+4≤KFC(KTC)≤G-K-4 [K Selection] K3.0-K6.0 [Ordering Code] KFC15-K3.5

Part Number	Number of Teeth	B	Gears Shape	Shaft Bore Dia. Pr (1mm Increment)	d Reference Dia.	D Tip Dia.	G Root Dia.	H	L	l1	l2	M (Coarse)	*1. Allowable Transmission Force (N·m) Bending Strength			Unit Price				
													EN 1.1191 Equiv.	Free-Cutting Brass Bar	EN 1.4301 Equiv.	Straight Bore	GEABN (x1.0) GEABB (x1.1) GEABG (x1.2)	GEAHB	GEABS	
Straight Bore (Shape A, Shape B, Shape K) GEAHB	12	7	K	4-5	9.6	11.2	7.6	11.2	20	13	3	M3	1.11	0.24	0.63					
	14				11.2	12.8	9.2	12.8					1.43	0.31	0.82					
	15				12	13.6	10	13.6					1.60	0.35	0.92					
	16				12.8	14.4	10.8						1.27	0.28	0.72					
	18				17.8	19.9	14.1						1.78	0.39	1.01					
	19				15.2	16.8	12.4						1.52	0.33	0.87					
	Straight Bore + Tap (Shape B, Shape K) GEABN GEABB GEABG GEAB GEABS	20	5	A	5-8	14.4	16	12.4	10	14	9	4	M4	2.13	0.46	1.22				
		24				16	17.6	14						1.78	0.39	1.02				
		25				19.2	20.8	17.2						2.32	0.50	1.32				
		27				20	21.6	18						3.25	0.71	1.85				
		28				24	26	20.4						2.46	0.53	1.40				
		30				25	27	23.6						3.44	0.75	1.98				
Straight Bore + Tap (Shape B, Shape K) GEABN GEABB GEABG GEAB GEABS	32	5	B	6-8	22.4	24	20.4	12.5	14	9	4	M4	2.89	0.63	1.65					
	35				24	25.6	22						4.04	0.88	2.30					
	36				25.6	27.2	23.6						3.16	0.69	1.80					
	40				28.8	30.4	26.8						4.42	0.96	2.52					
	45				32	33.6	30						3.42	0.74	1.95					
	48				36	37.6	34						4.01	0.87	2.29					
	Straight Bore + Tap (Shape B, Shape K) GEABN GEABB GEABG GEAB GEABS	50	7	K	4-6, 6.35	38.4	40	36.4	14	9	4	4	M4	5.77	1.26	3.30				
		52				40	41.6	38						6.07	1.32	3.46				

*1 Allowable Transmission Forces in the table are reference values calculated with prescribed conditions. For conditions, see P. 1498. ⚠ Shaft Bore Dia. 6.35 is available.

Ordering Example: Part Number - Number of Teeth - B - Gear Shape - P

GEAB0.8 - 25 - 5 - B - 6

GEAHB0.8 - 30 - 7 - A - 8

GEABS0.8 - 15 - 7 - K - 5

⚠ When gear shape is not specified, number of teeth 12 ~ 15 will be Shape K, 16 ~ 50 will be Shape B.

Alterations	Set Screw	Tapped Hole Dimension	Stepped Hole	Both Ends Stepped Bore
Code	KC90, KC120	TPC	DHL, DHR	WDH
Code	KC90, KC120	TPC	DHL, DHR	WDH
Spec.	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.	Changes the tapped hole dimension. [Ordering Code] TPC4 ⚠ Not applicable to Shape A. ⚠ Not applicable to Straight Bore Type.	Changes shaft bores to stepped bores. (Z: 1mm Increment, J: 0.1mm Increment) [Ordering Code] DHL-Z20-J2.0 ⚠ Applicable to Straight Bore Type Only.	Changes shaft bores to both ends stepped hole. (Q, R, S, T: 1mm Increment) ⚠ S, T ≥ 3 [Ordering Code] WDH-Q10-R10-S5-T5

Alterations	Side Slotted Hole	Side Through Hole	Side Tapped Hole
Code	LFC, LTC	KFC, KTC	QFC, QTC
Code	LFC, LTC	KFC, KTC	QFC, QTC
Spec.	Machines slotted holes on the side surface (30°). (LFC, LTC: 1mm Increment) ⚠ Applicable to Shape A only. ⚠ P+K+4≤LFC(LTC)≤G-C-4 [M Selection] M3 M4 [Ordering Code] LFC20-M3	Machines through holes on the side surface. (KFC, KTC: 1mm Increment, K: 0.5mm Increment) ⚠ Applicable to Shape A only. ⚠ P+K+4≤KFC(KTC)≤G-K-4 [K Selection] K3.0-K6.0 [Ordering Code] KFC20-K3.5	Machines tapped holes on the side surface of the gear. (QFC, QTC: 1mm Increment) ⚠ Applicable to Shape A only. ⚠ P+M+4≤QFC(QTC)≤G-M-4 [M Selection] M3 M4 [Ordering Code] QFC25-M3 ⚠ The tapped holes go through.