

Spur Gears - Tooth Width, Hub Dimensions Configurable

Pressure Angle 20°, Module 0.5, 0.8, 1.0, 1.5, 2.0, 2.5, 3.0

Type	Material	Surface Treatment	Accessory
Straight Bore GEFHB GEFBB GEFBG GEFBS	EN 1.1191 Equiv. EN 1.4301 Equiv.	Black Oxide Electroless Nickel Plating	Set Screw (EN 1.7220 Equiv., Black Oxide) Set Screw (EN 1.4301 Equiv.)
Keyway + Tap GEFKB GEFKBB GEFKBG GEFKBS			

⚠ Set Screw is not included in Straight Bore products.

RoHS 10

Shaft Bore Specifications

Shaft Bore Dia. Ph7	M (Coarse)	Accessory: Set Screw
3-5	M3	M3x3
6-12	M4	M4x3
13-17	M5	M5x4
18-30	M6	M6x5
31-40	M8	M8x6

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

Module 0.5, 0.8, 1.0, 1.5

Part Number	Number of Teeth	B 1mm Increment	Shaft Bore Dia. Ph7 (1mm Increment)		Hub 1mm Increment		d Reference Dia.	D Tip Dia.	G Root Dia.	Unit Price																				
			Straight Bore	Keyway + Tap	W	H				Straight Bore			Straight Bore + Tap			Keyway + Tap														
											GEFHB	GEFKB	GEFBG	GEFBS	GEFKBB	GEFKBG	GEFKBS													
Straight Bore GEFHB GEFBB GEFBG GEFBS	20-100	2-5	3-12	0-10	P+2sHsG-2 (Straight Bore)	10	11	8.75	12	13	10.75																			
						12	13.5	11.25	13	14	11.75																			
						15	16	13.75	16	17	14.75																			
						18	19	16.75	20	21	18.75																			
						24	25	22.75	25	26	23.75																			
						30	31	28.75	35	36	33.75																			
						40	41	38.75	40	41	38.75																			
						50	51	48.75	50	51	48.75																			
																			Straight Bore + Tap			Keyway + Tap								
						Straight Bore + Tap GEFB GEFBB GEFBG GEFBS	20-50	3-10	5-8	0-10	P+2sHsG-2 (Straight Bore)	12	13.6	10	12.8	14.4	10.8													
14.4	16	12.4	16	17.6	14																									
19.2	20.8	17.2	20	21.6	18																									
22.4	24	20.4	24	25.6	22																									
25.6	27.2	23.6	28.8	30.4	26.8																									
32	33.6	30	36	37.6	34																									
38.4	40	36.4	40	41.6	38																									
													Straight Bore + Tap			Keyway + Tap														
Keyway + Tap GEFKB GEFKBB GEFKBG GEFKBS	20-120	5-15	8N-35N	0-15	P+4sHsG-3 (Straight Bore, Straight Bore + Tap)							20	22	17.5	21	23	18.5													
												22	24	19.5	23	25	20.5													
						24	26	21.5	24	26	22.5																			
						26	28	23.5	28	30	25.5																			
						30	32	27.5	32	34	29.5																			
						35	37	32.5	36	38	33.5																			
						40	42	37.5	48	50	45.5																			
						50	52	47.5	60	62	57.5																			
						70	72	67.5	80	82	77.5																			
						100	102	97.5	120	122	117.5																			
													Straight Bore, Straight Bore + Tap			Keyway + Tap														
Straight Bore + Tap GEFB GEFBB GEFBG GEFBS	20-80	10-20	6-12	0-20	P+6sHsG-4 (Straight Bore, Straight Bore + Tap)	24	27	20.25	27	30	23.25																			
						30	33	26.25	36	39	32.25																			
						37.5	40.5	33.75	39	42	35.25																			
						42	45	38.25	45	48	41.25																			
						52.5	55.5	48.75	54	57	50.25																			
						60	63	56.25	72	75	68.25																			
						75	78	71.25	90	93	86.25																			
						105	108	101.25	120	123	116.25																			
																			Straight Bore, Straight Bore + Tap			Keyway + Tap								

Module 2.0, 2.5, 3.0

Part Number	Number of Teeth	B 1mm Increment	Shaft Bore Dia. Ph7 (1mm Increment)		Hub 1mm Increment		d Reference Dia.	D Tip Dia.	G Root Dia.	Unit Price																				
			Straight Bore	Keyway + Tap	W	H				Straight Bore			Straight Bore + Tap			Keyway + Tap														
											GEFHB	GEFKB	GEFBG	GEFBS	GEFKBB	GEFKBG	GEFKBS													
Straight Bore GEFHB GEFKBB GEFBG GEFBS	20-60	15-25	8-25	0-25	P+10sHsG-5 (Straight Bore, Straight Bore + Tap)	15	16	30	34	25																				
						18	19	32	36	27																				
						20	21	36	40	31																				
						24	25	40	44	35																				
						25	26	48	52	43																				
						30	31	50	54	45																				
						32	33	52	56	47																				
						36	37	60	64	55																				
						40	41	64	68	59																				
						48	49	72	76	67																				
											Straight Bore, Straight Bore + Tap			Keyway + Tap																
Straight Bore + Tap GEFB GEFBB GEFBG GEFBS	20-50	20-30	8-25	0-30	P+12sHsG-5 (Straight Bore, Straight Bore + Tap)	18	19	45	50	38.75																				
						20	21	50	55	43.75																				
						25	26	62.5	67.5	56.25																				
						28	29	70	75	63.75																				
						36	37	90	95	83.75																				
						40	41	100	105	93.75																				
						50	51	125	130	118.75																				
																			Straight Bore, Straight Bore + Tap			Keyway + Tap								
						Keyway + Tap GEFKB GEFKBB GEFKBG GEFKBS	20-40	25-35	8-25	0-35	P+10sHsG-6 (Straight Bore, Straight Bore + Tap)	12	13	36	42	28.5														
												15	16	45	51	37.5														
18	19	54	60	46.5																										
20	21	60	66	52.5																										
30	31	90	96	82.5																										
36	37	108	114	100.5																										
40	41	120	126	112.5																										
													Straight Bore, Straight Bore + Tap			Keyway + Tap														

- ⊗ Shaft bore diameter 9N is not available for Keyway Bore + Tap. ⊗ When specifying "Straight Bore + Tap" and "Keyway + Tap," make sure that the hub length satisfies the condition of "(W)>M+3".
- ⊙ When the tooth width is smaller, the transmitting torque is smaller. ⊙ Shaft bore diameter 6.35 is available for Straight Bore and Straight 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
- ⊙ When requesting Shape A (no hub), specify W=0.
- ⊙ When W=0, specification for H is not required.
- ⊙ For WH alterations, the H range requirements considered as Q and R = P must satisfy the condition of "Q + O ≤ H ≤ G - O, R + O ≤ H ≤ G - O." (O: Refer to the value in the specification table)
- ⊙ For DHL/DHR alterations, the H range requirements considered as Z = P must satisfy the condition of "Z + O ≤ H ≤ G - O." (O: Refer to the value in the specification table)

Ordering Example

Part Number - Number of Teeth - B - P - W - H

GEFHB1.0 - 30 - 8 - 15 - W10 - H26

GEFKBG2.0 - 32 - 15 - 20N - W0

Alterations

Part Number - Number of Teeth - B - P - W - H - (KC90, KC120-etc.)

GEFBB1.5 - 30 - 20 - 8 - W15 - H30 - KC90

GEFHB1.0 - 40 - 8 - 10 - W0 - KTC20 - K5.0

Alterations Code	Set Screw	Tapped Hole Dimension	Stepped Hole	Both Ends Stepped Bore
	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 Straight Bore Type.	Changes the tapped hole dimension. Ordering Code: TPC4 ⊙ Only when W>0 ⊗ Not applicable to Straight Bore Type.	Changes shaft bores to stepped bores. (Z: 1mm Increment, J: 0.1mm Increment) Ordering Code: DHL-Z20-J4.0 ⊙ Applicable to Straight Bore Type Only.	Changes shaft bores to both ends stepped bore. (Q, R, S, T: 1mm Increment) Ordering Code: WDH-Q10-R10-S5-T5 ⊙ Applicable to Straight Bore Type Only.

Alterations Code	Side Slotted Hole	Side Through Hole	Side Tapped Hole
	LFC, LTC	KFC, KTC	QFC, QTC
Spec.	Machines slotted holes on the side surface (30°). (LFC, LTC: 1mm Increment) ⊙ Applicable to W=0 only ⊙ P+4sLFC(LTC)≤G-C-4 M Selection M3, M4, M5, M6 Ordering Code: LFC20-M3	Machines through holes on the side surface. (KFC, KTC: 1mm Increment, K: 0.5mm Increment) ⊙ Applicable to W=0 only ⊙ P+K+4sKFC(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 W=0 only ⊙ P+M+4sQFC(QTC)≤G-M-4 M Selection M3, M4 Ordering Code: QFC25-M3 ⊙ Tapped Hole Depth Mx1.5 (When B-Mx1.5, through)