

CFHKB SERIES PERFORMANCE

(3-STAGE, RATIO I = 48~1000)

Precision Planetary Gearbox



MODEL NO.		STAGE	RATIO (1)	CFHKB 075	CFHKB 100	CFHKB 140	CFHKB 180	CFHKB 210	CFHKB 240
Nominal Output Torque T(2N)	Nm	3	48	-	-	-	-	-	3,280
			64	200	360	615	1,325	1,680	3,280
			84	200	360	620	1,325	1,680	-
			100	200	360	620	1,330	1,780	3,345
			125	170	310	535	1,170	1,780	3,345
			140	200	360	620	1,330	1,780	3,345
			175	170	310	535	1,170	1,780	3,345
			200	200	360	620	1,330	1,780	3,345
			250	170	310	535	1,170	1,780	3,345
			280	200	360	620	1,330	1,510	3,000
			350	170	310	535	1,170	1,775	3,345
			400	160	340	620	1,330	1,440	2,400
			500	170	310	535	1,170	1,780	3,000
			700	130	250	440	990	1,510	2,555
			1,000	55	160	290	640	980	1,655
Emergency Stop Torque T(2NOT)	Nm	3	48~1,000	2 times T(2N)					
Max. Acceleration Torque T(2B)	Nm	3	48~1,000	1,5 times T(2N)					
No Load Running Torque(2)	Nm	3	48~1,000	0.2	0.2	0.3	0.4	1	1.2
Backlash(3)	arcmin	3	48~1,000	≥ 2	≥ 2	≥ 2	≥ 2	≥ 2	≥ 2
Torsional Rigidity	Nm/arcmin	3	48~1,000	10	30	55	175	300	510
Nominal Input Speed n(1N)	rpm	3	48~1,000	5,500	4,600	4,600	4,000	3,700	3,400
Max. Input Speed n(1B)	rpm	3	48~1,000	7,000	7,000	7,000	6,000	5,500	5,000
Max Radial Load F(2r) (4)	N	3	48~1,000	4,500	6,700	10,000	15,000	22,000	30,000
Max. Axial Load F(2a)(4)	N	3	48~1,000	2,250	3,350	5,000	7,500	11,000	15,000
Max Tilting Moment M(2k) (4)	Nm	3	48~1,000	270	550	1,050	1,740	3,350	5,420
Service Life(6)	hr	3	48~1,000	20,000					
Operating Temp	°C	3	48~1,000	-10°C~ +90°C					
Degree of Gearbox Protection		3	48~1,000	IP65					
Lubrication		3	48~1,000	Synthetic lubrication grease					
Mounting Position		3	48~1,000	All directions					
Running Noise(6)	dB(A)	3	48~1,000	≥ 66	≥ 68	≥ 68	≥ 70	≥ 70	≥ 72
Efficiency η	%	3	48~1,000	≥ 92%					

(1) Ratio (i=N[in]/N[out]) (2) These values are measured by gearbox with ratio 1,000 (3-stage) at 3,000 rpm with no loading. (3) Backlash is measured at 2% of Nominal Output Torque T(2N). (4) Applied to the output shaft center at 100 rpm. (5) Continuous operation is not recommended (6) These values are measured by gearbox with ratio 1,000 (3-stage) at 3,000 rpm no loading. By lower ratio and/or higher RPM, the noise level could be 3 to 5 dB higher.