

CFHK SERIES PERFORMANCE

(2-STAGE, RATIO I = 12~100)

Precision Planetary Gearbox



MODEL NO.		STAGES	RATIO (1)	CFHK 060	CFHK 75	CFHK 100	CFHK 140	CFHK 180	CFHK 210	CFHK 240
Nominal Output Torque T(2N)	Nm	2	12	95	195	360	615	1,315	1,680	3,280
			16	95	200	360	615	1,320	1,680	3,280
			20	95	200	360	615	1,320	1,775	3,335
			25	80	170	310	535	1,165	1,775	3,335
			28	92	200	360	615	1,325	1,560	3,000
			35	80	170	310	535	1,170	1,775	3,340
			40	60	160	340	615	1,325	1,440	2,400
			50	50	170	310	535	1,170	1,775	3,000
			70	60	130	250	440	990	1,510	2,550
			100	24	55	160	290	655	1,005	1,685
Emergency Stop Torque T(2NOT)	Nm	2	12~100	2 times T(2N)						
Max. Acceleration Torque T(2B)	Nm	2	12~100	1,5 times T(2N)						
No Load Running Torque(2)	Nm	2	12~100	1	1.3	2	3.1	6	13	16
Backlash(3)	arcmin	2	12~100	≤ 3	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
Torsional Rigidity	Nm/arcmin	2	12~100	4.6	10	30	55	175	300	510
Nominal Input Speed n(1N)	rpm	2	12~100	3,000	3,000	2,800	2,700	2,200	2,100	2,000
Max. Input Speed n(1B)	rpm	2	12~100	6,000	6,000	6,000	4,500	4,500	4,000	3,000
Max Radial Load F(2r) (4)	N	2	12~100	3,000	4,500	6,700	10,000	15,000	22,000	30,000
Max. Axial Load F(2a)(4)	N	2	12~100	1,500	2,250	3,350	5,000	7,500	11,000	15,000
Max Tilting Moment M(2k) (4)	Nm	2	12~100	160	270	550	1,050	1,740	3,350	5,420
Service Life(5)	hr	2	12~100	20,000						
Operating Temp	°C	2	12~100	-10°C~ +90°C						
Degree of Gearbox Protection		2	12~100	IP65						
Lubrication		2	12~100	Synthetic lubrication grease						
Mounting Position		2	12~100	All directions						
Running Noise(6)	dB(A)	2	12~100	≤ 64	≤ 66	≤ 68	≤ 68	≤ 70	≤ 70	≤ 72
Efficiency η	%	2	12~100	≤ 94%						

(1) Ratio ($i=N[in]/N[out]$) (2) These values are measured by gearbox with ratio 100 (2-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 100 (2-stage) at 3,000 rpm no loading. By lower ratio and/or higher RPM, the noise level could be 3 to 5 dB higher.