

CH SERIES PERFORMANCE

Precision Planetary Gearbox



PERFORMANCE RATINGS		STAGES	RATIO (1)	CH 064	CH 090	CH 110	CH 140	CH 200	CH 255	CH 285	CH 355	CH 450	
Nominal Output Torque T(2N)	Nm	1	4	95	195	350	600	1,290	-	-	-	-	
			5	80	165	305	525	1,145	1,745	3,285	-	-	
			7	60	130	250	435	980	1,495	2,525	-	-	
			10	24	55	160	305	700	1,070	1,810	-	-	
		2	16	95	195	360	615	1,320	-	-	-	-	-
			20	95	200	360	615	1,320	1,770	3,325	-	-	-
			21	80	165	310	535	1,165	1,770	3,330	5,595	10,915	-
			25	80	165	310	535	1,165	1,770	3,330	-	-	-
			28	60	200	360	615	1,325	-	-	-	-	-
			31	60	130	250	440	990	1,510	2,550	4,810	9,565	-
			35	70	170	310	535	1,165	1,775	3,335	-	-	-
			40	40	96	220	615	1,215	-	-	-	-	-
			46	24	55	160	295	660	1,005	1,700	3,400	7,125	-
			50	50	120	275	535	1,170	1,775	3,340	-	-	-
			61	60	130	250	440	990	1,510	2,550	4,820	9,585	-
			70	60	130	250	440	990	1,510	2,550	-	-	-
			91	24	55	160	295	660	1,005	1,700	3,345	7,000	-
			100	24	55	160	295	660	1,005	1,700	-	-	-
Emergency Stop Torque T(2NOT)	Nm	1,2	4~100	2 times T(2N)									
Max. Acceleration Torque T(2B)	Nm	1,2	4~100	1,5 times T(2N)									
No Load Running Torque(3)	Nm	1	4~10	0.45	0.7	1.4	3.5	7	11	14	-	-	
		2	16~100	0.2	0.3	0.6	1.3	2.2	3.5	4.5	13	21	
Backlash(2)	arcmin	1	4~10	≤ 2	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	-	-	
		2	16~100	≤ 2	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1	
Torsional Rigidity	Nm/arcmin	1,2	4~100	8	22	60	115	395	650	1050	2,850	5,700	
Nominal Input Speed n(1N)	rpm	1	4~10	5,000	3,600	3,600	3,000	2,700	2,400	2,100	-	-	
		2	16~100	5,000	4,600	4,600	4,000	3,700	3,400	3,100	2,500	2,000	
Max. Input Speed n(1B)	rpm	1	4~10	7,000	6,000	6,000	5,000	4,500	4,000	3,500	-	-	
		2	16~100	7,000	7,000	7,000	6,000	5,500	5,000	4,500	4,000	3,500	
Max. Axial Load F(2aB)(4)	N	1,2	4~100	1,690	2,220	4,070	8,530	17,000	26,900	39,200	101,500	143,700	
Max Bending Moment M(2k)(4)	Nm	1,2	4~100	120	280	480	1,310	3,530	5,920	9,230	29,100	63,300	
Service Life(4)	hr	1,2	4~100	20,000									
Operating Temp	°C	1,2	4~100	-10°C~ +90°C									
Degree of Gearbox Protection		1,2	4~100	IP65									
Lubrication		1,2	4~100	Synthetic lubrication grease									
Mounting Position		1,2	4~100	All directions									
Running Noise(3)	dB(A)	1	4~10	≤ 58	≤ 59	≤ 64	≤ 65	≤ 66	≤ 66	≤ 66	-	-	
		2	16~100	≤ 58	≤ 59	≤ 60	≤ 63	≤ 66	≤ 66	≤ 66	≤ 68	≤ 70	
Efficiency η	%	1	4~10	≥ 97%									
		2	16~100	≥ 94%									

(1) Ratio ($i=N[in]/N[out]$) (2) Backlash is measured at 2% of Nominal Output Torque T(2N) (3) These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-stage) at 3,000 rpm without load. (4) Applied to the output flange center at 100 rpm. (5) Continuous operation not recommended.