

KH Gearbox Performance

Model No.	Stages	Ratio ⁽¹⁾	KH 064	KH 090	KH 110	KH 140	KH 200	KH 255	KH 285	
Nominal Output Torque T_{2N}	Nm	1	3	25	50	110	210	420	820	1,600
			4	25	60	110	210	420	820	1,600
			5	25	60	110	210	420	820	1,600
			7	23	50	100	200	390	750	1,400
			10	18	40	85	170	360	600	1,100
Emergency Stop Torque T_{2NOT}	Nm	1	3~10	2 times T_{2N}						
Max. Acceleration Torque T_{2B}	Nm	1	3~10	1,5 times T_{2N}						
No Load Running Torque ⁽⁴⁾	Nm	1	3~10	0.9	1.6	3.2	4.2	9.6	16.5	26.4
Backlash ⁽²⁾	arcmin	1	3~10	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3
Torsional Rigidity	Nm/arcmin	1	3~10	1.1	4.5	10	23	54	90	170
Nominal Input Speed n_{1N}	rpm	1	3~10	3,000	2,800	2,700	2,000	2,000	2,000	1,500
Max. Input Speed n_{1B}	rpm	1	3~10	6,000	6,000	4,500	4,500	4,000	3,000	2,500
Max. Radial Load F_{2rB} ⁽³⁾	N	1	3~10	2,400	4,500	5,100	13,000	28,700	36,200	58,300
Max. Axial Load F_{2aB} ⁽³⁾	N	1	3~10	1,200	2,250	2,550	6,500	14,350	18,100	29,150
Service Life ⁽⁵⁾	hr	1	3~10	20,000						
Operating Temp	°C	1	3~10	0° C ~ +90° C						
Degree of Gearbox Protection		1	3~10	IP65						
Lubrication		1	3~10	Synthetic lubrication grease						
Mounting Position		1	3~10	All directions						
Running Noise ⁽⁴⁾	dB(A)	1	3~10	≤ 64	≤ 66	≤ 66	≤ 68	≤ 68	≤ 70	≤ 72
Efficiency η	%	1	3~10	≥ 96%						

(1) Ratio ($i = N_{in} / N_{out}$).

(2) Backlash is measured at 2% of Nominal Output Torque T_{2N} .

(3) Applied to the output shaft center at 100 rpm.

(4) These values are measured by gearbox with ratio = 10 (1-stage) at 3,000 rpm without load.

(5) For continuous operation, the service life time is less than 10,000 hrs.

KH Gearbox Inertia

Model No.	KH 064	KH 090	KH 110	KH 140	KH 200	KH 255	KH 285
$\emptyset^{(A)}$ (C3)	1-stage	1-stage	1-stage	1-stage	1-stage	1-stage	1-stage
8	0.10	-	-	-	-	-	-
11	0.17	0.18	-	-	-	-	-
14	0.20	0.50	-	-	-	-	-
19	0.59	0.63	1.66	-	-	-	-
24	-	4.42	4.82	4.96	-	-	-
28	-	-	6.05	6.00	-	-	-
32	-	-	8.38	8.70	9.93	-	-
35	-	-	13.86	14.23	15.15	15.62	23.34
38	-	-	18.87	19.88	20.69	21.61	23.34
42	-	-	-	21.75	22.26	23.36	24.97
48	-	-	-	53.91	55.55	58.28	60.43
55	-	-	-	-	-	86.65	88.67
60	-	-	-	-	-	-	111.89

(A) \emptyset = Input shaft diameter.