

KF Gearbox Performance

Model No.	Stages	Ratio ⁽¹⁾	KF 060	KF 075	KF 100	KF 140	KF 180	KF 210	KF 240	
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	0.8	1.3	2.6	3.5	8	11	17.6
Backlash ⁽²⁾	arcmin	1	3~10	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3	≤ 3
Torsional Rigidity	Nm/arcmin	1	3~10	0.8	3.5	9	20.5	44	80	168
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	5,700	8,200	12,200	20,100	30,700	40,900	51,900
Max. Axial Load F _{2aB} ⁽³⁾	N	1	3~10	2,850	4,100	6,100	10,050	15,350	20,450	20,950
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.

KF Gearbox Inertia

Model No.	KF 060	KF 075	KF 100	KF 140	KF 180	KF 210	KF 240
∅ ^(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	kg.cm ²	-	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) ∅ = Input shaft diameter.