

AN Series

Specifications

Gearbox Performance

Model No.	Stage	Ratio ¹	AN023	AN023A	AN023B	AN023C	AN034	AN034A	AN034B	AN034C	
Nominal Output Torque T_{2N}	Nm	1	5	60	-	60	-	160	-	160	-
			10	40	-	40	-	100	-	100	-
	2	25	60	60	60	60	160	160	160	160	
		50	60	60	60	60	160	160	160	160	
		100	40	40	40	40	100	100	100	100	
Emergency Stop Torque T_{2NOT} ²	Nm	1,2	5~100	3 times of Nominal Output Torque							
Nominal Input Speed n_{iN}	rpm	1,2	5~100	5,000	5,000	5,000	5,000	4,000	4,000	4,000	4,000
Max. Input Speed n_{iB}	rpm	1,2	5~100	10,000	10,000	10,000	10,000	8,000	8,000	8,000	8,000
Micro Backlash P_0		1	5~10	-	-	-	-	≤1	-	≤1	-
		2	25~100	-	-	-	-	-	-	-	-
Reduced Backlash P_1	arcmin	1	5~10	≤3	-	≤3	-	≤3	-	≤3	-
		2	25~100	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
Standard Backlash P_2	arcmin	1	5~10	≤5	-	≤5	-	≤5	-	≤5	-
		2	25~100	≤7	≤7	≤7	≤7	≤7	≤7	≤7	≤7
Torsional Rigidity	Nm/arcmin	1,2	5~100	2.6	2.6	1.7	1.7	9.5	9.5	3.2	3.2
Max. Radial Load F_{2B} ³	N	1,2	5~100	950	950	1,000	1,000	2,450	2,450	2,550	2,550
Max. Axial Load F_{2aB} ³	N	1,2	5~100	475	475	500	500	1,225	1,225	1,275	1,275
Service Life	hr	1,2	5~100	20,000*							
Efficiency η	%	1	5~10	≥97%							
		2	25~100	≥94%							
Weight	kg	1	5~10	1.2	-	1.2	-	3.4	-	3.4	-
		2	25~100	1.4	1.9	1.4	1.9	4	5.3	4	5.3
Operating Temperature	°C	1,2	5~100	-10°C~90°C							
Lubrication				Synthetic lubrication oils							
Degree of Gearbox Protection		1,2	5~100	IP65							
Mounting Position		1,2	5~100	all directions							
Noise Level ($n_i=3000$ rpm, No Load)	dB(A)	1,2	5~100	≤58	≤60	≤58	≤60	≤60	≤63	≤60	≤63

Gearbox Inertia

Model No.	Stage	Ratio ¹	AN023	AN023A	AN023B	AN023C	AN034	AN034A	AN034B	AN034C	
Mass Moments of Inertia J_1	kg · cm ²	1	5	0.13	-	0.13	-	0.47	-	0.47	-
			10	0.13	-	0.13	-	0.44	-	0.44	-
	2	25	0.03	0.13	0.03	0.13	0.13	0.47	0.13	0.47	
		50	0.03	0.13	0.03	0.13	0.13	0.44	0.13	0.44	
		100	0.03	0.13	0.03	0.13	0.13	0.44	0.13	0.44	

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

2. $T_{2B} = 60\%$ of T_{2NOT}

3. Applied to the output shaft center @ 100 rpm

*S1 service life 10,000 hrs (Consult us)