PN Series
Specifications

Gearbox Performance

Model No.		Stages	Ratio[1]	PN023	PN034	PN042	PN056	PN075
Nominal Output Torque T_{2N}	Nm	1	3	14	39	104	215	423
			4	12	31	85	176	364
			5	14	39	104	215	423
			7	12	33	91	195	358
			10	9	26	65	150	293
		2	15	14	39	104	215	423
			16	12	31	85	176	364
			20	12	31	85	176	364
			25	14	39	104	215	423
			30	14	39	104	215	423
			35	12	33	91	195	358
			40	12	31	85	176	364
			50	14	39	104	215	423
			70	12	33	91	195	358
			100	9	26	65	150	293
Emergency Stop Torque T_{2NOT}[2]	Nm	1,2	3~100	3 times of Nominal Output Torque				
Nominal Input Speed n_{1N}	rpm	1,2	3~100	4,500	4,000	3,600	3,000	2,500
Max. Input Speed n_{1B}	rpm	1,2	3~100	8,000	6,000	6,000	4,800	3,600
Backlash*	arcmin	1	3~10	≤ 8	≤ 8	≤ 6	≤ 6	≤ 6
		2	15~100	≤ 10	≤ 10	≤ 8	≤ 8	≤ 8
Torsional Rigidity	Nm/arcmin	1,2	3~100	1.6	6.4	17.5	62.8	143.5
Max. Radial Load F_{2rB}[3]	N	1,2	3~100	680	1,770	1,830	4,140	6,440
Max. Axial Load F_{2aB}[3]	N	1,2	3~100	340	885	915	2,070	3,220
Service Life	hr	1,2	3~100	20,000*				
Efficiency η	%	1	3~10	≥ 97%				
		2	15~100	≥ 94%				
Weight	kg	1	3~10	0.8	2.3	4.6	9.7	19.7
		2	15~100	1.1	3.0	6.0	13.0	26.3
Operating Temp	°C	1,2	3~100	-10°C~90°C				
Lubrication				Synthetic lubrication grease				
Degree of Gearbox Protection		1,2	3~100	IP64				
Mounting Position		1,2	3~100	all directions				
Noise Level (n_1=3000rpm, No Load)	dB(A)	1,2	3~100	≤ 68	≤ 70	≤ 72	≤ 74	≤ 75

Gearbox Inertia

Model No.		Stages	Ratio[1]	PN023	PN034	PN042	PN056	PN075
Mass Moments of Inertia J_1	kg.cm²	1	3	0.15	0.53	3.00	10.69	31.86
			4	0.15	0.51	2.83	10.08	29.82
			5	0.15	0.50	2.80	9.96	29.43
			7	0.15	0.50	2.79	9.91	29.26
			10	0.15	0.50	2.79	9.89	29.20
		2	15	0.15	0.50	2.80	9.96	29.43
			16	0.15	0.51	2.83	10.08	29.82
			20	0.15	0.50	2.80	9.96	29.43
			25	0.15	0.50	2.80	9.96	29.43
			30	0.15	0.50	2.80	9.96	29.43
			35	0.15	0.50	2.80	9.96	29.43
			40	0.15	0.50	2.79	9.89	29.20
			50	0.15	0.50	2.79	9.89	29.20
			70	0.15	0.50	2.79	9.89	29.20
			100	0.15	0.50	2.79	9.89	29.20

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)

*Backlash is measured at 2% of Nominal Output Torque T_{2N}