PB Series
Specifications

Gearbox Performance

Model No.		Stages	Ratio[1]	PB060	PB090	PB115	PB142
Nominal Output Torque T_{2N}	Nm	1	3	14	39	104	215
			4	12	31	85	176
			5	14	39	104	215
			7	12	33	91	195
			10	9	26	65	150
		2	15	14	39	104	215
			16	12	31	85	176
			20	12	31	85	176
			25	14	39	104	215
			30	14	39	104	215
			35	12	33	91	195
			40	12	31	85	176
			50	14	39	104	215
			70	12	33	91	195
			100	9	26	65	150
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
Max. Input Speed n_{1B}	rpm	1,2	3~100	8,000	6,000	6,000	4,800
Backlash*	arcmin	1	3~10	≤ 8	≤ 8	≤ 6	≤ 6
		2	15~100	≤ 10	≤ 10	≤ 8	≤ 8
Torsional Rigidity	Nm/arcmin	1,2	3~100	3.7	7.2	15.1	60.5
Max. Radial Load F_{2rB}[3]	N	1,2	3~100	770	1,750	1,890	3,720
Max. Axial Load F_{2aB}[3]	N	1,2	3~100	385	875	945	1,860
Service Life	hr	1,2	3~100	20,000*			
Efficiency η	%	1	3~10	≥ 97%			
		2	15~100	≥ 94%			
Weight	kg	1	3~10	0.9	2.2	4.3	10.0
		2	15~100	1.2	3.0	5.7	13.3
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

Gearbox Inertia

Model No.		Stages	Ratio[1]	PB060	PB090	PB115	PB142
Mass Moments of Inertia J_1	$kg.cm^2$	1	3	0.15	0.53	3.00	10.69
			4	0.15	0.51	2.83	10.08
			5	0.15	0.50	2.80	9.96
			7	0.15	0.50	2.79	9.91
			10	0.15	0.50	2.79	9.89
		2	15	0.15	0.50	2.80	9.96
			16	0.15	0.51	2.83	10.08
			20	0.15	0.50	2.80	9.96
			25	0.15	0.50	2.80	9.96
			30	0.15	0.50	2.80	9.96
			35	0.15	0.50	2.80	9.96
			40	0.15	0.50	2.79	9.89
			50	0.15	0.50	2.79	9.89
			70	0.15	0.50	2.79	9.89
			100	0.15	0.50	2.79	9.89

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}