

CPLX SERIES PERFORMANCE

Economy Spur Planetary Gearbox



MODEL NO.		STAGES	RATIO (1)	CPLX 070	CPLX 090	CPLX 120
				CPLXR 070	CPLXR 090	CPLXR 120
Nominal Output Torque T(2N)	Nm	1	3	30	67	107
			4	39	86	137
			5	40	89	140
			7	37	80	128
			10	27	59	93
		2	12	31	69	109
			15	31	70	110
			16	39	86	137
			20	39	88	141
			25	40	89	140
			30	32	72	111
			35	36	80	130
			40	41	92	143
			50	42	90	143
			70	37	81	131
			100	27	59	93
Emergency Stop Torque T(2NOT)	Nm	1,2	3~100	3 times T(2N)		
Max. Acceleration Torque T(2B)	Nm	1,2	3~100	T(2B) = 60% of T(2NOT)		
No Load Running Torque(4)	Nm	1	3~10	0.10	0.40	0.80
		2	12~100	0.10	0.30	0.40
Backlash(2)	arcmin	1	3~10	≤ 7	≤ 6	≤ 6
		2	12~100	≤ 9	≤ 8	≤ 8
Torsional Rigidity	Nm/arcmin	1,2	3~100	2.2	8	12
Nominal Input Speed n(1N)	rpm	1,2	3~100	4,000	3,600	3,600
Max. Input Speed n(1B)	rpm	1,2	3~100	6,000	6,000	4,800
Max. Radial Load F(2rB)(3)	N	1,2	3~100	2,600	3,100	6,550
Max. Axial Load F(2aB)(3)	N	1,2	3~100	1,300	1,550	3,275
Service Life(5)	hr	1,2	3~100	20,000		
Operating Temp	°C	1,2	3~100	0°C~ +90°C		
Degree of Gearbox Protection		1,2	3~100	IP65		
Lubrication		1,2	3~100	Synthetic lubrication grease		
Mounting Position		1,2	3~100	All directions		
Running Noise(4)	dB(A)	1,2	3~100	≤ 62	≤ 64	≤ 66
Max. Belt Tension	N	1,2	3~100	560	950	1,200
Max. Bending Moment Based on the Gearbox Input Flange Mb(6)	Nm	2	12~100	19	38	45
		2		10	17	14
Efficiency η	%	1	3~10	≥ 97%		
		2	12~100	≥ 94%		

(1) Ratio ($i = N[\text{in}]/N[\text{out}]$). (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) or ratio = 100 (2-stage) at 3,000 rpm without load. By ratio smaller than 10, the noise value would be 3-5 dB higher. (5) For continuous operation, the service lifetime is less than 10,000 hrs. (6) Max. motor weight* (kg) = $0.1 \times Mb$ / motor length (m) *with symmetrically distributed motor weight. *with horizontal and stationary mounting.