

CPDXR SERIES PERFORMANCE

Economy Spur Planetary Gearbox



MODEL NO.		STAGES	RATIO (1)	CPDXR 053	CPDXR 064	CPDXR 090	CPDXR 110
Nominal Output Torque T(2N)	Nm	1	3	16	42	110	217
			4	16	42	113	223
			5	15	40	118	220
			7	12	35	96	198
			10	10	27	68	155
		2	15	15	40	109	213
			16	16	42	116	228
			20	16	42	116	230
			25	15	40	123	228
			30	15	40	108	212
			35	12	35	100	206
			40	16	43	117	232
			50	15	40	123	228
			70	12	35	100	206
			100	10	27	70	162
Emergency Stop Torque T(2NOT)	Nm	1, 2	3~100	3 times T(2N)			
Max. Acceleration Torque T(2B)	Nm	1, 2	3~100	T2B = 60% of T(2NOT)			
No Load Running Torque(4)	Nm	1	3~100	0.10	0.15	0.45	0.84
		2	15~100	0.10	0.15	0.35	0.45
Backlash(2)	arcmin	1	3~100	≤ 12	≤ 11	≤ 10	≤ 10
		2	15~100	≤ 14	≤ 13	≤ 12	≤ 12
Torsional Rigidity	Nm/arcmin	1, 2	3~100	1.2	3	10.8	18.2
Nominal Input Speed n(1N)	rpm	1, 2	3~100	4,500	4,000	3,600	3,600
Max Input Speed n(1B)	rpm	1, 2	3~100	8,000	6,000	6,000	4,800
Max Radial Load F(2rB)(3)	N	1, 2	3~100	1,045	880	1,815	3,675
Max Axial Load F(2aB)(3)	N	1, 2	3~100	523	440	808	1,838
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	≤ 70	≤ 72	≤ 74	≤ 75
Max. Bending Moment Based on the Gearbox Input Flange Mb(6)	Nm	1, 2	3~100	4	9	16	25
Efficiency η	%	1	3~10	93%			
		2	15~100	90.0%			

(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) 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 x Mb / motor length (m) *with symmetrically distributed motor weight. *with horizontal and stationary mounting.