

ERH SERIES Cycloidal Reducer

ERH B Specifications

Frame Size	B										
Stage	Single Stage										
Ratio	Units	Note	11	17	29	35	47	59	71		
Nominal Output Torque	[Nm]	*1	80	87	105	101	107	105	102		
Maximum Acceleration Torque	[Nm]	*2	120	131	158	152	161	158	153		
Emergency Stop Torque	[Nm]	*3	200	218	263	251	267	261	254		
Nominal Output Torque (Precision)	[Nm]	*1	60	75	79	75	78	80	76		
Maximum Acceleration Torque (Precision)	[Nm]	*2	90	113	118	113	117	120	114		
Emergency Stop Torque (Precision)	[Nm]	*3	150	188	197	189	196	200	190		
Nominal Input Speed	[rpm]	*4	3000								
Maximum Input Speed	[rpm]	*5	4000								
No Load Running Torque	[Nm]	*6	0.4								
Permitted Radial Load	[N]	*7	4150	4750	5650	5690	5690	5690	5690		
Permitted Axial Load	[N]	*8	2070	2380	2820	2840	2840	2840	2840		
Maximum Radial Load	[N]	*9	5690								
Maximum Axial Load	[N]	*10	2840								
Moment of Inertia ($\leq \emptyset 19$)	[kgcm ²]	--	0.705	0.958	0.916	0.916	0.916	0.916	0.916		
Efficiency	[%]	*11	90								
Torsional Rigidity	[Nm/arcmin]	*12	3.0	4.7	5.0	5.4	5.4	5.4	5.4		
Backlash (Standard)	[Arc-min]	--	≤ 60								
Backlash (Precision)	[Arc-min]	--	≤ 6								
Noise Level	[dB]	*13	≤ 71								
Protection Class	--	*14	IP41 (IP65)								
Ambient Temperature	[°C]	--	0-40								
Permitted Housing Temperature	[°C]	--	90								
Lubrication	--	--	Oil (≥ 2000 rpm & Precision) / Grease (< 2000 rpm)								
Weight	[kg]	*15	19								

- *1) At nominal input speed, service life is 20,000 hours
- *2) The maximum torque when starting or stopping operation
- *3) The maximum torque allowed under a stress situation (Permitted 1,000 times during service life)
- *4) The average input speed
- *5) The maximum intermittent input speed
- *6) Torque at no load applied to the input shaft at nominal input speed
- *7) At this load and nominal input speed, service life will be 20,000 hours. (The radial load applied to the output side shaft center)
- *8) At this load and nominal input speed, service life will be 20,000 hours. (The axial load applied to the output side bearing)
- *9) The maximum radial load that the gearbox can accept
- *10) The maximum axial load that the gearbox can accept
- *11) The efficiency at the nominal output torque rating
- *12) This does not include lost motion
- *13) Contact NIDEC-SHIMPO for the testing conditions and environment
- *14) IP65 (wash-down) is available as an option. Contact NIDEC-SHIMPO for more details
- *15) The weight may vary slightly between models