

ERH SERIES Cycloidal Reducer

ERH D Specifications

Frame Size	D										
Stage	Single Stage										
Ratio	Units	Note	11	17	29	35	47	59	71		
Nominal Output Torque	[Nm]	*1	383	495	533	570	633	609	582		
Maximum Acceleration Torque	[Nm]	*2	575	743	800	855	950	914	873		
Emergency Stop Torque	[Nm]	*3	957	1,240	1,330	1,420	1,580	1,520	1,460		
Nominal Output Torque (Precision)	[Nm]	*1	287	349	376	402	447	430	411		
Maximum Acceleration Torque (Precision)	[Nm]	*2	431	524	564	603	671	645	617		
Emergency Stop Torque (Precision)	[Nm]	*3	718	872	940	1,010	1,120	1,070	1,030		
Nominal Input Speed	[rpm]	*4	3000								
Maximum Input Speed	[rpm]	*5	4000								
No Load Running Torque	[Nm]	*6	1.9								
Permitted Radial Load	[N]	*7	11960	13740	15920	16630	18060	20240	20950		
Permitted Axial Load	[N]	*8	5980	6870	7960	8310	9030	10120	10470		
Maximum Radial Load	[N]	*9	22420								
Maximum Axial Load	[N]	*10	11210								
Moment of Inertia ($\leq \varnothing 28$)	[kgcm ²]	--	5.08	7.21	7.88	7.71	7.71	7.71	7.54		
Moment of Inertia ($\leq \varnothing 38$)	[kgcm ²]	--	7.75	11.00	12.01	11.75	11.75	11.75	11.50		
Efficiency	[%]	*11	90								
Torsional Rigidity	[Nm/arcmin]	*12	17.8	23.0	25.2	27.4	27.4	27.4	27.4		
Backlash (Standard)	[Arc-min]	--	≤ 60								
Backlash (Precision)	[Arc-min]	--	≤ 6								
Noise Level	[dB]	*13	≤ 78								
Protection Class	--	*14	IP41 (IP65)								
Ambient Temperature	[°C]	--	0-40								
Permitted Housing Temperature	[°C]	--	90								
Lubrication	--	--	Oil								
Weight	[kg]	*15	68								

*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