

EVT 255 2-Stage Specifications

Frame Size	255					
Ratio	Unit	Note	4	5	7	10
Nominal Output Torque	[Nm]	*1	1340	1680	2024	1534
Maximum Acceleration Torque	[Nm]	*2	3520	3520	3428	2478
Maximum Torque	[Nm]	*3	3891	3891	3809	2781
Emergency Stop Torque	[Nm]	*4	5400	6500	7200	5400
Nominal Input Speed	[rpm]	*5	1200			
Maximum Input Speed	[rpm]	*6	3000			
No Load Running Torque	[Nm]	*7	--			
Maximum Radial Load	[N]	*8	64000			
Maximum Axial Load	[N]	*9	48000			
Maximum Tilting Moment	[Nm]	*10	11000			
Moment of Inertia ($\leq \varnothing 48$)	[kgcm ²]	--	--	--	--	--
Moment of Inertia ($\leq \varnothing 65$)	[kgcm ²]	--	661.8	619.8	587.7	572.0
Efficiency	[%]	*11	93			
Torsional Rigidity	[Nm/arcmin]	*12	840			
Maximum Torsional Backlash	[Arc-min]	--	≤ 6			
Noise Level	dB [A]	*13	≤ 85			
Protection Class	--	*14	IP54 (IP65)			
Ambient Temperature	[°C]	--	0-40			
Permitted Housing Temperature	[°C]	--	90			
Weight	[kg]	*15	110			

EVT 255 3-Stage Specifications

Frame Size	255					
Ratio	Unit	Note	16	20	25	28
Nominal Output Torque	[Nm]	*1	1920	1992	2154	2195
Maximum Acceleration Torque	[Nm]	*2	3520	3520	3520	3460
Maximum Torque	[Nm]	*3	3520	3520	3520	3460
Emergency Stop Torque	[Nm]	*4	7200	7200	7200	7200
Nominal Input Speed	[rpm]	*5	1500			
Maximum Input Speed	[rpm]	*6	3000			
No Load Running Torque	[Nm]	*7	--			
Maximum Radial Load	[N]	*8	64000			
Maximum Axial Load	[N]	*9	48000			
Maximum Tilting Moment	[Nm]	*10	11000			
Moment of Inertia ($\leq \varnothing 48$)	[kgcm ²]	--	118.52	114.63	113.37	114.80
Moment of Inertia ($\leq \varnothing 65$)	[kgcm ²]	--	--	--	--	--
Efficiency	[%]	*11	88			
Torsional Rigidity	[Nm/arcmin]	*12	840			
Maximum Torsional Backlash	[Arc-min]	--	≤ 9			
Noise Level	dB [A]	*13	≤ 85			
Protection Class	--	*14	IP54 (IP65)			
Ambient Temperature	[°C]	--	0-40			
Permitted Housing Temperature	[°C]	--	90			
Weight	[kg]	*15	99			

EVT 255 3-Stage Specifications

Frame Size	255							
Ratio	Unit	Note	35	40	50	70	100	
Nominal Output Torque	[Nm]	*1	2195	2195	2195	2195	1405	
Maximum Acceleration Torque	[Nm]	*2	3460	3520	3520	3460	1718	
Maximum Torque	[Nm]	*3	3460	3520	3520	3460	1718	
Emergency Stop Torque	[Nm]	*4	7200	7200	7200	7200	5400	
Nominal Input Speed	[rpm]	*5	1500					
Maximum Input Speed	[rpm]	*6	3000					
No Load Running Torque	[Nm]	*7	--					
Maximum Radial Load	[N]	*8	64000					
Maximum Axial Load	[N]	*9	48000					
Maximum Tilting Moment	[Nm]	*10	11000					
Moment of Inertia ($\leq \varnothing 48$)	[kgcm ²]	--	112.25	109.37	109.05	108.77	108.62	
Moment of Inertia ($\leq \varnothing 65$)	[kgcm ²]	--	--	--	--	--	--	
Efficiency	[%]	*11	88					
Torsional Rigidity	[Nm/arcmin]	*12	840					
Maximum Torsional Backlash	[Arc-min]	--	≤ 9					
Noise Level	dB [A]	*13	≤ 85					
Protection Class	--	*14	IP54 (IP65)					
Ambient Temperature	[°C]	--	0-40					
Permitted Housing Temperature	[°C]	--	90					
Weight	[kg]	*15	99					

- *1) At nominal input speed, service life is 20,000 hours
- *2) The maximum torque when starting or stopping operation. Apply Cycle Factor f_0 , found on page 468, for higher duty cycle applications
- *3) Permitted 10,000 times during service life. Based on 10% of maximum radial load and smooth output shaft
- *4) The maximum torque allowed under a stress situation. Permitted 1,000 times during service life
- *5) The average input speed at nominal input torque. Maintain housing temperature below permitted value
- *6) The maximum intermittent input speed
- *7) Torque at no load applied to the input shaft at nominal input speed
- *8) The maximum radial load that the gearbox can accept
- *9) The maximum axial load that the gearbox can accept
- *10) The moment is the maximum load at output flange surface
- *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) Various wash-down options are available. Contact NIDEC-SHIMPO for more details
- *15) Weight may vary slightly between models