EVT 255 2-Stage Specifications

Frame Size	**255**					
Stage	**2-Stage**					
Ratio	Unit	Note	4	5	7	10
Nominal Output Torque	[Nm]	*1	1340	1680	1920	1280
Maximum Acceleration Torque	[Nm]	*2	2960	2960	2960	2080
Emergency Stop Torque	[Nm]	*3	5400	6500	7200	5400
Nominal Input Speed	[rpm]	*4	1000			
Maximum Input Speed	[rpm]	*5	2000			
No Load Running Torque	[Nm]	*6	--			
Permitted Radial Load	[N]	*7	19000	20000	23000	25000
Permitted Axial Load	[N]	*8	15000	16000	18000	20000
Maximum Radial Load	[N]	*9	40000			
Maximum Axial Load	[N]	*10	20000			
Moment of Inertia (≤ Ø 48)	[kgcm2]	--	--	--	--	--
Moment of Inertia (≤ Ø 65)	[kgcm2]	--	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	IP55 (IP65)			
Ambient Temperature	[°C]	--	0-40			
Permitted Housing Temperature	[°C]	--	90			
Weight	[kg]	*15	110			

EVT 255 3-Stage Specifications

Frame Size	**255**					
Stage	**3-Stage**					
Ratio	Unit	Note	16	20	25	28
Nominal Output Torque	[Nm]	*1	1920	1920	1920	1920
Maximum Acceleration Torque	[Nm]	*2	2960	2960	2960	2960
Emergency Stop Torque	[Nm]	*3	7200	7200	7200	7200
Nominal Input Speed	[rpm]	*4	1000			
Maximum Input Speed	[rpm]	*5	2000			
No Load Running Torque	[Nm]	*6	--			
Permitted Radial Load	[N]	*7	29000	31000	33000	34000
Permitted Axial Load	[N]	*8	20000	20000	20000	20000
Maximum Radial Load	[N]	*9	40000			
Maximum Axial Load	[N]	*10	20000			
Moment of Inertia (≤ Ø 48)	[kgcm2]	--	118.52	114.63	113.37	114.80
Moment of Inertia (≤ Ø 65)	[kgcm2]	--	--	--	--	--
Efficiency	[%]	*11	88			
Torsional Rigidity	[Nm/arcmin]	*12	840			
Maximum Torsional Backlash	[Arc-min]	--	≤ 9			
Noise Level	dB [A]	*13	≤ 85			
Protection Class	--	*14	IP55 (IP65)			
Ambient Temperature	[°C]	--	0-40			
Permitted Housing Temperature	[°C]	--	90			
Weight	[kg]	*15	99			

EVT 255 3-Stage Specifications

Frame Size	**255**						
Stage	**3-Stage**						
Ratio	Unit	Note	35	40	50	70	100
Nominal Output Torque	[Nm]	*1	1920	1920	1920	1920	1280
Maximum Acceleration Torque	[Nm]	*2	2960	2960	2960	2960	1440
Emergency Stop Torque	[Nm]	*3	7200	7200	7200	7200	5400
Nominal Input Speed	[rpm]	*4	1000				
Maximum Input Speed	[rpm]	*5	2000				
No Load Running Torque	[Nm]	*6	--				
Permitted Radial Load	[N]	*7	37000	38000	40000	40000	40000
Permitted Axial Load	[N]	*8	20000	20000	20000	20000	20000
Maximum Radial Load	[N]	*9	40000				
Maximum Axial Load	[N]	*10	20000				
Moment of Inertia (≤ Ø 48)	[kgcm2]	--	112.25	109.37	109.05	108.77	108.62
Moment of Inertia (≤ Ø 65)	[kgcm2]	--	--	--	--	--	--
Efficiency	[%]	*11	88				
Torsional Rigidity	[Nm/arcmin]	*12	840				
Maximum Torsional Backlash	[Arc-min]	--	≤ 9				
Noise Level	dB [A]	*13	≤ 85				
Protection Class	--	*14	IP55 (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

*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