

EVT SERIES Right-angle Planetary

EVT 200 2-Stage Specifications

Frame Size	200					
Stage	2-Stage					
Ratio	Unit	Note	4	5	7	10
Nominal Output Torque	[Nm]	*1	575	600	600	400
Maximum Acceleration Torque	[Nm]	*2	770	960	1120	775
Emergency Stop Torque	[Nm]	*3	1700	2000	2500	2000
Nominal Input Speed	[rpm]	*4	1500			
Maximum Input Speed	[rpm]	*5	3000			
No Load Running Torque	[Nm]	*6	10.8			
Permitted Radial Load	[N]	*7	12000	13000	15000	16000
Permitted Axial Load	[N]	*8	8300	8900	9800	11000
Maximum Radial Load	[N]	*9	25000			
Maximum Axial Load	[N]	*10	13000			
Moment of Inertia ($\leq \varnothing 28$)	[kgcm ²]	--	--	--	--	--
Moment of Inertia ($\leq \varnothing 38$)	[kgcm ²]	--	93.44	81.86	71.47	66.72
Moment of Inertia ($\leq \varnothing 48$)	[kgcm ²]	--	138.1	123.3	109.6	103.4
Moment of Inertia ($\leq \varnothing 65$)	[kgcm ²]	--	223.7	208.9	195.2	189.0
Efficiency	[%]	*11	93			
Torsional Rigidity	[Nm/arcmin]	*12	320			
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	50			

EVT 200 3-Stage Specifications

Frame Size	200					
Stage	3-Stage					
Ratio	Unit	Note	16	20	25	28
Nominal Output Torque	[Nm]	*1	555	600	600	600
Maximum Acceleration Torque	[Nm]	*2	1120	1120	1120	1120
Emergency Stop Torque	[Nm]	*3	2500	2500	2500	2500
Nominal Input Speed	[rpm]	*4	1500			
Maximum Input Speed	[rpm]	*5	3000			
No Load Running Torque	[Nm]	*6	4.70			
Permitted Radial Load	[N]	*7	19000	20000	21000	22000
Permitted Axial Load	[N]	*8	13000	13000	13000	13000
Maximum Radial Load	[N]	*9	25000			
Maximum Axial Load	[N]	*10	13000			
Moment of Inertia ($\leq \varnothing 28$)	[kgcm ²]	--	13.42	11.92	11.38	11.82
Moment of Inertia ($\leq \varnothing 38$)	[kgcm ²]	--	22.20	20.71	20.17	20.61
Moment of Inertia ($\leq \varnothing 48$)	[kgcm ²]	--	27.02	25.53	24.99	25.43
Moment of Inertia ($\leq \varnothing 65$)	[kgcm ²]	--	--	--	--	--
Efficiency	[%]	*11	88			
Torsional Rigidity	[Nm/arcmin]	*12	320			
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	37			

EVT 200 3-Stage Specifications

Frame Size	200						
Stage	3-Stage						
Ratio	Unit	Note	35	40	50	70	100
Nominal Output Torque	[Nm]	*1	600	600	600	600	400
Maximum Acceleration Torque	[Nm]	*2	1120	1120	1120	1120	775
Emergency Stop Torque	[Nm]	*3	2500	2500	2500	2500	2000
Nominal Input Speed	[rpm]	*4	1500				
Maximum Input Speed	[rpm]	*5	3000				
No Load Running Torque	[Nm]	*6	4.70				
Permitted Radial Load	[N]	*7	24000	25000	25000	25000	25000
Permitted Axial Load	[N]	*8	13000	13000	13000	13000	13000
Maximum Radial Load	[N]	*9	25000				
Maximum Axial Load	[N]	*10	13000				
Moment of Inertia ($\leq \varnothing 28$)	[kgcm ²]	--	10.9	10.5	10.3	10.2	10.2
Moment of Inertia ($\leq \varnothing 38$)	[kgcm ²]	--	19.69	19.26	19.13	19.01	18.94
Moment of Inertia ($\leq \varnothing 48$)	[kgcm ²]	--	24.51	24.08	23.95	23.83	23.77
Moment of Inertia ($\leq \varnothing 65$)	[kgcm ²]	--	--	--	--	--	--
Efficiency	[%]	*11	88				
Torsional Rigidity	[Nm/arcmin]	*12	320				
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	37				

- *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