

EVT SERIES Right-angle Planetary

EVT 064 2-Stage Specifications

Frame Size	064										
Ratio	Unit	Note	4	5	6	7	8	9	10		
Nominal Output Torque	[Nm]	*1	16	22	24	24	24	19	19		
Maximum Acceleration Torque	[Nm]	*2	38	48	54	54	54	38	38		
Maximum Torque	[Nm]	*3	45	56	63	63	61	45	45		
Emergency Stop Torque	[Nm]	*4	65	80	90	90	90	65	65		
Nominal Input Speed	[rpm]	*5	3300								
Maximum Input Speed	[rpm]	*6	6000								
No Load Running Torque	[Nm]	*7	0.33								
Maximum Radial Load	[N]	*8	1500								
Maximum Axial Load	[N]	*9	750								
Maximum Tilting Moment	[Nm]	*10	58								
Moment of Inertia ($\leq \varnothing 8$)	[kgcm ²]	--	0.305	0.273	0.256	0.246	0.240	0.236	0.233		
Moment of Inertia ($\leq \varnothing 14$)	[kgcm ²]	--	0.379	0.348	0.331	0.321	0.315	0.311	0.308		
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	--	0.569	0.537	0.521	0.510	0.504	0.500	0.497		
Efficiency	[%]	*11	93								
Torsional Rigidity	[Nm/arcmin]	*12	7.5								
Maximum Torsional Backlash	[Arc-min]	--	≤ 4								
Noise Level	dB [A]	*13	≤ 80								
Protection Class	--	*14	IP54 (IP65)								
Ambient Temperature	[°C]	--	0-40								
Permitted Housing Temperature	[°C]	--	90								
Weight	[kg]	*15	1.9								

EVT 064 3-Stage Specifications

Frame Size	064										
Ratio	Unit	Note	16	20	25	28	35	40	45		
Nominal Output Torque	[Nm]	*1	26	26	28	28	28	28	19		
Maximum Acceleration Torque	[Nm]	*2	54	54	54	54	54	54	38		
Maximum Torque	[Nm]	*3	54	54	54	54	54	54	38		
Emergency Stop Torque	[Nm]	*4	90	90	90	90	90	90	65		
Nominal Input Speed	[rpm]	*5	3800								
Maximum Input Speed	[rpm]	*6	6000								
No Load Running Torque	[Nm]	*7	0.2								
Maximum Radial Load	[N]	*8	1500								
Maximum Axial Load	[N]	*9	750								
Maximum Tilting Moment	[Nm]	*10	58								
Moment of Inertia ($\leq \varnothing 8$)	[kgcm ²]	--	0.082	0.073	0.072	0.078	0.071	0.062	0.070		
Moment of Inertia ($\leq \varnothing 14$)	[kgcm ²]	--	0.126	0.118	0.116	0.123	0.115	0.106	0.115		
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	--	--	--	--	--	--	--	--		
Efficiency	[%]	*11	88								
Torsional Rigidity	[Nm/arcmin]	*12	7.5								
Maximum Torsional Backlash	[Arc-min]	--	≤ 7								
Noise Level	dB [A]	*13	≤ 80								
Protection Class	--	*14	IP54 (IP65)								
Ambient Temperature	[°C]	--	0-40								
Permitted Housing Temperature	[°C]	--	90								
Weight	[kg]	*15	1.6								

EVT 064 3-Stage Specifications

Frame Size	064								
Ratio	Unit	Note	50	60	70	80	90	100	
Nominal Output Torque	[Nm]	*1	28	28	28	28	19	19	
Maximum Acceleration Torque	[Nm]	*2	54	54	54	54	38	38	
Maximum Torque	[Nm]	*3	54	54	54	54	38	38	
Emergency Stop Torque	[Nm]	*4	90	90	90	90	65	65	
Nominal Input Speed	[rpm]	*5	3800						
Maximum Input Speed	[rpm]	*6	6000						
No Load Running Torque	[Nm]	*7	0.2						
Maximum Radial Load	[N]	*8	1500						
Maximum Axial Load	[N]	*9	750						
Maximum Tilting Moment	[Nm]	*10	58						
Moment of Inertia ($\leq \varnothing 8$)	[kgcm ²]	--	0.061	0.061	0.061	0.061	0.061	0.061	
Moment of Inertia ($\leq \varnothing 14$)	[kgcm ²]	--	0.106	0.106	0.106	0.106	0.106	0.105	
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	--	--	--	--	--	--	--	
Efficiency	[%]	*11	88						
Torsional Rigidity	[Nm/arcmin]	*12	7.5						
Maximum Torsional Backlash	[Arc-min]	--	≤ 7						
Noise Level	dB [A]	*13	≤ 80						
Protection Class	--	*14	IP54 (IP65)						
Ambient Temperature	[°C]	--	0-40						
Permitted Housing Temperature	[°C]	--	90						
Weight	[kg]	*15	1.6						

- *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 Drive Technology for the testing conditions and environment
- *14) Various wash-down options are available. Contact Nidec Drive Technology for more details
- *15) Weight may vary slightly between models

