

EVS SERIES Right-angle Planetary

EVS o6o 2-Stage Specifications

Frame Size	060									
Stage	2-Stage									
Ratio	Unit	Note	3	4	5	6	7	8	9	10
Nominal Output Torque	[Nm]	*1	12	16	22	24	24	24	16	16
Maximum Acceleration Torque	[Nm]	*2	24	32	40	45	45	45	32	32
Emergency Stop Torque	[Nm]	*3	50	65	80	90	90	90	65	65
Nominal Input Speed	[rpm]	*4	3000							
Maximum Input Speed	[rpm]	*5	6000							
No Load Running Torque	[Nm]	*6	0.33							
Permitted Radial Load	[N]	*7	1700	1900	2000	2100	2200	2300	2400	2400
Permitted Axial Load	[N]	*8	2300	2500	2700	2700	2700	2700	2700	2700
Maximum Radial Load	[N]	*9	3000							
Maximum Axial Load	[N]	*10	2700							
Moment of Inertia ($\leq \emptyset 8$)	[kgcm ²]	--	0.320	0.271	0.251	0.242	0.235	0.232	0.229	0.228
Moment of Inertia ($\leq \emptyset 14$)	[kgcm ²]	--	0.395	0.346	0.326	0.317	0.310	0.307	0.304	0.303
Moment of Inertia ($\leq \emptyset 19$)	[kgcm ²]	--	0.584	0.535	0.516	0.506	0.500	0.496	0.494	0.492
Efficiency	[%]	*11	93							
Torsional Rigidity	[Nm/arc-min]	*12	3							
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	2							

EVS o6o 3-Stage Specifications

Frame Size	060									
Stage	3-Stage									
Ratio	Unit	Note	15	16	20	25	28	30	35	40
Nominal Output Torque	[Nm]	*1	16	24	24	24	24	16	24	24
Maximum Acceleration Torque	[Nm]	*2	32	45	45	45	45	32	45	45
Emergency Stop Torque	[Nm]	*3	65	90	90	90	90	65	90	90
Nominal Input Speed	[rpm]	*4	3000							
Maximum Input Speed	[rpm]	*5	6000							
No Load Running Torque	[Nm]	*6	0.20							
Permitted Radial Load	[N]	*7	2800	2800	3000	3000	3000	3000	3000	3000
Permitted Axial Load	[N]	*8	2700	2700	2700	2700	2700	2700	2700	2700
Maximum Radial Load	[N]	*9	3000							
Maximum Axial Load	[N]	*10	2700							
Moment of Inertia ($\leq \emptyset 8$)	[kgcm ²]	--	0.074	0.079	0.072	0.071	0.077	0.062	0.070	0.061
Moment of Inertia ($\leq \emptyset 14$)	[kgcm ²]	--	0.118	0.124	0.116	0.115	0.122	0.106	0.115	0.106
Moment of Inertia ($\leq \emptyset 19$)	[kgcm ²]	--	--	--	--	--	--	--	--	--
Efficiency	[%]	*11	88							
Torsional Rigidity	[Nm/arc-min]	*12	3							
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	1.8							

EVS o6o 3-Stage Specifications

Frame Size	060										
Stage	3-Stage										
Ratio	Unit	Note	45	50	60	70	80	90	100		
Nominal Output Torque	[Nm]	*1	16	24	24	24	24	16	16		
Maximum Acceleration Torque	[Nm]	*2	32	45	45	45	45	32	32		
Emergency Stop Torque	[Nm]	*3	65	90	90	90	90	65	65		
Nominal Input Speed	[rpm]	*4	3000								
Maximum Input Speed	[rpm]	*5	6000								
No Load Running Torque	[Nm]	*6	0.20								
Permitted Radial Load	[N]	*7	3000	3000	3000	3000	3000	3000	3000		
Permitted Axial Load	[N]	*8	2700	2700	2700	2700	2700	2700	2700		
Maximum Radial Load	[N]	*9	3000								
Maximum Axial Load	[N]	*10	2700								
Moment of Inertia ($\leq \varnothing 8$)	[kgcm ²]	--	0.070	0.061	0.061	0.061	0.061	0.061	0.061		
Moment of Inertia ($\leq \varnothing 14$)	[kgcm ²]	--	0.115	0.106	0.106	0.106	0.105	0.105	0.105		
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	--	--	--	--	--	--	--	--		
Efficiency	[%]	*11	88								
Torsional Rigidity	[Nm/arc-min]	*12	3								
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	1.8								

- *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