EVL 235 2-Stage Specifications

Frame Size			**235**							
Ratio	Units	Note	3	4	5	6	7	8	9	10
Nominal Output Torque	[Nm]	*1	575	765	960	1208	1313	1313	1064	1064
Maximum Acceleration Torque	[Nm]	*2	1160	1555	1945	2112	2112	2063	1812	1529
Maximum Torque	[Nm]	*3	1336	1861	2328	2441	2441	2339	2032	1787
Emergency Stop Torque	[Nm]	*4	2500	3300	4000	4500	4500	4500	3600	3600
Nominal Input Speed	[rpm]	*5	1200							
Maximum Input Speed	[rpm]	*6	3000							
No Load Running Torque	[Nm]	*7	14.5							
Maximum Radial Load	[N]	*8	15000							
Maximum Axial Load	[N]	*9	14000							
Moment of Inertia (≤Ø 38)	[kgcm2]	--	--	--	--	--	--	--	--	--
Moment of Inertia (≤Ø 48)	[kgcm2]	--	148.0	122.9	113.3	108.1	104.7	102.7	101.6	101.0
Moment of Inertia (≤ Ø 65)	[kgcm2]	--	223.2	198.1	188.6	183.3	180.0	178.0	176.8	176.2
Efficiency	[%]	*10	93							
Torsional Rigidity	[Nm/arcmin]	*11	400							
Maximum Torsional Backlash	[Arc-min]	--	≤ 8							
Noise Level	dB [A]	*12	≤ 85							
Protection Class	--	*13	IP54 (IP65)							
Ambient Temperature	[°C]	--	0-40							
Permitted Housing Temperature	[°C]	--	90							
Weight	[kg]	*14	68							

EVL 235 3-Stage Specifications

Frame Size			**235**							
Ratio	Units	Note	15	16	20	25	28	30	35	40
Nominal Output Torque	[Nm]	*1	858	1200	1200	1360	1440	948	1440	1440
Maximum Acceleration Torque	[Nm]	*2	1463	2112	2112	2112	2112	1463	2112	2112
Maximum Torque	[Nm]	*3	1463	2112	2112	2112	2112	1463	2112	2112
Emergency Stop Torque	[Nm]	*4	3600	4500	4500	4500	4500	3600	4500	4500
Nominal Input Speed	[rpm]	*5	1500							
Maximum Input Speed	[rpm]	*6	3000							
No Load Running Torque	[Nm]	*7	10.2							
Maximum Radial Load	[N]	*8	15000							
Maximum Axial Load	[N]	*9	14000							
Moment of Inertia (≤Ø 38)	[kgcm2]	--	36.32	37.24	35.75	35.47	36.39	34.39	35.21	34.25
Moment of Inertia (≤Ø 48)	[kgcm2]	--	66.14	67.06	65.57	65.28	66.21	64.21	65.03	64.07
Moment of Inertia (≤ Ø 65)	[kgcm2]	--	--	--	--	--	--	--	--	--
Efficiency	[%]	*10	88							
Torsional Rigidity	[Nm/arcmin]	*11	400							
Maximum Torsional Backlash	[Arc-min]	--	≤ 11							
Noise Level	dB [A]	*12	≤ 85							
Protection Class	--	*13	IP54 (IP65)							
Ambient Temperature	[°C]	--	0-40							
Permitted Housing Temperature	[°C]	--	90							
Weight	[kg]	*14	70							

EVL 235 3-Stage Specifications

Frame Size			**235**						
Ratio	Units	Note	45	50	60	70	80	90	100
Nominal Output Torque	[Nm]	*1	948	1440	1440	1440	1440	948	948
Maximum Acceleration Torque	[Nm]	*2	1246	2112	2112	2112	1728	1246	1131
Maximum Torque	[Nm]	*3	1246	2112	2112	2112	1728	1246	1131
Emergency Stop Torque	[Nm]	*4	3600	4500	4500	4500	4500	3600	3600
Nominal Input Speed	[rpm]	*5	1500						
Maximum Input Speed	[rpm]	*6	3000						
No Load Running Torque	[Nm]	*7	10.2						
Maximum Radial Load	[N]	*8	15000						
Maximum Axial Load	[N]	*9	14000						
Moment of Inertia (≤Ø 38)	[kgcm2]	--	35.10	34.18	34.14	34.11	34.10	34.09	34.08
Moment of Inertia (≤Ø 48)	[kgcm2]	--	64.92	63.99	63.95	63.93	63.91	63.90	63.90
Moment of Inertia (≤ Ø 65)	[kgcm2]	--	--	--	--	--	--	--	--
Efficiency	[%]	*10	88						
Torsional Rigidity	[Nm/arcmin]	*11	400						
Maximum Torsional Backlash	[Arc-min]	--	≤ 11						
Noise Level	dB [A]	*12	≤ 85						
Protection Class	--	*13	IP54 (IP65)						
Ambient Temperature	[°C]	--	0-40						
Permitted Housing Temperature	[°C]	--	90						
Weight	[kg]	*14	70						

*1) At nominal input speed, service life is 20,000 hours

*2) The maximum torque when starting or stopping operation. Apply Cycle Factor $\mathbf{f_0}$, 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 efficiency at the nominal output torque rating

*11) This does not include lost motion

*12) Contact NIDEC-SHIMPO for the testing conditions and environment

*13) Various wash-down options are available. Contact NIDEC-SHIMPO for more details

*14) Weight may vary slightly between models