

EVT SERIES Right-angle Planetary

EVT 200 2-Stage Specifications

Frame Size	200					
Ratio	Unit	Note	4	5	7	10
Nominal Output Torque	[Nm]	*1	604	646	646	478
Maximum Acceleration Torque	[Nm]	*2	904	1127	1315	931
Maximum Torque	[Nm]	*3	1064	1327	1498	1144
Emergency Stop Torque	[Nm]	*4	1700	2000	2500	2000
Nominal Input Speed	[rpm]	*5	1500			
Maximum Input Speed	[rpm]	*6	4000			
No Load Running Torque	[Nm]	*7	10.8			
Maximum Radial Load	[N]	*8	40000			
Maximum Axial Load	[N]	*9	30000			
Maximum Tilting Moment	[Nm]	*10	5300			
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	IP54 (IP65)			
Ambient Temperature	[°C]	--	0-40			
Permitted Housing Temperature	[°C]	--	90			
Weight	[kg]	*15	50			

EVT 200 3-Stage Specifications

Frame Size	200					
Ratio	Unit	Note	16	20	25	28
Nominal Output Torque	[Nm]	*1	583	646	683	710
Maximum Acceleration Torque	[Nm]	*2	1315	1315	1315	1315
Maximum Torque	[Nm]	*3	1315	1315	1315	1315
Emergency Stop Torque	[Nm]	*4	2500	2500	2500	2500
Nominal Input Speed	[rpm]	*5	2100			
Maximum Input Speed	[rpm]	*6	4000			
No Load Running Torque	[Nm]	*7	4.7			
Maximum Radial Load	[N]	*8	40000			
Maximum Axial Load	[N]	*9	30000			
Maximum Tilting Moment	[Nm]	*10	5300			
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	IP54 (IP65)			
Ambient Temperature	[°C]	--	0-40			
Permitted Housing Temperature	[°C]	--	90			
Weight	[kg]	*15	37			

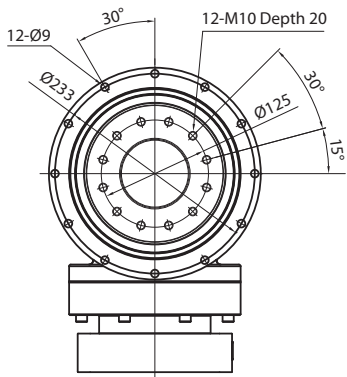
EVT 200 3-Stage Specifications

Frame Size	200							
Ratio	Unit	Note	35	40	50	70	100	
Nominal Output Torque	[Nm]	*1	710	465	710	710	480	
Maximum Acceleration Torque	[Nm]	*2	1315	1315	1315	1315	931	
Maximum Torque	[Nm]	*3	1315	1315	1315	1315	931	
Emergency Stop Torque	[Nm]	*4	2500	2500	2500	2500	2000	
Nominal Input Speed	[rpm]	*5	2100					
Maximum Input Speed	[rpm]	*6	4000					
No Load Running Torque	[Nm]	*7	4.7					
Maximum Radial Load	[N]	*8	40000					
Maximum Axial Load	[N]	*9	30000					
Maximum Tilting Moment	[Nm]	*10	5300					
Moment of Inertia (≤ Ø 28)	[kgcm ²]	--	10.9	10.5	10.3	10.2	10.2	
Moment of Inertia (≤ Ø 38)	[kgcm ²]	--	19.69	19.26	19.13	19.01	18.94	
Moment of Inertia (≤ Ø 48)	[kgcm ²]	--	24.51	24.08	23.95	23.83	23.77	
Moment of Inertia (≤ Ø 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	IP54 (IP65)					
Ambient Temperature	[°C]	--	0-40					
Permitted Housing Temperature	[°C]	--	90					
Weight	[kg]	*15	37					

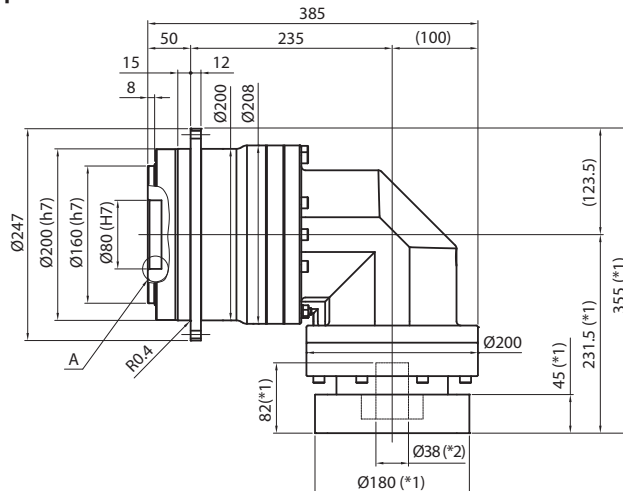
- *1) At nominal input speed, service life is 20,000 hours
- *2) The maximum torque when starting or stopping operation. Apply Cycle Factor f_0 , found on page 468, for higher duty cycle applications
- *3) Permitted 10,000 times during service life. Based on 10% of maximum radial load and smooth output 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

EVT SERIES Right-angle Planetary

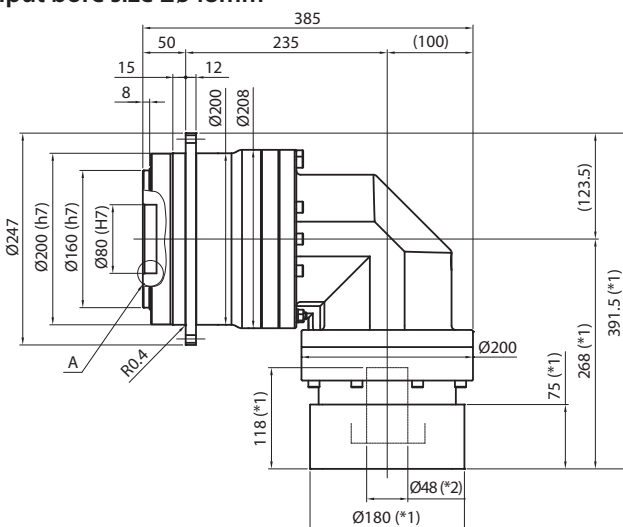
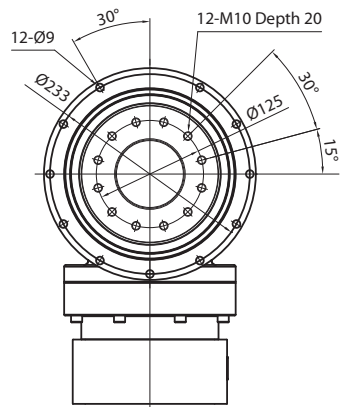
EVT 200 2-Stage Dimensions



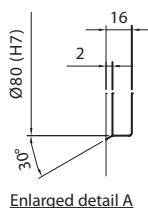
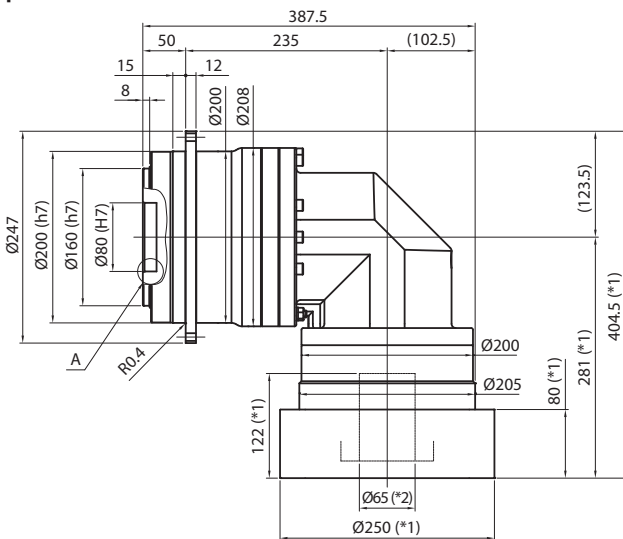
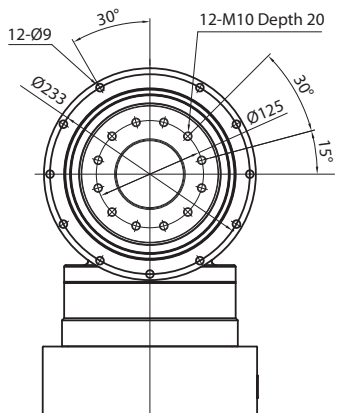
Input bore size $\leq \text{Ø}38\text{mm}$



Input bore size $\leq \text{Ø}48\text{mm}$



Input bore size $\leq \text{Ø}65\text{mm}$

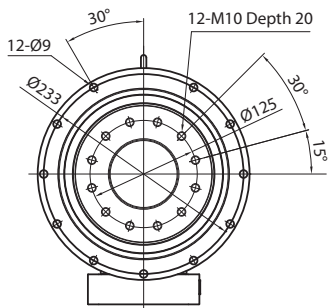


Enlarged detail A

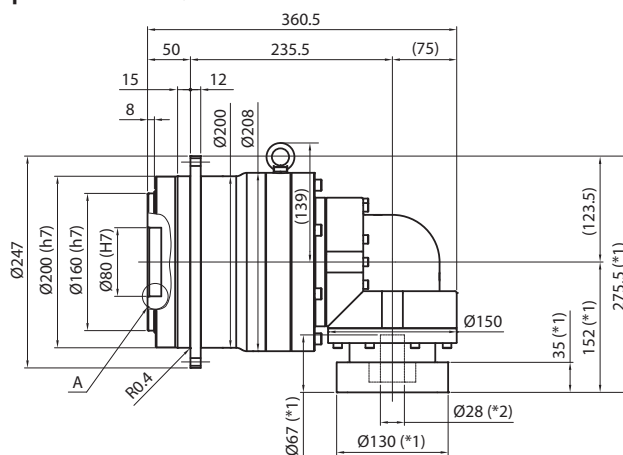
*1) Length will vary depending on motor

*2) Bushing will be inserted to adapt to motor shaft

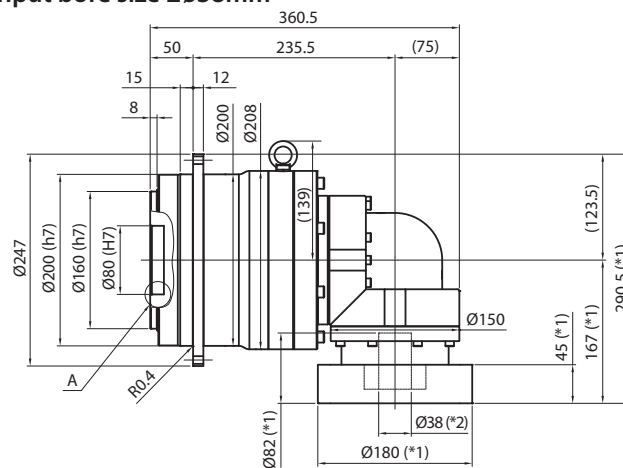
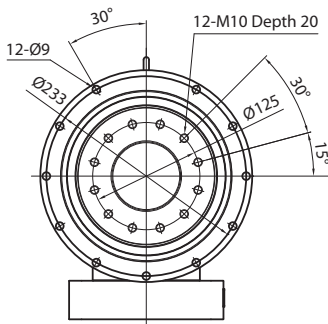
EVT 200 3-Stage Dimensions



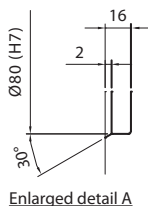
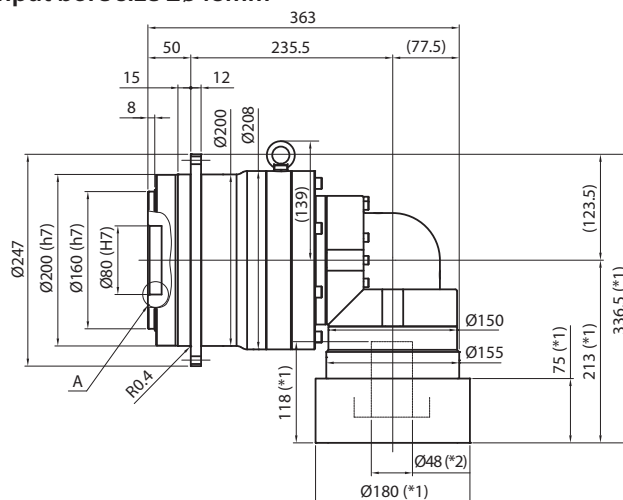
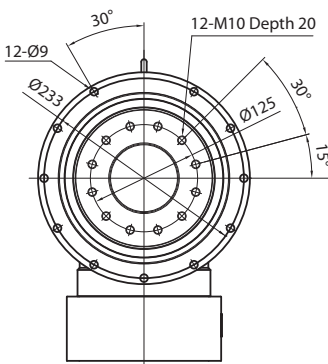
Input bore size ≤ 28mm



Input bore size ≤ 38mm



Input bore size ≤ 48mm



*1) Length will vary depending on motor

*2) Bushing will be inserted to adapt to motor shaft