VRS 240 1-Stage Specifications

Frame Size	240									
Ratio	**Unit**	**Note**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Nominal Output Torque	[Nm]	*1	1600	2400	2400	2600	2700	2700	2700	2700
Maximum Acceleration Torque	[Nm]	*2	3300	5100	5100	4800	4800	4700	4200	3600
Maximum Torque	[Nm]	*3	3800	5700	5700	5400	5400	5300	4700	4100
Emergency Stop Torque	[Nm]	*4	6000	8000	8000	8000	8000	8000	6000	6000
Nominal Input Speed	[rpm]	*5	1000	1000	1200	1200	1500	1500	1700	1700
Maximum Input Speed	[rpm]	*6	3000	3000	3000	3000	3000	3000	3000	3000
No Load Running Torque	[Nm]	*7	5.96							
Maximum Radial Load	[N]	*8	30000							
Maximum Axial Load	[N]	*9	27000							
Moment of Inertia (≤ Ø 38)	[kgcm2]	--	--	--	--	--	--	--	--	--
Moment of Inertia (≤ Ø 48)	[kgcm2]	--	--	--	--	--	--	--	--	--
Moment of Inertia (≤ Ø 65)	[kgcm2]	--	230	130	110	92	86	81	78	77
Efficiency	[%]	*10	95							
Torsional Rigidity	[Nm/arc-min]	*11	550							
Maximum Torsional Backlash	[arc-min]	--	≤ 3							
Noise Level	dB [A]	*12	≤ 62							
Protection Class	--	*13	IP54 (IP65)							
Ambient Temperature	[°C]	--	0-40							
Permitted Housing Temperature	[°C]	--	90							
Weight	[kg]	*14	85							

VRS 240 2-Stage Specifications

Frame Size	240									
Ratio	**Unit**	**Note**	**15**	**16**	**20**	**25**	**28**	**30**	**35**	**40**
Nominal Output Torque	[Nm]	*1	2000	2400	2600	3200	3400	2000	3400	3400
Maximum Acceleration Torque	[Nm]	*2	3300	5100	5100	5100	4900	3300	4900	5100
Maximum Torque	[Nm]	*3	3300	5100	5100	5100	4900	3300	4900	5100
Emergency Stop Torque	[Nm]	*4	6000	8000	8000	8000	8000	6000	8000	8000
Nominal Input Speed	[rpm]	*5	2000	2000	2000	2000	2000	2000	2000	2000
Maximum Input Speed	[rpm]	*6	4500	4500	4500	4500	4500	4500	4500	4500
No Load Running Torque	[Nm]	*7	1.28							
Maximum Radial Load	[N]	*8	30000							
Maximum Axial Load	[N]	*9	27000							
Moment of Inertia (≤ Ø 38)	[kgcm2]	--	--	--	--	--	--	--	--	--
Moment of Inertia (≤ Ø 48)	[kgcm2]	--	47	55	45	44	52	32	43	31
Moment of Inertia (≤ Ø 65)	[kgcm2]	--	--	--	--	--	--	--	--	--
Efficiency	[%]	*10	90							
Torsional Rigidity	[Nm/arc-min]	*11	550							
Maximum Torsional Backlash	[arc-min]	--	≤ 3							
Noise Level	dB [A]	*12	≤ 62							
Protection Class	--	*13	IP54 (IP65)							
Ambient Temperature	[°C]	--	0-40							
Permitted Housing Temperature	[°C]	--	90							
Weight	[kg]	*14	89							

VRS 240 2-Stage Specifications

Frame Size	240								
Ratio	**Unit**	**Note**	**45**	**50**	**60**	**70**	**80**	**90**	**100**
Nominal Output Torque	[Nm]	*1	2000	3400	3400	3400	3400	2000	2000
Maximum Acceleration Torque	[Nm]	*2	2900	5100	4800	4900	3700	2900	2500
Maximum Torque	[Nm]	*3	2900	5100	4800	4900	3700	2900	2500
Emergency Stop Torque	[Nm]	*4	6000	8000	8000	8000	8000	6000	6000
Nominal Input Speed	[rpm]	*5	2000	2200	2200	2800	2800	2800	2800
Maximum Input Speed	[rpm]	*6	4500	4500	4500	4500	4500	4500	4500
No Load Running Torque	[Nm]	*7	1.28						
Maximum Radial Load	[N]	*8	30000						
Maximum Axial Load	[N]	*9	27000						
Moment of Inertia (≤ Ø 38)	[kgcm2]	--	--	14	13	13	13	13	13
Moment of Inertia (≤ Ø 48)	[kgcm2]	--	43	31	31	31	31	31	31
Moment of Inertia (≤ Ø 65)	[kgcm2]	--	--	--	--	--	--	--	--
Efficiency	[%]	*10	90						
Torsional Rigidity	[Nm/arc-min]	*11	550						
Maximum Torsional Backlash	[arc-min]	--	≤ 3						
Noise Level	dB [A]	*12	≤ 62						
Protection Class	--	*13	IP54 (IP65)						
Ambient Temperature	[°C]	--	0-40						
Permitted Housing Temperature	[°C]	--	90						
Weight	[kg]	*14	89						

*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

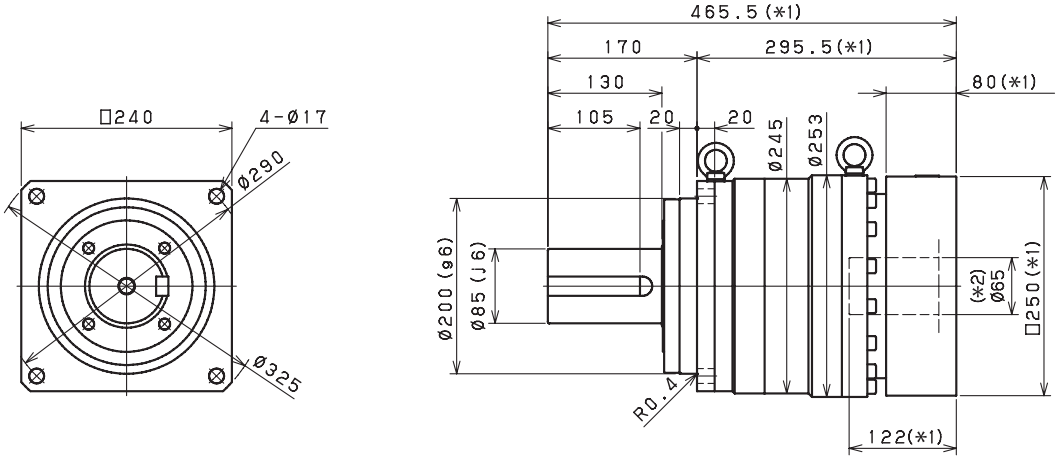
*12 Contact Nidec Drive Technology for the testing conditions and environment

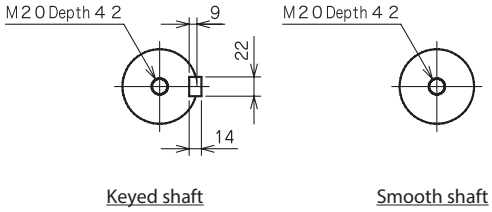
*13 IP65 (wash-down) is available as an option. Contact Nidec Drive Technology for more details

*14 Weight may vary slightly between models

VRS 240 1-Stage Dimensions

Input bore size ≦φ65 mm





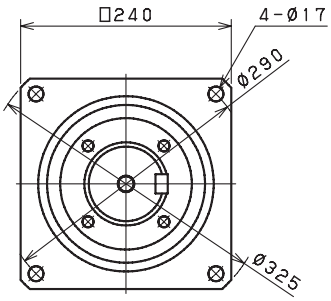
Keyed shaft Smooth shaft

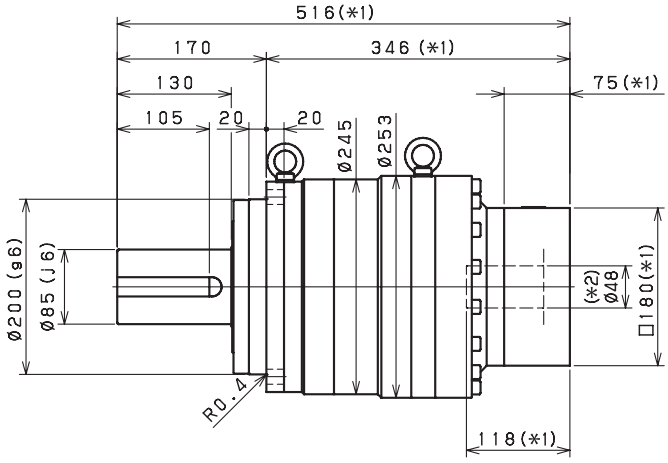
*1 Length will vary depending on motor

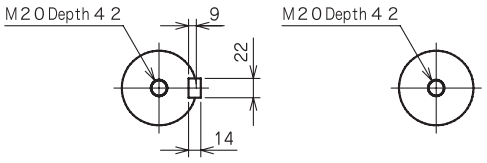
*2 Bushing will be inserted to adapt to motor shaft

VRS 240 2-Stage Dimensions

Input bore size ≦φ48 mm







Keyed shaft Smooth shaft

*1 Length will vary depending on motor

*2 Bushing will be inserted to adapt to motor shaft