

VRT 064 1-Stage Specifications

Frame Size	064										
Ratio	Unit	Note	4	5	6	7	8	9	10		
Nominal Output Torque	[Nm]	*1	27	28	28	28	28	28	28		
Maximum Acceleration Torque	[Nm]	*2	66	66	66	66	66	46	46		
Maximum Torque	[Nm]	*3	79	79	79	79	76	55	55		
Emergency Stop Torque	[Nm]	*4	100	100	100	100	100	80	80		
Nominal Input Speed	[rpm]	*5	3300	4000	4000	4000	4000	4000	4000		
Maximum Input Speed	[rpm]	*6	7500	7500	7500	7500	7500	7500	7500		
No Load Running Torque	[Nm]	*7	0.08								
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]	-	0.13	0.10	0.085	0.075	0.068	0.064	0.062		
Moment of Inertia ($\leq \varnothing 14$)	[kgcm ²]	--	0.24	0.21	0.20	0.19	0.18	0.18	0.17		
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	--	0.52	0.49	0.47	0.46	0.46	0.45	0.45		
Efficiency	[%]	*11	95								
Torsional Rigidity	[Nm/arc-min]	*12	12	12	11	11	8	8	8		
Maximum Torsional Backlash	[arc-min]	--	≤ 3								
Noise Level	dB [A]	*13	≤ 66								
Protection Class	--	*14	IP54 (IP65)								
Ambient Temperature	[°C]	--	0 - 40								
Permitted Housing Temperature	[°C]	--	90								
Weight	[kg]	*15	1.4								

VRT 064 2-Stage Specifications

Frame Size	064										
Ratio	Unit	Note	16	20	25	28	35	40	45		
Nominal Output Torque	[Nm]	*1	32	32	43	45	45	45	32		
Maximum Acceleration Torque	[Nm]	*2	66	66	66	66	66	66	46		
Maximum Torque	[Nm]	*3	66	66	66	66	66	66	46		
Emergency Stop Torque	[Nm]	*4	100	100	100	100	100	100	80		
Nominal Input Speed	[rpm]	*5	4000	4000	4000	4000	4000	4000	4000		
Maximum Input Speed	[rpm]	*6	8500	8500	8500	8500	8500	8500	8500		
No Load Running Torque	[Nm]	*7	0.04								
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]	-	0.072	0.064	0.062	0.069	0.061	0.051	0.061		
Moment of Inertia ($\leq \varnothing 14$)	[kgcm ²]	--	0.18	0.18	0.17	0.18	0.17	0.16	0.17		
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	--	0.46	0.45	0.45	0.46	0.45	0.44	0.45		
Efficiency	[%]	*11	90								
Torsional Rigidity	[Nm/arc-min]	*12	12	12	12	12	12	11	11		
Maximum Torsional Backlash	[arc-min]	--	≤ 3								
Noise Level	dB [A]	*13	≤ 66								
Protection Class	--	*14	IP54 (IP65)								
Ambient Temperature	[°C]	--	0 - 40								
Permitted Housing Temperature	[°C]	--	90								
Weight	[kg]	*15	1.6								

VRT 064 2-Stage Specifications

Frame Size	064							
Ratio	Unit	Note	50	60	70	80	90	100
Nominal Output Torque	[Nm]	*1	45	45	45	45	32	32
Maximum Acceleration Torque	[Nm]	*2	66	66	66	66	46	46
Maximum Torque	[Nm]	*3	66	66	66	66	46	46
Emergency Stop Torque	[Nm]	*4	100	100	100	100	80	80
Nominal Input Speed	[rpm]	*5	4800	4800	5500	5500	5500	5500
Maximum Input Speed	[rpm]	*6	8500	8500	8500	8500	8500	8500
No Load Running Torque	[Nm]	*7	0.04					
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]	-	0.051	0.051	0.051	0.051	0.051	0.051
Moment of Inertia ($\leq \varnothing 14$)	[kgcm ²]	--	0.16	0.16	0.16	0.16	0.16	0.16
Moment of Inertia ($\leq \varnothing 19$)	[kgcm ²]	--	0.44	0.44	0.44	0.44	0.44	0.44
Efficiency	[%]	*11	90					
Torsional Rigidity	[Nm/arc-min]	*12	12	9	11	7	7	8
Maximum Torsional Backlash	[arc-min]	--	≤ 3					
Noise Level	dB [A]	*13	≤ 66					
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 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 IP65 (wash-down) is available as an option. Contact Nidec Drive Technology for more details

*15 Weight may vary slightly between models

VRSF

PRE

PRF

VRL

VRB

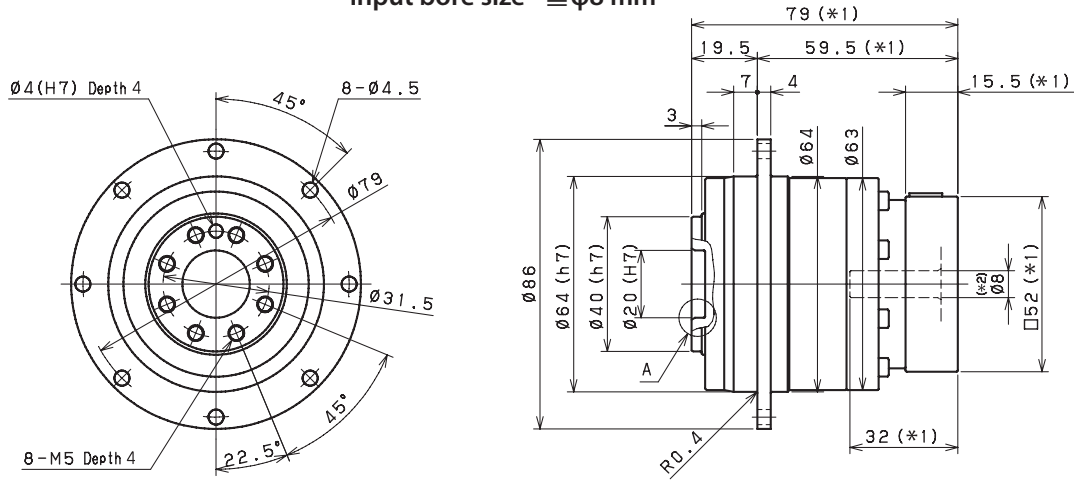
VRS

VRT

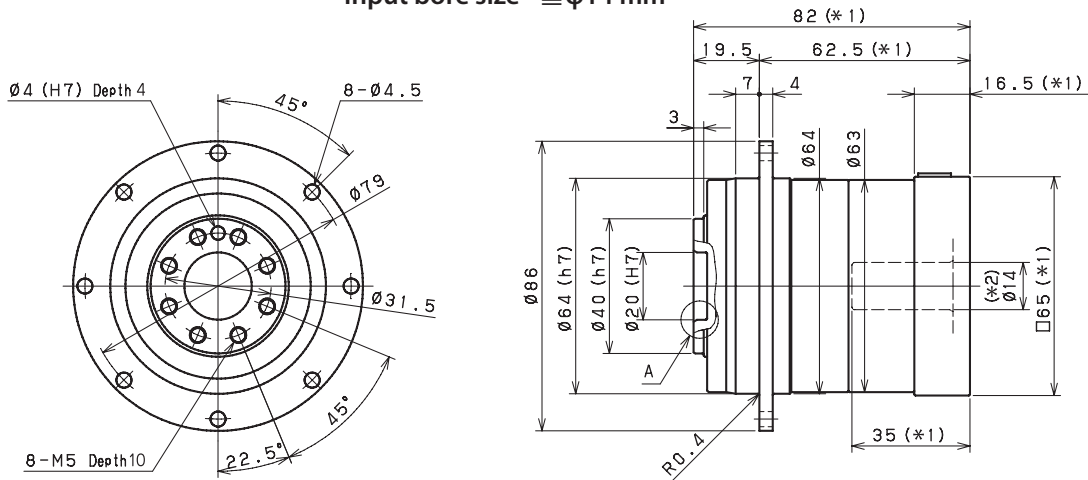
PLANETARY Inline Gear Reducers

VRT 064 1-Stage Dimensions

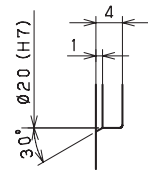
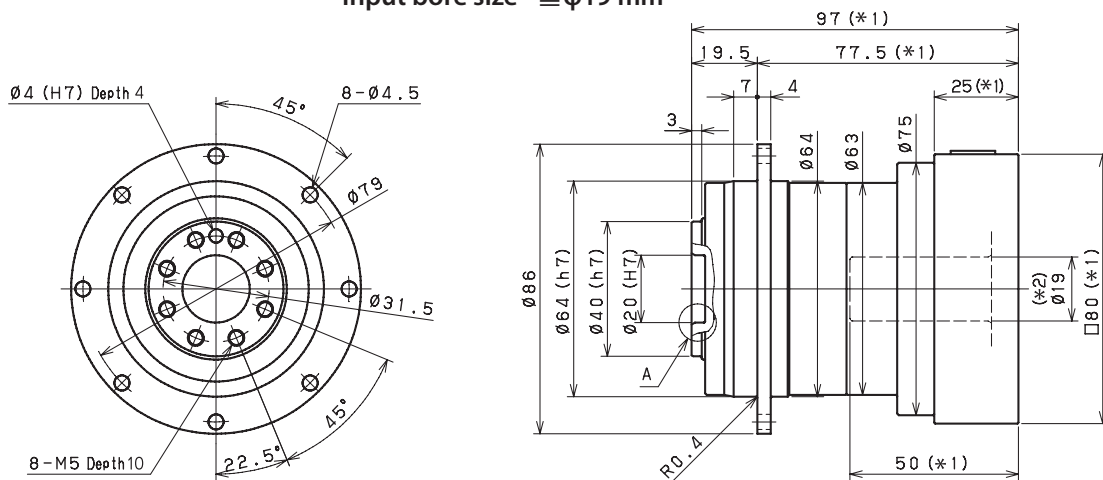
Input bore size $\leq \phi 8$ mm



Input bore size $\leq \phi 14$ mm



Input bore size $\leq \phi 19$ mm



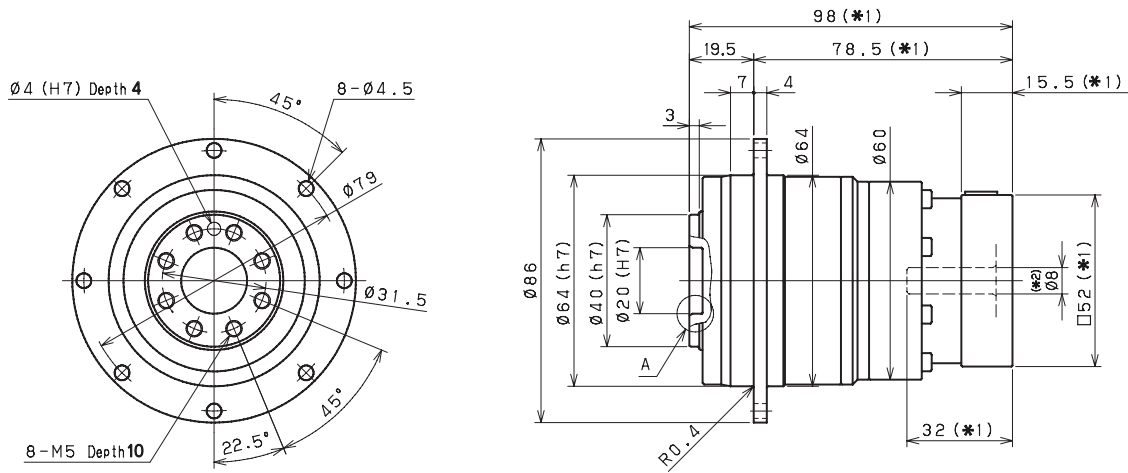
Enlarged detail A

*1 Length will vary depending on motor

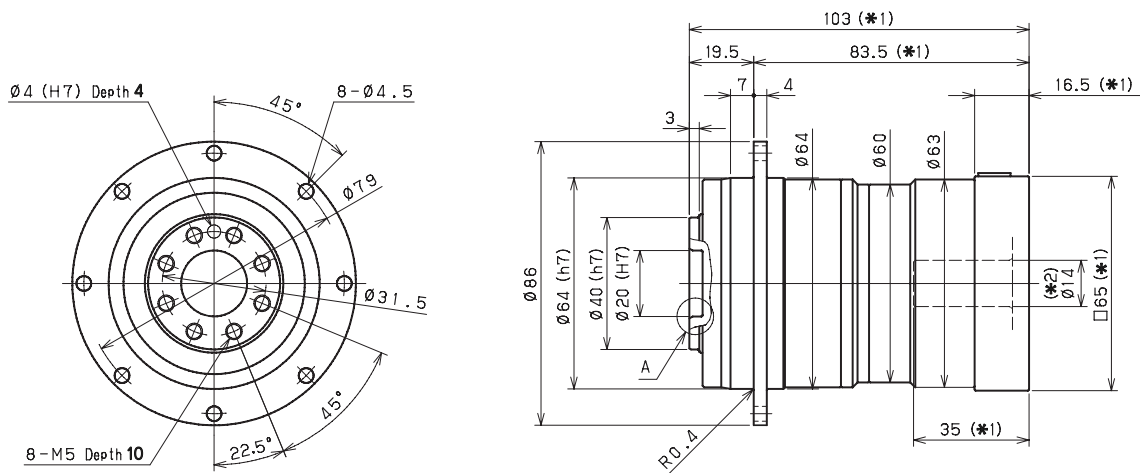
*2 Bushing will be inserted to adapt to motor shaft

VRT 064 2-Stage Dimensions

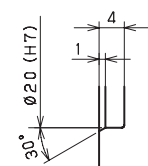
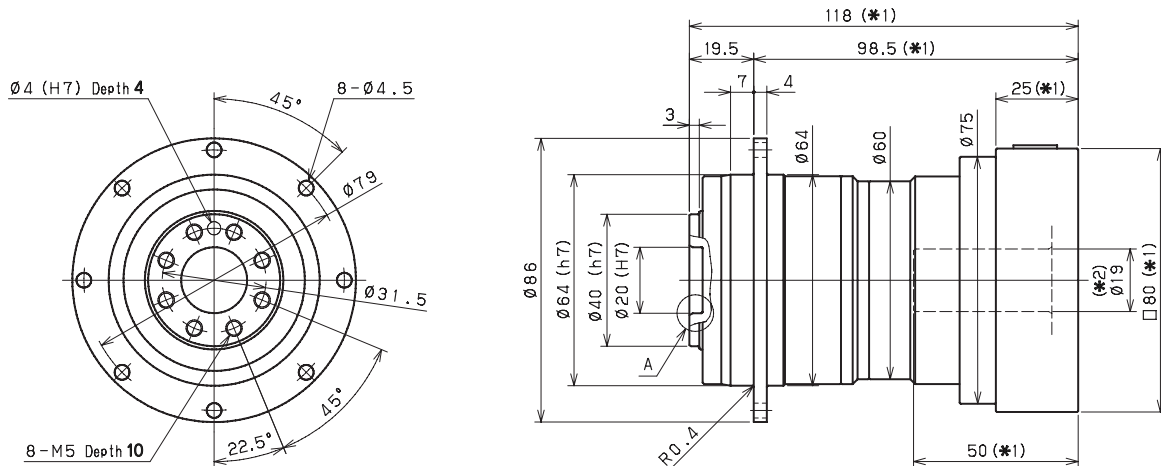
Input bore size $\leq \varnothing 8 \text{ mm}$



Input bore size $\leq \varnothing 14 \text{ mm}$



Input bore size $\leq \varnothing 19 \text{ mm}$



Enlarged detail A

*1 Length will vary depending on motor

*2 Bushing will be inserted to adapt to motor shaft

VRSF

PRE

PRF

VRL

VRB

VRS

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