

# PLANETARY *Inline Gear Reducers*

## PRF 062 1-Stage Specifications

Frame Size	062							
Ratio	Unit	Note	3	4	5	8	9	10
Nominal Output Torque	[Nm]	*1	35	50	50	50	35	35
Maximum Output Torque	[Nm]	*2	55	79	79	76	55	55
Emergency Stop Torque	[Nm]	*3	80	90	90	90	80	80
Nominal Input Speed	[rpm]	*4	3000					
Maximum Input Speed	[rpm]	*5	6000					
No Load Running Torque	[Nm]	*6	0.15					
Maximum Radial Load	[N]	*7	550					
Maximum Axial Load	[N]	*8	680					
Moment of Inertia ( $\leq \varnothing 8$ )	[kgcm <sup>2</sup> ]	--	-	-	-	-	-	-
Moment of Inertia ( $\leq \varnothing 14$ )	[kgcm <sup>2</sup> ]	--	0.19	0.16	0.15	0.14	0.14	0.14
Moment of Inertia ( $\leq \varnothing 19$ )	[kgcm <sup>2</sup> ]	--	0.40	0.37	0.36	0.35	0.35	0.35
Efficiency	[%]	*9	95					
Torsional Rigidity	[Nm/arcm <sup>in</sup> ]	*10	2.3					
Maximum Torsional Backlash	[Arc-min]	--	$\leq 8$					
Noise Level	dB [A]	*11	$\leq 58$					
Protection Class	--	--	IP54					
Ambient Temperature	[°C]	--	0-40					
Permitted Housing Temperature	[°C]	--	90					
Weight	[kg]	*12	1.0					

\*1 Continuous rating at 100% duty cycle, S1 operation, measured at 100rpm output and 30°C

\*2 Permitted for 30,000 output shaft revolutions. Note operation factor on page 469

\*3 The maximum torque allowed under a stress situation. Permitted 1,000 times during service life

\*4 The average input speed at nominal torque. Maintain housing temperature below permitted value

\*5 The maximum intermittent input speed

\*6 Torque at no load applied to the input shaft at nominal input speed

\*7 The maximum radial load that the gearbox can accept

\*8 The maximum axial load that the gearbox can accept

\*9 The efficiency at the nominal output torque ratings

\*10 This does not include lost motion

\*11 Contact Nidec Drive Technology for the testing conditions and environment

\*12 Weight may vary slightly between models

## PRF 062 2-Stage Specifications

Frame Size	062											
Ratio	Unit	Note	12	15	16	20	25	32	40	50	80	100
Nominal Output Torque	[Nm]	*1	35	35	50	50	50	50	50	46	46	35
Maximum Output Torque	[Nm]	*2	46	46	66	66	66	66	66	66	66	46
Emergency Stop Torque	[Nm]	*3	80	80	90	90	90	90	90	90	90	80
Nominal Input Speed	[rpm]	*4					3000					
Maximum Input Speed	[rpm]	*5					6000					
No Load Running Torque	[Nm]	*6					0.04					
Maximum Radial Load	[N]	*7					550					
Maximum Axial Load	[N]	*8					680					
Moment of Inertia ( $\leq \emptyset 8$ )	[kgcm <sup>2</sup> ]	--	0.08	0.07	0.07	0.06	0.06	0.07	0.06	0.06	0.06	0.06
Moment of Inertia ( $\leq \emptyset 14$ )	[kgcm <sup>2</sup> ]	--	0.16	0.14	0.14	0.14	0.14	0.14	0.13	0.14	0.14	0.14
Moment of Inertia ( $\leq \emptyset 19$ )	[kgcm <sup>2</sup> ]	--	-	-	-	-	-	-	-	-	-	-
Efficiency	[%]	*9					90					
Torsional Rigidity	[Nm/arcmin]	*10					2.3					
Maximum Torsional Backlash	[Arc-min]	--					$\leq 10$					
Noise Level	dB [A]	*11					≤58					
Protection Class	--	--					IP54					
Ambient Temperature	[°C]	--					0-40					
Permitted Housing Temperature	[°C]	--					90					
Weight	[kg]	*12					1.5					

\*1 Continuous rating at 100% duty cycle, S1 operation, measured at 100rpm output and 30°C

\*2 Permitted for 30,000 output shaft revolutions. Note operation factor on page 469

\*3 The maximum torque allowed under a stress situation. Permitted 1,000 times during service life

\*4 The average input speed at nominal torque. Maintain housing temperature below permitted value

\*5 The maximum intermittent input speed

\*6 Torque at no load applied to the input shaft at nominal input speed

\*7 The maximum radial load that the gearbox can accept

\*8 The maximum axial load that the gearbox can accept

\*9 The efficiency at the nominal output torque ratings

\*10 This does not include lost motion

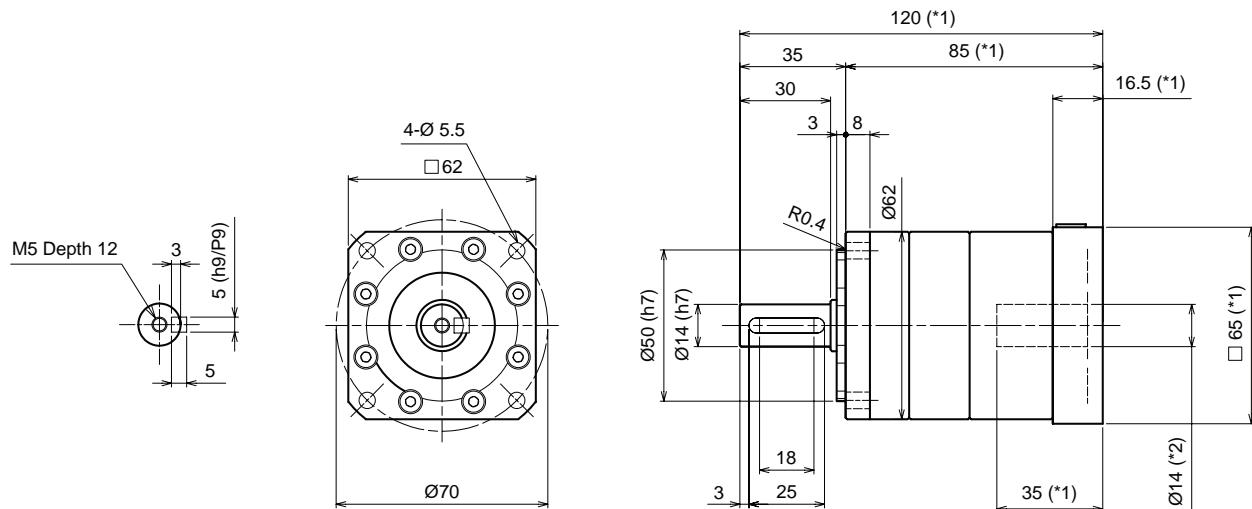
\*11 Contact Nidec Drive Technology for the testing conditions and environment

\*12 Weight may vary slightly between models

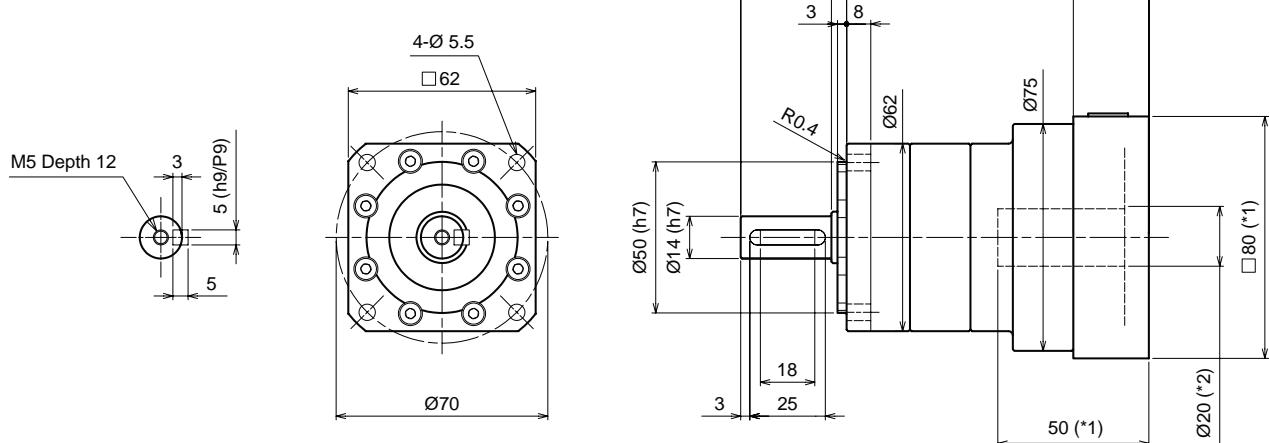
# PLANETARY *Inline Gear Reducers*

## PRF 062 1-Stage Dimensions

Input bore size  $\leq \varnothing 14$  mm



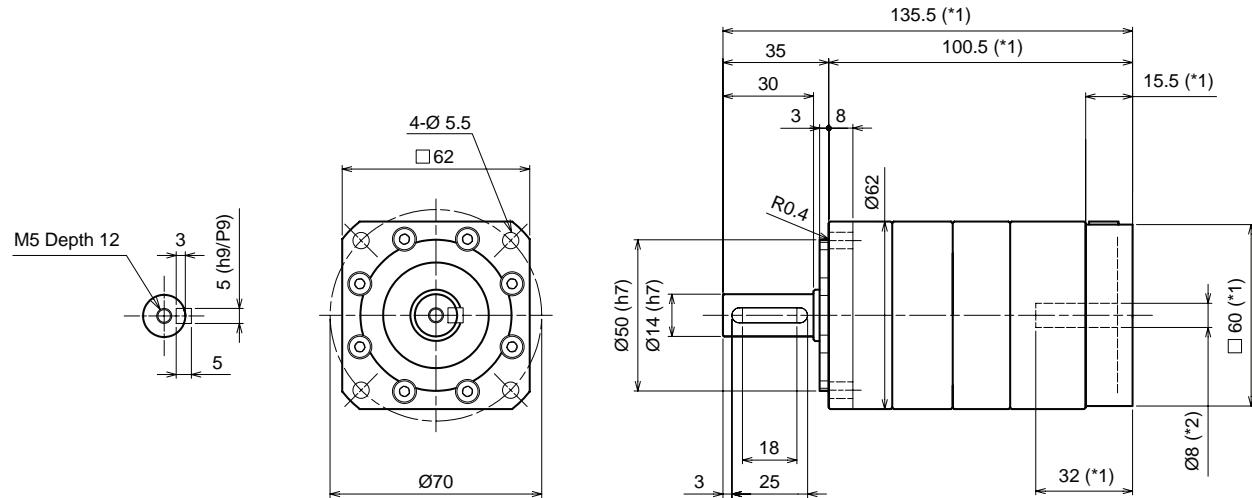
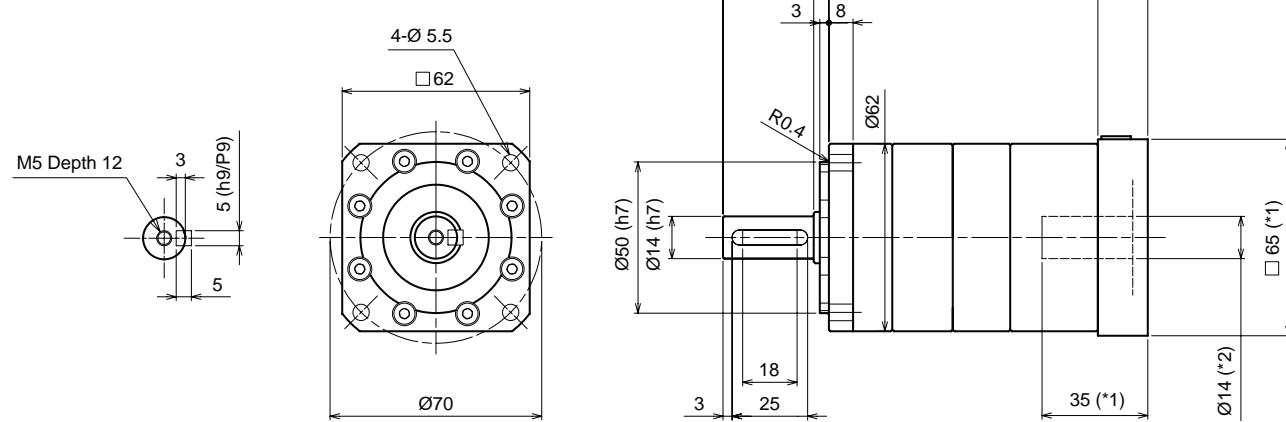
Input bore size  $\leq \varnothing 19$  mm



\*1 Length will vary depending on motor

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

## PRF 062 2-Stage Dimensions

Input bore size  $\leq \varnothing 8 \text{ mm}$ Input bore size  $\leq \varnothing 14 \text{ mm}$ 

\*1 Length will vary depending on motor

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

VRSF

PRE

PRF

VRL

VRB

VRS

VRT