

Option Codes

Please see the table below for a list of our new available option codes.

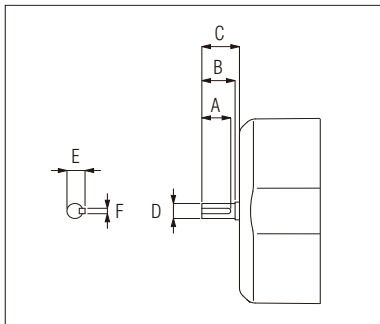
Gearbox Type					Motor Model								Option	
Type	Mounting	Frame	Shaft Direction	Ge Ratio	Motor Type	Motor Specs	Motor Power	Motor Phase	Motor Voltage	Terminal Box	Brake	Option	Option Code	
G3	L	28	N	5	M	B	08	T	AV	E	N	X	X0	

1. Add an "X" followed by the desired option code(s) to the end of the model name when ordering.
 2. Available options differ by model. For more information, please refer to the details page for each option.
 3. There are also options that cannot be combined concurrently. For more information, please refer to the details page for each option.
- For more information, please contact Brother Gearmotor.

List of new option specification codes

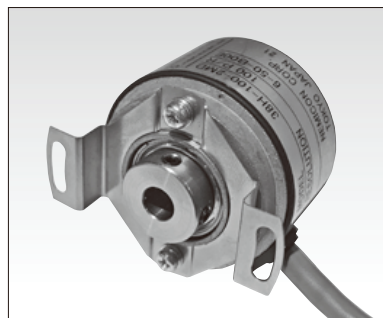
Category	Specification Code	Description
Motor Rear	X6	Shipped with an extended motor shaft.
	X0	Shipped with an attached 100PPR encoder
	X1	Shipped with an attached 1024PPR encoder
	X7	Shipped with a forced cooling fan.

X6- Extended Motor Shaft Option



X0- Encoder 100P/R Option

X1- Encoder 1024P/R Option



X7- Forced Cooling Fan Option



Options — Extended Motor Shaft —

Extended Motor Shaft

If interested in this option, please use the code from the table below to order.

The shaft will be exposed, so please install a cover and take proper precautions to avoid contact with this part during operation. For more information, please contact Brother.

Applicable Models

1/2 HP to 3 HP: Gearmotors & Brakemotors (excludes IP65 models)

Option	Option Code
X	X6

Model name example: Standard model G3L28N30-MB04TAVEB2 ⇒ Extended Motor Shaft G3L28N30-MB04TAVEB2X X=X6

Extended Motor Shaft Specification

*Figure-1

unit:in (mm)

Motor Power	A	B	C	D	E	F
1/2 HP	0.78 (20)	0.90 (23)	1.02 (26)	0.43 (11)	0.49 (12.5)	0.15 (4)
1 HP	0.78 (20)	0.90 (23)	1.10 (28)	0.43 (11)	0.49 (12.5)	0.15 (4)
2 HP	1.06 (27)	1.18 (30)	1.29 (33)	0.55 (14)	0.62 (16)	0.19 (5)
3 HP	1.06 (27)	1.18 (30)	1.29 (33)	0.55 (14)	0.62 (16)	0.19 (5)

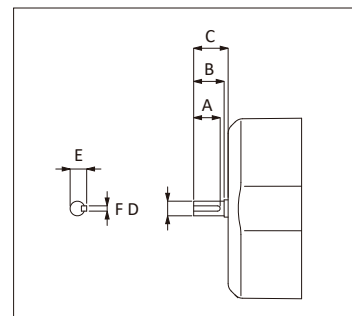


Figure-1

Motor Outer Dimensions

Due to the extended motor shaft, the motor will become longer. For details, please refer to the table below.

Motor Power	Overall length (L) unit:(in,mm)		
	Standard (Figure-2)		Extended Motor Shaft (Figure-3)
	Gearmotor	Brake Motor	Common
1/2 HP	6.92 (176)	7.71 (196)	10.35 (263)
1 HP	8.54 (217)	9.33 (237)	12.04 (306)
2 HP	10.57 (268.5)	11.71 (297.5)	14.62 (371.5)
3 HP	11.88 (302)	13.03 (331)	15.94 (405)

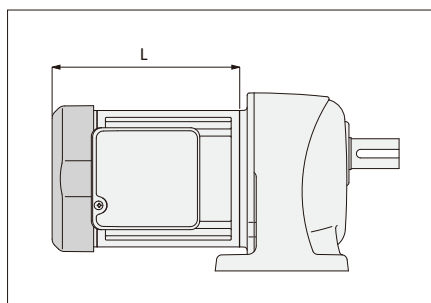


Figure-2 : Standard

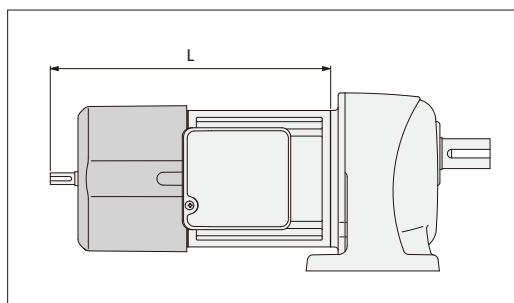


Figure-3 : Extended Motor Shaft

Options — Encoder —

Encoder

If interested in this option, please use the option codes in the table below to order.

Applicable Models

1/2 HP to 3 HP: Gearmotors & Brakemotors (excludes IP65 models)

(Note) If any brake replacement or gap adjustment are needed, please contact us.

Encoder Specifications

Option	Option Code	Spec	
		Number of Pulses	Output Method
X	X0	100 ppr	Line driver
X	X1	1024 ppr	Line driver

*If you require an encoder with specifications not listed in the table, it may be possible through a custom order. Please contact us for more information.

Model name example: Standard model G3L28N30-MB04TAVEB2 ⇒ With an encoder G3L28N30-MB04TAVEB2X=X0

Electrical specification

Supply Voltage	DC4.5 to 13.2V
Current draw	30mA MAX
Output Voltage	H level 2.5V or higher L level 0.5V or lower
Maximum Current Draw	20mA
Maximum Response Frequency	120kHz
Rise and Fall Time	100ns MAX

Connector specification (Manufacturer: Hirose Electric DF3-9S-2C)

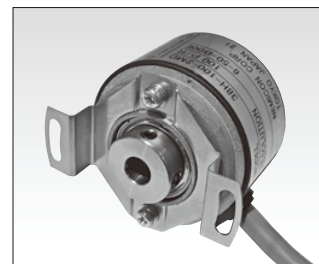
Terminal No.	Color	Connection	Terminal No.	Color	Connection
1	Red	Vcc	6	Gray	Sig B ⁻
2	Black	OV	7	Yellow	Sig Z
3	Green	Sig A	8	Orange	Sig Z ⁻
4	Blue	Sig A ⁻	9	Black	Shield
5	White	Sig B			

Motor Outer Dimensions

When an encoder is installed, the motor will become longer. For details, please refer to the table below.

Motor Power	Overall length (L)			Encoder Cable Valid Length
	Standard type (Figure-1)		With Encoder (Figure-2)	
	Without brake	With Brake	Without/with brake common	
1/8 HP	4.48 (114)	6.06 (154)	8.09 (205.5)	13.77 (350)
1/4 HP	5.07 (129)	7.066 (179.5)	8.68 (220.5)	13.77 (350)
1/2 HP	6.92 (176)	7.71 (196)	9.33 (237)	13.77 (350)
1 HP	8.54 (217)	9.33 (237)	10.94 (278)	11.81 (300)
2 HP	10.57 (268.5)	11.71 (297.5)	13.32 (338.5)	9.84 (250)
3 HP	11.88 (302)	13.01 (331)	14.64 (372)	9.84 (250)

(Note) 1. The encoder enclosure is rated IP50. Please note that this differs from the IP rating on the nameplate.
2. The Gearmotor is shipped with the encoder cable sticking out through a gap in the fan cover.



Encoder Appearance
*The encoder is installed inside the fan cover, so it is not visible.

Waveform specification

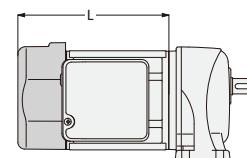
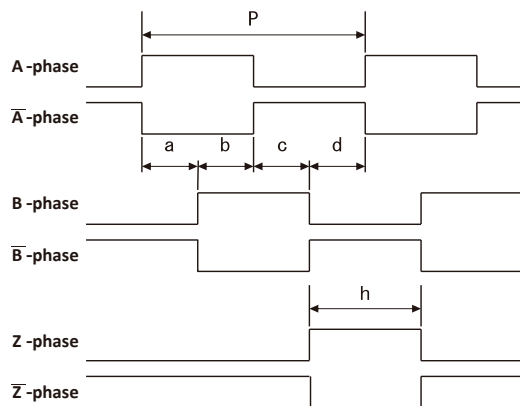


Figure-1 Standard type

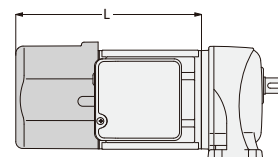


Figure-2 With encoder

Options — Forced Cooling Fan —

Forced Cooling Fan

The option allows for the installation of a forced cooling fan on the motor end. If interested in this option, please use the option codes in the table below to order.



Applicable Models

1/2 HP to 3 HP: Gearmotors & Brakemotors (excludes IP65 models)

(Note)1. Not available for models of the F3 Series 3 HP 55 frame. Non-
2. UL (The UL mark is removed from the gearmotor nameplate.)

Forced Cooling Fan Specification

Option	Option Code	Spec			
		Supply Voltage	Frequency	Rotational Speed	Rated Current
X	X7	AC200V±10%	50Hz	2600 rpm	0.05A
		AC200V±10%	60Hz	3000 rpm	0.04A

Model name example: Standard model G3L28N30-MB04TAVEB2 ⇒ With forced cooling fan G3L28N30-MB04TAVEB2X X=X7

Motor Outer Dimensions

When the forced cooling fan is installed, the motor will become longer. For details, please refer to the table below.

Figure-1: Standard type

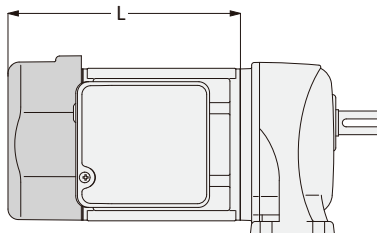
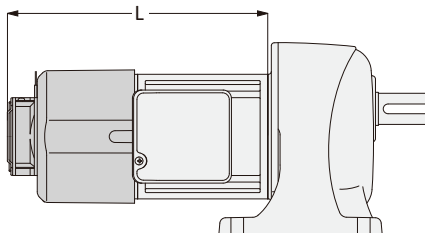


Figure-2: With forced cooling fan



unit:(in,mm)

Motor Power	Overall length (L)		
	Figure-1: Standard type		Figure-2: With forced fan
	Gearmotor brake	Brakemotor	Common
1/8 HP	4.48 (114)	6.06 (154)	9.31 (236.5)
1/4 HP	5.07 (129)	7.06 (179.5)	9.90 (251.5)
1/2 HP	6.92 (176)	7.71 (196)	10.55 (268)
1 HP	8.54 (217)	9.33 (237)	12.16 (309)
2 HP	10.5 (268.5)	11.71 (297.5)	14.54 (369.5)
3 HP	11.88 (302)	13.03 (331)	15.86 (403)

(Note)1. The fan enclosure is rated IP10. Please note that this differs from the IP rating on the nameplate.
The forced cooling fan is shipped with its own power cable.