STOCK RANGE

Compact AC Geared Motors

24 Hours Delivery

AC Induction Motors
In-line Gearboxes
Powers 6W to 200W
Global Approvals
Stocked In UK

gapp
automation

Gapp Automation Compact Geared Motors

Introduction

The latest addition to the Gapp Automation product portfolio is the GGM range of Compact In-Line AC Geared Motors. Manufactured to the highest quality standards, this range offers high reliability and long life. The GGM geared motors are characterised by their compact design, high efficiency and low noise, making them ideal for a wide variety of applications and industries. The AC motor range offers powers from 6W up to 200W, with supply voltages of 1ph/230V, 3ph/230V, 3ph/400V and 1ph/115V. The range includes Standard Induction motors and also Quick Reversible motors, which are ideal for Stop/Start, Forward/Reverse applications. Other variants include brake motors, variable speed motors and straight shafted motors which are available upon request. A comprehensive range of high efficiency helical spur gearboxes are available in ratios from 3:1 up to 200:1. With the addition of the 10:1 intermediate gearboxes, a limitless range of ratios are available. These gearboxes are lubricated for life, therefore do not require any maintenance.

GGM - The Company

GGM has its headquarters located in Seoul, South Korea, where it has several state of the art manufacturing facilities. Founded in 1979, GGM has today developed into one of the leading global manufacturers of small AC and DC geared motors. Approved suppliers to a range of high profile global brands, GGM has a proven track record in high quality and high volume production techniques, innovative product design and agile product development, and yet is able offer a very cost-effective solution. Approved to ISO 9001(200) and ISO 14001, GGM continues to re-invest in its design and production capabilities. GGM products are supported worldwide through a global network of distribution partners and product approvals include CE and UL. Visit www.Gapp Automation.co.uk or www.ggm.co.kr for more information.

Gapp Automation - About Us

Gapp Automation GmbH has its headquarters based at Nuremberg in Germany, where its central logistics and design centre are also located. Founded in 1985 as a system engineering house, Gapp Automation now boasts an impressive product portfolio of leading edge automation products. The flagship 300S range of PLCs is the fastest PLC available on the market that supports Step7 from Siemens. Due to this common platform all Gapp Automation PLCs, from the compact 100V through to the 500S slot PLC, support Step7 from Siemens. This allows customers to easy switch between each PLC range, to suit the application requirements, without the need to change the programming environment.

Support

Gapp Automation offers technical support through a team of dedicated product engineers, who have significant experience and knowledge of small geared motors. In addition to expertise of small geared motors, Gapp Automation also has considerable application knowledge in a variety of industries. If you would like to discuss your application do not hesitate to contact Gapp Automation, who will be happy to assist.

UK Stock

All standard items included within this catalogue are held in stock in the UK, meaning next day delivery is normally possible. This ensures that Gapp Automation offers its customer quick product availability to suit immediate production and spares requirements. For large quantities or non-stock variants, these are available on a very short leadtime, which is due to the agile production and planning techniques utilised at GGM. For regular ongoing product requirements please discuss these with Gapp Automation, who are more than happy to tailor stock and reserve product to suit your production demands.

Total Solutions

In addition to the GGM Geared motors, Gapp Automation has a comprehensive range of control, automation and drives products. Gapp Automation has strategic partnership with other manufacturers of complimentary products. This ensures customers can rely on a complete solution from Gapp Automation.

Gapp Automation products include:

- PLCs
- HMIs
- Industrial PCs
- Motion Control
- Remote IO
- Remote Diagnostics
- Electrical Drives
- Servo Systems
- Steppers
- Electric Actuators
- Planetary Gearboxes
- Signal Towers

Contents

6W 1ph Standard Induction & Quick Reversible

6W 60mm²

The Gapp Automation range of compact AC geared motors are ideal for a wide variety of applications due to their long life, aesthetic design, low noise and high efficiency. All of the motors use standard AC induction technology, and can be combined with a range of in-line helical gearboxes, to give a compact and very cost-effective geared motor solution.

In addition to the Standard Induction motors, Gapp Automation also offers a range of Quick Reversible models. These are ideally suited for Stop/Start or Forward/Reverse applications, due to their integrated friction braking system, which reduces over-run and stopping time (S2 duty).

6W motors are self cooled and offer impedance protection. This feature ensures that these motors cannot overheat even during stall conditions.

K6IG6NC / K6RG6NC

K6IG6NC-T / K6RG6NC-T

Motor Performance Data

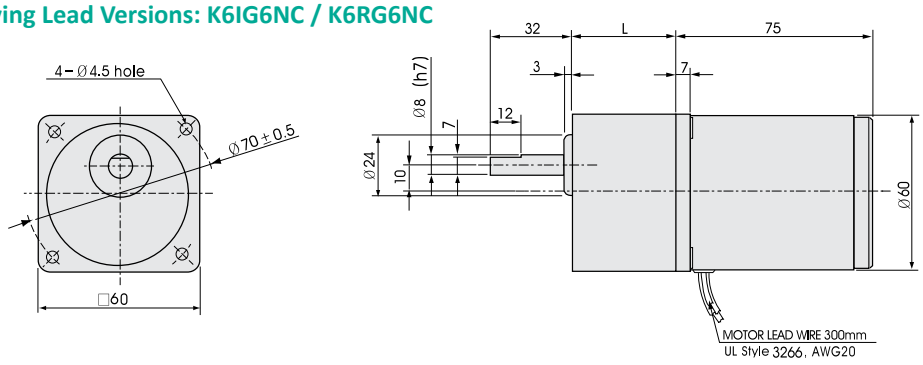
Motor Type	Motor Part Nr	Connection Type	Output Power (W)	Rated Voltage (V)	Rated Freq (Hz)	Rated Current (A)	Starting Current (A)	Rated Torque (Nm)	Starting Torque (Nm)	No Load Speed (r/min)	Rated Speed (r/min)	Capacitor (uF)	Duty Rating	IP Rating	Ins Class	Mass (kg)
Standard Induction	K6IG6NC	Flying Lead	6W	230V +/- 10%	50	0.12	0.19	0.048	0.041	1500	1250	0.6	S1	22	E	0.7
	K6IG6NC-T	Terminal Box												44		0.9
Quick Reversible	K6RG6NC	Flying Lead	6W	230V +/- 10%	50	0.13	0.23	0.048	0.052	1500	1250	0.8	S2	22	E	0.7
	K6RG6NC-T	Terminal Box												44		0.9

Geared Motor Performance Data

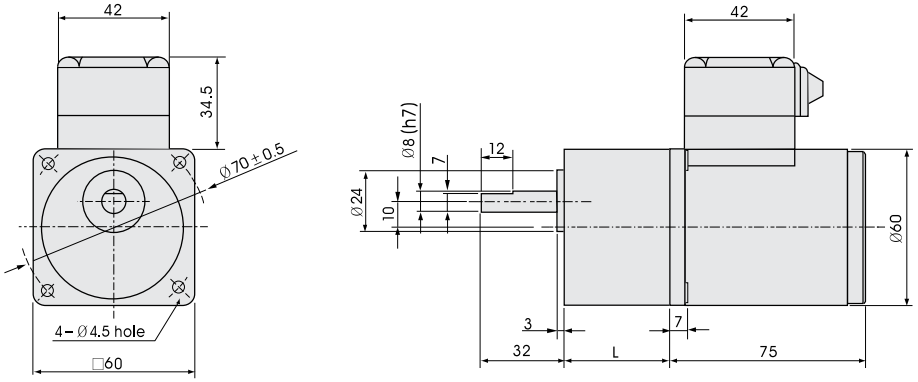
Motor Type	Motor Part Nr	No Load Speed (r/min)	500	300	200	150	100	75	60	50	30	20	15	10	8.3
		Rated Speed (r/min)	417	250	167	125	83	63	50	42	25	17	13	8.3	6.9
		Gearbox Ratio	3	5	7.5	10	15	20	25	30	50	75	100	150	180
		Gearbox Part Nr	K6G3B	K6G5B	K6G7.5B	K6G10B	K6G15B	K6G20B	K6G25B	K6G30B	K6G50B	K6G75B	K6G100B	K6G150B	K6G180B
Standard Induction	K6IG6NC K6IG6NC-T	Rated Torque (Nm)	0.11	0.19	0.29	0.38	0.57	0.69	0.86	1.03	1.55	2.33	3.0*	3.0*	3.0*
Quick Reversible	K6RG6NC K6RG6NC-T	Rated Torque (Nm)	0.11	0.19	0.29	0.38	0.57	0.69	0.86	1.03	1.55	2.33	3.0*	3.0*	3.0*

Motor part numbers without a T refer to flying lead versions. Motor part numbers with a T refer to terminal box versions.
Torque figures displaying a * symbol signify that under shock loads, high inertia or stall conditions the rated torque of the gearbox may be exceeded, potentially causing damage to the gearbox or resulting in reduced lifetime. The use of a torque limiting device is therefore recommended. Please contact Gapp Automation for more details. Performance data above relates to 50Hz operation. Higher frequency operation may be possible. However please contact Gapp Automation to discuss your requirements.

Flying Lead Versions: K6IG6NC / K6RG6NC



Terminal Box Versions: K6IG6NC-T / K6RG6NC-T



Options

110V/115V, Plain Shafted, Variable Speed and Braked Motors are are available on request.

Gearbox ratios 3.6:1, 6:1, 9:1, 12.5:1, 18:1, 36:1, 60:1, 90:1 and 120:1 are available upon request

Rated Speeds < 8.3rpm are available on request. This increases geared motor length by 26mm.

All motors and gearboxes can be assembled free of charge prior to despatch. Please inform Gapp Automation at time of ordering, if this service is required.

For all of these options, and any other request, please contact Gapp Automation to discuss your requirements.

Gearbox Model	L (mm)	Geared Motor Mass (Kg)	
		Flying Lead	Terminal Box
K6G3B - K6G18B	30	1.22	1.42
K6G20B - K6G36B	40	1.35	1.55
K6G50B - K6G180B	40	1.41	1.61

All dimensions are in mm. For any critical dimensions please confirm with Gapp Automation Ltd

15W 1ph Standard Induction & Quick Reversible

15W 70mm²

The Gapp Automation range of compact AC geared motors are ideal for a wide variety of applications due to their long life, aesthetic design, low noise and high efficiency. All of the motors use standard AC induction technology, and can be combined with a range of in-line helical gearboxes, to give a compact and very cost-effective geared motor solution.

In addition to the Standard Induction motors, Gapp Automation also offers a range of Quick Reversible models. These are ideally suited for Stop/Start or Forward/ Reverse applications, due to their integrated friction braking system, which reduces over run and stopping time (S2 duty).

All 15W motors are supplied with a normally closed thermal switch integrated into the motor windings, for thermal protection purposes.

K6IG6NC / K6RG6NC

K6IG6NC-T / K6RG6NC-T

Motor Performance Data

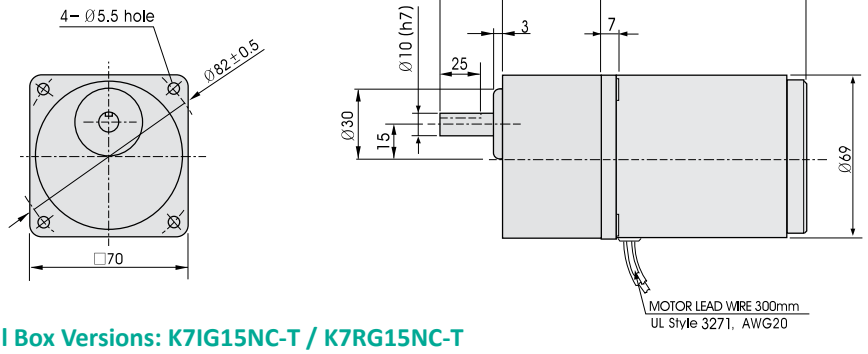
Motor Type	Motor Part Nr	Connection Type	Output Power (W)	Rated Voltage (V)	Rated Freq (Hz)	Rated Current (A)	Starting Current (A)	Rated Torque (Nm)	Starting Torque (Nm)	No Load Speed (r/min)	Rated Speed (r/min)	Capacitor (uF)	Duty Rating	IP Rating	Ins Class	Mass (kg)
Standard Induction	K7IG15NC	Flying Lead	15W	230V +/- 10%	50	0.18	0.40	0.12	0.08	1500	1250	1.0	S1	22	E	1.5
	K7IG15NC-T	Terminal Box												44		1.7
Quick Reversible	K7RG15NC	Flying Lead	15W	230V +/- 10%	50	0.21	0.45	0.12	0.10	1500	1250	1.5	S2	22	E	1.5
	K7RG15NC-T	Terminal Box												44		1.7

Geared Motor Performance Data

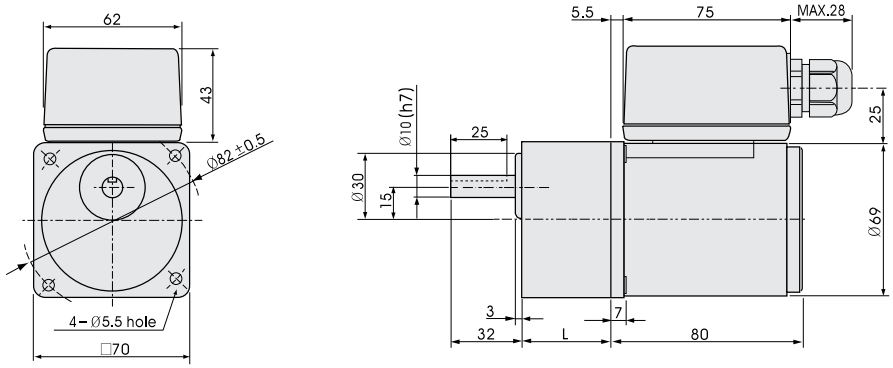
Motor Type	Motor Part Nr	No Load Speed (r/min)	500	300	200	150	100	75	60	50	30	20	15	10	8.3
		Rated Speed (r/min)	417	250	167	125	83	63	50	42	25	17	13	8.3	6.9
		Gearbox Ratio	3	5	7.5	10	15	20	25	30	50	75	100	150	180
		Gearbox Part Nr	K7G3B	K7G5B	K7G7.5B	K7G10B	K7G15B	K7G20B	K7G25B	K7G30B	K7G50B	K7G75B	K7G100B	K7G150B	K7G180B
Standard Induction	K7IG15NC K7IG15NC-T	Rated Torque (Nm)	0.29	0.48	0.72	0.95	1.43	1.72	2.15	2.58	3.88	5.0*	5.0*	5.0*	5.0*
Quick Reversible	K7RG15NC K7RG15NC-T	Rated Torque (Nm)	0.29	0.48	0.72	0.95	1.43	1.72	2.15	2.58	3.88	5.0*	5.0*	5.0*	5.0*

Motor part numbers without a T refer to flying lead versions. Motor part numbers with a T refer to terminal box versions. The thermal switch is wired internally. Torque figures displaying a * symbol signify that under shock loads, high inertia or stall conditions the rated torque of the gearbox may be exceeded, potentially causing damage to the gearbox or resulting in reduced lifetime. The use of a torque limiting device is therefore recommended. Please contact Gapp Automation for more details. Performance data above relates to 50Hz operation. Higher frequency operation may be possible. However please contact Gapp Automation to discuss your requirements.

Flying Lead Versions: K7IG15NC / K7RG15NC



Terminal Box Versions: K7IG15NC-T / K7RG15NC-T



All dimensions are in mm. For any critical dimensions please confirm with Gapp Automation Ltd

Options

110V/115V, Plain Shafted, Variable Speed and Braked Motors are available on request.

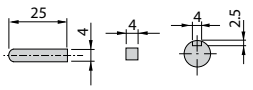
Gearbox ratios 3.6:1, 6:1, 9:1, 12.5:1, 18:1, 36:1, 60:1, 90:1 and 120:1 are available upon request

Rated Speeds < 8.3rpm are available on request. This increases geared motor length by 30mm.

All motors and gearboxes can be assembled free of charge prior to despatch. Please inform Gapp Automation at time of ordering, if this service is required.

For all of these options, and any other request, please contact Gapp Automation to discuss your requirements.

Gearbox Model	L (mm)	Geared Motor Mass (Kg)	
		Flying Lead	Terminal Box
K7G3B - K7G18B	32	2.02	2.22
K7G20B - K7G36B	42	2.15	2.35
K7G50B - K7G180B	42	2.21	2.41



Please note: Key dimensions are not to IEC standards

25W Standard Induction & Quick Reversible

25W 80mm²

The Gapp Automation range of compact AC geared motors are ideal for a wide variety of applications due to their long life, aesthetic design, low noise and high efficiency. All of the motors use standard AC induction technology, and can be combined with a range of in-line helical gearboxes, to give a compact and very cost-effective geared motor solution.

In addition to the Standard Induction motors, Gapp Automation also offers a range of Quick Reversible models. These are ideally suited for Stop/Start or Forward/Reverse applications, due to their integrated friction braking system, which reduces over-run and stopping time (S2 duty).

All 25W motors are supplied with a normally closed thermal switch integrated into the motor windings, for thermal protection purposes.

Motor Performance Data

Motor Type	Motor Part Nr	Output Power (W)	Rated Voltage (V)	Rated Freq (Hz)	Rated Current (A)	Starting Current (A)	Rated Torque (Nm)	Starting Torque (Nm)	No Load Speed (r/min)	Rated Speed (r/min)	Capacitor (uF)	Duty Rating	IP	Ins Class	Mass (kg)
Standard Induction	K8IG25NC-T5	25W	1ph; 230V +/- 10%	50	0.29	0.55	0.20	0.11	1500	1250	1.5	S1	54	E	1.8
	K8IG25NH-T5		3ph; 230V +/- 10%		0.29	0.77	0.19	0.65		1350	n/a	S1			
	K8IG25NV-T5		3ph; 400V +/- 10%		0.18	0.49	0.19	0.73		1300	n/a	S1			
Quick Reversible	K8RG25NC-T5		1ph; 230V +/- 10%		0.35	0.63	0.20	0.17		1250	2.0	S2			

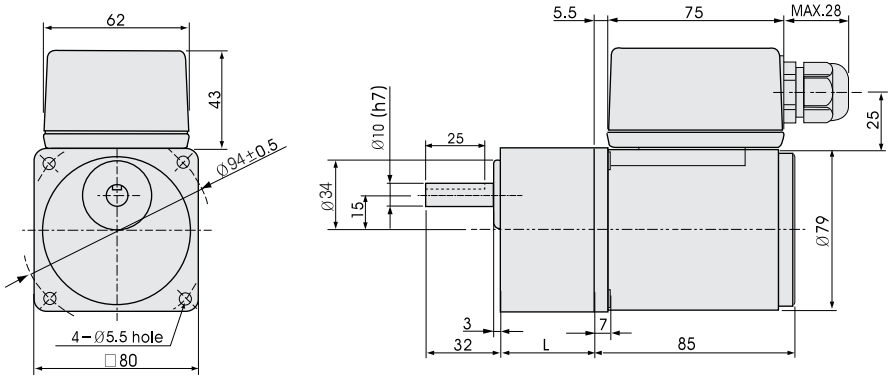
Geared Motor Performance Data

Motor Type	Motor Part Nr	No Load Speed (r/min)	500	300	200	150	100	75	60	50	30	20	15	10	8.3
		Gearbox Ratio	3	5	7.5	10	15	20	25	30	50	75	100	150	180
		Gearbox Part Nr	K8G3B	K8G5B	K8G7.5B	K8G10B	K8G15B	K8G20B	K8G25B	K8G30B	K8G50B	K8G75B	K8G100B	K8G150B	K8G180B
Standard Induction	K8IG25NC-T5 1ph/230V	Rated Speed (r/min)	417	250	167	125	83	63	50	42	25	17	13	8.3	6.9
		Rated Torque (Nm)	0.46	0.77	1.16	1.55	2.32	2.79	3.49	4.19	6.31	8.0*	8.0*	8.0*	8.0*
	K8IG25NH-T5 3ph/230V	Rated Speed (r/min)	450	270	180	135	90	68	54	45	27	18	14	9.0	7.5
		Rated Torque (Nm)	0.44	0.74	1.10	1.47	2.21	2.65	3.31	3.97	5.99	8.0*	8.0*	8.0*	8.0*
	K8IG25NV-T5 3ph/400V	Rated Speed (r/min)	433	260	173	130	87	65	52	43	26	17	13	8.7	7.2
		Rated Torque (Nm)	0.45	0.75	1.13	1.51	2.26	2.72	3.40	4.18	6.15	8.0*	8.0*	8.0*	8.0*
Quick Reversible	K8RG25NC-T5 1ph/230V	Rated Speed (r/min)	417	250	167	125	83	63	50	42	25	17	13	8.3	6.9
		Rated Torque (Nm)	0.46	0.77	1.18	1.55	2.32	2.79	3.49	4.19	6.31	8.0*	8.0*	8.0*	8.0*

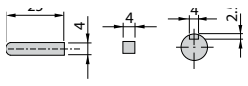
Motor part numbers without a T refer to flying lead versions. Motor part numbers with a T refer to terminal box versions.
Torque figures displaying a * symbol signify that under shock loads, high inertia or stall conditions the rated torque of the gearbox may be exceeded, potentially causing damage to the gearbox or resulting in reduced lifetime. The use of a torque limiting device is therefore recommended. Please contact Gapp Automation for more details. Performance data above relates to 50Hz operation. Higher frequency operation may be possible. Please contact Gapp Automation to discuss your requirements.

Options

110V/115V, Plain Shafted, Variable Speed and Braked Motors are are available on request.
Gearbox ratios 3.6:1, 6:1, 9:1, 12.5:1, 18:1, 36:1, 60:1, 90:1 and 120:1 are available upon request
Rated Speeds < 8.3rpm are available on request. This increases geared motor length by 32mm.
All motors and gearboxes can be assembled free of charge prior to despatch. Please inform Gapp Automation at time of ordering, if this service is required.
For all of these options, and any other request, please contact Gapp Automation to discuss your requirements.



Gearbox Model	L (mm)	Geared Motor Mass (Kg)
K8G3B to K8G18B	32	2.32
K8G20B to K8G36B	42.5	2.45
K8G50B to K8G200B	42.5	2.51



Please note: Key dimensions are not to IEC standards
All dimensions are in mm. For any critical dimensions please confirm with Gapp Automation Ltd

40W Standard Induction & Quick Reversible

40W 90mm²

The Gapp Automation range of compact AC geared motors are ideal for a wide variety of applications due to their long life, aesthetic desgn, low noise and high efficiency. All of the motors use standard AC induction technology, and can be combined with a range of in-line helical gearboxes, to give a compact and very cost-effective geared motor solution.

In addition to the Standard Induction motors, Gapp Automation also offers a range of Quick Reversible models. These are ideally suited for Stop/Start or Forward/Reverse applications, due to their integrated friction braking system, which reduces over-run and stopping time (S2 duty).

All 40W motors are supplied with a normally closed thermal switch integrated into the motor windings, for thermal protection purposes.

Motor Performance Data

Motor Type	Motor Part Nr	Output Power (W)	Rated Voltage (V)	Rated Freq (Hz)	Rated Current (A)	Starting Current (A)	Rated Torque (Nm)	Starting Torque (Nm)	No Load Speed (r/min)	Rated Speed (r/min)	Capacitor (uF)	Duty Rating	IP	Ins Class	Mass (kg)
Standard Induction	K9IG40NC-T5	40W	1ph; 230V +/- 10%	50	0.40	0.85	0.32	0.26	1500	1250	2.5	S1	54	E	2.6
	K9IG40NH-T5		3ph; 230V +/- 10%		0.41	1.30	0.29	1.00		1350	n/a	S1			
	K9IG40NV-T5		3ph; 400V +/- 10%		0.18	0.70	0.30	1.15		1350	n/a	S1			
Quick Reversible	K9RG40NC-T5		1ph; 230V +/- 10%		0.55	1.03	0.32	0.40		1250	3.5	S2			

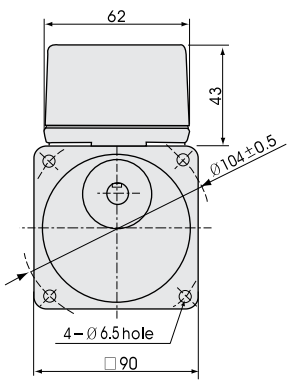
Geared Motor Performance Data

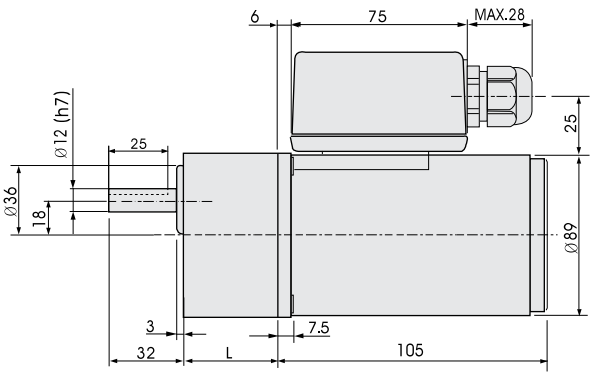
Motor Type	Motor Part Nr	No Load Speed (r/min)	500	300	200	150	100	75	60	50	30	20	15	10	8.3
		Gearbox Ratio	3	5	7.5	10	15	20	25	30	50	75	100	150	180
		Gearbox Part Nr	K9G3B	K9G5B	K9G7.5B	K9G10B	K9G15B	K9G20B	K9G25B	K9G30B	K9G50B	K9G75B	K9G100B	K9G150B	K9G180B
Standard Induction	K9IG40NC-T5 1ph/230V	Rated Speed (r/min)	417	250	167	125	83	63	50	42	25	17	13	8.3	6.9
		Rated Torque (Nm)	0.75	1.25	1.88	2.50	3.75	4.51	5.64	6.77	10.0*	10.0*	10.0*	10.0*	10.0*
	K9IG40NH-T5 3ph/230V	Rated Speed (r/min)	450	270	180	135	90	68	54	45	27	18	14	9.0	7.5
		Rated Torque (Nm)	0.69	1.15	1.73	2.30	3.88	4.15	5.19	6.23	9.39	10.0*	10.0*	10.0*	10.0*
	K9IG40NV-T5 3ph/400V	Rated Speed (r/min)	450	270	180	135	90	68	54	45	27	18	14	9.0	7.5
		Rated Torque (Nm)	0.72	1.19	1.79	2.38	3.58	4.30	5.37	6.45	9.71	10.0*	10.0*	10.0*	10.0*
Quick Reversible	K9RG40NC-T5 1ph/230V	Rated Speed (r/min)	417	250	167	125	83	63	50	42	25	17	13	8.3	6.9
		Rated Torque (Nm)	0.75	1.25	1.88	2.50	3.75	4.51	5.64	6.77	10.0*	10.0*	10.0*	10.0*	10.0*

Motor part numbers without a T refer to flying lead versions. Motor part numbers with a T refer to terminal box versions.
Torque figures displaying a * symbol signify that under shock loads, high inertia or stall conditions the rated torque of the gearbox may be exceeded, potentially causing damage to the gearbox or resulting in reduced lifetime. The use of a torque limiting device is therefore recommended. Please contact Gapp Automation for more details. Performance data above relates to 50Hz operation. Higher frequency operation may be possible. Please contact Gapp Automation to discuss your requirements.

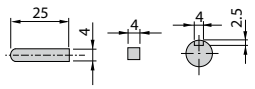
Options

110V/115V, Plain Shafted, Variable Speed and Braked Motors are are available on request.
Gearbox ratios 3.6:1, 6:1, 9:1, 12.5:1, 18:1, 36:1, 60:1, 90:1 and 120:1 are available upon request
Rated Speeds < 8.3rpm are available on request. This increases geared motor length by 37mm.
All motors and gearboxes can be assembled free of charge prior to despatch. Please inform Gapp Automation at time of ordering, if this service is required.
For all of these options, and any other request, please contact Gapp Automation to discuss your requirements.





Gearbox Model	L (mm)	Geared Motor Mass (Kg)
K9G3B - K9G18B	42	3.39
K9G20B - K9G36B	60	3,65
K9G50B - K9G200B	60	3.80



All dimensions are in mm. For any critical dimensions please confirm with Gapp Automation Ltd

60W Standard Induction & Quick Reversible

The Gapp Automation range of compact AC geared motors are ideal for a wide variety of applications due to their long life, aesthetic design, low noise and high efficiency. All of the motors use standard AC induction technology, and can be combined with a range of in-line helical gearboxes, to give a compact and very cost-effective geared motor solution.

In addition to the Standard Induction motors, Gapp Automation also offers a range of Quick Reversible models. These are ideally suited for Stop/Start or Forward/Reverse applications, due to their integrated friction braking system, which reduces over run and stopping time (S2 duty).

All 60W motors are supplied with a normally closed thermal switch integrated into the motor windings, for thermal protection purposes.

Motor Performance Data

Motor Type	Motor Part Nr	Output Power (W)	Rated Voltage (V)	Rated Freq (Hz)	Rated Current (A)	Starting Current (A)	Rated Torque (Nm)	Starting Torque (Nm)	No Load Speed (r/min)	Rated Speed (r/min)	Capacitor (uF)	Duty Rating	IP	Ins Class	Mass (kg)
Standard Induction	K9IP60FC-T5	60W	1ph; 230V +/- 10%	50	0.63	1.28	0.47	0.40	1500	1250	4.0	S1	54	E	2.7
	K9IP60FH-T5		3ph; 230V +/- 10%		0.60	1.90	0.44	1.65		1350	n/a	S1			
	K9IP60FV-T5		3ph; 400V +/- 10%		0.37	1.15	0.44	1.85		1350	n/a	S1			
Quick Reversible	K9RP60FC-T5		1ph; 230V +/- 10%		0.77	1.44	0.47	0.50		1250	4.5	S2			

Gearbox Models

K9PxxxB
Standard Torque
(Up to 20Nm)

K9PxxxBF
Standard Torque
(Up to 20Nm)

K9PxxxBU-K6
High Torque
(Up to 30Nm)

K9PxxxBUF-K6
High Torque
(Up to 30Nm)

Geared Motor Performance Data - Standard Torque

Motor Type	Motor Part Nr	No Load Speed (r/min)	500	300	200	150	100	75	60	50	30	20	15	10	7.5
		Gearbox Ratio	3	5	7.5	10	15	20	25	30	50	75	100	150	200
		Gearbox Part Nr	K9P3B	K9P5B	K9P7.5B	K9P10B	K9P15B	K9P20B	K9P25B	K9P30B	K9P50B	K9P75B	K9P100B	K9P150B	K9P200B
			K9P3BF	K9P5BF	K9P7.5BF	K9P10BF	K9P15BF	K9P20BF	K9P25BF	K9P30BF	K9P50BF	K9P75BF	K9P100BF	K9P150BF	K9P200BF
Standard Induction	K9IP60FC-T5 1ph/230V	Rated Speed (r/min)	417	250	167	125	83	63	50	42	25	17	13	8.3	6.3
		Rated Torque (Nm)	1.12	1.87	2.80	3.37	5.05	6.09	7.61	9.10	15.2	20.0*	20.0*	20.0*	20.0*
	K9IP60FH-T5 3ph/230V	Rated Speed (r/min)	450	270	180	135	90	68	54	45	27	18	14	9.0	6.8
		Rated Torque (Nm)	1.04	1.73	2.59	3.12	4.67	5.63	7.04	8.45	14.1	18.9	20.0*	20.0*	20.0*
	K9IP60FV-T5 3ph/400V	Rated Speed (r/min)	450	270	180	135	90	68	54	45	27	18	14	9.0	6.8
		Rated Torque (Nm)	1.04	1.73	2.59	3.89	4.67	5.63	7.04	8.45	14.1	18.9	20.0*	20.0*	20.0*
Quick Reversible	K9RP60FC-T5 1ph/230V	Rated Speed (r/min)	417	250	167	125	83	63	50	42	25	17	13	8.3	6.3
		Rated Torque (Nm)	1.12	1.87	2.80	3.37	5.05	6.09	7.61	9.13	15.2	20.0*	20.0*	20.0*	20.0*

Geared Motor Performance Data - High Torque

Motor Type	Motor Part Nr	No Load Speed (r/min)	30	20	15	10	7.5
		Gearbox Ratio	50	75	100	150	200
		Gearbox Part Nr	K9P50BU-K6	K9P75BU-K6	K9P100BU-K6	K9P150BU-K6	K9P200BU-K6
			K9P50BUF-K6	K9P75BUF-K6	K9P100BUF-K6	K9P150BUF-K6	K9P200BUF-K6
Standard Induction	K9IP60FC-T5 1ph/230V	Rated Speed (r/min)	25	17	13	8.3	6.3
		Rated Torque (Nm)	15.2	20.4	27.2	30.0*	30.0*
	K9IP60FH-T5 3ph/230V	Rated Speed (r/min)	27	18	14	9.0	6.8
		Rated Torque (Nm)	14.1	18.9	25.2	30.0*	30.0*
	K9IP60FV-T5 3ph/400V	Rated Speed (r/min)	27	18	14	9.0	6.8
		Rated Torque (Nm)	14.1	18.9	25.2	30.0*	30.0*
Quick Reversible	K9RP60FC-T5 1ph/230V	Rated Speed (r/min)	25	17	13	8.3	6.3
		Rated Torque (Nm)	15.2	20.4	27.2	30.0*	30.0*

Torque figures displaying a * symbol signify that under shock loads, high inertia or stall conditions the rated torque of the gearbox may be exceeded, potentially causing damage to the gearbox or resulting in reduced lifetime. The use of a torque limiting device is therefore recommended. Please contact Gapp Automation for more details.

Performance data relates to 50Hz operation. Higher frequency operation may be possible. Please contact Gapp Automation to discuss your requirements.

Options

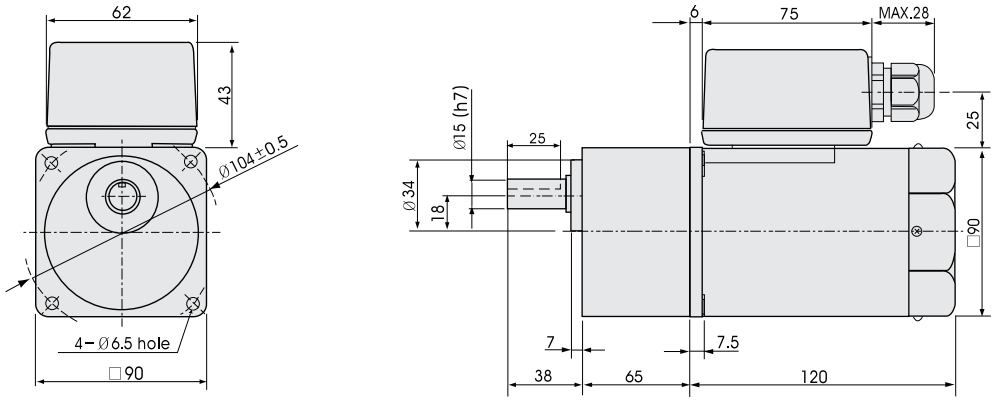
110V/115V, non-geared, variable speed and braked motors are available upon request.

Gearbox ratios 3.6:1, 6:1, 9:1, 12.5:1, 18:1, 36:1, 60:1, 90:1, 120:1 and 180:1 are available upon request.

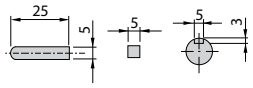
Rated Speeds < 8.3rpm are available upon request. This increases geared motor length by 40mm.

All motors and gearboxes can be assembled free of charge prior to despatch. Please inform Gapp Automation at time of ordering, if this service is required. ***For all of these options, and any other request, please contact Gapp to discuss your requirements.***

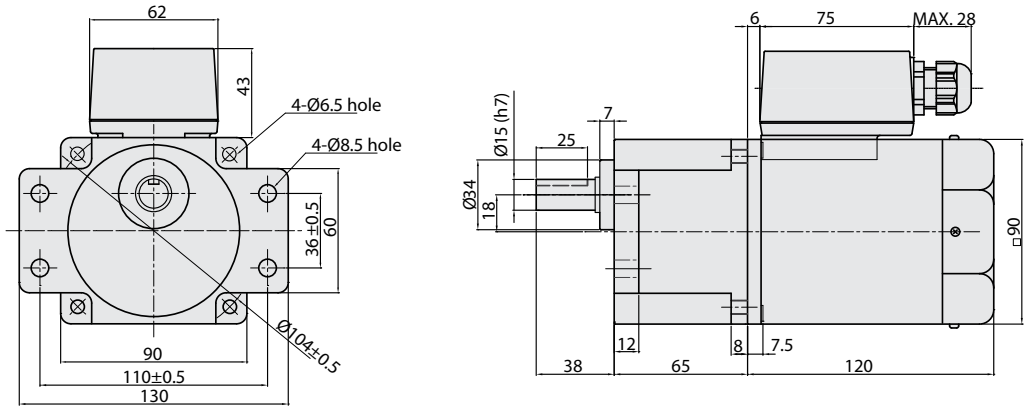
60W Motor + K9PxxxB Gearbox



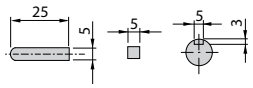
Gearbox Model	Geared Motor Mass (Kg)
K9P3B - K9P10B	4.00
K9P12.5B - K9P15B	4.10
K9P20B - K9P50B	4.15
K9P75B - K9P200B	4.20



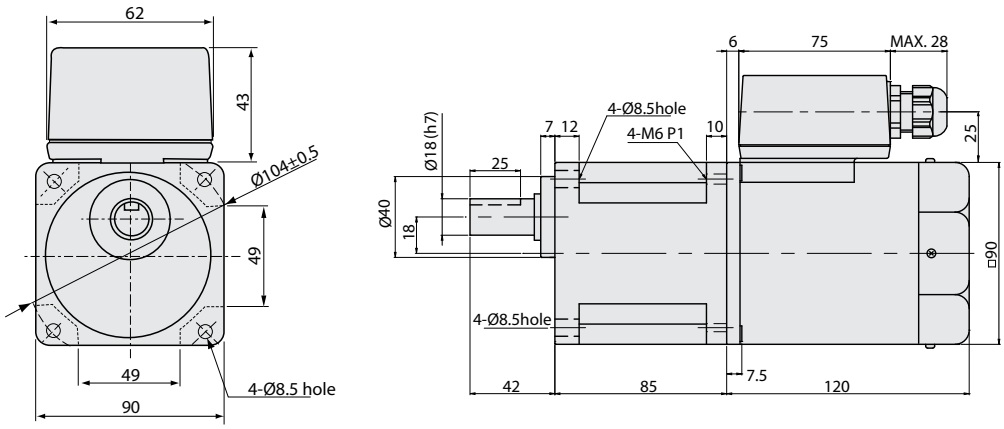
60W Motor + K9PxxxBF Gearbox



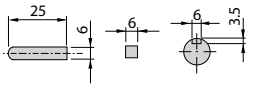
Gearbox Model	Geared Motor Mass (Kg)
K9P3BF - K9P10BF	4.00
K9P12.5BF - K9P15BF	4.10
K9P20BF - K9P50BF	4.15
K9P75BF - K9P200BF	4.20



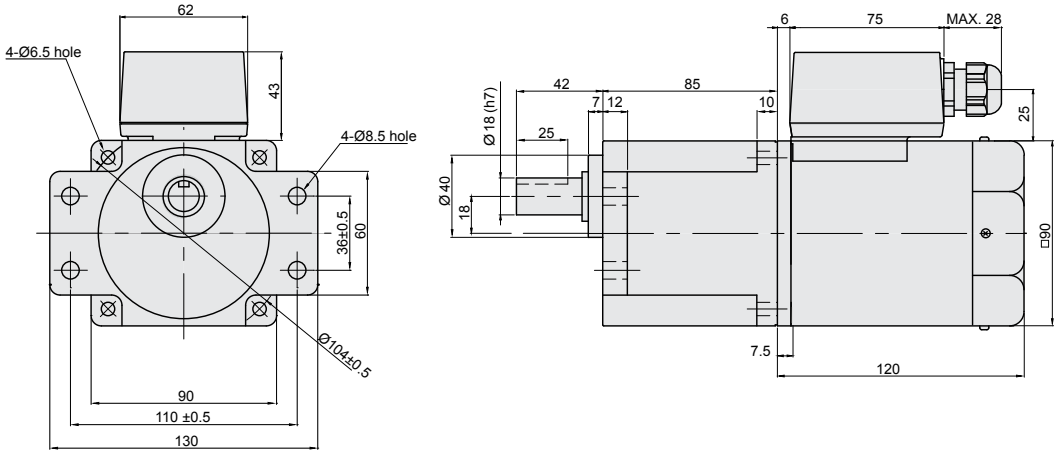
60W Motor + K9PxxxBU-K6 Gearbox



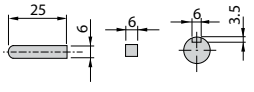
Gearbox Model	Geared Motor Mass (Kg)
K9P3BU-K6 to K9P10BU-K6	4.20
K9P12.5BU-K6 to K9P15BU-K6	4.30
K9P20BU-K6 to K9P50BU-K6	4.40
K9P75BU-K6 to K9P200BU-K6	4.50



60W Motor + K9PxxxBUF-K6 Gearbox



Gearbox Model	Geared Motor Mass (Kg)
K9P3BUF-K6 to K9P10BUF-K6	4.30
K9P12.5BUF-K6 to K9P15BUF-K6	4.40
K9P20BUF-K6 to K9P50BUF-K6	4.50
K9P75BU-K6 to 9P200BU-K6	4.60



All dimensions are in mm. For any critical dimensions please confirm with Gapp Automation Ltd

90W Standard Induction & Quick Reversible

The Gapp Automation range of compact AC geared motors are ideal for a wide variety of applications due to their long life, aesthetic design, low noise and high efficiency. All of the motors use standard AC induction technology, and can be combined with a range of in-line helical gearboxes, to give a compact and very cost-effective geared motor solution.

In addition to the Standard Induction motors, Gapp Automation also offers a range of Quick Reversible models. These are ideally suited for Stop/Start or Forward/Reverse applications, due to their integrated friction braking system, which reduces over-run and stopping time (S2 duty).

All 90W motors are supplied with a normally closed thermal switch integrated into the motor windings, for thermal protection purposes.

Motor Performance Data

Motor Type	Motor Part Nr	Output Power (W)	Rated Voltage (V)	Rated Freq (Hz)	Rated Current (A)	Starting Current (A)	Rated Torque (Nm)	Starting Torque (Nm)	No Load Speed (r/min)	Rated Speed (r/min)	Capacitor (uF)	Duty Rating	IP	Ins Class	Mass (kg)
Standard Induction	K9IP90FC-T5	90W	1ph; 230V +/- 10%	50	0.87	2.15	0.68	0.55	1500	1300	6.0	S1	54	E	3.2
	K9IP90FH-T5		3ph; 230V +/- 10%		0.86	2.80	0.65	2.45		1350	n/a	S1			
	K9IP90FV-T5		3ph; 400V +/- 10%		0.52	1.65	0.65	2.65		1350					
Quick Reversible	K9RP90FC-T5		1ph; 230V +/- 10%		1.30	2.30	0.71	0.60		1250	7.0	S2			

Gearbox Models

K9PxxxB
Standard Torque
(Up to 20Nm)

K9PxxxBF
Standard Torque
(Up to 20Nm)

K9PxxxBU-K6
High Torque
(Up to 30Nm)

K9PxxxBUF-K6
High Torque
(Up to 30Nm)

Geared Motor Performance Data - Standard Torque

Motor Type	Motor Part Nr	No Load Speed (r/min)	500	300	200	150	100	75	60	50	30	20	15	10	7.5
		Gearbox Ratio	3	5	7.5	10	15	20	25	30	50	75	100	150	200
		Gearbox Part Nr	K9P3B	K9P5B	K9P7.5B	K9P10B	K9P15B	K9P20B	K9P25B	K9P30B	K9P50B	K9P75B	K9P100B	K9P150B	K9P200B
			K9P3BF	K9P5BF	K9P7.5BF	K9P10BF	K9P15BF	K9P20BF	K9P25BF	K9P30BF	K9P50BF	K9P75BF	K9P100BF	K9P150BF	K9P200BF
Standard Induction	K9IP90FC-T5 1ph/230V	Rated Speed (r/min)	433	260	173	130	87	65	52	43	26	17	13	8.7	6.5
		Rated Torque (Nm)	1.61	2.68	4.02	4.83	7.25	8.74	10.9	13.1	20.0*	20.0*	20.0*	20.0*	20.0*
	K9IP90FH-T5 3ph/230V	Rated Speed (r/min)	450	270	180	135	90	68	54	45	27	18	14	9.0	6.8
		Rated Torque (Nm)	1.55	2.58	3.87	4.65	6.98	8.42	10.5	12.6	20.0*	20.0*	20.0*	20.0*	20.0*
	K9IP90FV-T5 3ph/400V	Rated Speed (r/min)	450	270	180	135	90	68	54	45	27	18	14	9.0	6.8
		Rated Torque (Nm)	1.55	2.58	3.87	4.65	6.98	8.42	10.5	12.6	20.0*	20.0*	20.0*	20.0*	20.0*
Quick Reversible	K9RP90FC-T5 1ph/230V	Rated Speed (r/min)	417	250	167	125	83	63	50	42	25	17	13	8.3	6.3
		Rated Torque (Nm)	1.68	2.80	4.20	5.05	7.57	9.13	11.4	13.7	20.0*	20.0*	20.0*	20.0*	20.0*

Geared Motor Performance Data - High Torque

Motor Type	Motor Part Nr	No Load Speed (r/min)	30	20	15	10	7.5
		Gearbox Ratio	50	75	100	150	200
		Gearbox Part Nr	K9P50BU-K6	K9P75BU-K6	K9P100BU-K6	K9P150BU-K6	K9P200BU-K6
			K9P50BUF-K6	K9P75BUF-K6	K9P100BUF-K6	K9P150BUF-K6	K9P200BUF-K6
Standard Induction	K9IP90FC-T5 1ph/230V	Rated Speed (r/min)	26	17	13	8.3	6.5
		Rated Torque (Nm)	21.9	29.3	30.0*	30.0*	30.0*
	K9IP90FH-T5 3ph/230V	Rated Speed (r/min)	27	18	14	9.0	6.8
		Rated Torque (Nm)	21.0	28.2	30.0*	30.0*	30.0*
	K9IP90FV-T5 3ph/400V	Rated Speed (r/min)	27	18	14	9.0	6.8
		Rated Torque (Nm)	21.0	28.2	30.0*	30.0*	30.0*
Quick Reversible	K9RP90FC-T5 1ph/230V	Rated Speed (r/min)	25	17	13	8.3	6.3
		Rated Torque (Nm)	22.8	30.0*	30.0*	30.0*	30.0*

Torque figures displaying a * symbol signify that under shock loads, high inertia or stall conditions the rated torque of the gearbox may be exceeded, potentially causing damage to the gearbox or resulting in reduced lifetime. The use of a torque limiting device is therefore recommended. Please contact Gapp Automation for more details.

Performance data relates to 50Hz operation. Higher frequency operation may be possible. Please contact Gapp Automation to discuss your requirements.

Options

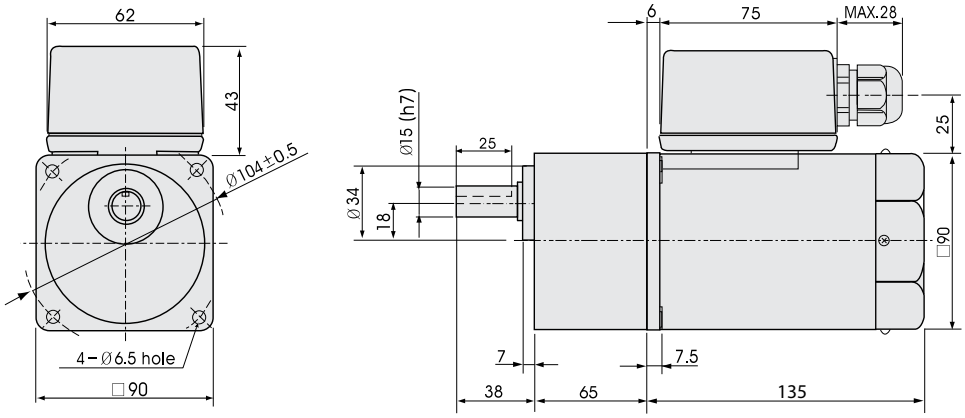
110V/115V, non-geared, variable speed and braked motors are available upon request.

Gearbox ratios 3.6:1, 6:1, 9:1, 12.5:1, 18:1, 36:1, 60:1, 90:1, 120:1 and 180:1 are available upon request.

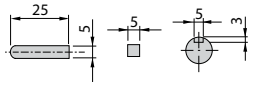
Rated Speeds < 8.3rpm are available upon request. This increases geared motor length by 40mm.

All motors and gearboxes can be assembled free of charge prior to despatch. Please inform Gapp Automation at time of ordering, if this service is required. ***For all of these options, and any other request, please contact Gapp Automation to discuss your requirements.***

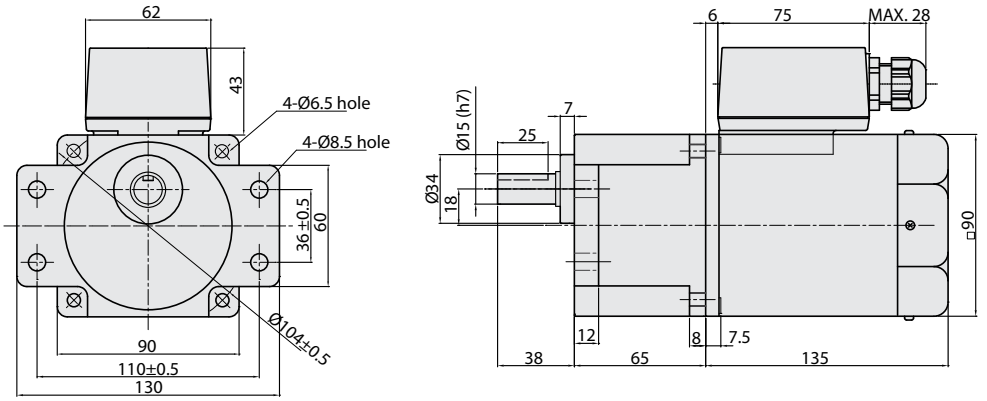
90W Motor + K9PxxxB Gearbox



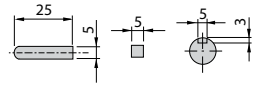
Gearbox Model	Geared Motor Mass (Kg)
K9P3B - K9P10B	4.50
K9P12.5B - K9P15B	4.60
K9P20B - K9P50B	4.65
K9P75B - K9P200B	4.70



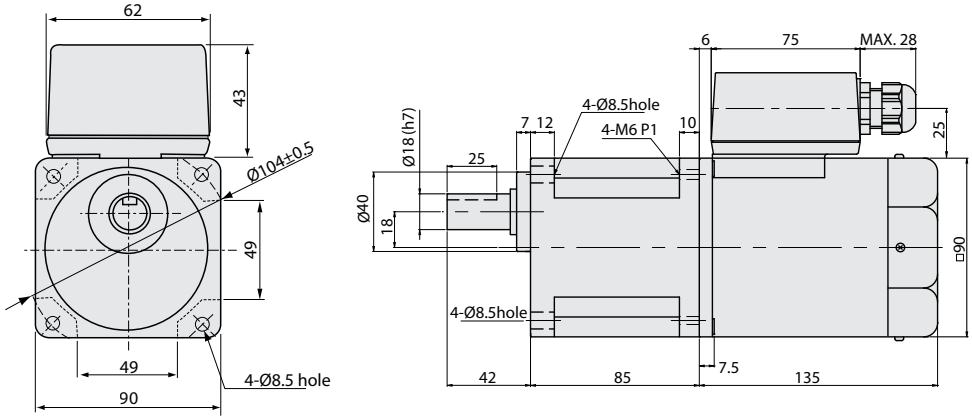
90W Motor + K9PxxxBF Gearbox



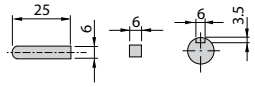
Gearbox Model	Geared Motor Mass (Kg)
K9P3BF - K9P10BF	4.50
K9P12.5BF - K9P15BF	4.60
K9P20BF - K9P50BF	4.65
K9P75BF - K9P200BF	4.70



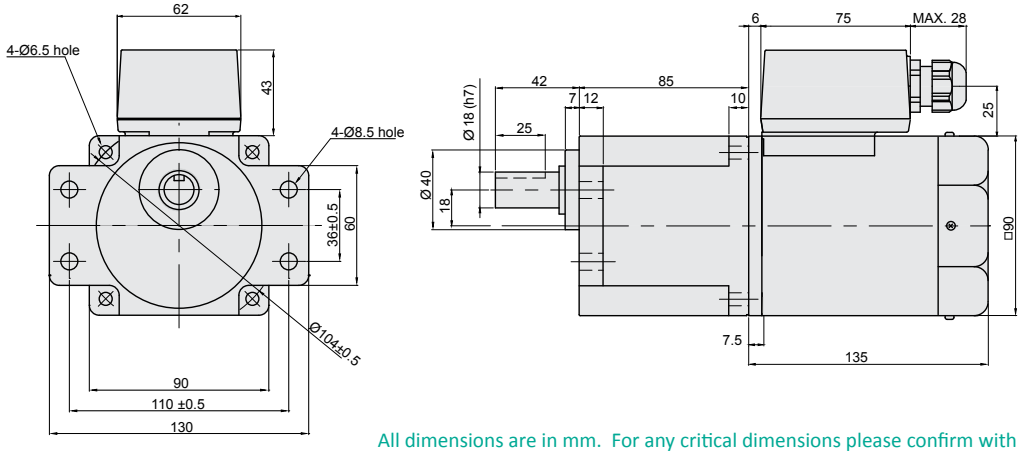
90W Motor + K9PxxxBU-K6 Gearbox



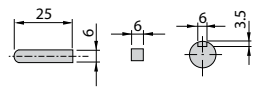
Gearbox Model	Geared Motor Mass (Kg)
K9P3BU-K6 to K9P10BU-K6	4.70
K9P12.5BU-K6 to K9P15BU-K6	4.80
K9P20BU-K6 to K9P50BU-K6	4.90
K9P75BU-K6 to K9P200BU-K6	5.00



90W Motor + K9PxxxBUF-K6 Gearbox



Gearbox Model	Geared Motor Mass (Kg)
K9P3BUF-K6 to K9P10BUF-K6	4.80
K9P12.5BUF-K6 to K9P15BUF-K6	4.90
K9P20BUF-K6 to K9P50BUF-K6	5.00
K9P75BUF-K6 to K9P200BUF-K6	5.10



All dimensions are in mm. For any critical dimensions please confirm with Gapp Automation Ltd

120W & 150W Standard Induction & Quick Reversible

The Gapp Automation range of compact AC geared motors are ideal for a wide variety of applications due to their long life, aesthetic design, low noise and high efficiency. All of the motors use standard AC induction technology, and can be combined with a range of in-line helical gearboxes, to give a compact and very cost-effective geared motor solution.

In addition to the Standard Induction motors, Gapp Automation also offers a range of Quick Reversible models. These are ideally suited for Stop/Start or Forward/Reverse applications, due to their integrated friction braking system, which reduces over-run and stopping time (S2 duty).

All 120W and 150W motors are supplied with a normally closed thermal switch integrated into the motor windings, for thermal protection purposes.

Motor Performance Data

Motor Type	Motor Part Nr	Output Power (W)	Rated Voltage (V)	Rated Freq (Hz)	Rated Current (A)	Starting Current (A)	Rated Torque (Nm)	Starting Torque (Nm)	No Load Speed (r/min)	Rated Speed (r/min)	Capacitor (uF)	Duty Rating	IP	Ins Class	Mass (kg)
Standard Induction	K9IP120FC-T5	120W	1ph; 230V +/- 10%	50	0.85	2.53	0.90	0.60	1500	1300	6.0	S1	54	E	3.3
	K9IP150FH-T5	150W	3ph; 230V +/- 10%		1.10	3.47	1.13	3.00		1300	n/a	S1			
	K9IP150FV-T5		3ph; 400V +/- 10%		0.71	2.10	1.13	3.50		1300	n/a	S1			
Quick Reversible	K9RP120FC-T5	120W	1ph; 230V +/- 10%		0.85	2.50	0.90	0.58		1300	6.0	S2			

Geared Motor Performance Data - Standard Torque

Motor Type	Motor Part Nr	No Load Speed (r/min)	500	300	200	150	100	75	60
		Gearbox Ratio	3	5	7.5	10	15	20	25
		Gearbox Part Nr	K9P3BU-K6	K9P5BU-K6	K9P7.5BU-K6	K9P10BU-K6	K9P15BU-K6	K9P20BU-K6	K9P25BU-K6
			K9P3BUF-K6	K9P5BUF-K6	K9P7.5BUF-K6	K9P10BUF-K6	K9P15BUF-K6	K9P20BUF-K6	K9P25BUF-K6
Standard Induction	K9IP120FC-T5 1ph/230V	Rated Speed (r/min)	433	260	173	130	87	65	52
		Rated Torque (Nm)	2.15	3.58	5.36	6.45	9.67	11.7	14.6
	K9IP150FH-T5 3ph/230V	Rated Speed (r/min)	433	260	173	130	87	65	52
		Rated Torque (Nm)	2.69	4.49	6.73	8.09	12.1	14.6	18.3
	K9IP150FV-T5 3ph/400V	Rated Speed (r/min)	433	260	173	130	87	65	52
		Rated Torque (Nm)	2.69	4.49	6.73	8.09	12.1	14.6	18.3
Quick Reversible	K9RP120FC-T5 1ph/230V	Rated Speed (r/min)	433	260	173	130	87	65	52
		Rated Torque (Nm)	2.15	3.58	5.36	6.45	9.67	11.7	14.6

Motor Type	Motor Part Nr	No Load Speed (r/min)	50	30	20	15	10	7.5
		Gearbox Ratio	30	50	75	100	150	200
		Gearbox Part Nr	K9P30BU-K6	K9P50BU-K6	K9P75BU-K6	K9P100BU-K6	K9P150BU-K6	K9P200BU-K6
			K9P30BUF-K6	K9P50BUF-K6	K9P75BUF-K6	K9P100BUF-K6	K9P150BUF-K6	K9P200BUF-K6
Standard Induction	K9IP120FC-T5 1ph/230V	Rated Speed (r/min)	43	26	17	13	8.7	6.5
		Rated Torque (Nm)	17.5	29.1	30.0*	30.0*	30.0*	30.0*
	K9IP150FH-T5 3ph/230V	Rated Speed (r/min)	43	26	17	13	8.7	6.5
		Rated Torque (Nm)	22.0	30.0*	30.0*	30.0*	30.0*	30.0*
	K9IP150FV-T5 3ph/400V	Rated Speed (r/min)	43	26	17	13	8.7	6.5
		Rated Torque (Nm)	22.0	30.0*	30.0*	30.0*	30.0*	30.0*
Quick Reversible	K9RP120FC-T5 1ph/230V	Rated Speed (r/min)	43	26	17	13	9.0	6.5
		Rated Torque (Nm)	17.5	29.1	30.0*	30.0*	30.0*	30.0*

Gearbox Models

K9PxxxBU-K6
High Torque
(Up to 30Nm)

K9PxxxBUF-K6
High Torque
(Up to 30Nm)

Options

110V/115V, non-geared, variable speed and braked motors are available upon request.

Gearbox ratios 3.6:1, 6:1, 9:1, 12.5:1, 18:1, 36:1, 60:1, 90:1, 120:1 and 180:1 are available upon request.

Rated Speeds < 8.3rpm are available upon request. This increases geared motor length by 40mm.

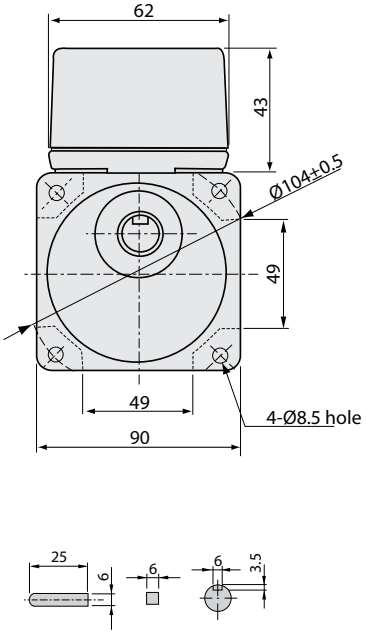
All motors and gearboxes can be assembled free of charge prior to despatch. Please inform Gapp Automation at time of ordering, if this service is required.

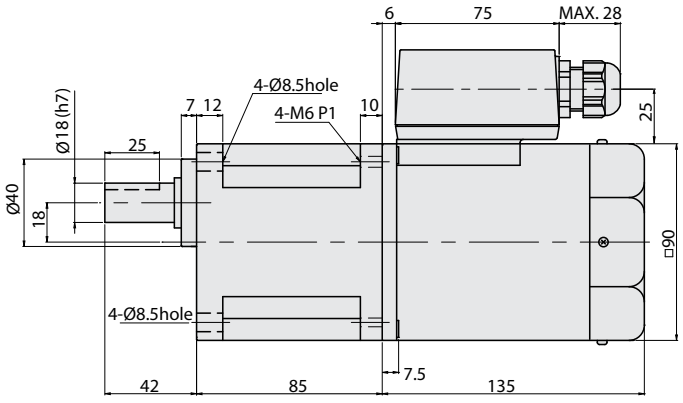
For all of these options, and any other request, please contact Gapp Automation to discuss your requirements.

Torque figures displaying a * symbol signify that, under shock loads, high inertia or stall conditions, the rated torque of the gearbox may be exceeded, potentially causing damage to the gearbox or resulting in reduced lifetime. The use of a torque limiting device is therefore recommended. Please contact Gapp Automation for more details.

Performance data relates to 50Hz operation. Higher frequency operation may be possible. Please contact Gapp Automation to discuss your requirements.

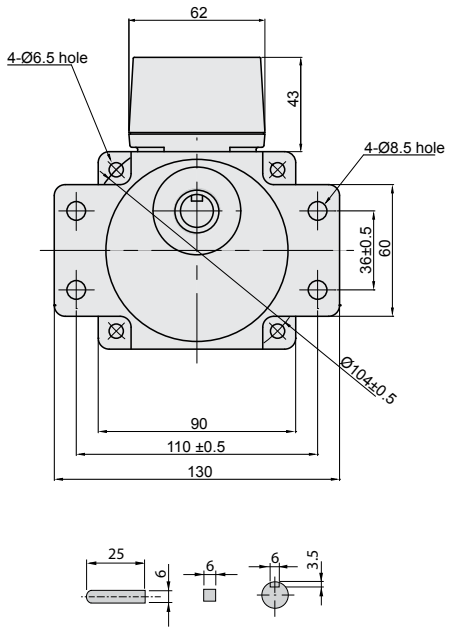
120W/150W Motor + K9PxxxBU-K6 Gearbox

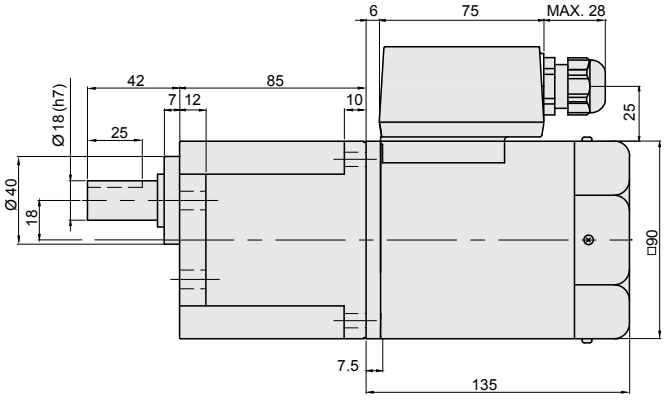




Gearbox Model	Geared Motor Mass (Kg)
K9P3BU-K6 to K9P10BU-K6	4.80
K9P12.5BU-K6 to K9P15BU-K6	4.90
K9P20BU-K6 to K9P50BU-K6	5.00
K9P75BU-K6 to K9P200BU-K6	5.10

120W/150W Motor + K9PxxxBUF-K6 Gearbox





Gearbox Model	Geared Motor Mass (Kg)
K9P3BUF-K6 to K9P10BUF-K6	4.90
K9P12.5BUF-K6 to K9P15BUF-K6	5.00
K9P20BUF-K6 to K9P50BUF-K6	5.10
K9P75BUF-K6 to K9P200BUF-K6	5.20

All dimensions are in mm. For any critical dimensions please confirm with Gapp Automation Ltd

180W & 200W Standard Induction & Quick Reversible

The Gapp Automation range of compact AC geared motors are ideal for a wide variety of applications due to their long life, aesthetic design, low noise and high efficiency. All of the motors use standard AC induction technology, and can be combined with a range of in-line helical gearboxes, to give a compact and very cost-effective geared motor solution.

In addition to the Standard Induction motors, Gapp Automation also offers a range of Quick Reversible models. These are ideally suited for Stop/Start or Forward/Reverse applications, due to their integrated friction braking system, which reduces over-run and stopping time (S2 duty).

All 180W and 200W motors are supplied with a normally closed thermal switch integrated into the motor windings, for thermal protection purposes.

Motor Performance Data

Motor Type	Motor Part Nr	Output Power (W)	Rated Voltage (V)	Rated Freq (Hz)	Rated Current (A)	Starting Current (A)	Rated Torque (Nm)	Starting Torque (Nm)	No Load Speed (r/min)	Rated Speed (r/min)	Capacitor (uF)	Duty Rating	IP	Ins Class	Mass (kg)
Standard Induction	K9IP180FC-T5	180W	1ph; 230V +/- 10%	50	1.70	3.62	1.35	0.75	1500	1300	7.0	S1	54	E	4.1
	K9IP200FH-T5	200W	3ph; 230V +/- 10%		1.51	4.51	1.45	4.3		1350	n/a	S1			
	K9IP200FV-T5		3ph; 400V +/- 10%		0.91	2.80	1.45	4.5		1350	n/a	S1			
Quick Reversible	K9RP180FC-T5	180W	1ph; 230V +/- 10%		1.70	3.63	1.35	0.70		1300	8.0	S2			

Geared Motor Performance Data - Standard Torque

Motor Type	Motor Part Nr	No Load Speed (r/min)	500	300	200	150	100	75	60
		Gearbox Ratio	3	5	7.5	10	15	20	25
		Gearbox Part Nr	K9P3BU-K6	K9P5BU-K6	K9P7.5BU-K6	K9P10BU-K6	K9P15BU-K6	K9P20BU-K6	K9P25BU-K6
			K9P3BUF-K6	K9P5BUF-K6	K9P7.5BUF-K6	K9P10BUF-K6	K9P15BUF-K6	K9P20BUF-K6	K9P25BUF-K6
Standard Induction	K9IP180FC-T5 1ph/230V	Rated Speed (r/min)	433	260	173	130	87	65	52
		Rated Torque (Nm)	3.22	5.36	8.05	9.67	14.5	17.5	21.9
	K9IP200FH-T5 3ph/230V	Rated Speed (r/min)	450	270	180	135	90	68	54
		Rated Torque (Nm)	3.46	5.76	8.64	10.4	15.6	18.8	23.5
	K9IP200FV-T5 3ph/400V	Rated Speed (r/min)	450	270	180	135	90	68	54
		Rated Torque (Nm)	3.46	5.76	8.64	10.4	15.6	18.8	23.5
Quick Reversible	K9RP150FC-T5 1ph/230V	Rated Speed (r/min)	433	260	173	130	87	65	52
		Rated Torque (Nm)	3.22	5.36	8.05	9.67	14.5	17.5	21.9

Motor Type	Motor Part Nr	No Load Speed (r/min)	50	30	20	15	10	7.5
		Gearbox Ratio	30	50	75	100	150	200
		Gearbox Part Nr	K9P30BU-K6	K9P50BU-K6	K9P75BU-K6	K9P100BU-K6	K9P150BU-K6	K9P200BU-K6
			K9P30BUF-K6	K9P50BUF-K6	K9P75BUF-K6	K9P100BUF-K6	K9P150BUF-K6	K9P200BUF-K6
Standard Induction	K9IP180FC-T5 1ph/230V	Rated Speed (r/min)	43	26	17	13	8.7	6.5
		Rated Torque (Nm)	26.2	30.0*	30.0*	30.0*	30.0*	30.0*
	K9IP200FH-T5 3ph/230V	Rated Speed (r/min)	45	27	18	14	9.0	6.8
		Rated Torque (Nm)	28.2	30.0*	30.0*	30.0*	30.0*	30.0*
	K9IP200FV-T5 3ph/400V	Rated Speed (r/min)	45	27	18	14	9.0	6.8
		Rated Torque (Nm)	28.2	30.0*	30.0*	30.0*	30.0*	30.0*
Quick Reversible	K9RP150FC-T5 1ph/230V	Rated Speed (r/min)	43	26	17	13	8.7	6.5
		Rated Torque (Nm)	26.2	30.0*	30.0*	30.0*	30.0*	30.0*

Gearbox Models

K9PxxxBU-K6
High Torque
(Up to 30Nm)

K9PxxxBUF-K6
High Torque
(Up to 30Nm)

Options

110V/115V, non-geared, variable speed and braked motors are available upon request.

Gearbox ratios 3.6:1, 6:1, 9:1, 12.5:1, 18:1, 36:1, 60:1, 90:1, 120:1 and 180:1 are available upon request.

Rated Speeds < 8.3rpm are available upon request. This increases geared motor length by 40mm.

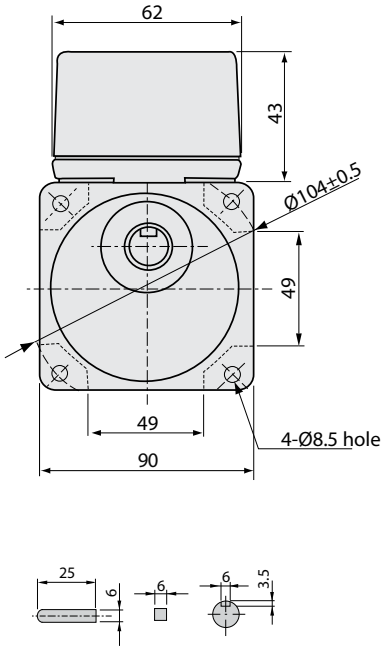
All motors and gearboxes can be assembled free of charge prior to despatch. Please inform Gapp Automation at time of ordering, if this service is required.

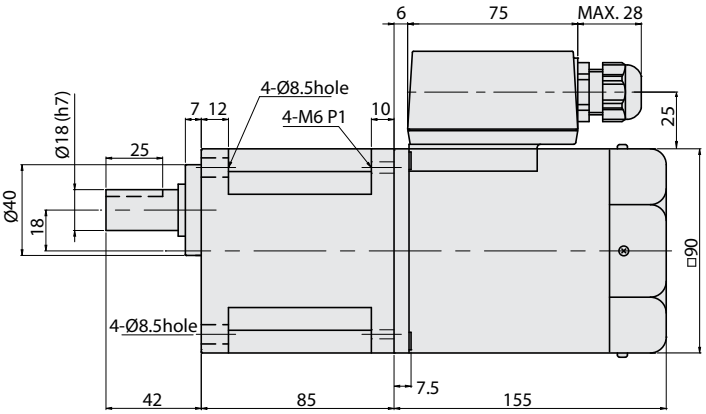
For all of these options, and any other request, please contact Gapp Automation to discuss your requirements.

Torque figures displaying a * symbol signify that, under shock loads, high inertia or stall conditions, the rated torque of the gearbox may be exceeded, potentially causing damage to the gearbox or resulting in reduced lifetime. The use of a torque limiting device is therefore recommended. Please contact Gapp Automation for more details.

Performance data relates to 50Hz operation. Higher frequency operation may be possible. Please contact Gapp Automation to discuss your requirements.

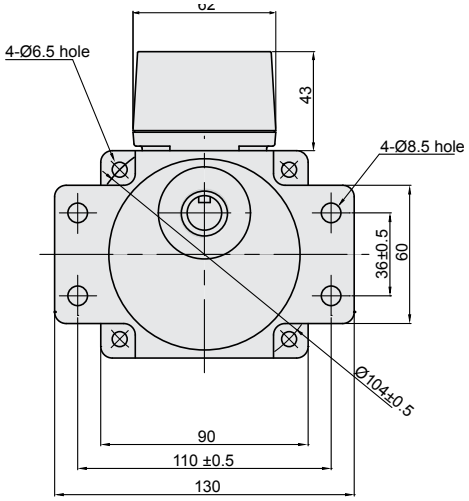
180W/200W Motor + K9PxxxBU-K6 Gearbox

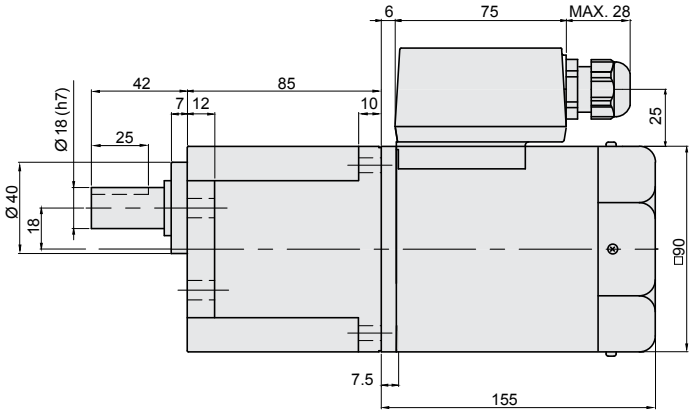


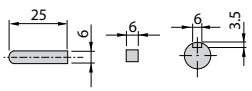


Gearbox Model	Geared Motor Mass (Kg)
K9P3BU-K6 to K9P10BU-K6	5.60
K9P12.5BU-K6 to K9P15BU-K6	5.70
K9P20BU-K6 to K9P50BU-K6	5.80
K9P75BU-K6 to K9P200BU-K6	5.90

180W/200W Motor + K9PxxxBU-K6 Gearbox







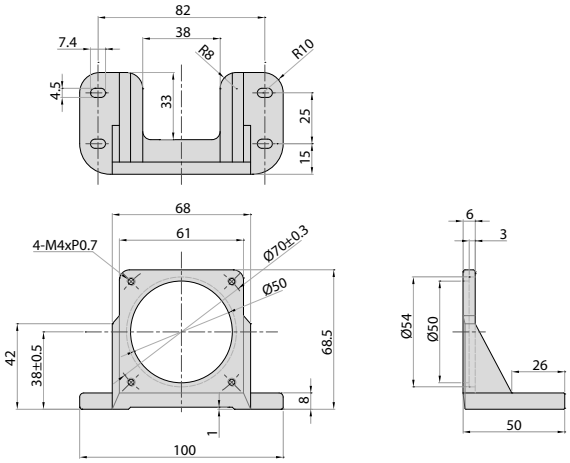
Gearbox Model	Geared Motor Mass (Kg)
K9P3BUF-K6 to K9P10BUF-K6	5.70
K9P12.5BUF-K6 to K9P15BUF-K6	5.80
K9P20BUF-K6 to K9P50BUF-K6	5.90
K9P75BUF-K6 to K9P200BUF-K6	6.00

All dimensions are in mm. For any critical dimensions please confirm with Gapp Automation Ltd

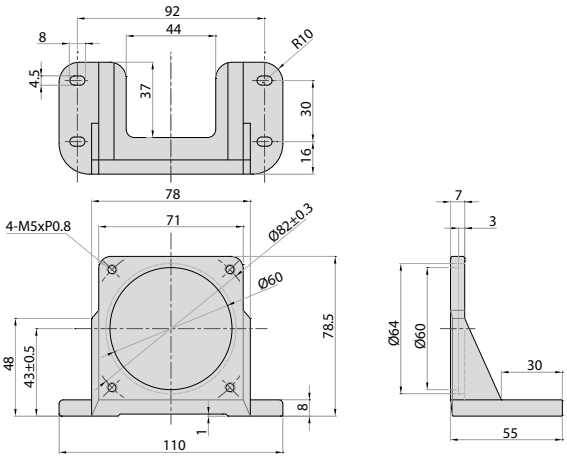
Foot Mounts

Foot mounts are available for all square gearboxes to allow simple mounting of the geared motor. They can be ordered as separate items or pre-assembled to the geared motor prior to despatch, to suit the required mounting orientation. Please specifiy this at placement of order. These foot mounts are not suitable for use with flanged type gearboxes.

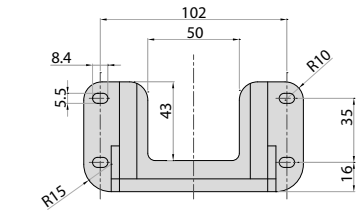
Part Nr: K6B (Suitable for K6GxxxB gearboxes)



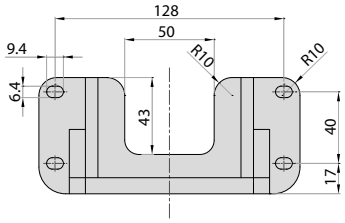
Part Nr: K7B (Suitable for K7GxxxB gearboxes)

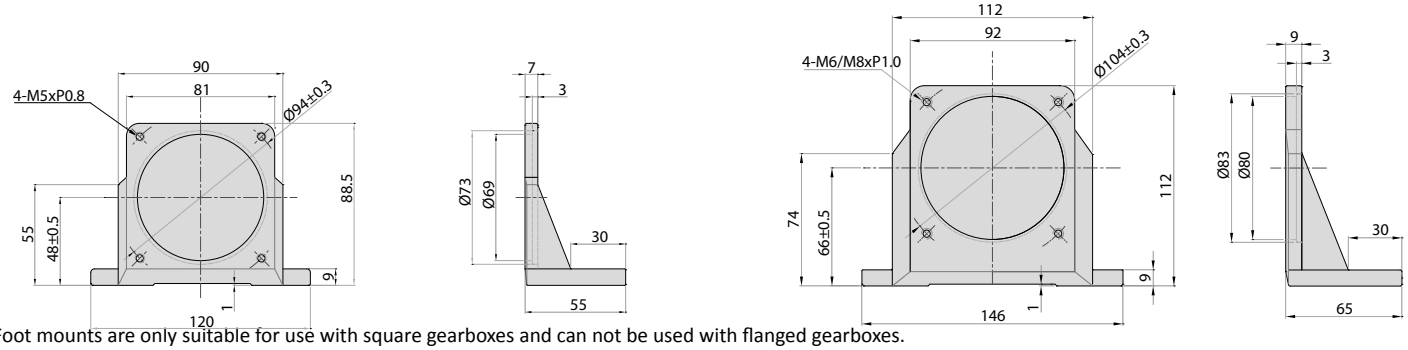


Part Nr: K8B (Suitable for K8GxxxB gearboxes)



Part Nr: K9B-M6 (Suitable for K9GxxxB/K9PxxxB gearboxes)
Part Nr: K9B-M8 (Suitable for K9PxxxBU-K6 gearboxes)

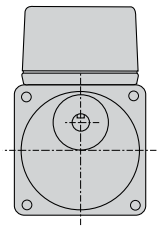




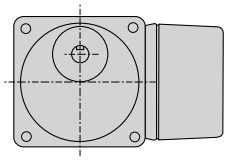
Foot mounts are only suitable for use with square gearboxes and can not be used with flanged gearboxes.

Terminal Box and Lead Positions

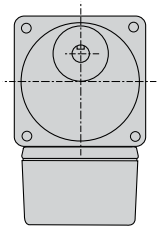
Pos T



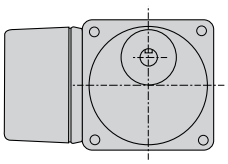
Pos R



Pos B

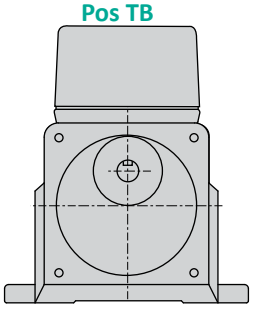


Pos L



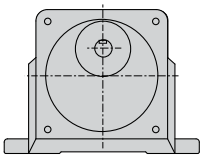
Example

Pos TB

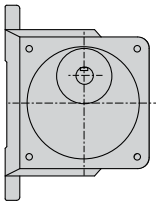


Foot Mount Positions

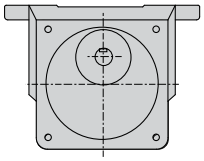
Pos B



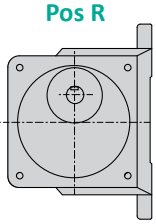
Pos L



Pos T



Pos R



Key
T = Top
R = Right
L = Left
B = Bottom

(Viewed towards output shaft, with shaft offset towards top)

Motors and gearboxes are supplied un-assembled as standard. Assembly can be offered free of charge and should be specified at time of ordering.

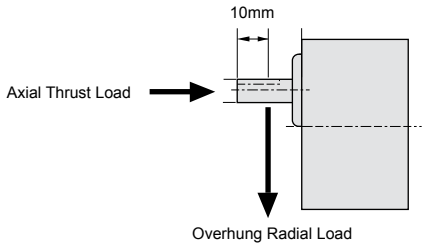
Service Factors

The life-time of the geared motor is determined by several factors including axial/radial load, application type, load conditions and ambient temperature. To ensure that the lifetime of the geared motor is maintained, it is essential that the motor is not overloaded. In addition, depending upon the application type, the following service factors should be applied when determing the suitable motor selection

Load Type	Application Example	Service Factor		
		5 hr/day	8 hr/day	24 hr/day
Constant Running	No Shock Loads Belt Conveyor, Stirrer	0.8	1.0	1.5
Light Impact	Frequenct Start/Stop Indexing Conveyor , CAM	1.2	1.5	2.0
Medium Impact	Frequent Instant Reversing/Stopping, Labelling Machine, Barrier/Gate	1.5	2.0	2.5
Heavy Impact	Instant Stall, Heavy Shock Loads, Punching, Drilling	2.0 - 2.5	2.5 - 3.0	3.0 - 3.5

Gearbox Radial and Axial Load Capacities

The Radial Overhung Load capacity is the amount of bending load can be applied to the geared motor output shaft. This is where the driven mechanism is not independently supported, but applies a force to the shaft bearing, such as chain or belt drive. The figures below relate to a position 10mm from the end of the output shaft. As both radial and axial loading affect the life-time of the geared motor it is essential that these figures are not exceeded.



Gearbox Model	Ratio	Motor Power (W)	Radial Overhung Load (N)	Axial Thrust Load (N)	Bolt Dimensions (mm)
K6G3B - K6G18B	3 - 18	6	50	30	M4 x 50
K6G20B - K6G180B	20 - 180	6	120	30	M4 x 60
K7G3B - K7G18B	3 - 18	15	80	40	M5 x 50
K7G20B - K7G180B	20 - 180	15	150	40	M5 x 65
K8G3B - K8G18B	3 - 18	25	100	50	M5 x 50
K8G20B - K8G180B	20 - 180	25	200	50	M5 x 65
K9G3B - K9G18B	3 - 18	40	250	100	M6 x 65
K9G20B - K9G180B	20 - 180	40	300	100	M6 x 80
K9P3B - K9P9B	3 - 9	60/90	400	150	M6 x 95
K9P3BF - K9P9BF	3 - 9	60/90	400	150	M6 x 25
K9P10B - K9P18B	10 - 18	60/90	450	150	M6 x 95
K9P10BF - K9P18BF	10 - 18	60/90	450	150	M6 x 25
K9P20B - K9P200B	20 - 200	60/90	500	150	M6 x 95
K9P20BF - K9P200BF	20 - 200	60/90	500	150	M6 x 25
K9P3BU-K6 - K9P9BU-K6	3 - 9	60/200	400	150	M6 x 20
K9P3BUF-K6 - K9P9BUF-K6	3 - 9	60/200	400	150	M6 x 20
K9P10BU-K6 - K9P18BU-K6	10 - 18	60/200	400	150	M6 x 20
K9P10BUF-K6 - K9P18BUF-K6	10 - 18	60/200	400	150	M6 x 20
K9P20BU-K6 - K9P200BU-K6	20 - 200	60/200	400	150	M6 x 20
K9P20BUF-K6 - K9P200BUF-K6	20 - 200	60/200	400	150	M6 x 20

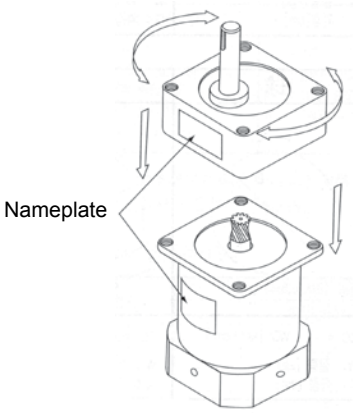
Installation Instructions

The Gapp Automation range of AC Geared Motors are maintenance free, and do not require servicing during the normal life of the product. Fitting and operation should be done in accordance with Gapp Automation's instruction sheet The gearbox has grease lubricated bearings and gears, neither of which require maintenance, provided the product is used in normal working conditions and within the rated specification.

To maximise the life of the motor, it is essential that there is sufficient free flow of air around the product. For motor powers 6 - 40W, these Geared Motors are totally enclosed and are therefore self cooled. The surface temperature of the motor is rated to operate at around 80^{0}C under normal operating conditions. The operator should take care not to touch the surface of the motor or gearbox when it is being operated to avoid scalding. For motor powers of 60W and above it is important that the fan is not covered. When these motor powers are operated at frequencies less than 25Hz, it is recommended that force cooling is used to ensure sufficient levels of cooling are maintained. Contact Gapp Automation for further details.

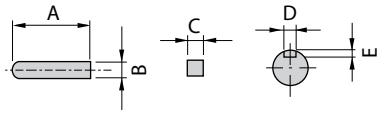
Motor and Gearbox Assembly

When assembling gearboxes to motors it is important that particular care is taken to avoid any possible damage to the motor pinion and input stage of the gearbox. The motor should be held firmly and placed in a vertical direction with the motor shaft facing upwards. The gearbox should then be lowered slowly into position, and turned slightly in the horizontal direction to ensure a smooth meshing of the pinion to the first stage of the gearbox. Under no circumstances should the motor and gearbox quickly come together. Once the motor pinion and gearbiox input stage has been correctly meshed, the gearbox can then be rotated to ensuure alignment of the fixing holes. The fixing bolts can then be inserted. The nuts should be tightened in an opposing diagonal order.



When fitting the geared motor to the application, the output shaft bearing housing can be used as a locating spiggot for mounting the unit. For square gearboxes, the fixing bolts can be used to fix the geared motor directly to the application. In this case, it is important that the motor and gearbox do not separate, which could cause damage to the motor pinion.

Key & Keyway Dimensions & Tolerances



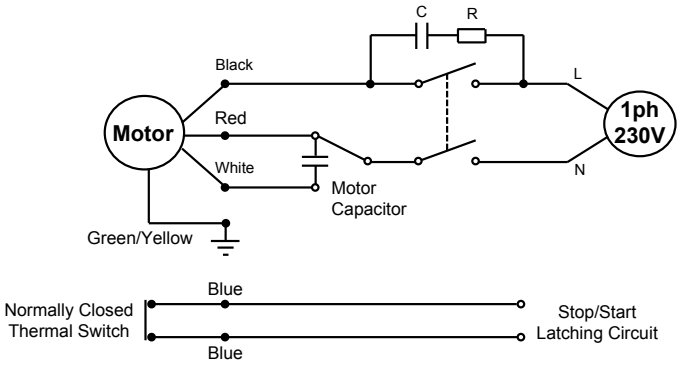
Gearbox Model	Motor Power (W)	Shaft Diameter (mm)	A	B	C	D	E
K6G3B - K6G180B	6	8 h7	D-Cut Shaft				
K7G3B - K7G180B	15	10 h7	25 ± 0.2	$4^{+0.00}_{-0.03}$	$4^{+0.00}_{-0.03}$	$4^{+0.04}_{-0.00}$	$2.5^{+0.10}_{-0.00}$
K8G3B - K8G180B	25	10 h7	25 ± 0.2	$4^{+0.00}_{-0.03}$	$4^{+0.00}_{-0.03}$	$4^{+0.04}_{-0.00}$	$2.5^{+0.10}_{-0.00}$
K9G3B - K9G180B	40	12 h7	25 ± 0.2	$4^{+0.00}_{-0.03}$	$4^{+0.00}_{-0.03}$	$4^{+0.04}_{-0.00}$	$2.5^{+0.10}_{-0.00}$
K9P3B/BF - K9P200B/BF	60-90	15 h7	25 ± 0.2	$5^{+0.00}_{-0.03}$	$5^{+0.00}_{-0.03}$	$5^{+0.04}_{-0.00}$	$3.0^{+0.10}_{-0.00}$
K9P3BU-K6/BUF-K6 K9P200BU-K6/BUF-K6	60-200	18 h7	25 ± 0.2	$6^{+0.00}_{-0.03}$	$6^{+0.00}_{-0.03}$	$6^{+0.04}_{-0.00}$	$3.5^{+0.10}_{-0.00}$

15W and 25W Gearboxes are not in accordance to IEC standards

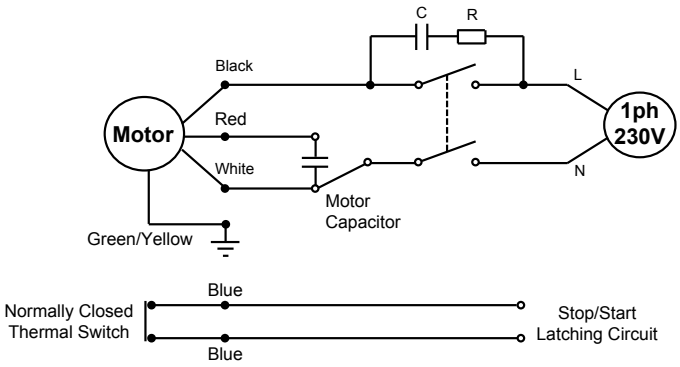
Wiring Diagrams

Single Phase 230V

Clockwise Rotation

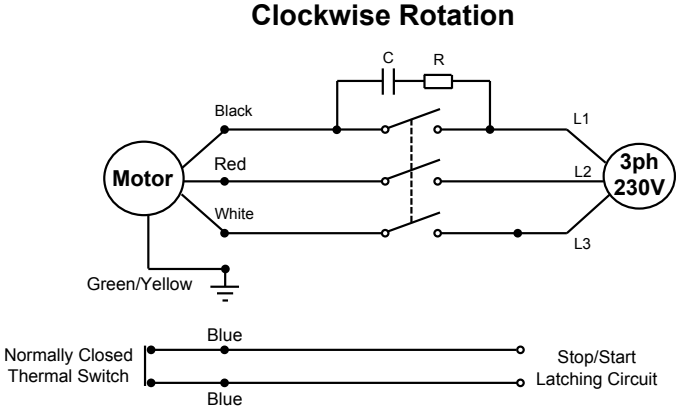


Counter-Clockwise Rotation

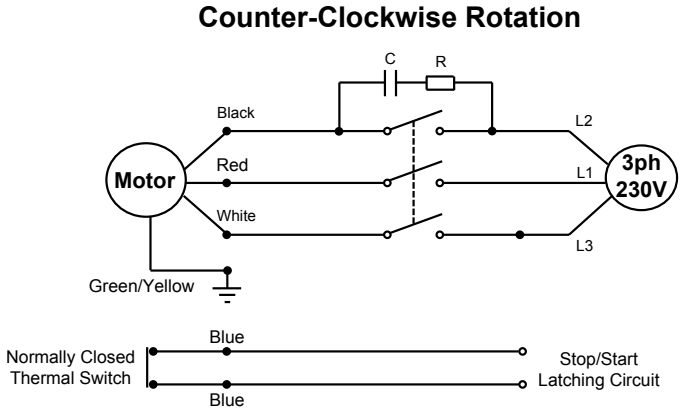


Three Phase 230V

Clockwise Rotation

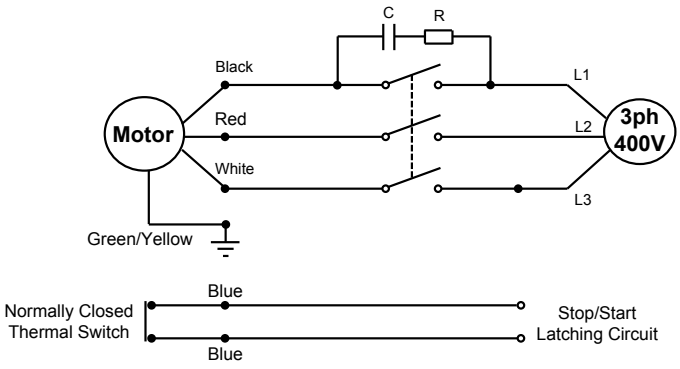


Counter-Clockwise Rotation

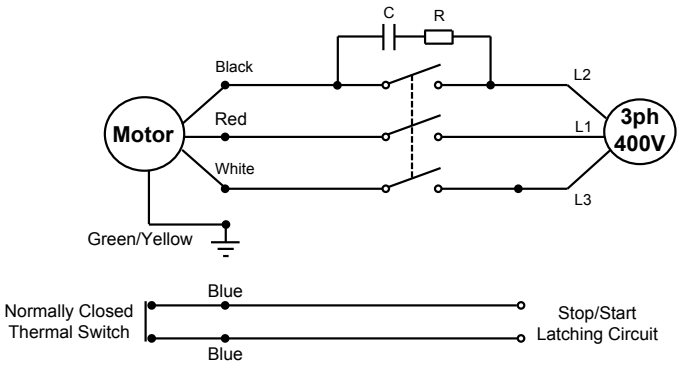


Three Phase 400V

Clockwise Rotation



Counter-Clockwise Rotation



Please Note: output direction of rotation of geared motor depends upon gearbox ratio (number of stages). Please check correct rotation of geared motor prior to installation to avoid any damage to the machine or risk to the user.

Spark Suppression

Item	Details
Contactor	400VAC, 5A minimum (indcutive load)
Resistor	5 - 200 Ohm
Capacitor	0.1 - 0.2uF

Motor Thermal Switch

Gapp Automation geared motors rated from 15W up to 200W are supplied with thermal switches as standard. It is essentail to ensure protection to the motor and to the installation that the motor thernmal switch is connected to the machine's Stop/Start safety circuit. Motors rated to 6W are impedance protected, therefore are not supplied with thermal switches. All motors, when run continuously at rated load, will experience heating up of the motor body. It is advisable that the operator should not touch the motor until it has cooled down.

Model Codes

Motor Coding

K	9	I	P	60	F	C	-	T

Series

K

Motor Type

I	Standard Induction
R	Quick Reversible
D	DC

Power

6	6W
15	15W
25	25W
40	40W
60	60W
90	90W
120	120W
150	150W
180	180W
200	200W

Voltage

C	1ph/230V
H	3ph/230V
V	3ph/400V
M	3ph/380V
Z	3ph/440V
U	1ph/115V
1	12VDC
2	24VDC
3	90VDC
4	180VDC

Frame Size (mm)

6	60 x 60
7	70 x 70
8	80 x 80
9	90 x 90

Motor Shaft

G	Small Pinion (6 - 40W)
P	Large Pinion (60 - 200W)
S	Straight

Motor Cooling

N	Self Cooled
F	Impeller
E	Electric Fan

Specification

	Flying Lead
T5	Terminal Box (Plastic, Rotate)
T6	Terminal Box (Metal, Non-Rotate)
B	Brake Motor
SU	Variable Speed (With Connector)
SP	Variable Speed (Without Connector)

Gearbox Coding

K	9	P	100	B	F	K6

Series

K

Motor Shaft

G	Small Pinion (6 - 40W)
P	Large Pinion (60 - 200W)

Bearing

B	Ball
M	Metal
C	Combination

Specification

K6	6mm Key (U type only)

Frame Size (mm)

6	60 x 60
7	70 x 70
8	80 x 80
9	90 x 90

Ratio

3	3:1
....	.....
200	200:1

Specification

	Square
F	Flanged
U	High Torque

Decimal Gearbox Coding

K	9	P	10	B	X

Series

K

Motor Shaft

G	Small Pinion (6 - 40W)
P	Large Pinion (60 - 200W)

Bearing

B	Ball

Frame Size (mm)

6	60 x 60
7	70 x 70
8	80 x 80
9	90 x 90

Ratio

10	10:1

Specification

X	Decimal Gearbox

Gearbox Ratios Available

Type	Frame (mm)	Power (W)	Gearbox Ratio																						
K6G	60 x 60	6	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	
K7G	70 x 70	15	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	
K8G	80 x 80	25	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	
K9G	90 x 90	40	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	
K9P	90 x 90	60 - 90	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	200
K9P-U	90 x 90	60 - 200	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	200

Models highlighted in green are generally not held in stock, so may be subject to a short leadtime. Please contact Gapp Automation to discuss your requirements.

Other Models

www.ggm.co.kr

Brake Geared Motors

Variable Speed Geared Motors

Variable Speed Controllers

Straight Shafted Motors

Brushless DC Geared Motors

PM DC Geared Motors

Miniature DC Geared Motors

Open Frame Geared Motors

Customised Solutions

gapp automation

Gapp Automation Ltd
6 Kempston Court
Kempston Hardwick
Bedford, MK43 9PQ
Tel: 01234 924324
Fax: 01234 924325
email: info@gapp.co.uk
www.gapp.co.uk