LUYANG

Products Catalogue

LUYANG TECHNOLOGY CO., LTD.

Made in Taiwan

INDEX

We reserve the right to change the product design without prior notice.
Please contact service staff for the latest product specifications.

LUYANG

Established in 1981, we specialize in gearboxes, motors, and controllers. As a leading manufacturer of precision reducers and motors in Taiwan, we leverage over 40 years of R&D and production expertise to enhance our products from design to testing. Our commitment to system management, precise design, stringent processing control, and quality inspection ensures the delivery of optimal products to customers across various sectors including automation, food, warehousing, medical care, agriculture, and daily life.

ABOUT US

1981 The company was established as Luyang Industrial Co., Ltd., specializing in manufacturing motors for the sewing machine sector.

1986 Commenced manufacturing gear motors, primarily distributed in the United States and Japan, garnering positive feedback from customers.

1992 Continue evolving a range of products and transitioning them into medium-sized gearboxes and motors within the automation sector.

1997 Expand factory scale and production lines. Small motors and gearboxes were launched in the same year, garnering significant market interest.

2003 Achieved CE and UL international certifications once more.

2010 Collaborate with American technology to enhance the development of high-efficiency brushless motors for urban small-scale wind power generation.

2011 Officially renamed to Luyang Technology Co., Ltd.

2018 Achieved recertification for ISO9001:2015.

2023 Relocated to Taiwan Central Science Park, a new factory and development and operation center were inaugurated.

Sustainable factory ESG

The factory structure incorporates an eaves design, featuring exterior balconies for planting greenery and rooftop solar panels to decrease indoor temperature and minimize air conditioning usage, cutting down on carbon emissions and ultimately promoting environmental sustainability.
Wide-area solar panels are installed on the roof of the building. The electricity generated is used for plant irrigation and to meet the power needs of offices and factories. Part of the electricity is sold to electric power companies (state-owned enterprises) to optimize the use of renewable energy.

Certification

Acquired international CE and UL certifications, offering high-quality, stable performance products.

※The product series and models with UL certification are different. If you want to order products with UL specifications, please inform the service staff in advance.


DNV·GL

CE Safety Test Documentation Review Statement

Luyang Technology Co., Ltd.


CERTIFICATE OF COMPLIANCE


CERTIFICATE OF COMPLIANCE


SGS

LUYANG Technology Co., Ltd

ISO 9001:2015

IAF

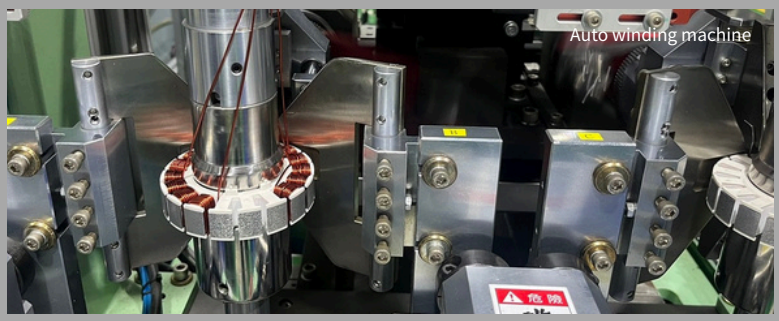
Quality Control

We have achieved ISO 9001:2015 certification and established quality standards for each product. From raw materials to processing and final products, we apply international inspection standards and utilize advanced inspection equipment to perform incoming material inspections, process inspections, and final quality control.

2.5D Image measuring instrument


Motor testing system


Hardness testing machine


Auto winding machine

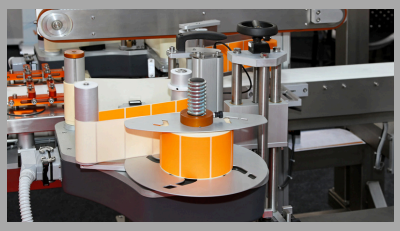
5S

We are committed to promoting 5S (sorting, organizing, shining, standardizing, and sustaining) and introducing it into various aspects such as warehouse management, production management, and personnel management to enhance quality culture and personnel management capabilities and make corporate organizations more efficient.

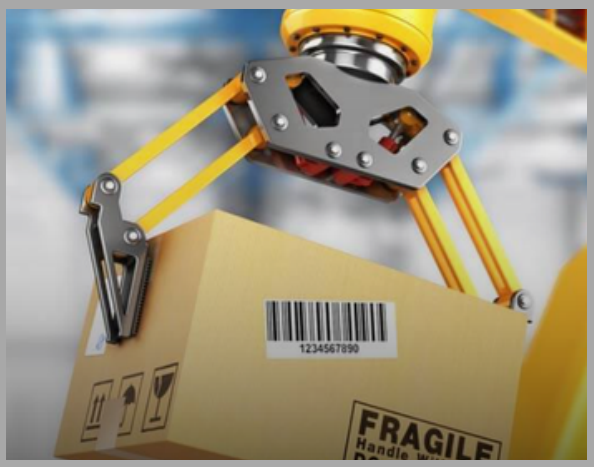
Application

The motor, as the heart of the transmission system, has long become an indispensable part of our daily lives. Our products can be found across a wide range of applications, including automation equipment, food and beverage, packaging, entertainment, healthcare, agriculture, and logistics. At the same time, we continuously upgrade and develop technology to deliver more stable and reliable products. We aspire to provide people with greater convenience and lead the way toward a better future!







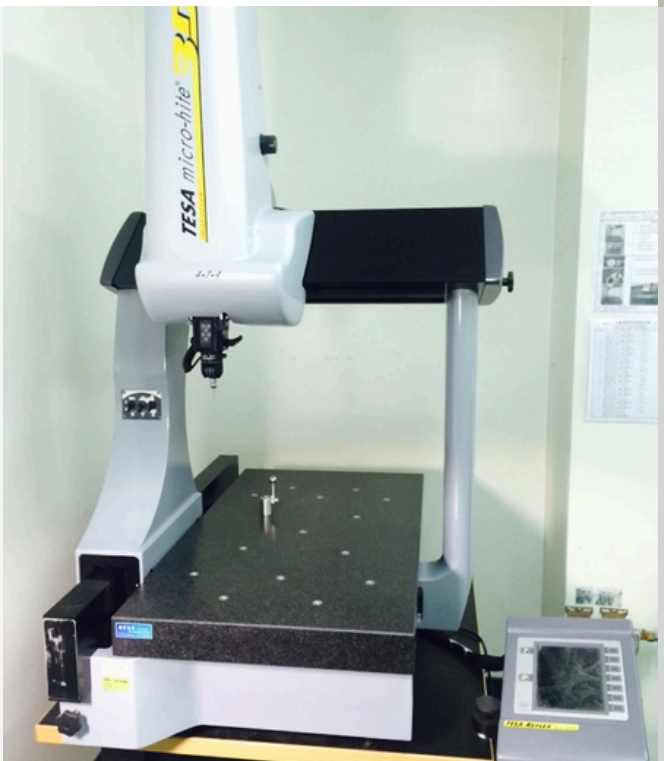




Customization

With a philosophy centered on technology, cost, speed and service, we provide OEM and ODM customization services, tailored to meet customer requirements and support enhance their product advantages.

Since 1981, we have accumulated rich experience in customization. Our products are used in home appliances, electric bicycles, electric wheelchairs, automated industrial products, and health equipment. From design to production, we collaborate closely with our customers to create products that are more user-friendly, delivering a superior experience.

We have a design team for motors, electronics, gears and mechanisms, and use advanced R&D software and equipment to design and develop according to customer needs. After the sample production is completed, product characteristics can be tested and verified, effectively shortening the development time.



3D coordinate measuring machine(CMM)

Induction Motor Standard Specifications

Item	Three-phase Induction Motor	Single-phase Induction Motor
Ingress Protection	IP-23	
Motor Case	Aluminum	
Initialization Mode	Start Directly	Capacitor-start Capacitor-start + Centrifugal Switch
Rated Time	Continuous or Rating 30 mins	
Insulation	Class E	
Environment	Ambient temperature 0°C~40°C (no freeze) Humidity below 85% (freeze prevent)	
Pole	2P, 4P	
Altitude	Below the altitude of 1000m	
Install Environmental Limitation	Should be installed in indoor area. Do not be closed to easy-explosive and flammable place. Avoid illumination, water, oil or other liquids. Avoid continuous vibration or impact. Avoid electromagnetic interference. Not being in the radiate, magnetic or vacuum area.	

Notice for use

1. Must be operated by personnel with appropriate professional qualifications and grounding it. Do not touch the motor with your hands, otherwise it may cause electric shock.
2. Installation, movement, and motor check are prohibited while the motor is electrified. Be sure to cut off the power supply before proceeding, otherwise it may cause fire, electric shock or personal injury.
3. Cut the power off immediately when an abnormal situation happens, or it is possible to get electric shock or hurt, even fire may happen.
4. Cut the power off while power failure, otherwise after power is back on, the human or device could be hurt if the motor starts abruptly.
5. After cutting the power off, do not touch the capacitor terminals within 30 seconds to avoid electric shock caused by residual voltage.
6. Do not overload, otherwise electric shock, personal injury or device damage could happen.
7. Do not touch rotating parts (output shaft, fan, etc...) while the motor is operating.

AC MOTOR
INDUCTION MOTOR

K
Series

AC Voltage

- single phase or three phase AC voltage input

Various specification options

- IK Motor
- RK Motor
- Single Phase Speed Control Motor
- Brake Motor
- The gearbox is compatible.

Small size and easy installation

INDICATION OF MOTOR

4 IK 25 GN - A M

DIMENSION	TUPE	OUTPUT	MOTOR SHAFT	VOLTABE& POLES	ACCESSORY
2:60mm 3:70mm 4:80mm 5:90mm	IK:Induction RK:Reversible	6:6W 15:15W 25:25W 40:40W 60:60W 90:90W 120:120W 150:150W	A:Round shaft A(K):Round shaft with keyway(40W above) AK:Worm gear shaft GN:Helical gear shaft(under 40W) GU:Helical gear shaft(60W above) GA:Alloy worm(40~90W) GS:Clutch brake(40~150W)	4 Pole A0:1ø100V A:1ø110V C0:1ø200V C:1ø220V CE:1ø220~240V(50Hz) S:3ø220V U:3ø380V S3:3ø220/380V 2 Pole B:1ø110V (2P) D:1ø220V (2P)	F:Fan(60W above is equipped) M:Power off brake T:Terminal box(55x55) FF:Forced fan(40W above optional)

RK reversible: Rated duration 30 minutes. Suitable for more frequent forward and reverse applications.

Add "R" in front of the motor shaft code to indicated a speed control motor used with SS controller.

INDICATION OF GEARBOX

4 GN 100 K

DIMENSION	TYPE	RATIO	BEARING TYPE
2:60mm 3:70mm 4:80mm 5:90mm	GN:Helical gear shaft under 40W GU:Helical gear shaft 60W above GA:Alloy worm(40-90W)	100:1/100 10XK:Decimal type	GN: K: Square flange + ball bearing (Standard) GU: K: Ear flange + ball bearing KB: Square flange + ball bearing (Standard)

Please refer to the table on page 24 for the ratios.

INDICATION OF ASSEMBLED SPEED CONTROL MOTOR

M 5 40 - 4 0 1 FF - A(K)

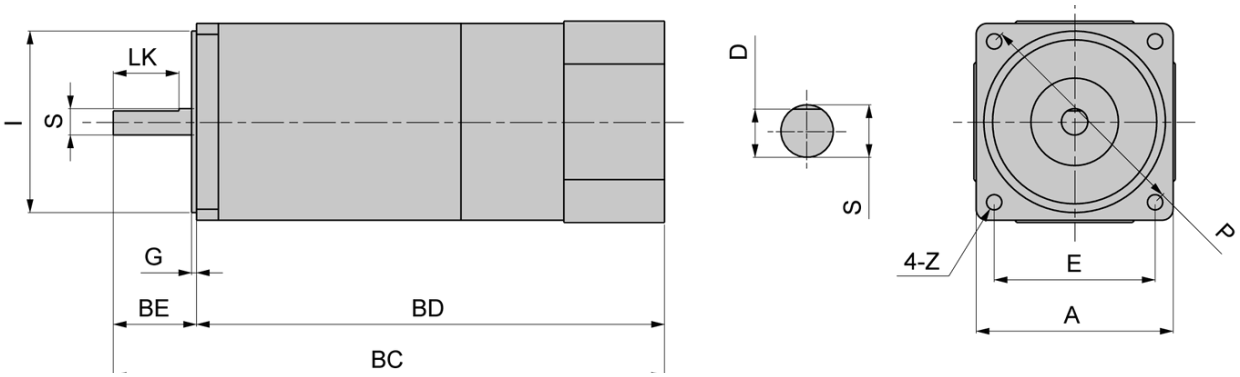
MODEL	DIMENSION	OUTPUT	SHAFT	TYPE	VOLTAGE	ACCESSORY	OTHERS
M:Speed Control Motor	2:60mm 3:70mm 4:80mm 5:90mm	6:6W 15:15W 25:25W 40:40W 60:60W 90:90W 120:120W 150:150W	0:Round Shaft 4:GN 5:GU 6:GS 7:GA	0:Induction 1:Reversible	1:1ø110V 2:1ø220V 2E:1ø220~240V/50Hz	F:Fan (60W above is equipped) M:Power off brake FF:Forced fan	A(K):Round shaft with keyway(40W above) AK:Worm gear shaft (25W above)

RK reversible: Rated duration 30 minutes. Suitable for more frequent forward and reverse applications.

※RK: 30 mins rated time limited.
※The speed control motor does not included a controller, which needs to be purchased separately.
※Please contact us while the motor is running under the low temperature enviroment.

IK INDUCTION MOTOR

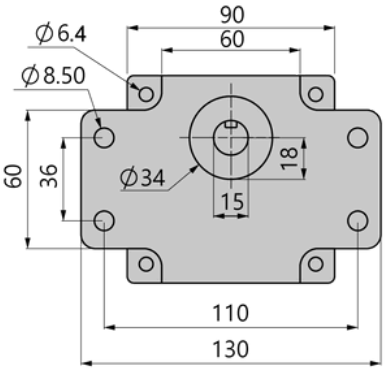
IK motor is suitable for applications that require continuous operation in one direction.

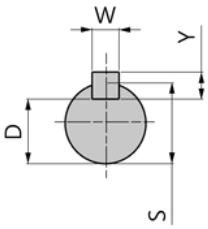


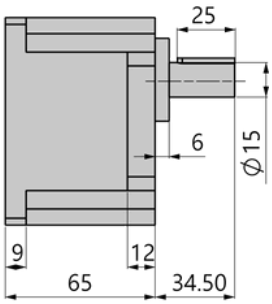
DIMENSION(mm)

MODEL	OUTPUT (W)	A	BC	BD	BE	I	G	P	Z	E	SHAFT			WEIGHT (KG)
											LK	S	D	
2	6W	60	100	76	24	54	2.2	70	5	49.5	18	6	5.2	0.8
3	15W	70	112	80	32	64	2.2	82	6	58	25	6	5.2	1.1
4	25W	80	118	86	32	73	2.2	94	7	66.5	25	8	7	1.5
	40W	90	142	106	36	83	2.2	104	7	73.6	30	10	9	2.4
	60W	90	161	125	36	83	2.2	104	7	73.6	30	12	11	2.5
5	90W	90	184	148	36	83	2.2	104	7	73.6	30	12	11	3.3
	120W	90	184	148	36	83	2.2	104	7	73.6	30	12	11	3.3
	150W	90	184	148	36	83	2.2	104	7	73.6	30	12	11	3.3

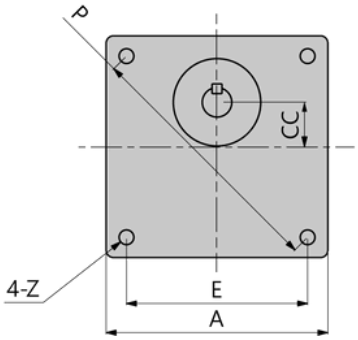
GEARBOX

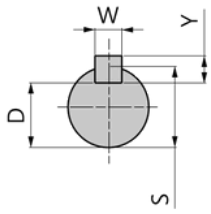


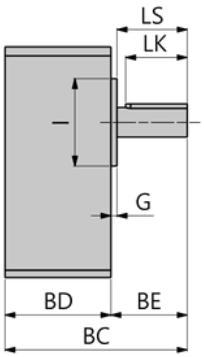




Ear Flange(GU type only)







Square Flange

DIMENSION(mm)

MODEL	OUTPUT (W)	RATIO	A	BC	BD	BE	CC	I	G	P	Z	E	OUTPUT SHAFT				WEIGHT (KG)
													LS	S	D	WxYxLK	
2	6W (GN)	3~18 20~180	60	64 74	32 42	32	10	18	4.5	70	4.4	49.5	27.5	8	7	--	0.34 0.39
3	15W (GN)	3~18 20~180	70	64 74	32 42	32	15	30	3	82	5.5	58	29	10	7.5	4x4x25	0.52 0.58
4	25W (GN)	3~18 20~180	80	68 82	36 50	32	15	34	2.5	94	5.5	66.5	29.5	10	7.5	4x4x25	0.66 0.81
5	40W (GN)	3~18 20~180	90	75 91	43 59	32	18	34	3	104	6.4	73.6	29	12	9.5	4x4x25	1.2 1.4
	60W (GN)	3~18 20~180	90	75 91	43 59	32	18	34	3	104	6.4	73.6	29	12	9.5	4x4x25	1.2 1.4
	60W (GU)	3~18 20~180	90	101	65	36	18	34	6	104	6.4	73.6	30	15	12	5x5x25	1.2 1.4
	90W (GU)	3~18 20~180	90	101	65	36	18	34	6	104	6.4	73.6	30	15	12	5x5x25	1.2 1.4
	120W (GU)	3~18 20~180	90	101	65	36	18	34	6	104	6.4	73.6	30	15	12	5x5x25	1.2 1.4
	150W (GU)	3~18 20~180	90	101	65	36	18	34	6	104	6.4	73.6	30	15	12	5x5x25	1.2 1.4

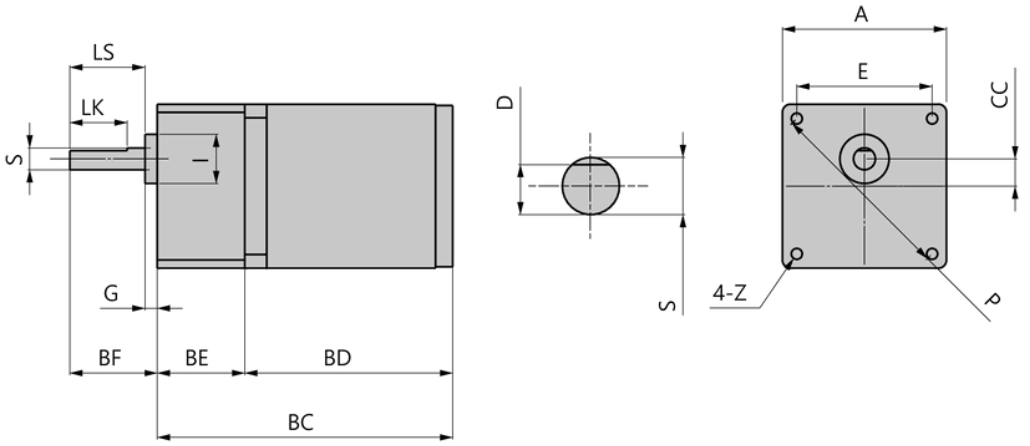
MOTOR WITH GEARBOX

DIMENSION(mm)

MODEL	OUTPUT (W)	RATIO	A	BC	BE	BD	BF	CC	I	G	P	Z	E	OUTPUT SHAFT			
														LS	S	D	WxYxLK
2	6W (GN)	3~18 20~180	60	108 118	32 42	76	32	10	18	4.5	70	4.4	49.5	27.5	8	7	--
3	15W (GN)	3~18 20~180	70	112 122	32 42	80	32	15	30	3	82	5.5	58	29	10	7.5	4x4x25
4	25W (GN)	3~18 20~180	80	122 136	36 50	86	32	15	34	2.5	94	5.5	66.5	29.5	10	7.5	4x4x25
5	40W (GN)	3~18 20~180	90	149 165	43 59	106	32	18	34	2.5	104	6.4	73.6	29.5	12	9.5	4x4x25
	60W (GN)	3~18 20~180	90	168 184	43 59	125	32	18	34	2.5	104	6.4	73.6	29.5	12	9.5	4x4x25
5	60W (GU)	3~180	90	190	65	125	36	18	34	6	104	6.4	73.6	30	15	12	5x5x25
	90W (GU)	3~180	90	213	65	148	36	18	34	6	104	6.4	73.6	30	15	12	5x5x25
	120W (GU)	3~180	90	213	65	148	36	18	34	6	104	6.4	73.6	30	15	12	5x5x25
	150W (GU)	3~180	90	213	65	148	36	18	34	6	104	6.4	73.6	30	15	12	5x5x25

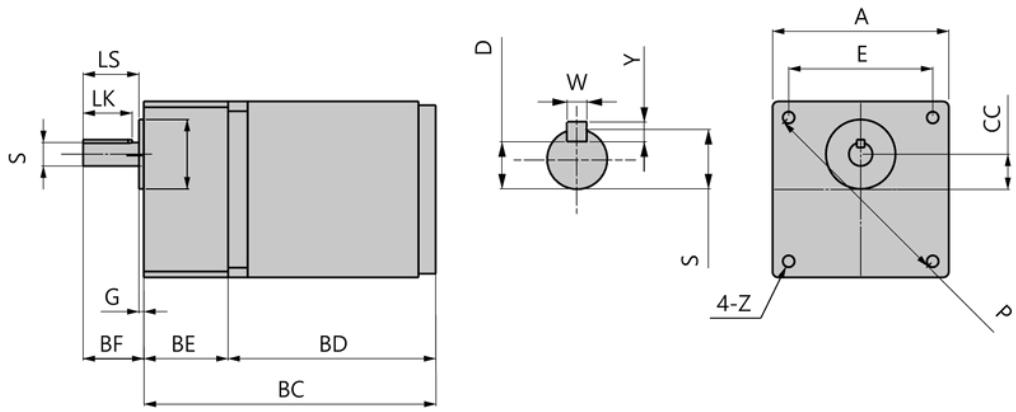
※RK:30 mins rated time limited.

6W



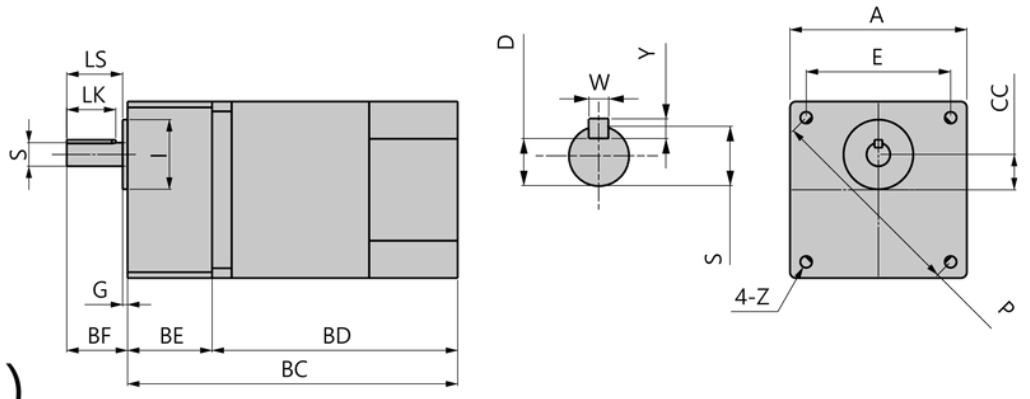
(Output shaft standard specifications: Milling)

15W-40W



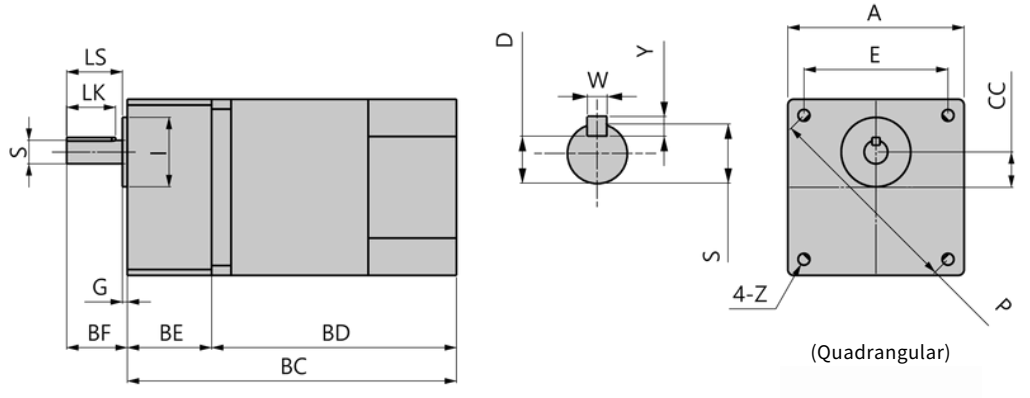
(Output shaft standard specifications: Keyway)

60W (GN)



(Output shaft standard specifications: Keyway)

60W(GU)-150W

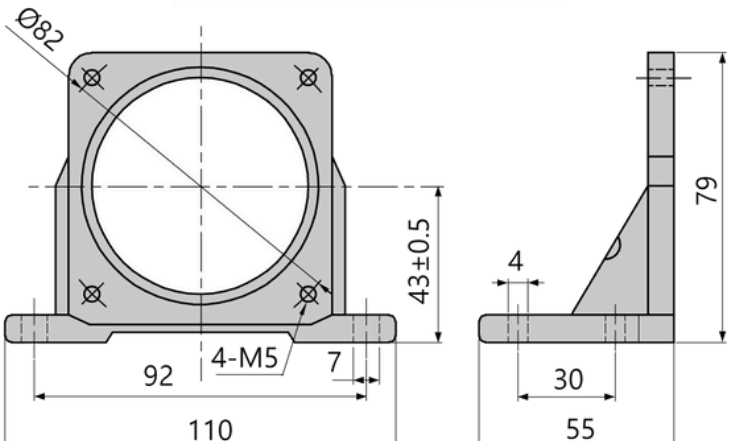


(Quadrangular)

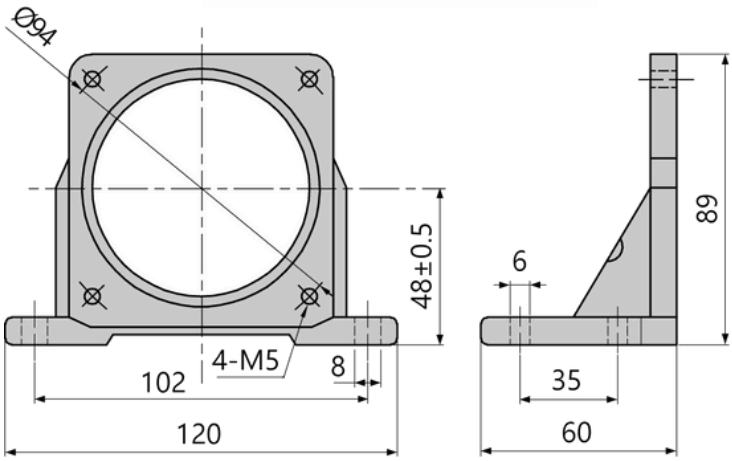
(Output shaft standard specifications: Keyway)

L BRACKET STAND

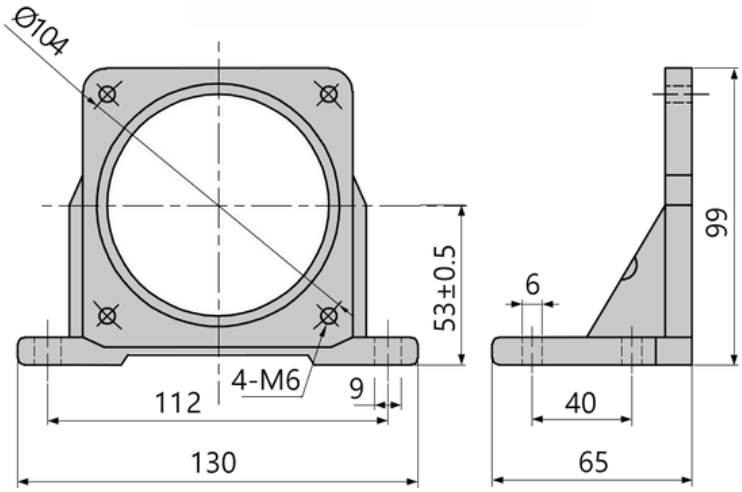
Model: 3L
(For 70mm frame)



Model: 4L
(For 80mm frame)



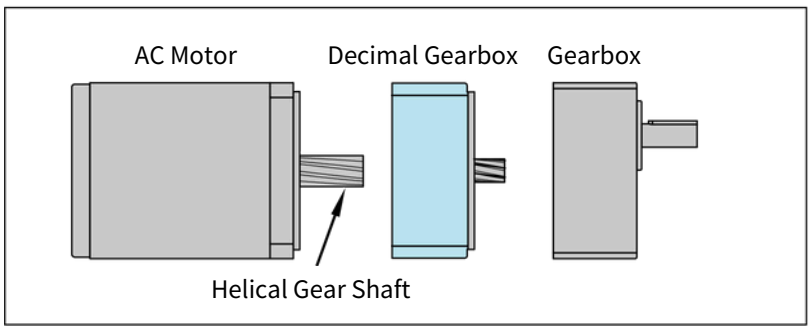
Model: 5L
(For 90mm frame)

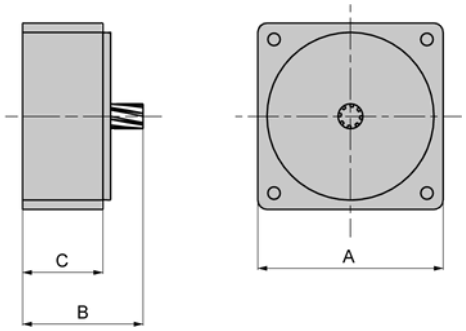


DECIMAL GEARBOX

Reduction Ratio 1:10

If gearbox cannot provide enough ratio, decimal gear box could be consdered to add one or more gearboxes to get preferable ratio.





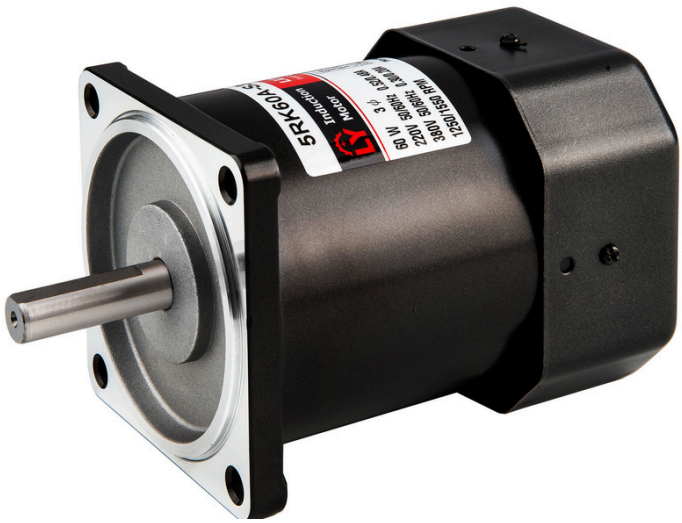
SPECIFICATION

ITEM	STANDARD SPECIFICATION
Ratio	1 : 10
Frame Model	2、3、4、5

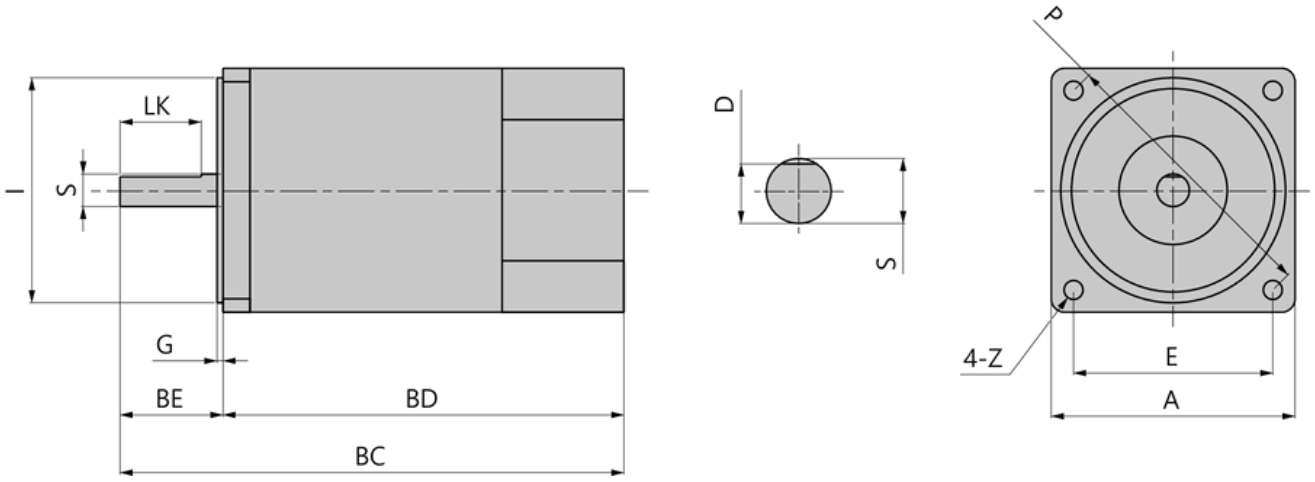
DIMENSION(mm)

MODEL	OUTPUT(W)	A	B	C
2	6W	60	39	26
3	15W	70	39	26
4	25W	80	39	26
5	GN 40W~60W GU 60W~150W	90 90	59 59	40 40

RK REVERSIBLE MOTOR (Simple Brake)



RK motor (reversible motor) is suitable for application of reversing its direction repeatedly.
(30 mins rated time limited)



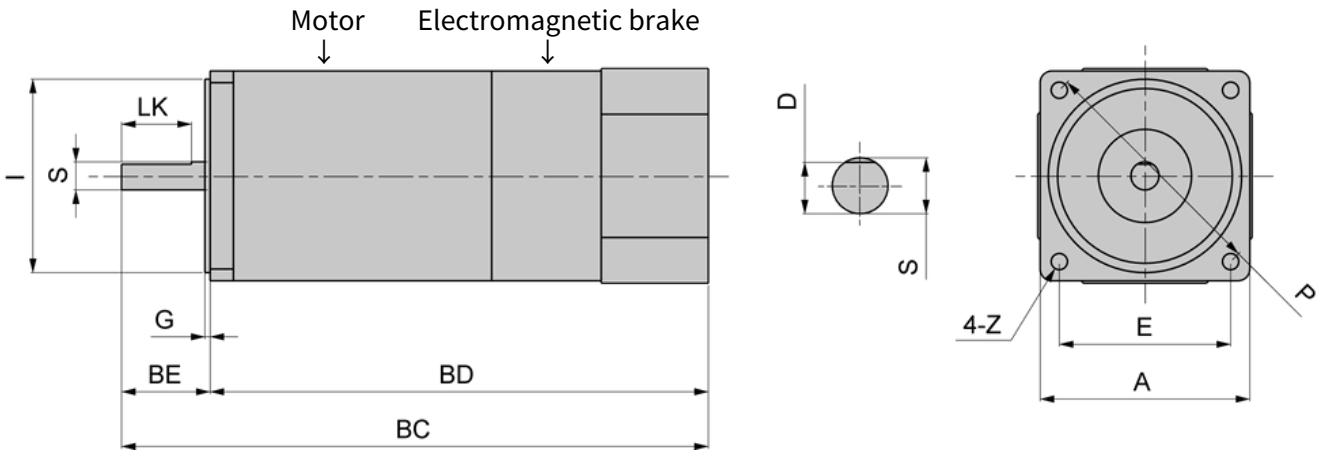
DIMENSION(mm)

MODEL	OUTPUT (W)	A	BC	BD	BE	I	G	P	Z	E	SHAFT			WEIGHT (KG)
											LK	S	D	
2	6W	60	100	76	24	54	2.2	70	5	49.5	18	6	5.2	0.8
3	15W	70	112	80	32	64	2.2	82	6	58	25	6	5.2	1.1
4	25W	80	118	86	32	73	2.2	94	7	66.5	25	8	7	1.5
	40W	90	142	106	36	83	2.2	104	7	73.6	30	10	9	2.4
	60W	90	161	125	36	83	2.2	104	7	73.6	30	12	11	2.5
5	90W	90	184	148	36	83	2.2	104	7	73.6	30	12	11	3.3
	120W	90	184	148	36	83	2.2	104	7	73.6	30	12	11	3.3
	150W	90	184	148	36	83	2.2	104	7	73.6	30	12	11	3.3

※RK:30 mins rated time limited.

BRAKE MOTOR

With positioning holding function, the motor will stop instantly when power is cut off and has load holding force.
Suitable for vertical lifting or immediate stop mechanism.



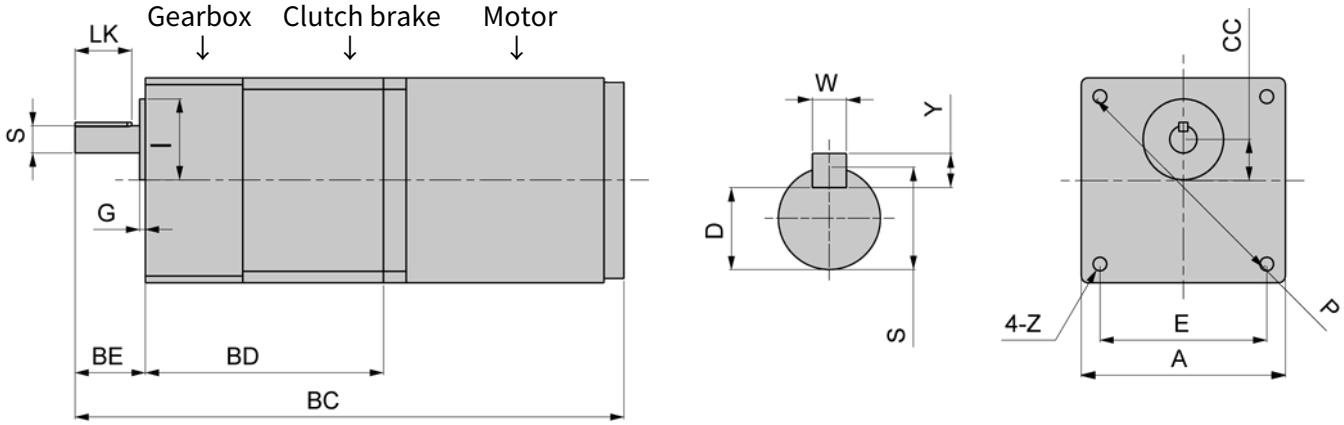
DIMENSION(mm)

MODEL	OUTPUT (W)	A	BC	BD	BE	I	G	P	Z	E	SHAFT			WEIGHT (KG)
											LK	S	D	
2	6W	60	152.5	128.5	24	54	2.2	70	5	49.5	18	6	5.2	1
3	15W	70	164.2	132.2	32	64	2.2	82	6	58	25	6	5.2	1.5
4	25W	80	169.2	137.2	32	73	2.2	94	7	66.5	25	8	7	2
	40W	90	198.5	162.5	36	83	2.2	104	7	73.6	30	10	9	3
	60W	90	224.5	188.5	36	83	2.2	104	7	73.6	30	12	11	3.3
5	90W	90	249.9	213.9	36	83	2.2	104	7	73.6	30	12	11	4
	120W	90	249.9	213.9	36	83	2.2	104	7	73.6	30	12	11	4
	150W	90	249.9	213.9	36	83	2.2	104	7	73.6	30	12	11	4

※RK: 30 mins rated time limited.

CLUTCH BRAKE MOTOR

The positioning is more precise and suitable for high-frequency start/stop mechanisms.

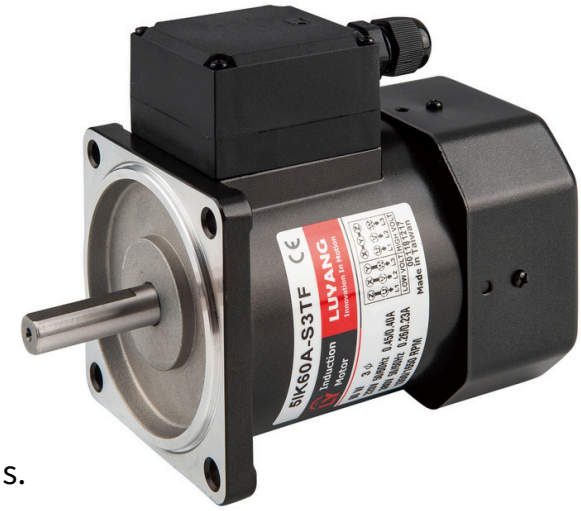


DIMEMSION(mm)

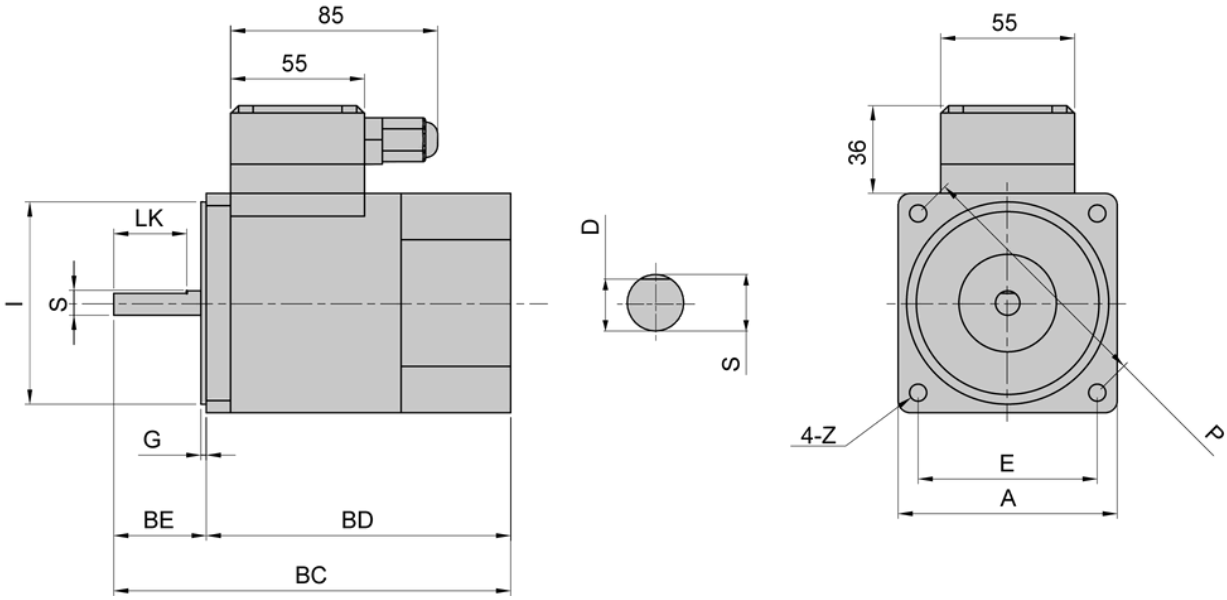
MODEL	OUTPUT (W)		A	BC	BD	BE	I	G	P	Z	E	CC	SHAFT			WEIGHT (KG)
													S	D	WxYxLK	
5	40W (GN)	3~18R	90	243	105	32	34	2.2	104	6.4	73.6	18	12	9.5	4x4x25	5.52
		20~180R	90	259	121	32	34	2.2	104	6.4	73.6	18	12	9.5	4x4x25	5.54
	60W (GN)	3~18R	90	262	105	32	34	2.2	104	6.4	73.6	18	12	9.5	4x4x25	5.52
		20~180R	90	278	121	32	34	2.2	104	6.4	73.6	18	12	9.5	4x4x25	5.54
	60W(GU)		90	284	127	36	34	6	104	6.4	73.6	18	15	12	5x5x25	5.54
	90W(GU)		90	312	127	36	34	6	104	6.4	73.6	18	15	12	5x5x25	6.39
	120W(GU)		90	312	127	36	34	6	104	6.4	73.6	18	15	12	5x5x25	6.39
	150W(GU)		90	312	127	36	34	6	104	6.4	73.6	18	15	12	5x5x25	6.39

※RK: 30 mins rated time limited.

MOTOR WITH TERMINAL BOX



Terminal box meets European safety standards.



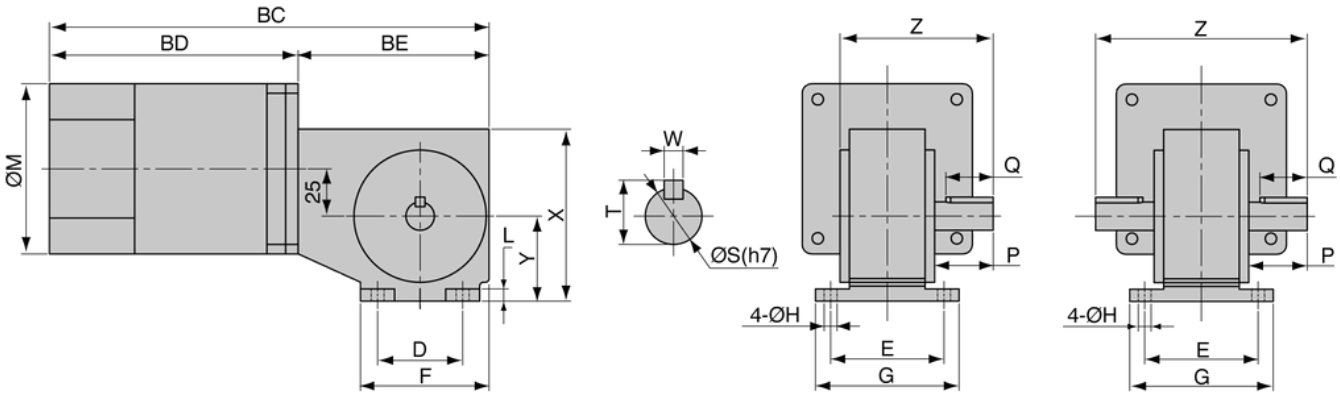
DIMENSION(mm)

MODEL	OUTPUT (W)	A	BC	BD	BE	I	G	P	Z	E	SHAFT			WEIGHT (KG)
											LK	S	D	
2	6W	60	100	76	24	54	2.2	70	5	49.5	18	6	5.2	1.02
3	15W	70	112	80	32	64	2.2	82	6	58	25	6	5.2	1.38
4	25W	80	118	86	32	73	2.2	94	7	66.5	25	8	7	1.6
	40W	90	142	106	36	83	2.2	104	7	73.6	30	10	9	2.78
	60W	90	161	125	36	83	2.2	104	7	73.6	30	12	11	2.78
5	90W	90	184	148	36	83	2.2	104	7	73.6	30	12	11	3.65
	120W	90	184	148	36	83	2.2	104	7	73.6	30	12	11	3.65
	150W	90	184	148	36	83	2.2	104	7	73.6	30	12	11	3.65

※RK: 30 mins rated time limited.

ALLOY WORM MOTOR

L D R



DIMENSION(mm)

OUTPUT (W)	BC	BD	BE	D	E	F	G	H	L	M	X	Y	DIRECTION Z L	DIRECTION Z R	DIRECTION Z D	OUTPUT SHAFT P	OUTPUT SHAFT Q	OUTPUT SHAFT W	OUTPUT SHAFT S	OUTPUT SHAFT T
40W	214	113	101	45	60	68	76	6.8	6.5	90	91	45	81	81	112	31	25	5	15	17
60W	233	132	101	45	60	68	76	6.8	6.5	90	91	45	81	81	112	31	25	5	15	17
90W	256	155	101	45	60	68	76	6.8	6.5	90	91	45	81	81	112	31	25	5	15	17

SPECIFICATION

Ratio	5、10、15、20、30、40、50、60 etc. (90W ratio 30 above only for light loading)
Maintenance	R25 above : 50Kgcm
Over-Hanging Load	40W、60W Model : 40Kg (10cm from output shaft)
Thrust Load	40、60、90 Model : 15Kg (But without adding the axial direction, such as the impact force of driving a parallel key)
Install Environment	Ambient Temperature : 0°C~+40°C Ambient Humidity : below85% (No Mist)
Direction of Output Shaft	R : Right side ; L : Left side ; D : Double shafts

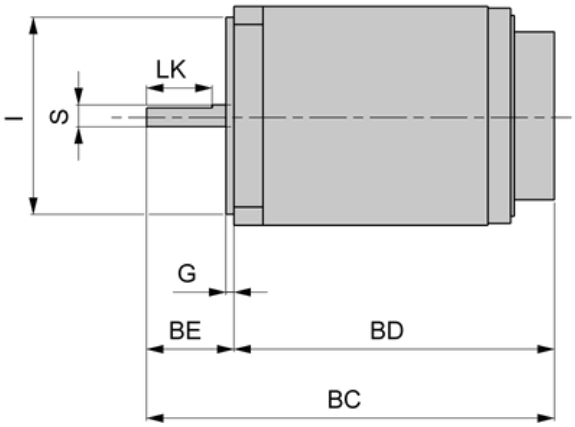
※The gear transmission efficiency of this product is 50%.
※RK:30 mins rated time limited.

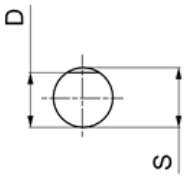
SPEED CONTROL MOTOR

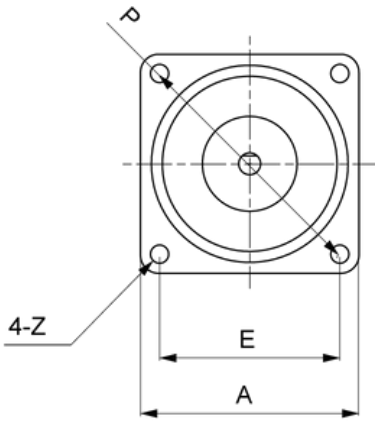
A stepless transmission system, suitable for speed control of single-phase motors.

Speed control range:
50Hz: 90~1350 rpm/min
60Hz: 90~1600 rpm/min

Note1: Speed control range is restricted to no-loading circumstances.
Note2: Three-phase motor is requested to corporate with inverter.







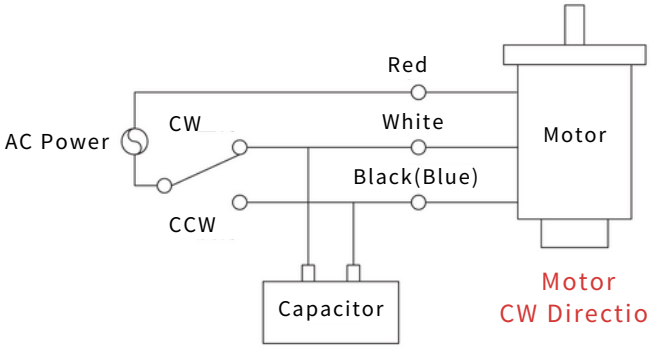
DIMENSION(mm)

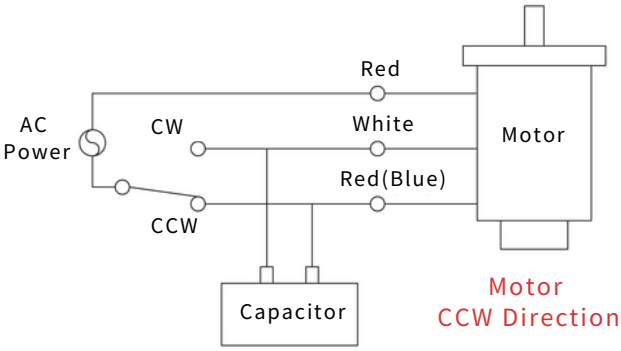
MODEL	OUTPUT (W)	A	BC	BD	BE	I	G	P	Z	E	SHAFT			WEIGHT (KG)
											LK	S	D	
2	6W	60	112	88	24	54	2.2	70	5	49.5	18	6	5.2	0.9
3	15W	70	124	92	32	64	2.2	82	6	58	25	6	5.2	1.6
4	25W	80	130	98	32	73	2.2	94	7	66.5	25	8	7	2.5
	40W	90	154	118	36	83	2.2	104	7	73.6	30	10	9	2.6
	60W	90	173	137	36	83	2.2	104	7	73.6	30	12	11	3.4
5	90W	90	198	162	36	83	2.2	104	7	73.6	30	12	11	3.4
	120W	90	198	162	36	83	2.2	104	7	73.6	30	12	11	3.4
	150W	90	198	162	36	83	2.2	104	7	73.6	30	12	11	3.4

※RK:30 mins rated time limited.

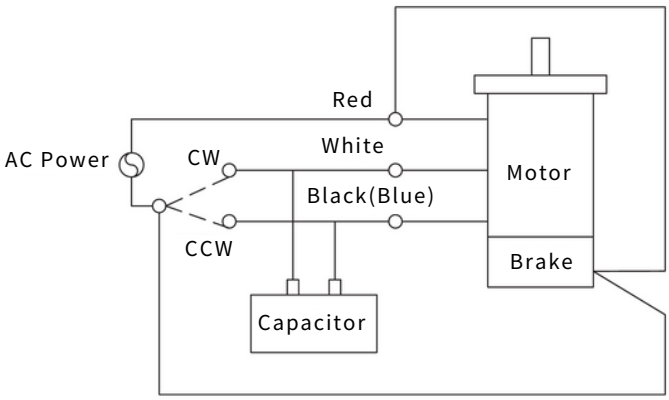
WIRE DRAWING - K SERIES

WIRE DRAWING OF SINGLE-PHASE MOTOR



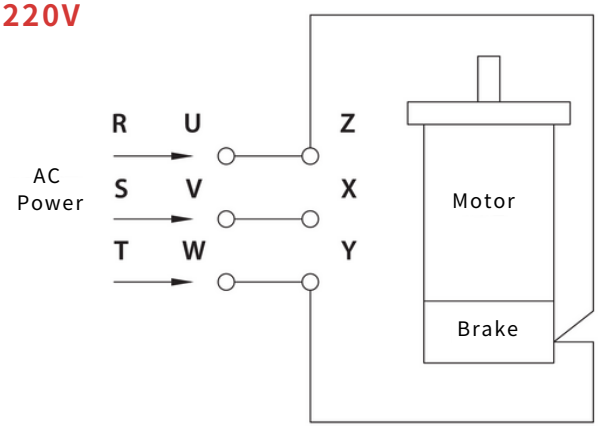


WIRE DRAWING OF SINGLE-PHASE BRAKE MOTOR

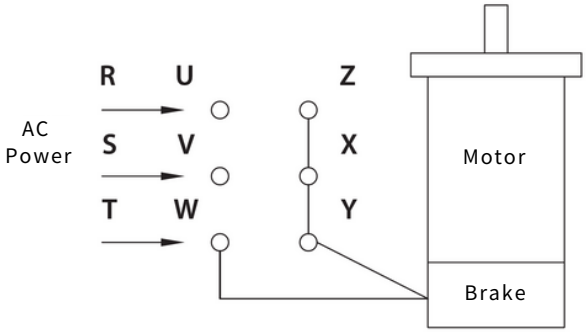


WIRE DRAWING OF 3-PHASE BRAKE MOTOR(6 WIRES)

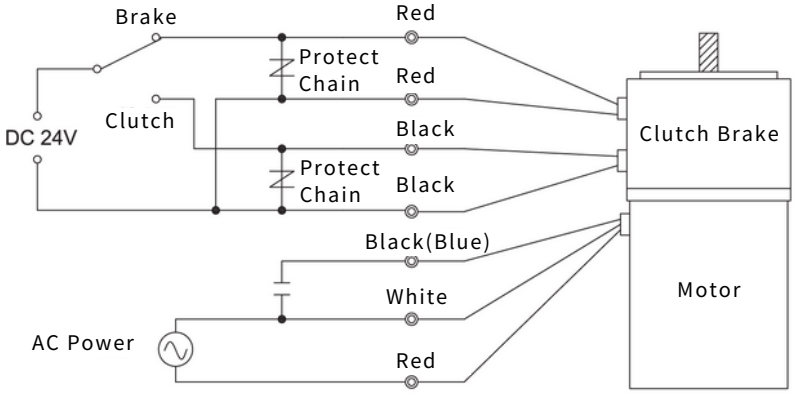
220V



380V



WIRE DRAWING OF CLUTCH-BRAKE MOTOR



PERMISSIBLE TORQUE OF GEAR MOTOR

50Hz MAXIMUM TORQUE (Kg • cm)

OUTPUT (W)	RATIO (R)	3	5	6	7.5	9	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180
	rpm	500	300	250	200	166	120	100	83	75	60	50	42	30	25	20	17	15	12.5	10	8.3
6W		1.2	1.9	2.3	2.9	3.4	4.7	5.7	6.8	7.6	9.3	11	13	16	20	24	30	30	30	30	30
15W		3.0	4.7	5.7	7.1	8.5	11.8	14.2	18	20	23	28	33	46	50	50	50	50	50	50	50
25W		5.0	7.8	9.4	11.8	14.1	19.6	23	28	31	38	46	55	76	80	80	80	80	80	80	80
40W	Torque (T)	7.3	12	14.7	18	22	30	36	43	48	54	65	77	100	100	100	100	100	100	100	100
60W		12	19	22	28	34	48	55	62	69	82	98	118	164	196	200	200	200	200	200	200
90W		17	28	34	43	51	67	80	96	107	125	150	178	200	200	200	200	200	200	200	200
120W		24	40	48	60	71	89	107	129	143	162	194	200	200	200	200	200	200	200	200	200
150W		34	57	67	83	98	118	143	173	192	200	200	200	200	200	200	200	200	200	200	200

60Hz MAXIMUM TORQUE (Kg • cm)

OUTPUT (W)	RATIO (R)	3	5	6	7.5	9	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180
	rpm	600	360	300	240	200	144	120	100	90	72	60	50	36	30	24	20	18	15	12	10
6W		1.0	1.5	1.8	2.3	2.8	3.9	4.7	5.6	6.2	7.0	8.3	10	13.8	16	20	24	30	30	30	30
15W		2.6	3.9	4.7	5.8	7.0	9.8	11.8	15	17	19	23	27.6	38.4	46	50	50	50	50	50	50
25W		4.1	6.3	7.6	9.5	11.4	16	19	23	26	31	37	45	62	75	80	80	80	80	80	80
40W	Torque (T)	6.3	10	12	15	19	26	30	37	41	45	54	65	90	100	100	100	100	100	100	100
60W		10	16	19	24	28	40	47	55	61	69	83	100	138	160	175	200	200	200	200	200
90W		14	24	28	35	42	60	70	80	89	103	124	149	200	200	200	200	200	200	200	200
120W		19	30	37	46	55	70	83	100	129	125	150	180	200	200	200	200	200	200	200	200
150W		26	39	48	60	72	82	98	125	138	150	180	200	200	200	200	200	200	200	200	200

MOTOR SPECIFICATION - K SERIES(IK)

*The following values are subject to change without prior notice.

MODEL ROUND SHAFT	MODEL SHAFT	OUTPUT (W)	VOLTAGE (V)	POLE (P)	FREQUENCY (Hz)	STARTING TORQUE (Kg cm)	RATED TORQUE (Kg.cm)	RATED CURRENT (A)	RATED RPM (r/min)	CAPACITOR (μF)
2IK6A-A	2IK6GN-A	6	1ø110	4	60	0.54	0.36	0.24	1600	3(250V)
2IK6A-C	2IK6GN-C		1ø220	4	50 60	0.51 0.53	0.46 0.36	0.12 0.12	1250 1600	0.8(450V)
3IK15A-A	3IK15GN-A	15	1ø 110	4	60	0.92	0.91	0.31	1600	4.5(250V)
3IK15A-C	3IK15GN-C		1ø 220	4	50 60	1.19 1.01	1.17 0.91	0.19 0.16	1250 1600	1.2(450V)
3IK15A-S	3IK15A-S	15	3ø 220	4	50 60	2.20 1.80	1.19 0.99	0.14 0.12	1250 1450	--
3IK15A-U	3IK15A-U		3ø 380	4	50 60	2.20 1.80	1.19 0.99	0.08 0.07	1250 1450	--
4IK25A-A	4IK25GN-A	25	1ø 110	4	60	1.28	1.47	0.47	1650	6(250V)
4IK25A-C	4IK25GN-C		1ø 220	4	50 60	1.23 1.28	1.80 1.47	0.28 0.22	1350 1650	1.5(450V)
4IK25A-S	4IK25GN-S	25	3ø 220	4	50 60	6.13 4.93	1.80 1.47	0.28 0.23	1350 1650	--
4IK25A-U	4IK25GN-U		3ø 380	4	50 60	6.23 4.94	1.80 1.47	0.16 0.13	1350 1650	--
5IK40A-A	5IK40GN-A	40	1ø 110	4	60	1.78	2.36	0.63	1650	10(250V)
5IK40A-C	5IK40GN-C		1ø 220	4	50 60	1.99 2.05	2.89 2.36	0.33 0.30	1350 1650	2.5(450V)
5IK40A-S	5IK40GN-S	40	3ø 220	4	50 60	12.13 9.43	2.89 2.36	0.33 0.28	1350 1650	--
5IK40A-U	5IK40GN-U		3ø 380	4	50 60	12.33 9.28	2.89 2.36	0.19 0.16	1350 1650	--
5IK60A-A	5IK60(GN-GU)-A	60	1ø 110	4	60	2.88	3.54	0.95	1650	14(250V)
5IK60A-C	5IK60(GN-GU)-C		1ø 220	4	50 60	2.79 2.89	4.33 3.54	0.55 0.45	1350 1650	3.5(450V)
5IK60A-S	5IK60(GN-GU)-S	60	3ø 220	4	50 60	15.63 12.09	4.33 3.54	0.45 0.40	1350 1650	--
5IK60A-U	5IK60(GN-GU)-U		3ø 380	4	50 60	15.77 12.40	4.33 3.54	0.26 0.23	1350 1650	--
5IK90A-A	5IK90GU-A	90	1ø 110	4	60	4.56	5.32	1.35	1650	22(250V)
5IK90A-C	5IK90GU-C		1ø 220	4	50 60	4.01 4.04	6.50 5.32	0.67 0.65	1350 1650	5(450V)
5IK90A-S	5IK90GU-S	90	3ø 220	4	50 60	19.73 15.13	6.50 5.32	0.66 0.55	1350 1650	--
5IK90A-U	5IK90GU-U		3ø 380	4	50 60	19.95 15.73	6.50 5.32	0.38 0.32	1350 1650	--
5IK120A-A	5IK120GU-A	120	1ø 110	4	60	4.91	7.09	1.78	1650	25(250V)
5IK120A-C	5IK120GU-C		1ø 220	4	50 60	5.28 5.11	8.67 7.09	0.86 0.87	1350 1650	6(450V)
5IK120A-S	5IK120GU-S	120	3ø 220	4	50 60	26.56 20.16	8.67 7.09	0.76 0.68	1350 1650	--
51K120A-U	51K120GU-U		3ø 380	4	50 60	26.45 20.53	8.67 7.09	0.44 0.39	1350 1650	--
51K150A-A	5IK150GU-A	150	1ø 110	4	60	7.06	8.86	2.13	1650	30(250V)
5IK150A-C	5IK150GU-C		1ø 220	4	50 60	6.13 6.60	10.84 8.86	1.06 1.10	1350 1650	8(450V)
5IK150A-S	5IK150GU-S	150	3ø 220	4	50 60	34.31 22.94	10.84 8.86	0.94 0.81	1350 1650	--
5IK150A-U	5IK150GU-U		3ø 380	4	50 60	31.21 24.24	11.84 8.86	0.54 0.47	1350 1650	--

MOTOR SPECIFICATION - K SERIES(RK)

*The following values are subject to change without prior notice.

MODEL ROUND SHAFT	MODEL SHAFT	OUTPUT (W)	VOLTAGE (V)	POLE (P)	FREQUENCY (Hz)	STARTING TORQUE (Kg cm)	RATED TORQUE (Kg.cm)	RATED CURRENT (A)	RATED RPM (r/min)	CAPACITOR (μF)
2RK6A-A	2RK6GN-A	6	1ø110	4	60	0.62	0.38	0.26	1550	3.5(250V)
2RK6A-C	2RK6GN-C		1ø220	4	50 60	0.66 0.68	0.49 0.38	0.13 0.15	1200 1550	1(450V)
3RK15A-A	3RK15GN-A	15	1ø 110	4	60	1.34	0.94	0.38	1550	6(250V)
3RK15A-C	3RK15GN-C		1ø 220	4	50 60	1.23 1.26	1.22 0.94	0.20 0.19	1200 1550	1.5(450V)
4RK25A-A	4RK25GN-A	25	1ø 110	4	60	1.36	1.52	0.53	1600	8(250V)
4RK25A-C	4RK25GN-C		1ø 220	4	50 60	1.65 1.61	1.88 1.52	0.30 0.27	1300 1600	2(450V)
4RK25A-S	4RK25GN-S	25	3ø 220	4	50 60	5.98 4.65	1.95 1.57	0.28 0.24	1250 1550	--
4RK25A-U	4RK25GN-U		3ø 380	4	50 60	5.89 4.66	1.95 1.57	0.16 0.14	1250 1550	--
5RK40A-A	5RK40GN-A	40	1ø 110	4	60	1.88	2.44	0.93	1600	12(250V)
5RK40A-C	5RK40GN-C		1ø 220	4	50 60	2.15 2.51	3.00 2.44	0.43 0.43	1300 1600	3(450V)
5RK40A-S	5RK40GN-S	40	3ø 220	4	50 60	11.78 8.78	3.12 2.52	0.38 0.36	1250 1550	--
5RK40A-U	5RK40GN-U		3ø 380	4	50 60	11.16 8.91	3.12 2.52	0.22 0.21	1250 1550	--
5RK60A-A	5RK60(GN-GU)-A	60	1ø 110	4	60	3.00	3.66	1.24	1600	16(250V)
5RK60A-C	5RK6O(GN-GU)-C		1ø 220	4	50 60	3.55 3.53	4.50 3.66	0.62 0.58	1300 1600	4(450V)
5RK60A-S	5RK60(GN-GU)-S	60	3ø 220	4	50 60	15.39 12.45	4.68 3.78	0.52 0.48	1250 1550	--
5RK60A-U	5RK60(GN-GU)-U		3ø 380	4	50 60	15.92 12.87	4.68 3.78	0.30 0.28	1250 1550	--
5RK90A-A	5RK90GU-A	90	1ø 110	4	60	5.21	5.49	1.81	1600	25(250V)
5RK90A-C	5RK90GU-C		1ø 220	4	50 60	5.36 5.35	6.75 5.49	0.77 0.88	1300 1600	6(450V)
5RK90A-S	5RK90GU-S	90	3ø 220	4	50 60	20.29 15.81	7.02 5.66	0.71 0.66	1250 1550	--
5RK90A-U	5RK90GU-U		3ø 380	4	50 60	19.51 15.06	7.02 5.66	0.41 0.38	1250 1550	--
5RK120A-A	5RK120GU-A	120	1ø 110	4	60	5.50	7.32	2.17	1600	27(250V)
5RK120A-C	5RK120GU-C		1ø 220	4	50 60	5.85 5.86	9.01 7.32	1.07 0.88	1300 1600	7(450V)
5RK120A-S	5RK120GU-S	120	3ø 220	4	50 60	26.03 19.77	9.37 7.55	0.81 0.78	1250 1550	--
5RK120A-U	5RK120GU-U		3ø 380	4	50 60	27.07 20.29	9.37 7.55	0.47 0.45	1250 1550	--
5RK150A-A	5RK150GU-A	150	1ø 110	4	60	6.98	9.15	2.58	1600	30(250V)
5RK150A-C	5RK150GU-C		1ø 220	4	50 60	6.32 6.60	11.26 9.15	1.47 1.34	1300 1600	8(450V)
5RK150A-S	5RK150GU-S	150	3ø 220	4	50 60	26.03 19.77	11.71 9.44	1.00 0.92	1250 1550	--
5RK150A-U	5RK150GU-U		3ø 380	4	50 60	27.07 20.29	11.71 9.44	0.58 0.53	1250 1550	--

*RK : 30 minsrated time limited.

SPEED CONTROLLER

Controller Series

Combined speed controller

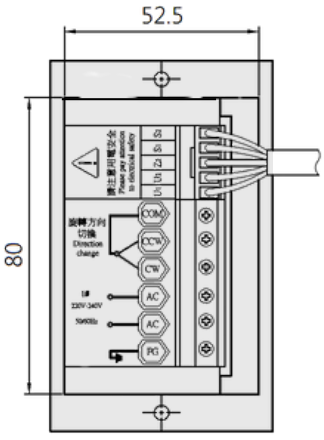
Separate speed controller

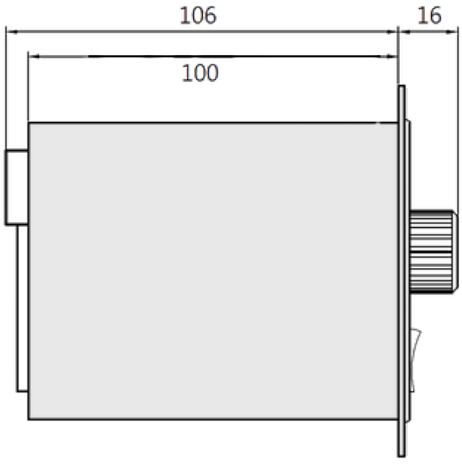
COMBINED SPEED CONTROLLER

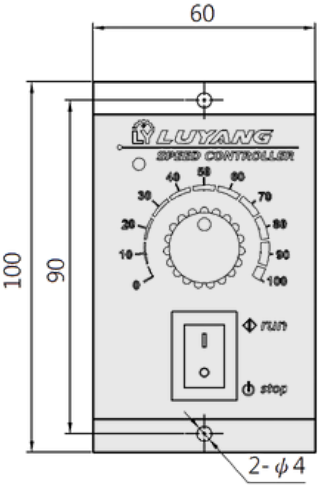
INDICAITION OF SPEED CONTROLLER

UX	315	-	0	2

MODEL	OUTPUT	TYPE	VOLTAGE
UX: Digital display speed controller	206 : 6W 315 : 15W 425 : 25W 540 : 40W 560 : 60W 590 : 90W 5120 : 120W 5150 : 150W	0 : Induction 1 : Reversible	1 : 1ø110V (60Hz) 2 : 1ø220V (60Hz) 2E : 1ø220~240V (50Hz) 10 : 1ø100V (60Hz) 10E : 1ø100V (50Hz) 20 : 1ø200V (60Hz) 20E : 1ø200V (50Hz)







SPECIFICATION

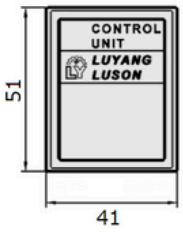
Type	Voltage (V)	Frequency (Hz)	Rated current (A)	Output (W)	Speed range (rpm)	Speed rate of change (%)	Velocity reaction	Electronic brake	Velocity safety	Ambient condition
UX01 UX02	100~110V 200~220V	60	5	6-150	90~1600	5%	0.5 (Sec)	--	◎	-10°C~+50°C
UX02E	200~240V	50	5	6-150	90~1350	5%	0.5 (Sec)	--	◎	-10°C~+50°C

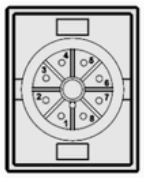
SEPARATED SPEED CONTROLLER

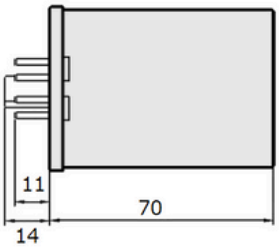
INDICAITION OF SPEED CONTROLLER

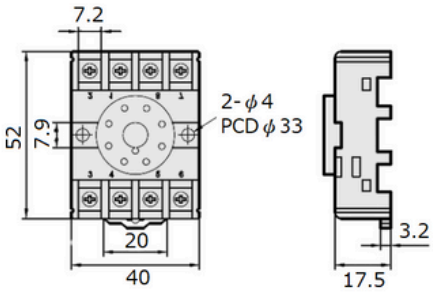
S	S	11
MODEL	FEATURE	VOLTAGE
S : Separated	S : Speed control	11 : 1ø100~110V (60Hz) 11E : 1ø100V (50Hz) 22 : 1ø200~220V (60Hz) 22E : 1ø200~240V (50Hz)

SS11 SEPARATED SPEED CONTROLLER



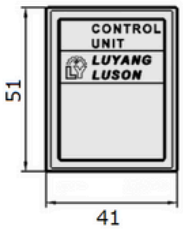


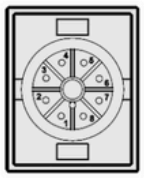


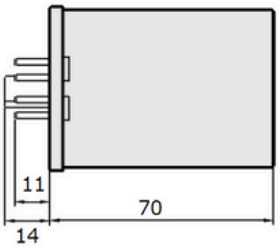


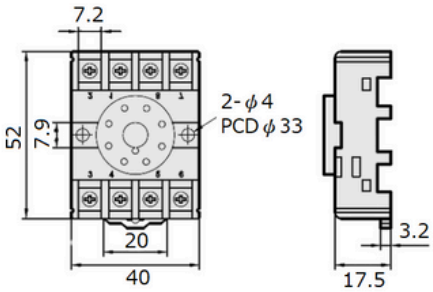
Controller Body　　Foot Base

SS22 SEPARATED SPEED CONTROLLER









Controller Body　　Foot Base

SPECIFICATION

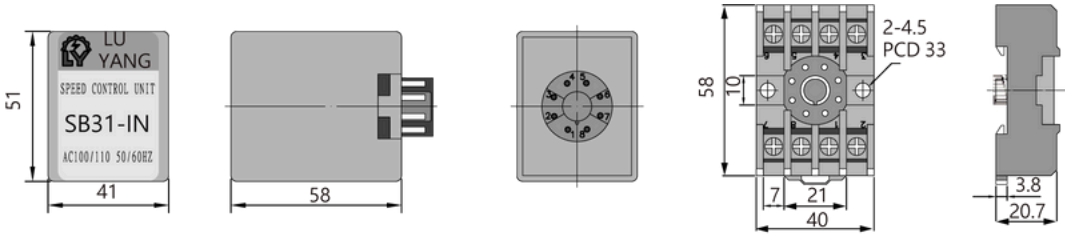
TYPE	VOLTAGE (V)	FREQUENCY (Hz)	RATED CURRENT (A)	OUTPUT (W)	SPEED RANGE (rpm)	SPEED RATE OF CHANGE (%)	VELOCITY REACTION	ELECTRONIC BRAKE	VELOCITY SAFETY	AMBIENT CONDITION
SS11 SS22	100~110V 200~220V	60	5	6-150	90~1600	5%	0.5 (Sec)	--	◎	-10°C~+50°C
SS11E SS22E	100V 200~240V	50	5	6-150	90~1350	5%	0.5 (Sec)	--	◎	-10°C~+50°C

INSTANTANEOUS BRAKE PACK

INDICATION

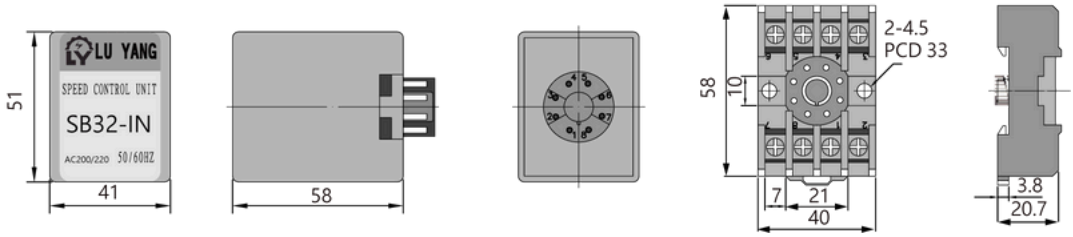
SB	32	–	IN
MODEL	VOLTAGE		FEATURE
SB : Electronic instantaneous brake pack	31 : 1ø100~110V (50/60Hz) 32 : 1ø200~240V (50/60Hz)		IN : Can be used for inching

SB31 – IN ELECTRONIC INSTANTANEOUS BRAKE PACK



Controller Body Foot Base

SB32 – IN ELECTRONIC INSTANTANEOUS BRAKE PACK



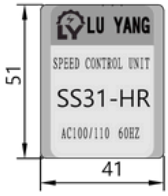
Controller Body Foot Base

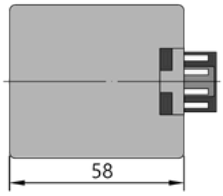
SPEED CONTROL & BRAKE PACK

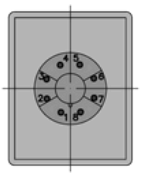
INDICATION

S	S	31	-	HR
MODEL	FEATURE	VOLTAGE		OTHER
S : Separated	S : Speed control	31 : 1ø100~110V (60Hz) 31E : 1ø100V (50Hz) 32 : 1ø200~220V (60Hz) 32E : 1ø200~240V (50Hz)		HR : Speed and brake control

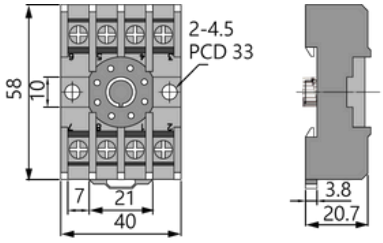
SS31-HR SPEED CONTROL AND BRAKE





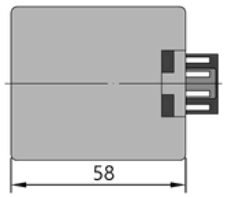


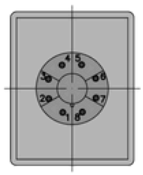
Controller Body



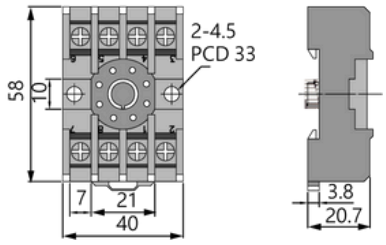
Foot Base

SS32-HR SPEED CONTROL AND BRAKE





Controller Body



Foot Base

SPECIFICATION

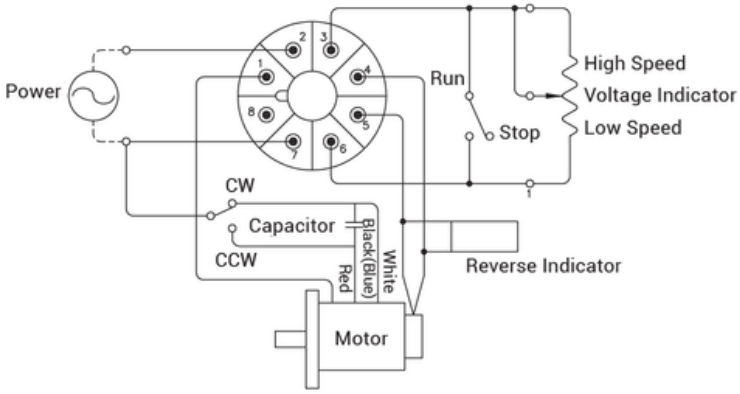
TYPE	VOLTAGE (V)	FREQUENCY (Hz)	RATED CURRENT (A)	OUTPUT (W)	SPEED RANGE (rpm)	SPEED RATE OF CHANGE (%)	VELOCITY REACTION	ELECTRONIC BRAKE	VELOCITY SAFETY	AMBIENT CONDITION
HR31-HR SS32-HR	100~110V 200~220V	60	3	6-150	90~1600	5%	0.5 (Sec)	○	◎	-10°C~+50°C
SS31E-HR SS32E-HR	100V 200~220V	50	3	6-150	90~1350	5%	0.5 (Sec)	○	◎	-10°C~+50°C

CONNECTION DIAGRAM OF CONTROLLER

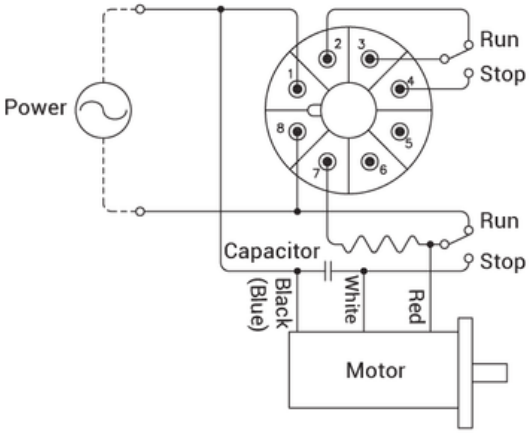
NOTE:

1. Please confirm the controller and motor output specifications before connection.
2. While using motor overheat protection, it must be connected in series with motor control cables.
3. When a forced fan is installed on the speed control motor, the forced fan power supply must be connected to the input power supply.
4. When a speed control motor is equipped with a non-excitation brake, the input side of the power supply must be connected in parallel with the motor starting power supply side so that the brake can be disengaged when the motor starts.
5. A motor with speed control and electronic brake function, when the motor stops, the electronic brake will activate for 0.5 seconds, and forward and reverse rotation cannot be used at this time.
6. The switch contact capacity must be above AC 125V 5A or above AC 250V 5A.
7. When the electronic brake function is used in the case of 0.5 second operation and 0.5 second stop, the motor temperature will increase. However, please keep the motor operating temperature below 90°C.

SS11 SS22

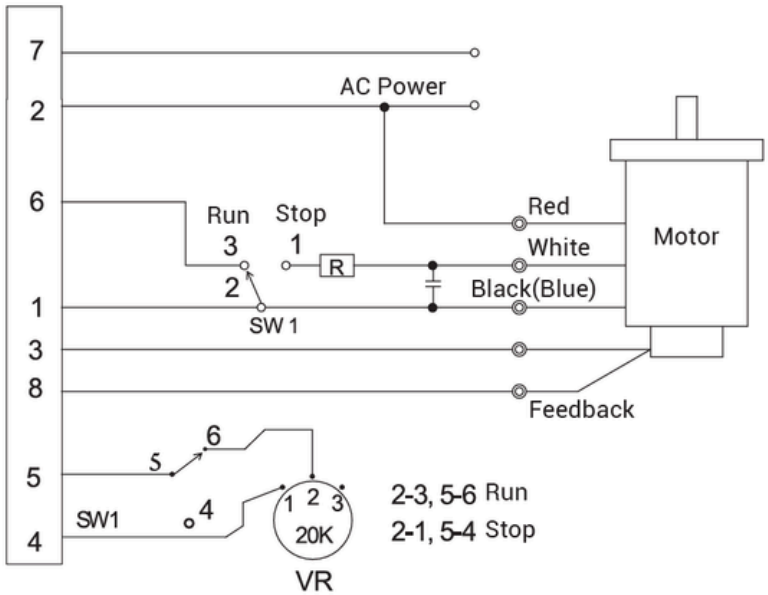


SB31-IN SB32-IN



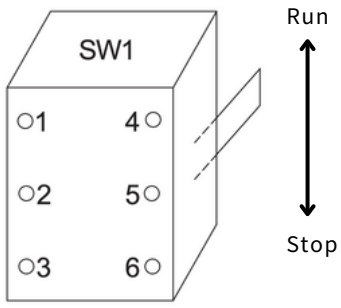
SS31-HR SS32-HR (8支腳)

***PIN3、8、5、4 Signal input



Please be sure to check the circuit wiring diagram before powering on.

R 10 OHM 10W



SW1: DPDT or MY2 RELAY LY2

INVERTER

For AC induction motor

LFD Series

For small output use

Suitable for AC motors below 250W

Control frequency and time

- Adjust frequency (1~400Hz)
- Set up acceleration and deceleration time
- Can be set in sections

Torque compensation

Enhanced starting torque at low frequencies

Carrier frequency

Improve equipment resonance and motor running noise

Proection

With protection function, it is safer for equipment and systems

LFD AC MOTOR INVERTER

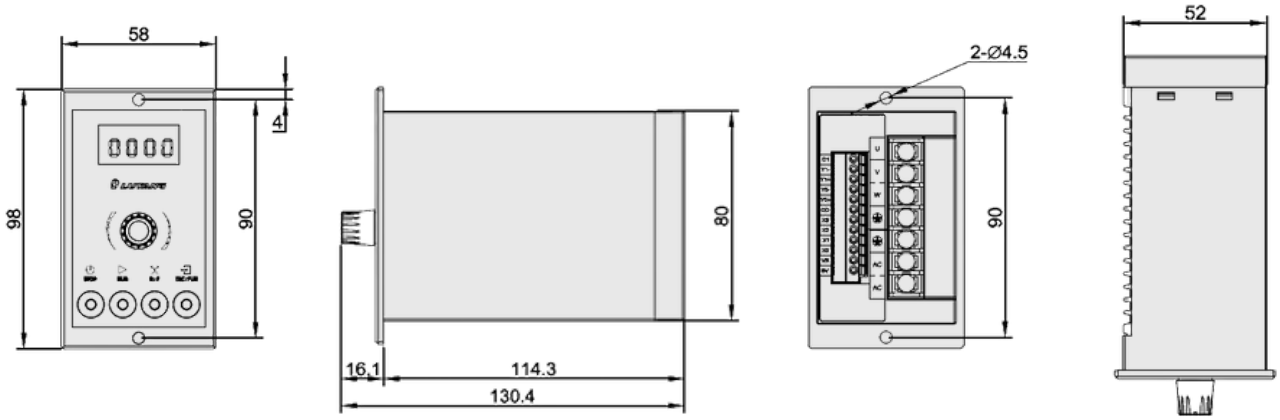
INDICATION

LFD	025	U	-	C	□
MODEL	OUTPUT	SERIES		INPUT VOLTAGE	TYPE
LFD: Inverter	025 : 250W	U : U series		A : Single-phase AC100~120V C : Single-phase AC200~240V	□ : Standard (not shown)

SPECIFICATION

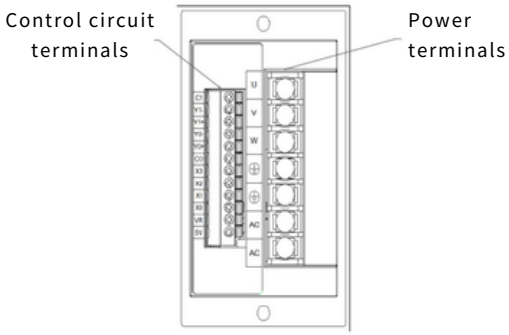
Inverter	Model		LFD025U-A	LFD025U-C
	Power input	Input voltage (V)	Single-phase AC110V	Single-phase AC220V
		Voltage tolerance	-10%~ +10%	
		Frequency tolerance	-5%~ +5%	
		Rated Input current (A)	2.4	1.2
		Maximum input current (A)	4.0	2.0
	Rated output (W)		250	
	Output frequency range (Hz)		1~400	
	Output frequency resolution (Hz)		0.1	
	Control system		V/F control, SPWM drive	
	Carrier frequency range (Hz)		2K~15K	
	Acceleration/ deceleration		0.1~15sec(can be set in sections), soft start and soft stop setting	
	Control features		Torque compensation, slip compensation, stall prevention	
	Protective function		Overvoltage, undervoltage, overcurrent/overload, IGBT overheating, motor open circuit	
	Frequency setting method		Panel operation, potentiometer, multi-speed gear setting (16 speeds)	
	Operation setting method		Panel operation, I/O X0~X3	
	Others		Carrier frequency adjustment, abnormal warning recording, increase/deceleration ratio setting, stop mode selection	
	Cooling / degree of protection		Natural cooling/ IP20	

DIMENSION

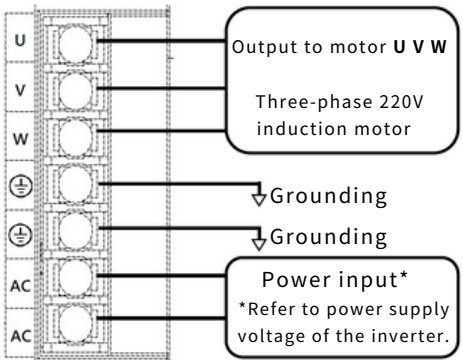


OPERATING INSTRUCTION

■ Function instruction

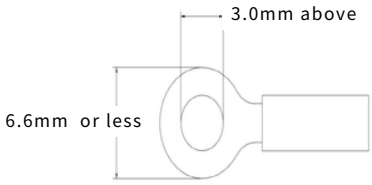


■Power supply lead wiring



Connect to terminal block terminals:

For the connection between the wires and the terminal block, please use the following terminals to prevent wire detachment. Suitable terminal: Insulated coated round crimp terminal.



*Grounding reminder: Please make sure to ground the motor and inverter.

■Functional description

Operating mode	Contents
Monitored mode	Speed display, main power supply voltage, motor current, load factor, operation segments, warning, input signal, output signal, external speed regulator voltage, inverter temperature.
Multiple segment mode	Operating data 16 segments, Frequency, acceleration and deceleration time
Parameter mode	Parameter 1: Set frequency input mode, operation mode, acceleration time, deceleration time, slow start, slow stop, stop mode, reduction ratio, reduction ratio digits, and speed up ratio. Parameter 2: Set the input function of IN-0, IN-1, IN-2, IN-3, OUT-0, and OUT-1. Parameter 3: Set the upper frequency limit, lower frequency limit, overvoltage, undervoltage, overload, overload delay time, frequency reach detection width, and restore to preset parameters. Parameter 4: Set PWM carrier frequency, set motor pole, motor rated output, motor rated frequency, motor rated current, maximum current ratio limit, stall current ratio limit, and maximum slip frequency.

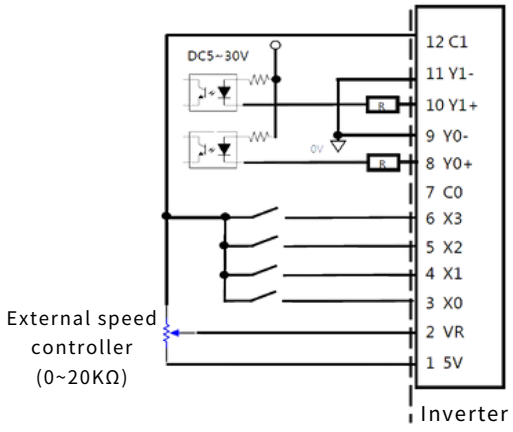
■I/O signal instruction

Pin No.	Terminal	Contents	Voltage range
1	5V	Internal power supply 5V	DC 5V
2	VR	External VR input voltage	DC 0~5V
3	X0	IN-0 input function	DC 10~30V Current below 10mA
4	X1	IN-1 input function	
5	X2	IN-2 input function	
6	X3	IN-3 input function	
7	CO	External power supply COM	COM
8	Y0+	OUT-0 output function (positive terminal)	DC 5~30V Current below 10mA
9	Y0-	OUT-0 output function (negative terminal)	
10	Y1+	OUT-1 output function (positive terminal)	
11	Y1-	OUT-1 output function (negative terminal)	
12	C1	Internal power supply 0V	DC 0V

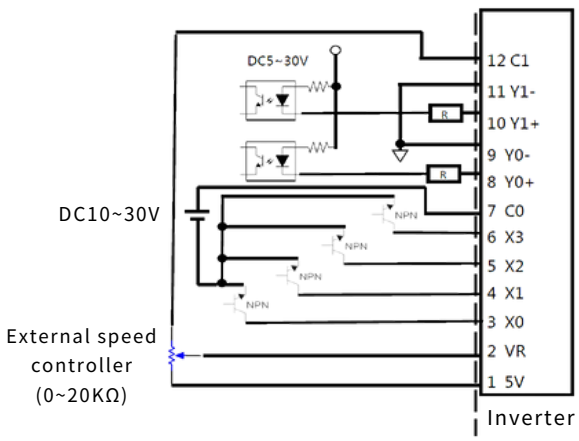
※Output and input signal wires should have a diameter larger than 26AWG.
※Can allocate 4 groups of inputs (X0~X3) and 2 groups of outputs (Y0~Y1) from the following signals:
Relative input signals: Non-using, RUN/STOP, FWD/REV, FWD, REV, M0, M1, M2, M3, ALARM_RESET, EMERGENCY_SWITCH.
Relative output signals: ALARM_OUT, MOVE, DIR, VA.

■I/O Signal connection

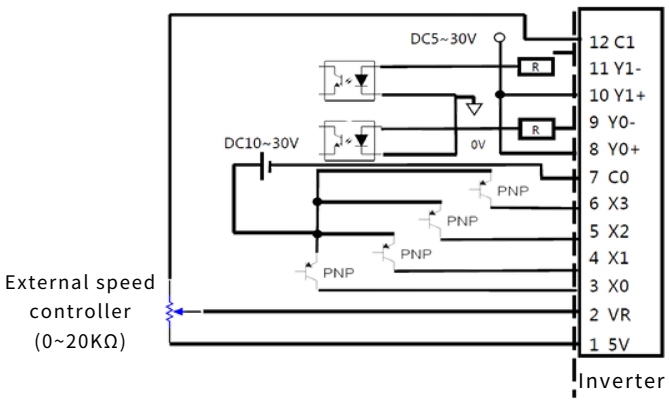
Sink circuit (internal power supply)



Sink circuit (external power supply)



Source circuit (external power supply)



Note: For details, please refer to the LFD inverter operation manual.

GEAR MOTOR

L Series

Output 100~3700W

No need to change grease

Optional brake

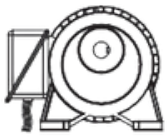
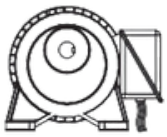
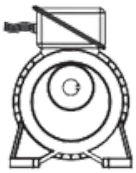
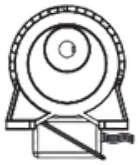
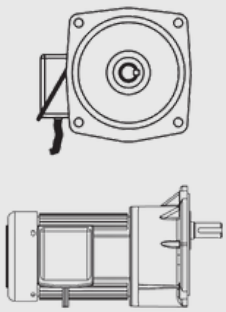
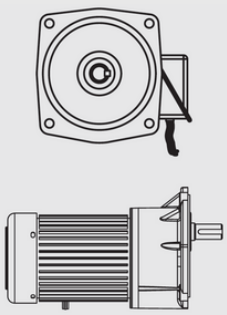
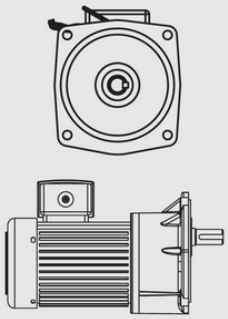
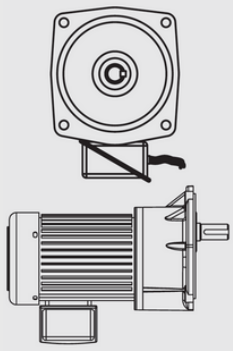
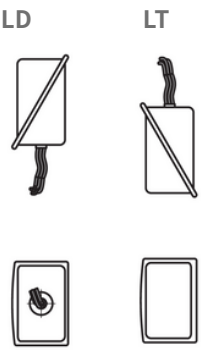
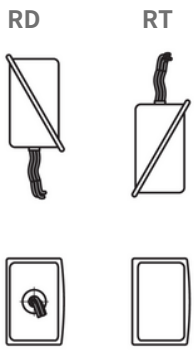
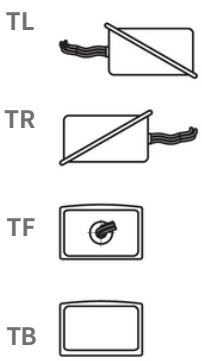
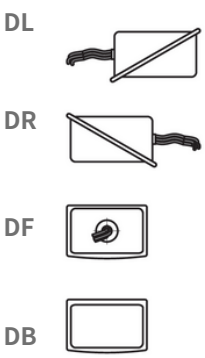
GEAR MOTORS

INDICATION OF GEAR MOTOR

LH	28	-	750	-	30	-	S3	M

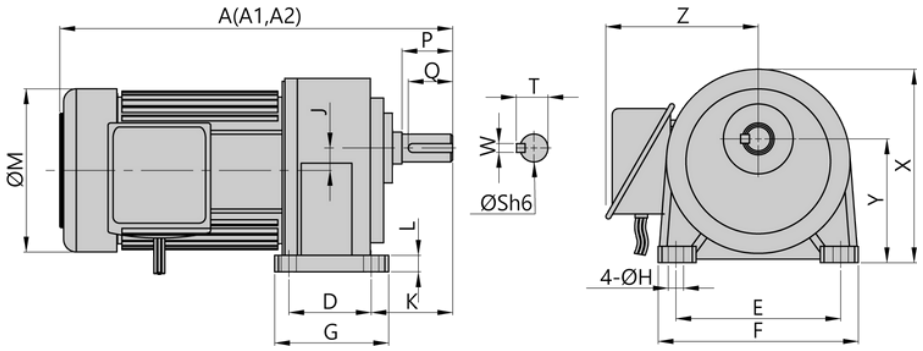
MODEL	CODE	OUTPUT	RATIO	VOLTAGE	ACCESSORY
J220 : Carton Sealer Gear Motor LH : Horizontal Type Gear Motor LV : Vertical Type Gear Motor	18 : Frame 18 22 : Frame22 22B : Frame22B 28 : Frame28 32 : Frame32 40 : Frame40 50 : Frame50	100 : 100W (1/8HP) 200 : 200W (1/4HP) 400 : 400W (1/2HP) 750 : 750W (1HP) 1500 : 1500W (2HP) 2200 : 2200W (3HP) 3700 : 3700W (5HP)	3~1800	AC : 1ø 110/220V 50/60Hz (For 200W below) AV : 1ø 110/220V 60Hz (For 400~1500W) AVE : 1ø 110/220V 50Hz (For 400~1500W) S3 : 3ø 220/380V (For 100~3700W)	M : Electromagnetic Brake

DIRECTION OF TERMINAL BOX

TYPE	G1-LEFT SIDE (STANDARD TYPE)	G2-RIGHT SIDE	G3-TOP SIDE	G4-DOWN SIDE
LH				
LV				
WIRE INLET DIRECTION				

※ Please contact us while the motor will run under the low temperature environment.

LH HORIZONTAL GEAR MOTOR



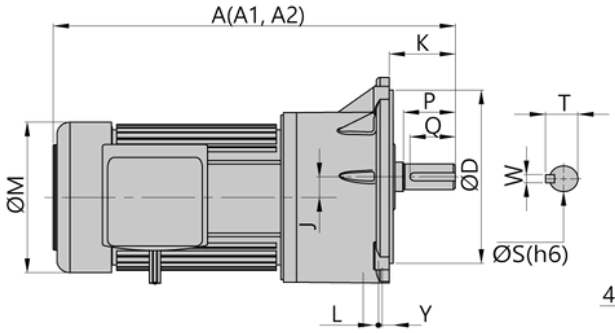
DIMENSION(mm)

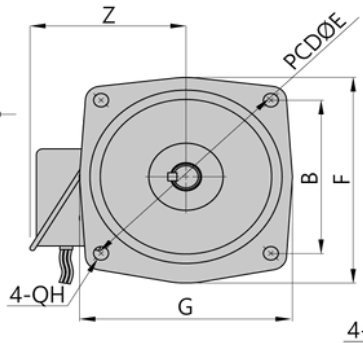
OUTPUT W(HP)	RATIO	HOUSING	CODE	A ①	A1 ①	A2 ①	D	E	F	G	H	J	K	L	M	X	Y	Z	OUTPUT SHAFT S	P	W	T	Q
100W (1/8 HP)	3~50 (60~200)	1	18	246	276	246	40	110	135	65	9	16	48.6	10	135	131	88.5	120	18	30	5	20	25
	60~200	2	22	276	307	276	65	130	158	90	11	17.65	60	13	135	153	97.5	120	22	40	7	25	35
200W (1/4 HP)	3~10 (12.5~90)	1	18	266	276	276	40	110	135	65	9	16	48.6	10	135	131	88.5	120	18	30	5	20	25
	12.5 ~90 (100~200)	2	22	296	307	306	65	130	158	90	11	17.65	60	13	135	153	97.5	120	22	40	7	25	35
	100~200	3	28	312	322	322	90	140	180	120	11	24.22	66.5	16	135	174	116	120	28	45	7	31	40
400W (1/2 HP) ②	3~10 (12.5~90)	2	22	306	317	-	65	130	158	90	11	17.65	60	13	135	153	97.5	135	22	40	7	25	35
	12.5~90 (100~200)	3	28	322	332	-	90	140	180	120	11	24.22	66.5	16	135	174	116	135	28	45	7	31	40
	100~200	4	32	367	378	-	130	170	210	165	13	30.22	70	20	135	198	130	135	32	55	10	35	50
400W+ (1/2 HP) ③	3~10 (12.5~90)	2	22	329	335	358	65	130	158	90	11	17.65	60	13	165	153	97.5	135	22	40	7	25	35
	12.5~90 (100~200)	3	28	353	359	382	90	140	180	120	11	24.22	66.5	16	165	174	116	135	28	45	7	31	40
	100~200	4	32	396	402	418	130	170	210	165	13	30.22	70	20	165	198	130	135	32	55	10	35	50
750W (1 HP)	(3~25)	2	22	336	342	385	65	130	158	90	11	17.65	60	13	165	153	97.5	135	22	40	7	25	35
	3~25 (30~120)	3	28	360	366	410	90	140	180	120	11	24.22	66.5	16	165	174	116	135	28	45	7	31	40
	30~120 (125~200)	4	32	396	402	445	130	170	210	165	13	30.22	70	20	165	198	130	135	32	55	10	35	50
	125~200	5	40	451	457	500	150	210	265	198	15	28	89	22	165	250	160	135	40	65	10	43	60
1500W (2 HP)	(3~40)	3	28	413	413	457	90	140	180	120	11	24.22	66.5	16	192	174	116	135	28	45	7	31	40
	3~30 (40~100)	4	32	453	453	497	130	170	210	165	13	30.22	70	20	192	198	130	146	32	55	10	35	50
	25~100 (110~170)	5	40	510	510	552	150	210	265	198	15	28	89	22	192	250	160	146	40	65	10	43	60
	110~180	6	50	560	560	560	170	265	319	238	18	51	120	31.5	192	308	200	146	50	80	14	54	75
2200W (3 HP)	3~40(45~80)	5	40	530	530	-	150	210	265	198	15	28	89	22	220	250	160	160	40	65	10	43	60
	45~100	6	50	580	580	-	170	265	319	238	18	51	120	31.5	220	308	200	160	50	80	14	54	75
3700W (5 HP)	3~10 (15~60)	5	40	560	560	-	150	210	265	198	15	28	89	22	220	250	160	160	40	65	10	43	60
	15~60	6	50	620	620	-	170	265	319	238	18	51	120	31.5	220	308	200	160	50	80	14	54	75

NOTE: ① A : With 3-phase motors / A1 : With 3-phase brake motors / A2 : With single-phase motors.
② Standard type for 400W 3-phase ③ Standard type for 400W single-phase and enhanced type for 400W 3-phase.

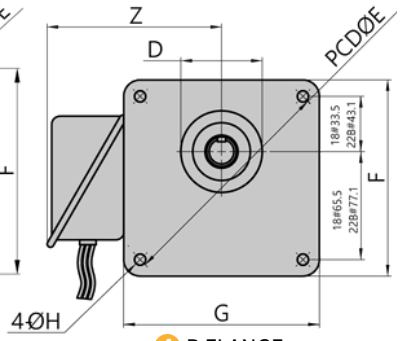
NOTIEC: 1. Light loading type have one year guarantee for motor only. 2. Ratio showed in parenthesis ( ) are used for light loading.
3. Refer to dimension of single-phase brake motor, please contact us.

LV VERTICAL GEAR MOTOR





A FLANGE
(For code 22, 28, 32, 40, 50)



4 B FLANGE
(For code 18, 22B)

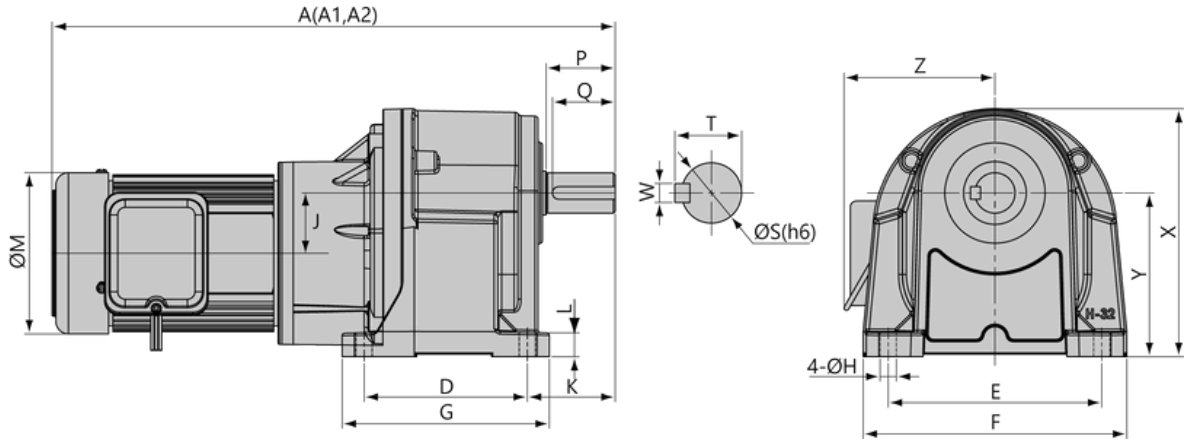
DIMENSION(mm)

OUTPUT W(HP)	RATIO	HOUSING	CODE	A (1)	A1 (1)	A2 (1)	B	D	E	F	G	H	J	K	L	M	Y	Z	OUTPUT SHAFT S	P	W	T	Q
100W (1/8 HP)	3~50 (60~200)	1	18	246	276	246	-	49	140	119	119	9	16	40	12	135	-	120	18	30	5	20	25
	60~200	2 2	22 22B	276 276	307 207	276 276	130.8 -	148 57	185 170	176 147	164 147	11 11	17.65 17.65	47 47	12 12	135 135	3 -	120 120	22 22	40 40	7 7	25 25	35 35
200W (1/4 HP)	3~10 (12.5~90)	1	18	266	276	276	-	49	140	119	119	9	16	40	12	135	-	120	18	30	5	20	25
	12.5 ~90 (100~200)	2 2	22 22B	296 296	307 307	306 306	130.8 -	148 57	185 170	176 147	164 147	11 11	17.65 17.65	47 47	12 12	135 135	3 -	120 120	22 22	40 40	7 7	25 25	35 35
	100~200	3	28	312	323	322	155.6	170	220	216	216	11	24.22	60	15	135	6	120	28	45	7	31	40
400W (1/2 HP) (2)	3~10 (12.5~90)	2 2	22 22B	306 306	317 317	- -	130.8 -	148 57	185 170	176 147	164 147	11 11	17.65 17.65	47 47	12 12	135 135	3 -	135 135	22 22	40 40	7 7	25 25	35 35
	12.5~90 (100~200)	3	28	322	332	-	155.6	170	220	216	216	11	24.22	60	15	135	6	135	28	45	7	31	40
	100~200	4	32	367	378	-	180.3	185	255	241	225	13	30.22	65	15	135	4	135	32	55	10	35	50
400W+ (1/2 HP) (3)	3~10 (12.5~90)	2 2	22 22B	329 339	335 335	358 358	130.8 -	148 57	185 170	176 147	164 147	11 11	17.65 17.65	47 47	12 12	165 165	3 -	135 135	22 22	40 40	7 7	25 25	35 35
	12.5~90 (100~200)	3	28	355	361	384	155.6	170	220	216	216	11	24.22	60	15	165	6	135	28	45	7	31	40
	100~200	4	32	396	402	418	180.3	185	255	241	225	13	30.22	65	15	165	4	135	32	55	10	35	50
750W (1 HP)	(3~25)	2 2	22 22B	336 336	342 342	385 385	130.8 -	148 57	185 170	176 147	164 147	11 11	17.65 17.65	47 47	12 12	165 165	3 -	135 135	22 22	40 40	7 7	25 25	35 35
	3~25 (30~120)	3	28	362	368	411	155.6	170	220	216	216	11	24.22	60	15	165	6	135	28	45	7	31	40
	30~120 (125~200)	4	32	396	402	445	180.3	185	255	241	225	13	30.22	65	15	165	4	135	32	55	10	35	50
	125~200	5	40	451	457	500	219.3	230	310	291	272	15	28	85	21	165	5	135	40	65	10	43	60
1500W (2 HP)	(3~40)	3	28	413	413	457	155.6	170	220	216	216	11	24.22	60	15	192	6	135	28	45	7	31	40
	3~30 (40~100)	4	32	453	453	497	180.3	185	255	241	225	13	30.22	65	15	192	4	146	32	55	10	35	50
	25~100 (110~170)	5	40	508	508	552	219.3	230	310	291	272	15	28	85	21	192	5	146	40	65	10	43	60
	110~180	6	50	560	560	560	275.8	280	390	369	341	18	51	92	25	192	5	146	50	80	14	54	75
2200W (3 HP)	3~40(45~80)	5	40	530	530	-	219.3	230	310	291	272	15	28	85	21	220	5	160	40	65	10	43	60
	45~100	6	50	580	580	-	275.8	280	390	369	341	18	51	92	25	220	5	160	50	80	14	54	75
3700W (5 HP)	3~10 (15~60)	5	40	560	560	-	219.3	230	310	291	272	15	28	85	21	220	5	160	40	65	10	43	60
	15~60	6	50	620	620	-	275.8	280	390	369	341	18	51	92	25	220	5	160	50	80	14	54	75

NOTE: (1) A : With 3-phase motors / A1 : With 3-phase brake motors / A2 : With single-phase motors.
(2) Standard type for 400W 3-phase (3) Standard type for 400W single-phase and enhanced type for 400W 3-phase (4) B flange : for code 18, 22B.

NOTIEC: 1. Light loading type have one year guarantee for motor only. 2. Ratio showed in parenthesis ( ) are used for light loading.
3. Refer to dimension of single-phase brake motor, please contact us.

LH HORIZONTAL HIGH RATIO GEAR MOTOR



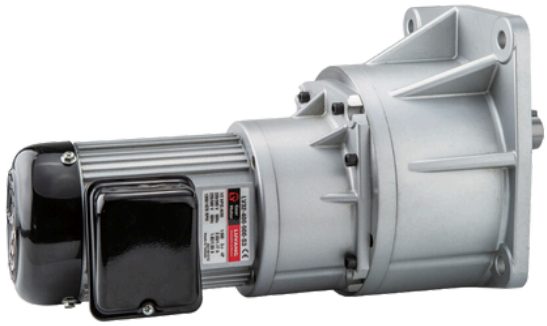
DIMENSION(mm)

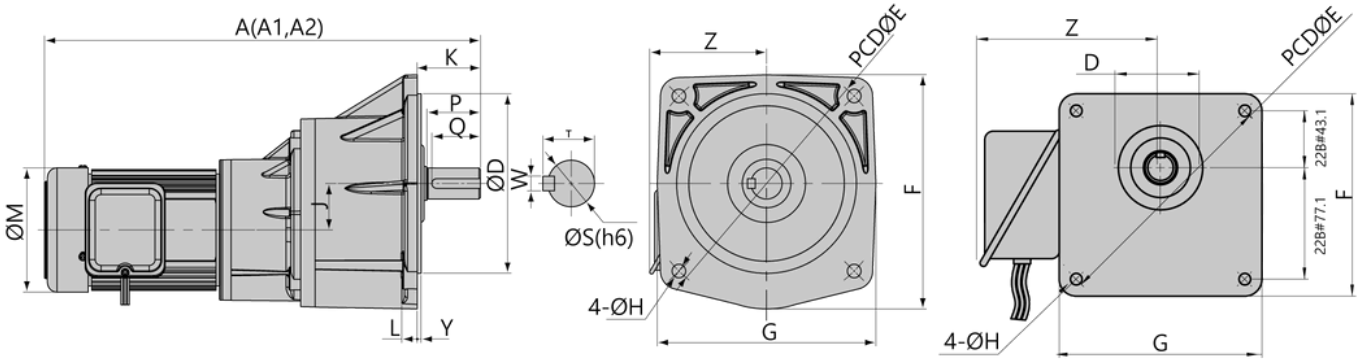
OUTPUT W(HP)	RATIO	HOUSING	CODE	A ①	A1 ①	A2 ①	D	E	F	G	H	J	K	L	M	X	Y	Z	OUTPUT SHAFT S	P	W	T	Q
100W (1/8 HP)	(250~1800)	1#+2#	22	346	377	346	65	130	158	90	11	33.65	60	13	135	153	97.5	135	22	40	7	25	35
	250~1800	1#+3#	28	349	379	349	90	140	180	120	11	40.22	66.5	16	135	174	116	135	28	45	7	31	40
200W (1/4 HP)	(250~1800)	1#+3#	28	369	379	379	90	140	180	120	11	40.22	66.5	16	135	174	116	135	28	45	7	31	40
	250~1800	2#+4#	32	433	444	443	130	170	210	165	13	47.87	70	20	135	198	130	135	32	55	10	35	50
400W (1/2 HP) ②	(250~1800)	2#+4#	32	443	454	-	130	170	210	165	13	47.87	70	20	135	198	130	135	32	55	10	35	50
	250~1800	3#+5#	40	500	511	-	150	210	265	198	15	52.3	89	22	135	250	160	146	40	65	10	43	60
400W+ (1/2 HP) ③	(250~1800)	2#+4#	32	466	472	495	130	170	210	165	13	47.87	70	20	165	198	130	135	32	55	10	35	50
	250~1800	3#+5#	40	521	527	550	150	210	265	198	15	52.3	89	22	165	250	160	146	40	65	10	43	60

NOTE: ① A : With 3-phase motors / A1 : With 3-phase brake motors / A2 : With single-phase motors.
② Standard type for 400W 3-phase ③ Standard type for 400W single-phase and enhanced type for 400W 3-phase.

NOTIEC: 1. Light loading type have one year guarantee for motor only. 2. Ratio showed in parenthesis ( ) are used for light loading.
3. Refer to dimension of single-phase brake motor, please contact us.

LV VERTICAL HIGH RATIO GEAR MOTOR





A FLANGE
(For code 22, 28, 32, 40)

4 B FLANGE
(For code 18, 22B)

DIMENSION(mm)

OUTPUT W(HP)	RATIO	HOUSING	CODE	A ①	A1 ①	A2 ①	D	E	F	G	H	J	K	L	M	Y	Z	OUTPUT SHAFT S	P	W	T	Q
100W (1/8 HP)	(250~1800)	1#+2#	22	346	377	346	148	185	176	164	11	33.65	47	12	135	3	135	22	40	7	25	35
	(250~1800)	1#+2#	22B	346	377	346	57	170	147	147	11	33.65	47	12	135	-	135	22	40	7	25	35
	250~1800	1#+3#	28	348	379	348	170	220	216	216	11	40.22	60	15	135	6	135	28	45	7	31	40
200W (1/4 HP)	(250~1800)	1#+3#	28	368	379	379	170	220	216	216	11	40.22	60	15	135	6	135	28	45	7	31	40
	250~1800	2#+4#	32	433	444	443	185	255	241	225	13	47.87	65	15	135	4	135	32	55	10	35	50
400W (1/2 HP) ②	(250~1800)	2#+4#	32	443	454	-	185	255	241	225	13	47.87	65	15	135	4	135	32	55	10	35	50
	250~1800	3#+5#	40	500	511	-	230	310	291	272	15	52.3	85	21	135	5	135	40	65	10	43	60
400W+ (1/2 HP) ③	(250~1800)	2#+4#	32	466	472	495	185	255	241	225	13	47.87	65	15	165	4	135	32	55	10	35	50
	250~1800	3#+5#	40	521	527	550	230	310	291	272	15	52.3	85	21	165	5	135	40	65	10	43	60

NOTE: ① A : With 3-phase motors / A1 : With 3-phase brake motors / A2 : With single-phase motors.
② Standard type for 400W 3-phase ③ Standard type for 400W single-phase and enhanced type for 400W 3-phase ④ B flange : for code 18, 22B.

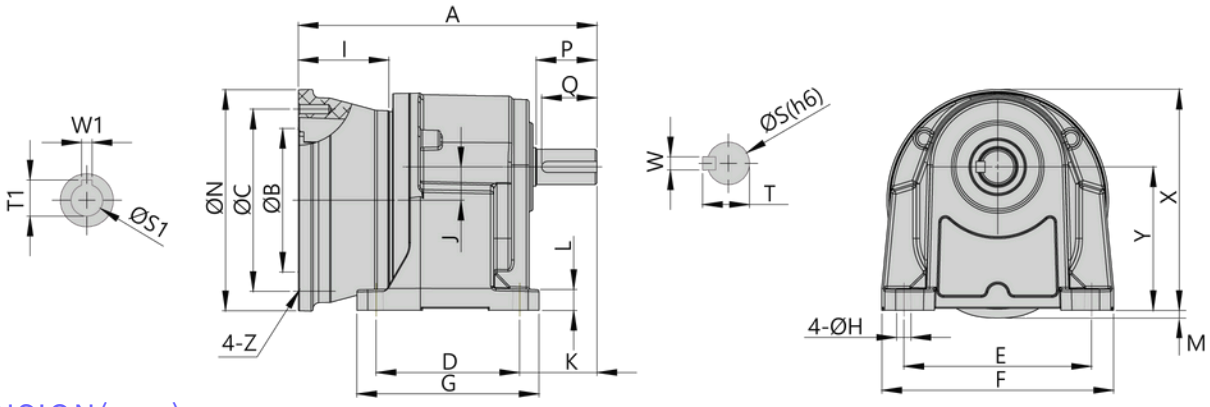
NOTIEC: 1. Light loading type have one year guarantee for motor only. 2. Ratio showed in parenthesis ( ) are used for light loading.
3. Refer to dimension of single-phase brake motor, please contact us.

LHM HORIZONTAL GEARBOX (MOTOR PLUG-IN)

INDICATION

LHM 18 - 100 - 20

MODEL	CODE	OUTPUT	RATIO
LHM: Horizontal Gearbox Motor Plug-In	18: Frame 18 22: Frame 22 28: Frame 28 32: Frame 32 40: Frame 40	100: 100W 200: 200W 400: 400W 750: 750W 1500: 1500W 2200: 2200W 3700: 3700W	3~200



DIMENSION(mm)

OUTPUT W(HP)	RATIO	CODE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	X	Y	Z	OUTPUT SAHFT S	OUTPUT SAHFT P	OUTPUT KEYWAY W	OUTPUT KEYWAY T	OUTPUT KEYWAY Q	INPUT BORE S1	INPUT KEYWAY W1	INPUT KEYWAY T1
100W (1/8 HP)	3~50 (60~200)	18	156	110	130	40	110	135	65	9	55	16	48.6	10	8	160	131	88.5	M8	ø18	30	5	20	25	ø11	4	12.8
	60~200	22	186	110	130	65	130	158	90	11	55	17.65	60	13	1	160	153	97.5	M8	ø22	40	7	25	35	ø11	4	12.8
200W (1/4 HP)	3~10 (12.5~90)	18	156	110	130	40	110	135	65	9	55	16	48.6	10	8	160	131	88.5	M8	ø18	30	5	20	25	ø11	4	12.8
	12.5 ~90 (100~200)	22	186	110	130	65	130	158	90	11	55	17.65	60	13	1	160	153	97.5	M8	ø22	40	7	25	35	ø11	4	12.8
	100~200	28	200	110	130	90	140	180	120	11	55	24.22	66.5	16	-	160	178	116	M8	ø28	45	7	31	40	ø11	4	12.8
400W (1/2 HP)	3~10 (12.5~90)	22	186	110	130	65	130	158	90	11	55	17.65	60	13	1	160	153	97.5	M8	ø22	40	7	25	35	ø14	5	16.3
	12.5~90 (100~200)	28	200	110	130	90	140	180	120	11	55	24.22	66.5	16	-	160	178	116	M8	ø28	45	7	31	40	ø14	5	16.3
	100~200	32	247	110	130	130	170	210	165	13	55	30.22	70	20	-	160	198	130	M8	ø32	55	10	35	50	ø14	5	16.3
750W (1 HP)	3~25 (30~120)	28	235	130	165	90	140	180	120	11	82	24.22	66.5	16	9	200	178	116	M10	ø28	45	7	31	40	ø19	6	21.8
	30~120 (125~200)	32	271	130	165	130	170	210	165	13	82	30.22	70	20	1	200	198	130	M10	ø32	55	10	35	50	ø19	6	21.8
	125~200	40	326	130	165	150	210	265	198	15	82	28	89	22	-	200	250	160	M10	ø40	65	10	43	60	ø19	6	21.8
1500W (2 HP)	3~30	32	271	130	165	130	170	210	165	13	82	30.22	70	20	1	200	198	130	M10	ø32	55	10	35	50	ø24	8	27.3
	25~100	40	326	130	165	150	210	265	198	15	82	28	89	22	-	200	250	160	M10	ø40	65	10	43	60	ø24	8	27.3
2200W (3 HP)	3~40	40	336	180	215	150	210	265	198	15	98	28	89	22	-	250	250	160	M14	ø40	65	10	43	60	ø28	8	31.3
3700W (5 HP)	3~10	40	336	180	215	150	210	265	198	15	98	28	89	22	-	250	250	160	M14	ø40	65	10	43	60	ø28	8	31.3

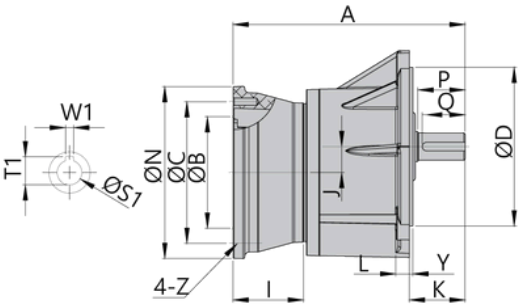
NOTIEC: 1. Light loading type have one year guarantee for motor only. 2. Ratio showed in parenthesis ( ) are used for light loading.
3. Suitable for motors of IEC standard.

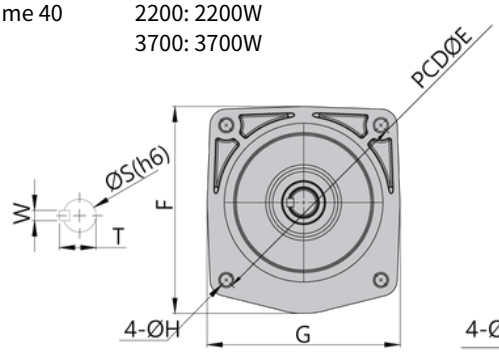
LVM VERTICAL GEARBOX (MOTOR PLUG-IN)

INDICATION

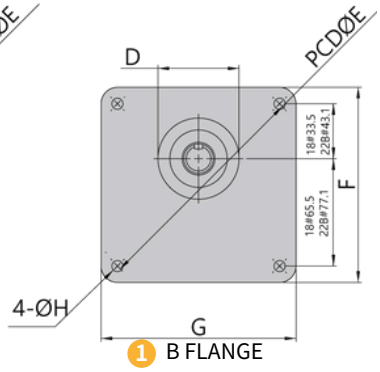
LVM 22 - 200 - 20

MODEL	CODE	OUTPUT	RATIO
LVM: Vertical Gearbox Motor Plug-In	18: Frame 18 22: Frame 22 22B: Frame 22B 28: Frame 28 32: Frame 32 40: Frame 40	100: 100W 200: 200W 400: 400W 750: 750W 1500: 1500W 2200: 2200W 3700: 3700W	3~200





A FLANGE
(For code 22, 28, 32, 40)



1 B FLANGE
(For code 18, 22B)

DIMENSION(mm)

OUTPUT W(HP)	RATIO	CODE	A	B	C	D	E	F	G	H	I	J	K	L	N	Y	Z	OUTPU SHAFT S	OUTPU SHAFT P	OUTPU KEYWAY W	OUTPU KEYWAY T	OUTPU KEYWAY Q	INPUT BORE S1	INPUT KEYWAY W1	INPUT KEYWAY T1
100W (1/8 HP)	3~50 (60~200)	18	156	110	130	49	140	119	119	9	55	16	40	12	160	-	M8	ø18	30	5	20	25	ø11	4	12.8
	60~200	22	186	110	130	148	185	176	164	11	55	17.65	47	12	160	3	M8	ø22	40	7	25	35	ø11	4	12.8
		22B	186	110	130	57	170	147	147	11	55	17.65	47	12	160	-	M8	ø22	40	7	25	35	ø11	4	12.8
200W (1/4 HP)	3~10 (12.5~90)	18	156	110	130	49	140	119	119	9	55	16	40	12	160	-	M8	ø18	30	5	20	25	ø11	4	12.8
	12.5 ~90 (100~200)	22	186	110	130	148	185	176	164	11	55	17.65	47	12	160	3	M8	ø22	40	7	25	35	ø11	4	12.8
		22B	186	110	130	57	170	147	147	11	55	17.65	47	12	160	-	M8	ø22	40	7	25	35	ø11	4	12.8
	100~200	28	200	110	130	170	220	216	216	11	55	24.22	60	15	160	6	M8	ø28	45	7	31	40	ø11	4	12.8
400W (1/2 HP)	3~10 (12.5~90)	22	186	110	130	148	185	176	164	11	55	17.65	47	12	160	3	M8	ø22	40	7	25	35	ø14	5	16.3
		22B	186	110	130	57	170	147	147	11	55	17.65	47	12	160	-	M8	ø22	40	7	25	35	ø11	4	12.8
	12.5~90 (100~200)	28	200	110	130	170	220	216	216	11	55	24.22	60	15	160	6	M8	ø28	45	7	31	40	ø14	5	16.3
	100~200	32	247	110	130	185	255	241	225	13	55	30.22	65	15	160	4	M8	ø32	55	10	35	50	ø14	5	16.3
750W (1 HP)	3~25 (30~120)	28	235	130	165	170	220	216	216	11	82	24.22	60	15	200	6	M10	ø28	45	7	31	40	ø19	6	21.8
	30~120 (125~200)	32	271	130	165	185	255	241	225	13	82	30.22	65	15	200	4	M10	ø32	55	10	35	50	ø19	6	21.8
	125~200	40	326	130	165	230	310	290	268	15	82	28	85	21	200	5	M10	ø40	65	10	43	60	ø19	6	21.8
1500W (2 HP)	3~30	32	271	130	165	185	255	241	225	13	82	30.22	65	15	200	4	M10	ø32	55	10	35	50	ø24	8	27.3
	25~100	40	326	130	165	230	310	290	268	15	82	28	85	21	200	5	M10	ø40	65	10	43	60	ø24	8	27.3
2200W (3 HP)	3~40	40	336	180	215	230	310	290	268	15	95	28	85	21	250	5	M14	ø40	65	10	43	60	ø28	8	31.3
3700W (5 HP)	3~10	40	336	180	215	230	310	290	268	15	95	28	85	21	250	5	M14	ø40	65	10	43	60	ø28	8	31.3

NOTE: 1 B flange : for code 18, 22B.

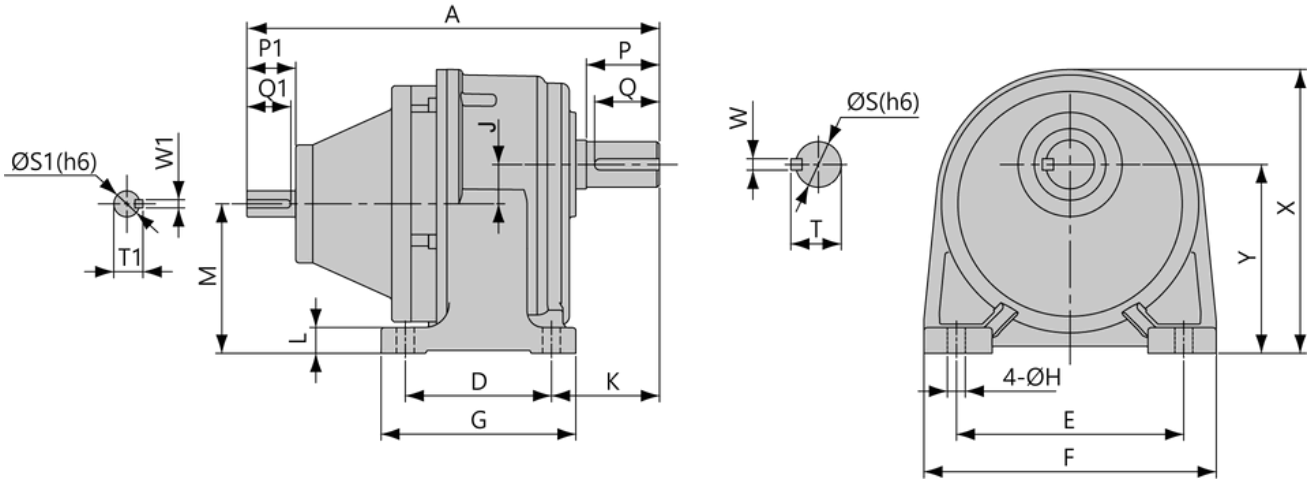
NOTIEC: 1. Light loading type have one year guarantee for motor only. 2. Ratio showed in parenthesis ( ) are used for light loading.
3. Suitable for motors of IEC standard.

LHD HORIZONTAL DOUBLE SHAFT GEARBOX

INDICATION

LHD 22 - 200 - 90

MODEL	CODE	OUTPUT	RATIO
LHD : Horizontal Double Shaft Gearbox	18: Frame 18 22: Frame 22 28: Frame 28 32: Frame 32	100: 100W 200: 200W 400: 400W 750: 750W 1500: 1500W	3~200



DIMENSION(mm)

OUTPUT W(HP)	RATIO	CODE	A	D	E	F	G	H	J	K	L	M	X	Y	OUTPUT SHAFT S	P	W	T	Q	INPUT BORE S1	P1	W1	T1	Q1
100W (1/8 HP)	3~50 (60~200)	18	168	40	110	135	65	9	16	48.6	10	72.5	131	88.5	18	30	5	20	25	14	25	5	16	22
	60~200	22	199	65	130	158	90	11	17.65	60	13	79.85	153	97.5	22	40	7	25	35	14	25	5	16	22
200W (1/4 HP)	3~10 (12.5~90)	18	168	40	110	135	65	9	16	48.6	10	72.5	131	88.5	18	30	5	20	25	14	25	5	16	22
	12.5 ~90 (100~200)	22	199	65	130	158	90	11	17.65	60	13	79.85	153	97.5	22	40	7	25	35	14	25	5	16	22
	100~200	28	213	90	140	180	120	11	24.22	66.5	16	91.78	174	116	28	45	7	31	40	14	25	5	16	22
400W (1/2 HP)	3~10 (12.5~90)	22	233	65	130	158	90	11	17.65	60	13	79.85	153	97.5	22	40	7	25	35	16	30	5	18	27
	12.5~90 (100~200)	28	258	90	140	180	120	11	24.22	66.5	16	91.78	174	116	28	45	7	31	40	16	30	5	18	27
	100~200	32	293	130	170	210	165	13	30.22	70	20	99.78	198	130	32	55	10	35	50	16	30	5	18	27
750W (1 HP)	3~25 (30~120)	28	270	90	140	180	120	11	24.22	66.5	16	91.78	174	116	28	45	7	31	40	19	40	6	21.5	35
	30~120 (125~200)	32	305	130	170	210	165	13	30.22	70	20	99.78	198	130	32	55	10	35	50	19	40	6	21.5	35
1500W (2 HP)	3~30	32	313.5	130	170	210	165	13	30.22	70	20	99.78	198	130	32	55	10	35	50	24	50	8	27	45

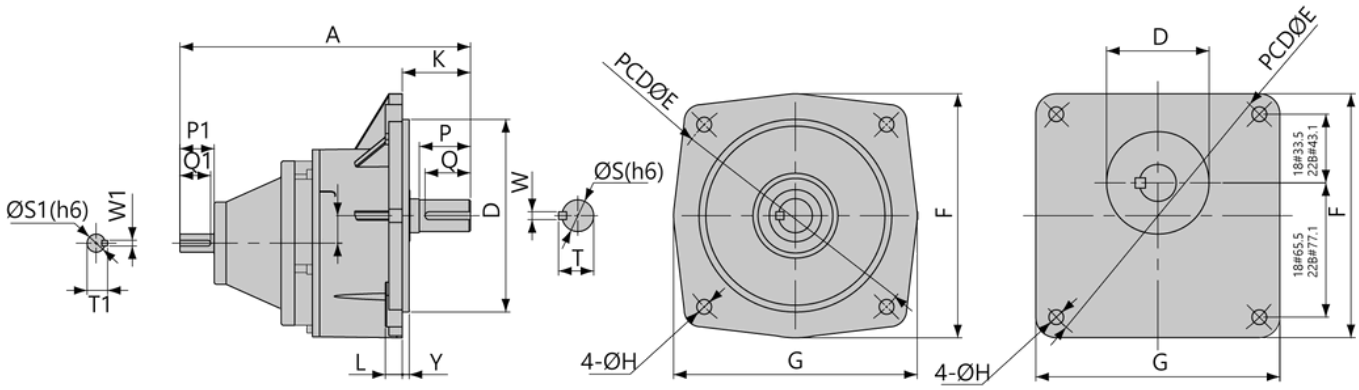
NOTIEC: 1. Light loading type have one year guarantee for motor only. 2. Ratio showed in parenthesis ( ) are used for light loading.

LVD VERTICAL DOUBLE SHAFT GEARBOX

INDICATION

LVD 18 - 100 - 90

MODLE	CODE	OUTPUT	RATIO
LVD立式雙軸減速機	18: Frame18 22: Frame22 22B: Frame22B 28: Frame28 32: Frame32	100: 100W 200: 200W 400: 400W 750: 750W 1500: 1500W	3~200



A FLANGE
(For code 22, 28, 32, 40)

1 B FLANGE
(For code 18, 22B)

DIMENSION(mm)

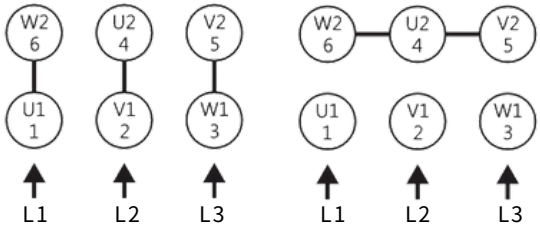
OUTPUT W(HP)	RATIO	CODE	A	D	E	F	G	H	J	K	L	Y	OUTPUT SHAFT S	P	W	T	Q	INPUT BORE S1	P1	W1	T1	Q1
100W (1/8 HP)	3~50 (60~200)	18	168	50	140	119	119	9	16	40	12	-	18	30	5	20	25	14	25	5	16	22
	60~200	22	199	148	185	176	164	11	17.65	47	12	3	22	40	7	25	35	14	25	5	16	22
		22B	199	57	170	147	147	11	17.65	47	12	-	22	40	7	25	35	14	25	5	16	22
200W (1/4 HP)	3~10 (12.5~90)	18	168	50	140	119	119	9	16	40	12	-	18	30	5	20	25	14	25	5	16	22
	12.5 ~90 (100~200)	22	199	148	185	176	164	11	17.65	47	12	3	22	40	7	25	35	14	25	5	16	22
		22B	199	57	170	147	147	11	17.65	47	12	-	22	40	7	25	35	14	25	5	16	22
	100~200	28	213	170	220	216	216	11	24.22	60	15	6	28	45	7	31	40	14	25	5	16	22
400W (1/2 HP)	3~10 (12.5~90)	22	233	148	185	176	164	11	17.65	47	12	3	22	40	7	25	35	16	30	5	18	27
		22B	233	57	170	147	147	11	17.65	47	12	-	22	40	7	25	35	16	30	5	18	27
	12.5~90 (100~200)	28	258	170	220	216	216	11	24.22	60	15	6	28	45	7	31	40	16	30	5	18	27
	100~200	32	293	185	255	241	225	13	30.22	65	15	4	32	55	10	35	50	16	30	5	18	27
750W (1 HP)	3~25 (30~120)	28	270	170	220	216	216	11	24.22	60	15	6	28	45	7	31	40	19	40	6	21.5	35
	30~120 (125~200)	32	305	185	255	241	225	13	30.22	65	15	4	32	55	10	35	50	19	40	6	21.5	35
1500W (2 HP)	3~30	32	313.5	185	255	241	225	13	30.22	65	15	4	32	55	10	35	50	24	50	8	27	45

NOTE: 1 B flange : for code 18, 22B.

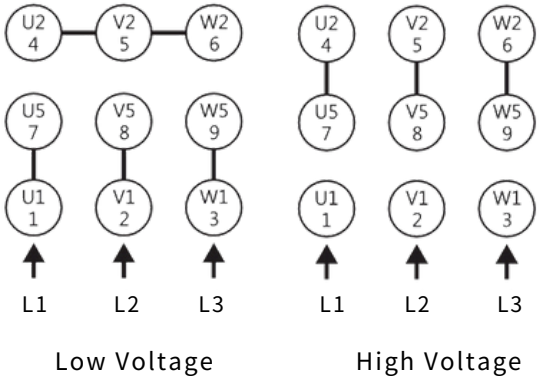
NOTIEC: 1. Light loading type have one year guarantee for motor only. 2. Ratio showed in parenthesis ( ) are used for light loading.

WIRE DRAWING-L SERIES

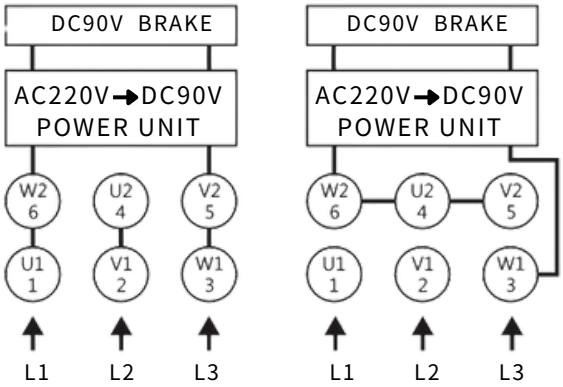
3 PHASE WITH 6 WIRES



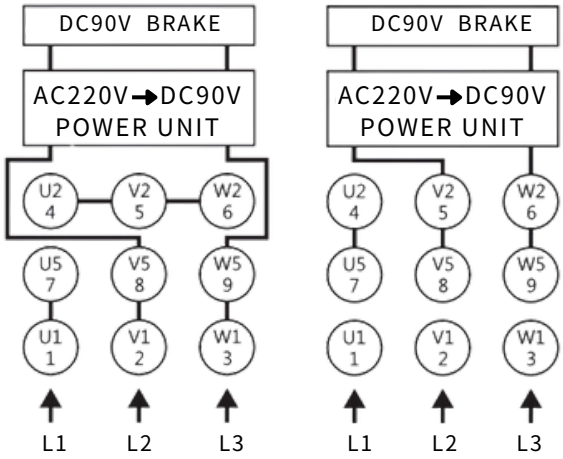
3 PHASE WITH 9 WIRES



3 PHASE WITH 6 WIRES WITH BRAKE

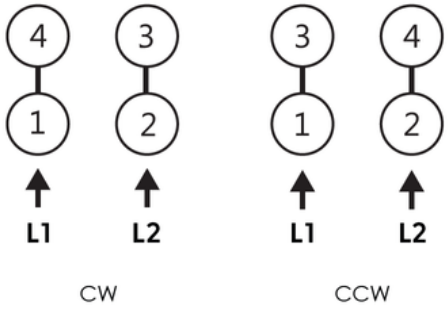


3 PHASE WITH 9 WIRES WITH BRAKE

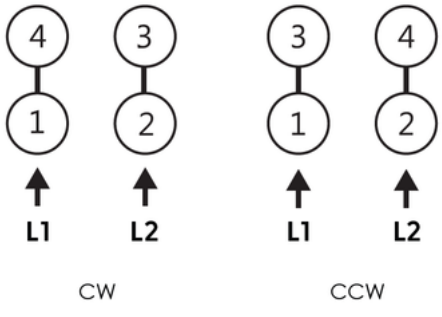


WIRE DRAWING-J SERIES

SINGLE PHASE 110V WITH 4 WIRES (J SERIES)

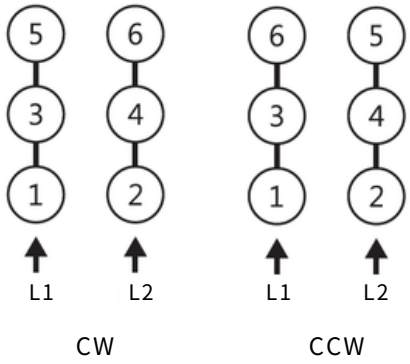


SINGLE PHASE 220V WITH 4 WIRES (J SERIES)

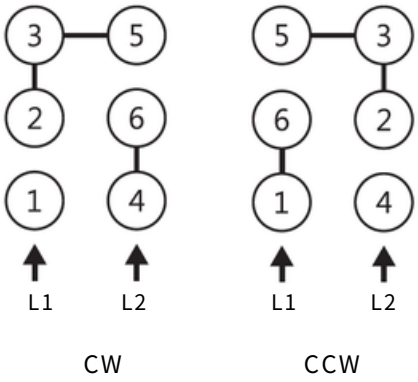


WIRE DRAWING-L SERIES

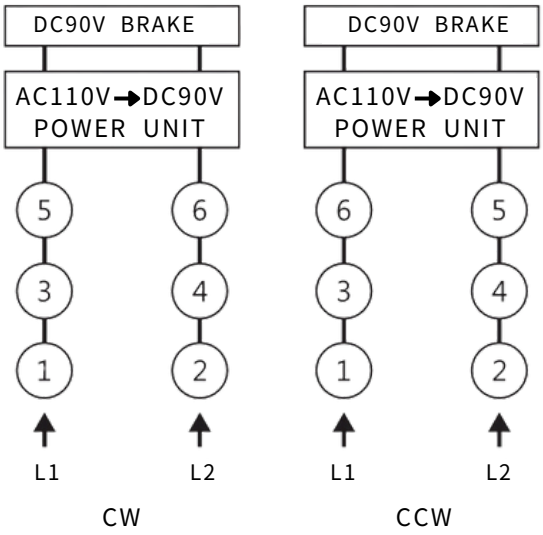
SINGLE PHASE 110V WITH 6 WIRES



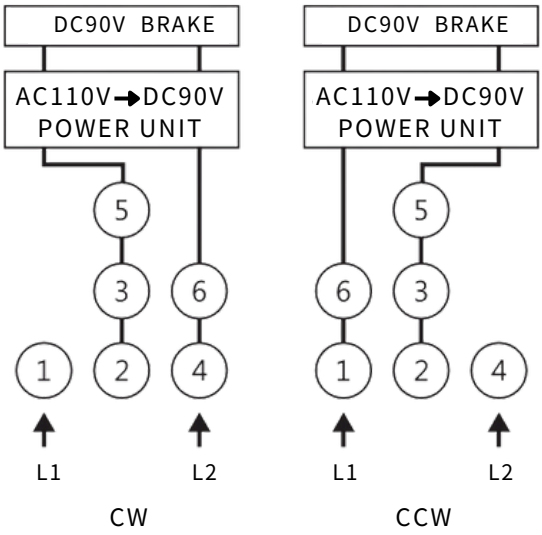
SINGLE PHASE 220V WITH 6 WIRES



SINGLE PHASE 110V WITH 6 WIRES WITH BRAKE

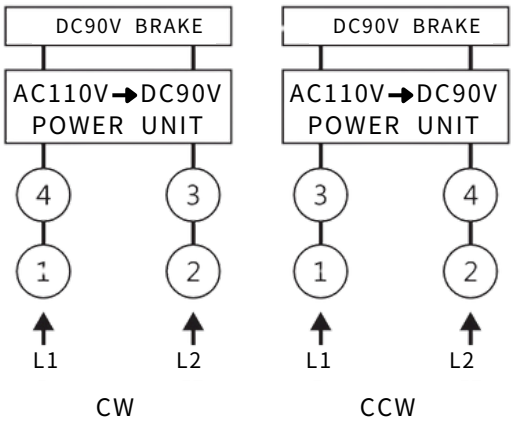


SINGLE PHASE 220V WITH 6 WIRES WITH BRAKE

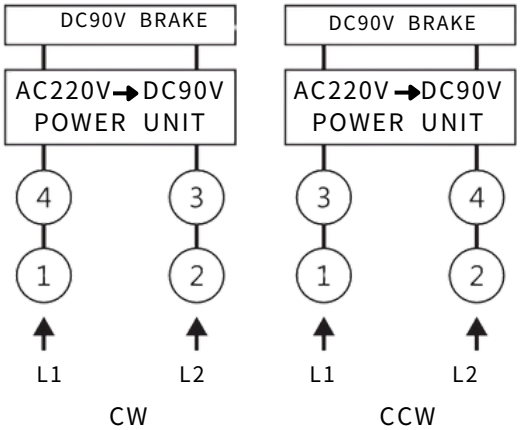


WIRE DRAWING-J SERIES

SINGLE PHASE 110V WITH BRAKE (J SERIES)



SINGLE PHASE 220V WITH BRAKE (J SERIES)



SPECIFICATION OF MOTOR AND BRAKE

PHASE	OUTPUT (W/HP)	POLE (P)	VOLTAGE (V)	FREQ. (Hz)	MOTOR RATED RPM	MOTOR RATED CURRENT (A)	MOTOR RATED TORQUE (Kg • m)	CLASS	BRAKE TORQUE (Kg • m)	RELEASE TIME AC SWITCH	RELEASE TIME DC SWITCH	ADJUST GAP SPECIFIED VALUE	ADJUST GAP BOUNDARY VALUE	WITH BRAKE BRAKE VOLTAGE	WITH BRAKE INPUT VOLTAGE	WITH BRAKE OPERATION TIMES
3Ø	100W (1/8 HP)	4P	220/380	50 60	1400 1700	0.71 / 0.41 0.62 / 0.36	0.069 0.058	E	0.1	0.1	0.06	0.3	0.7	DC90V	AC200~ 240V	10 times/ min
	200W (1/4 HP)		220/380	50 60	1400 1700	1.16 / 0.67 0.99 / 0.57	0.115 0.137	E	0.2	0.07	0.03	0.3	0.7			
	400W (1/2HP) Standard		220/380	50 60	1350 1670	2.03 / 1.17 1.82 / 1.05	0.28 0.24	E	0.4	0.10	0.03	0.3	0.7			
	400W (1/2HP) Enhanced		220/380	50 60	1400 1700	1.80 / 1.04 1.68 / 0.97	0.27 0.23	E	0.4	0.10	0.03	0.3	0.7			
	750W (1 HP)		220/380	50 60	1400 1700	3.43 / 1.98 3.12 / 1.80	0.52 0.43	E	0.8	0.12	0.05	0.3	1.0			
	1500W (2 HP)		220/380	50 60	1400 1700	6.27 / 3.62 5.78 / 3.34	1.03 0.86	E	1.6	0.14	0.05	0.3	1.0			
	2200W (3 HP)		220/380	50 60	1400 1700	9.50 / 5.48 8.76 / 5.06	1.53 1.26	E	2.5	0.15	0.03	0.3	1.0			
	3700W (5 HP)		220/380	50 60	1400 1700	15 / 8.66 13.8 / 8	2.57 2.12	E	5.0	0.17	0.05	0.3	1.2			
1Ø	100W (1/8 HP)	4P	110/220	50 60	1350 1670	- / 1.14 1.84 / 1.01	0.072 0.058	E	0.1	0.1	0.06	0.3	0.7	DC90V	AC100~ 110V AC200~ 240V	10 times/ min
	200W (1/4 HP)		110/220	50 60	1350 1670	- / 2 3.11 / 1.68	0.144 0.117	E	0.2	0.07	0.03	0.3	0.7			
	400W (1/2 HP)		110/220	50 60	1380 1680	- / 3.33 6.65 / 3.38	0.282 0.232	E	0.4	0.10	0.03	0.3	0.7			
	750W(1 HP)		110/220	50 60	1380 1680	- / 5.48 10.1 / 5.18	0.529 0.435	E	0.8	0.12	0.15	0.3	1.0			

SPECIFICATION OF GEAR MOTOR

RATIO	100W (1/8HP) TORQUE				200W (1/4HP) TORQUE				400W (1/2HP) TORQUE				750W (1HP) TORQUE				1500W (2HP) TORQUE				2200W (3HP) TORQUE				3700W (5HP) TORQUE			
	Ø	50Hz Kg・m	60Hz Kg・m	O.H.L Kg	Ø	50Hz Kg・m	60Hz Kg・m	O.H.L Kg	Ø	50Hz Kg・m	60Hz Kg・m	O.H.L Kg	Ø	50Hz Kg・m	60Hz Kg・m	O.H.L Kg	Ø	50Hz Kg・m	60Hz Kg・m	O.H.L Kg	Ø	50Hz Kg・m	60Hz Kg・m	O.H.L Kg	Ø	50Hz Kg・m	60Hz Kg・m	O.H.L Kg
3	18	0.2	0.17	30	18	0.38	0.31	30	22	0.71	0.6	54	28	1.29	1.11	62	32	2.60	2.21	135	40	3.8	3.19	155	40	6	5.5	180
5	18	0.32	0.27	60	18	0.61	0.5	60	22	1.15	1	90	28	2.25	1.85	130	32	4.81	3.5	180	40	6.55	5.48	220	40	11	10	225
10	18	0.62	0.51	90	18	1.2	1	90	22	2.5	2.1	120	28	4.6	3.9	180	32	8.8	7.1	250	40	13.2	10.7	320	40	22	20	550
12.5	18	0.77	0.66	100	22	1.54	1.24	100	28	3.1	2.5	130	28	5.7	4.9	190	32	11	8.9	290	40	16.5	13.3	340				
15	18	0.93	0.77	100	22	1.85	1.5	100	28	3.7	2.9	140	28	6.9	5.8	220	32	13.2	10.7	290	40	19.8	16	360	50	32.6	29.8	750
20	18	1.2	1	120	22	2.47	1.99	120	28	4.94	4	150	28	9.3	7.7	240	32	17.6	14.2	330	40	26.5	21.4	410	50	43.6	36	830
25	18	1.5	1.3	130	22	3	2.49	130	28	6.17	4.9	170	28	11.6	9.6	250	32	22.1	17.8	390	40	33.1	26.7	480	50	53.9	49.5	1050
30	18	1.8	1.4	140	22	3.6	2.98	180	28	7.4	5.87	260	32	13.85	11.55	410	32	26.4	21.3	520	40	39.65	32	710	50	64.7	58.8	1000
40	18	2.4	2	150	22	4.94	3.99	190	28	9.88	7.98	290	32	17.9	14.9	430	40	35.3	28.5	600	40	53	42.8	740	50	86.3	78.5	1200
50	18	3	2.5	160	22	6.17	4.98	200	28	12.3	9.97	320	32	22.4	18.7	470	40	44.2	35.7	720	50	66.3	53.3	880	50	107	97	1350
60	22	3.6	3	220	22	7.4	5.98	220	28	14.8	11.9	350	32	26.9	22.4	560	40	53	42.8	720	50	79.5	64.2	1000	50	127	115	1400
70	22	4.3	3.6	220	22	7.9	6.9	220	28	16.5	13.6	350	32	31.7	26.5	560	40	62.6	52.1	720	50	92.6	77.3	1000				
75	22	4.6	3.7	220	22	9.2	7.5	220	28	18.5	14.9	350	32	35.1	28.3	560	40	66.3	53.5	720	50	99.4	80.3	1000				
80	22	4.9	4.1	220	22	9.4	7.9	220	28	18.4	15.5	350	32	35.4	29.8	560	40	70.9	59.5	720	50	105.1	87.7	1000				
90	22	5.4	4.4	250	22	11	8.9	250	28	22.1	17.8	350	32	42	33.95	600	40	79.4	64.1	720	50	113	94.5	1000				
100	22	6	5	250	28	12.3	9.9	250	32	24.7	19.9	350	32	46.8	37.8	600	40	88.4	71.4	720	50	126	105	1000				
120	22	7.2	6	250	28	14.8	11.9	340	32	29.6	23.9	600	32	58.4	47.3	720	50	106	85.6	1000								
150	22	9.1	7.4	250	28	18.4	14.8	350	32	36.9	29.8	600	40	70.1	56.6	720	50	132.5	107	1000								
180	22	11	9	250	28	22.2	17.9	350	32	44.4	35.9	600	40	84.2	68	720	50	132.6	107.1	1000								
200	22	11.9	10	250	28	24.7	19.9	350	32	49.4	39.9	600	40	93.6	75.6	720												

NOTES: O.H.L means overhung load.

NORMAL RATIO & ACTUAL RATIO SHEET

STANDARD GEAR MOTOR

Code 18	1/8 HP	Normal	3	5	7.5	10	12.5	15	18	20	21.4	25	30	36	40	50	60	75	80	90	100	120	150	180	200
		Actual	3.3	5	7.5	10.8	12.7	15	17.7	20	21.4	25	29.5	36.7	40.5	50.4	60.2	73.3	--	91.7	107.6	122.2	150	165	198
	1/4 HP	Normal	3	5	7.5	10	12.5	15	18	20	21.4	25	30	36	40	50	60	75	80	90	--	--	--	--	--
		Actual	3.3	5	7.5	10.8	12.7	15	17.7	20	21.4	25	29.5	36.7	40.5	50.4	60.2	73.3	--	91.7	--	--	--	--	--
Code 22	1/8 HP	Normal	60	70	80	90	100	120	140	150	160	180	200	240	--	--	--	--	--	--	--	--	--	--	--
		Actual	63.1	68.9	75.6	92.7	103.1	120.7	131.3	143.4	157.3	192.8	215.9	239.9	--	--	--	--	--	--	--	--	--	--	--
	1/4 HP	Normal	12.5	15	18	20	25	30	40	50	60	70	80	90	100	120	140	150	160	180	200	--	--	--	--
		Actual	12.6	15.7	18.3	19.9	23.9	29.3	39.9	49.6	63.1	68.9	75.6	92.7	103.8	120.7	131.3	143.4	157.3	192.8	215.9	--	--	--	--
	1/2 HP	Normal	3	5	7.5	10	12.5	15	18	20	25	30	35	40	50	60	75	90	--	--	--	--	--	--	--
		Actual	3	5.1	7.4	10.9	12.9	15.4	--	21	26.9	31.7	--	40.7	48.9	66.6	74.9	85.1	--	--	--	--	--	--	--
	1HP	Normal	3	5	7.5	10	12.5	15	20	25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Actual	3.1	5.1	7.4	10.9	12.9	15.4	21	26.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Code 28	1/4 HP	Normal	100	120	140	160	165	180	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Actual	97.8	117.3	143.4	160	163.6	179.9	204.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1/2 HP	Normal	12.5	15	18	20	25	30	40	50	60	70	80	90	100	120	140	160	165	180	200	--	--	--	--
		Actual	12.2	15.6	18.8	22.9	25.6	32.6	38.4	49.3	59.1	72.3	80.6	90.7	97.8	117.3	143.4	160	163.6	179.9	204.3	--	--	--	--
	1 HP	Normal	3	5	7.5	10	12.5	15	18	20	25	30	40	50	60	75	90	100	120	--	--	--	--	--	--
		Actual	3	5	7.7	9.7	12.5	15	18.3	20.5	26.1	30	39.4	47.3	57.8	73.3	85.1	100	127.7	--	--	--	--	--	--
	2 HP	Normal	3	5	7.5	10	12.5	15	18	20	25	30	--	--	--	--	--	--	--	--	--	--	--	--	--
		Actual	3	5	7.7	9.7	12.5	15	18.3	20.5	26.1	30	--	--	--	--	--	--	--	--	--	--	--	--	--
Code 32	1/2 HP	Normal	100	120	140	150	180	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Actual	109.8	129.6	137.4	155.6	171.8	194.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1 HP	Normal	30	40	50	60	70	80	90	100	120	125	150	180	200	--	--	--	--	--	--	--	--	--	--
		Actual	28	41	53	58.1	67.8	80	96	106	120	129.6	155.6	171.8	194.4	--	--	--	--	--	--	--	--	--	--
	2 HP	Normal	3	5	7.5	10	12.5	15	18	20	25	30	40	50	60	70	80	90	100	--	--	--	--	--	--
		Actual	3.2	5	7.9	10.4	12.1	14.3	17.2	19	25.1	28.2	41.6	48.6	57.3	68.9	76	86	107.5	--	--	--	--	--	--
Code 40	1 HP	Normal	125	140	150	180	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		Actual	117.2	135	150	181	201	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2 HP	Normal	25	30	40	50	60	70	80	90	100	110	120	150	170	--	--	--	--	--	--	--	--	--	--
		Actual	25	28.8	39.1	50	57.5	67.1	78.1	87.9	97.7	112.5	125	150.9	167.6	--	--	--	--	--	--	--	--	--	--
	3 HP	Normal	3	5	10	15	20	25	30	40	45	50	60	70	80	90	100	--	--	--	--	--	--	--	--
		Actual	3.3	5.4	9.6	14.4	19.5	25	28.8	39.1	44.9	50	57.5	67.1	78.1	87.9	97.7	--	--	--	--	--	--	--	--
	5 HP	Normal	3	5	10	15	20	25	30	40	50	60	--	--	--	--	--	--	--	--	--	--	--	--	--
		Actual	3.3	5.4	9.6	14.4	19.5	25	28.8	39.1	50	57.5	--	--	--	--	--	--	--	--	--	--	--	--	--

NORMAL RATIO & ACTUAL RATIO SHEET

HIGH RATIO GEAR MOTOR

Code 22	1/8 HP	Normal	250	300	350	450	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800
		Actual	289.8	339.7	402.9	475.2	537.1	610.7	720.3	814.3	864.4	977.1	1043.8	1178.7	1325.4	1423.3	1498.3	1600.4	1872.9
Code 28	1/8 HP	Normal	250	300	350	450	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800
		Actual	281.7	330.2	391.7	462	522.2	591.4	697.5	788.5	946.2	1023	1100	182.7	1297.4	1344.4	1466.7	1566.7	1833.3
	1/4 HP	Normal	250	300	350	450	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800
		Actual	281.7	330.2	391.7	462	522.2	591.4	697.5	788.5	946.2	1023	1100	182.7	1297.4	1344.4	1466.7	1566.7	1833.3
Code 32	1/4 HP	Normal	250	300	350	450	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800
		Actual	239.2	315.9	370.1	460	500	651.8	760.2	830.1	897.4	994.6	1050.8	1142.8	1261	1369.4	1514.3	1643.3	1814.4
	1/2 HP	Normal	250	300	350	450	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800
		Actual	272.3	322.5	387	453.3	527.7	749.3	813.8	876.1	884.6	1021.8	1118.4	1206.2	1304.3	1447.5	1539.8	1598.3	1847.8
Code 40	1/2 HP	Normal	250	300	350	450	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800
		Actual	241.5	304.3	349.9	449.22	483	608.6	699.8	781.3	895.2	998.8	1078.1	1220.7	1317.7	1464.8	1536.5	1631.9	1831.1
	1 HP	Normal	250	300	350	450	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800
		Actual	243.4	312.5	359.4	458.3	511.4	588.1	716.1	799	916.7	1005.7	1098.6	1176.1	1305.6	1371.4	1500	1598	1797.8

DC PERMANENT MAGNET MOTOR

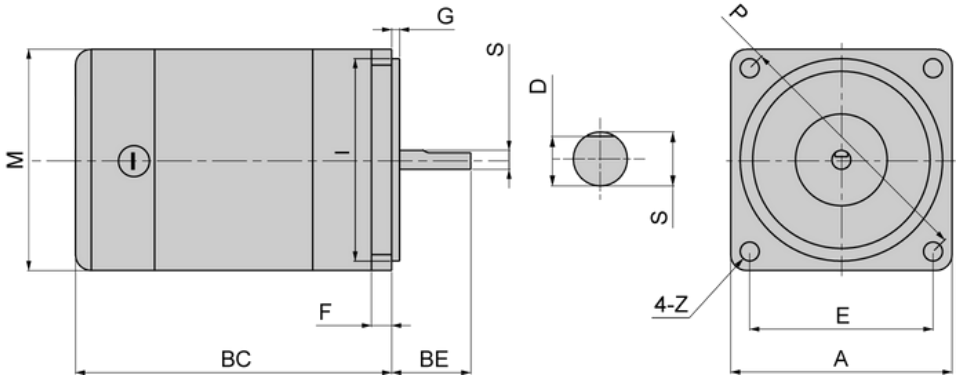
INDICATION OF DC MOTOR

D	05	GN	12	-	1800

MODEL	CODE	MOTOR SHAFT	VOLTAGE	MOTOR SPEED
Permanent Magnet DC Motor	05 : 60mm 06 : 70mm 07 : 80mm 08 : 90mm 10 : 90mm 12 : 90mm 18 : 90mm	A:Round shaft GN:General Helical gear shaft (Model 05~08) GU:Enhanced Helical gear shaft(Model 10~18)	12 : 12V 24 : 24V 90 : 90V 180 : 180V	1800 3000

Round shaft type

Gear shaft type



DIMENSION(mm)

	MODEL	A	BC	BE	I	M	F	S	G	Z	P	E
DC	05	60	102.5	24	54	63	6.4	8	2.2	4.5	70	49.5
	06	70	102.5	25	64	70	6.4	8	2.2	6	82	58
	07	80	109	25	73	70	6.5	8	2.2	6	94	66.5
	08	90	118	32	83	80	8.4	10	2.2	7	104	73.6
	10	90	138	32	83	80	8.4	10/12	2.2	7	104	73.6
	12	90	161	32	83	90	10.5	12	2.2	8	104	73.6
	18	90	181	32	83	90	10.5	12	2.2	8	104	73.6

※ Rated Time limited : Means motor must be cooled down after 30mins runing. Otherwise, motor is possible to be damaged.
※ 1800 rpm: Continuous Operation 3000 rpm: 30 mins rated time limited

STANDARD SPECIFCATIN

MOTOR TYPE			VOLTAGE (V)	RATED CURRENT (A)	RATED RPM (rpm)	OUTPUT		WEIGHT (KG)	COLLOCATED GEARHEAD
	MODEL	MOTOR SHAFT				WATT (W)	TORQUE (Kg • cm)		
DC	05	A GN	12/24	1.4/0.7	1800	10	0.6	0.7	GN : 2GN
				2.8/1.4	3000	20	0.7		
			90	0.23	1800	10	0.6		
				0.37	3000	20	0.7		
	06	A GN	12/24	2.2/1.1	1800	20	1.13	1.0	GN : 3GN
				4.0/2.0	3000	36	1.17		
			90/180	0.3/0.15	1800	20	1.13		
				0.53/0.26	3000	36	1.17		
	07	A GN	12/24	3.3/1.65	1800	30	1.70	1.3	GN : 4GN
				6.6/3.3	3000	60	1.95		
			90/180	0.44/0.22	1800	30	1.70	1.7	
				0.88/0.44	3000	60	1.95		
	08	A GN	12/24	4.4/2.2	1800	40	2.26	1.7	GN: 5GN
				7.7/3.86	3000	70	2.27		
			90/180	0.59/0.29	1800	40	2.26		
				1.03/0.5	3000	70	2.27		
	10	A GU	12/24	7.2/3.5	1800	65	3.68	2.2	GU : 5GU
				13.2/6.6	3000	120	3.89		
			90/180	0.96/0.48	1800	65	3.68	2.3	
				1.77/0.88	3000	120	3.89		
	12	A GU	12/24	11/5.5	1800	100	5.66	3.4	GU : 5GU
				22/11	3000	200	6.49		
			90/180	1.47/0.74	1800	100	5.66	3.5	
				2.94/1.47	3000	200	6.49		
	18	A GU	12/24	22/11	1800	200	11.3	4	GU: 5GU
			90/180	2.9/1.5	1800	200	11.3	4.1	

※ Please contact us while the motor is running under the low temperature environment.

BRUSHLESS MOTOR

BU Series
(AC Input)

AC Input

- Single-phase or three-phase input voltage of alternating current

Wider Speed Range Keep Torque Stable

- Motor speed range 80~4500rpm.
- Torque is not affected by low speed.

Feature-rich

- Reverse direction
- Modify velocity
- Setting for Acceleration/Deceleration Time
- Various speed configurations
- Operating Modes Selection
- Protection function, alarm indication

Efficiency Greatly Improved

- The efficiency of motor and driver set reaches 70~80%.
  *Efficiency may vary by products.

BU SERIES - BRUSHLESS MOTOR

INDICATION OF MOTOR

6	BU	030	GB	-	A	30	□
DIMENSION	TYPE	OUTPUT	MOTOR SHAFT		VOLTAGE	RATED SPPED	Protection
6: 60mm 8: 80mm 9: 90mm	BU: BU brushless motor	030: 30W 060: 60W 120: 120W	A: Round shaft GB: Helical gear shaft		A: AC100~240V	30: 3000RPM	□ : IP40 standard (not shown)

INDICATION OF DRIVER

BUD	030	-	C	□
TYPE	OUTPUT		POWER INPUT VOLTAGE	FUNCTION
BUD: BU driver	030: 30W 060: 60W 120: 120W		A: Single-phase AC100~120V C: Single-phase AC200~240V/ Three-phase AC200~240V	□ : Standard (not shown)

INDICATION OF GEAR BOX

6	GB	5
DIMENSION	TYPE	RATIO
6: 60mm 8: 80mm 9: 90mm	GB: Helical gearbox	5: 1/5 *Please refer to the gearbox specification table for the ratio.

INDICATION OF CONNECTION CABLE

CL	010	□	BU	□
CABLE	LENGTH	CONNECTOR TYPE	SERIES	FUNCTION
CL: Connection cable	010: 1m 020: 2m	□ : Standard (not shown)	BU: BU series	□ : Standard (not shown)

SPECIFICATION

30(W)	Model of motor		Round shaft type: 6BU030A-A30 Helical gear shaft type: 6BU030GB-A30		
	Model of driver		BUD030-A	BUD030-C	
	Power input voltage	Rated voltage (V)	Single-phase AC110V	Single-phase AC220V	Three-phase AC 220V
		Voltage tolerance	±15%		
		Frequency (Hz)	50/60		
		Frequency tolerance	±5%		
		Rated input current (A)	0.86	0.51	0.32
		Max. input current (A)	2.0	1.2	0.75
	Rated output (W)		30		
	Motor rated speed (r/min)		3000		
	Speed control range (r/min)		80~4500		
	Speed change rate		±0.2%		
	Motor rated torque (N-m)		0.10		
	Motor peak torque (N-m)		0.14		
	Rotor inertia (J= X 10 kg・m^2)		0.087		
	Permissible load inertia (J= X 10 kg・m^2)		1.8		
	Insulation		B		
	Ingress Protection Rating		Motor IP40, Driver IP20		

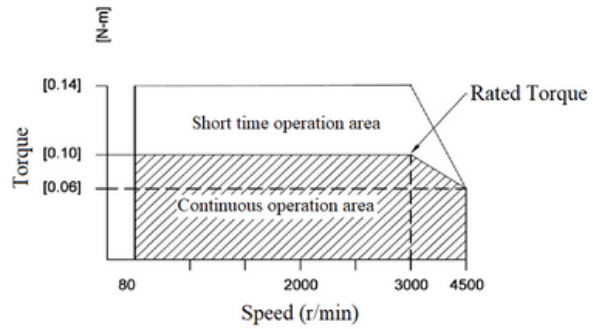
60(W)					
	Model of motor		Round shaft type: 8BU060A-A30 Helical gear shaft type: 8BU060GB-A30		
	Model of driver		BUD060-A	BUD060-C	
	Power input voltage	Rated voltage (V)	Single-phase AC110V	Single-phase AC220V	Three-phase AC 220V
		Voltage tolerance	±15%		
		Frequency (Hz)	50/60		
		Frequency tolerance	±5%		
		Rated input current (A)	1.48	0.82	0.50
		Max. input current (A)	3.3	1.9	1.1
	Rated output (W)		60		
	Motor rated speed (r/min)		3000		
	Speed control range (r/min)		80~4500		
	Speed change rate		±0.2%		
	Motor rated torque (N-m)		0.19		
	Motor peak torque (N-m)		0.29		
	Rotor inertia (J= X 10 kg・m^2)		0.23		
	Permissible load inertia (J= X 10 kg・m^2)		3.3		
	Insulation		B		
	Ingress Protection Rating		Motor IP40, Driver IP20		

120(W)	Model of motor		Round shaft type: 9BU120A-A30 Helical gear shaft type: 9BU120GB-A30		
	Model of driver		BUD120-A	BUD120-C	
	Power input voltage	Rated voltage (V)	Single-phase AC110V	Single-phase AC220V	Three-phase AC 220V
		Voltage tolerance	±15%		
		Frequency (Hz)	50/60		
		Frequency tolerance	±5%		
		Rated input current (A)	2.33	1.41	0.81
		Max. input current (A)	6.8	4.1	2.0
	Rated output (W)		120		
	Motor rated speed (r/min)		3000		
	Speed control range (r/min)		80~4500		
	Speed change rate		±0.2%		
	Motor rated torque (N-m)		0.38		
	Motor peak torque (N-m)		0.57		
	Rotor inertia (J= X 10 kg・m^2)		0.61		
	Permissible load inertia (J= X 10 kg・m^2)		5.6		
	Insulation		B		
	Ingress Protection Rating		Motor IP40, Driver IP20		

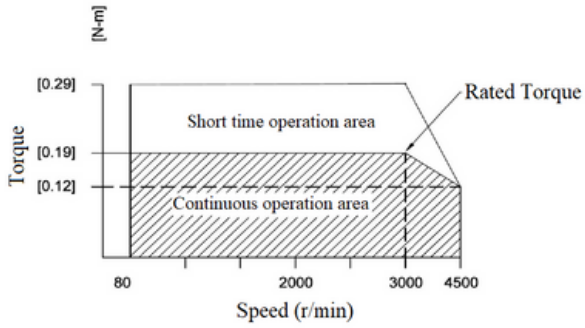
MOTOR TORQUE CHARACTERISTIC

Short-time operation area: mainly used for short-time operation. If the set time is exceeded, the overload protection function will activate.
Continuous operation area: An area where continuous operation is possible.

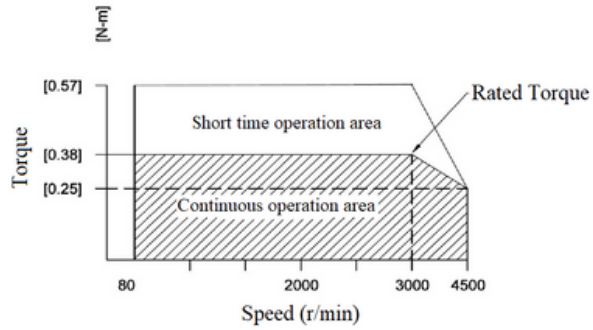
30W



60W



120W



BASIC SPECIFICATION

Item	motor	driver
Detection of driving	Hall sensor	
Operation mode	Continuous	
Insulation level of motor	B	
Ingress protection level	IP40	IP20
Insulation resistance	Insulate DC500V 100MΩ or higher.	Power terminal to driver heat sink DC500V 100MΩ or higher
Withstand voltage	Insulation withstand voltage: 1500V AC for 1 minute	Power terminal to driver shell withstands AC500V for 1 minute
Usage environment	Temperature Range: 0 to +40°C (above freezing)	
	Humidity: below 85% (no condensation)	
	Altitude: under 1000 meters above sea level.	
	Free of corrosive gases and dust. Special environments such as non-explosive, radioactive places, magnetic fields or vacuum.	
Storage environment	Temperature Range: -20 to +70°C (non-freezing)	
	Humidity: below 85% (no condensation)	
	Altitude: under 3000m above sea level	
	Environment: Keep away from direct sunlight, reduce salt, and store in a well-ventilated area.	
Material of the shaft	Motor shaft and reducer output shaft are made of steel.	

SPECIFICATION OF GEARBOX

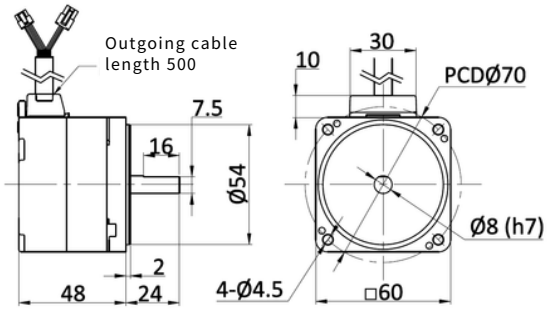
Gearbox	Motor speed \ Actual ratio		5	10	15	20	30	50	100
Output speed (r/min)		3000r/min	600	300	200	150	100	60	30
Allowable torque (N.m)	30W	80~3000r/min	0.42	0.83	1.26	1.65	2.43	3.98	6.00
		4500r/min	0.29	0.59	0.87	1.17	1.71	2.79	4.86
	60W	80~3000r/min	0.83	1.65	2.52	3.30	4.75	7.95	16.00
		4500r/min	0.59	1.17	1.71	2.34	3.33	5.58	11.16
	120W	80~3000r/min	1.65	3.30	5.04	6.69	9.60	15.91	30.00
		4500r/min	1.17	2.34	3.51	4.68	6.66	11.07	22.23
Allowable radial load (N)	30W	10mm from the front end of the output shaft	100		150		200		
	60W		200		300		450		
	120W		300		400		500		
	30W	20mm from the front end of the output shaft	150		200		300		
	60W		250		350		550		
	120W		400		500		650		
Allowable axial load (N)	30W					40			
	60W					100			
	120W					150			
Rotation direction			Same direction as the motor				Opposite direction to the motor		

DIMENSIONAL DRAWING

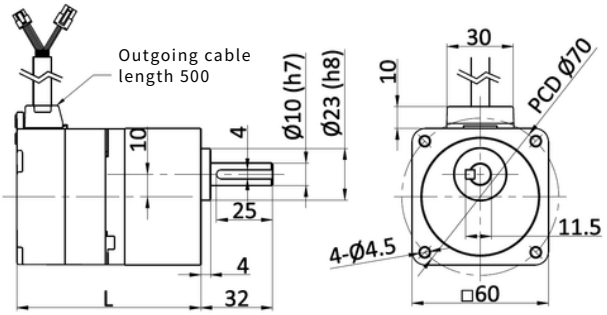
Unit: mm

30W

Motor



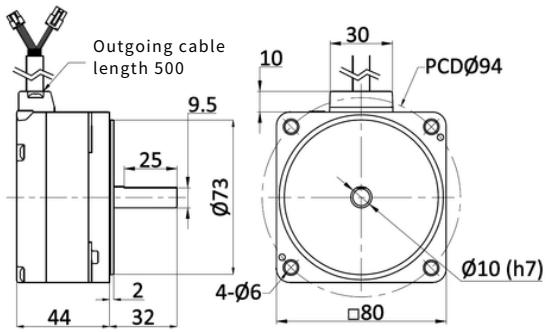
Motor with gearbox



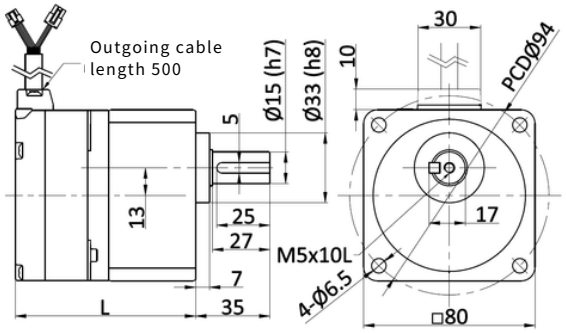
Ratio	L
5~20	82
30~100	86

60W

Motor



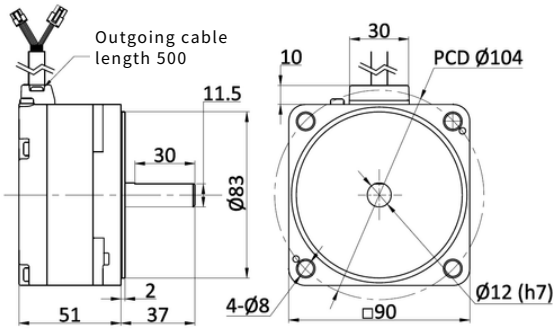
Motor with gearbox



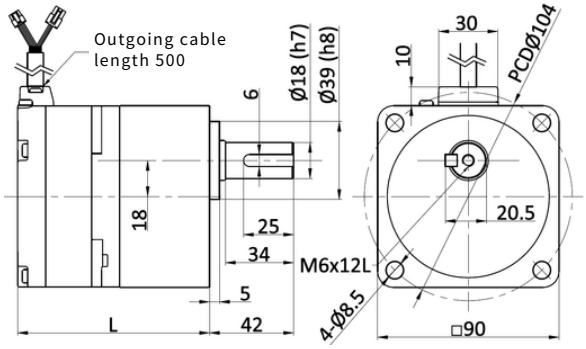
Ratio	L
5~20	85
30~100	90

120W

Motor

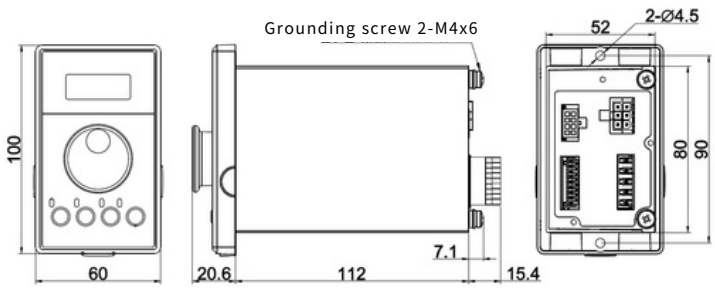


Motor with gearbox

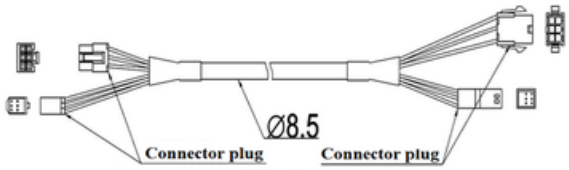


Ratio	L
5~20	96
30~100	109

Driver



Accessory

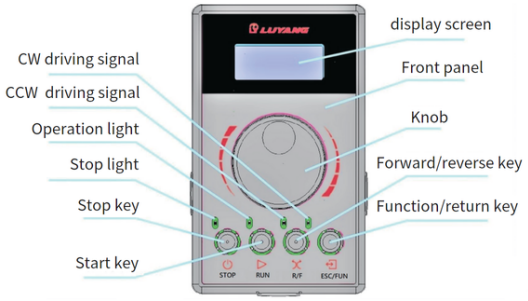


Driver side

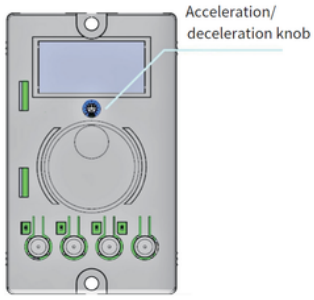
Motor side

FUNCTION AND OPERATION

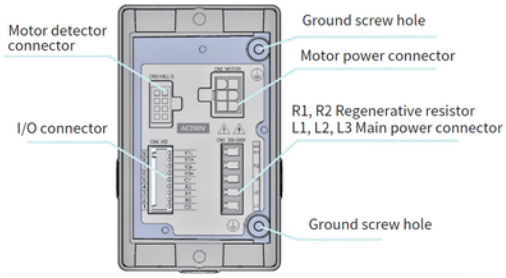
Name of each part



Front Side of Driver
(with front panel)



Front Side of Driver
(remove front panel)



Back Side of Driver

Power Voltage Input
Single-phase: Connect the power to L1 and L2 respectively.
Three-phase: Connect the power to L1, L2 and L3 respectively.

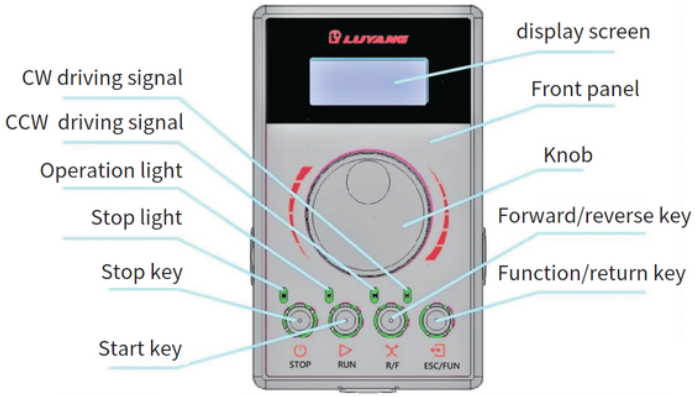
Function

Function	Content
Operation function	Motor start/stop. Switch running direction. Adjust speed. Choice of three operating modes. Setting of four sections of operating data: speed, torque limit, acceleration/deceleration time. Upper limit and lower limit setting of motor speed. Set the rotation speed when displaying the reduction ratio and acceleration ratio. Slow start/slow stop. Simple stop with hold mode.
Speed setting method	Use the knob to adjust the speed. Use I/O to set the speed of four-stage running data.
Acceleration/deceleration time*1	Analog setting: Set by acceleration and deceleration knob. Set within the range of 0.2~15 seconds. Digital setting: Set for each segment. Set within the range of 0.2~15 seconds. *1 Actual acceleration time and deceleration time are affected by the usage conditions, load inertia, load torque, etc.
Input signal	Optocoupler input method: power supply must be less than 10mA. Operation using internal power supply: DC5V. Connectable external DC power supply: DC5~30V. SINK input/SOURCE input. Can select 3 sets of inputs (X0~X2) from the signal. Factory settings: [FWD], [REV], [M0].
Output signal	Optocoupler, transistor open collector circuit output. External DC power supply: DC5~30V. SINK output/SOURCE output. Can select 2 sets of inputs (Y0~Y1) from the signal. Factory settings: [SPEED OUT], [ALARM OUT].
Protection function	Abnormal alarm display, overload, overcurrent, overvoltage, undervoltage, overspeed, motor stall, detector abnormality, safe start, driver overtemperature, driver power module abnormality.

■Connect and run

● Operates through the driver body

1. Motor start/stop: Press the run key (RUN) to start the motor. Press the stop button (STOP) to stop the motor.
2. Switch the rotation direction: Press the rotation direction key to switch the motor rotation direction.
3. Adjust the speed: Press the knob and turn the knob to adjust the speed. Press the knob again to confirm the speed setting.



Slowly turn the knob to the right, and the rotation speed will gradually increase at 1r/min.
Slowly turn the knob to the left, and the rotation speed will gradually decrease at 1r/min.
When turning the knob quickly, the rotation speed changes significantly.

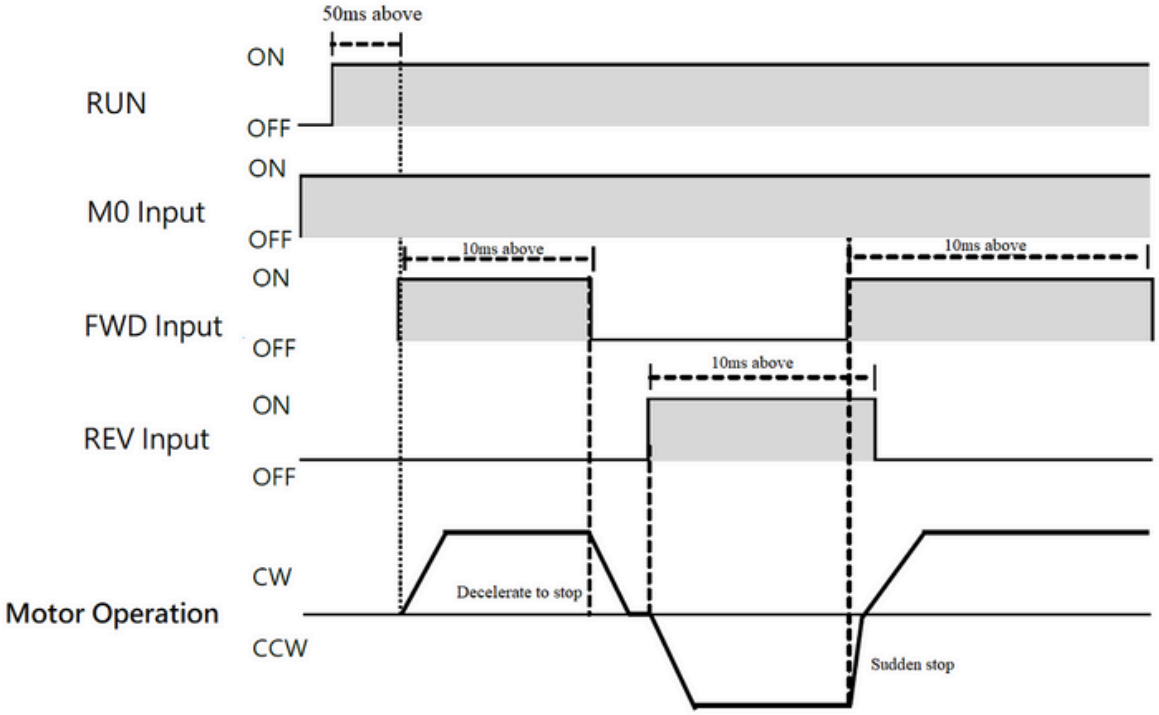
● Set operation time by external signal

I/O connector signal contact description

Pin No.	Terminal name	Default value*1	Description	Description	Voltage range
9	Y1-	[ALARM OUT]	OUT-1	Will be [OFF] when ALARM occurs	DC 5 ~ 30V current under 10mA
8	Y1+				
7	Y0-	[SPEED OUT]	OUT-0	The motor output shaft outputs 30 pulse signals per revolution.	
6	Y0+				
5	C1	C1		0V (for internal power use)	DC 0V
4	X2	[FWD]	IN-2	When [ON], the motor rotates in FWD direction.	DC 10 ~ 30V current under 10mA
3	X1	[REV]	IN-1	When [ON], the motor rotates in REV direction.	
2	X0	[M0]	IN-0	When [OFF], the motor operates in SP.1 mode.	
1	C0	C0		Input signal common contact (for external power use).	COM

※[ ] is the factory setting.
※The wire diameter of the output/input signal cable must be more than 26AWG.
※3 sets of inputs (X0~X2) and 2 sets of outputs (Y0~Y1) can be assigned from the following signals.
11 sets of relative input signals - Unused, STOP_MODE, FWD, REV, START/STOP, RUN/BRAKE, CCW/CW, M0, M1, ALARM_RESET, EMERGENCY_SWITCH.
6 sets of relative output signals - SPEED_OUT, ALARM_OUT, MOVE, VA, DIR, TRAV.

■Timing diagram



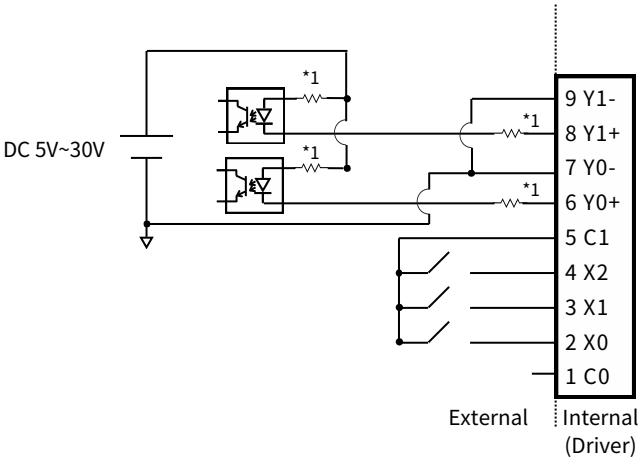
When the FWD input is ON and REV is OFF, the motor runs in the CW direction.
When the FWD input is OFF and REV is ON, the motor runs in the CCW direction.
When the FWD and REV inputs are set to ON at the same time, the motor stops instantly.
* The rotation direction here is the running direction of the motor alone. The reduction ratio of the reducer is different, and the running direction will change.

Notice
▼ Do not use the ON/OFF of the power supply to operate or stop the motor. It must be done through the driver body or external signals.
▼ Please input the input signals at least 10ms apart, otherwise the motor may malfunction.
▼ The greater the friction load and load inertia, or the more frequent starts-instant stops-reversals, the faster the temperature of the motor rises. Please keep the motor surface temperature below 90°C.

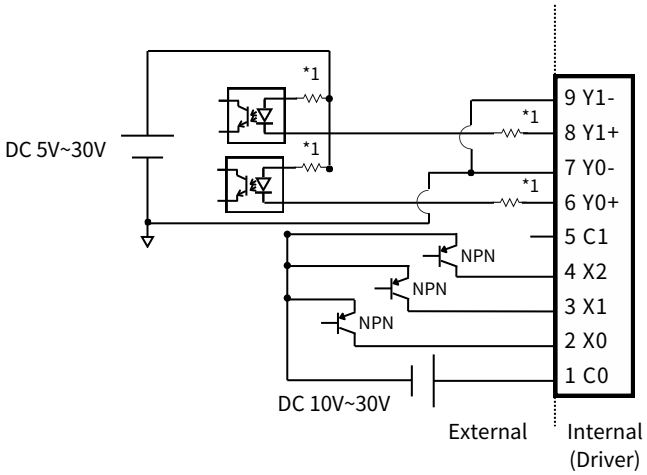
I/O signal wiring

Sink circuit (internal power)

*Internal power supply refers to using the built-in power supply of the driver.

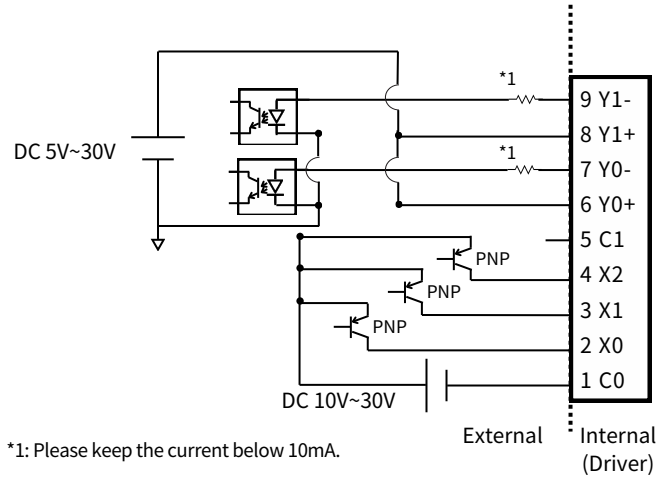


Sink circuit (external power)



*1: Please keep the current below 10mA.

Source circuit (external power)



*1: Please keep the current below 10mA.

■Connect and operate

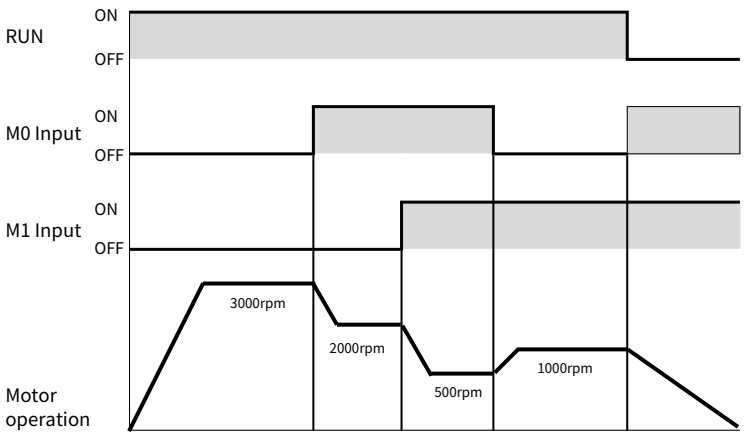
Operation mode	Content
Monitoring mode	Operating status, load rate, number of operating stages, warnings, I/O monitoring, main power supply voltage, operating amount count, total operating amount, drive temperature
Multi-stage mode	Four operating stages of setting (Operating data: speed, torque limit (0~300%), acceleration and deceleration time (0.2~15 seconds).
Parameter mode	**Parameter A:** Speed input mode (internal speed, multi-step speed input by M0 and M1), operation mode (panel operation, I/O operation), acceleration and deceleration setting selection (hardware: acceleration and deceleration rate knob, software: ACCT, DECT, AT, DT), acceleration time, deceleration time, motor speed upper/ lower limit, stop hold mode, slow start, slow stop, torque limit, reduction ratio, display digits of reduction ratio, speed increase ratio, panel initial display. **Parameter B:** I/O mode setting. **Parameter C:** Alarm mode, operation volume counting and setting, and restoration to original factory settings. **Parameter M:** Motor established information and displays software version, etc.

● When running using multiple speeds

After the operation data setting is completed, multi-stage operation can be performed by switching the M0 and M1 inputs ON/OFF.

Example

Stage number of operating data	M0	M1	RPM
SP. 1	OFF	OFF	3000
SP. 2	ON	OFF	2000
SP. 3	OFF	ON	1000
SP. 4	ON	ON	500



Note: Please refer to the BU series operation manual for relevant details.

BRUSHLESS MOTOR

BH Series
(DC Input)

Wider Speed Range & Stable Torque

- Motor speed range 100~3000rpm.
- Torque is not affected by low speed.

DC Input Driver

- 24VDC input voltage.

More functions

- Modify velocity.
- Setting of acceleration and deceleration time.
- Adjustment of torque range.
- Security characteristics.

BH SERIES - BRUSHLESS MOTOR

INDICATION OF MOTOR

6	BH	030	GB	-	K	25	□

DIMENSION	TYPE	OUTPUT	MOTOR SHAFT	VOLTAGE	RATED SPPED	PROTECTION
6: 60mm 8: 80mm 9: 90mm	BH: BH brushless motor	030: 30W 050: 50W 100: 100W	A: Round shaft GB: Helical gear shaft	K: DC24V	25: 2500RPM	□ : IP40 standard (not shown)

INDICATION OF DRIVER

BHD	030	-	K	□

TYPE	OUTPUT	POWER INPUT VOLTAGE	FUNCTION
BHD: BH driver	030: 30W 050: 50W 100: 100W	K: DC24V	□ : Standard (not shown) G: Regeneration control

INDICATION OF GEARBOX

6	GB	5

DIMENSION	TYPE	RATIO	
6: 60mm 8: 80mm 9: 90mm	GB: Helical gearbox	5: 1/5	*Please refer to the gearbox specification table for the ratio.

INDICATION OF DRIVER POWER CABLE/ INPUT SIGNAL CABLE

※ When ordering the driver, a driver power cable and a driver input signal cable are included.

LBH	003	Y1

CONNECTION CABLE	LENGTH	CODE
LBH: BH series	003: 0.3m(standard)	Y1: Driver power cable Y2: Driver input signal cable

INDICATION OF CABLE ※ Maximum cable extension distance: 2m (including motor cable 0.5m)

CL	010	□	BH	□

CABLE	LENGTH	CONNECTOR TYPE	SERIES	FUNCTION
CL: Cable	010: 1m 020: 2m	□ : Standard (not shown)	BH: BH series	□ : Standard (not shown)

SPECIFICATION

			Round shaft type 6BH030A-K25	Helical gear shaft type 6BH030GB-K25
30W	Motor model			
	Driver model		BHD030-K	
	Power input voltage	Rated voltage (V)	DC24	
		Permissible voltage range	±15%	
		Rated input current (A)	1.9	
		Max. input current (A)	4.1	
	Rated output (W)		30	
	Motor rated speed (r/min)		2500	
	Speed control range (r/min)		100~3000	
	Speed change rate		±0.5%	
	Motor rated torque(N-m)		0.12	
	Motor peak torque (N-m)		0.17	
	Rotor inertia (J= X 10 kg・m^2)		0.087	
	Permissible load inertia (J= X 10 kg・m^2)		1.8	
	Motor Insulation		B	
	Ingress Protection Rating		Motor IP40, Driver IP00	

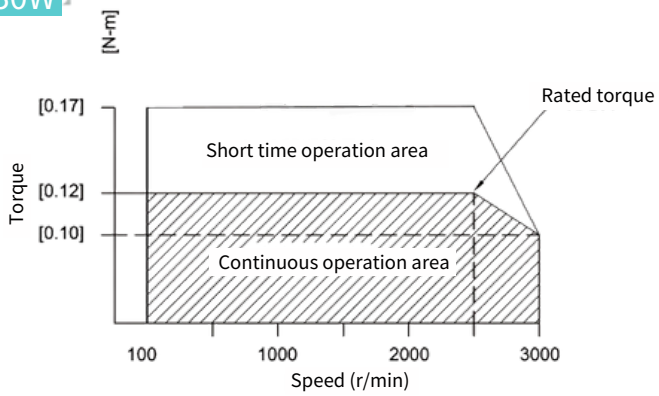
			Round shaft type 8BH050A-K25	Helical gear shaft type 8BH050GB-K25
50W	Motor model			
	Driver model		BHD050-K	
	Power input voltage	Rated voltage (V)	DC24	
		Permissible voltage range	±15%	
		Rated input current (A)	2.9	
		Max. input current (A)	5.4	
	Rated output (W)		50	
	Motor rated speed (r/min)		2500	
	Speed control range (r/min)		100~3000	
	Speed change rate		±0.5%	
	Motor rated torque(N-m)		0.19	
	Motor peak torque (N-m)		0.29	
	Rotor inertia (J= X 10 kg・m^2)		0.23	
	Permissible load inertia (J= X 10 kg・m^2)		3.3	
	Motor Insulation		B	
	Ingress Protection Rating		Motor IP40, Driver IP00	

100W	Motor model		Round shaft type 9BH100A-K25	Helical gear shaft type 9BH100GB-K25
	Driver model		BHD100-K	
	Power input voltage	Rated voltage (V)	DC24	
		Permissible voltage range	±15%	
		Rated input current (A)	6	
		Max. input current (A)	9.8	
	Rated output (W)		100	
	Motor rated speed (r/min)		2500	
	Speed control range (r/min)		100~3000	
	Speed change rate		±0.5%	
	Motor rated torque(N-m)		0.38	
	Motor peak torque (N-m)		0.58	
	Rotor inertia (J= X 10 kg・m^2)		0.61	
	Permissible load inertia (J= X 10 kg・m^2)		5.6	
	Motor Insulation		B	
	Ingress Protection Rating		Motor IP40, Driver IP00	

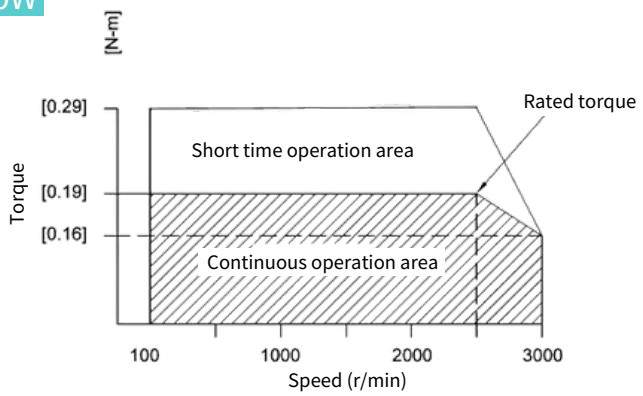
MOTOR TORQUE CHARACTERISTICS

Short-time operation area: mainly used for short-time operation. If the set time is exceeded, the overload protection function will activate.
Continuous operation area: An area where continuous operation is possible.

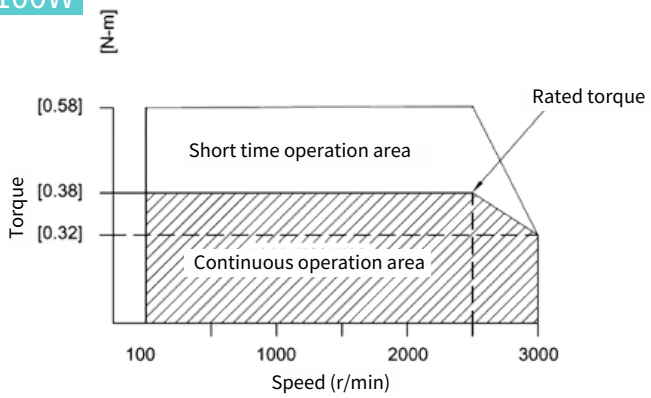
30W



50W



100W



BASIC SPECIFICATIONS

Item	Motor	Driver
Operation mode	Continuous	
Insulation level of motor	B	
Ingress protection level	IP40	IP00
Insulation resistance	Insulate DC500V 100MΩ or higher	Power terminal to driver heat sink DC500V 100MΩ or higher
Withstand voltage	Insulation withstand voltage: 1500V AC for 1 minute	Power terminal to driver shell withstands AC500V for 1 minute
Usage environment	Temperature Range: 0 to +40°C (above freezing). Humidity: below 85% (no condensation). Altitude: under 1000 meters above sea level. Free of corrosive gases and dust. Special environments such as non-explosive, radioactive places, magnetic fields or vacuum.	
Storage environment	Temperature Range: -20 to +70°C (non-freezing). Humidity: below 85% (no condensation). Altitude: under 3000m above sea level. Environment: Keep away from direct sunlight, reduce salt, and store in a well-ventilated area.	
Material of the shaft	Motor shaft and reducer output shaft are made of steel.	

SPECIFICATION OF GEAR BOX

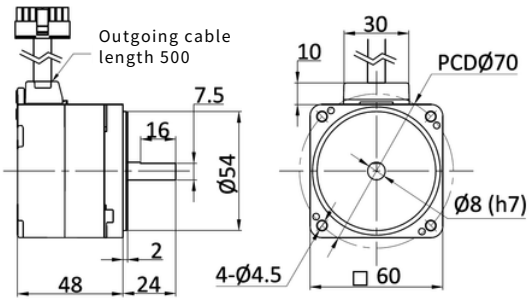
Gearbox	Motor speed \ Actual ratio		5	10	15	20	30	50	100
Output speed (r/min)		2500r/min	500	250	167	125	83	50	25
Allowable torque (N.m)	30W	100~2500r/min	0.50	0.97	1.55	2.04	2.91	4.75	6.00
		3000r/min	0.42	0.83	1.26	1.65	2.43	3.98	5.82
	50W	100~2500r/min	0.83	1.65	2.54	3.30	4.75	7.95	16.00
		3000r/min	0.70	1.36	2.04	2.81	3.98	6.60	13.29
	100W	100~2500r/min	1.75	3.49	5.24	6.98	9.99	16.68	30.00
		3000r/min	0.87	1.75	2.62	3.49	5.04	8.34	16.68
Allowable radial load (N)	30W	10mm from the front end of the output shaft	100		150			200	
	50W		200		300			450	
	100W		300		400			500	
	30W	20mm from the front end of the output shaft	150		200			300	
	50W		250		350			550	
	100W		400		500			650	
Allowable axial load (N)	30W					40			
	50W					100			
	100W					150			
Rotation direction			Same direction as the motor				Opposite direction to the motor		

DIMENSIONAL DRAWING

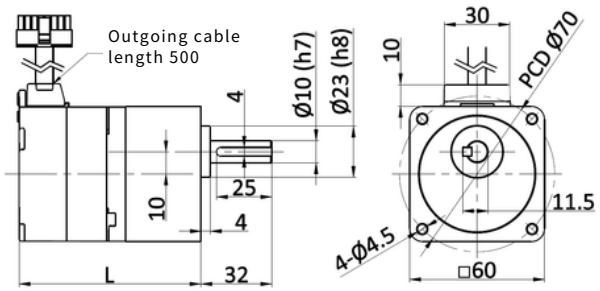
Unit: mm

30W

Motor



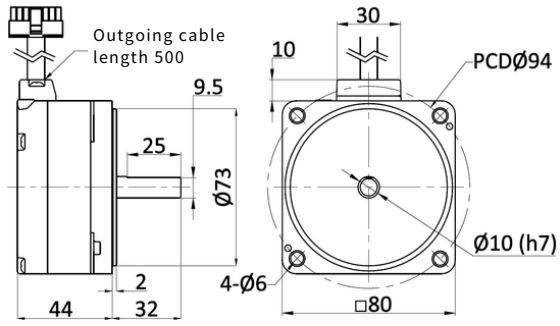
Motor with gearbox



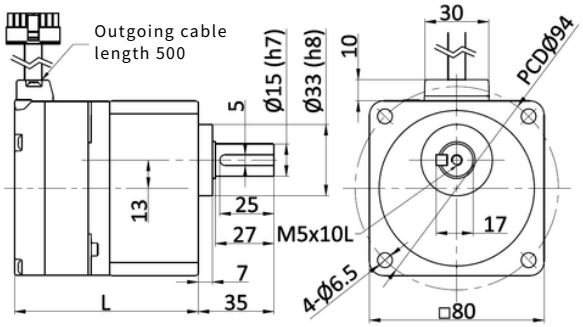
Ratio	L
5~20	82
30~100	86

50W

Motor



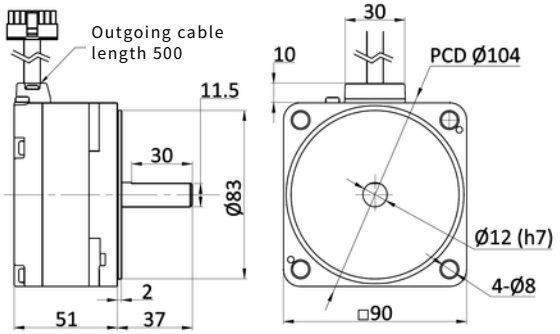
Motor with gearbox



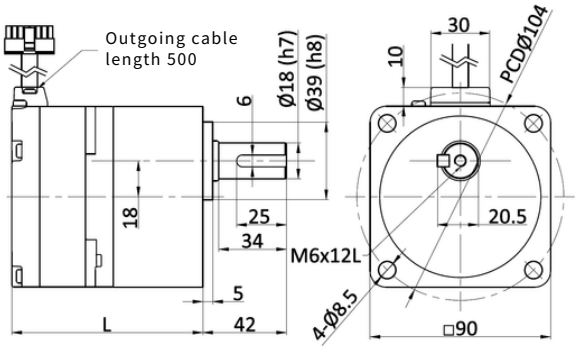
Ratio	L
5~20	85
30~100	90

100

Motor

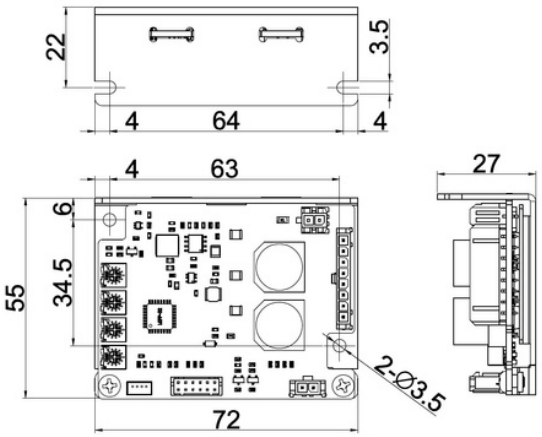


Motor with gearbox

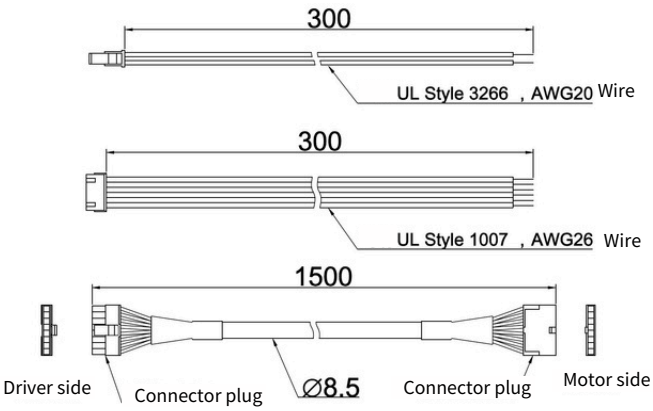


Ratio	L
5~20	96
30~100	109

Driver

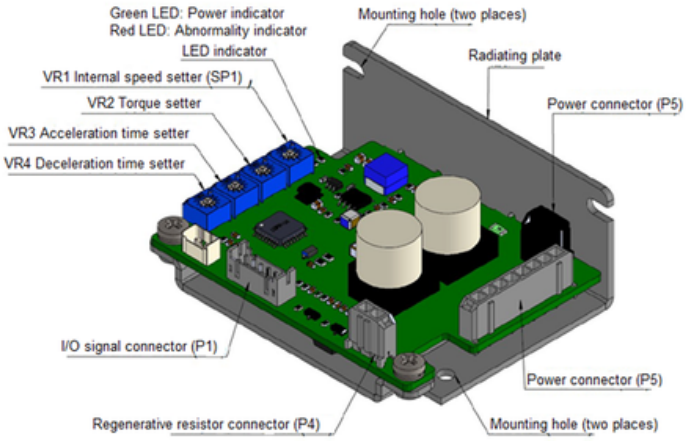


Accessory

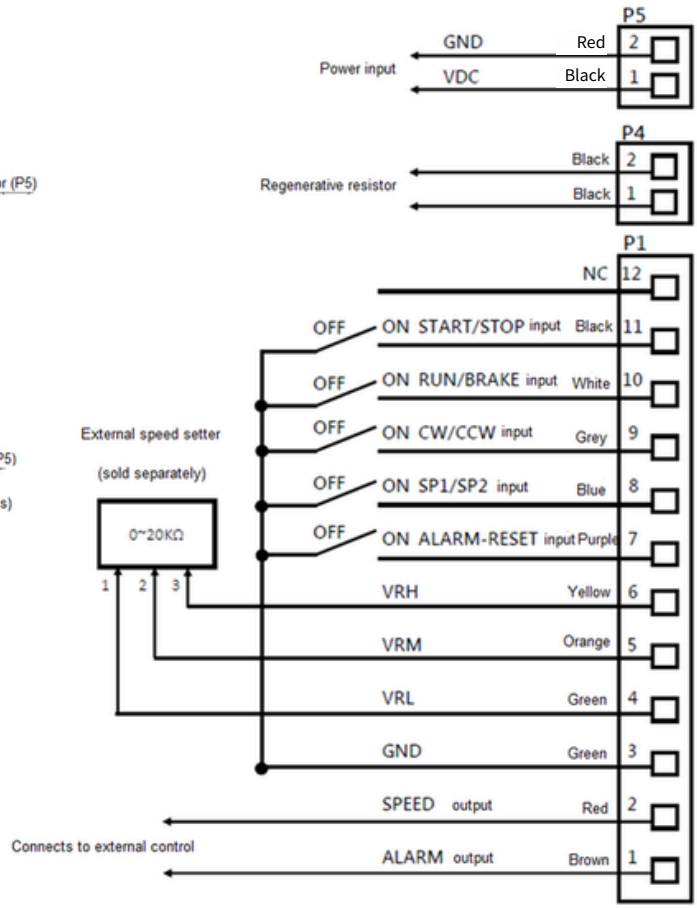


DRIVER FUNCTIONS AND OPERATION

■Name of each part



■Drawing



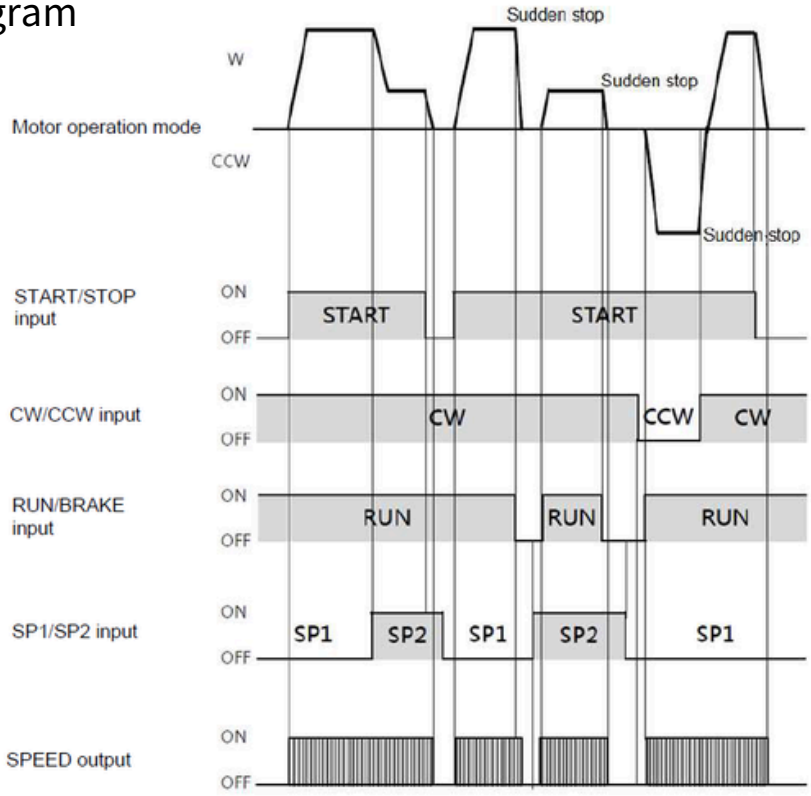
※When the motor is used to operate with inertia, it is recommended to use a regenerative resistor with a regenerative resistor value of 40Ω and a regenerative power of more than 30W.

■Function

Function	content
Speed setting method	Through the internal speed setter (VR1) of SP1. Via SP2 external speed setter. External DC voltage through SP2: DC 0~5V with a minimum current of 1mA.
Range of Torque	Adjust the torque range using the torque setter (VR2).
Acceleration time, deceleration time*	Set within the range of 0.1~12 seconds Settings can be made using the acceleration time setter (VR3) and deceleration time setter (VR4). ※ The actual acceleration time and deceleration time are affected by the customer's usage conditions, load inertia and load torque, etc.
Input signal	START/STOP command, RUN/BRAKE command, reversal of running direction, choice between internal or external speed configuration, adjustment of torque range and ALARM-RESET input.
Resistor pickup	Connectable pick-up resistor connector (P4)
Output signal	SPEED output, ALARM output
Protection function	Overload, motor sensor anomaly, overvoltage, undervoltage, overspeed, motor stall, driver anomaly and initial start anomaly.

Operation

■Timing diagram



*The rotation direction here is the running direction of the motor alone.
The reduction ratio of the reducer is different, and the running direction will change.

Notice
▼ Do not use the ON/OFF of the power supply to operate or stop the motor. It must be done through the driver body or external signals.
▼ Please input the input signals at least 10ms apart, otherwise the motor may malfunction.
▼ The greater the friction load and load inertia, or the more frequent starts-instant stops-reversals, the faster the temperature of the motor rises. Please keep the motor surface temperature below 90°C.

● START/STOP input and RUN/BRAKE input

When switching between motor operation and instantaneous stop (or stop), use START/STOP input and RUN/BRAKE input.

	START/STOP input	RUN/BRAKE input	Motor action status
Signal level	ON	ON	Operation*1
	ON	OFF	Sudden stop
	OFF	ON	Stop*2

*1 When the motor is running, the speed is set by the internal speed setter (SP1) or the external speed setter (SP2).
*2 The motor stops and stops according to the deceleration time setting.

Notice
▼ Before inputting power to the driver, be sure to set the START/STOP input and RUN/BRAKE input to OFF.
▼ When the START/STOP input and the RUN/BRAKE input are both OFF at the same time, BRAKE takes priority.
▼ The actual acceleration time and deceleration time are affected by the usage conditions, load inertia and load torque, etc.

● CW/CCW input

When ON, CW is selected. When OFF, CCW is selected.
The running direction is the running direction of the motor output shaft as viewed from the output shaft facing the motor.

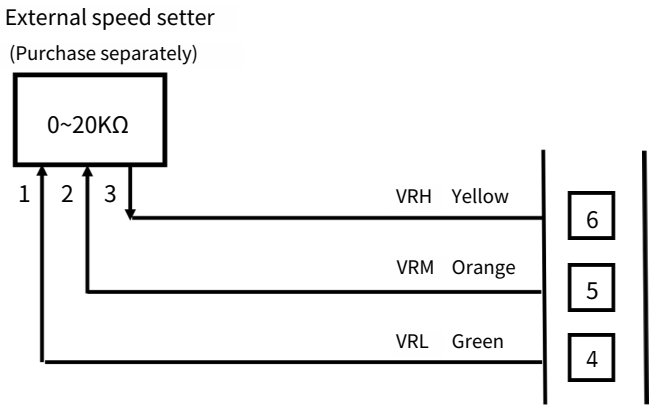
● Speet setting

Use SP1 internal speed setting

When the SP1/SP2 input is OFF, the internal speed (SP1) is selected.
At this time, it can be adjusted and increased in the clock direction through the internal speed setter (VR1).
Factory speed: 0 rpm

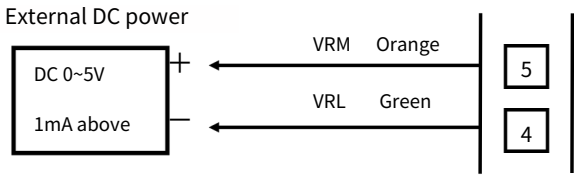
Use SP2 external speed setting

When the SP1/SP2 input is ON, the external speed (SP2) is selected and must be connected to PIN NO.4~NO.6 of P1.
At this time, the speed can be set through an external speed setter (sold separately).



Use SP2 external DC voltage

When the SP1/SP2 input is ON, the external speed (SP2) is selected and must be connected to PIN NO.4~NO.5 of P1. At this time, the speed can be set through an external DC power supply.

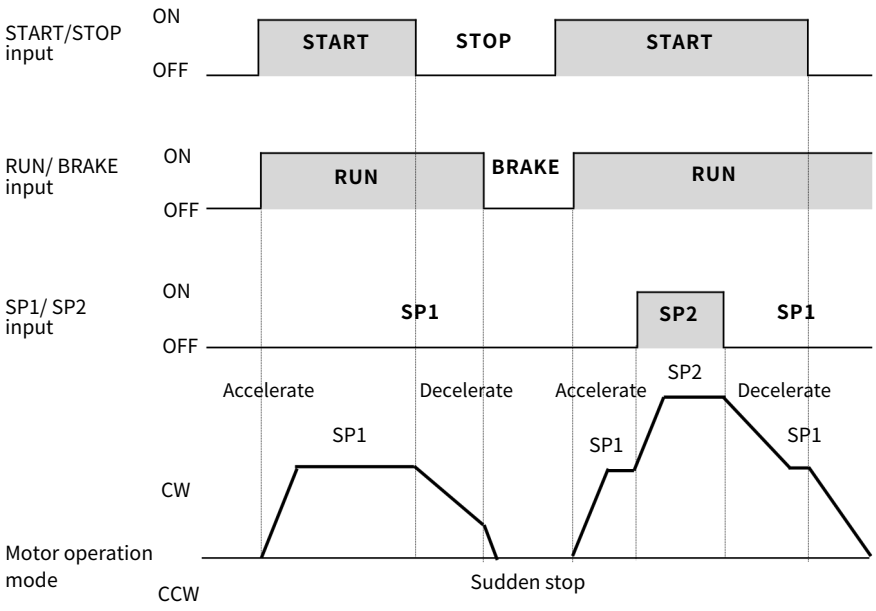


● Torque range setting

The torque can be set through the torque setter (VR2). Adjust clockwise, the torque range increases.

● Setting of acceleration time and deceleration time

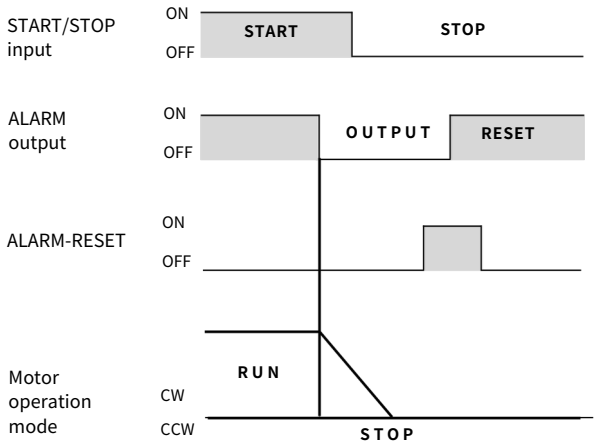
The time from stop to rated speed can be set by the acceleration time setter (VR3).
The time from rated speed to stop can be set with the deceleration time setter (VR4).
It can be set in the range of 0.1~12 seconds. Adjust clockwise, the time increases.



Notice
▼ The actual acceleration and deceleration time is affected by the use conditions of the motor, load inertia and load torque.

ALARM-RESET Input

Before inputting ALARM-RESET, the START/STOP input must be set to OFF and the motor is in a stopped state. After setting ALARM-RESET to ON, the ALARM signal will be reset. Alternatively, resetting the power supply can also reset the ALARM signal.



Notice

▼ When the driver protection function is activated, please find out the cause of ALARM and eliminate it before restarting the motor.

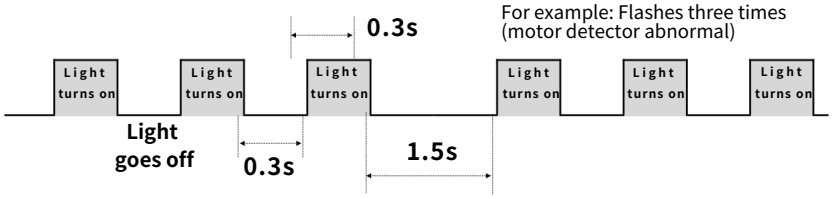
▼ The START/STOP signal cannot be input until the ALARM reset operation is completed.

▼ Please input ALARM-RESET after the motor (reducer) output shaft has completely stopped.

ALARM display

The protection function of the driver will be activated, and the ALARM output will be automatically switched OFF to stop the motor in the scenarios described below. At this time, the reason why the protection function is activated can be confirmed by the number of times the LED light flashes.

After the LED light flashes the number of specified times in the order of 0.3 seconds on and 0.3 seconds off, the light flashes repeatedly in the interval of 1.5 seconds.

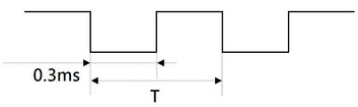


SPEED output

Synchronized with the motor operation; 30 pulse signals will be outputted for every revolution of the motor output shaft (pulse amplitude 0.3ms). The operation speed of the motor can be calculated by measuring the frequency of the SPEED output.

$$\text{Motor operation speed*[r/min]} = \frac{\text{SPEED output frequency[Hz]}}{30} \times 60$$

$$\text{SPEED outputfrequency} = \frac{1}{T}$$



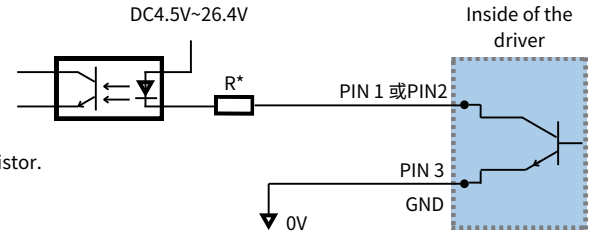
ALARM output

The ALARM output is ON when normal and OFF when there is an alarm.

Output circuit

The signal output of the driver is a transistor open collector output.

The signal status does not represent the voltage level of the signal, but the ON: [electricity] OFF: [non-electricity] of the internal transistor.



R*：Recommended to connect a current limiting resistor.
DC24V: 2.7kΩ~4.7KΩ (1W)
DC5V: 560Ω~820Ω (0.25W)

WARNING CODES

Notice

▼ When the driver's protection function takes effect, please eliminate the cause first, and then disable the protection function to avoid damage.

▼ If the cause is not eliminated and the motor continues to operate, the motor may malfunction, which may cause personal injury or equipment damage.

Warming	ALARM LED flash times	Cause of failure	Troubles shooting
Over-current	2	• More than three times the load of the rated torque of the motor is applied to the motor.	• If it is still abnormal after resetting, increase the capacity of the motor or reduce the load.
Overload	3	• When a load that exceeds the rated torque of the motor is applied to the motor for more than 5 seconds. • Motor operated frequently within a short period of time-Stopped suddenly or when the operation direction was changed.	• If it is still abnormal after resetting, increase the capacity of the motor or reduce the load. ◦
Over-voltage	4	• When performing roll-down load operation or when driving a load that exceeds the allowable load inertia. • The voltage applied to the driver exceeds DC24V by approximately 15% or more.	• If abnormalities still occur when the input voltage is within the rated allowable range, send the product back to the dealer or original manufacturer for repairs.
Insufficient voltage	5	• When the voltage applied to the driver drops to less than 15% of DC24V.	• If abnormalities still occur when the input voltage is within the rated allowable range, send the product back to the dealer or original manufacturer for repairs.
Regenerative over-voltage	6	• The regenerative voltage exceeds 25%	• Reduce load inertia.
Motor stalled	7	• When the motor stalled for more than 2 seconds.	• Confirm whether the load end is stuck.
Over-speed	8	• When the operation speed of the motor exceeds 3500r/min.	• If abnormalities still occur after the load is removed from the motor, send the product back to the dealer or original manufacturer for repairs.
Initial startup abnormal	11	• When power is connected, both the START/STOP and RUN/BRAKE are ON.	• Reconfirm the wiring.
Motor detector abnormal	12	• The detector wires in the motor cable have fallen off or broken.	• If it is still abnormal after resetting, send the product back to the dealer or original manufacturer for repairs.

NOTE : Please refer to the BH series operation manual for relevant details.

SIDE CHANNEL RING BLOWER

INDICATION

RB 40 - 5 2 0

MODEL	SIZE	OUTPUT CODE	VOLTAGE	OTHERS
RB : Side channel ring blower	20 30 40 50 60 80	4 5 6 7	1 : 1Ø100-120/200-240V 50/60Hz, 1Ø108-120/216-240V 50/60Hz, UL/CSA 9 : 1Ø108-127/208-254V 50/60Hz 2 : 3Ø200-240/380-440V 50/60Hz 3 : 3Ø208-240/416-480V 50/60Hz, UL/CSA B : 3Ø200-240/345-416V 50Hz, 3Ø208-275/380-480V 60Hz	0 : CE (standard type) U : UL / CSA type

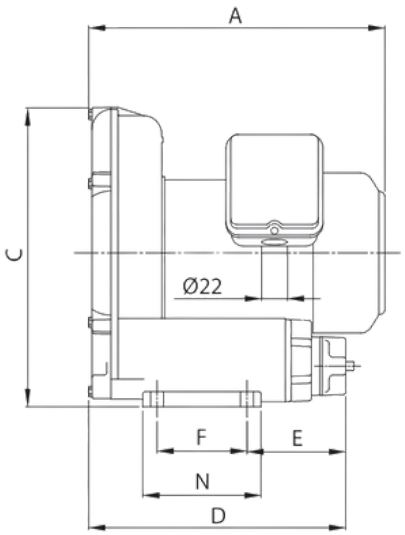
Blow/ Vacuum 60Hz

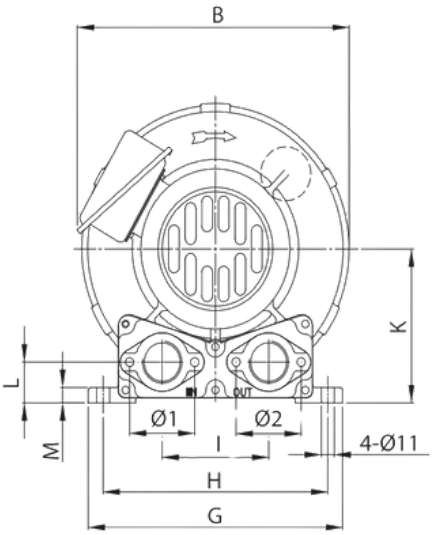
Model	Output (Kw)	Voltage (V)	Phase	Blow 60Hz		Vacuum 60Hz		Max. airflow (m3/h)	Noise level dB(A)*
				Rated current (Amps)	Ultimate pressure (mbar)	Rated current (Amps)	Ultimate pressure (mbar)		
RB20-510	0.28	100-120 / 200-240	1Ø	3.4-3 / 1.73-1.6	+85	3.23-2.97 / 1.68-1.58	-75	66	65
RB20-520	0.28	200-240 / 380-440	3Ø	1-0.93 / 0.55-0.53	+85	1-0.9 / 0.53-0.52	-75	66	65
RB30-510	0.42	100-120 / 200-240	1Ø	5.5-4.7 / 2.8-2.36	+110	5.1-4.34 / 2.58-2.21	-100	96	68
RB30-520	0.42	200-240 / 380-440	3Ø	1.92-1.93 / 1.08-1.18	+130	1.83-1.95 / 1.06-1.17	-105	96	68
RB40-510	0.9	100-120 / 200-240	1Ø	16.4-12.8 / 8.2-6.5	+160	15.81-12.35 / 7.69-6.28	-165	180	72
RB40-610	1.3	100-120 / 200-240	1Ø	17.7-13.9 / 8.7-7	+180	17.41-13.6 / 8.42-6.84	-180	180	72
RB40-420	0.93	200-240 / 380-440	3Ø	4.1-3.64 / 2.1-2.44	+135	3.97-3.53 / 2.08-2.11	-135	180	72
RB40-520	1.15	200-240 / 380-440	3Ø	5-4.45 / 2.63-2.53	+180	4.75-4.31 / 2.61-2.55	-180	180	72
RB40-620	1.5	200-240 / 380-440	3Ø	6.2-5.3 / 3.3-3.1	+230	5.66-5 / 3-2.91	-210	180	72
RB50-510	1.75	100-120 / 200-240	1Ø	22.3-17.3 / 10.7-8.3	+130	22.4-17.4 / 10.3-8.3	-150	252	73
RB50-520	1.75	200-240 / 380-440	3Ø	8.2-7.3 / 4.38-4.27	+200	7.4-6.77 / 4-3.99	-200	252	73
RB50-620	2.55	200-240 / 380-440	3Ø	10-8.8 / 5.3-4.84	+250	8.55-7.7 / 4.6-4.45	-240	252	73
RB60-520	2.55	200-240 / 380-440	3Ø	11.7-10.3 / 6.4-6	+220	11.6-9.9 / 6-5.6	-220	372	78
RB60-620	3.45	200-240 / 380-440	3Ø	15.7-13.4 / 8-7.4	+270	13.7-12 / 7.1-6.7	-270	372	78
RB60-720	4.6	200-240 / 380-440	3Ø	18.7-15.4 / 9.5-8.6	+330	15.9-13.3 / 8.2-7.6	-320	372	78
RB80-4B0	4.6	208-275 / 380-480	3Ø	22.8-17.8 / 12.4-10	+230	22.8-17.6 / 12.5-10.1	-250	600	79
RB80-5B0	6.3	208-275 / 380-480	3Ø	26.1-21.8 / 14.1-12.4	+280	25.5-21.7 / 13.7-12.3	-315	600	79
RB80-6B0	8.6	208-275 / 380-480	3Ø	36.4-32.6 / 20.5-18.8	+450	25.3-26 / 14.6-14.3	-350	600	79

※ 吸入/壓出口全開，距離1公尺 4點量測平均值。

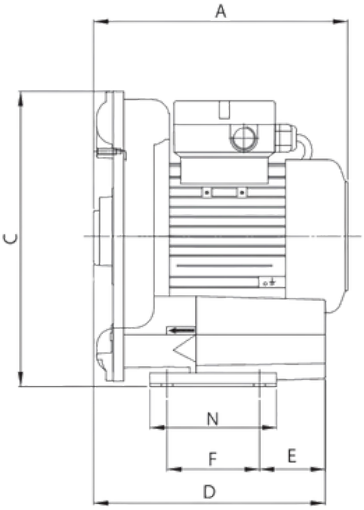
BLOWER DIMENSION

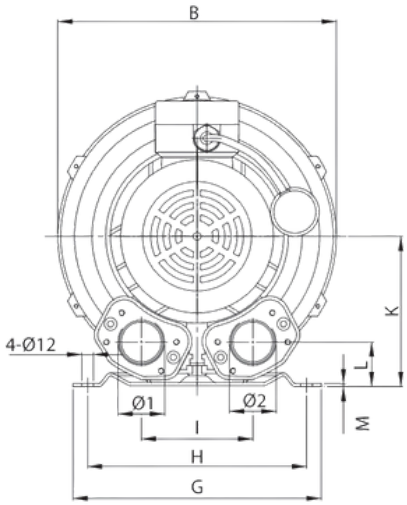
RB20-.../RB30-...





RB40-...



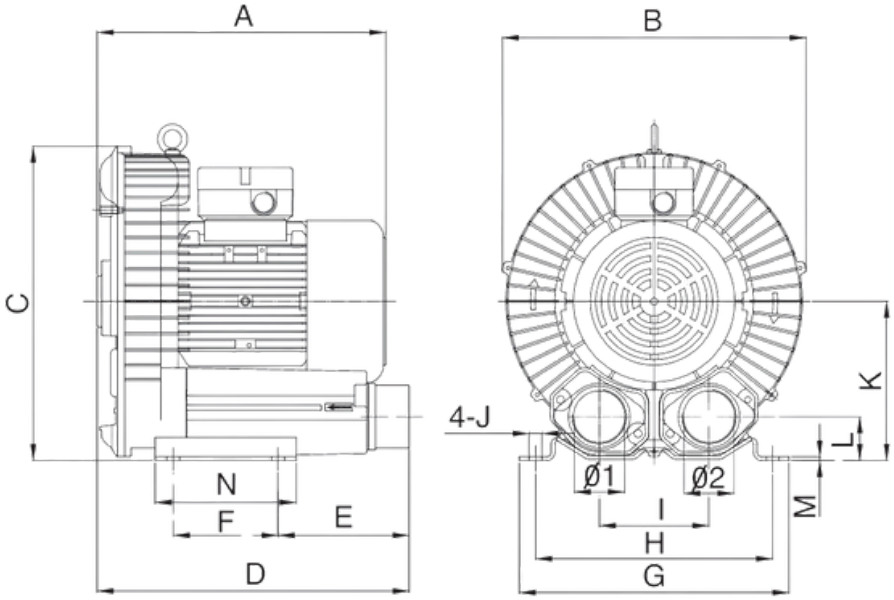


Dimension (mm)

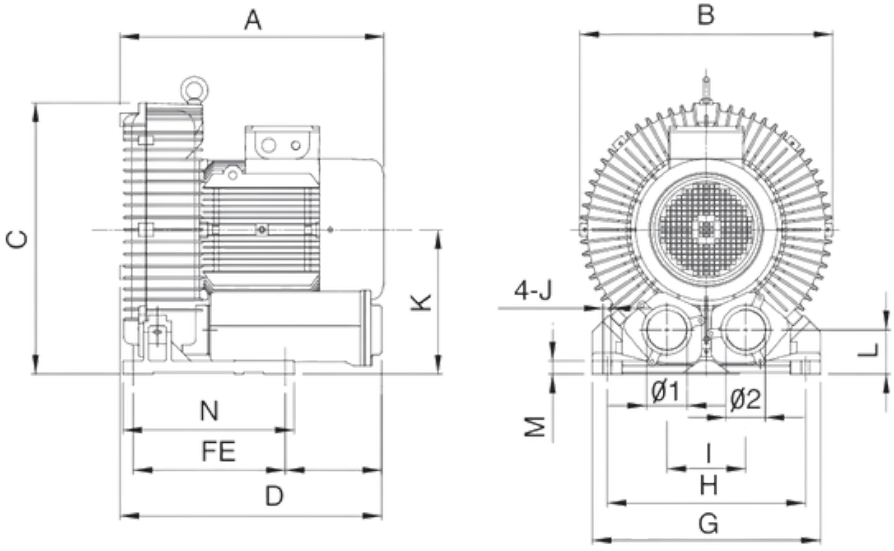
Model	A	B	C	D	E	F	G	H	I	K	L	M	N	Ø1	Ø2
RB20-5...	225	236	238	218	87	76	212	190	90	120	34	12	100	G1"	G1"
RB30-5...	256	255	257	262	117	83	230	205	100	130	38	12	110	G1 1/4"	G1 1/4"
RB40-4...	261	286	303	238	68	95	255	225	115	154	46	3	130	G1 1/2"	G1 1/2"
RB40-5...	261	286	303	238	68	95	255	225	115	154	46	3	130	G1 1/2"	G1 1/2"
RB40-6...	281	286	303	238	68	95	255	225	115	154	46	3	130	G1 1/2"	G1 1/2"

BLOWER DIMENSION

RB50-.../RB60-...



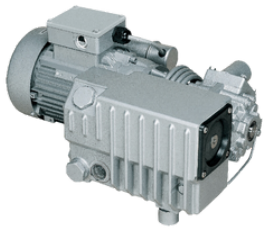
RB80-...



Dimension (mm)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Ø1	Ø2
RB50-...	317	333	345	342	142	115	296	260	120	14	175	48	4	155	G2"	G2"
RB60-...	364	382	383	380	130	140	325	290	125	15	197	53	4.5	180	G2"	G2"
RB80-...	487	466	498	482	178	280	420	365	145	15	265	91	24	316	G2 1/2"	G2 1/2"
RB80-...-Z	482	466	474	468	183	170	394	356	152	15	241	66	6	217	G2 1/2"	G2 1/2"

ROTARY VANE VACUUM PUMP



INDICATION

CP 10 - 5 1 0

MODEL	OUTPUT	ULTIMATE PRESSURE	VOLTAGE	OTHERS
CP: Rotary vane vacuum pump	08: 1/2HP (0.35 / 0.45Kw) 10: 1HP (0.76 / 0.93Kw) 20: 2HP (1.10 / 1.50Kw) 30: 3HP (1.50 / 2.20Kw) 40: 4HP (3.00 / 3.45Kw)	4: 20 mbar (Continuous type*1) 5: 2 mbar (CP10 only) 6: 0.5 mbar (CP20 only)	1: 1Ø 100-120 / 200-240V, 50/60Hz 5: 1Ø 200-240V, 50/60Hz 2: 3Ø 200-240 / 380-440V, 50/60Hz	0: CE (standard type)

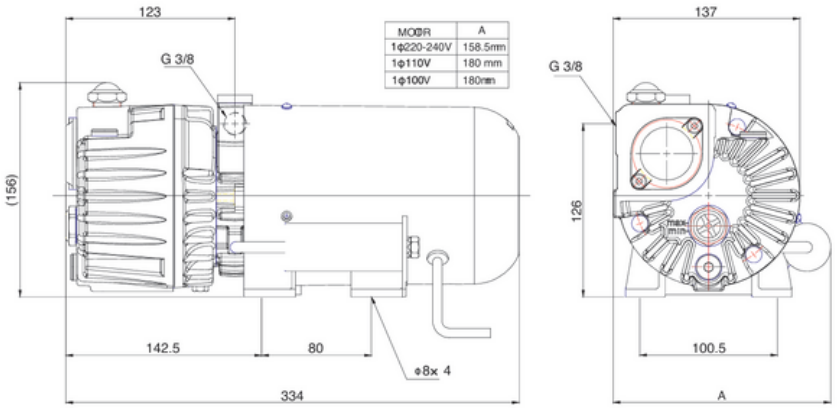
	Model	Output (Kw)	Voltage (V)	Phase	Rated current (Amps)	Ultimate pressure *2 (mbar)	Max. pump speed (m3/h)	Noise level *3 dB(A)	Type
50Hz	CP08 - 573	0.35	220-240V	1Ø	2.4	2	8	59	Normal
	CP08 - 5M3	0.35	110V	1Ø	5.5	2	8	60	Normal
	CP08 - 5I3	0.35	100V	1Ø	4.4	2	8	60	Normal
	CP10 - 410	0.76	100-120 / 200-240V	1Ø	7.5-12.2/4-6.8	20	20	72	Continuous
	CP10 - 510	0.76	100-120 / 200-240V	1Ø	7.5-12.2/4-6.8	2	20	72	Normal
	CP10 - 450	0.76	200-240V	1Ø	4-6.8	20	20	72	Continuous
	CP10 - 550	0.76	200-240V	1Ø	4-6.8	2	20	72	Normal
	CP10 - 420	0.76	200-240 / 380-440V	3Ø	2.5-2.9/1.5-1.9	20	20	72	Continuous
	CP10 - 520	0.76	200-240 / 380-440V	3Ø	2.5-2.9/1.5-1.9	2	20	72	Normal
	CP20 - 420	1.1	200-240 / 380-440V	3Ø	5.4-6.4/3.4-4.2	20	40	70	Continuous
	CP20 - 620	1.1	200-240 / 380-440V	3Ø	5.4-6.4/3.4-4.2	0.5	40	70	Normal
	CP30 - 420	1.5	200-240 / 380-440V	3Ø	6.1-7.6/3.8-5.5	20	63	74	Continuous
	CP30 - 620	1.5	200-240 / 380-440V	3Ø	6.1-7.6/3.8-5.5	0.5	63	74	Normal
	CP40 - 420	3	200-240 / 380-440V	3Ø	6.5-8/4.5-5.2	20	100	74	Continuous
	CP40 - 620	3	200-240 / 380-440V	3Ø	6.5-8/4.5-5.2	0.5	100	74	Normal
60Hz	CP08 - 573	0.45	220-240V	1Ø	2.5	2	9.6	63	Normal
	CP08 - 5M3	0.45	110V	1Ø	6.2	2	9.6	64	Normal
	CP08 - 5I3	0.45	100V	1Ø	6.8	2	9.6	64	Normal
	CP10 - 410	0.92	100-120 / 200-240V	1Ø	9.8-9.0 / 5.3-4.8	20	24	72	Continuous
	CP10 - 510	0.92	100-120 / 200-240V	1Ø	9.8-9.0 / 5.3-4.8	2	24	72	Normal
	CP10 - 450	0.92	200-240V	1Ø	4.6-4	20	24	72	Continuous
	CP10 - 550	0.92	200-240V	1Ø	4.6-4	2	24	72	Normal
	CP10 - 420	0.92	200-240 / 380-440V	3Ø	2.7-2.5 / 1.6-1.5	20	24	72	Continuous
	CP10 - 520	0.92	200-240 / 380-440V	3Ø	2.7-2.5 / 1.6-1.5	2	24	72	Normal
	CP20 - 420	1.5	200-240 / 380-440V	3Ø	5.2-5.5 / 3.0-3.2	20	48	74	Continuous
	CP20 - 620	1.5	200-240 / 380-440V	3Ø	5.2-5.5 / 3.0-3.2	0.5	48	74	Normal
	CP30 - 420	2.2	200-240 / 380-440V	3Ø	5.4-6.3 / 3.1-3.9	20	76	76	Continuous
	CP30 - 620	2.2	200-240 / 380-440V	3Ø	5.4-6.3 / 3.1-3.9	0.5	76	76	Normal
	CP40 - 420	3.5	200-240 / 380-440V	3Ø	6.6-6.8 / 3.8-4.2	20	120	76	Continuous
	CP40 - 620	3.5	200-240 / 380-440V	3Ø	6.6-6.8 / 3.8-4.2	0.5	120	76	Normal

※ 1: Continuous type can abstract the air successively under normal air pressure environment.
2: Intel flange pressure. 3: db(A) value gets from 4 points and 1 meter distance test.

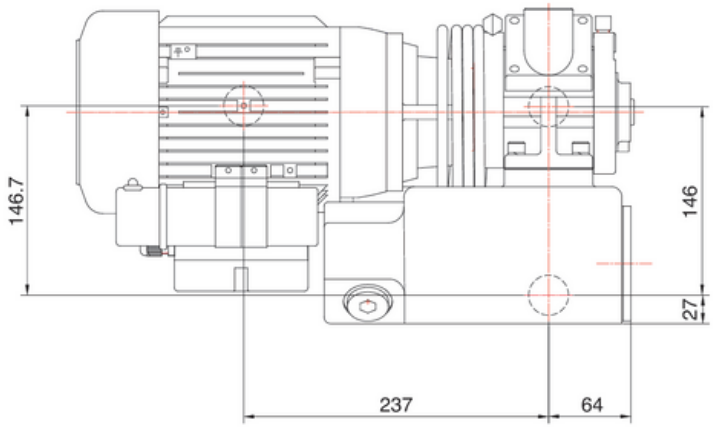
● Environment temperature 5˚C~40˚C.
● Prohibited to apply for drawing high-acid substance or high-corrosive gas.

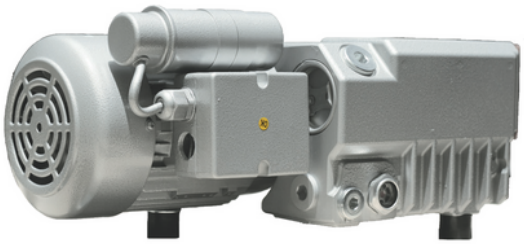
VACUUM PUMP DIMENSION

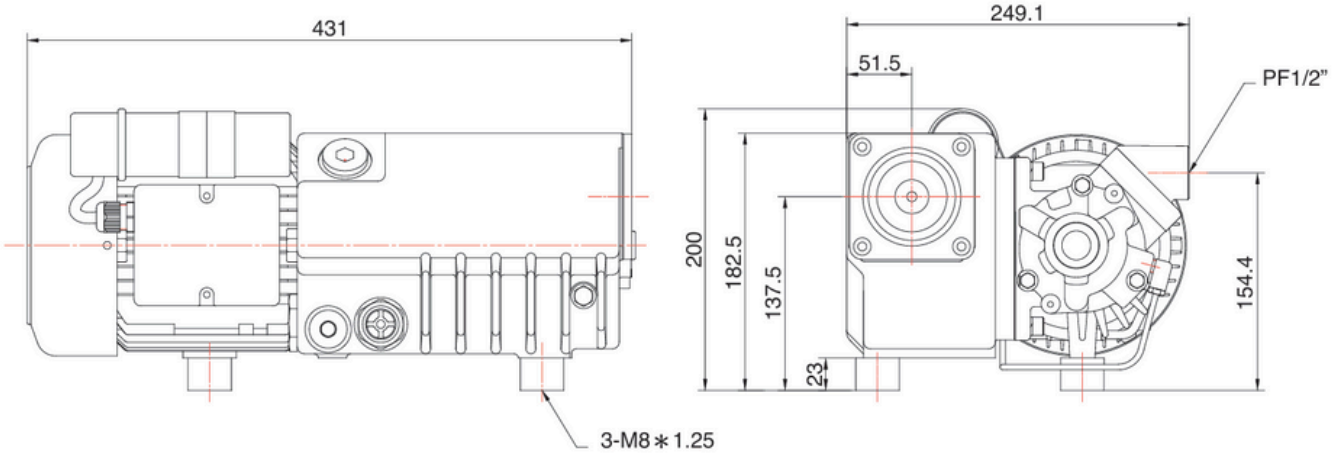
CP08



CP10

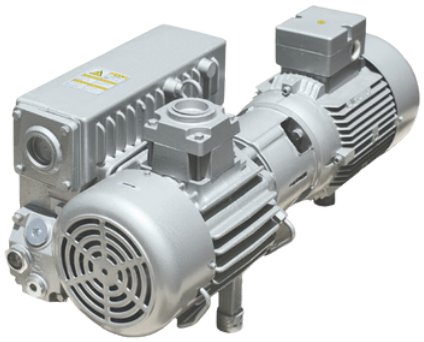


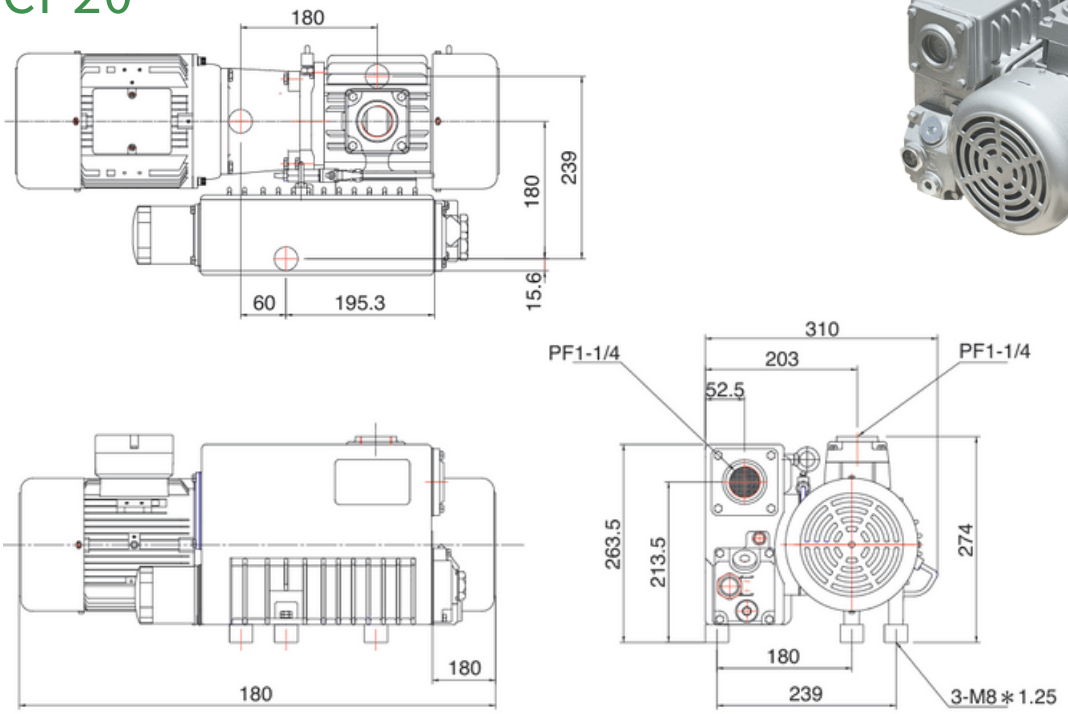




VACUUM PUMP DIMENSION

CP20





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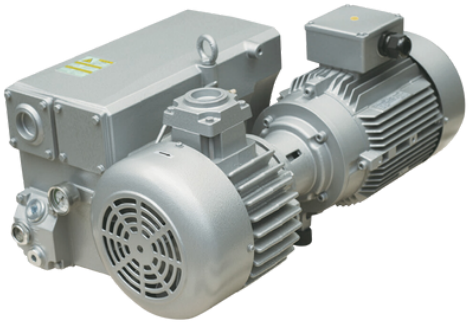

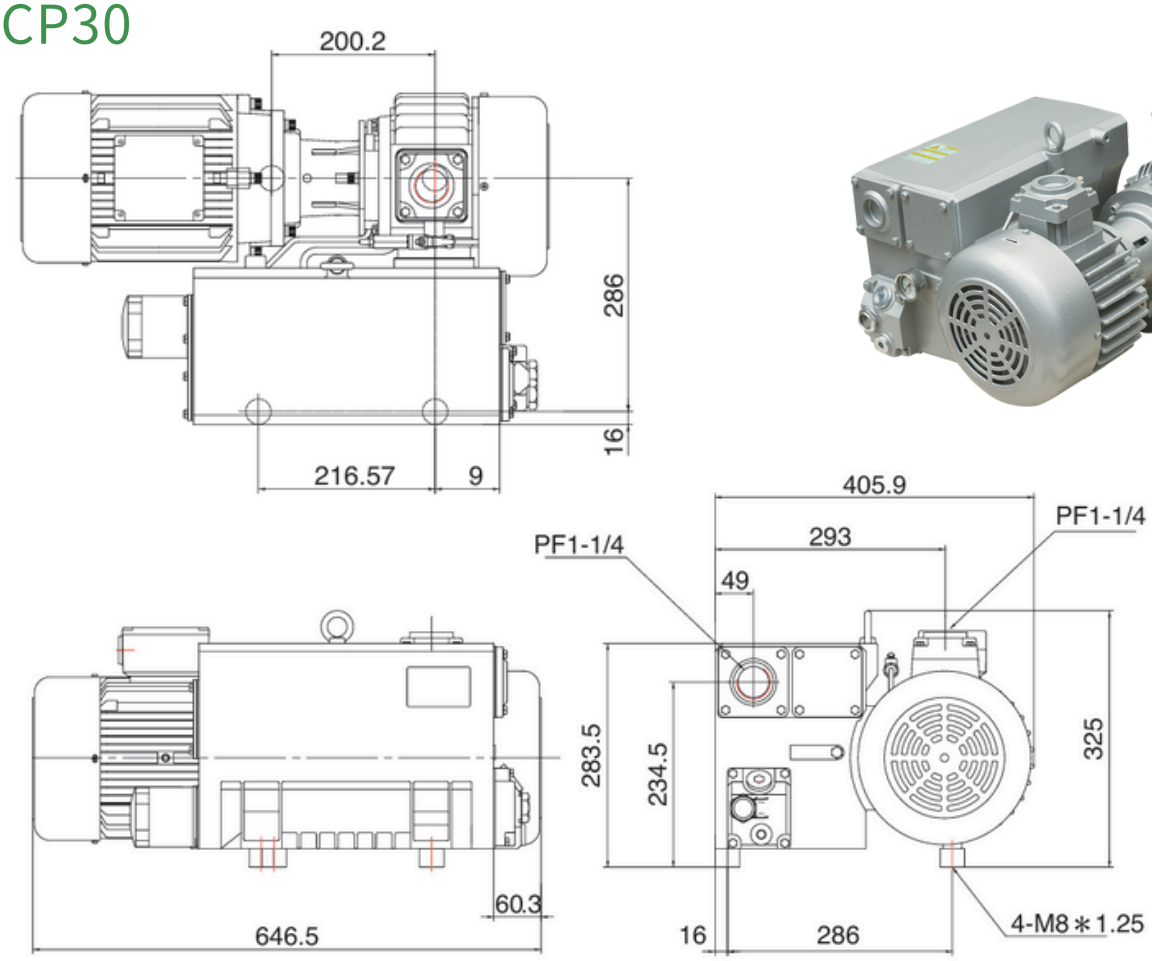

MEMO:

CONTACT US

If you want to know the latest products or specifications,
please contact your dealer or service personnel!

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