

# Linear Actuator

## 1-Axis Controller

### 22. HIWIN 1-Axis Controller

LAK2LR

CE

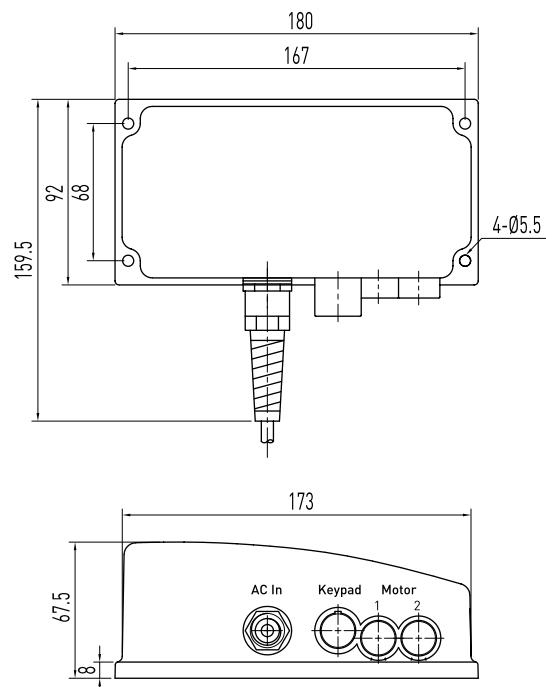


Table 22.1 Specifications

Input voltage	AC 100 / 110 / 220 / 230V(50/60Hz)
Output power	108VA (24VDC) max.
Duty cycle	10%
Protection	IP54
Working temp.	+5°C~40°C

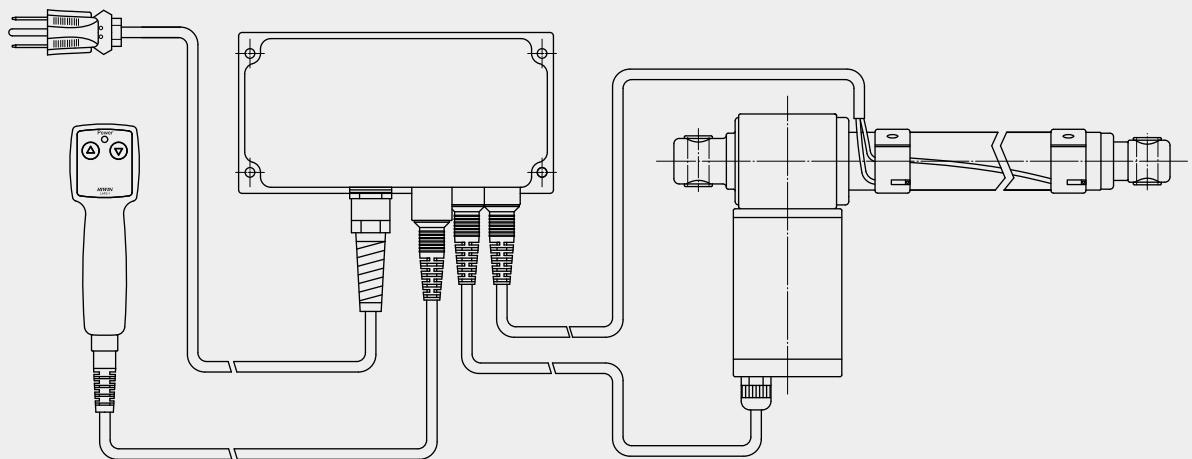
#### Option:

IP66

#### Features of the LAK2LR

- Controls 1 linear Actuator
- Controls 1 Actuator with external limit switches
- OLP (Over Load Protection)
- Standard cable length: 4M
- Electronic protection for the relays

## For Series LAM1 completed with external limit switches



## Ordering Information

LAK2LR - G - 110 - B E			
Actuator No. 1 G: Over current setting value	Input Voltage 100: AC100V; 110: AC110V 220: AC220V; 230: AC230V	Color B: Black G: Gray	Special models according to Client's requirement None E = Special requirement

\* Check attached table for over current setting..see page 55.

\* The keypad of the LAK2LR is not the same as LAK2L.

# Linear Actuator

## 2-Axis Controller

### 23. HIWIN 2-Axis Controller (1)

LAK2

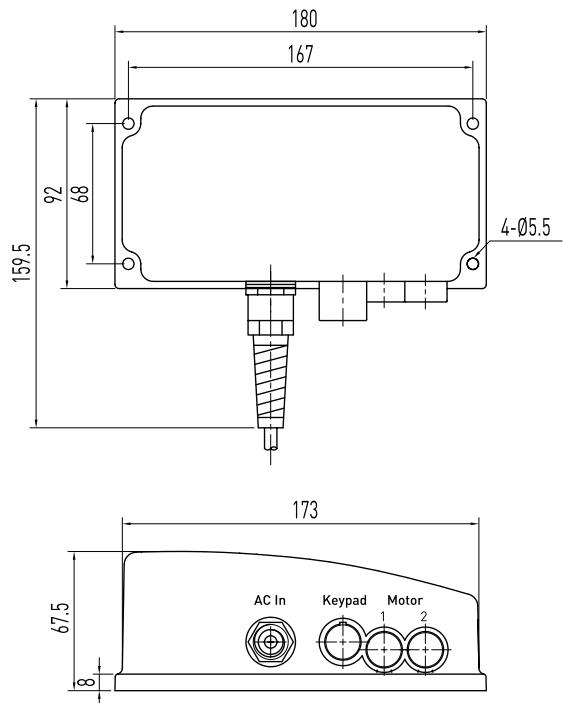


Table 23.1 Specifications

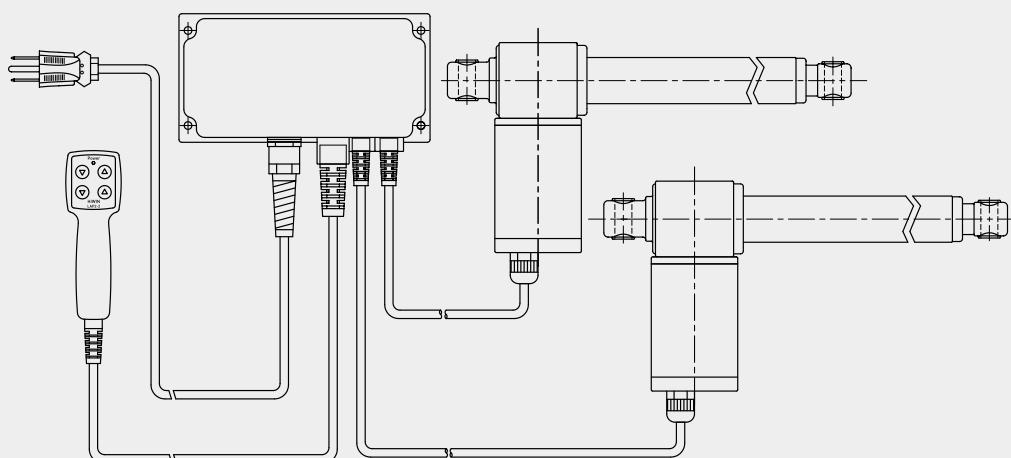
Input voltage	AC 100 / 110 / 220 / 230V [50/60Hz]
Output power	108VA (24VDC) max.
Duty cycle	10%
Protection	IP54
Working temp.	+5°C~40°C

#### Option:

- (1) IP66
- (2) DC 12V In & Out
- (3) DC 24V In & Out
- (4) UL version only for AC 120V input [Max. Output 24V/6A]

#### Features of the LAK2

- Control 1 or 2 Linear Actuators
- Over load protection
- Standard cable length: AC:4M/DC:1M
- Electronic protection of the relays



## Ordering Information (AC Power)

LAK2 - B0 - 110 - B E			
Actuator No. 1~2	Input Voltage	Color	Special models according to Client's requirement
A-G: Over current setting value	100: AC100V; 110: AC110V 220: AC220V; 230: AC230V	B: Black G: Gray	None E = Special requirement

\* Check attached table for over current setting...see page 55.

## Ordering Information (DC Power)

LAK2 - E0 - 12 - B E			
Actuator No. 1~2	Input Voltage	Color	Special models according to Client's requirement
A-L: Over current setting value	12: 12VDC 24: 24VDC	B: Black G: Gray	None E = Special requirement

\* Standard cable: 1M in length with 3 flying lead termination.

\* Check attached table for over current setting...see page 55.

# Linear Actuator

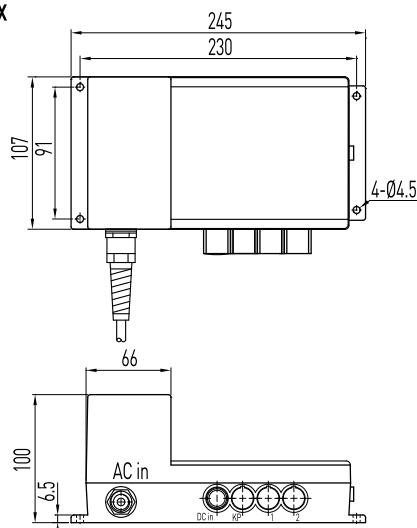
## 2-Axis Controller

### 24. HIWIN 2-Axis Controller (2)

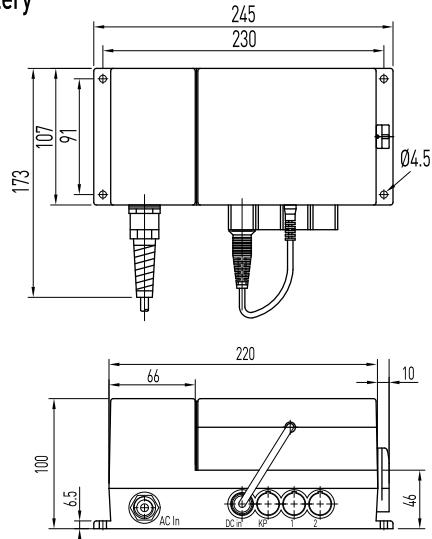
LAK2BN



#### 0 No Battery box



#### 1 For 1.3Ah Battery



#### 2 For 2.9Ah Battery

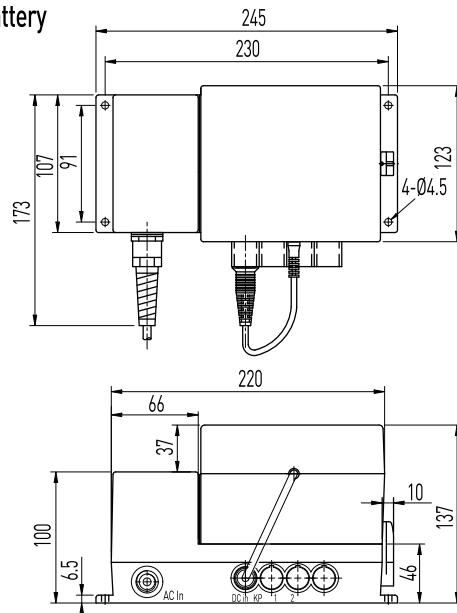


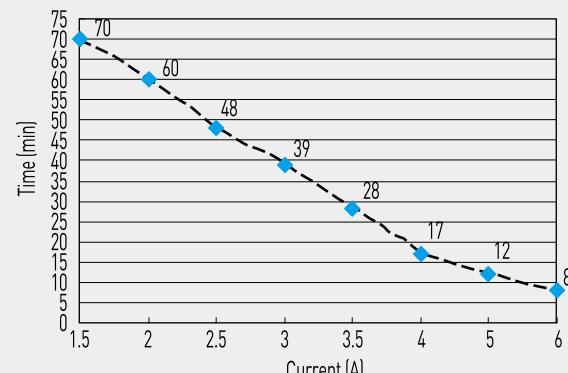
Table 24.1 Specifications

Input voltage	AC 100 / 110 / 220 / 230V(50/60Hz)
Output power	144VA (24VDC) max.
Duty cycle	10%
Protection	IP54
Working temp.	+5°C~40°C

#### Option:

- (1) IP66
- (2) Custom program
- (3) Two axes move simultaneously
- (4) Two axes move synchronously  
(Actuators must have feedback)

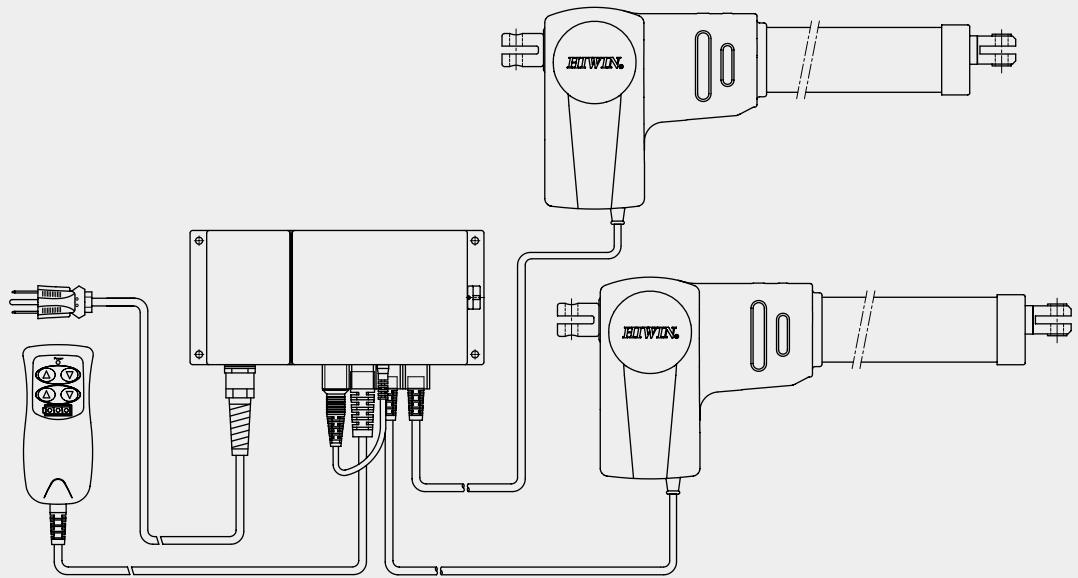
#### Current vs. Durable Period under Load (1.3Ah)



Note: 1. The test results are obtained under duty cycle 10% (2 minutes of continuous operation followed by 18 minutes of non-operation).  
2. The Test results are for reference only, actual value will be different due to the battery performance.

#### Features of the LAK2BN

- Control 1 or 2 Linear Actuators
- Compact size
- Over load protection
- Soft - start / stop
- Standard cable length: 4M
- Rechargeable Battery
- Low battery indicator (alarm)
- Battery capacity: 1.3Ah (12VDCx2)  
(Option: 2.9Ah, 12VDCx2)
- \*Note: Please charge battery for at least 8 hours before initial use.



## Ordering Information

LAK2BN - 1 - D0 - 110 - B E

Battery	Actuator No. 1~2	Input Voltage	Color	Special models according to Client's requirement
0: None Battery box	0: None	100: AC100V; 110: AC110V	B: Black	None
1: 1.3Ah	A-H: Over current setting value	220: AC220V; 230: AC230V	G: Gray	E = Special requirement
2: 2.9Ah				

\* Check attached table for over current setting...see page 55.

# Linear Actuator

## 2-Axis Controller

### 25. HIWIN 2-Axis Controller (3)

LAK2D

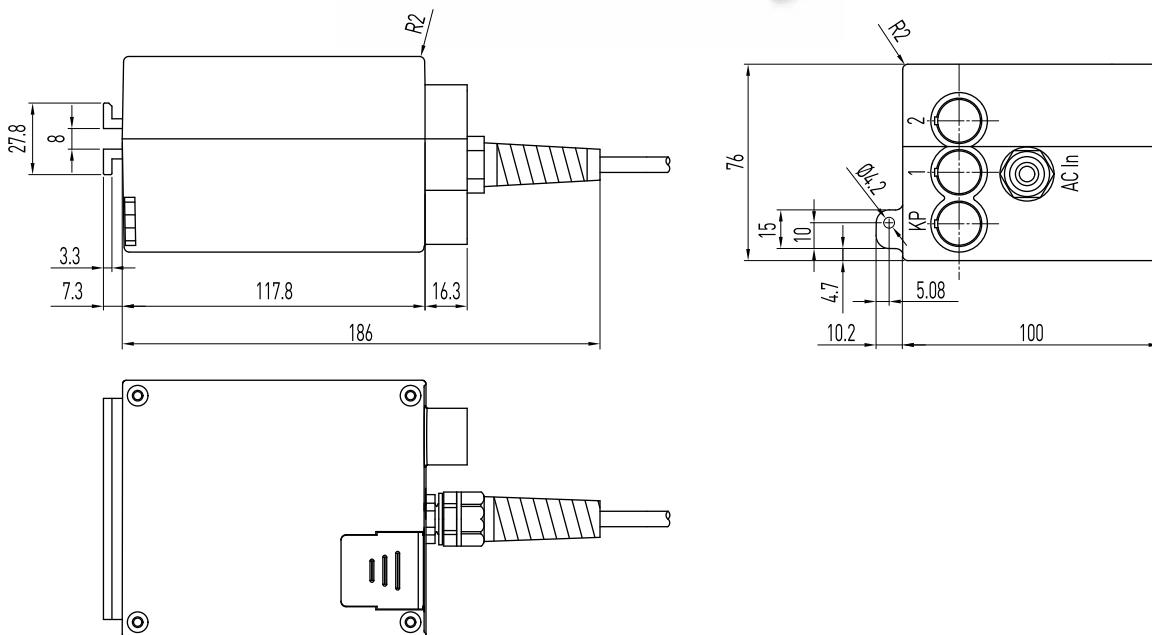


Table 25.1 Specifications

Input voltage	AC 100 / 110 / 220 / 230V {50 / 60Hz}
Output power	108VA (24VDC) max.
Duty cycle	10%
Protection	IP54
Working temp.	+5°C~40°C

#### Option:

(1) IP66

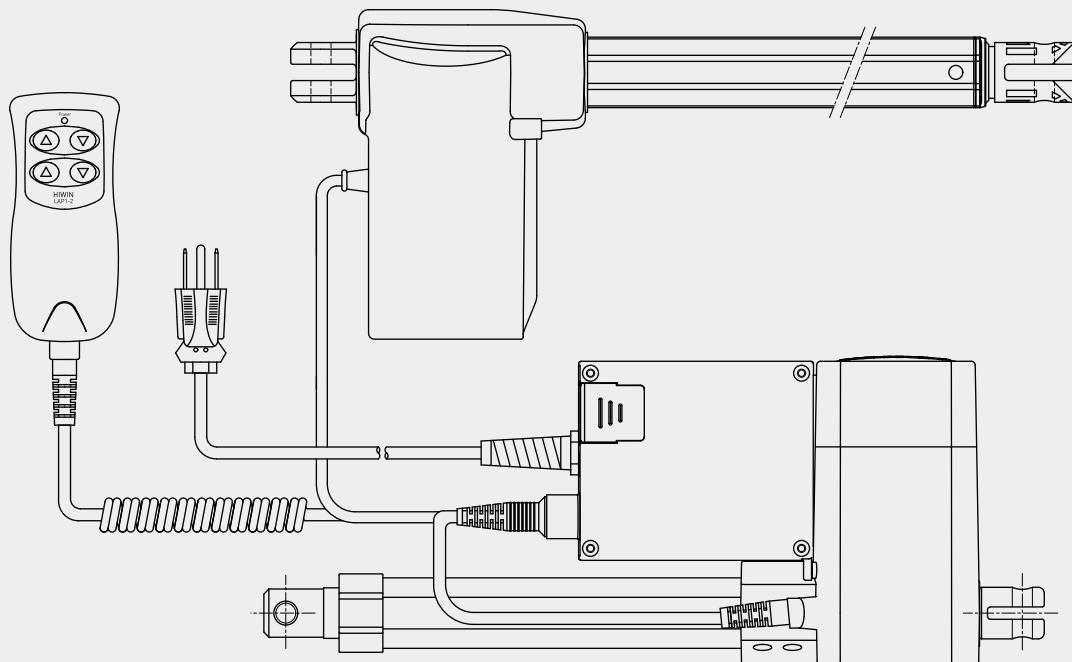
#### Features of the LAK2D

- Control 1 or 2 Linear Actuators
- Standard cable length: 4M
- Over load protection
- During an emergency power loss, please insert 2-9V alkaline batteries to lower the actuators. (Protection class is IP54 when LAK2D is operated with batteries)

- Can be mounted directly on the LAM3 or LAN5

\* There is no battery charge function, the 9V batteries are used for emergencies only.

## LAK2D can be mounted with LAM3 or LAN5



## Ordering Information

LAK2D - 1 - D0 - 110 - G E

Battery	Actuator No. 1~2	Input Voltage	Color	Special models according to Client's requirement
0: None	0: None	100: AC100V; 110: AC110V	B: Black	None
1: 9-volt alkaine battery	A~F: Over current setting value	220: AC220V; 230: AC230V	G: Gray	E = Special requirement

\* Check attached table for over current setting...see page 55.

\* LAK2D over current must be set to the same value.

# Linear Actuator

## 2-Axis Controller

### 26. HIWIN 2-Axis Controller

LAK2J

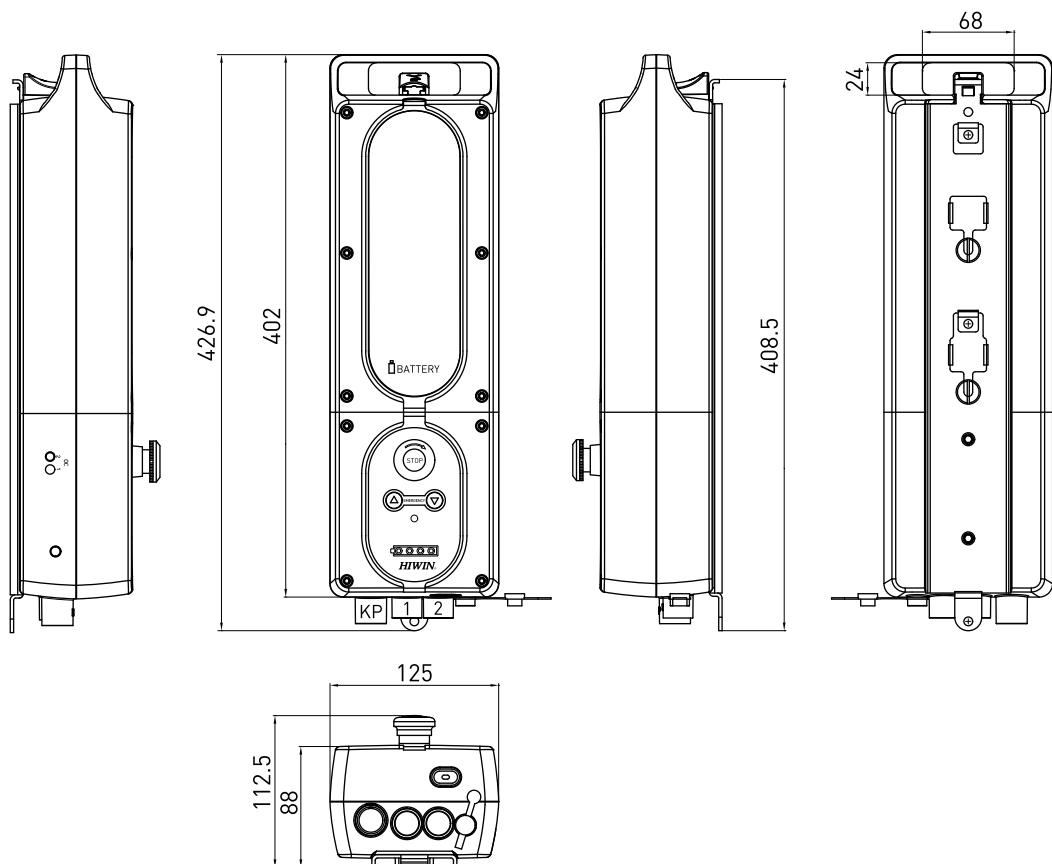


Table 26.1 Specifications

Output voltage	DC 24V
Duty cycle	10%
Protection	IP54
Working temp.	+5°C~40°C

#### Option:

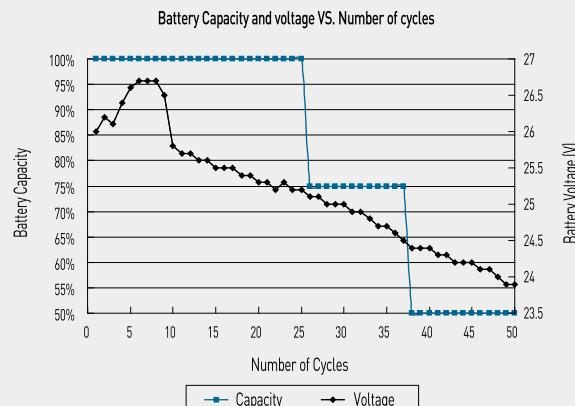
- [1] IP65
- [2] Custom program
- [3] UL Version

## Features of the LAK2J

- Portable design (operated by battery)
- Control 1 to 2 Linear Actuators
- Emergency stop button
- Emergency operation through front panel (only for axis 1)
- Over load protection
- Soft - start / stop
- Battery rechargeable via LAKCH charger
- Automatic alarm when the battery is low
- Automatic Energy Saving Mode
- Battery capacity 4.5Ah (12VDC\*2)
- LED for power indication

\*Note: Please charge the battery for at least 12 hours before the initial use

## Battery Characteristics

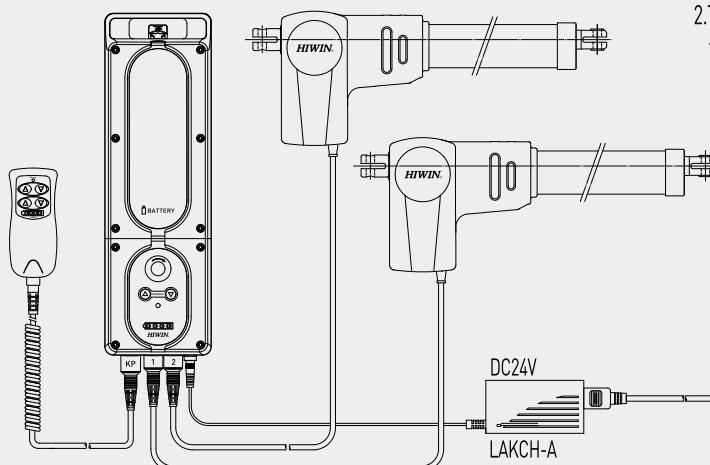


\*Test results are obtained under 5A load current

Note: 1.The test results are obtained under duty cycle 10%

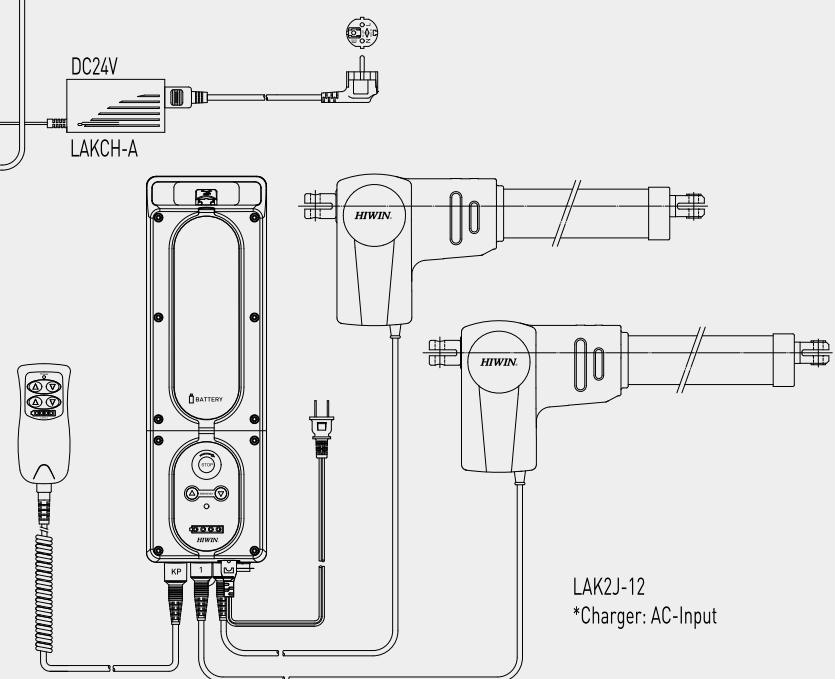
(2 minutes of continuous operation followed by 18 minutes of non-operation).

2.The Test results are for reference only, actual value will be different due to the battery performance.



LAK2J-11

\*Charger: DC-Input



LAK2J-12

\*Charger: AC-Input

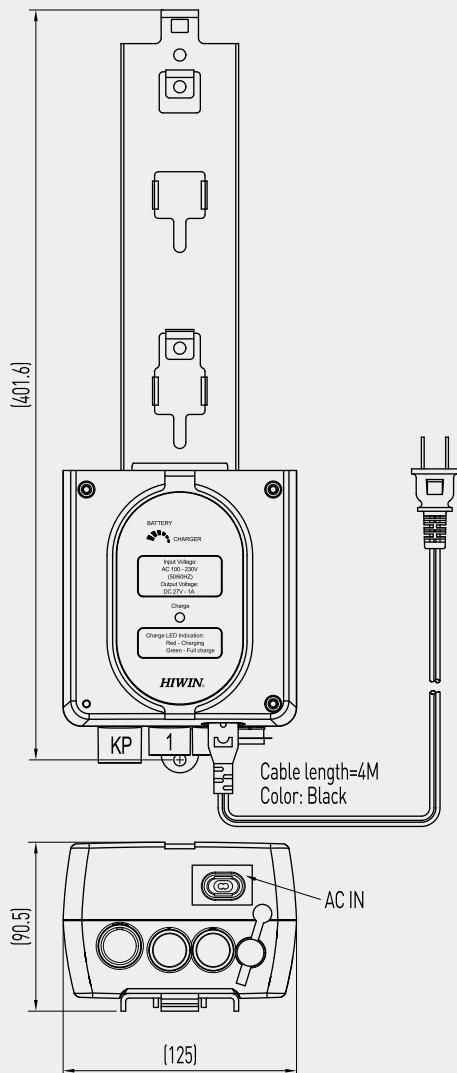
## Ordering Information

LAK2J - 11 - HH - 01 - 24 - W E

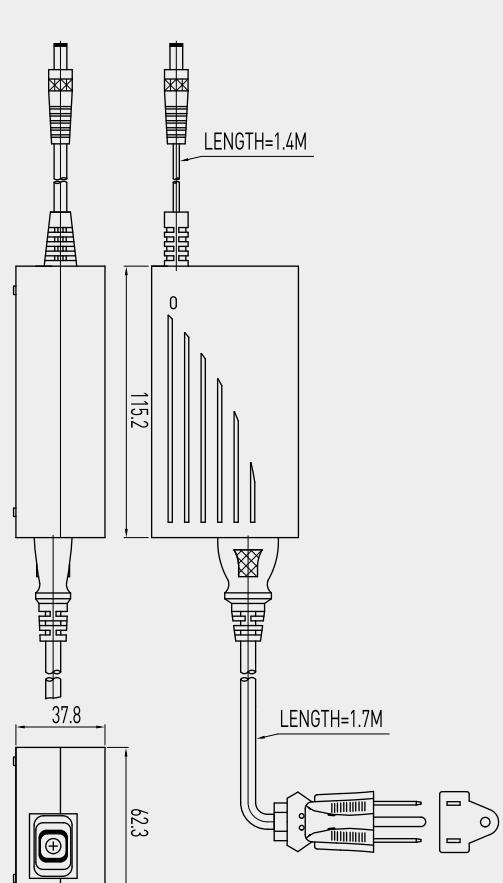
Battery	Charger	Actuator No.1~2	Software function	Output power	Color	Special models according to
1: 4.5Ah	1: DC in charger by LAKCH-A 2: AC in charger (100~230VAC, 50~60HZ)	0: None A-H: Over current setting value	01: Standard	DC: 24V	W: White G: Gray	Client's requirement None E = Special requirement

## Charger/Battery

Charger : LAKCH-B



Charger : LAKCH-A



## Ordering Information

<u>LAKCH - A - 24 - B</u>			
External charger for LAK2J-11	Output power DC: 24V	Color B: Black	
<u>LAKCH - B - 24 - W E</u>			
Wall charger	Output power DC: 24V	Color W: White G: Gray	Special models according to Client's requirement None E=Special requirement

# Linear Actuator

## 3-Axis Controller

### 27. HIWIN 3-Axis Controller

LAK4

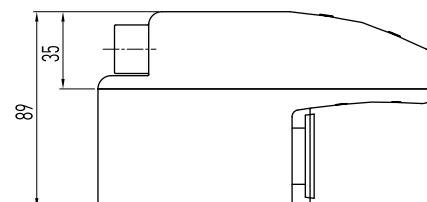
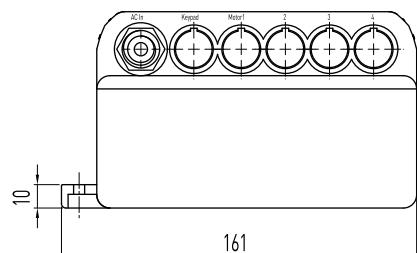
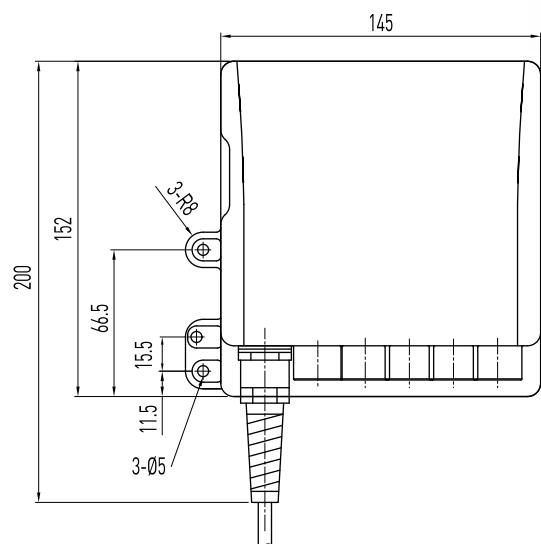


Table 27.1 Specifications

Input voltage	AC 100 / 110 / 120 / 220 / 230V (50 / 60Hz)
Output power	72.5VA (24VDC) max.
Duty cycle	10%
Protection	IP54
Working temp.	+5°C~40°C

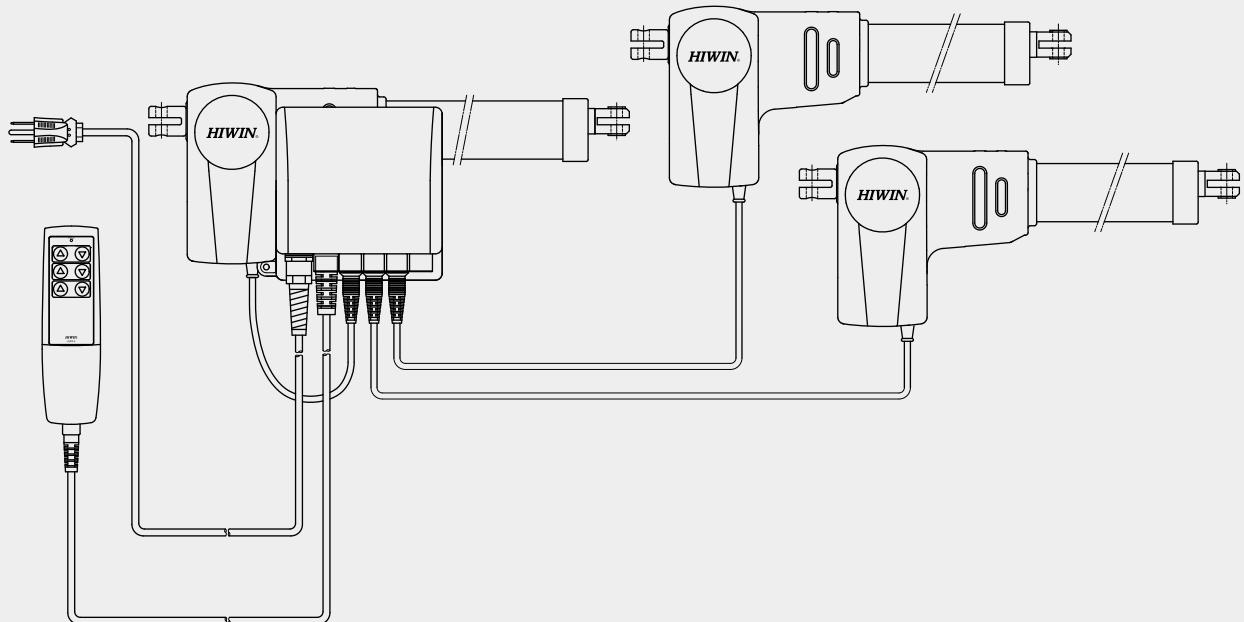
#### Option:

- (1) IP66
- (2) UL version only for LAK4-F000-110-B

#### Features of LAK4

- Control 1 to 3 Actuators
  - Can be mounted directly on the LAN1
  - Standard cable length: 4M
- \*Note: LAK4 without over current protection

LAK4 can be mounted with LAN1



## Ordering Information

LAK4 - D000 - 110 - B E

Actuator No.1~3

0: None

A~F: Only indicate the actuator maximum current,  
not indicate over current setting value.

Input Voltage

100: AC100V; 110: AC110V  
220: AC220V; 230: AC230V

Color

B: Black  
G: Gray

Special models according to Client's requirement

None

E = Special requirement

# Linear Actuator

## 4-Axis Controller

### 28. HIWIN 4-Axis Controller

LAK4D

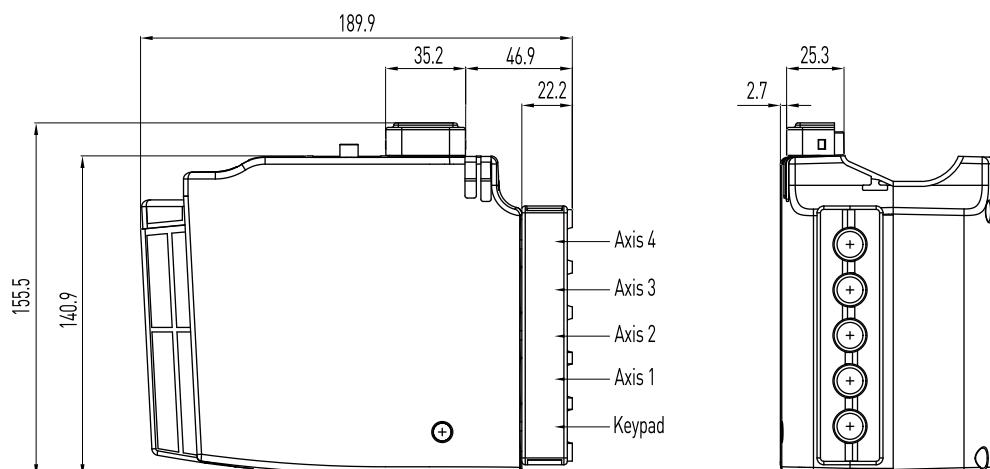
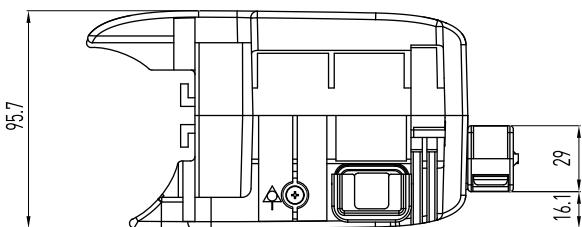


Table 28.1 Specifications

Input voltage	AC 100 / 110 / 120 / 220 / 230V [50/60Hz]
Output power	72.5VA (24VDC) max.
Duty cycle	10%
Protection	IP54
Working temp.	+5°C~40°C

#### Option:

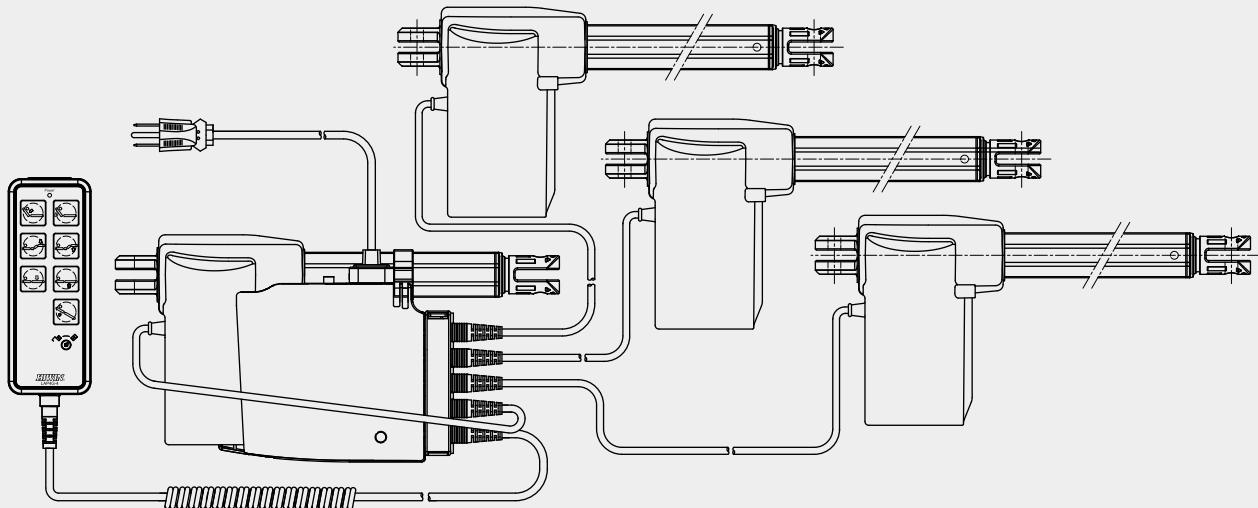
- (1) IP66
- (2) Output power: 144VA, 216VA
- (3) UL Version

#### Features of LAK4D

- Control 1 to 4 Linear Actuator
- Standard cable length: 4M
- Detachable cable retainer (protection against accidental unplugging)
- Removable AC power cable.

- LED power display.
- Can be mounted directly on the LAN5.
- (LAN5 min. RL must be greater than 300mm)
- \* Notes: LAK4D without over current protection.

LAK4D can be mounted with LAN5



## Ordering Information

LAK4D - D000 - 110 - G E

Actuator No.1~4

0: None

A~H: Only indicate the actuator maximum current,  
not indicate over current setting value.

Input Voltage

100: AC100V; 110: AC110V

220: AC220V; 230: AC230V

120: AC 120V

Color

B: Black

G: Gray

Special models according to Client's requirement

None

E = Special requirement

# Linear Actuator

## 6-Axis Controller

### 29. HIWIN 6-Axis Controller

LAK6B

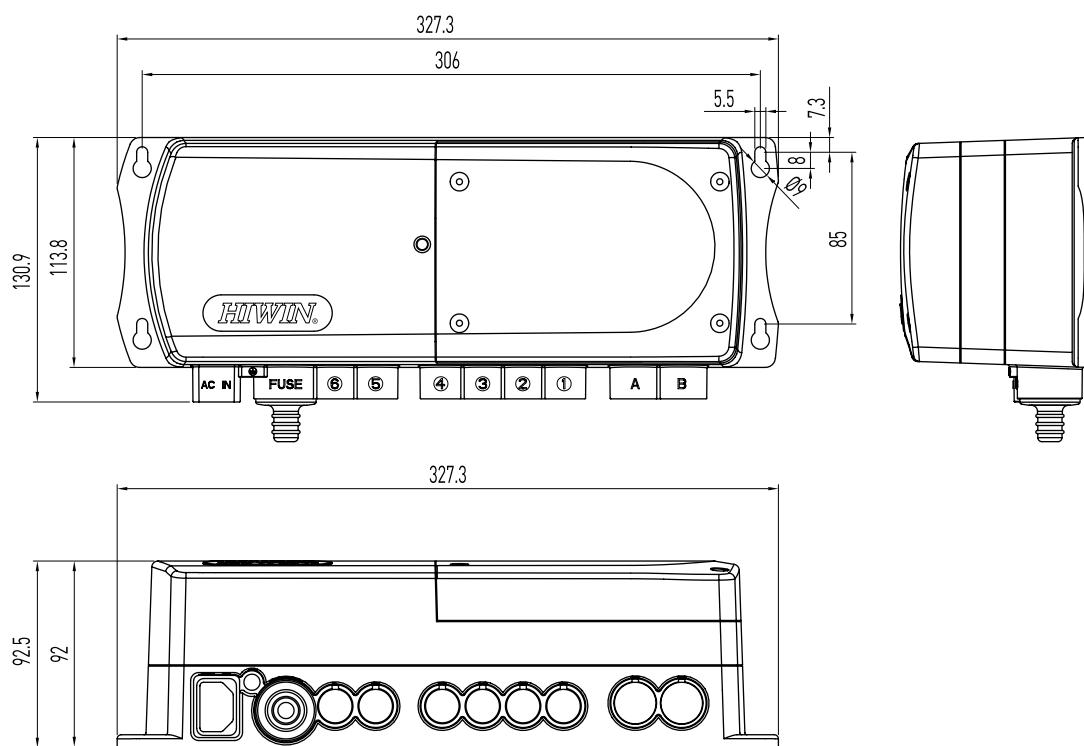


Table 29.1 Specifications

Input voltage	AC 100 / 110 / 220 / 230V [50/60Hz]
Output power	216VA (24VDC) max.
Duty cycle	10%
Protection	IP54
Working temp.	+5°C~40°C

#### Option:

- (1) IP66
- (2) Custom program

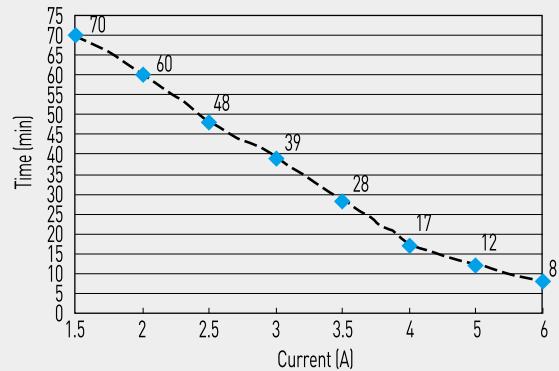
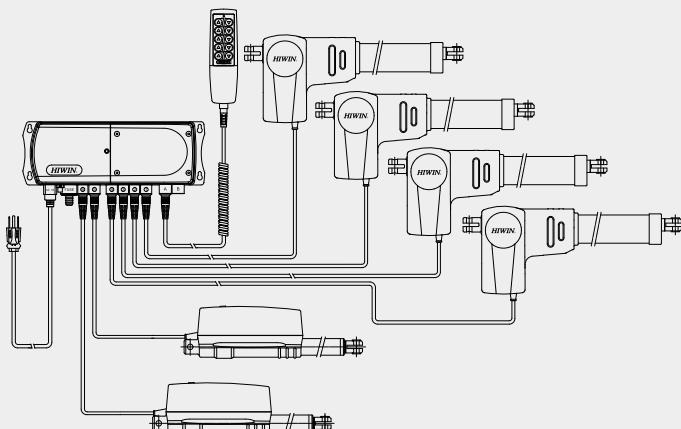
## Features of LAK6B

- Control 1 to 6 Linear Actuators
- Over load protection
- Soft-start
- Standard cable length: 4M
- Rechargeable battery
- Low battery indicator [alarm]
- Automatic energy saving
- Battery capacity 1.3Ah (12VDCx2)

\* Note: Simultaneous movement is not available for LAN3-1/-2/-3(24Q)

\* Note: Please charge battery for at least 8 hours before initial use.

- Main fuse replaceable by external plug
- Spare fuse inside the fuse plug
- External ground connection
- LED power indication



Note: 1.The test results are obtained under duty cycle 10% (2 minutes of continuous operation followed by 18 minutes of non-operation).  
2.The Test results are for reference only, actual value will be different due to the battery performance.

## Ordering Information

LAK6B - 1 - D 00000 - 00 - 110 - G E

Battery	Actuator No.1~6	Type	Input Voltage	Color	Special models according to Client's requirement
0: No	0: None	00: Standard	100: AC100V; 110: AC110V	B: Black	None
1: 1.3Ah	A~J: Over current setting value	01: Custom software	220: AC220V; 230: AC230V	G: Gray	E = Special requirement

\* Check attached table for over current setting...see page 55.

## Over Current Setting Table

Code No.	Current setting	Actuator Model	Controller Model
A	2.5A	LAS4-1; LAS5-1/-2	LAK2; LAK2D; LAK2LR; LAK2BN; LAK2J; LAK4; LAK4D; LAK6B
B	3.0A	LAS1-1; LAS3-1; LAI2-1; LAS5A-1/-2	LAK2; LAK2D; LAK2LR; LAK2BN; LAK2J; LAK4; LAK4D; LAK6B
C	4.0A	LAS1-2; LAS3-2; LAS4-2; LAI1-1[24V]; LAM2-3/-4; LAS2-1/-2; LAI2-1	LAK2; LAK2LR; LAK2D; LAK2BN; LAK2J; LAK4; LAK4D; LAK6B
D	5.0A	LAM3-3/-4; LAN1-1/-2; LAN5-2/-3/-4; LAM2-1/-2; LAI2-2	LAK2; LAK2D; LAK2LR; LAK2BN; LAK2J; LAK4; LAK4D; LAK6B
E[24V]	6.0A	LAM3-2; LAN4; LAC3-1; LAN4-3/-4; LAN5-1; LAI1-1A[24V]; LAC1	LAK2D; LAK2BN; LAK2J; LAK4; LAK4D; LAK6B
E[12V]	6.0A	LAS1-1[12V]; LAS3-1[12V]; LAS4-1[12V]; LAM2-3/-4; LAS2-1/-2	LAK2(DC)
F[24V]	7.0A	LAN1-1/-2/-3/-4[24Q]; LAM3-1; LAN4-1/-2; LAN5-3/-4[24Q]	LAK2; LAK2D; LAK2LR; LAK2BN; LAK2J; LAK4; LAK4D; LAK6B
F[12V]	7.0A	LAS1-2[12V]; LAS3-2[12V]; LAS4-2[12V]; LAM2-3/-4	LAK2(DC)
G[24V]	8.0A	LAM1-1/-2/-1A; LAN5-1/-2[24Q]	LAK2; LAK2LR; LAK6B; LAK2J
G[12V]	8.0A	LAI1-1[12V]; LAM1-1/-2	LAK2(DC)
H[24V]	9.0A	LAN3-1/-2/-3[24V]; LAN3A-1/-2/-3/-4[24V]	LAK6B; LAK2J
H[12V]	9.0A	LAI1-1A[12V]; LAM2-1/-2	LAK2(DC)
I	10A	For reservation	
J	12A	LAN3-1/-2/-3[24Q]; LAN3A-1/-2/-3/-4[24Q]	LAK6B; LAK2J
K	14A	For reservation	
L	15A	LAN1-1/-2/-3[12V]; LAM1-1/-2/-1A[12V], -2A[12V]; LAM3[12V]; LAN4[12V]	LAK2(DC)
Z	**A	Special current value (special requirement)	

## LA Cable Connector Vs. Controller Model

Actuator Model	Normal connector	Controller Model	
		LAK2 / LAK2J / LAK2LR	LAK2BN / LAK2D / LAK4 / LAK4D / LAK6B
LAM1	bare wire		
LAM2	bare wire		
LAM3	bare wire		
LAI1	bare wire		
LAI2	bare wire		
LAS1	bare wire	Audio connector (Stereo Plug)	DIN 4 Pin Connector
LAS2	bare wire		
LAS3	bare wire		
LAS4	bare wire		
LAS5	bare wire		
LAN1	bare wire		
LAN3	bare wire		
LAN3A	bare wire		
LAN4	bare wire		
LAN5	bare wire		
LAC1	bare wire		
LAC3	bare wire		



# Linear Actuator

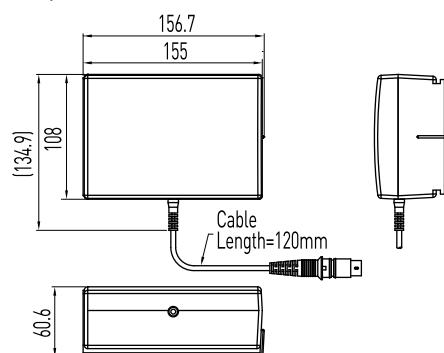
## Battery

### 30. HIWIN Battery

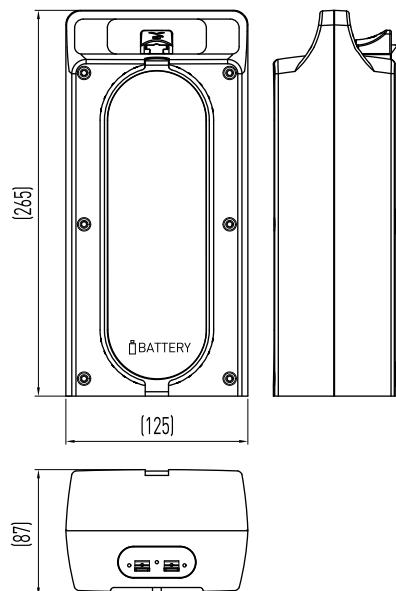
#### LAKB



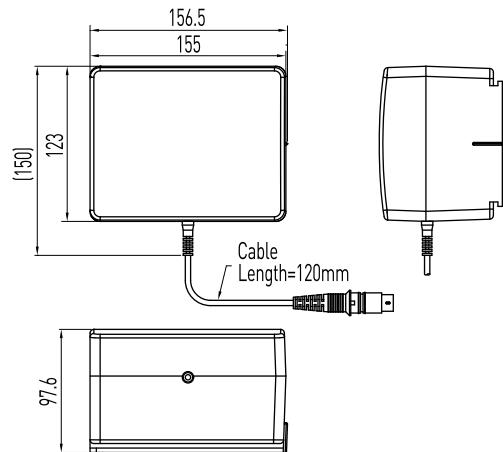
Battery: LAKB-1



Battery: LAKB-3



Battery: LAKB-2



## Ordering Information

LAKB - 1 - G E

Battery	Color	Special models according to Client's requirement
1: 1.3Ah	B: Black	None
2: 2.9Ah	G: Gray	E = Special requirement

LAKB - 3 - G E

Battery for LAK2J	Color	Special models according to Client's requirement
3: 4.5Ah	W: White	None
	G: Gray	E = Special requirement

# Linear Actuator

## Over Current Protection Box

### 31. HIWIN Over Current Protection Box

#### LAKC1-1

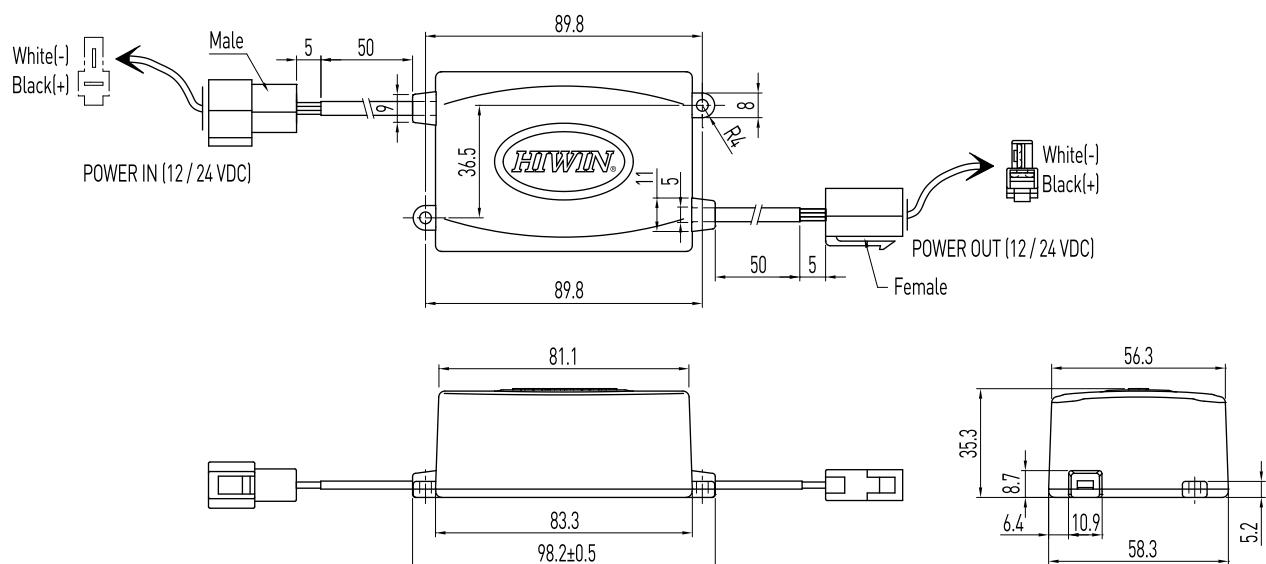


Table 31.1 Specifications

Input voltage	12/24VDC
Output power	12/24VDC
Duty cycle	10%
Protection	IP54
Working temp.	+5°C~40°C

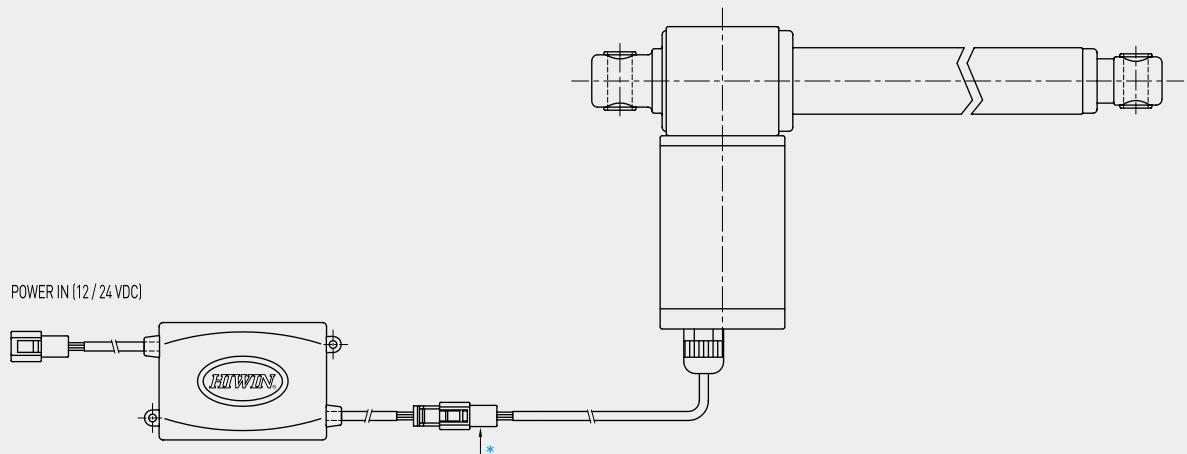
#### Option:

[1] IP66

#### Features of LAKC1-1

- Compact size
- Low cost
- Easy to use
- Multiple over-current settings available
- Fast response time

## For Series



\* When purchasing an actuator to be connected with the LAKC1, please inform the Hiwin sales representative.

## Ordering Information

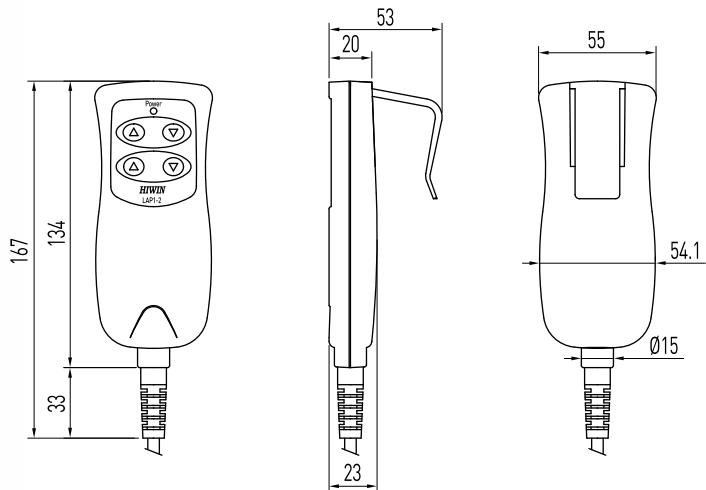
LAKC1 - 1 - 12 - 6 G E				
Model number	Input (Output) Voltage	Over Current Setting	Color	Special models according to Client's requirement
12: 12VDC	12V:	24V:	B : Black	None
24: 24VDC	2: 2A	2: 2A	G: Gray	E=Ignore this part of the serial number if not available
	3: 3A	2.5: 2.5A		
	4: 4A	3: 3A		
	5: 5A	4: 4A		
	6: 6A	5: 5A		
	8: 8A	6: 6A		
	10: 10A	7: 7A		
	12: 12A	8: 8A		
	18: 18A	9: 9A		
		10: 10A		

# Linear Actuator

## Keypad Series

### 32. HIWIN Keypad Series

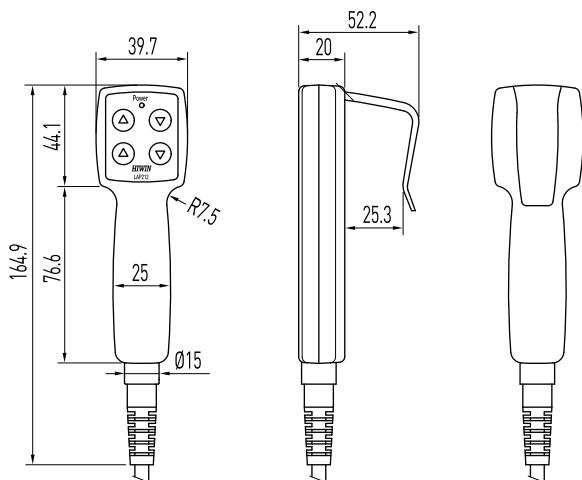
#### LAP1



#### Features of the LAP1

- Controls a maximum of 2 Actuators
- Compatible with the LAK2, LAK4, LAK4D, LAK2LR, LAK2D, & the LAK6B
- Ergonomic design
- Standard cable length: coil 600mm; total 1100mm
- Protection: IP66

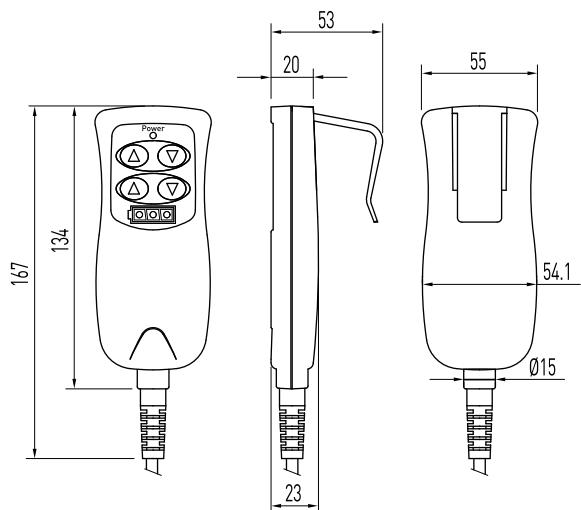
#### LAP2



#### Features of the LAP2

- Control maximum of 2 Actuators
- Compatible with LAK2, LAK4, LAK2D
- Ergonomic design and small size
- Standard cable length: coil 600mm; total 1100mm
- Protection: IP66

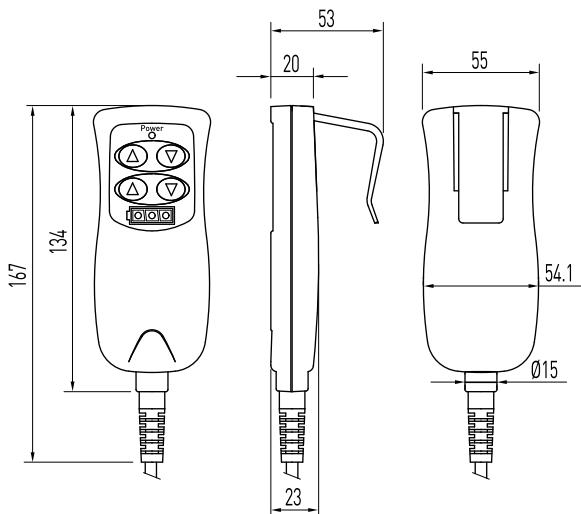
## LAP3



## Features of the LAP3

- Control maximum of 2 Actuators
  - Compatible with LAK2B, LAK2J
  - Ergonomic design
  - Standard cable length: coil 600mm; total 1100mm
- LED for battery capacity
  - Protection: IP66
- \* Option: UL version only for LAP3-1-B

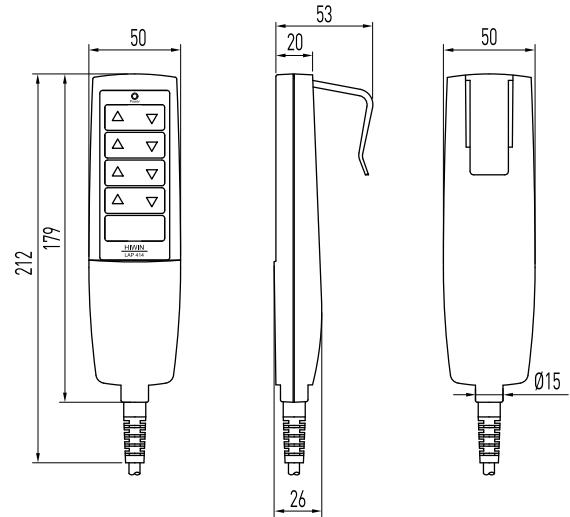
## LAP3N



## Features of the LAP3N

- Control maximum of 2 Actuators
  - Compatible with LAK2BN
  - Ergonomic design
  - Standard cable length: coil 600mm; total 1100mm
- LED for battery capacity
  - Protection: IP66
- \* Option: Cable length: coil 600mm; total 2250mm

## LAP4



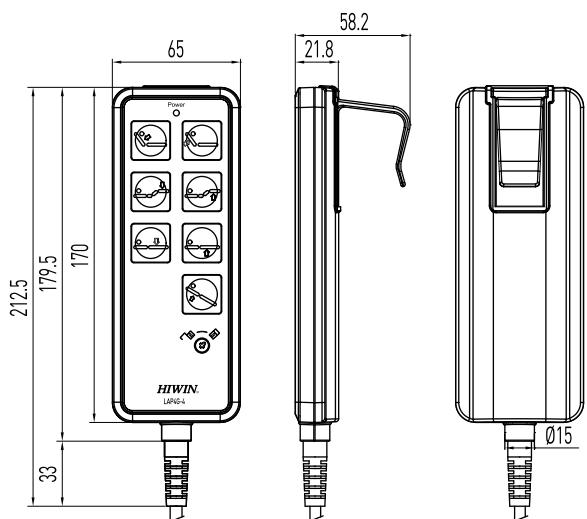
### Features of the LAP4

- Control maximum of 4 Actuators
- Compatible with LAK4
- Ergonomic design
- Standard cable length: coil 600mm; total 1100mm
- Protection: IP66

### Option:

- (1) Cable length: coil 600mm; total 2250mm
- (2) UL version only for LAP4-3-B

## LAP4G



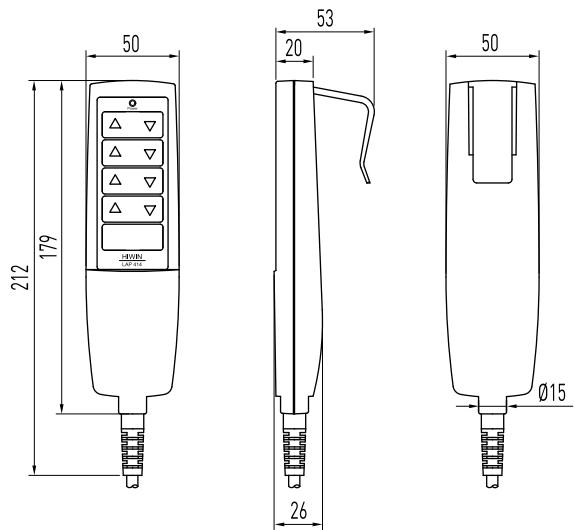
### Features of the LAP4G

- Control maximum of 6 Actuators
- Compatible with LAK4D, LAK6B
- Ergonomic design
- Standard cable length: coil 600mm; total 1100mm
- Protection: IP66
- With lock function

### Option:

- (1) UL version
- (2) Cable length: coil 600mm; total 2250mm
- (3) Special mask...see page 69~70.

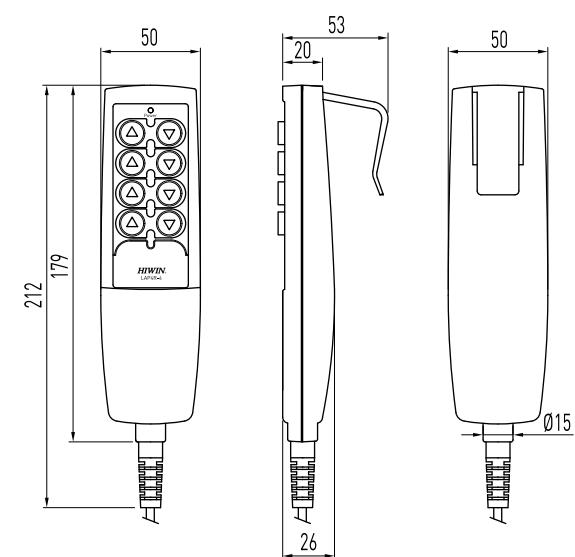
## LAP4N



## Features of the LAP4N

- Control maximum of 4 Actuators
- Compatible with LAK4D
- Ergonomic design
- Standard cable length: coil 600mm; total 1100mm
- Protection: IP66
- \* Option: Cable length: Coil 600mm; total 2250mm

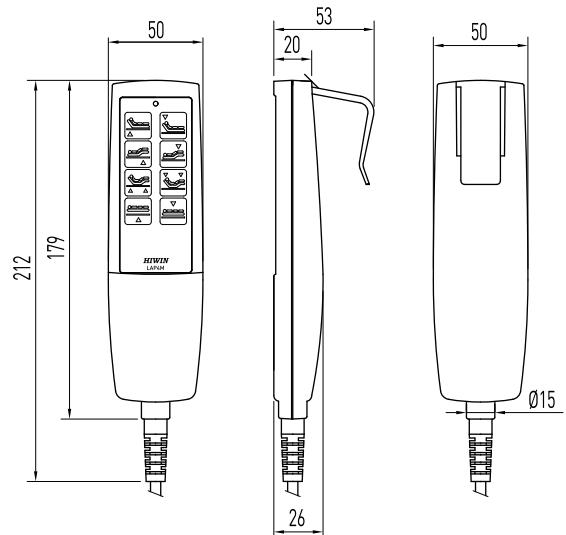
## LAP4R



## Features of the LAP4R

- Control maximum of 4 Actuators
- Compatible with LAK4, LAK4D, LAK2J, LAK6B
- Ergonomic design
- Standard cable length: coil 600mm; total 1100mm
- Protection: IP66
- \* Option: Cable length: coil 600mm; total 2250mm

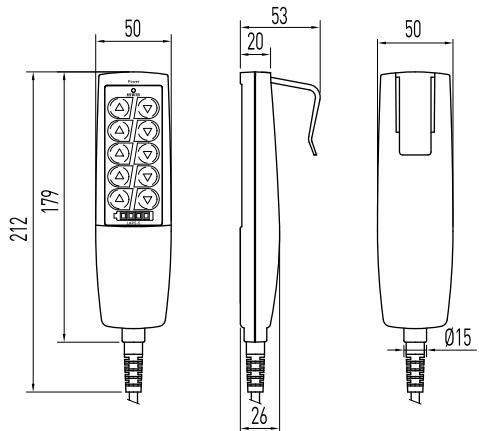
## LAP4M



### Features of the LAP4M

- Control maximum of 4 Actuators
- Compatible with LAK4, LAK4D
- Ergonomic design
- Standard cable length: coil 600mm; total 1100mm
- Protection: IP66
- \* Option: Cable length: coil 600mm; total 2250mm

## LAP5



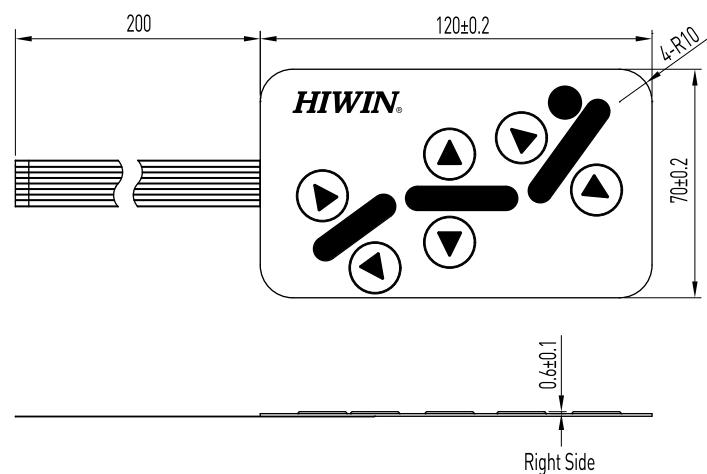
### Features of the LAP5

- Control maximum of 5 Actuators
- Compatible with LAK6B, LAK2J
- Ergonomic design
- Standard cable length: coil 600mm; total 1100mm
- Protection: IP66

### Ordering Information

		LAP1 - 2 - B E						
Model number		Number of axis controlled	Color	Special models according to Client's requirement				
LAP1	LAP2	LAP3	LAP3N	LAP4	LAP4N	LAP4G	B: Black	None
LAP4M	LAP4R	LAP5					G: Gray	E=Ignore this part of the serial number if not available

## LAPM1



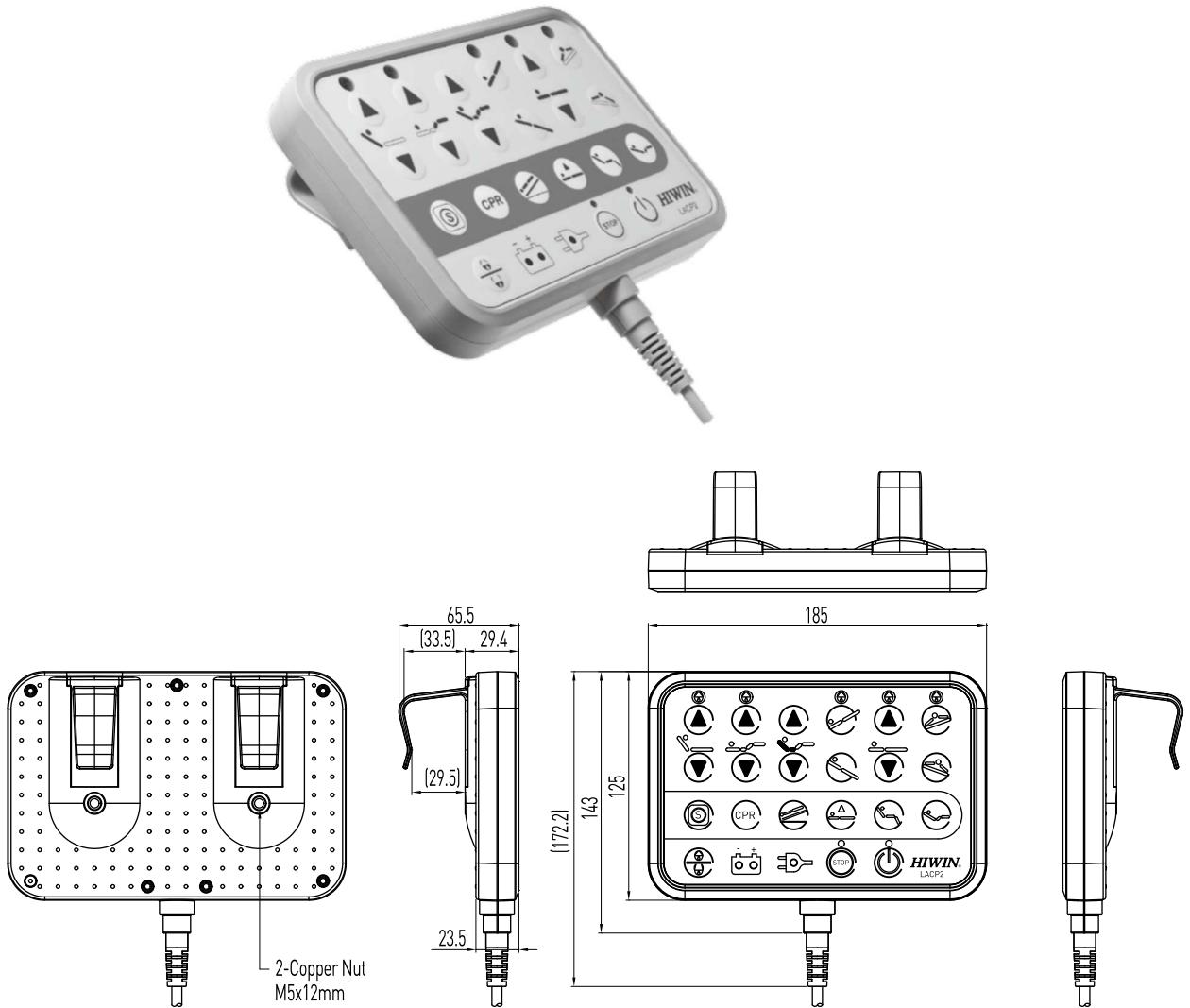
## Features of the LAPM1

- Control maximum of 4 Actuators
- Compatible with LAK4D, LAK6B
- Cable length: 200mm

## Ordering Information

LAPM1 - 1 - R E		
Model number	R: Right side L: Left side	Special models according to Client's requirement None E = Ignore this part of the serial number if not available

## LACP2



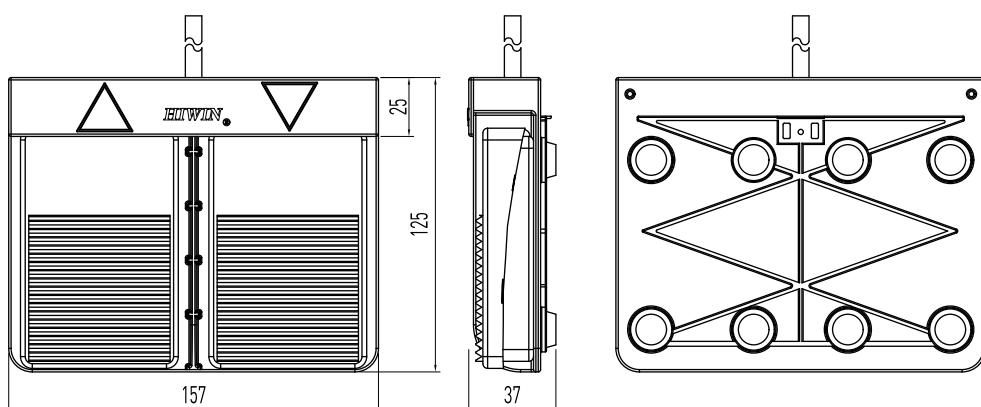
### Features of the LACP2

- Control maximum of 5 Actuators
- Compatible with LAK6B
- Ergonomic design
- Custom mask and function
- Standard cable length: coil 600mm; total 1100mm
- Protection: IP54
- Option: IP66

### Ordering Information

LACP2 - 2 - B E			
Model number	Number of axis controlled	Color B : Black G : Gray	Special models according to Client's requirement None E = Ignore this part of the serial number if not available

## LAFS1



### Features of the LAFS1

- Controls 1 Actuator
- Compatiable with all controllers
- \* Notice the type of controller
- Easily portable with attached magnet
- Standard cable length: coil 600mm; total 1100mm

### Ordering Information

LAFS1 - 1 - G E			
Model number	Number of axis controlled	Color	Special models according to Client's requirement
LAFS1		G: Gray	None E = Ignore this part of the serial number if not available

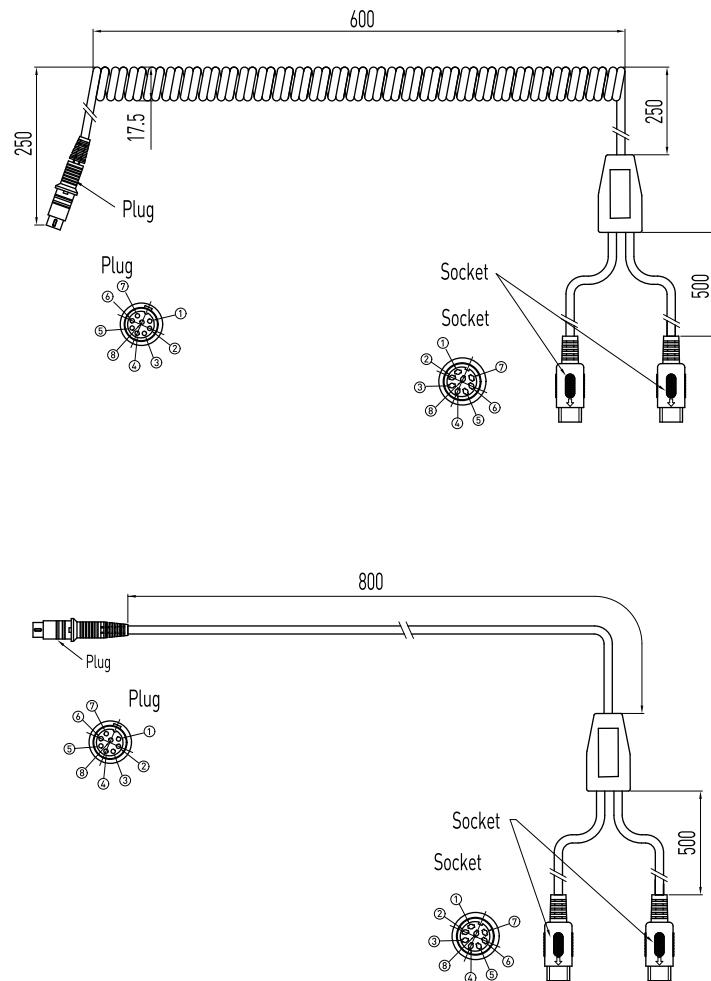
# Linear Actuator

Options for each type

## 33. Standard Cable length of the actuator

Item	Type	Standard cable length(Straight line)					Cable diagram
		Mount with controller Cable length(L)	Normal length (L)				
1	LAM1						
2	LAM2						
3	LAM3	200mm(DIN 4PIN)					
4	LAI1						
5	LAI2						
6	LAS1						
7	LAS2						
8	LAS3						
9	LAS4						
10	LAS5		1M	1.5M	2M	2.5M	3M
11	LAN1	300mm(DIN 4PIN)					
12	LAH1	300mm(DIN 4PIN)					
13	LAN3						
14	LAN3A						
15	LAN4						
16	LAN5	410mm(DIN 4PIN)					
17	LAC1						
18	LAC3						
19	LAN5 Coil						
DIN 4PIN - Coil	Species	1	2	3	4	5	
	Length A	100	300	300	100	1350	
	Length B	100	300	400	600	400	
	Length C	130	130	330	130	110	
DIN 4PIN - Coil (90° Connector)	Species	1	2				
	Length A	100	300				
	Length B	100	300				
	Length C	100	100				

## Y-CABLE



## Features of the Y-Cable

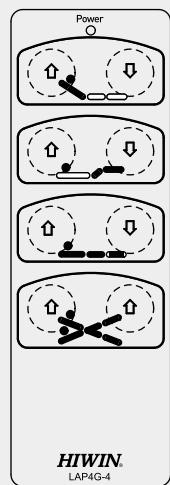
- Compatible with 2 keypads independent input.

## Ordering Information

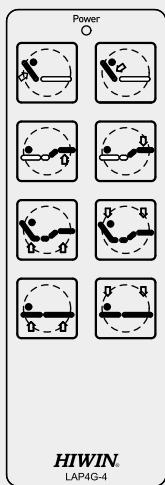
LAPY - 1 - G E			
Model of Y extension cable	Cable	Color	Special models according to Client's requirement
	1: Coil cable 2: Straight cable	B: Black G: Gray	None E = Ignore this part of the serial number if not available



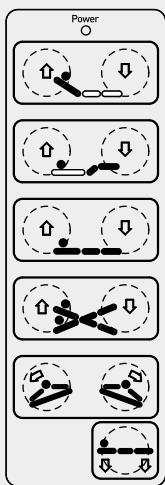
### LAP4G Mask (3)



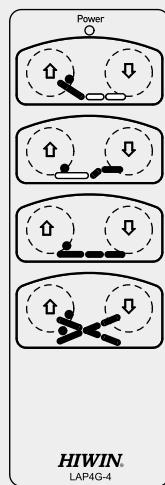
H12B020



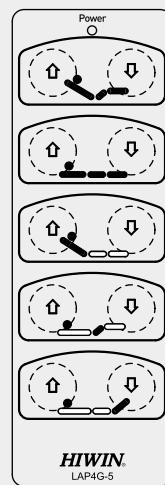
H12B021



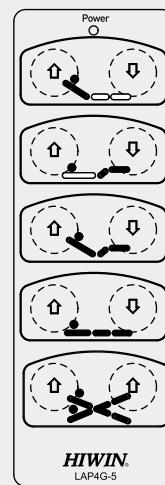
H12B023



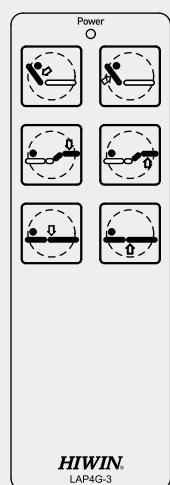
H12B026



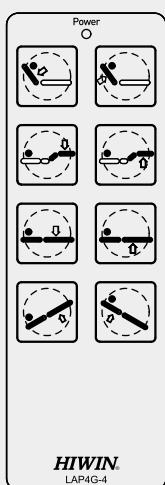
H12B027



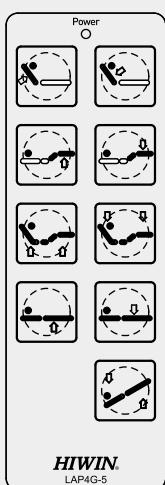
H12B028



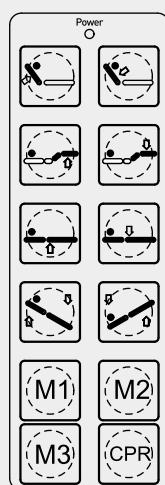
H12B032/H12B039



H12B047



H12B049



H12B052

### 35. HIWIN Options for each Actuator Type

	Function	IP54	IP65	IP66	Back fixture	Gear box	Rod end with flat material	Safety nut	Spline (push only)	Quick release	Internal limit	External limit	Hall Sensor	Potentiometer	Optical Sensor	MR Sensor
Series													NPN	PNP	TTL	NPN
LAM1	LAM1-1	●	▲			▲	▲						▲			
	LAM1-2	●	▲			▲	▲						▲			
	LAM1-1A	●	▲			▲	▲						▲			
	LAM1-2A	●	▲			▲	▲						▲			
LAM2	LAM2-1	●		▲	▲			●		▲	●	●	▲			▲
	LAM2-2	●		▲	▲			●		▲	●	●	▲			▲
	LAM2-3	●		▲	▲			●		▲	●	●	▲			▲
	LAM2-4	●		▲	▲			●		▲	●	●	▲			▲
LAM3	LAM3-1	●		▲	▲				▲	▲	●					
	LAM3-2	●		▲	▲				▲	▲	●					
	LAM3-3	●		▲	▲				▲	▲	●					
	LAM3-4	●		▲	▲				▲	▲	●					
LAS1	LAS1-1	●	▲			▲			▲		●					
	LAS1-2	●	▲			▲			▲		●					
LAS2	LAS2-1	●	▲			▲					●			■	■	■
	LAS2-2	●	▲			▲					●			■	■	■
LAS3	LAS3-1	●	▲			▲					●			■	■	■
	LAS3-2	●	▲			▲					●			■	■	■
LAS4	LAS4-1	●	▲								●					
	LAS4-2	●	▲								●					
LAS5	LAS5-1	●		▲								▲	▲	▲		
	LAS5-2	●		▲								▲	▲	▲		
LAN1	LAN1-1	●		▲	▲				▲	▲	●		▲	▲	▲	
	LAN1-2	●		▲	▲				▲	▲	●		▲	▲	▲	
	LAN1-3	●		▲	▲				▲	▲	●		▲	▲	▲	
	LAN1-4	●		▲	▲				▲	▲	▲	●		▲	▲	
LAN3	LAN3-1	●		▲	▲				▲	▲	▲	●			▲	▲
	LAN3-2	●		▲	▲				▲	▲	▲	●			▲	▲
	LAN3-3	●		▲	▲				▲	▲	▲	●			▲	▲
LAN3A	LAN3A-1	●		▲	▲				▲	▲	▲	●			▲	▲
	LAN3A-2	●		▲	▲				▲	▲	▲	●			▲	▲
	LAN3A-3	●		▲	▲				▲	▲	▲	●			▲	▲
	LAN3A-4	●		▲	▲				▲	▲	▲	●			▲	▲
LAN4	LAN4-1	●		▲												
	LAN4-2	●		▲												
	LAN4-3	●		▲												
	LAN4-4	●		▲												
LAN5	LAN5-1	●	◆	■	▲				▲	▲	●		▲	▲		
	LAN5-2	●	◆	■	▲				▲	▲	●		▲	▲		
	LAN5-3	●	◆	■	▲				▲	▲	●		▲	▲		
	LAN5-4	●	◆	■	▲				▲	▲	●		▲	▲		
LAC1	LAC1-1	●									●		■	■	■	
LAC3	LAC3-1	●									●		■	■	■	

"●" Standard

"▲" Option is available.

"◆" "■" Only 1 option is available.

# Linear Actuator

## 36. HIWIN Option for each Controller Type

Function \ Type	LAK2RL	LAK2	LAK2BN	LAK2D	LAK2J	LAK4	LAK4D	LAK6B
IP54	●	●	●	●	●	●	●	●
IP65					▲			
IP66	▲	▲	▲	▲		▲	▲	▲
Input Voltage	DC 12V DC 24V AC 100V AC 110V AC 120V AC 220V AC 230V	■ ■ ■ ■ ■ ■ ■						
Output Power (24V)	72.5VA 108VA 144VA 216VA			●		● ●	● ■	■ ●
Max. control axis no.	1	2	2	2	2	3	4	6
Over load protection	●	●	●	●	●			●
Relay protection	●	●	●	●	●	●		●
Battery	9V alkaline 1.3Ah (Lead Acid) 2.9Ah (Lead Acid) 4.5Ah (Lead Acid)			▲ ■ ■	● ● ● ●			●
Charge function				●	▲			●
Energy saving				●	●			●
Custom program				▲	▲			▲
Control external limit switch	●		▲					▲
Mounted with actuator				●		●	●	
Detachable cable retainer							●	
Removable AC power cable							●	●

"●" Standard

"▲" Option is available.

"◆" "■" Only 1 option is available.