

Control Box CM43

The CM43 control box is dedicated to patient hoist and stand-up lift for medical care purposes. With BT43 lead-acid battery box as its power source, it is convenient for quick replacement and continuous use, so it can be applied to professional medical places with high working frequency, and there are 2.9Ah or 5.0Ah battery capacities to choose from. You can also purchase the CH43 charging dock to charge the spare BT43 battery boxes.

For user with lower usage rate, built-in charging power supply is a suitable choice. When not in use, plug the control box (with BT43) into AC power to charge the battery.

The practical and beautiful design is also suitable for home care. In case of emergency during use, press the emergency stop button to cut off the battery and stop the actuator immediately.



Features

- CM43 Control Box
 - Main applications: Medical care, home care
 - Use BT43 lead-acid battery box as power source, input: 24V DC
 - Max. Number of actuators: 2 channels
 - Max. Number of controls: 1 channel
 - Auto power off
 - Adjustable over-current protection: lift actuator 6~11A (Need a "setting hand control")
 - LED indication of charging and usage status
 - Charging reminder buzzer
 - Duty cycle: 10%, max. 2 min continuous operation in 20 min.
 - Operating ambient temperature: +5°C~+40°C
 - Storage temperature: -10°C~+50°C
 - IP Level: IPX4 (only applies when the BT43 battery box is connected to CM43 control box)
 - Electric shock protection level: Class II
 - Optional Internal SMPS charger:
 1. Charge Input: 100~240V AC, 50/60 Hz (SMPS)
 2. Optional charging power cord according to regional plug type (*Refer to Charging Power Cord*)

- BT43 Battery Box (separately purchased item)

- Operating ambient temperature: -10°C ~ +50°C (discharging), -10°C ~ +40°C (charging)
- Storage temperature: -15°C ~ +40°C
- Storage humidity: 20% ~ 85%
- IP Level: IPX4 (only applies when the BT43 battery box is connected to CM43 control box)
- Capacity of 2.9 Ah (Fig 1.) or 5.0 Ah (Fig 2.) is optional

Battery capacity ⁽¹⁾	Total charging time	Number of cycles for actuator ⁽²⁾
2.9 Ah	Approx. 5 hours	Approx. 40 cycles
5.0 Ah	Approx. 7 hours	Approx. 70 cycles

Remarks:

- (1) Due to the chemical characteristics of lead-acid batteries, the battery capacity will gradually decrease over time, which is normal.
- (2) This refers to the reference number of cycles for normal use of a fully charged battery in a lifting system with maximum thrust of 6000N and stroke of 200mm.



Fig 1. 2.9 Ah BT43 Battery Box



Fig 2. 5.0 Ah BT43 Battery Box

- CH43 Charging Dock (purchase separately)

- Input voltage: 100~240V AC
- Output voltage: 24V DC
- Output current: 0.625 A
- Short circuit protection
- Operating ambient temperature: -20°C ~ +70°C (discharging), 0°C ~ +40°C (charging)
- Storage humidity: 20% ~ 90%
- Color: RAL7037
- Power cord: (Refer to Charging Power Cord)



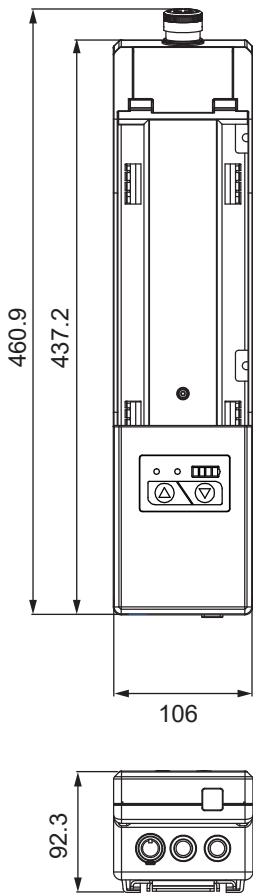
Fig 3. CH43 Charging Dock



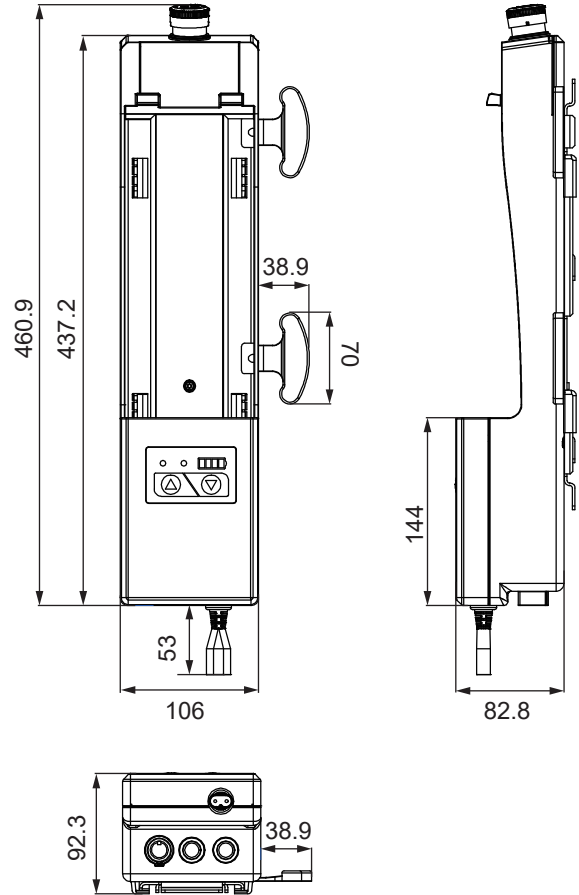
Fig 4. CH43+BT43

Dimensions

- CM43 Control Box

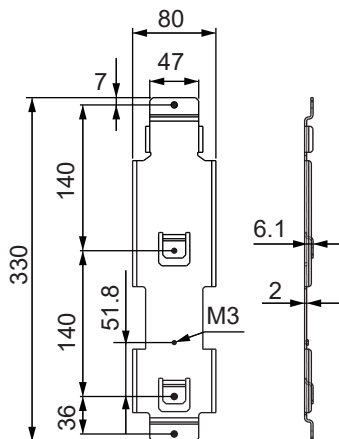


Standard (Without internal charger)

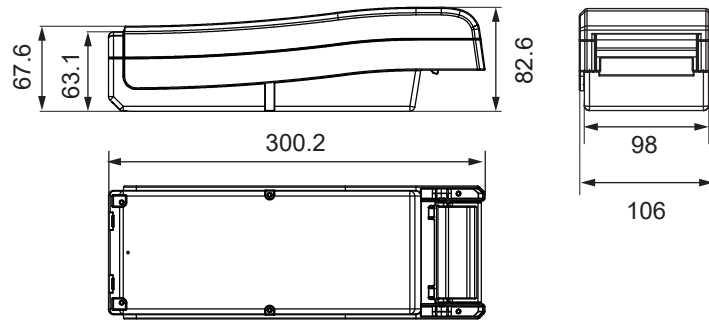


With internal charger

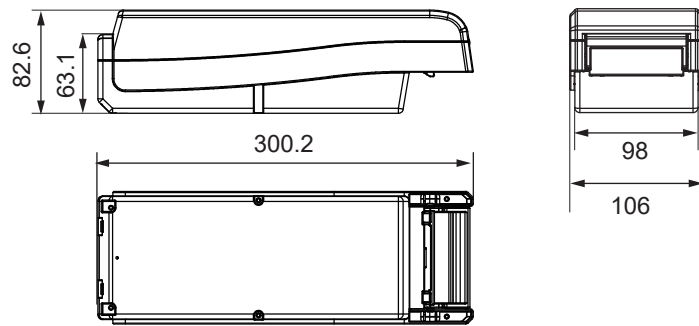
- Mounting Bracket



● BT43 Battery Box

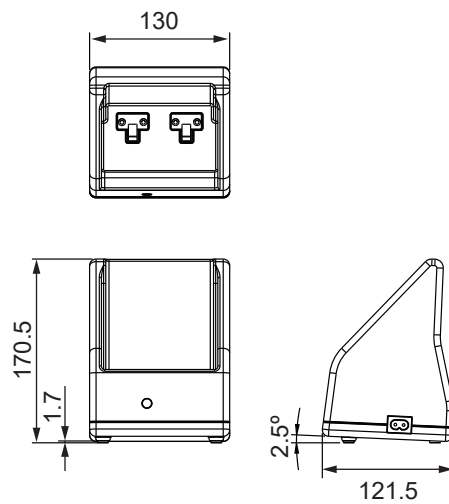


2.9 Ah model

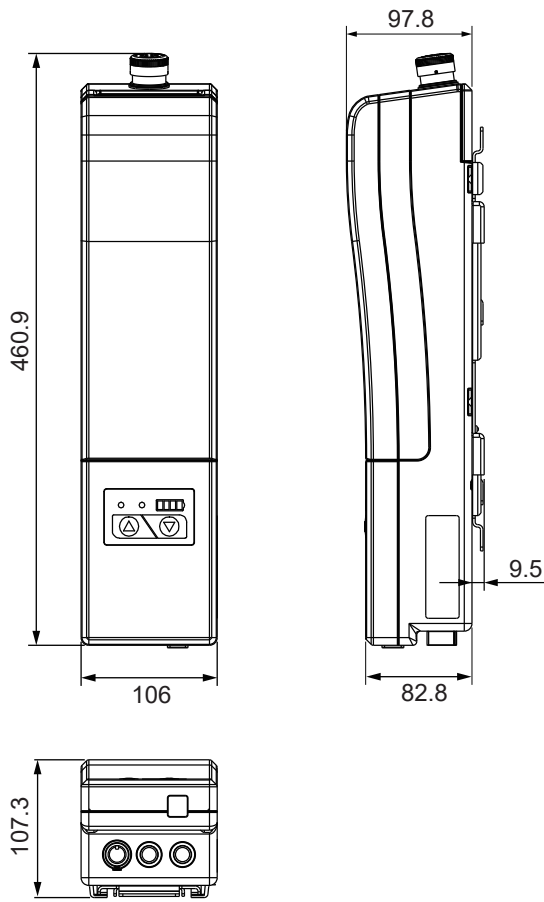


5.0 Ah model

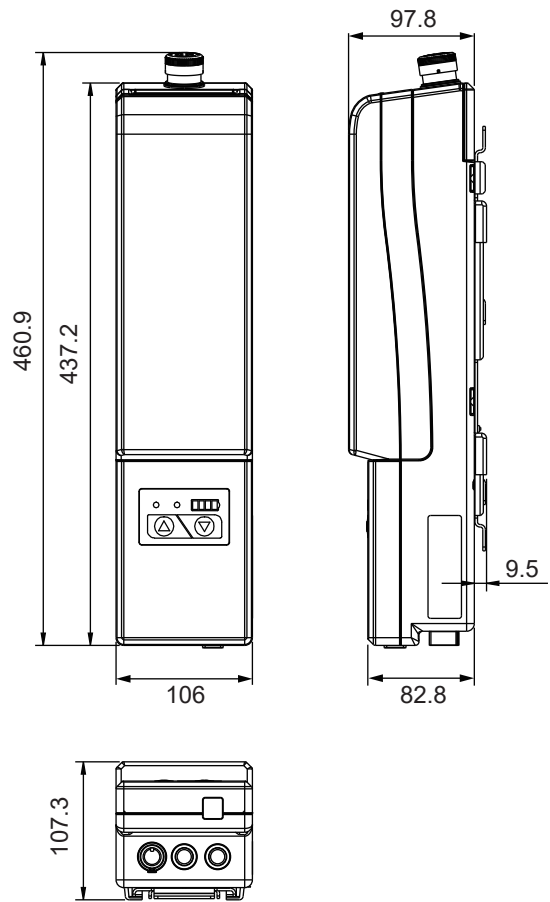
● CH43 Charging Dock



● CM43+BT43

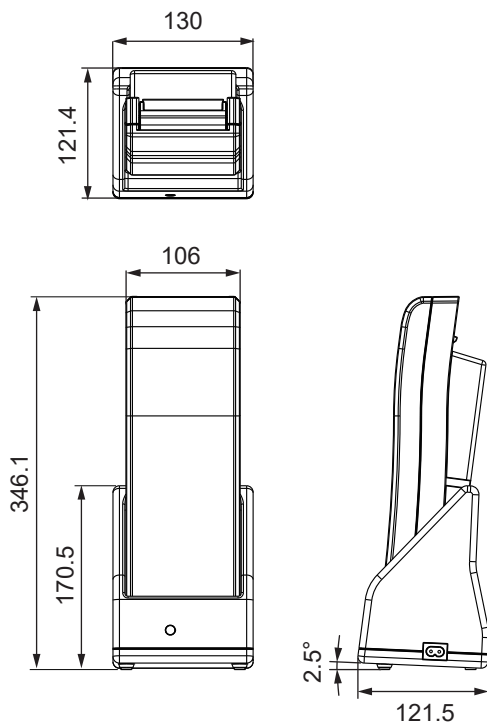


With 2.9 Ah BT43

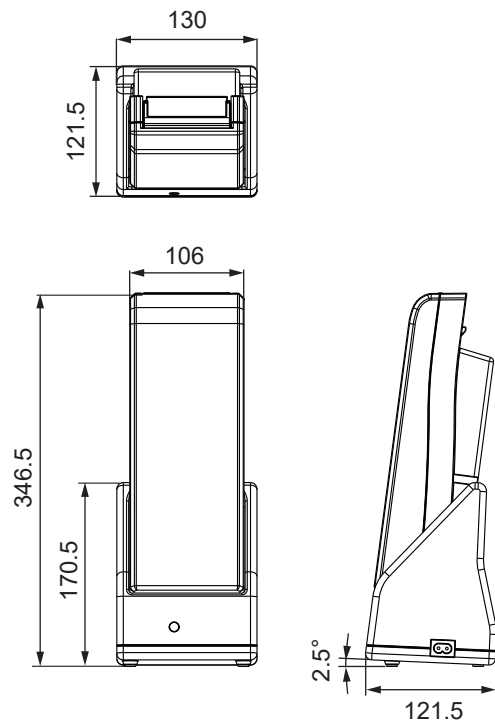


With 5.0 Ah BT43

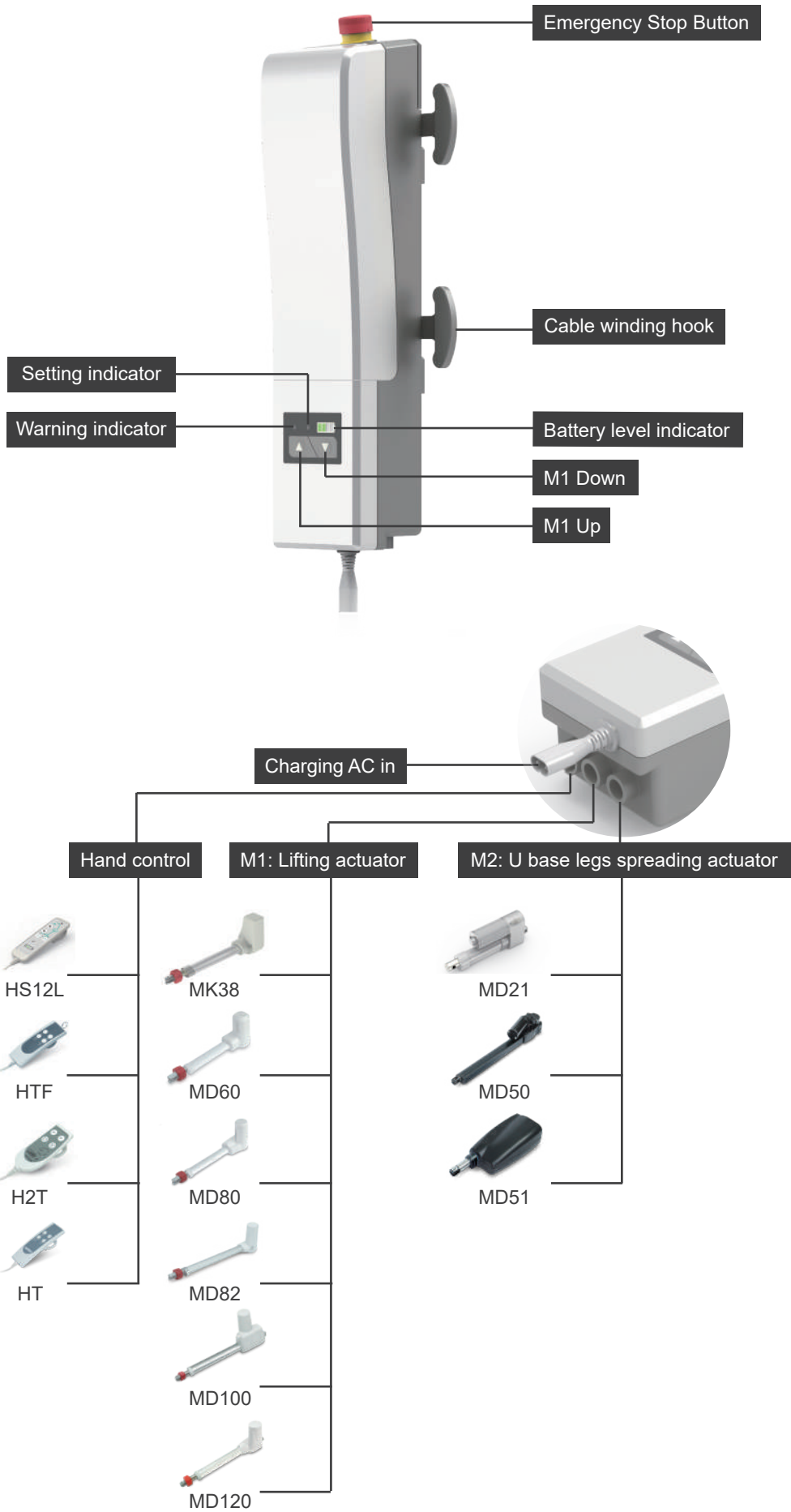
● BT43+CH43



With 2.9 Ah BT43



With 5.0 Ah BT43

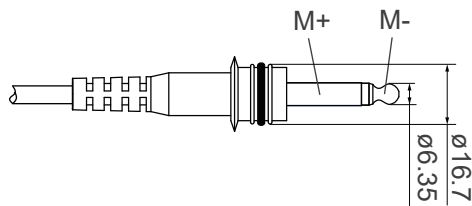


Compatibility

Product	Model	Compatible requirement
Actuator	M1 Lifting actuator: MK38, MD60, MD80, MD82, MD100, MD120	<ul style="list-style-type: none"> Phone jack(ø6.35mm) with Moteck J2-type plug
	M2 U base legs spreading actuator: MD21, MD50, MD51	
Hand control	HS12L, HTF, HT, H2T	<ul style="list-style-type: none"> Moteck P2 control category With Moteck H-type 8-pin DIN plug
	HS12L, H2T	<ul style="list-style-type: none"> Moteck S3 control category With Moteck H-type 8-pin DIN plug

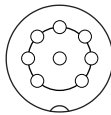
Socket

- Actuator socket for Moteck J2-type phone jack



Remarks: Connect M+ to "+" & M- to "-" of DC power, the actuator will extend.

- Hand control socket for Moteck H-type DIN plug



8-pin socket



J2-type



H-type

Charging Power Cord

Plug type (wall end)	2000mm straight	3000mm straight	Connector (device end)
	code		
US 2-pin plug 	A2	A3	<ul style="list-style-type: none"> • IEC 60320 C7 type connector 
EU 2-pin plug 	C2	C3	
CEE 7/17 plug 	N/A	V3	

Ordering Key

CM43 - 24 - 2 - A C 2 0 C2

Output voltage	24: 24V DC
Number of actuator	1: 1 channel 2: 2 channels
Function version	A: Standard
Charger	0: Without charger and power cord C: Internal SMPS charger with AC power cord
Actuator socket	2: Moteck J2-type (ø16.7mm) Phone jack
Reserved	0
Charging Power cord	A2: US plug, 2000mm straight A3: US plug, 3000mm straight C2: EU plug, 2000mm straight C3: EU plug, 3000mm straight V3: CEE 7/17 plug, 3000mm straight 00: Without charging power cord

BT43 - 2

Battery capacity	2: 2.9Ah 5: 5.0Ah
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CH43 - A3

AC Power cable	A2: US plug, 2000mm straight A3: US plug, 3000mm straight C2: EU plug, 2000mm straight C3: EU plug, 3000mm straight V3: CEE 7/17 plug, 3000mm straight 00: Without AC Power cord
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