

SV2-BBOX-1

BATTERY BOX
(ABSOLUTE TYPE)

INSTRUCTION SHEET

SAFETY PRECAUTIONS

Thank you for purchasing this product. Read the following safety precautions carefully and use battery only in accordance with the specifications to avoid damage or danger. Before using this product, read the instruction sheet to ensure the correct use of the product. Keep this sheet handy for quick reference whenever needed.

WARNING

- Make sure the installation location is free of vapor, corrosive and inflammable gas.
- Make sure that the battery is stored in an environment free of vapor, corrosive and inflammable gas, and that it is neatly arranged to avoid short circuits.
- Do not short-circuit the positive and negative electrodes of the battery, and do not install the battery in the reverse direction.
- Do not mix new and used batteries to avoid losing power or shortening the life of the new batteries. It is suggested to replace all batteries with new ones.

CAUTION

- Do not place the battery in a high-temperature environment over 100°C (212°F), as this may cause fire or explosion.
- The batteries are non-rechargeable. Do not charge the batteries as this may cause explosion.
- Do not directly weld on the surface of the battery.

AVERTISSEMENT

- Assurez-vous que l'emplacement de l'installation ne contient pas de vapeur, et ni de gaz corrosif ou inflammable.
- Assurez-vous que la batterie est stockée dans un environnement qui ne contient pas de vapeur, et ni de gaz corrosif ou inflammable, et qu'elle est bien rangée pour éviter les courts-circuits.
- Ne court-circuitiez pas les électrodes positives ou négatives de la batterie, et n'installez pas la batterie à sens inverse.
- Ne mélangez pas les piles neuves et usagées à fin d'éviter une perte d'énergie ou de raccourcir la durée de vie des piles neuves. Quand un remplacement est nécessaire, il est suggéré de remplacer toutes les piles en même temps avec des neuves.

ATTENTION

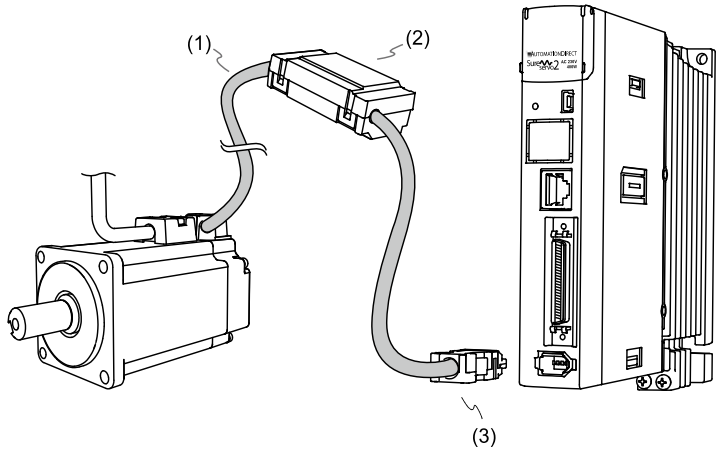
- Ne placez pas la batterie dans un environnement à haute température supérieure à 100 degrés Celsius (212 degrés Fahrenheit), car cela pourrait causer un incendie ou une explosion.
- La batterie n'est pas rechargeable. Ne chargez pas les batteries car cela pourrait causer une explosion.
- Ne soudez pas directement sur la surface de la batterie.

For more information about the absolute servo system and absolute battery box, refer to the user manuals.

OVERVIEW

This absolute battery box is designed for use with the absolute servo system. The battery supplies power to the absolute servo system so that the encoder continues to operate even when the power is off. In addition, the encoder can continuously record the motor's actual position at any time, even when the motor shaft is rotated after the power is off.

BATTERY BOX AND SERVO DRIVE WIRING



(1) Encoder cable; (2) Single battery box (absolute type); (3) CN2 connector

This is the wiring diagram of a battery box connected to the encoder cable. Note that this diagram is not drawn to scale and the actual connection cables will vary depending on the selected servo drive and motor model.

Note:

- For the encoder cable specifications, refer to Cable specifications.
- The type of connector that is connected to the servo motor is a quick connector or a military connector.

CABLE SPECIFICATIONS

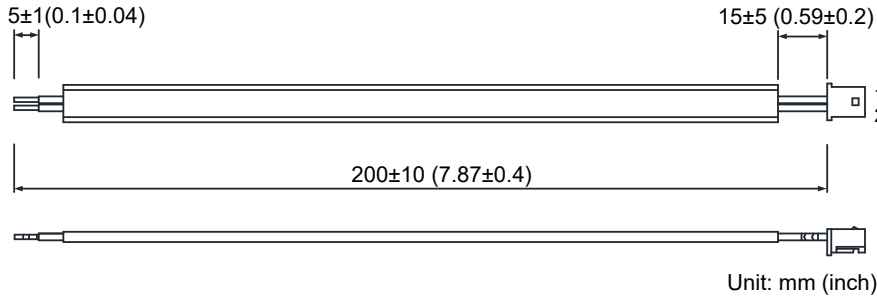
Type	Absolute Type Encoder Cable Model	Encoder wiring - wire diameter mm ² (AWG)			
		Size	Number	Specification	Standard Length
Quick connector	SV2C-E122□□FN SV2C-E122□□NN	L = 3 - 20 m: 0.324 mm ² -2C (AWG22-2C) + 0.205 mm ² -2P (AWG24-2P)	2C + 2P	L = 3 - 20 m (UL2464)	L = 3 - 20 m (9.84 - 65.6 ft)
Military connector	SV2C-E222□□FN SV2C-E222□□NN				

Note:

- The □□ in the encoder cable model indicates the length of the encoder cable. 03 = 3 m; 05 = 5 m; 10 = 10 m; 20 = 20 m.
- When the encoder cable length is 3 - 20 m, AWG22 is +5V and grounded, and AWG24 is the signal cable.

WIRING CABLE INCLUDED IN THE BATTERY BOX PACKAGING

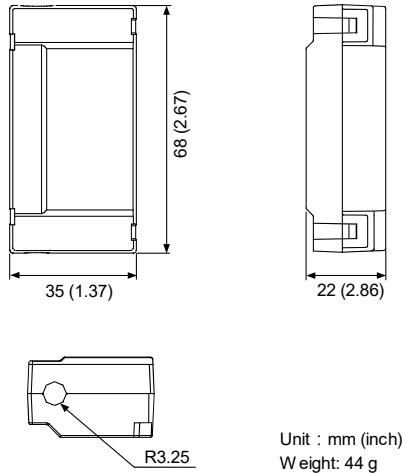
Battery box cable for self-wiring (part number: SV2-BBOX-CBL)



BATTERY SPECIFICATIONS

Name	Li/SOCl2 Cylindrical battery
Type	ER14505
International standard size	AA
Standard voltage	3.6V
Standard capacity	2700 mAh
Maximum continuous discharge current	100 mA
Maximum pulse current	200 mA
Dimensions (D x H)	14.5 x 50.5 mm
Weight	Approx. 19 g
Operating temperature	-40°C to +85°C (-40°F to +185°F)
Supplier	EVE Energy Co., Ltd.

BATTERY BOX EXTERIOR DIMENSIONS



BATTERY BOX AND BATTERY INSTALLATION INSTRUCTIONS

Step 1

Release the snap-fit tabs on both sides and remove the battery box cover.

Step 2

Position the cable clamp to the encoder connection cable. Note that the cable clamp should be placed close to the heat shrink tube.
(A) Cable clamp; (B) Heat shrink tube

Step 3

Plug in the lead wire and tighten the cable clamp screw.

Step 4

Install a new battery and connect the wire.

Step 5

Place the battery wire into the box and fit the cover.