



ELECYLINDER EC

Quick Start Guide Third Edition

Please refer to the Instruction Manual (ME3766 ,ME3778,ME3779) for details of handling.

STEP
1

Checking the Necessary Equipment

| | | |
|--|---|---|
| <p>ELECYLINDER Quantity: 1 Model: EC</p>  <input type="checkbox"/> | <p>Power - I/O Cable Quantity: 1 Model: CB-EC-PWBIO***-RB</p>  <p>* Select by model</p> <input type="checkbox"/> | <p>Power - I/O Connector Quantity: 1 Model: 1-1871940-6</p>  <p>* Select by model</p> <input type="checkbox"/> |
| <p>24VDC Power Supply Quantity: 1 Model: PSA-24*</p>  <p>*Commercially available 24V power supply can also be used.</p> <input type="checkbox"/> | <p>Teaching Pendant Quantity: 1 Model: TB-03-*-*</p>  <p>It's possible to connect TB-02, too.</p> <p>* Sold separately</p> <input type="checkbox"/> | <p>PC Compatible Software Quantity: 1 Model: RCM-101-USB</p>  <p>* Sold separately</p> <input type="checkbox"/> |

STEP
2

Installing the ELECYLINDER

Prepare the screws, nuts and tools required for installation.

Precautions for Installation

- Install with proper length of screws and tightening torque.
- Do not apply external force to the ELECYLINDER body during installation.
- When installing an external guide, please perform the centering adjustment.

STEP
3

Wiring

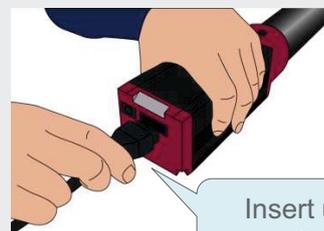
○ Connecting the Cable

Items to Prepare

ELECYLINDER/Power - I/O cable

Connect the power - I/O cable to the ELECYLINDER.
Push in the connector until it clicks into place.

Connection Diagram



Connecting to 24VDC Power Supply

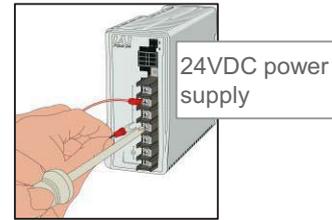
Items to Prepare

ELECYLINDER/24VDC power supply
(to be prepared by user)

Connect the cable wiring to the 24VDC power supply.

| Wire color | Symbol | Function |
|------------|--------|---|
| BK | 0V | Ground |
| RD | 24V | Power supply input (24VDC \pm 10%, 4.2A at peak) |

* Wire diameter: KIV 0.75mm² (AWG18)



Connecting to PLC

Items to Prepare

ELECYLINDER/PLC (to be prepared by user)

Connect the cable wiring to the PLC.

Connection Diagram

Power · I/O cable Terminal

Wire the processed terminal according to the specifications of the PLC.

| Category | Wire color | Signal abbreviation | Signal name |
|----------|------------|---------------------|-----------------------------|
| Input | OR | ST0 | Backward |
| | YW | ST1 | Forward |
| | GN | RES | Alarm cancel |
| Output | BL | LS0 | Backward movement completed |
| | PL | LS1 | Forward movement completed |
| | GY | ALM | Alarm |

* Wire diameter: KIV 0.12mm² (AWG26)

For the specification with brake, when installing a forcible brake release switch, input to brown wiring (signal abbreviation: BKRLS). Power capacity of 24VDC \pm 10%/200mA or higher is required.

STEP
4

Operation

Operation with the Teaching Pendant

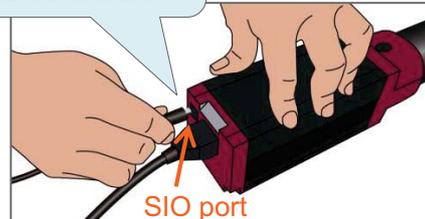
Items to Prepare

ELECYLINDER/Teaching pendant

- 1 Connect the teaching pendant/TB-03.
Insert the round connector of TB-03 to the SIO port of the ELECYLINDER.



Insert the round connector with arrow mark downward



- 2 Turn ON the 24VDC power supply to start up the menu screen, and then touch [Simple Data Setting].

Action

The screen will switch to the Simple Data Setting window.



3 Performing home return operation

Touch the [Homing] button.

Action

After home return operation is complete, the [F.End] and [B.End] buttons will be displayed.

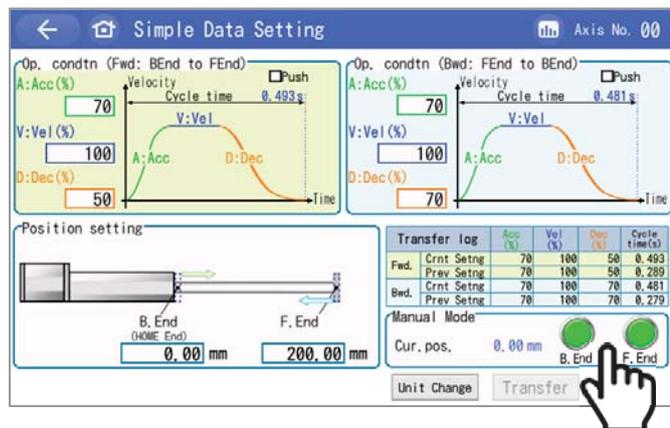


4 Moving to the forward/backward ends

Touch the [F.End] (forward) or [B.End] (backward) button.

Action

The ELECYLINDER will move to the forward or backward end.



STEP 5

Adjustment

Adjusting the Stop Position

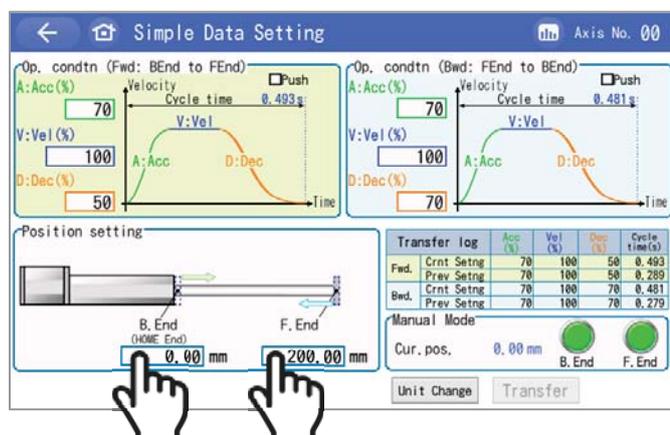
Items to Prepare

ELECYLINDER/Teaching pendant

1 Touch the position you want to adjust.

Action

Ten Key window will open.



2 After setting the numerical value, touch the [ENT] key. After returning to the "Simple Data Setting" window, touch the [Transfer] key.

The adjustment completes!



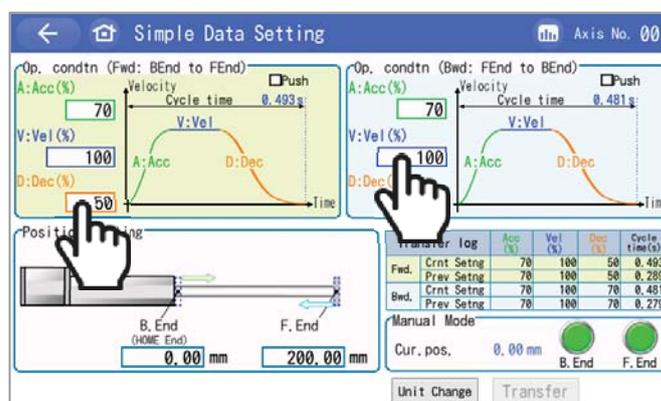
○ Adjustment of Operating Conditions (AVD)

A: Acceleration
V: Velocity
D: Deceleration } → AVD

1 Touch the condition you want to adjust.

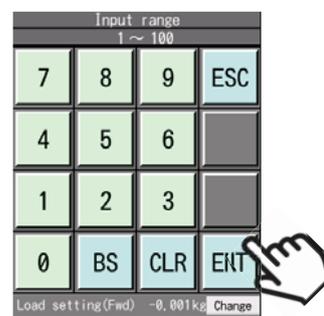
Action

Ten Key window will open.



2 After setting the numerical value, touch the [ENT] key.
After returning to the "Simple Data Setting" window, touch the [Transfer] key.

The adjustment completes!



STEP
6

Alarm Countermeasures

○ Alarm List

| Alarm group | Name | Content of alarm and typical countermeasures | |
|-------------|--|--|---|
| A | Overload alarm | [Content] [Countermeasure] | Rod or slider of ELECYLINDER stopped abnormally while moving to the target position. Make sure that there are no obstructions or obstacles in the movement range. |
| B | Motor abnormality alarm | [Content] [Countermeasure] | Motor abnormality occurred. Replace the motor. |
| C | Controller abnormality alarm | [Content] [Countermeasure] | Controller abnormality occurred. Replace the controller. |
| D | Controller-encoder abnormality alarm | [Content] [Countermeasure] | An abnormality occurred between the controller and encoder. Turn the power off and then on again. If the unit does not recover even so, replace the motor or controller. |
| E | Power supply voltage/Power supply capacity error alarm | [Content] [Countermeasure] | Controller abnormality occurred. Check the voltage and capacity of the supplied power for any abnormality. |
| Warning | Maintenance warning | [Content] [Countermeasure] | Reached the "maintenance period" set by user. Perform maintenance for ELECYLINDER. |