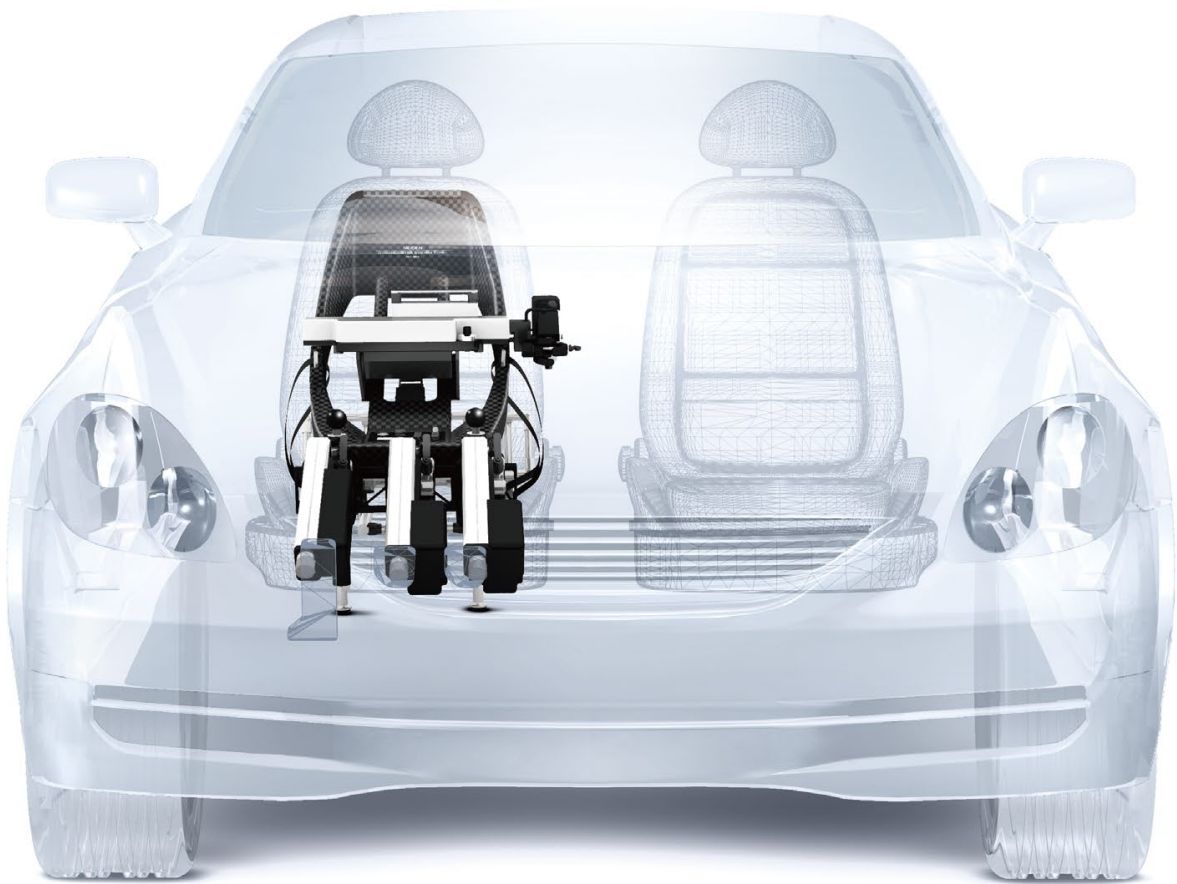


Drive Robot **TYPE-i**



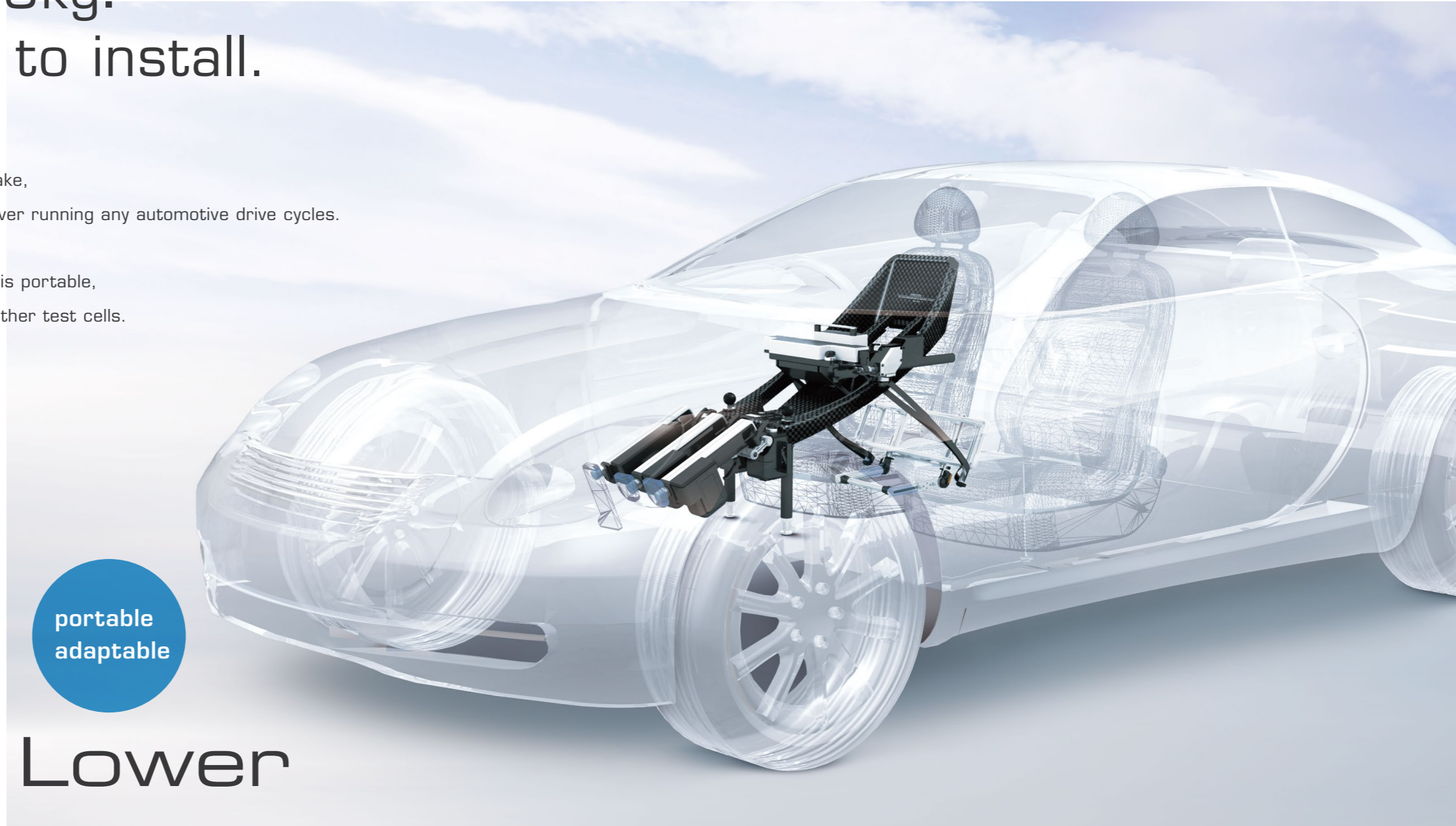
Drive Robot **TYPE-i**

Supports performance, durability,
and drive cycle test on Chassis Dynamometers.

The lightest drive robot on the market-23.5kg. Portable and Easy to install.

Operate the vehicles accelerator, clutch, gearshift, brake, or ignition with precision actuators to simulate the driver running any automotive drive cycles.

The drive robot is adaptable to different vehicles, and is portable, so it can be easily shared among multiple vehicles in other test cells.



Actuator weight

54% Lower

※ compared to our previous products

New design and reduced weight make setup fast and easy.

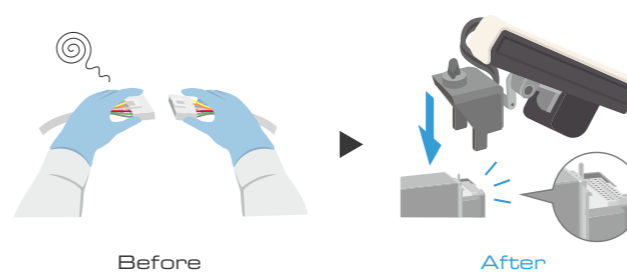
1 One Person Setup



Fewer part & lower weight, along with a simple 3-point mounting system, allows for one person installation and setup.

Patent applied for

2 Simple Installation

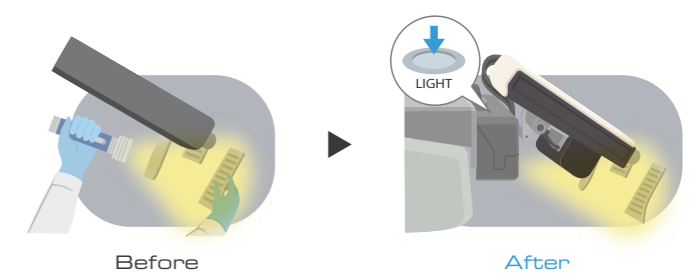


Plug-in actuators do not require a cumbersome wire harness, reducing installation time (Installation time of 5 minutes※).

Patent applied for

※ Not including actuator adjustment

3 Integrated Work Light



Includes an integrated LED light as standard. The light illuminates the pedal position freeing both hands during adjustments.

Patent applied for

Drive Robot Operation

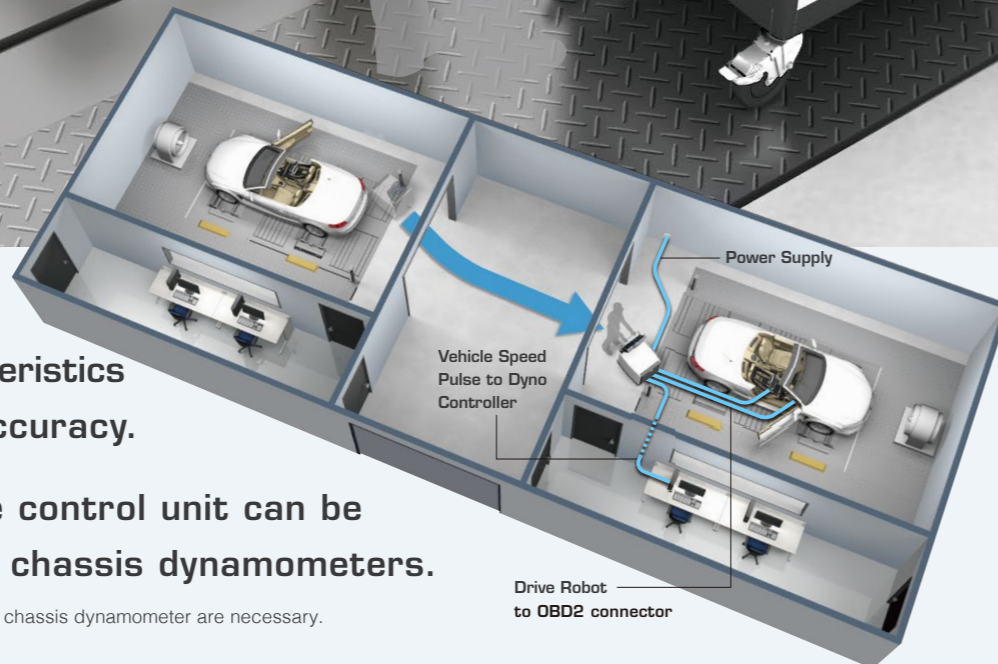


Improved Control Accuracy

Learned vehicle characteristics improves drive cycle accuracy.

The portable, cart-type control unit can be shared among multiple chassis dynamometers.

A power supply and vehicle speed signal from a chassis dynamometer are necessary.

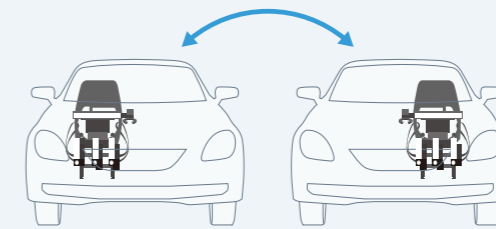


1 Simultaneous Vehicle Data Measurement



Vehicle data can be obtained simultaneously with the drive robot's data. Check the current status of the vehicle being tested by measuring and comparing real-time driving conditions.
 ※Standard PID measurements only, some data type may not be supported depending on the vehicle.

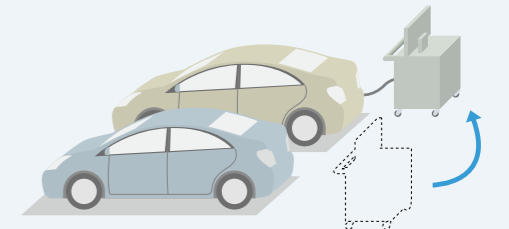
2 Left/Right Hand Drive Support



Shift actuator supports both of left/right hand drive. Easily switched without tools.

Patent applied for

3 Portable Control Cart



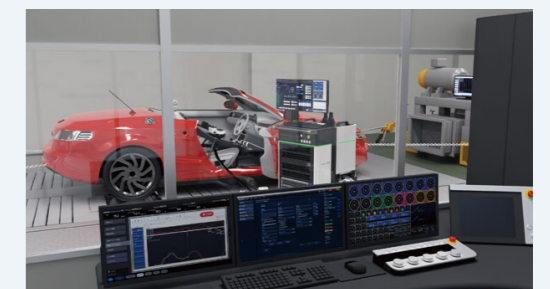
Sharing among multiple chassis dynamometers reduces drive robot idle time and increases their utilization rate.

4 Improved Driving Accuracy



Improved drive robot control accuracy by learning the steady-state and transient characteristics of the vehicle.

5 Safety Operation

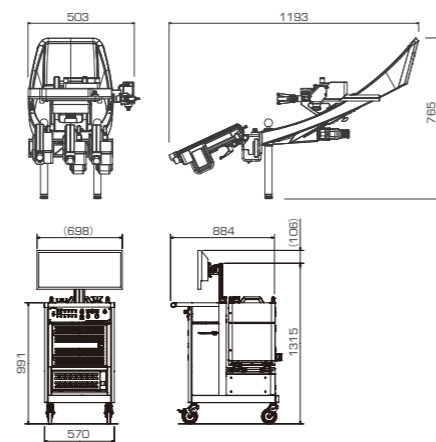


Safe and secure operation from the control room through connection to a remote PC.
 ※Remote PC is optional. A LAN cable connection is required between the drive robot and the control room.

Drive Robot Specifications



- A** Accel Actuators Accel Actuators
- B** Brake Actuators Brake Actuators
- C** Clutch Actuators Clutch Actuators
- D** Shift actuators Shift actuators
- E** Frame Frame
- F** Support Legs Support Legs
- G** Sling belt fixing bracket control unit Sling belt fixing bracket control unit
- H** Control wagon For actuator control and setting



※Two types of support legs are included. Size S: 140mm-220mm, Size L: 240mm-360mm
 ※The chucking, sling belt & fixing bracket at the end of the shift actuator can be removed and replace.

Basic Specification

Operation Functions	Speed control (time and distance based) Accelerator pedal opening control Brake ON/OFF Clutch engage/disengage Shift position selection Actuator stroke range adjustment
Learning function	Driving force characteristic recording Transient characteristics recording function
Mass	Actuator: 23.5 kg (including frame, shift including accelerator pedal, brake, and clutch actuators) Portable Control Cart: 150 kg
Editing Function	Driving schedule editing 1 mode, max. 200,000 steps Out of tolerance judgement (judgement error) function Step shift condition (time, distance, measurement)
Display Functions	Analog display, digital meter, bar graph, and Chronological order display
Measurement Functions	Sampling cycle 1ms minimum Scheduler interlocking function Results output (CSV/MAT/ATFX) General-purpose AO output OBD information measurement
Usage Environment	Actuator: ambient temperature: 0-40°C, ambient humidity: RH30-80 Control wagon: ambient temperature: 0-40°C, ambient humidity: RH30-80
Option	Seat cover, instrument mounting fixture

Actuators and Control Wagons

Object of Operation	Rated operating force	Stroke
Accelerator	160N	150mm 0.2s
Brake	400N	200mm 0.4s
Clutch	250N	200mm 0.3s
Shift	140N	250mm 0.2s
Select	120N	200mm 0.2s
Ignition	0.6Nm	360°

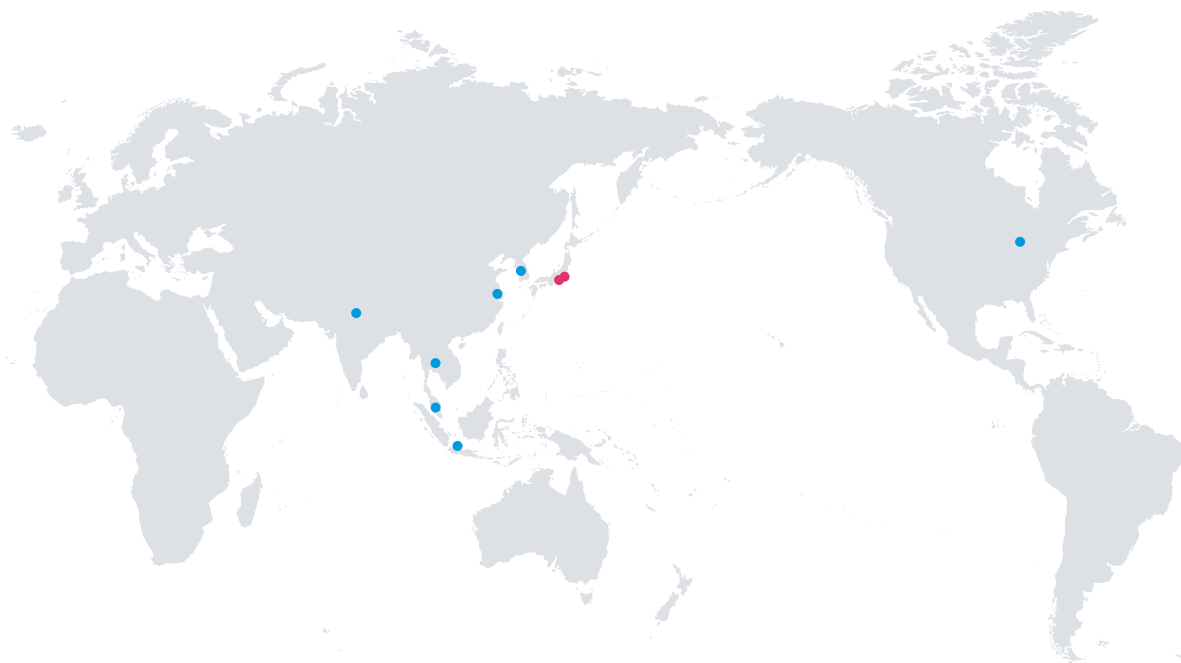
Portable Control Cart

A touch panel operation screen is included. It can be operated from a standing position in the test cell. Casters allow it to be moved and shared among other test cells.



Screen Example

Network



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● MEIDENSHA CORPORATION
Ohta Works [Japan]



● MEIDEN AMERICA, INC.
[The United States]



● THAI MEIDENSHA CO., LTD.
[Thailand]

- MEIDENSHA (SHANGHAI) CORPORATE MANAGEMENT CO., LTD. [China]
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CE103-3667C

As of Jul., 2023

2023-7ME 0.5L