

# *Hseries*

## *Dumbwaiter*



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**Ryoden Lift**  
**Ryoden Elevator Construction Ltd.**

Published: February 2025

The contents of the document herein are subject to change without notice.

# Work can become easier.

We have created a new product that values the user experience.

We want to make daily work more convenient and comfortable.

This is the next generation dumbwaiter that “softly” fits in with people’s lives.

## *Hseries* Dumbwaiter

The thoughtfulness that closes gently

### Assisted Close

The door is equipped with a function that automatically closes when you apply force only halfway when closing it. The door closes slowly and gently without closing all the way, reducing noise.



Three charms that make you feel lighter and lighter every time you use it



Consideration that is easy for everyone to see

### Color Universal Design

There are individual differences in how people see colors, and some people find it difficult to distinguish certain color combinations. "Fuwari" takes into consideration the diversity of color vision. It adopts color universal design so that more people can use it with confidence.

Consideration to prevent carelessness

### Door Gap Cover (option)

With conventional elevators for small packages, there was a lot of "careless mistakes" that occurred when items fell into the gaps in the doors. Therefore, we developed a revolutionary new function that automatically closes the gaps. We added "thoughtfulness" to the ease of use.

# We care all those who use our dumbwaiters.

The Ryoden H Series Dumbwaiter has evolved into a more reliable, user-friendly models with more advanced spec line-up.

**Obtained Color Universal Design Certification.**

The newly designed operating panel adopted Color Universal Design for all LED lights, characters and numbers on the face sheet.



Pin microphone

Speaker

**The hands-free interphone requires no button operation during use.**

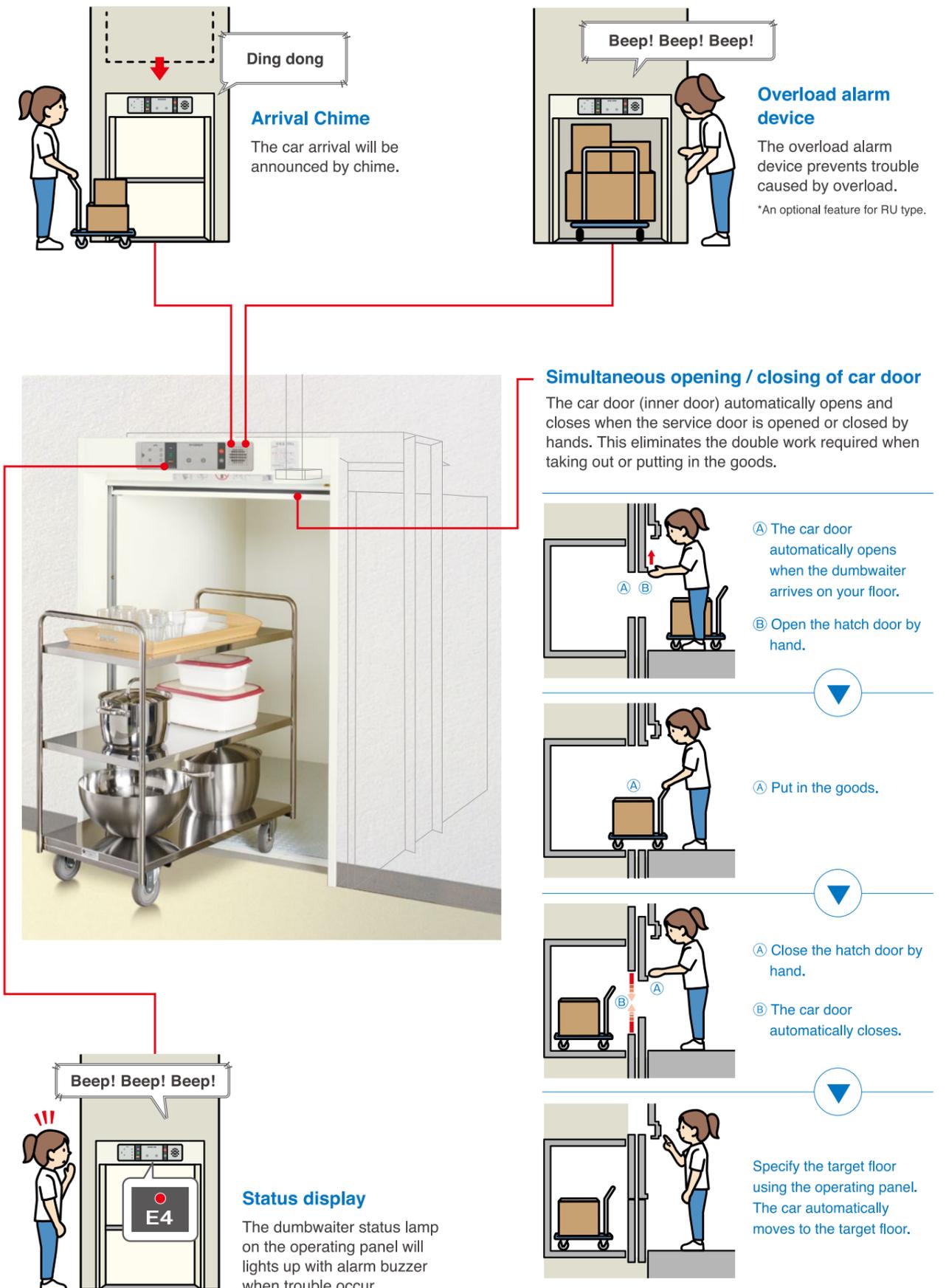
Enables a volume corresponding to installed conditions with three-stage volume control.



Sample display for errors

**Automatic energy-saving mode**

The energy-saving mode is automatically established if the dumbwaiter is not operated within the prescribed period of time.



Ding dong

**Arrival Chime**

The car arrival will be announced by chime.

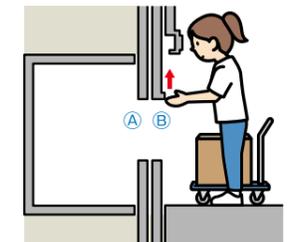
Beep! Beep! Beep!

**Overload alarm device**

The overload alarm device prevents trouble caused by overload.  
\*An optional feature for RU type.

**Simultaneous opening / closing of car door**

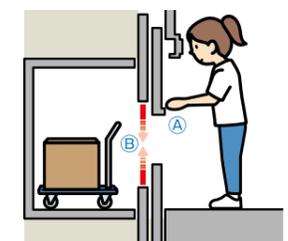
The car door (inner door) automatically opens and closes when the service door is opened or closed by hands. This eliminates the double work required when taking out or putting in the goods.



- Ⓐ The car door automatically opens when the dumbwaiter arrives on your floor.
- Ⓑ Open the hatch door by hand.



- Ⓐ Put in the goods.



- Ⓐ Close the hatch door by hand.
- Ⓑ The car door automatically closes.



Specify the target floor using the operating panel. The car automatically moves to the target floor.

Beep! Beep! Beep!

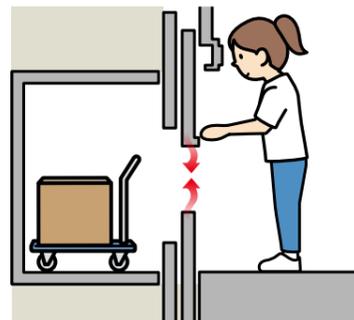
**Status display**

The dumbwaiter status lamp on the operating panel will light up with alarm buzzer when trouble occur.

# More comfortable, more safety and easy to use functions.



Easy to use devices to improve efficiency.  
**Convenience**



**Assist Close Function** NEW

The hatch door closes slowly and gently without closing it all the way to the end, suppressing noise.

\*This function may not be possible to install with some other options.



**Color Universal Design** NEW

The appearance of colors varies from person to person, and it can be difficult to distinguish between certain color schemes. Ryoden Dumbwaiter H series considered such diversity and adopted a Color Universal Design.



**Hands-Free interphone**

It automatically switches call and talk, allows no button operation required to communicate with people in other floors.



**Moveable shelf boards in car**

The Table Type allows the shelf boards to be set at five different heights in accordance with the size of the goods.

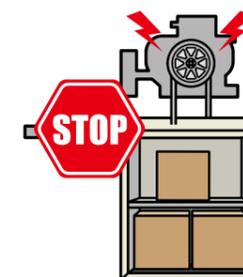


**Caution Buzzer**

The caution buzzer will beep when the hatch door is left open for 2 or 3 minutes. This function prevents forgetting to close the door.



To use safely  
**Safety**



**A.S.T. System (Anti.Stall.Timer) System**

The A.S.T System automatically stops the motor when trouble is detected during car operation.



**Door Locking Device**

The hatch door remains locked until the car arrives, preventing from carelessly opening the service door and causing the goods to fall out.



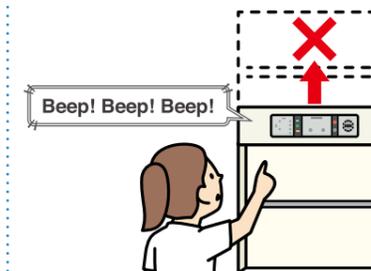
**Door Switch**

Car Operation is disabled by a switch when the door is opened. A more reliable forced locking type has also been adopted.



**Car Door with Gate Switch**

The gate switch keeps the goods from sticking out from the car.

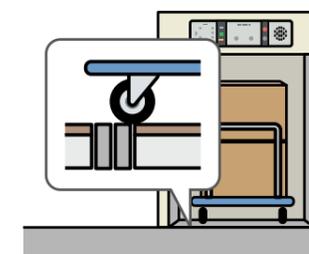


**Overrun Control Switch**

Two types of limit switches are provided for preventing the car from passing its destination.

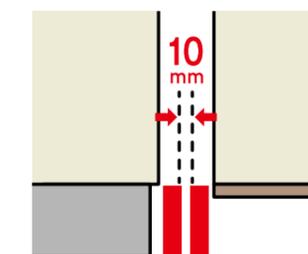


Features that increase reliability  
**Reliability**



**Inverter Control**

The inverter accurately controls the car stop position. The stop position is maintained with high accuracy, regardless of carrying capacity.



**10mm gap between car and sill.**

The gap between the Floor Type car and sill is 10mm, allowing carts to be smoothly taken out and put in within inverter control.

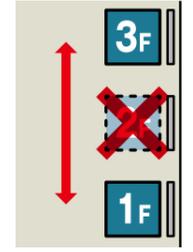
# We offer a wide range of options to enhance convenience, safety and cleanliness.

Functions that are easier to use and improve work efficiency.

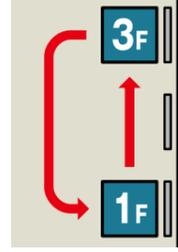
## Convenience



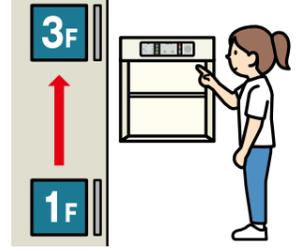
**Key-less Operation Pause Switch** **NEW**  
 This function locks all doors when an operation STOP status exists, thus preventing mischievous operations.



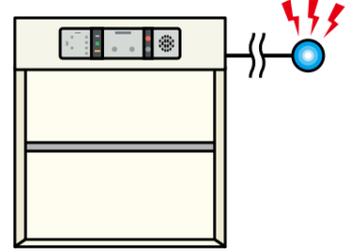
**Key-less Service Detachment Mode** **NEW**  
 This function is on, the dumbwaiter detaches the specified floor for efficient operations.



**Return-to-Reference-Floor Function**  
 This function automatically returns the cage to a specified floor after its contents have been delivered. A learning function can also be added to increase efficiency in systems with frequent-stop floors.



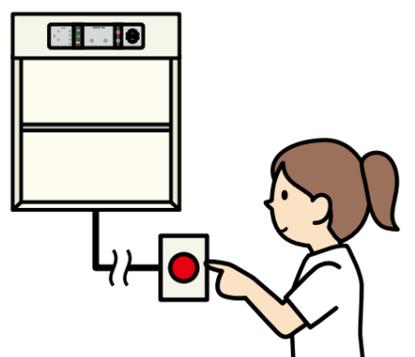
**Dedicated Operation Mode**  
 When pressing a button and turning on this function, the cage cuts off calls from other floors until it lands to the original destination floor.



**Landing Lamp** **NEW**  
 The LED light comes on to let you know that the dumbwaiter has arrived. This device is useful in factories, restaurants and other places where the surrounding work noise is loud.

For more safe use

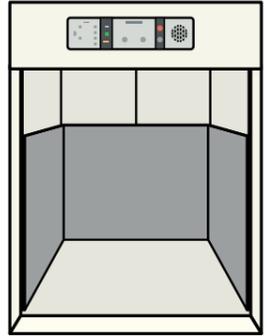
## Safety



**Security Operation Mode** **NEW**  
 Supports advanced security functions such as fingerprint authentication and touch panel.



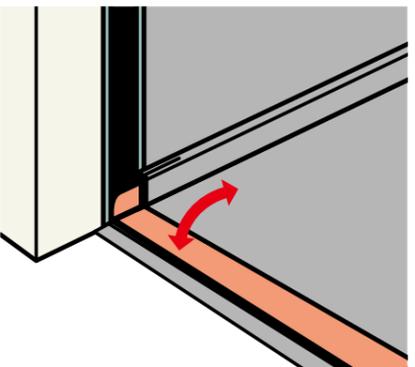
**Cart Stopper** **NEW**  
 This optional fence stops carts from hitting the back wall of the cage to prevent the dumbwaiter from malfunctioning or breaking. \* For RL type only.



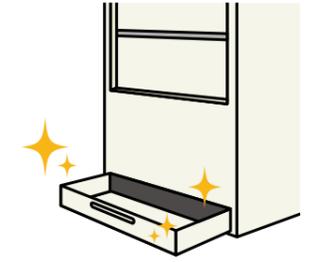
**Protective Sheet** **NEW**  
 Prevents the cage from scratches in daily work.  
 \* For RL type only.

Equipment to keep the dumbwaiter clean

## Cleanliness



**Door-Gap Cover** **NEW**  
 Prevent from dropping objects into the gap between doors.  
 \* Only for RT-S,D and RU-S,D type



**Drawer for Pit Cleaning.** **NEW**  
 By installing a drawer for pit cleaning, you can clean every corner and easily pick up dropped items in the pit.  
 \* Only for RU type.



**Antiviral and antibacterial option**  
 By applying an antiviral and antibacterial sheets to the knob and the operation panel that are touched by hands during use, you can use the dumbwaiter with more cleanly.



# Hotels

Cleanliness is important in hotels that carry meals and room equipment. Many options available such as stainless-steel decorative parts, and a function that allows you to call a cage without touching the operation panel.

Assist Closing Function (Standard)

Universal Color Design (Standard)

Stainless Steel

Non-Contact Switch



# Factories

For factories that tend to convey large and heavy items, both hands tend to be occupied. It is possible to add functions that take into account safety, and ambient noise.

Assist Closing Function (Standard)

Universal Color Design (Standard)

Arrival Signal

Cart Stopper



Great for a variety of scenes! Proposal of "recommended options" for each types.

## RL

[Floor Type]

Hotels

Factories

Hospitals



▶ P11

## RT

[Table Type]

Villas

Hospitals



▶ P15

## RU

[Unit Type]

Villas



▶ P19

# Villas

When carrying shopping luggage to the kitchen or living room, Door-Gap Cover is recommended to prevent small items from falling into the pit.

Assist Closing Function (Standard)

Universal Color Design (Standard)

Door Gap Cover

Pit Cleaning Drawer

Operation Pause Switch



# + Hospitals

We have a new lineup of options that are ideal for germ-sensitive hospitals. Please also pay attention to the safety and cleanliness functions

Assist Closing Function (Standard)

Universal Color Design (Standard)

Non-Contact Switch

Door Gap Cover

Operation Pause Switch





## The RL type is capable of transporting handcarts and service tables.

The RL type is available to three types corresponding to the load capacity : 200kg, 300kg, and 500kg.

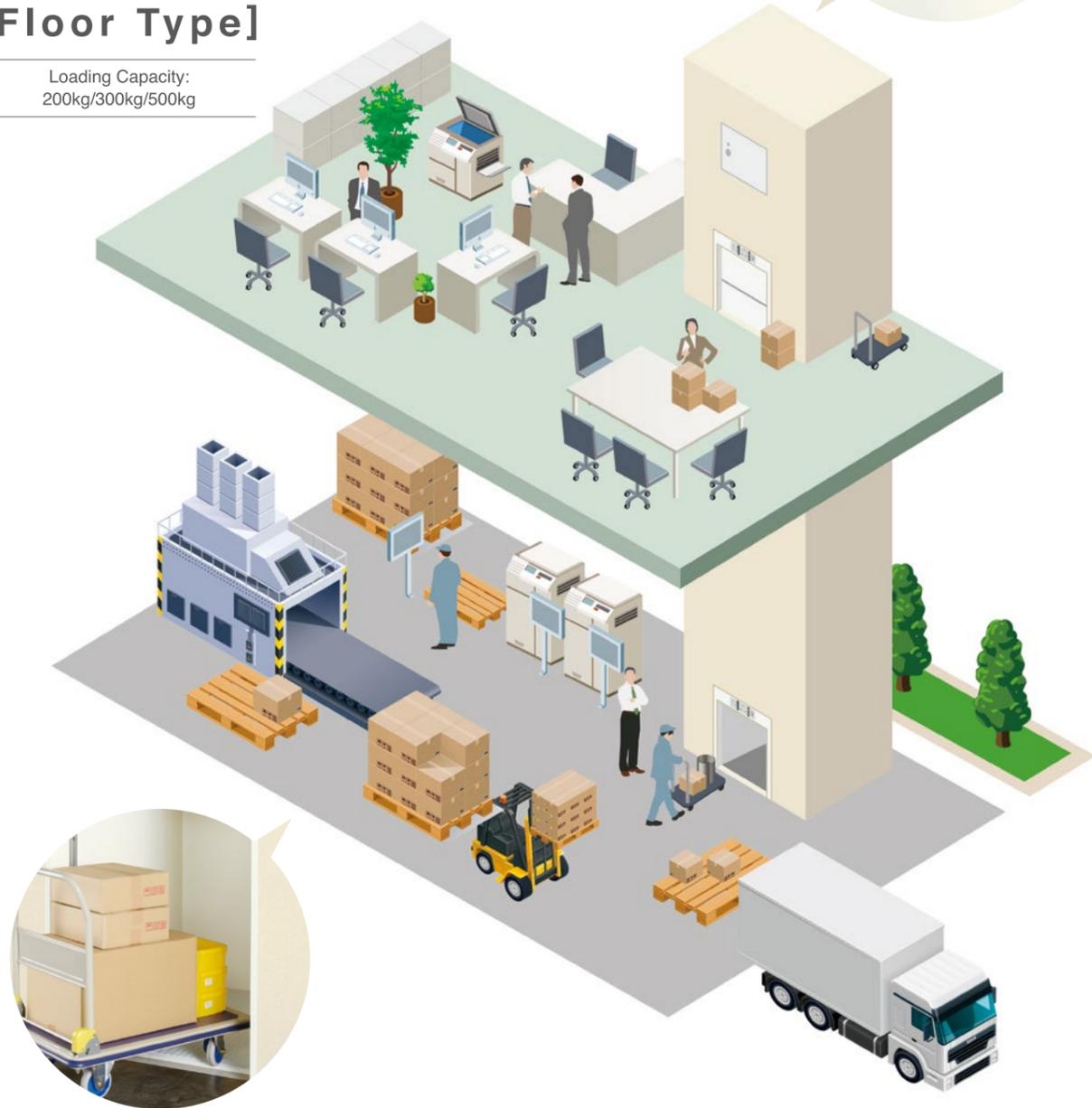
The maximum car size of 1000 (W)×1000(D)×1200 (H) (mm) offers a comfortable amount of transporting space.

•Major types of application / Schools, banks, laboratories, industrial premises

# RL

## [Floor Type]

Loading Capacity:  
200kg/300kg/500kg



Ideal for transporting goods on handcarts



### Standard Color variation

\*Please note that the actual color may vary slightly from the above due to the printing process.



Natural White No.701



Right Gray No.602



Pink Blossom No.603

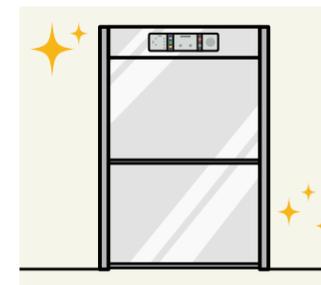
### Specification

#### Standard Specification

Item	Material	Front surface finish	Material	Front surface finish
Jamb (W=300mm or less)	Steel Plate	Painted finish	Stainless Steel	Hairline finish
Hatch door (Bi-parting)				
Sill	Angle steel			
Cage (ceiling, wall)	Steel Plate			
Cage (floor)				
Cage (Bi-parting)				
Operating Panel	ABS resin	—	ABS resin or stainless face plate	

#### Stainless Steel design specification (Optional feature)

### Recommended Option



#### Stainless steel finish

Rust-resistant stainless steel can be applied to decorative surfaces. This also contributes to a sanitary environment.



#### Cart Stopper **NEW**

This optional fence stops carts from hitting the back wall of the cage to prevent the dumbwaiter from malfunctioning or breaking.

\* For RL type only.





**Entrances at serving height, ensuring smooth operation.**

The RT type is available to three types corresponding to the load capacity : 30kg, 50kg, and 100kg. The shelf boards inside the car can be changed to the height matched with goods.

•Major types of application / hotels, hospitals, private houses.

# RT

[Table Type]

Loading Capacity:  
30kg/50kg/100kg



Ideal for transporting small goods.



**Standard Color variation**

※Please note that the actual color may vary slightly from the above due to the printing process.



Natural White No.701



Right Gray No.602



Pink Blossom No.603

**Specification**

**Standard Specification**

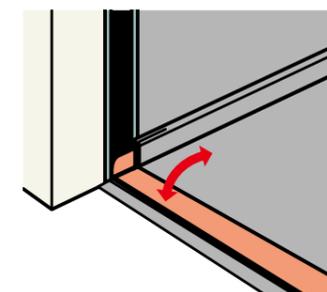
Item	Material	Front surface finish
Jamb (W=300mm or less)	Steel Plate	Painted finish
Hatch door (Bi-parting)		
Table (Table depth=300mm or less)	Stainless Steel	Hairline finish
Cage (ceiling, wall)	Steel Plate	Painted finish
Cage (Shelf board 1pce)※	Stainless Steel	Hairline finish
Cage (floor)		
Cage (Bi-parting)	Steel Plate	Painted finish
Operating Panel	ABS resin	—

※For RT-100kg, two shelves are standard.

**Stainless Steel design specification (Optional feature)**

Material	Front surface finish
Stainless Steel	Hairline finish
ABS resin or stainless face plate	

**Recommended Option**



**Door-Gap Cover NEW**

Prevent from dropping objects into the gap between doors.

\* Only for RT-S,D and RU-S,D type



**Stainless steel finish**

Rust-resistant stainless steel can be applied to decorative surfaces. This also contributes to a sanitary environment.



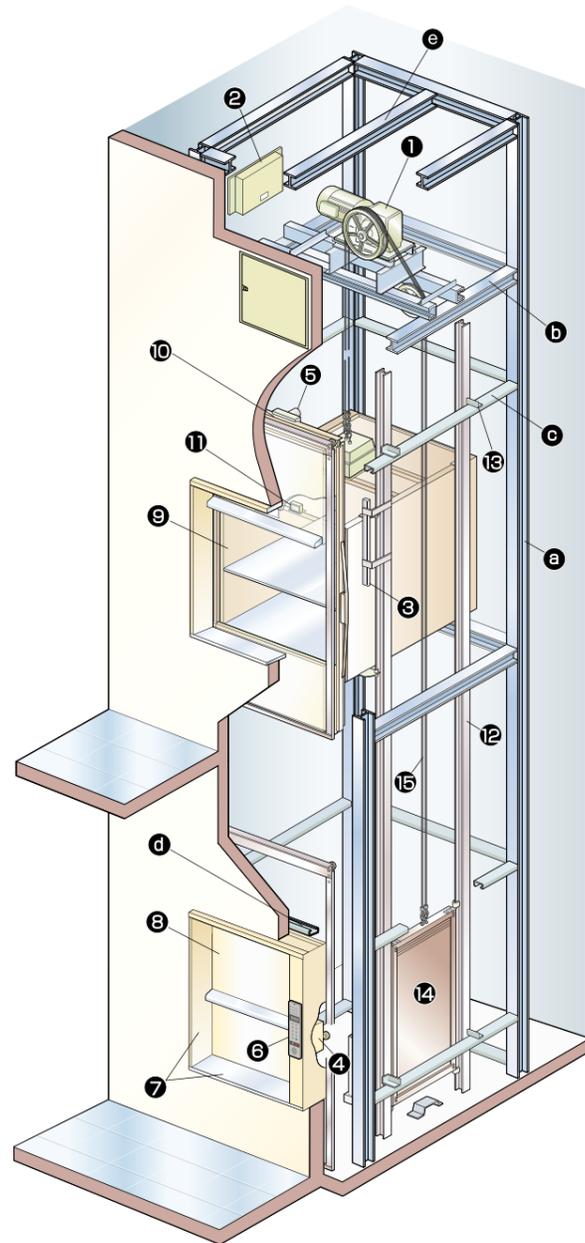
**Key-less Operation Pause Switch NEW**

This function locks all doors when an operation STOP status exists, thus preventing mischievous operations.



# RT ▶ [Table Type Structure]

▼Structure(Steel frame structure)



- 1 Traction Machine
- 2 Control panel, Power receiving box
- 3 Landing switch
- 4 Door locking device
- 5 Door motor
- 6 Operating panel
- 7 Jamb, Table
- 8 Hatch door(Bi-parting)
- 9 Car
- 10 Car door(Bi-parting)
- 11 Car gate switch
- 12 Guide rail
- 13 Rail bracket
- 14 CWT
- 15 Hoisting rope
- a Hoistway column(by owner)  
- H-100×100×6×8 or bigger
- b Machine room support beam(by owner)  
- H-100×100×6×8 or bigger
- c Separating beam(by owner)  
- C-100×50×20×3.2 or bigger  
L-50×50×6 or bigger
- d Jamb lintel beam(by owner)  
- C-100×50×20×3.2 or bigger  
L-50×50×6 or bigger
- e Lifting beam  
- H-100×100×6×8 or bigger

\* a - d show a typical example, Details may differ depending on specifications.

**Steel Construction** ■ Dumbwaiter ■ Others

▼Shaft Elevation

Machine room clear height: MH (by owner) 1000~1200  
Machine room support height: OH  
Total height: TH  
Travel (TR)<15m  
Pit:P  
Machine room lighting  
Machine room support beam (by owner)  
Wall plug (by owner)  
Ladder (by owner)  
Shelf  
Car height:H  
Hoistway column (by owner)  
Separating beam (by owner)  
Jamb lintel beam (by owner)  
CWT  
Waterproof finish (by owner)  
Wall plug (by owner)  
Car side :P1  
CWT side :P2

\* Dumbwaiter shaft to be located in a suitable environment not exposed to rainwater, direct sunlight, wind pressure, dust, and other elements that may affect to safe operation.

▼Shaft Plan (S-single opening)

▼Shaft Plan (D-double opening)

▼Entrance front view

▼Shaft Plan (LD-front and side opening)

▼Machine room plan

▼Horizontal Dimensions and Reaction Loads for pit

Rated capacity	Reaction Loads for pit [kN]		Horizontal loads [N]			
	P1	P2	Fa	Fb	Fc	Fd
30kg	8.6	7.1	203	181	-	-
50kg	11.6	9.0	261	232	-	-
100kg	18.4	13.3	458	478	-	-

**RT Type (Table Type) Dimensions**

Model	Rated Capacity (kg)	Motor (kW)	Rated Speed (m/min)	Entrance opening	Car internal (mm) (A × B × H)	Hoistway dimensions (mm)			Entrance (mm) (J × H)	Pit (mm) P	Table height (mm) TD	Reaction loads for machine room		No. of Car shelf boards
						X	Y	OH				R1 (kN)	R2 (kN)	
RT-30-S-45	30	0.4	45	Single	500×500×750	745	635	1425	500×750	700	700	1.3	2.5	1
RT-30-D-45				Front and rear										
RT-30-LD-45				Front and side										
RT-50-S-45	50	0.4	45	Single	600×600×750	845	735	1425	600×750	700	700	1.7	3.0	1
RT-50-D-45				Front and rear										
RT-50-LD-45				Front and side										
RT-100-S-45	100	0.75	45	Single	750×750×900	995	885	1650	750×900	650	650	2.8	4.6	2
RT-100-D-45				Front and rear										
RT-100-LD-45				Front and side										

•Please consult if the travel exceeds 15m.



# RU

[Unit type]

Loading Capacity:  
30kg/50kg/75kg/100kg

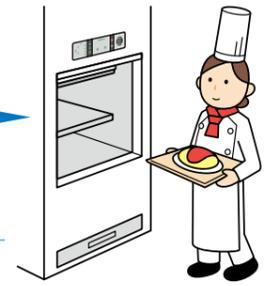
The RU Type features an integrated design of the RT Type dumbwaiter and the hoistway.  
The RU type dumbwaiter is installable in existing buildings as well.

The RU type is available to three types corresponding to the load capacity: 30Kg, 50Kg, and 75kg. This unit type dumbwaiter can be easily installed in existing offices, factories, warehouses in the short construction period.

•Major installation locations/restaurants, stores, houses



An integrated design of the dumbwaiter and hoistway.



### Standard Color



No.701 : Natural White

\* Please note that the actual color may vary slightly from the above due to the printing process.

### Specification

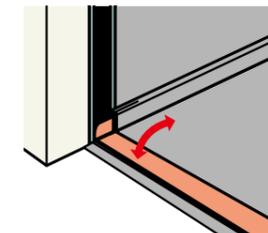
#### Standard Specification

Item	Material	Front surface finish
External panel	Steel sheet	Painted (No.701)
Jamb		
Service door (bi-parting)		
Table	Stainless steel	Hairline finished
Cage (ceiling and walls)	Steel sheet	Painted(No.701)
Cage (shelf board)	Stainless steel	Hairline finish
Cage (floor)	Stainless steel	Hairline finish
Cage door (bi-parting)	Steel sheet	Painted(No.701)
Operating panel	ABS resin	—

#### Stainless Steel design specification (Optional Specification)

Material	Front surface finish
Stainless steel	Hairline finish
ABS resin or stainless steel face plate	

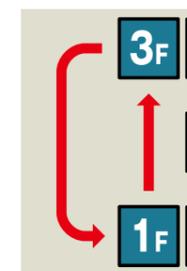
### Recommended option (with additional cost)



**Door-Gap Cover** NEW  
Prevent from dropping objects into the gap between doors.  
\* Only for RT-S,D and RU-S,D type



**Drawer for Pit Cleaning.** NEW  
By installing a drawer for pit cleaning, you can clean every corner and easily pick up dropped items in the pit.  
\* Only for RU type.



**Return-to-Reference-Floor Function**  
This function automatically returns the cage to a specified floor after its contents have been delivered. A learning function can also be added to increase efficiency in systems with frequent-stop floors.

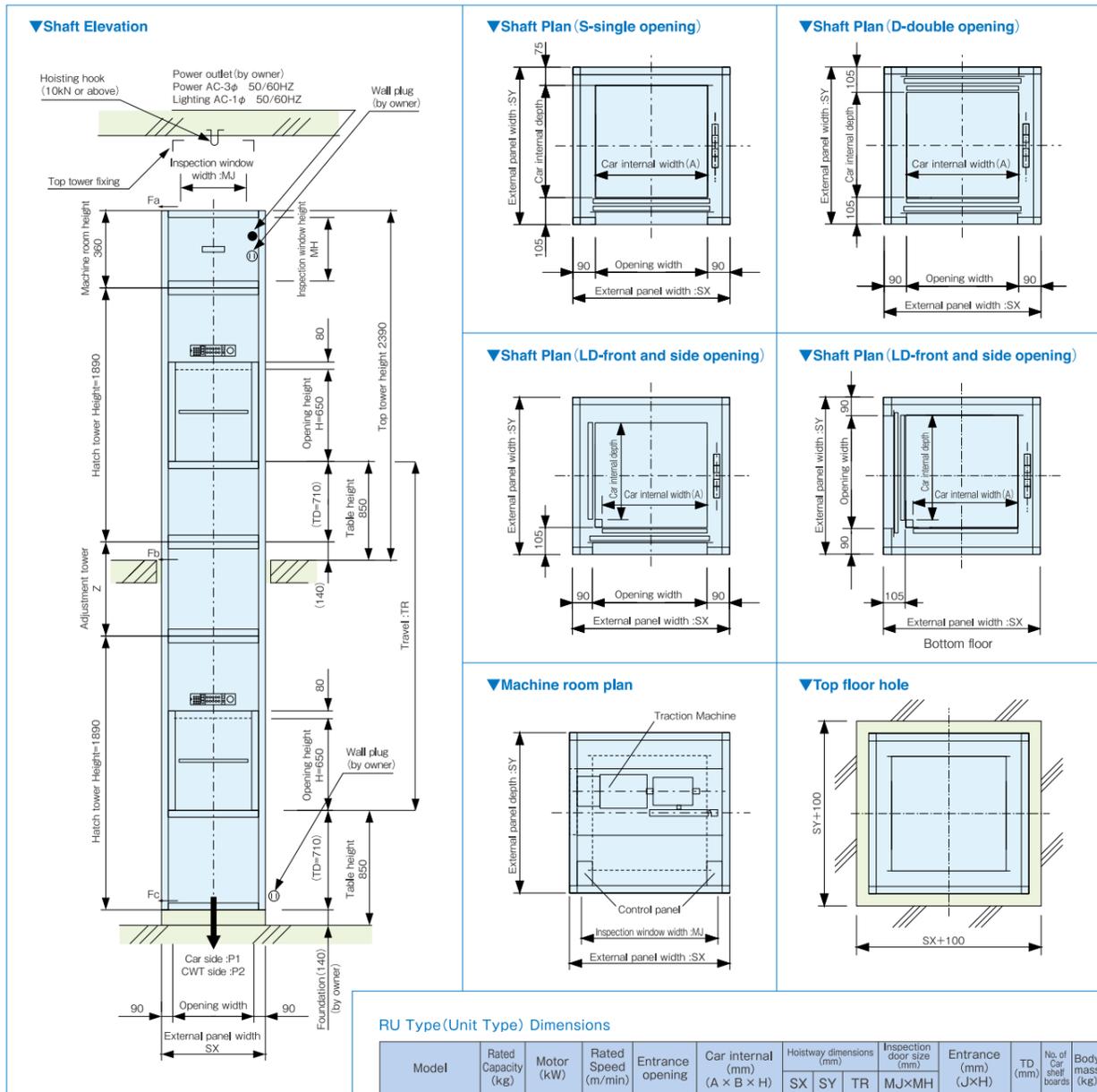
[Overall View]





RU ▶ [Unit type frame structure]

□ Dumbwaiter □ Others



RU Type (Unit Type) Dimensions

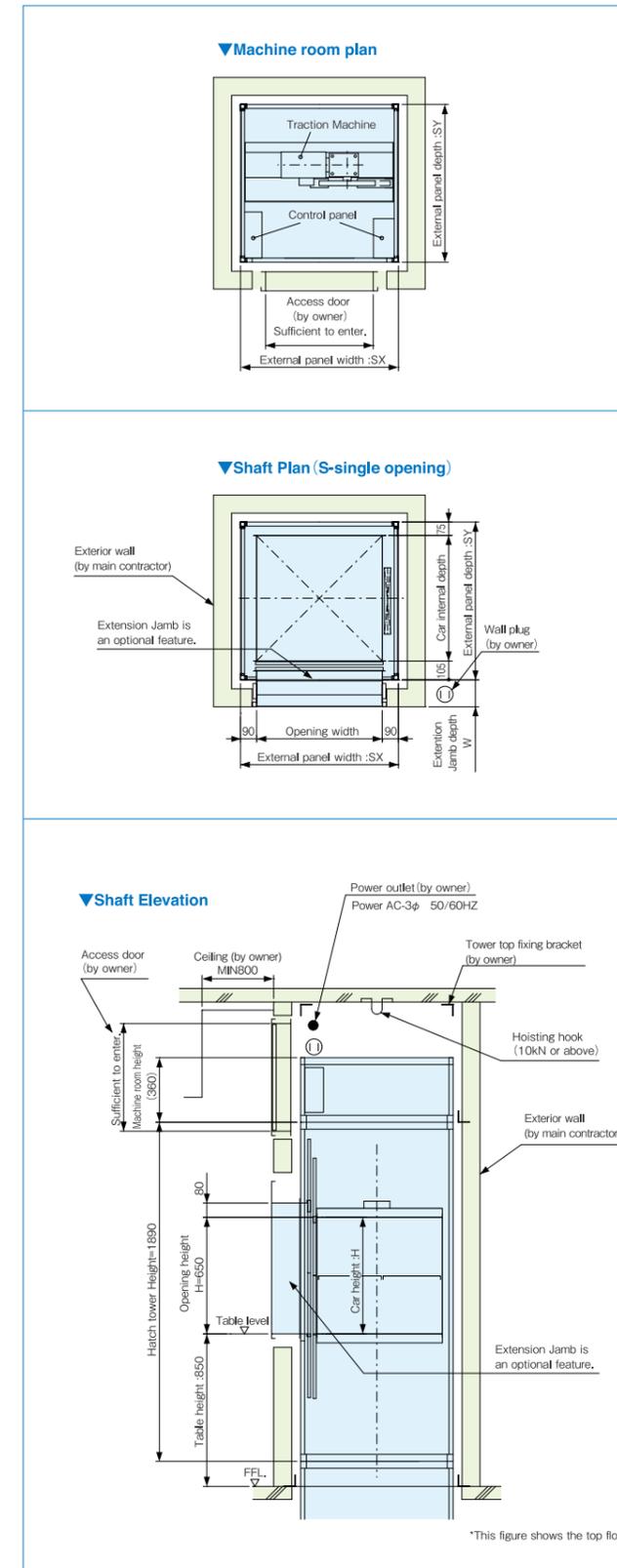
Model	Rated Capacity (kg)	Motor (kW)	Rated Speed (m/min)	Entrance opening	Car internal (A × B × H)	Hoistway dimensions (mm)			Inspection door size (mm)	Entrance (mm) (J×H)	TD (mm)	No. of Car shaft boards	Body mass (kg)
						SX	SY	TR					
RU-30-S-45	30	0.4	45	Single	500×500×650	680	680	MAX 12m	550×296	500×650	710	1	530
RU-30-D-45				Front and rear	500×470×650								
RU-30-LD-45				Front and side	460×460×650								
RU-50-S-45	50	0.4	45	Single	500×500×650	680	680	MAX 12m	550×296	500×650	710	1	610
RU-50-D-45				Front and rear	500×470×650								
RU-50-LD-45				Front and side	460×460×650								
RU-75-S-45	75	0.4	45	Single	600×600×650	780	780	MAX 12m	650×296	600×650	710	1	720
RU-75-D-45				Front and rear	600×570×650								
RU-75-LD-45				Front and side	660×660×650								
RU-100-S-45	100	0.75	45	Single	700×700×650	880	880	MAX 12m	750×296	700×650	710	1	770
RU-100-D-45				Front and rear	700×670×650								
RU-100-LD-45				Front and side	660×660×650								

Power Feeder Data (power supply voltage: AC200V 50/60Hz)

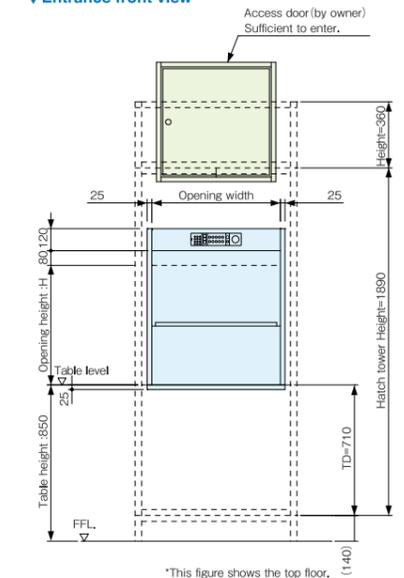
Model	Power consumption (kVA)	Primary side NFB rating (A)	Maximum lead length by power cable size (m)			Minimum ground cable size (mm <sup>2</sup> )
			2.0 mm <sup>2</sup>	3.5 mm <sup>2</sup>	5.5 mm <sup>2</sup>	
RU-30	1.0	10	97	170	268	2.0
RU-50	1.0	10	97	170	268	2.0
RU-75	1.0	10	97	170	268	2.0
RU-100	1.7	15	58	102	160	2.0

RU ▶ [Unit Type Structure with Wall by Owner] ※In case of fireproof building

□ Dumbwaiter □ Others



Entrance front view



Horizontal Dimensions and Reaction Loads for pit

Rated capacity	Reaction Loads for pit [kN]		Horizontal loads [N]		
	P1	P2	Fa	Fb	Fc
30kg	7.7	6.2	595	838	331
50kg	10.3	7.7	673	970	386
75kg	13.3	9.5	821	1114	447
100kg	16.3	11.2	871	1213	496

\*Horizontal loads are the same for every side.