

## S700P Small machine room passenger elevator



### HANGZHOU SWORD ELEVATOR CO., LTD.

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**SWORD**  
HANGZHOU SWORD ELEVATOR CO., LTD.



## SWORD

### The manufacturing base of SWORD in Hangzhou

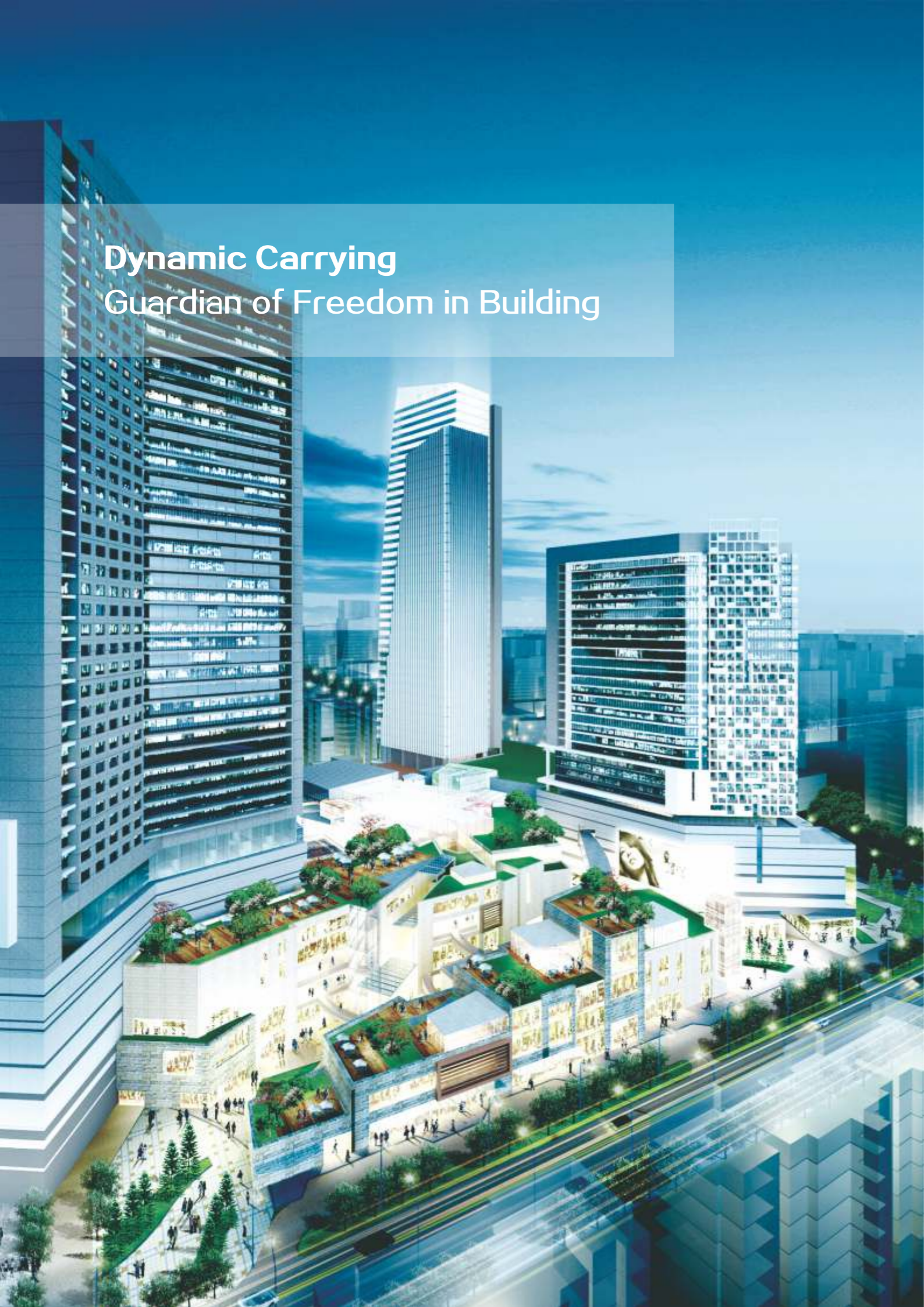
- An investment of 150 million US dollars
- An area of 270,000 square meters
- An annual output of 100000 units
- One of the most advanced elevator testing towers in China, over 120m in height, with the testing ability of 10m/s

### The excellence of quality originates from capability

HANGZHOU SWORD ELEVATOR CO., LTD. was established in 2009 and is located at the National Economic and Technological Development Zone in Hangzhou, China. We are an international comprehensive manufacturer and service provider which integrate the R&D, design, production, sales, installation and after-sales maintenance of elevators and escalators. Our annual production capacity is up to 100,000 units, of which the comprehensive strength ranks top in the industry.

Our products cover small machine room passenger elevator, machine-room-less passenger elevator, high-speed elevator, hospital elevator, freight elevator, panoramic elevator, escalator, moving walk and vehicle elevator, totally nine series, among which our environment-friendly products with high precision and high standard have went through German TÜV certification, European Union CE, Russian CU-TR certification, JKKP Malaysian certification, Algerian ENACT certification and successfully joined in the North American CSA and ASME certification systems. We have provided service and solutions for more than 70 countries and regions worldwide by now. All these have contributed to the unceasing enhancement of our brand image and influence.

## Dynamic Carrying Guardian of Freedom in Building



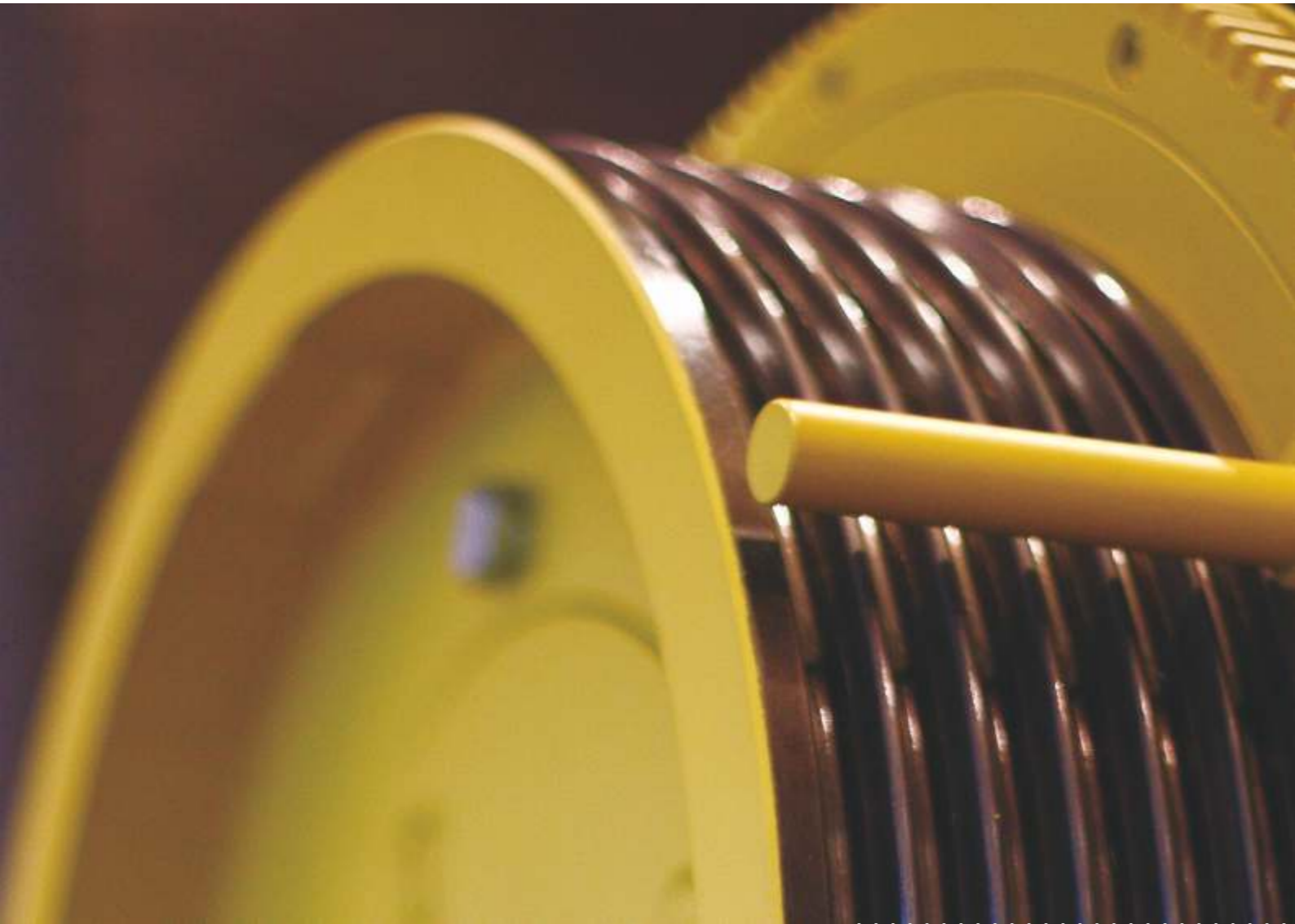
HANGZHOU SWORD ELEVATOR CO., LTD

# S700P

Small machine room passenger elevator

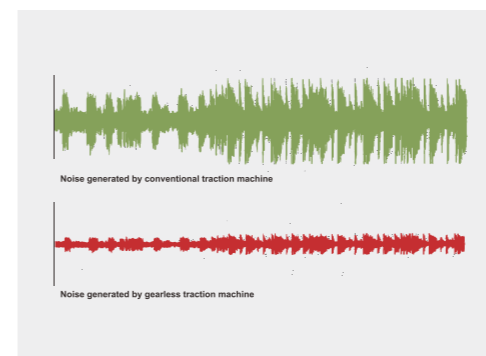
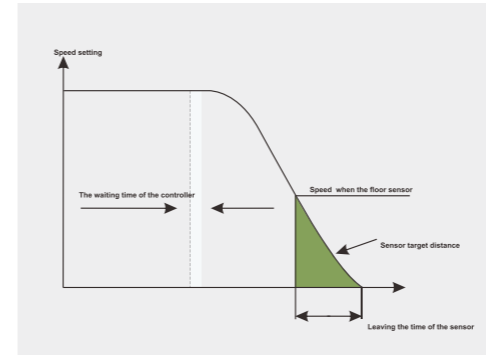
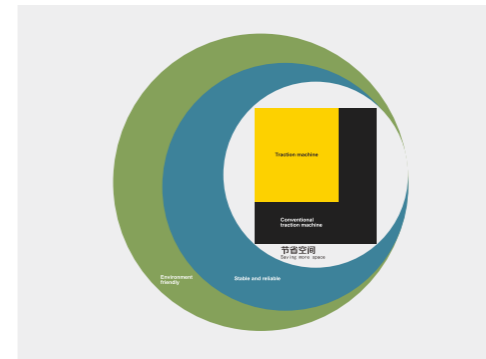
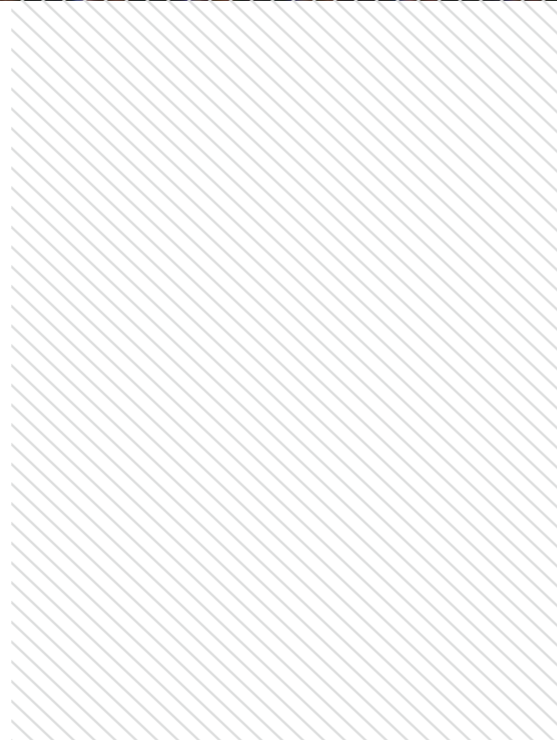
Hangzhou SWORD Elevator Co., Ltd. launched a series of passenger elevators, and is committed to high-end services from the very beginning of our design. As a manufacturer, we select the most advanced and mature technology, coupled with Hangzhou SWORD'S cutting-edge factory equipment, in a bid to deliver the highest quality value for customers.

In addition to the concepts of safety, reliability and energy-saving advocated by traditional elevator service providers, Hangzhou SWORD Elevator is a model of tranquility, stability and generosity. Many series of products are integrated with Hangzhou SWORD's persistent research and thinking on architecture.



## Ultra-quiet, energy-saving, new green driving force

As the lifting power, permanent magnet synchronous gearless traction machine reduces the energy loss of the reduction box of the traditional geared tractor and improves the transmission efficiency. Compared with the traditional motor, it can save more than 30% energy, reduce noise and vibration to the greatest extent, and improve the comfortableness of the product.



### Delicate Drive, Space-Saving

Compared with traditional motors, permanent magnet synchronous gearless traction machine has simpler structure, smaller volume, lighter weight, more flexible shape and size to meet the design of small machine room, so as to save the machine room space for users.

### Intelligent Control, Precise and Reliable

Benefited from the control of high-precision encoder, the speed detection accuracy is rather high and the elevator stops very precisely.

### Economic Operation, Green Energy-Saving

Energy transmission efficiency is up to more than 95%, starting current is small, heat productivity is small, energy-saving effect is obvious. Compared with traditional motors, it can save energy more than 30%. In addition, there is no need for the complex lubricating system of the traditional motor, which avoids oil pollution and makes the maintenance simpler.

### Mute Operation, Smooth and Comfortable

Gearless motor is driven by electro-magnetic force with low-speed non-contact operation, which avoids mechanical wear, vibration and noise of reduction box during the transmission process, and makes the elevator run very smoothly.



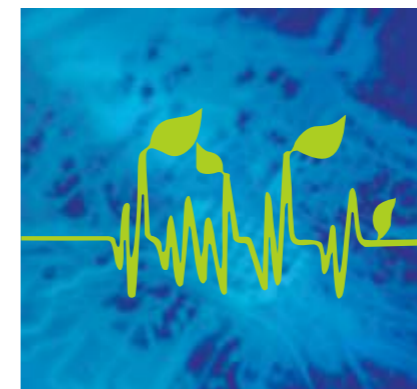
## Accurate control, intelligent and reliable

The modular full-computer control and double 32-bit CPU make the data processing more accurate and stable. Using pulse to transfer signals is to reduce line fault and improve system reliability. The high-voltage variable frequency AC drive makes the elevator operation more stable and reliable.



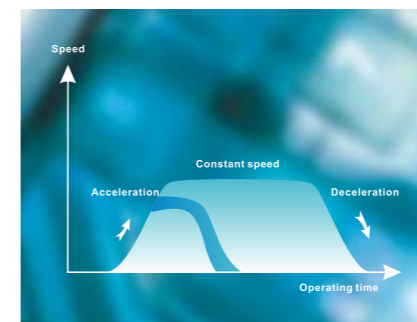
### Microcomputer Control System

Double 32-bit microcomputer control panel, combined with vector closed-loop control technology, circular communication system and unique graphics generator makes the elevator's dynamic response speed faster and more reliable.



### Serial Communication System

Only four wires are needed for the signal transmission of landing display and landing call by pulse, which greatly reduces the connection errors and production costs and improves system reliability. It is also convenient for upgrading in the future.



### Unique Graphics Generator

The unique graphics generator makes the elevator more stable in its acceleration, deceleration and braking process, which improves the comfortableness and leveling accuracy, and also reduces the running time.



## Permanent magnet synchronous door motor, accurate and sensitive

Permanent magnet variable frequency door motor: compact structure, convenient installation. The energy-saving effect of the products greatly satisfies the modern people's requirements of energy-saving. It uses the latest permanent magnet synchronous motor drive, closed-loop vector control and synchronous belt transmission which reflect the product's stability and comfortableness. It is also equipped with synchronous and asynchronous retiring cams for choice, with overload reversal protection function.



### Structure optimization and easy installation

Ultrathin design, the thickest place of the door motor is only 108mm, which is easy to install and debug.



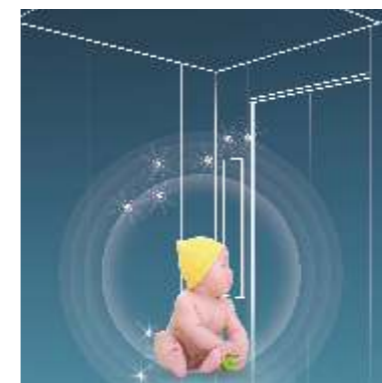
### High security, stable quality

Tested and certified in strict accordance with highest standards in the industry, so as to ensure the elevator's operation stable and reliable.



### High running efficiency

The time for opening the door is 2.5s and the time for closing the door is 2.7s (OP=900). Therefore, the efficiency of door opening and closing is high and the running curve is good.



### Optional function: push-deterrent device, to reduce the hidden safety trouble

When the elevator accidentally stops at a non-floor location, it prohibits passengers to use their force to open the car door, so as to reduce the fall risk.



## Humanized design, personalized service

We provide the best service and tailor some personalized product solutions for customers. According to the unique design and planning of the architecture and the surrounding environment, we provide diversified function solutions and spare parts collocations, making the riding experience a distinguished enjoyment. In view of some customers' personalized requirements, we provide a wide range of choices in a bid to make the most satisfying elevator for customers.



### Voice Announcement Function

Target floor arrival voice announcement allows users to know the arrival floor clearly and enjoy our attentive service. Chinese announcement or English announcement can be provided.

### Negative Oxygen Ion Ventilation System (optional)

Negative oxygen ion ventilation system ensures the air clear in the car, making passengers feel the freshness of nature.



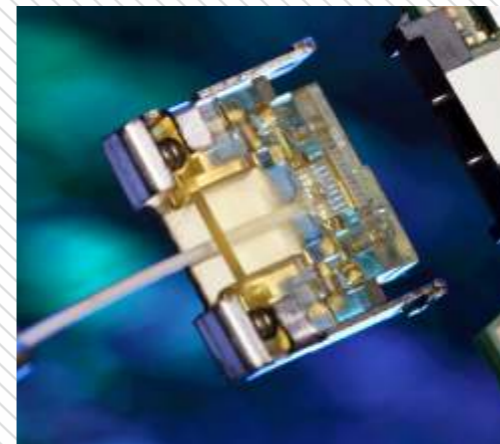
### Intelligent IC Card Management System (optional)

Intelligent IC card management system manages the permission to specific floors by the card reader system in the car or outside the hall. After the elevator is installed with the intelligent IC card management system, it can set permissions for passengers, and owners can only select the corresponding floors by punching the card; at the same time, the system can provide visitor function: visitors can confirm their identities with owners by talkback or other methods of communication, and owners press the button on the visitor board, easily allowing the visitors to take the elevator without going out.



### Remote Monitoring System (Optional) ➤

Remote monitoring system collects the elevators' running state in real time and monitors all the elevators by the monitoring computers at monitoring center; it can record the elevators' running condition while monitoring, take statistic analysis of the elevators' running data and send relevant reports to the printer for printing. The system can centrally manage the elevators, control the elevators' running condition in time and help to analyze the reason of errors and alarm when the elevator is in abnormal conditions, which improves the efficiency of services and maintenance, and reduce the error rate.



#### ◎ Advancement

Using advanced concepts, technologies and methods, combined with object-oriented design ideas, the advanced technologies of data integration and the application of popular management theory provide users with a direct-viewing and easy-to-use monitoring system.

#### ◎ Easy maintenance

Provide a flexible organization, user permission, data backup/recovery, data tracing, data integration, application fallback and other management tools, which greatly facilitates the system maintenance work.

#### ◎ Applicability

Reliable and reasonable function and input/output interface can be applied to different environments. System can flexibly choose configuration according to different elevator models.

#### ◎ Expansibility

Fully considering the needs of information integration and function expansion, we provide a variety of expansion interfaces, so as to facilitate the connection with other equipment and systems.

#### ◎ Safety

Access password and access permission both guarantee the safety of the system. From the perspective of functional operating permission management, we manage users in group and record the operating process in detail, so as to protect the safety of system and data.

## Cabin decoration

### Standard Cabin

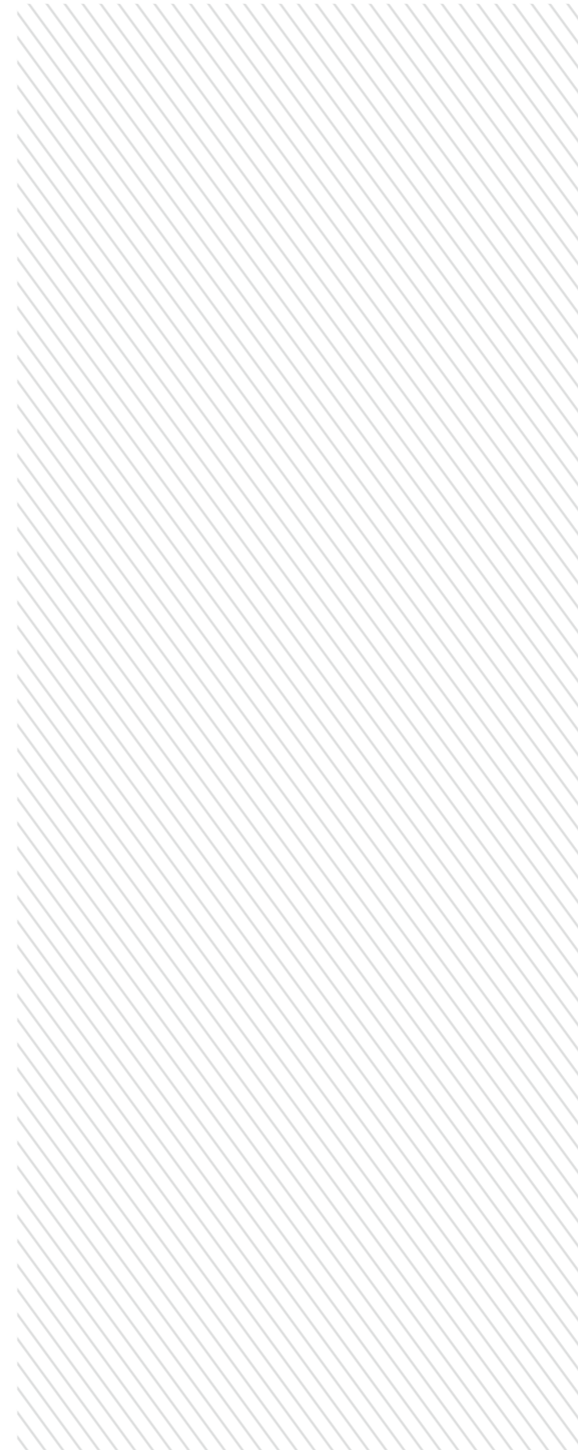


Ceiling: XO-Z0378 (L)  
 304 hairline stainless steel frame + silk-screen acrylic light-passing panels + LED lighting, the middle frame is baking varnish steel panel + white mirror stainless steel roof

Wall: 304 hairline stainless steel

Car door: 304 hairline stainless steel

Floor: XO-Z0465 (PVC)



### XO-Z0212

Wall : XO-Z0212J Mirror stainless steel + mirror etching stainless steel + champagne gold hairline stainless steel

Ceiling : XO-Z0212D (L) Champagne gold hairline stainless steel + milk-white acrylic lamp board

Handrail: XO-Z0212F Champagne gold hairline stainless steel (on the left and right sides)

Floor: XO-Z0212P Marble

Recommended Front Wall: Champagne gold mirror stainless steel

### Optional Cabin



Ceiling: XO-Z0372(L) (Hairline stainless steel panel frame, acrylic lighting decoration and trapezoid roof board)

Wall: Hairline stainless steel

Car door: Hairline stainless steel

Floor: XO-Z0464(PVC)



### XO-Z0219

Wall: XO-Z0219J  
 Rear wall: black Ti-gold hairline stainless steel + glass  
 Side walls: black Ti-gold hairline stainless steel + mirror stainless steel

Ceiling : XO-Z0219D (L) black Ti-gold hairline stainless steel + milk-white acrylic lamp board

Handrail: XO-Z0219F Hairline stainless steel tube (on the rear wall)

Floor : XO-Z0212P Marble parquet

Recommended Front Wall: White mirror stainless steel

## The hall door and hall call box

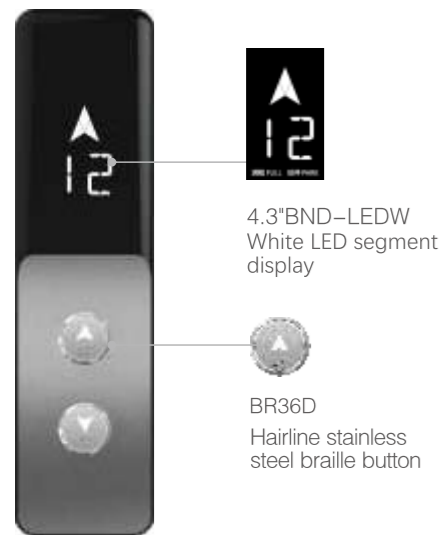


Hall door on the first floor: hairline stainless steel



Hall doors on other floors: volcanic ash colored painted steel (RAL7047)

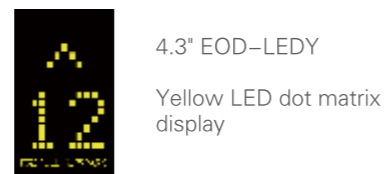
### Hall-Call Box 550-1050kg



XHB18-A

Hall-Call Box: XHB18-A the new bottomless hall-call box adopts stainless steel material, and comes standard with a 4.3 inch BND-LEDW white LED segment display and BR36D hairline stainless steel braille buttons.

### Optional Display



4.3" EOD-LEDY  
Yellow LED dot matrix display

## Car operation panel

### Car Operation Panel 550-900kg



COP2

COP2 integrated car operation panel is equipped with a 6.4 inch BND-LEDW white segment display and BR36D shimmery hairline stainless steel braille buttons in excellent quality. Panel is made of 304 hairline stainless steel.

### Optional Display

- 6.4" BND-LCD  
Black screen LCD
- 6.4" EOD-LCD  
Yellow dot matrix liquid crystal display
- 6.4" EOD-LEDY  
Yellow LED dot matrix display
- 7.0" TFT-LCD  
Colorized liquid crystal display
- 12.1" TFT-LCD  
Colorized liquid crystal display (Network Multimedia)

### Optional Button

- BS34D  
Stainless steel braille button
- BR34B  
Shimmery white mirror stainless steel braille button

## The hall door and hall call box



Hall door on the first floor: hairline stainless steel



Hall doors on other floors: volcanic ash colored painted steel (RAL7047)

### Hall-Call Box



XHB17-A  
Bottomless hall-call box



4.3\"/>



BR34B  
White mirror stainless steel braille button



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### Optional Display

## Car operation panel

### Car Operation Panel

1100-1600kg



COP2



10.4\"/>

COP2 is an integrated car operation panel placed at the front wall, with a 10.4\"/>

### Optional Display



6.4\"/>



6.4\"/>



6.4\"/>



7.0\"/>



12.1\"/>

### Optional Button



BS34D

Stainless steel braille button



BR34B

Shimmery white mirror stainless steel braille button

## Optional cabin configuration

### Optional Ceiling



XO-Z0372(L)

Hairline stainless steel panel frame + acrylic lighting decoration + trapezoid roof board



XO-Z0303(L)

White mirror stainless steel frame + down lamp on both sides + acrylic lighting board for the middle part (grid)



XO-Z0378(L)

304 hairline stainless steel frame + silk-screen acrylic light-passing board + LED lighting, baking varnish steel frame in the middle + platinum stainless steel roof board



XO-Z0379(L)

Painted steel panel on both sides + acrylic light-passing board + LED lighting + white mirror stainless steel roof board in the middle

### Optional Handrail



XO-Z0509  
Flat stainless steel

Optional Floor ◀

▶ Marble Series



XO-Z0194P



XO-Z0183P



XO-Z0182P



XO-Z0214P



XO-0442



XO-Z0206P

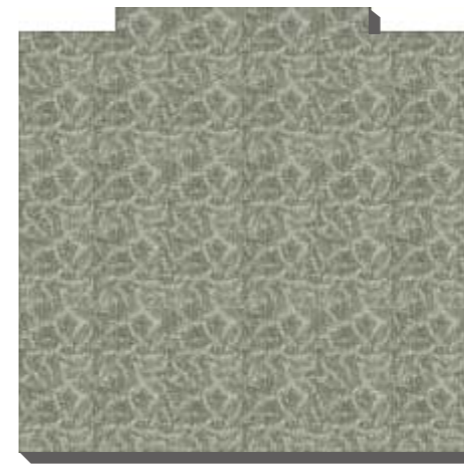


XO-Z0429

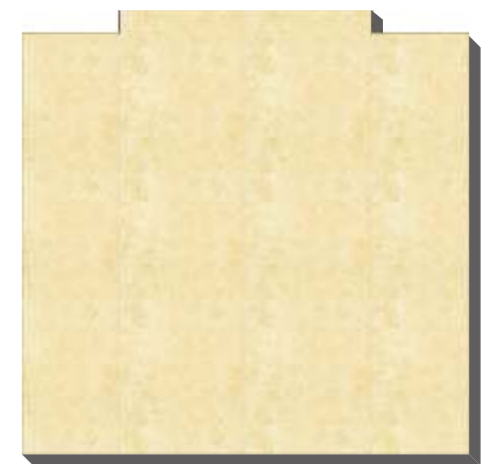


XO-Z0440

▶ PVC Series



XO-Z0465



XO-Z0464

# BASIC FUNCTION

## – Operating Functions

Full Collective Operation	On the basis of signal control, elevator call signals are assembled together to make selective response.
Load Non Stop	When the car is fully loaded, the elevator does not respond to the hall call signal but executes the car-internal signal.
Automatic Home Landing	If there's no registration of calls or operations within the set time, the car will automatically return to the preset home floor and wait there.
Error Call Cancel	Before the car starts, the registration of a call or operation can be cancelled by double click of this button.
Floor Space Self-Learning	The system can automatically record each floor's height and make precise distance control when the elevator is operating.
Key Switch	When lock key moves, the system no longer respond to hall call signals. After the elevator finishes responding to all the car-internal instructions, it automatically returns to the home floor.
Door Open Button Door Close Button	Door open and close buttons are set in the cabin. When the elevator is not running, you can press the open button to open the door, or press the close button to cancel the open waiting time and close the door at once, which improves the running efficiency.
Separate Control For Car Door & Hall Door'S Opening Time	The system can set different opening time for hall door and car door.
Auto-Correction Operation	When the elevator loses its position, it auto-corrects itself to the right position.
Nearby Leveling	When the elevator misses the leveling location, no need to return to the bottom floor, only stop at the nearby floor, in order to save the passenger's time.
Door-Closing Waiting Time Cancel	Through clicking the close button, close the cabin door immediately.
Re-Opening For Hall Door	In normal closing process, when pressing the hall button, if the direction of hall call button is the same with the elevator's running direction, the elevator will be re-opened again.
Torque Compensation Without Weighing	When elevator starts, system would compensate torque according to the current weight without weighing, in order to create a comfortable starting feeling.
Operating Direction Reverse Prediction	Before the elevator operates to target floor, when the calculation shows there is no command in the same direction after responding to the target floor, the display reverses its direction in advance.
Attendant Service	The attendant service allows semi-automatic operation with manual control.
Independent Service	This function is designed for meeting customers' special needs. When independent service is switched on, the elevator will only answer the registered car's call instruction and deviate from group control.

## – Safety Functions

Protection For First & Top Floors	If the speed is not slowed down to the pre-set value while the car is reaching the first or top floor, a forced deceleration will be carried out by system in order to protect the safety of the car.
Error Self-Diagnosis	The system can automatically diagnose and record the elevator's error signal, and use special tools to quickly remove the fault.
Motor Overheat Protection	Self-protection mode will be started if the temp of the motor exceeds the pre-set value due to the heat made by motor itself or the high temp in the environment. The car stops at the nearest floor, unloaded, and shuts down the light and ventilation; once the temp falls down to the pre-set value, the car will return to normal work.
Steel Wire Rope Sliding Self-Test	Real-time monitoring of the relative displacement of the traction steel wire rope.
Door-Closing Torque Protection	If the resistance torque reached the pre-set value when closing the door, the door will reopen.
Speed Anomaly Detection	By monitoring and comparing the encoder feedback signal and the system pre-set speed value, the system can master the elevator's running speed. Once the difference value is beyond the scope that the system allows, the system gets into the protection state and the car stops running.
Contactors Anomaly Detection	According to the contact device's control command, the system detects the state of the main contactor and the brake contactor. If anomaly is found, the system will enter a state of protection and the elevator stops running.
Power Grid Anomaly Detection	If the power grid fluctuation is over a certain safety margin, the system gets into the protection state and the elevator stops running.
Light Curtain Protection	Light curtain protection fence is set up at the entrance of the elevator. Every scan loop has 154 bunches of infrared rays, and the reaction time is one second.
Overload Alarm	When the load of the car exceeds rated capacity, overload alarm is triggered. This operation includes opening the door, sounding the buzzer, illuminating the overload lamp and cancelling all the COP commands. The overload condition is removed when the weight of the car falls below the rated load.
Door Open/Close Protection	When the elevator reaches a floor, the door isn't opened completed in the setting time because of obstacle or other reasons, the elevator will enter the open protection mode - after opening the door in this floor unsuccessfully three times, it runs to the next floor to open the door. When the door isn't closed completely in the setting time because of obstacle or other reasons, the elevator will enter the close protection mode and not respond to any call commands.
Brake Anomaly Detection	If difference is discovered between the actual braking state and the system command, the elevator will get into protection state and stop running.
Emergency Home Landing (In Case Of Fire)	When fire breaks out in the building, after the system receiving the fire alarm, the elevator will cancel all the commands and call signals, and drive the elevator to return to the fire-fighting floor, open the door and evacuate the passengers.
Hall Door Self-Learning	When adding floors and stops, carry out the hall door self-learning to ensure the safety and then the elevator can operate normally.
Safety Rescue	When the elevator detects anomaly, under the premise of safety assurance, it enters the safety rescue operation mode, issues voice message to appease and prompt, and stops at the nearest floor to open the door and release passengers, after which, according to the actual situation after the accident, determines whether the elevator can run again or not.

## – Emergency Functions

Five-Way Intercom	There is an intercom device around car, car bottom, car roof, machine room and monitor room.
Cabin Alarm	In case of emergency, the alarm bell will be activated by pressing the alarm button on the car operation panel.
Emergency Electric Operation In Machine Room	An emergency electric operation device is installed in machine room. When an emergency happens, it can be operated by the professional maintenance staff in the machine room.
Cabin Emergency Light	Emergency light in the car will start whenever there is a power cut.

## – Energy-Saving Functions

Lighting & Fan Auto-Control In Car	If the lift does not receive any instructions within the pre-set time, the elevator automatically shuts off the cabin lighting and fan, in order to save energy.
Energy-Saving Display	After a pre-set time, if there is no hall call registration, display will turn off for energy-saving.

## – Human Interface

Car Passing Chime	When the elevator arrives at the target station, the car passing chime will remind the passengers with a loud bell.
Hall & Car Direction Indicator	Both car and hall screens will display the elevator's running direction.
Car & Hall Display	The indicator in the car operation panel or in the hall call panel will display the elevator's floor position and running direction by arrow signals.
Customized Floor Info Display	Based on customer's demand, the elevator can set a different floor info display. This information can be a combination of numbers 0-9, letters A-Z or any of the two characters and also can be set to a three-digit display beginning with 1, such as 13A etc. Note: segment code display cannot distinguish the number 0 from the letter O, the letter S from the number 5.
Cabin Fire Status Indicator	When fire breaks out, through the indicator in the cabin, remind the passengers to leave and do not take the elevator.
Shimmery Button	When not pressed, the COP buttons keep shimmery as an indicator for passengers; when pressed, the COP buttons turn full-lighted as a command registration.
COP Registration Tone	When the floor call in the cabin is successfully registered, the elevator gives the "ding" sound feedback, so it is more humanized and facilitates the operation of special groups.

— Intelligence

Communication Monitoring Protection	Real-time monitoring of control system and the communication status in the car. When detecting communication outage in the car, the elevator automatically opens the door and issues voice message to appease and remind passengers to leave the car.
Hall Call Intelligent Registration	In the group control mode, when an elevator fails to pick up all the passengers, the button will automatically re-register and keep the calling, and the system will automatically send another elevator to serve the waiting passengers.
Door Open Time Intelligent Adjustment	The elevator system automatically adjusts the opening time of the door according to the different flows of the entrance and exit of the landing station and the car and hall call instructions.
Control System Temperature Monitoring	Real-time monitoring of the temperature of the control system. If the trend of over-temperature is detected, the elevator will transfer into the safety rescue mode to prevent people from getting stuck.
Intelligent Comfortable Operation	The control system automatically calculates the optimal running curve according to the spacing of different target floors, so that the elevator operates smoothly and comfortably.
Button Sticking Automatic Identification	The control system can automatically identify the sticking or jamming of the hall call buttons, automatically remove the stuck or jammed call command, in order to avoid the failure of closing the door due to the sticking or jamming of the hall call buttons.

— Special Operation

Anti-Nuisance Car Call Protection	If there is only one passenger in the car, and an excessive number of car calls are registered, nuisance is detected and all car calls will be cancelled.
Auto-Parking	Elevators in the same group will park on different floors in its spare time, in order to optimize the using efficiency of the elevators.
Hall Call Cancel	Switch and buttons on the main panel can be dialed up to cancel the outside hall call, in order to facilitate testing and maintenance.
Static Positioning	When doing the motor angle positioning, no need to take the steel wire cable away from the traction machine, which is more convenient for installation at worksite. (2.5m/s, no such function)
Car Top Inspection	Set up the repair switch at the car top which is convenient for maintainers to repair in the hoistway. At this time, the repair switch for the machine room is invalid.
Silent Mode	At hotels, apartments and other places, in a specific period of time (e.g. night), automatically close the sound of the station chime and keep silent for the tenants; at other times, the station chime generator automatically restores the voice and provides voice announcement for the elevator users.

Pacifying Voice	When the elevator is in a special state, the voice will pacify the passengers in the car.
Nearby Leveling	When the elevator loses its leveling position, no need to reach the bottom floor to reset, and just stop at the nearest floor to correct its position, so as to save the waiting time of passengers. (2.5m/s, as a basic function)
Progressive Reduction Of Electric Current	During the stopping of the elevator, the electric current will be gradually reduced to zero, so as to improve the comfortableness of the passenger's riding experience.
Zero Speed Stop Under Repair	When under repair, the elevator stops at zero speed, in order to increase the service life of motor's brake.
Test-Free	By the DIP and repair switch on control panel, the elevator can automatically complete the testing itself.
Auto Re-Leveling	When the elevator's door opens, because of the personnel's entrance, the telescopic steel wire rope leads to the changes of the elevator's leveling position and the elevator will automatically correct its leveling position at a slow speed.

OPTIONAL FUNCTION 

Door Open Standby	This function changes the door close standby function of common elevators. By setting up parameters, make the elevator open the door and stand by, in order to keep the air circulating and fresh.
Anti-Nuisance Hall Call Protection	Hall calls include up call and down call. If the passenger operates wrongly, the elevator will open and close the door twice. This function can reduce the door opening and closing for one time and improve the operating efficiency.
Attendant Non-Stop	When pressing the non-stop button, elevator will move straightly to the target floor, ignoring all the hall calls.
Door Hold Button	The cabin is equipped with the door hold button. When the switch is on, the elevator doesn't close the door for a set period of time. After the set waiting time, the elevator automatically closes its door. During the waiting (door-opening) process, if you press the close button, the door will be closed immediately and cancel the waiting.
Duplex	When there are two elevators, the duplex function can be selected. When in duplex, according to its priority, the system sends the fastest available elevator to serve the hall call command, in order to reduce the passenger's waiting time.
Voice Announcement	The elevator is equipped with the voice announcement device, which tells the passengers the floor that the elevator is stopping at, the state of the door and other information.

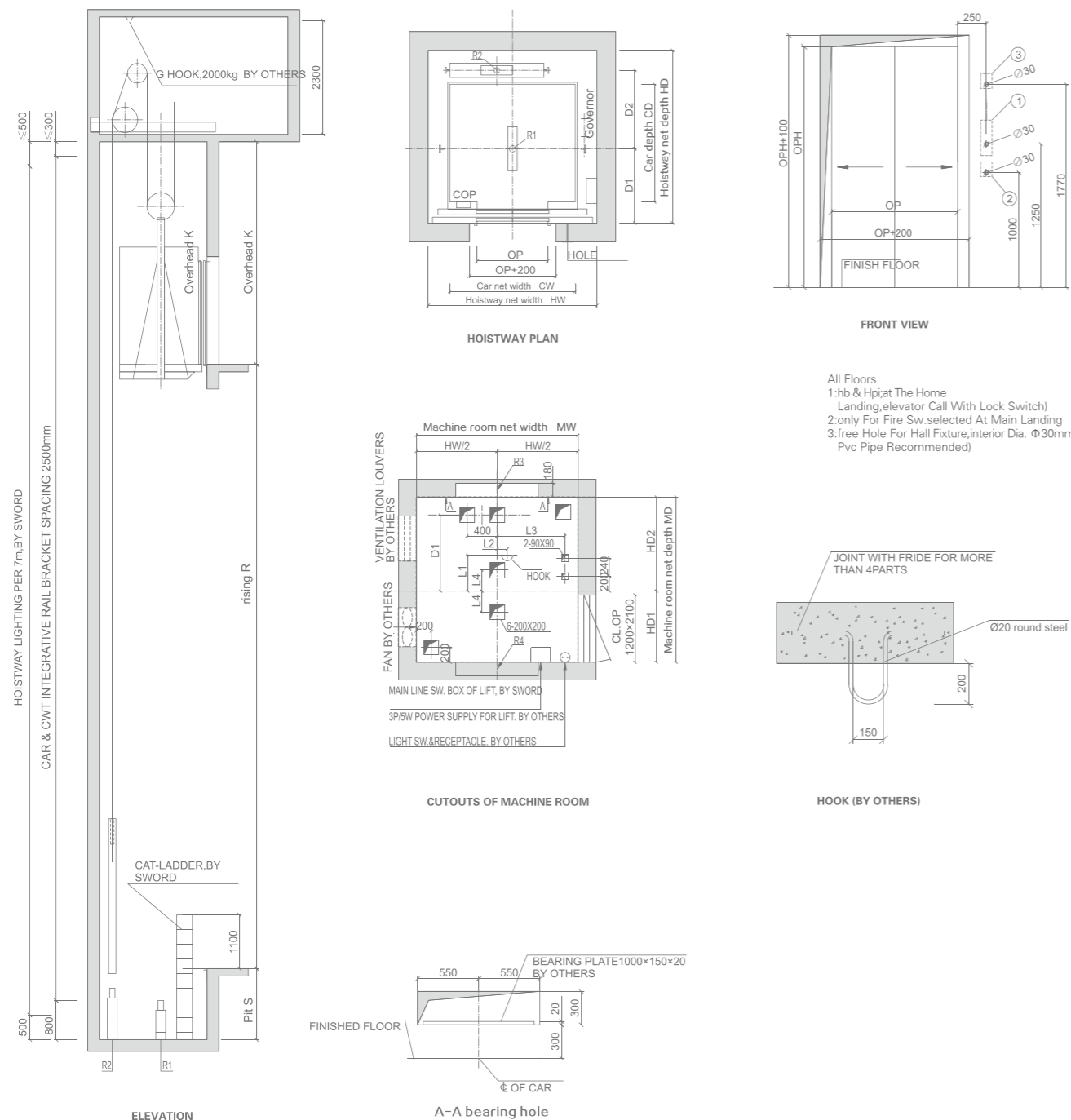
Hall Chime	In general, the hall chime is integrated in the hall call display to remind passengers of the elevator's arrival.
Emergency Fireman Operation	When the key switch preinstalled in the car is turned on, the elevator will cancel all the hall call signals, and only respond to the signals from the car. This function is intended to cooperate with firemen to put out the fire and should be used with the fire elevators.
Fireman Landing Success Feedback	Through a fire-isolated switch, system could feed back fireman landing success signal to the fire-fighting system in the residential district.
Automatic Rescue Device	This device is used for rescue operation in case of power failure. It is powered by a rechargeable battery. When a sudden power cut happens, a sound signal will comfort the trapped passengers, and the car will move towards the nearest floor, keeping the door open to release the passengers.
Reverse Command Cancel	When the elevator is running upward or downward, the command that is in the reverse direction cannot be registered.
Area Elevator System	Computers are carried out for the district monitor system. This function can provide computed monitoring for all the elevators in this district and offer the BA for the intelligent building management system.
Building Management System	The elevator can provide the discrete-type running state signals for the intelligent building management system. The main signals are running direction, floor information, safety information, etc.
CCTV Cable Interface Reservation (Including CCTV Cable)	Cable interfaces are reserved for the installation of the cabin CCTV (including the CCTV cable).
Advanced Door Opening	Start the function and the elevator's speed will be slowed down to a set value to open the door when the elevator enters the door area, which improves the operating efficiency. (When speed $\geq$ 2.5m/s, this function is a basic function.)
Conference Priority Mode	In the group control mode, if there is a large passenger flow in a certain floor due to the closing of a meeting, this mode can be manually triggered by a dedicated switch or by automatic triggering of the sensor, then the other elevators will automatically come to this floor to serve.
IC Card Automatic Registration	After the user swipes the IC card, the system automatically registers the floor instruction, with no need to press the button. (This function cannot be used together with the IC card open access function.)
Arrival Pre-Remind Button	According to the optimal curve automatically calculated, pre-remind the elevator's next landing floor and the corresponding floor button flashes.
Arrival Pre-Remind Display	According to the optimal curve automatically calculated, pre-remind the elevator's next landing floor and the corresponding floor number flashes.
VIP Priority Service	When the VIP passenger on a certain floor hopes that the elevator can arrive at his floor immediately or preferentially, by pressing the switch, the system will automatically send an elevator to answer this priority call and cancel all the hall calls. The elevator will arrive at the floor at the first time to carry the VIP passenger and at this time it only responds to the cabin instructions and does not reply to any hall call service.

Note: If there is a difference between the real products and the functional list in this catalogue, please refer to the explanation by SWORD sales representatives.

# Small machine room elevators

## S700P

LAYOUT OF S700P  
(630kg ≅ Load ≅ 1000kg & 1.0m/s ≅ Speed ≅ 1.75m/s)



### Duties of Owners and Builders

- The interior of the hoistway must meet the requirements of fire protection. Do not install any devices rather than the lift.
- The hoistway must be vertical. The minimum clearance size is considered as the hoistway horizontal size. And the vertical error must be within 0~+25mm/0~30m, 0~+30mm/30m~60m, 0+50mm/60.
- If there is a space under the hoistway pit which is accessible for a person, the counterweight buffer shall be installed on a solid base which is extended to the solid ground, or install the safety gear and enlarge the hoistway size. Please consult elevator supplier about the details.
- Before installation, set safety protection barriers with enough strength at all rough openings (the height of safety protection barriers is no less than 1.2m).
- Enclosed hoistway shall be provided with ventilation (at top or bottom of hoistway), and protected by grid guard. The size of ventilation shall be no less than 1% of the hoistway size.
- The reserved holes on the hall doors and hall call display shall be refilled after the installation of the elevator.
- Concrete hoistway structure is recommended. If the hoistway is frame structured, the concrete beams of 300mm height shall be made at the installation place for guide rail brackets; in addition, the concrete beams of 300mm height in the same width as the hoistway need to be made on the upper and lower edges of the each floor's hall door holes. If the hoistway is solid bearing brick structured, the concrete beams of 300mm height in the same width as the hoistway should be made on the upper and lower edges of the each floor's hall door holes.
- If auxiliary concrete ring beam structure is needed to ensure safety of guide rail installation, the strength of concrete should be at least C20.
- When distance between two adjacent landing door sills is more than 11m, a safety door is required in between and it cannot be opened inside the hoistway. Safety door's width shall be no less than 350mm, and its height shall be no less than 1800mm.
- Pit shall be waterproof. If there is a sump, it shall be made in the corner.
- According to the requirements of technical parameters, the elevator's power supply shall be placed in the machine room and be locked with a lockable switch. Voltage fluctuation shall be within ± 7%. Null line and ground lead shall be separated and the grounding resistance shall be no greater than 4Ω.
- All the force marked in the drawing shall bear its load. Hoistway walls and pit shall be strong enough to withstand the load.
- All the prepared parts (hook, pre-embedded steel plate etc) by users which is marked in the drawing shall be made in advance.
- Emergency rescue room is required and each elevator shall be equipped with a six conductor cable connected to the machine room. It is recommended to use shielded/twisted pair wire with an area of at least 0.75 mm² per conductor or be replaced by a CAT-5 cable.
- The temperature in the machine room shall be maintained between 5~40°C.

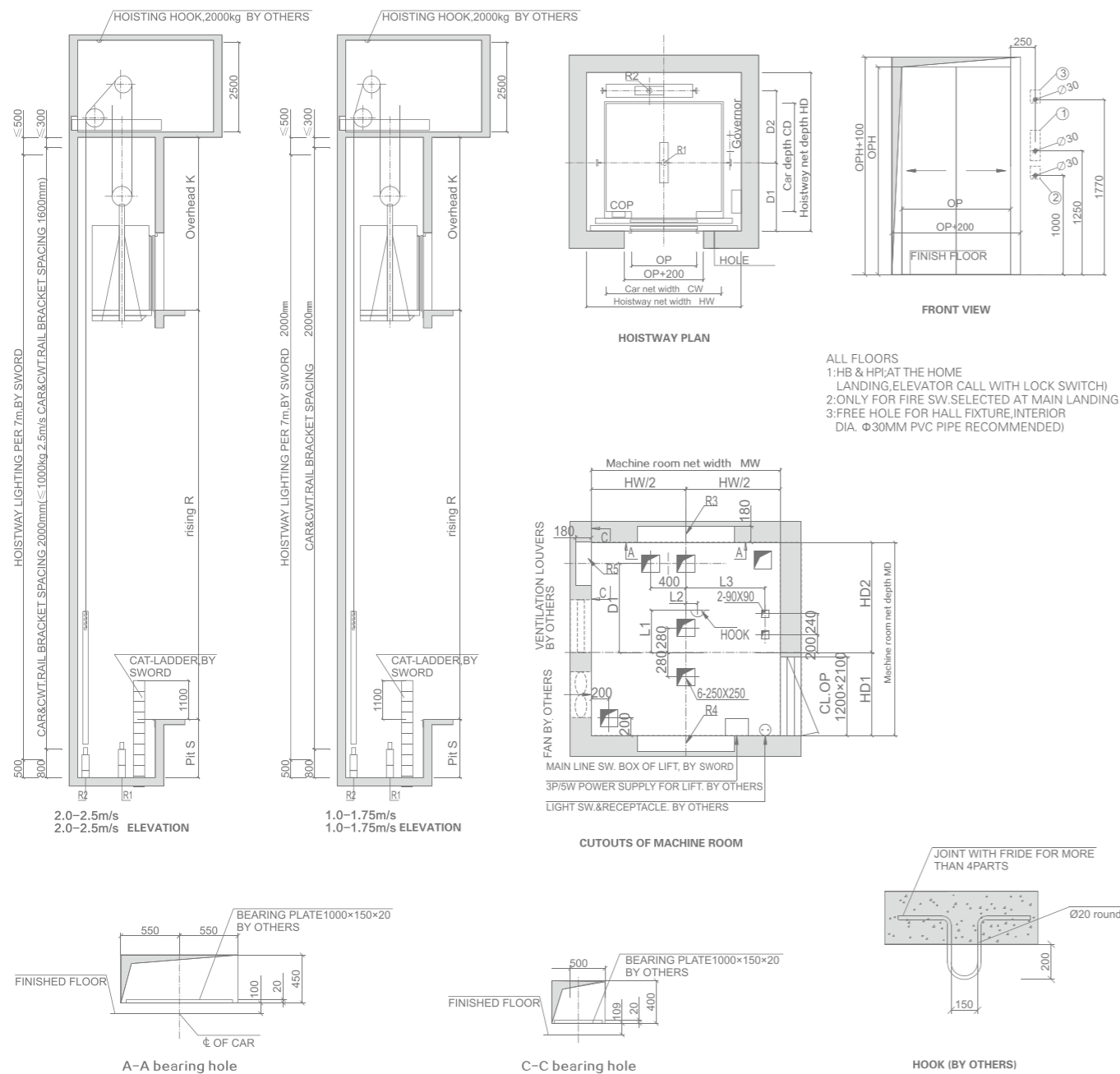
Load (kg)	Speed (m/s)	Car inner size CW(mm)xCD(mm)	Opening net size OP(mm)xOPH(mm)	Hoistway net size HW(mm)xHD(mm)	Pit S(mm)	Overhead K(mm)	Other location size (mm)				Pit reactions (kN)				Overhead bearing (kN)	Max. floor (floor)	Max. rising (m)	
							D1	D2	L1	L2	L3	L4	R1	R2				R3
630(550)	1	1400x1050	800x2100	1850x1700	1450	4600	705	805		803	260	68	56	40	37	16	50	
	1.5	1400x1100	800x2100	1850x1750	1450	4600	705	855	803	260	76	64	45	42	16	50		
	1.75				1550	4800									32	90		
800(750)	1	1400x1350	800x2100	1850x2000	1450	4600	835	975	460	135	803	260	84	68	50	45	24	75
	1.5				1550	4800												
	1.75	1450	4600	16	50													
900	1	1600x1350	900x2100	2150x2100	1450	4600	835	965	903	260	96	76	54	53	16	50		
	1.5				1550	4750									24	75		
	1.75	1550	4800	32	90													
1000	1	1600x1500	900x2100	2150x2200	1450	4650	947	1013	480	903	280	100	80	59	53	16	50	
	1.5				1550	4850										24	75	
	1.75	1550	4900	32	90													

NOTE: DO NOT SCALE THIS DRAWING, UNLESS OTHERWISE STATED.

# Small machine room elevators

## S700P

**LAYOUT OF S700P**  
(800kg ≙ Load ≙ 1000kg & 2.0m/s ≙ Speed ≙ 2.5m/s)  
OR (1000kg < Load ≙ 1600kg & 1.0m/s ≙ Speed ≙ 2.5m/s)



## Duties of Owners and Builders

- The interior of the hoistway must meet the requirements of fire protection. Do not install any devices rather than the lift.
- The hoistway must be vertical. The minimum clearance size is considered as the hoistway horizontal size. And the vertical error must be within 0~+25mm/0~30m, 0~+30mm/30m~60m, 0+50mm/60.
- If there is a space under the hoistway pit which is accessible for a person, the counterweight buffer shall be installed on a solid base which is extended to the solid ground, or install the safety gear and enlarge the hoistway size. Please consult elevator supplier about the details.
- Before installation, set safety protection barriers with enough strength at all rough openings (the height of safety protection barriers is no less than 1.2m).
- Enclosed hoistway shall be provided with ventilation (at top or bottom of hoistway), and protected by grid guard. The size of ventilation shall be no less than 1% of the hoistway size.
- The reserved holes on the hall doors and hall call display shall be refilled after the installation of the elevator.
- Concrete hoistway structure is recommended. If the hoistway is frame structured, the concrete beams of 300mm height shall be made at the installation place for guide rail brackets; in addition, the concrete beams of 300mm height in the same width as the hoistway need to be made on the upper and lower edges of the each floor's hall door holes. If the hoistway is solid bearing brick structured, the concrete beams of 300mm height in the same width as the hoistway should be made on the upper and lower edges of the each floor's hall door holes.
- If auxiliary concrete ring beam structure is needed to ensure safety of guide rail installation, the strength of concrete should be at least C20.
- When distance between two adjacent landing door sills is more than 11m, a safety door is required in between and it cannot be opened inside the hoistway. Safety door's width shall be no less than 350mm, and its height shall be no less than 1800mm.
- Pit shall be waterproof. If there is a sump, it shall be made in the corner.
- According to the requirements of technical parameters, the elevator's power supply shall be placed in the machine room and be locked with a lockable switch. Voltage fluctuation shall be within ± 7%. Null line and ground lead shall be separated and the grounding resistance shall be no greater than 4 Ω.
- All the force marked in the drawing shall bear its load. Hoistway walls and pit shall be strong enough to withstand the load.
- All the prepared parts (hook, pre-embedded steel plate etc) by users which is marked in the drawing shall be made in advance.
- Emergency rescue room is required and each elevator shall be equipped with a six conductor cable connected to the machine room. It is recommended to use shielded/twisted pair wire with an area of at least 0.75 mm² per conductor or be replaced by a CAT-5 cable.
- The temperature in the machine room shall be maintained between 5~40°C.

Capacity (kg)	Speed (m/s)	Car inner size CW(mm)xCD(mm)	Opening net size OP(mm)xOPH(mm)	Hoistway net size HW(mm)xHD(mm)	HD1 (mm)	HD2 (mm)	Pit S(mm)	Overhead K(mm)	Other location size (mm)				Pit reactions (KN)					Max. floor (floor)	Max. rising			
									D1	L1	L2	L3	K1	R1	R2	R3	R4			R5		
800	2.0	1400x1350	800x2100	1950x2100	835	1265	1650	5000	1030	0	0	803	450	84	68	49	35	10.6	36	105		
	2.5																				2050	5200
900	2.0	1600x1350	900x2100	2150x2100	835	1265	1650	5000	977	0	0	903	450	96	76	54	41	11.8	36	105		
	2.5																				2050	5200
1000 (1050)	2.0	1600x1500	900x2100	2150x2200	947	1253	1650	5000	1030	0	0	903	450	100	80	60	40	12.5	36	105		
	2.5																				2050	5200
1150	1.0	2000x1350	1100x2100	2600x2100	835	1265	1450	4750	977	480	165	1103	400	132	108	76	57	16.8	24	75		
	1.5																				1550	4950
	1.75																				1550	5000
	2.0																				1650	5100
1350	2.5	2000x1550	1100x2100	2600x2300	947	1353	1450	5300	1065	505	165	1103	450	140	112	81	59	17.5	36	105		
	2.0																				2050	5300
	1.5																				1550	4950
	1.75																				1550	5000
1600	2.5	2000x1750	1100x2100	2600x2500	1047	1453	1450	4750	1165	480	165	1103	400	156	124	92	63	19.5	16	50		
	2.0																				2050	5300
	1.5																				1550	4950
	1.75																				1550	5000

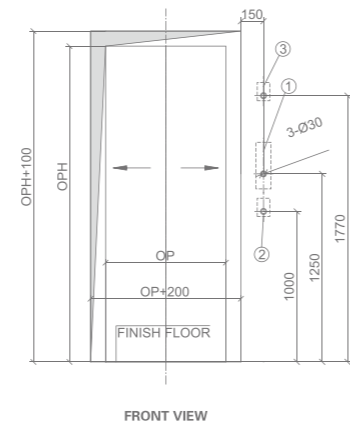
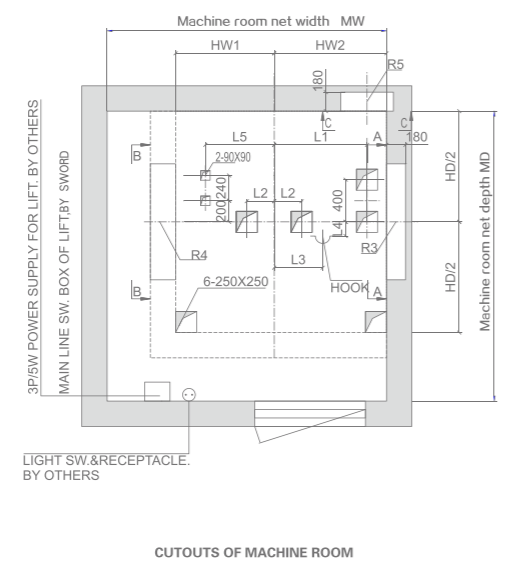
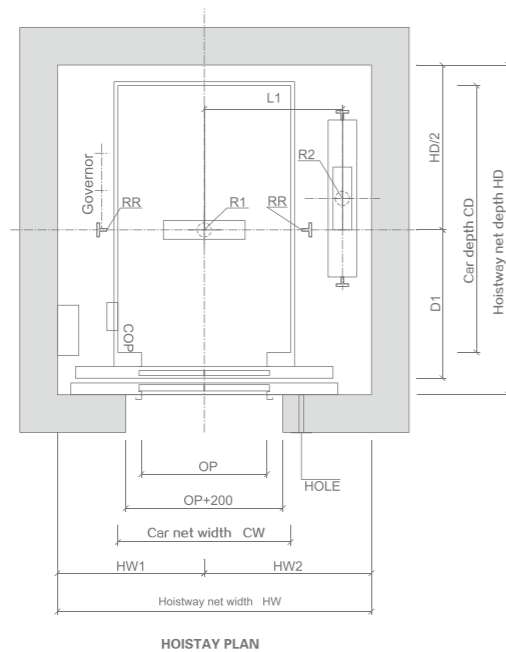
Please contact sales if necessary.

NOTE: DO NOT SCALE THIS DRAWING, UNLESS OTHERWISE STATED.

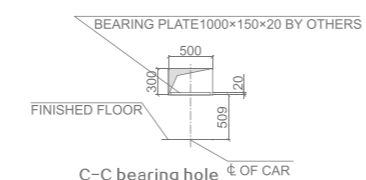
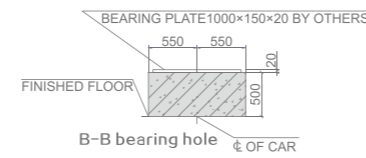
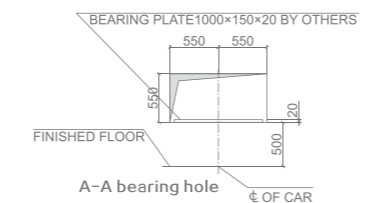
# Small machine room elevators

## S700P

**LAYOUT OF S700P**  
(Deep Cabin, Load=1000kg, 1.0m/s ≤ Speed ≤ 2.5m/s)



ALL FLOORS  
1: HB & HP (AT THE HOME LANDING, ELEVATOR CALL WITH LOCK SWITCH)  
2: ONLY FOR FIRE SW. SELECTED AT MAIN LANDING  
3: FREE HOLE FOR HALL FIXTURE, INTERIOR DIA. Ø 30MM PVC PIPE RECOMMENDED



### Duties of Owners and Builders

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Capacity (kg)	Speed (m/s)	Car inner size CW(mm)xCD(mm)	Opening net size OP(mm)xOPH(mm)	Hoistway net size HW(mm)xHD(mm)	Machine room net size	Pit S(mm)	Overhead K(mm)	Other location size (mm)					Pit reactions (KN)					Max. floor (floor)	Max. rising			
								AW	AV	D1	L1	L2	L3	L4	L5	R1	R2			R3	R4	R5
1000	1.0	1100x2100	900x2100	2100x2500	2750x3150	2050	5200	1035	1065	145	880	280	480	135	653	100	80	62	21	10.6	16	50
	1.5																				24	75
	1.75																				32	90
	2.0																				36	105
	2.5																				36	125

NOTE: DO NOT SCALE THIS DRAWING, UNLESS OTHERWISE STATED.