Elevator Technology

thyssenkrupp Elevator Hong Kong

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GL 2

thyssenkrupp moves people – the future of urban mobility.

In 40 short years, we've become one of the world's leading elevator companies with unique engineering capabilities, offering next-generation solutions like MULTI, the ropeless elevator, ACCEL, an accelerated people mover, and MAX, a cloud-based predictive maintenance service. Whether building a new state-of-the-art system or optimizing and modernizing existing ones, our solutions deliver crucial energy and time efficiencies, helping to address the challenges of urbanization and transform cities into the best places to live.









We support our customers throughout their project lifecycle, from the design to the end-of-life phase. Every step of the way, we strive to fully understand their needs and consistently deliver the safest, highest quality passenger transportation solutions, maintenance and modernization packages.

Through our internal technical support function, ITS (International Technical Services), thyssenkrupp trains its service technicians in a multibrand portfolio, enabling them to successfully service more than 1.2 million units under maintenance.

thyssenkrupp – the diversified industrial group

engineering.tomorrow.together – three words that describe who we are, what we do, and how we do it. Driven by global megatrends such as urbanization and the need for efficient use of environmental resources, our global community of more than 150,000 colleagues works together with our customers to harness our engineering expertise and strive for technological and business solutions that satisfy the demand for "more" in a "better" way.

Find out more: www.thyssenkrupp.com



One World Trade Center



Makkah Clock Tower / Source © SL Rasch

We provide smart and innovative products for a wide variety of applications:

- Passenger and freight elevators
- Escalators and moving walks
- Passenger boarding bridges
- Stair and platform lifts
- Customized service and modernization solutions



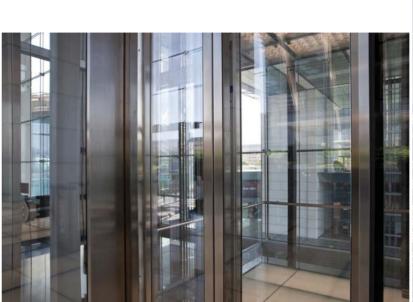
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engineering. tomorrow. together.

thyssenkrupp Elevator Hong Kong

Established in 2003, thyssenkrupp Elevator (Hong Kong) installs, maintains and modernizes elevators and escalators in Hong Kong. We have a strong presence in various segments, such as residential, hospital and infrastructure. We are committed to working together to make cities the best places to live.













GL

Proven MR performance

Engineered to its high performance, GL is suited for mid-rise and high-end residential and commercial buildings. Ride comfort is ensured by sturdy car design, use of noise-reducing materials from moving components, and high precision motor system that results in smooth braking and accurate levelling.

Designed for

Specification

- Commercial buildings
- Max. travel height: ≤150m Max. number of floors: ≤32

Rated load: ≤1600kg

- Mid-rise residential buildings
- Rated speed: ≤3.0m/s
- Group control: 8

Proven MR performance



Ride comfort

Sturdy car design, use of noise-reducing materials, and high precision motor system guarantee ride comfort.



Safe and reliable

Stringent product design based on thyssenkrupp German standards ensures highest degree of passenger safety.



Comfort and aesthetic design

Embrace aesthetic car interior design and comfort.

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Ride comfort



 Independent suspension system effectively reduces noise and vibrations.

High-performance device between the car and the bottom of the car frame reduces vibration.

Hard-wearing polymer guide shoe lining delivers a smooth ride and enhances passenger comfort.

 Noise-reducing materials minimize noise from moving components.

Plastic-coated (or fully plastic) compensating cable effectively reduces noise from impacts.

K/S series door system features a wide belt and large rollers to reduce door noise.

 Precision VVVF frequency drive for smooth deceleration and acceleration.

Patented variable-frequency drive manufactured using German technology delivers accurate CPI and vector control and greater torque at lower speeds.

Ensure levelling accuracy (±5mm).

Cutting-edge MC series control system automatically maps elevator movement for greater efficiency and enhanced passenger comfort.

Safe and reliable



thyssenkrupp based on its stringent German product design and safety standards is a trusted brand in the industry. thyssenkrupp is committed to ensuring the highest degree of passenger safety.

Training

Our technicians are trained to work to the highest safety standards and adhere to stringent safety rules. thyssenkrupp's TEAMService and SEED Campus, the thyssenkrupp Elevator training institution, assure that our team is continuously and systematically trained to deliver the services you depend on.

Solutions

Our unique field operations system, VIEW, stores every elevator's service history, enabling us to see the performance of the units in real time, and monitor the leading indicators that optimize equipment availability.

Design

Stringent global product design standards and cutting-edge technology ensure the highest levels of passenger safety.



Installation

thyssenkrupp's reputation for customer-centric solutions has come about through our focus on providing solutions to design, select and install people transportation systems for a wide variety of buildings.

Systematic project management

Utilize mobility devices to provide real-time project management and reporting to ensure timely installation.

Professional installation

Utilize vigorous process to select installation teams. Staff are graded on 7 levels. Installation teams are regularly trained and put through stringent tests to qualify them on proven methodology.

Comprehensive quality control system

In-process checks and quality assurance to ensure qualitative and safe installation

Service

At thyssenkrupp, we are consistently committed to responding to customers' requests in a highly responsive, punctual and timely manner. Driven by a global service strategy, our business operating model contributes to all aspects of customer service satisfaction.

We adopt a proactive approach to go beyond our customers' expectations by providing tailored-made solutions to meet their needs. We strive to protect your investment by delivering a systematic service program of which is smart, stress-free and systematic.

Prescriptive maintenance

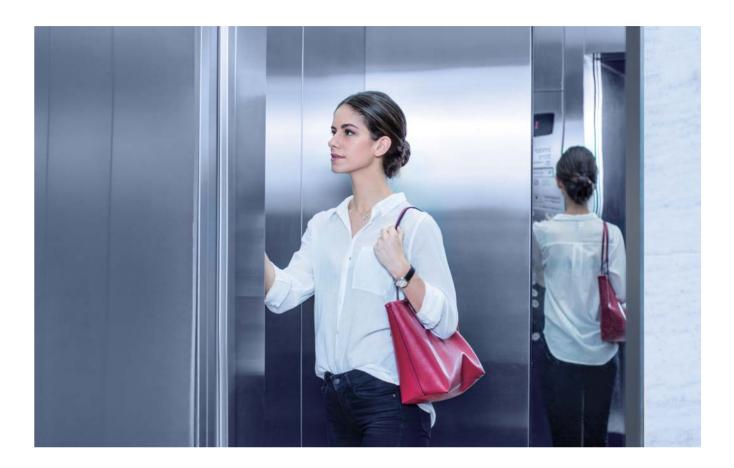
Offered through a variety of service agreements that insure a consistent, proactive, and predictable process which you can rely on. Our team is trained to eliminate maintenance problems.

Smart tools

Our network of engineers is well-equipped with intelligent tools to keep passengers moving.

Skilled team

Every engineer is very well-trained to deliver quality work on time.



Comfort and aesthetic design

GL embraces comfort and aesthetic.

Comfort and aesthetic throughout your building

Designed for mid-to-high-end residential and commercial buildings, GL's inspiring car interiors are designed with the building segment in mind. The feeling of comfort will continue from the lobby interior, into the elevator and therefor throughout the entire building.

Car interior

CS1-GE

Standard

Ceiling RF-CL1S (Powder coated

steel - RAL1015)

Side Wall Powder coated steel -

RAL1015

Rear Wall Powder coated steel -

RAL1015

Front Wall Powder coated steel -

RAL1015

Floor PVC floor - TCD314

Handrail



CS2-GE

Option

Ceiling RF-CL1S (Powder coated steel - RAL7035)

Side Wall Powder coated steel - RAL7035

Rear Wall Powder coated steel - RAL7035

Front Wall Powder coated steel - RAL7035

Floor PVC floor - CFL010

Handrail -



Car interior

CS3-GE

Standard

Ceiling RF-CL1S (Powder coated

steel - RAL7035)

Side Wall Hairline stainless steel

Rear Wall Hairline stainless steel

Front Wall Hairline stainless steel

Floor PVC

PVC patterned - PF001

(TCD319, TCD314)

Handrail -



CS4-GE

Option

Ceiling RF-CL1S (Powder coated steel - RAL7035)

Side Wall Hairline stainless steel, mirror stainless steel

Rear Wall Hairline stainless steel, mirror stainless steel

Front Wall Hairline stainless steel

Floor PVC patterned - PF001 (TCD319, TCD314)

Handrail TSF08 - flat hairline stainless steel handrail



Car interior

CL1-GE

Standard

Ceiling Starlight (Powder coated

steel - RAL1015)

Side Wall Powder coated steel -

RAL1015

Rear Wall Powder coated steel -

RAL1015

Front Wall Powder coated steel -

RAL1015

Floor PVC floor - CFL008

Handrail



CL2-GE

Option

Ceiling Starlight (Powder coated steel - RAL7035)

Side Wall Powder coated steel - RAL7035 mirror stainless steel

Rear Wall Powder coated steel - RAL7035 mirror stainless steel

Front Wall Powder coated steel - RAL7035 Floor PVC floor - CFL010

Handrail



Car interior

CL3-GE

Standard

Ceiling Starlight (Hairline stainless steel)

Side Wall Hairline stainless steel

Rear Wall Hairline stainless steel

Front Wall Hairline stainless steel

Floor

PVC patterned - PF002

(CFL008, CFL006)

Handrail ·



CL4-GE

Option

Ceiling Starlight

(Hairline stainless steel)

Side Wall Color-painted steel HK04

Rear Wall Mirror stainless steel,

color-painted steel HK04 Front Wall Hairline stainless steel

Floor PVC patterned - PF002

(CFL010, CFL006)

Handrail TSF08 - flat hairline

stainless steel handrail







Car Operating Panel (COP)

Standard	1
Type Indicator Button	COP S-A01 Red dot matrix MT42
Optional	2
Type Indicator Button	COP S-B01 Red dot matrix AN170
Optional	3
Type Indicator	COP S-A02 Blue-white segment LCD
Button	MT42
Optional	4
Type Indicator	COP S-B02 Blue-white segment LCD
Button	AN170



All thyssenkrupp products shipped on or after 1 October, 2016 will feature the new logo. Products shipped before this date will continue to use the old logo. Actual colours of the product may vary from the printed brochure. Due to the differences of the floor configurations and functions, the design of the operating panel may differ slightly.

Landing operating panel (LOP)

•	5 1	3 !	•	•		
Standard Indicator Button Firemen's switch	Red dot matrix MT42 P-FS01	* 18		•	18	† 18 PLF-HI1
Optional Indicator Button	Red dot matrix AN170	·		PLF-A01	PLF-VI1	1
Optional	3	1. PLS-A01	PLD-A01			MT 42
Indicator Button Firemen's switch Optional Indicator Button	4.3" Blue-white segment LCD AN170 A-FS01 4 4.3" Blue-white segment LCD MT42	18 2. PLS-B01	18 8 PLD-B01	PLF-B01	† 18 PLF-VI1	PLF-HI1 AN 170
		3. ALS-B02	ALD-B02	ALF-B02	ALF-HI2	A-FS01
		4. ALS-A02	ALD-A02	ALF-A02	ALF-HI2	

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Function list

TE-GL			
Category	No.	Function	Standard / Optional
	1	Door reopen by following landing call at same landing	S
	2	Collective selective control	S
	3	Full-load non-stop	S
	4	Onward travel to the next stop in the case of a non-opening door	S
	5	Anti-nuisance"limit number of car call when empty load"	S
	6	Anti-nuisance "car call cancellation at terminal landing"	S
	7	Anti-nuisance "car call deletion opposite to travel direction"	S
	8	Adjustable waiting time for opening door at the main landing	S
Enhanced Car Functions	9	Adjustable speed and torque of door operator	S
	10	Re-leveling	S
	11	Energy saving operation for car light and fan	S
	12	Elevator start-up loading weighting compensation function	S
	13	In advance door open	0
	14	Changing fire landing	0
	15	Changing parking landing	0
	16	Changing main landing	0
	17	Main landing return	0
	18	Landing to the nearest floor in case of problem (eg. motor overheat, car position missing)	S
	19	Fire emergency return (FER)	S
	20	Alarm button & Intercom button	S
	21	Emergency car lighting	S
	22	Overload protect	S
	23	Repeat door closing in the event of lock failure	S
	24	Safety curtain for door	S
Safety and Emergency	25	Door overload protect	S
Functions	26	Parking (by key switch)	S
	27	Phase failure and phase reversal protection	S
	28	Lockable main switch integrated for controller cabinet	S
	29	Emergency electrical operation	S
	30	Inspection operation	S
	31	Traction machine overheat supervision	S
	32	Traction machine skidding protection	S
	33	Prepared fire emergency return signal	S
	34	Prevent unintended movement of elevator cab	S

Note: S – Standard 0 – Optional

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Function list

Category	No.	Function	Standard / Optional
	35	Restrict the opening of the car door inside the car	S
	36	Brake Torque Detection Function	S
	37	Main COP attendance	0
Safety and Emergency	38	Fireman service	0
Functions	39	Door lock bypass function	0
	40	Automatic rescue operation	0
	41	Earthquake function (sensors by customer)	0
	42	Earthquake function (incl. sensors)	0
	43	Emergency power operation (generator by customer)	0
	44	Automatic doors	S
	45	Collective fault signal	S
Title Forestone	46	Operation counting (trip and hour)	S
Trip Functions	47	Car priority	0
	48	Through door	0
	49	Selective door (only in through car case)	0
	50	Door close button	S
	51	Door open button	S
	52	Car call cancellation (by double press)	S
	53	Landing indicator of dot-matrix (red)	S
	54	Car indicator of dot-matrix (red)	S
Human Machine	55	Landing indicator of 4.3"blue-white segment LCD	0
Interface	56	Car indicator of 5.7" blue-white segment LCD	0
	57	Car arrival alarm	0
	58	Second COP (excl. (car attendant and intercom)	0
	59	COP for disabled persons (no indicator, braille push buttons as standard)	0
	60	Intercom system	S
	61	Traveling cable (incl. video transmission function)	0
	62	BAS interface function (dry contactor signal)	0
	63	Color video camera (in car)	0
Monitoring and Tele-service	64	Remote monitor interfacing (excl. MH2 board)	0
TOTO SCITTION	65	Remote monitor interfacing (incl. MH2 board, without modem)	0
	66	Supervision panel (cable by other, cable length<=150m)	0
	67	Build automation interfacing (RS232, MM board)	0
	68	Build automation interfacing (RS485, MMC board)	0

Note: S – Standard O – Optional

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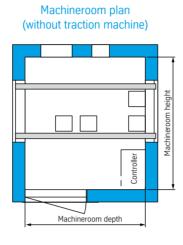
Function list

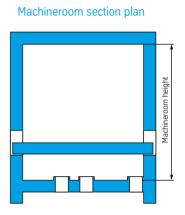
TE-GL			
Category	No.	Function	Standard / Optional
	68	Group control (max 8 units)	0
Group / Duplex Control	69	Automatically allocate lower load elevator to response landing call in group	0
	70	Continued group / duplex operation in case of failure of the other elevator	0
	71	Taking units out of group (timer / switch)	0

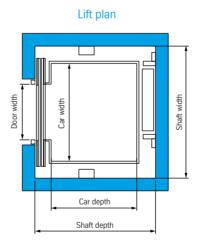
Note: S – Standard 0 – Optional

Layout (Counter weight at rear)

Shaft vertical section Machineroom height Travel height Pit depth







According to the elevator	construction specification, t	he elevator shaft horizontal size is the r	minimum clearance by plumbing,	and the allowed deviation as follows:
Shaft height	SH≤30m	30m <sh≤60m< th=""><th>60m<sh≤90m< th=""><th>90m<sh≤125m< th=""></sh≤125m<></th></sh≤90m<></th></sh≤60m<>	60m <sh≤90m< th=""><th>90m<sh≤125m< th=""></sh≤125m<></th></sh≤90m<>	90m <sh≤125m< th=""></sh≤125m<>
Permitted deviation	0~+25mm	0~+35mm	0~+50mm	0~+80mm

Technical specifications (Counter weight at rear)

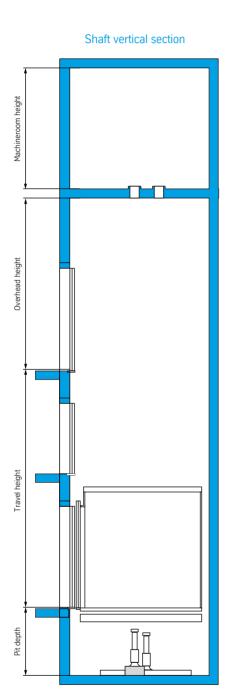
GL						
Rated Load (kg)	Rated Speed (m/s)	Max. Travel Height (m)	Max. Number of Floors	Center Opening Door Size (DW x DH)(mm)	Car Size (CW x CD x HD)(mm)	Shaft Size (SW x SD)(mm)
630	1.0 1.5 1.6 1.75	55 75 85 85	18 26 30 30	800 x 2100	1100 x 1400 x 2400	1800 x 2000
800	1.0 1.5 1.6 1.75 2.0 2.5 3.0	50 75 75 90 110 125 150	17 26 26 31 32 32 40*	800 x 2100	1350 x 1400 x 2400	1900 x 2000 1900 x 2150
1000	1.0 1.5 1.6 1.75 2.0 2.5 3.0	50 75 75 90 110 125 150	17 26 26 31 32 32 40*	900 x 2100	1600 x 1400 x 2400	2150 x 2000 2150 x 2150
1150	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1100 x 2100	1800 x 1400 x 2400	2350 x 2000
1250	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1100 x 2100	2000 x 1450 x 2400	2450 x 2170
1350	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1100 x 2100	2000 x 1550 x 2400	2450 x 2270
1600	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1100 x 2100	2000 x 1750 x 2400	2450 x 2470

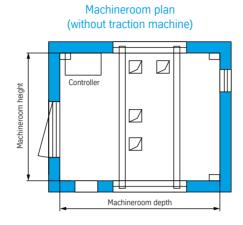
Min. overhead height & pit depth

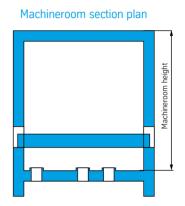
Rated Speed	Min. Overhe	ad height (mm) Min. Pit Depth (mm)							
1.0	3800	3800	3800	4100	1250	1250	1250	1300	
1.5	3900	3900	3900	4400	1300	1300	1300	1400	
1.6	3900	3900	3900	4450	1300	1300	1300	1400	
1.75	3950	3950	3950	4500	1300	1300	1300	1400	
2.0	/	4050	4050	4550	/	1350	1350	1400	
2.5	/	4750	4750	4750	/	1750	1750	1750	
3.0	/	4750	/	/	/	2200	/	/	

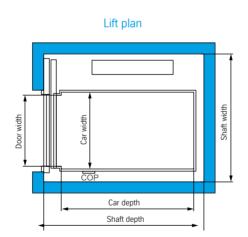
^{*} Note: The maximum number of floors permitted in the standard design when in the case without driver function is 40. If in the case of which the client requests the number of floors and driver function to be more than 32, please contact your contract engineering department.

Layout (Counter weight at side 1250~1600kg)









According to the elevator cor	nstruction specification, the elevator	r shaft horizontal size is the minimu	m clearance by plumbing, and the	allowed deviation as follows:
Shaft height	SH≤30m	30m <sh≤60m< th=""><th>60m<sh≤90m< th=""><th>90m<sh≤125m< th=""></sh≤125m<></th></sh≤90m<></th></sh≤60m<>	60m <sh≤90m< th=""><th>90m<sh≤125m< th=""></sh≤125m<></th></sh≤90m<>	90m <sh≤125m< th=""></sh≤125m<>
Permitted deviation	0~+25mm	0~+35mm	0~+50mm	0~+80mm

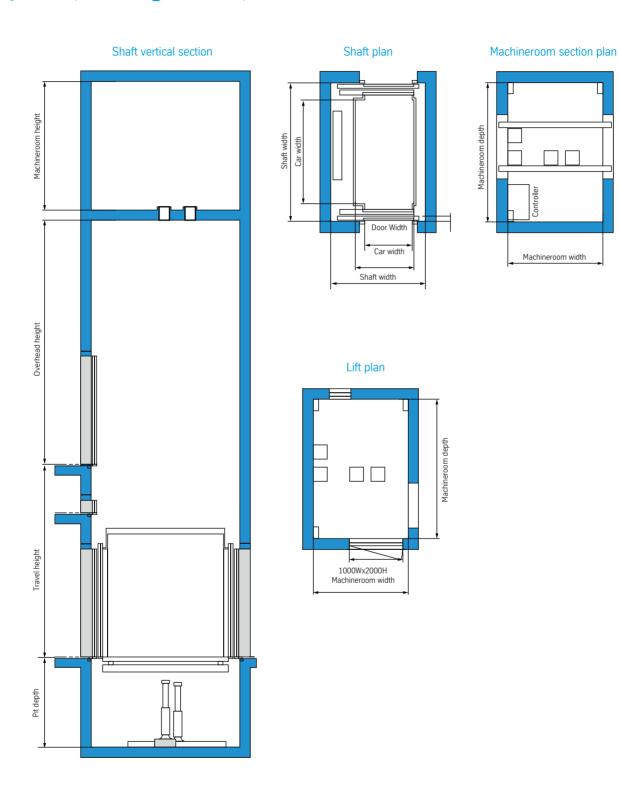
Technical Specifications (Counter weight at side 1250~1600kg)

GL						
Rated Load (kg)	Rated Speed (m/s)	Max. Travel Height (m)	Max. Number of Floors	Center Opening Door Size (DW x DH)(mm)	Car Size (CW x CD x HD)(mm)	Shaft Size (SW x SD)(mm)
1250	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1100 x 2100	1400 x 2050 x 2400	2300 x 2540
1350	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1100 x 2100	1400 x 2200 x 2400	2300 x 2690
1600	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1300 x 2100	1400 x 2400 x 2400	2310 x 2890

Min. overhead height & min. pit depth

Rated Speed	Min. Overhead height (mm)	Min. Pit Depth (mm)
	1250-1600kg	1250-1600kg
1.0	4100	1300
1.5	4400	1400
1.6	4450	1400
1.75	4500	1400
2.0	4550	1400
2.5	4750	1750

Layout (Through door)



According to the elevator	construction specification, t	he elevator shaft horizontal size is the r	minimum clearance by plumbing, a	and the allowed deviation as follows:
Shaft height	SH≤30m	30m <sh≤60m< th=""><th>60m<sh≤90m< th=""><th>90m<sh≤125m< th=""></sh≤125m<></th></sh≤90m<></th></sh≤60m<>	60m <sh≤90m< th=""><th>90m<sh≤125m< th=""></sh≤125m<></th></sh≤90m<>	90m <sh≤125m< th=""></sh≤125m<>
Permitted deviation	0~+25mm	0~+35mm	0~+50mm	0~+80mm

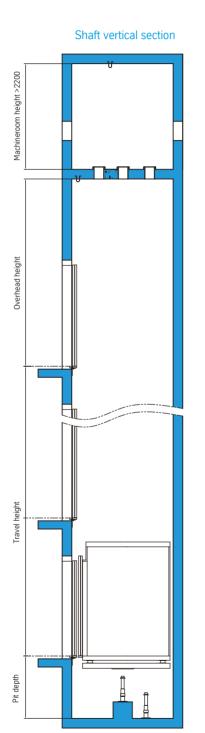
Technical Specifications (Through door)

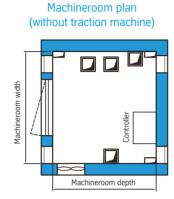
GL Control of the con						
Rated Load (kg)	Rated Speed (m/s)	Max. Travel Height (m)	Max. Number of Floors	Side Opening Door Size (DW x DH)(mm)	Car Size (CW x CD x HD)(mm)	Shaft Size (SW x SD)(mm)
630	1.0 1.5 1.6 1.75	55 75 85 85	18 26 30 30	800 x 2100 (Center Opening Door)	1100 x 1320 x 2400	1820 x 1850
800	1.0 1.5 1.6 1.75 2.0	50 75 75 90 110	17 26 26 31 32	900 x 2100	1100 x 1480 x 2400	1850 x 2120
1000	1.0 1.5 1.6 1.75 2.0	50 75 75 90 110	17 26 26 31 32	900 x 2100	1100 x 1880 x 2400	1850 x 2520
1150	1.0 1.5 1.6 1.75 2.0	50 75 75 90 110	17 26 26 31 32	1000 x 2100	1200 x 1880 x 2400	1950 x 2520
1250	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1100 x 2100	1400 x 1900 x 2400	2300 x 2540
1350	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1100 x 2100	1400 x 2050 x 2400	2300 x 2690
1600	1.0 1.5 1.6 1.75 2.0 2.5	50 75 75 90 110 125	17 26 26 31 32 32	1300 x 2100	1400 x 2250 x 2400	2890

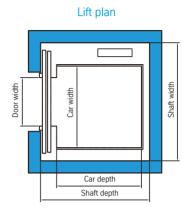
Min. overhead height & pit depth

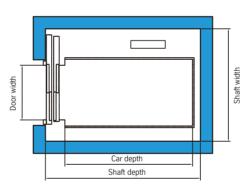
Rated Speed	Min. Overhe	ad height (mm)	Min. Pit Depth (mm)						
1.0	3800	3800	3800	4100	1250	1250	1250	1300	
1.5	3900	3900	3900	4400	1300	1300	1300	1400	
1.6	3900	3900	3900	4450	1300	1300	1300	1400	
1.75	3950	3950	3950	4500	1300	1300	1300	1400	
2.0	/	4050	4050	4550	/	1350	1350	1400	
2.5	/	/	/	4750	/	/	/	1750	

Layout (Counter weight at side 630~1150kg)









According to the elevator construction specification, the elevator shaft horizontal size is the minimum clearance by plumbing, and the allowed deviation as follows:							
Shaft height	SH≤30m	30m <sh≤60m< th=""><th>60m<sh≤90m< th=""><th>90m<sh≤125m< th=""></sh≤125m<></th></sh≤90m<></th></sh≤60m<>	60m <sh≤90m< th=""><th>90m<sh≤125m< th=""></sh≤125m<></th></sh≤90m<>	90m <sh≤125m< th=""></sh≤125m<>			
Permitted deviation	0~+25mm	0~+35mm	0~+50mm	0~+80mm			

Technical Specifications (Counter weight at side 630~1150kg)

GL						
Rated Load (kg)	Rated Speed (m/s)	Max. Travel Height (m)	Max. Number of Floors	Door Size (DW x DH)(mm)	Car Size (CW x CD x HD)(mm)	Shaft Size (SW x SD)(mm)
630	1.0 1.5 1.6 1.75	55 75 85 85	18 26 30 30	800 x 2100 (Center Opening Door)	1100 x 1400 x 2400	1850 x 1800
800	1.0 1.5 1.6 1.75 2.0	50 75 75 90 110	17 26 26 31 32	800 x 2100 (Center Opening Door)	1350 x 1400 x 2400	1950 x 1800
1000	1.0 1.5 1.6 1.75 2.0	50 75 75 90 110	17 26 26 31 32	900 x 2100 (Center Opening Door)	1600 x 1400 x 2400	2200 x 1800
1000	1.0 1.5 1.6 1.75 2.0	50 75 75 90 110	17 26 26 31 32	900 x 2100 (Side Opening Door)	1100 x 2100 x 2400	1850 x 2550
1150	1.0 1.5 1.6 1.75 2.0	50 75 75 90 110	17 26 26 31 32	900 x 2100 (Center Opening Door)	1800 x 1400 x 2400	2400 x 1800
1150	1.0 1.5 1.6 1.75 2.0	50 75 75 90 110	17 26 26 31 32	900 x 2100 (Side Opening Door)	1200 x 2100 x 2400	1950 x 2250

Min. overhead height & min. pit depth

Rated Speed	Min. Overhea	ad height (mm)	Min. Pit De	Min. Pit Depth (mm)		
	630kg	800-1150kg	630kg	800-1150kg		
1.0	3750	3750	1300	1300		
1.5	3900	3900	1400	1400		
1.6	3900	3900	1400	1400		
1.75	3950	3950	1450	1450		
2.0	/	4050	/	1550		