

XOP Travolator



**XIZI
OTIS**

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XIZI OTIS

Otis holding company in China, with the fastest development, highest cost efficiency, and greatest potential, Xizi Otis has been playing as one the most excellent operation entity in the Otis family.

Xizi Otis has the largest escalator and travolator production center of the Otis family, with a production capacity of more than 5000 units. The annual production (new equipment) is more than 20,000 units.

Since founded in 1997, Xizi Otis has been successfully applied the advanced Otis technology and the most matured world-class management system. And it is all along standing as the pioneer of the energy-saving and environment-friendly innovation.

Now, Xizi Otis is recognized as one of the top largest elevator, escalator and move walkway's manufacture & service provider. Such a great growth achieved by Xizi Otis is regarded as the legend in the China elevator industry.



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XOP

Based on Otis advanced technology, the XOP travolator is designed and produced to apply for supermarket, airport, commercial mall, etc. Through the rigid quality system, it not only fully satisfied the operation practicality, but also bring passenger with humanized design.

XOP characterizes itself as high quality and reliability, safety, flexibility and energy saving.

Quality & Reliability

XOP travolator fully utilizes the Otis' advanced designing and manufacturing process-PDP process. It has been proved as the Otis' most matured worldwide moving walkways product.

Through the stringent quality control system, and company's enforcement on all along pursuing the higher quality, XOP is deemed as the most qualified and reliable product; it effectively eliminates the operation failure and shortens the maintenance time.



EM-W1

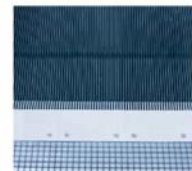
- High efficient worm gear box.
- Integrated Non Reversal
- Device / Motor thermal
- device / Motor cover control;
- Optional Control contact for
- lifted Brake / Brake lining wear
- Overspeed governor.
- Compact design and small size.
- Low noise and smooth operation.
- Flender gearbox, most mature
- reducer in travolator industry.



Duplex-chain designed main drive wheel is with a strong broken strength. Such a compact and vigorous structure strengthens the reliability of the whole driving system, and as well promotes efficiency and riding quality.



Otis initiated tube structure truss with a robust design; it greatly improve the overall running stability and service life. The Otis blue painting renders the whole truss a protection against rustiness and corrosion.



Anti-slip grooves on the pallet surface have excellent slip-proof function to make the ride safe and comfortable. Slightly inclined combs can make the trolleys easily get on and off.



Special designed big wheel handrail drive runs in low noise and big power, which improves the running condition of the handrail, ensuring a smooth ride, prolonging its life time as well.

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Safety

Passenger Safety is always first at Otis. XOP protection devices and electrical safety requirements is strictly accordant with the European code EN115 and other countries' code of practice. Meanwhile, XOP is also comply with the Otis global jobsite safety standard WWJSS.

XOP implements several new features to minimize hazardous potential. The advanced micro processor controlling system can fully monitor the moving walk's performance and promptly eliminate running hazard and reduce maintenance time.

Standard Safety Devices



Optional Safety Devices

Option	Description
5 Dry Contact	5 Dry Contact, provide contact for up/down/emergency stop/fault/running signal to monitor system.
Control Contact For Brake Lining Wear	When the brake linings are worn, the controlling switch is activated ,and it prevents the machine from starting. If this happens, a maintenance job is necessarily carried out for the brake, and the brake lining must be replaced immediately.
The Brake Lifting Monitor	The operational brake control switches prevent starting the machine in case the operational brake is closed.
REM-X	The REM-X, a remote, internet-based monitoring system, uses the most advanced technology to allow travolators within its network to be monitored from a master control center.
Loose Or Broken Handrail Protection Device	If the handrail stretches or breaks, the safety switch will initiate, stopping the travolator.
Handrail Speed Monitoring Device	When the handrail running speed becomes abnormally (too fast or too slow), the sensor for monitoring handrail speed will send a signal to the control system to stop the travolator.
Skirt Panel Safety Protect Device	The safety switches located at upper and lower landing. If an object is blocked between the skirt panel and pallets at the position where safety switch located, and causing skirt panel deflection exceed the limit, then the skirt panel safety switch will initiate stopping travolator.
Skirt Panel Brush	Located on both sides of the skirt panel, the skirt panel brush protects passenger's clothing from getting snagged between the skirt panel and side plate.
Sprinkler System (Non-Standard)	Installed within the travolator body. In case of fire, the sprinkler system automatically initiates within the travolator or building.

Flexibility

XOP can be operated at temperature +4℃ ~+40℃ , and with humidity <85%. It has a great flexibility to cater for different occasions.

The Microcomputer Control System, robust machine, a unique rectangular steel tube frame and the use of automatic refueling system, that makes XOP more suitable for real way station, supermarkets, airports and tourism channel, etc.



Shopping mall



Marketplace



Plaza



Supermarket



Airport

Standard Specification

Inclination	10°/ 11°/ 12°
Rise	1.5-10m
Pallet Width	800/1000mm
Speed	0.5m/s
Arrangement	Single/Side by side/Scissors

Max Transport Capacity

Rating Speed (m/s)	Persons Per Pallet	Pallet Width (mm)	Capacity Person/hour
0.5	3.75	800	6750
	5	1000	9000

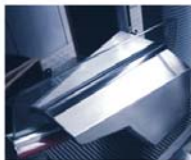
Stylish Design



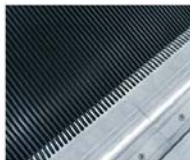
To satisfy the customization from different users, XOP is offering many options to choose. With these stylish designs, while satisfying customer's requirement, it can reach a perfect harmonious combination with the building environment in vicinity. Thus besides bringing passenger a safe and quiet riding, it renders a graceful aesthetical appreciation as well.



Painted steel handrail entry box as standard.



Stainless steel handrail entry box as an option.



Stainless steel is the standard material for pallet.



The delicate traffic flow light with a distinctive instruction.



Various handrail colors meet different environment.



Die-cast aluminum is the optional material for pallet.

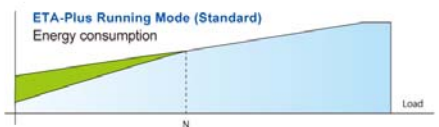
Energy Saving

The XOP is fitted with highly efficient gear systems and machines that are designed to reduce energy consumption, and operational running costs.

The ETA-PLUS energy saving mode uses a Y connection on the motor to dramatically reduce motor heat consumption, and thus could save energy up to 10%, depending on passenger load, which is suitable for most of the application.

The optional variable frequency (VF) drive system enables the travolator to run at different speeds depending on traffic flow.

The VF drive system combines with a sensor that can automatically Detect when a passenger alights the travolator. At the time of detecting traffic the travolator will gradually accelerate to run at normal speed. This feature conserves energy and Reduces running cost significantly.



The ETA-PLUS Running Mode is standard mode of operation used under normal circumstances, which is suitable for most of the application.



The VF Running Mode is generally applicable for low traffic flow locations such as hotels and office buildings. VF mode cuts down on noise levels and can save up to 50% depending on passenger flow.



The Intermittent Running Mode is designed for unique circumstances such as underground passageways where daily passenger flow is inconsistent, with long periods of little or no traffic.

■ Energy-saving



MID Support Detail (Planform)



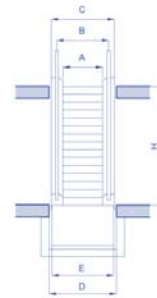
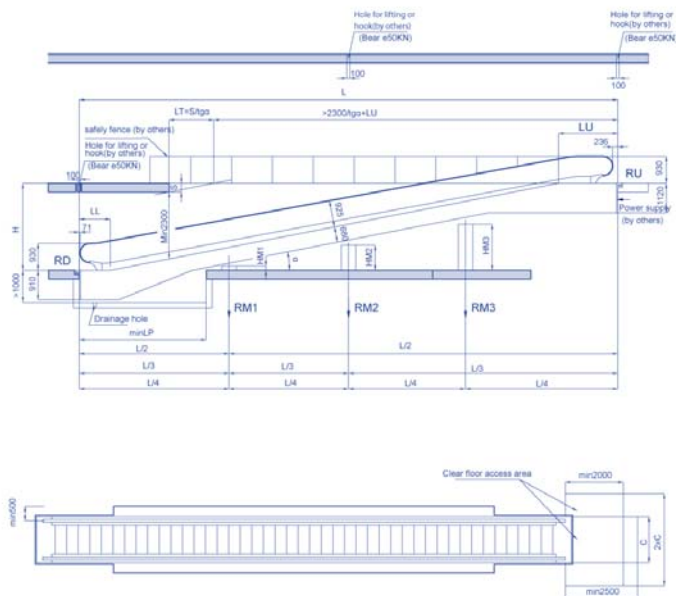
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Angle	SPEED [mm]	Step width [mm]	SPIN [mm]	min LP	LP	LL	LE	B	C	min D	E	K1	K2
10°	1500	800	5.67139+098	4720	1388	1088		1227	1388	1709	1560	15300	30000
11°	800	1500	5.14489+2136	4430	2048	1080	2300[mm]xLL	1437	1380	1600	1360	16300	32000
12°	800	1500	5.14489+2136	4430	2048	1080		1037	1388	1500	1300	15300	32000
	800	1500	5.14489+2136	4430	2048	1080		1037	1388	1500	1360	16300	32000

Reaction to support in KN L in m **(1KN=100kg)**

Step width [mm]	1500				800			
	RD	RL	RM1	RM2	RD	RL	RM1	RM2
Number of supports								
2	4.8L+2	4.8L+4	—	—	4.25L+2	4.25L+8	—	—
3	2.2L+5	2.2L+4	6.1L+2	—	1.9L+8	1.9L+7	5.2L+2	—
4	1.5L+6	1.1L+5	3.4L+5	3.4L+2	1.3L+8	1.3L+7	2.1L+2	3.1L+5

TRAVALATOR XOP H≤6000mm LAYOUT



Done by the owner & builder

1. This drawing is for the escalator which is to be installed, the permitted tolerance is $\pm 15\text{mm}$ $\pm 1\text{mm}$, permitted tolerance of open L is $\pm 15\text{mm}$.
2. When horizontal open L is $\pm 15\text{mm}$, the intermediate support position is in the middle of open L.
3. When horizontal open L is $\pm 15\text{mm}$, the intermediate support position is in the middle of open L.
4. When horizontal open L is $\pm 15\text{mm}$, the intermediate support position is in the middle of open L.
5. Safety protection factor with enough strength which is not less than 1.2m in height should be placed around all the holes of escalator before installation.
6. The pit should be impervious to infiltration of water. And the drainage hole should be in the center of the pit.
7. According to the requirement of the technical parameter sheet, the power supply should be placed in the machine room with protection switch and locked off. The fluctuation of the power supply should be less than 7%. The neutral conductor and the protection conductor should always be separate, and the ground resistance should be no more than 40.
8. When the distance between the centerline of the handrail and any obstacle is less than 50mm, a vertical obstruction of not less than 50mm in height, not preventing any sharp edges should be placed down the handrail decking.
9. The corresponding parameter of machine should refer to GB.
10. The drawing is only for EC-500, EM-500 or EC-500.
11. The drawing is only for EC type.
12. Any special requirement, please contact XOC before signing contract.

ME300 MID support beam by local formula (mm)

H41=1.5 L (kg/m) (local formula)

H42=1.5 L (kg/m) (local formula)

H43=1.5 L (kg/m) (local formula)

H44=1.5 L (kg/m) (local formula)

H45=1.5 L (kg/m) (local formula)

H46=1.5 L (kg/m) (local formula)

H47=1.5 L (kg/m) (local formula)

H48=1.5 L (kg/m) (local formula)

H49=1.5 L (kg/m) (local formula)

H50=1.5 L (kg/m) (local formula)

H51=1.5 L (kg/m) (local formula)

H52=1.5 L (kg/m) (local formula)

H53=1.5 L (kg/m) (local formula)

H54=1.5 L (kg/m) (local formula)

H55=1.5 L (kg/m) (local formula)

H56=1.5 L (kg/m) (local formula)

H57=1.5 L (kg/m) (local formula)

H58=1.5 L (kg/m) (local formula)

H59=1.5 L (kg/m) (local formula)

H60=1.5 L (kg/m) (local formula)

H61=1.5 L (kg/m) (local formula)

H62=1.5 L (kg/m) (local formula)

H63=1.5 L (kg/m) (local formula)

H64=1.5 L (kg/m) (local formula)

H65=1.5 L (kg/m) (local formula)

H66=1.5 L (kg/m) (local formula)

H67=1.5 L (kg/m) (local formula)

H68=1.5 L (kg/m) (local formula)

H69=1.5 L (kg/m) (local formula)

H70=1.5 L (kg/m) (local formula)

H71=1.5 L (kg/m) (local formula)

H72=1.5 L (kg/m) (local formula)

H73=1.5 L (kg/m) (local formula)

H74=1.5 L (kg/m) (local formula)

H75=1.5 L (kg/m) (local formula)

H76=1.5 L (kg/m) (local formula)

H77=1.5 L (kg/m) (local formula)

H78=1.5 L (kg/m) (local formula)

H79=1.5 L (kg/m) (local formula)

H80=1.5 L (kg/m) (local formula)

H81=1.5 L (kg/m) (local formula)

H82=1.5 L (kg/m) (local formula)

H83=1.5 L (kg/m) (local formula)

H84=1.5 L (kg/m) (local formula)

H85=1.5 L (kg/m) (local formula)

H86=1.5 L (kg/m) (local formula)

H87=1.5 L (kg/m) (local formula)

H88=1.5 L (kg/m) (local formula)

H89=1.5 L (kg/m) (local formula)

H90=1.5 L (kg/m) (local formula)

H91=1.5 L (kg/m) (local formula)

H92=1.5 L (kg/m) (local formula)

H93=1.5 L (kg/m) (local formula)

H94=1.5 L (kg/m) (local formula)

H95=1.5 L (kg/m) (local formula)

H96=1.5 L (kg/m) (local formula)

H97=1.5 L (kg/m) (local formula)

H98=1.5 L (kg/m) (local formula)

H99=1.5 L (kg/m) (local formula)

H100=1.5 L (kg/m) (local formula)

NOTE: DO NOT SCALE THIS DRAWING, UNLESS OTHERWISE STATED

Angle °	SPEED (m/s)	Step width (mm)	SPN (mm)	min LP	LU	LL	LS	B	C	min D	E	K1	K2	K3
18°	0.5	1000	5.6713+3087	5290	3022	1075	2200kg=LU	1227	1390	1750	1560	15300	20000	45000
11°	0.5	1000	5.1440+2155	4950	2580	1075	2200kg=LU	1227	1390	1750	1560	15300	20000	45000
12°	0.5	1000	4.7040+3210	4650	2135	1075	2200kg=LU	1227	1390	1750	1560	15300	20000	45000

Reaction to support in KN L in m (1KN=100kg)

Step width [mm]	1000					800				
Number of supports	PD	PU	PM1	PM2	PM3	PD	PU	PM1	PM2	PM3
3	—	—	—	—	—	2.0L+3.5	2.0L+11.5	5.3L+2.7	—	—
4	1.6L+3.5	1.6L+11	3.5L+3.2	3.5L+3.5	—	1.6L+3.5	1.6L+11	3.1L+3.2	3.1L+3.5	—
5	1.1L+3.5	1.1L+11	2.6L+2	2.6L+3.2	2.6L+4.2	1.6L+3.5	1.6L+11	2.6L+2	2.6L+3.2	2.6L+4.4

TRAVALATOR XOP 6000<H≤8000mm LAYOUT



- 3 This always refers to the elevator which has $m \geq 2$ dm and the permitted tolerance is $\pm 150\text{mm}$ or $\pm 15\text{mm}$, permitted tolerance is $0.1 \pm 0.1 \pm 0.15\text{mm}$
- 2 When horizontal spans $L \geq 4\text{m}$, and 4 intermediate supports the position is in middle of span
- 3 When horizontal spans $L \geq 4\text{m}$, and 2 intermediate supports, bearing should be proportionally distributed
- 4 Safety protection barrier with enough strength which is not less than 1.2m in height should be placed around all the balconies of reactor before installation
- 5 The pit should be impervious to infiltration of water. And the drainage hole should be in the corner of the pit
- 6 According to the requirements of the technical parameter sheet, the power supply should be placed in the machine room with protection shield and locked off. The fluctuation of the power supply should be less than $\pm 1\%$. The neutral conductor and the protection conductor should always be separate, and the ground resistance should be no more than 4 Ω
- 7 When the distance between the cantilever of the handrail and any obstacle is less than 50 mm, a vertical obstruction of not less than 50 mm in height, not presenting any sharp cutting edges should be placed above the handrail side
- 8 The corresponding parameter of machine should refer to SGB
- 9 The drawing is only for reference, SGB or EC-40
- 10 The drawing is only for reference
- 11 Any special requirement, please contact KCCG before signing contract

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Angle α	SPEED (km/s)	Step width (km/s)	SPIN (km/s)	inc PL	LI	LU	LS	B	G	min D	E	K1	K2
10°		1000						1227	1580	1700	1560	13000	30000
		800	5.8712H+4215	5989	1989	2318		1237	1580	1500	1470	14200	22600
11°	0.5	1000	5.1460H+4275	5660	2046	2328	2300H+LI	1237	1550	1700	1560	15000	30000
		800						1237	1580	1500	1470	14200	22600
12°		1000	4.7040H+4480	5375	2066	2345		1237	1580	1700	1560	15000	30000
		800						1237	1580	1500	1470	14200	22600

Reaction to support in KN L in m

(1KN=100kg)

step width (mm)	1000								800				
Number of supports	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL
2	4.3E+0.2	4.3E+0.4					4.25E+0.2	4.25E+0.4					
3	2.2E+0.5	2.2E+0.6	6.1E+0.2				1.9E+0.4	1.9E+0.7	5.2E+0.2				
4	1.3E+0.6	1.5E+0.5	3.6E+0.2	3.6E+0.5	3.3E+0.6	3.3E+0.9	1.3E+0.7	3.1E+0.2	3.1E+0.6	2.3E+0.4	2.3E+0.6	2.3E+0.8	2.3E+0.8

TRAVALATOR XOP-NI H≤6000mm LAYOUT