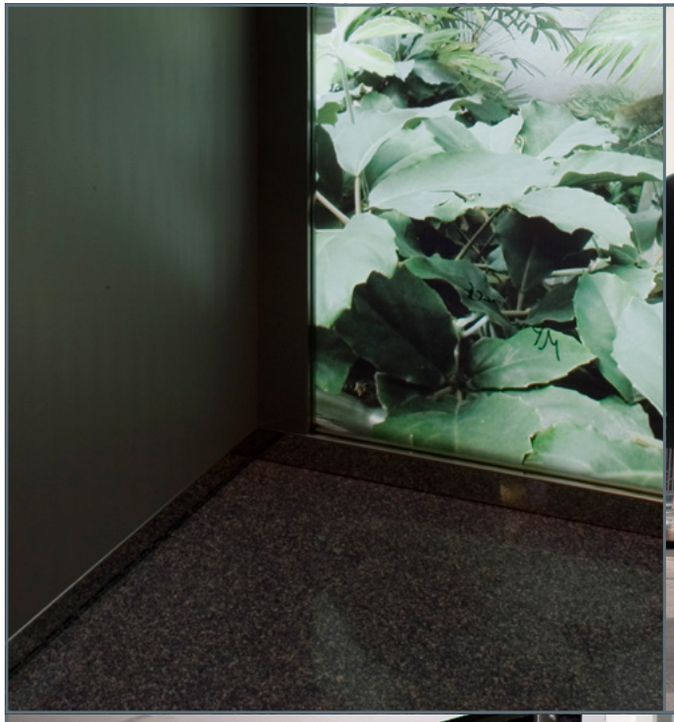



San Bernardo
San Bernardo
Metro
Metro
San Bernardo

MPGO! Evolution

Eco-design

The highest performance in the range

Energy efficiency

Innovative, versatile and highly eco-efficient. That's MPGO! Evolution with gearless technology, the most advanced type in the MPGO! range.

The MPGO! offers lifts for residential buildings, hospitals, offices and public buildings. MPGO! Evolution is a lift with the highest level of energy efficiency. This is vouched for through its LEVEL A CERTIFICATION in the VDI energy classification system.

Maximum efficiency accessible for all

PASSENGER LIFTS

MpGO! Evolution

STANDARD EN 81-20/50

FEATURES

TYPE:	Gearless Lift
SUSPENSION:	2:1
LOAD:	320 kg to 1600 kg
CAPACITY:	4 to 21 persons
SPEED:	1.0 - 1.6 m/s (Optional 2,5 m/s from 8 to 21 persons)
TRAVEL RANGE:	Up to 50 m
STOPS:	16 stops
ENTRANCES	Single entrance and double 180° entrance
SERIES:	"S" Machine room less

CAR

MODEL:	D-100 with curtain photocell
	Jamb arrow direction
	(Optional: other car models, see catalogues)
EXTERIOR DIMENSIONS:	See table
HEIGHT:	2100 mm
	(Optional: other heights)

CAR DOORS

TYPE:	TYPE: Automatic: 2 side-opening panels. 3VF
	(Optional: other models)
FINISH:	Stainless steel (XO2)
DIMENSIONS:	See table x 2000 mm
	(Optional: other heights)

LANDING DOORS

TYPE:	Automatic: 2 side-opening panels
	(Optional: other models)
FINISH:	Epoxy RAL 7044
DIMENSIONS:	See table x 2000 mm
	(Optional: other heights)
FIRE CLASSIFICATION ACCORDING TO EN 81-51:	E120, EW60
	(Optional: other classifications)

SHAFT

DIMENSIONS:	See table
PIT:	See table
HEADROOM:	See table

CAR OPERATING PANEL

MODEL:	Full-height
FINISH:	Plastic coated steel
	(Optional: Stainless steel XO2)
PUHSBUTTON:	Mechanical, polycarbonate plastic, fireproof pushbutton lit up with Leds
	(Optional: Mechanical, stainless steel pushbutton with halo lighting)
CAR INDICATOR:	2 digit display with Leds made up of 7 segments
	(Optional LCD and TFT display)
SAFETY:	Emergency light and telephone

LANDING OPERATING PANEL

MODEL:	P001, door frames
FINISH:	Stainless steel plate (X02)
PUHSBUTTON:	Mechanical, polycarbonate plastic, fireproof pushbutton lit up with Leds
	(Optional: Mechanical, stainless steel pushbutton with halo lighting)
ENGRAVING:	Black logo (done with laser)

CONTROLLER

TYPE:	Via Serie controller and DSP inverter. Down collective or pick-up
CONTROLLER CABINET:	"S" series: On the highest floor. (Optional: cabinet may be located on any floor)
	Epoxy finish

ELECTRIC INSTALLATION

	Pre-assembled with "Plug & Play" connectors

MACHINE

	Gearless. Permanent maGO magnets With thermal safety cover for motor. Rescue operation: Automatic rescue in addition to emergency electrical controller

BUFFERS

	Made from polyurethane with a metal pedestal included

GUIDE RAILS

	Cold-Drawn / Machined
	In accordance with ISO 7465
	Bracketed

FIXINGS

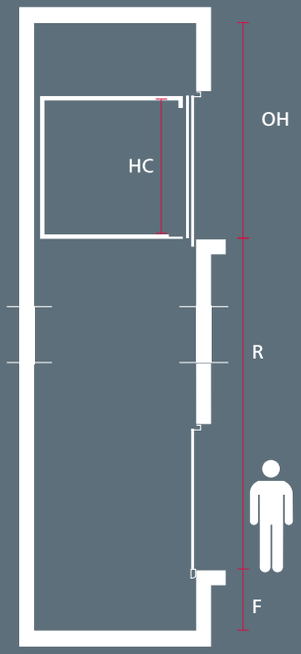
	Fixing brackets and plugs for enclosure

ELECTRICAL FEATURES

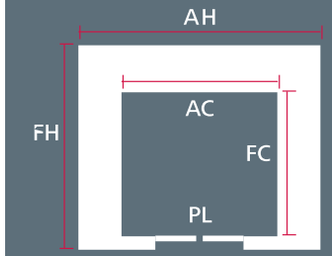
POWER SUPPLY VOLTAGE:	380 V three-phase
	(Optional: 220 V, 400 V, 415 V three-phase)
LIGHTING VOLTAGE:	220 V
FREQUENCY:	50 Hz
	(Optional: 60 Hz)

NOTE: Specifications correspond to the basic rate model.

DIAGRAM



STANDARD ENTRANCE



DOUBLE 180° ENTRANCE

Eco-efficient (Level A) | Gearless | 4 to 21 persons | 320 to 1600 kg | Machine roomless

MPGO! Evolution

	S SERIES															
	MP410GO!	MP510GO!	MP610GO!	MP616GO!	MP810GO!	MP816GO!	MP1010GO!	MP1016GO!	MP1310GO!	MP1316GO!	MP1510GO!	MP1516GO!	MP1710GO!	MP1716GO!	MP2110GO!	MP2116GO!
Capacity (persons)	4	5	6	6	8	8	10	10	13	13	15	15	17	17	21	21
Speed (m/s)	1	1	1	1,6	1	1,6	1	1,6	1	1,6	1	1,6	1	1,6	1	1,6
Starts per hour	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180
Power (HP / kW)	4 / 3	4 / 3	5,4 / 4	10,8 / 8	6,75 / 5	10,8 / 8	8,1 / 6	17,3 / 12,8	9,5 / 7	17,3 / 12,8	10,8 / 8	17,3 / 12,8	10,2 / 7,6	17,7 / 13,1	19 / 14,2	27,7 / 20,6
Current rating (A)	9,1	9,6	11,2	22,8	14,1	22,8	17,3	34,9	17,6	34,9	21,3	31	29,7	33	42	53,5
Q payload capacity (kg)	320	375	450 / 480	450 / 480	630	630	750 / 800	750 / 800	1000	1000	1125	1125	1275	1275	1600	1600
PL Clear entrance (mm)	700	700	800	800	900	900	900	900	900	900	1000	1000	1000	1000	1100	1100
AC Car exterior width (mm)	800	950	1000	1000	1100	1100	1200	1200	1100	1100	1200	1200	1200	1200	1400	1400
FC Car exterior depth (mm)	1100	1050	1250	1250	1400	1400	1500	1500	2100	2100	2150	2150	2300	2300	2400	2400
HC Car useful height (mm)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
AH shaft width (mm)	1350	1450	1500	1500	1600	1600	1700	1750	1600	1650	1700	1750	1800	1800	2000	2000
FH shaft depth (mm)	1350	1350	1500	1600	1650	1650	1750	1750	2350	2350	2400	2400	2700	2700	2750	2750
F Pit (mm)	1025	1025	1025	1155	1025	1155	1025	1300	1025	1400	1025	1400	1200	1400	1200	1400
OH Headroom (mm)	4400	4400	3400	3600	3400	3600	3400	3650	3400	3650	3400	3650	3400	3650	3400	3650
No. of ropes and diameter (mm)	4 x 6,5	5 x 6,5	5 x 6,5	5 x 6,5	6 x 6,5	6 x 6,5	7 x 6,5	7 x 6,5	8 x 6,5	8 x 6,5	9 x 6,5	9 x 6,5	9 x 6,5	9 x 6,5	9 x 8	9 x 8
Distance between brackets (mm)	1500 / 3000	1500 / 3000	1500 / 3000	3000	1500 / 3000	3000	1500 / 3000	3000	1500 / 3000	3000	1500 / 3000	3000	1500 / 3000	3000	1500 / 3000	3000
Car guide rail (sections of 5 m)	70 / 65 / 9	70 / 65 / 9	70 / 65 / 9	90 / 75 / 16	70 / 65 / 9	90 / 75 / 16	70 / 70 / 9	90 / 75 / 16	70 / 70 / 9	90 / 75 / 16	89 / 62 / 16	90 / 75 / 16	120 / 76 / 9	120 / 76 / 9	90 / 75 / 16	125 / 82 / 16
Counterweight guide rail (sections of 5 m)	50 / 50 / 5	50 / 50 / 5	50 / 50 / 5	70 / 70 / 9	50 / 50 / 5	70 / 70 / 9	65 / 54 / 8	70 / 70 / 9	70 / 70 / 9	70 / 70 / 9	70 / 70 / 9	70 / 70 / 9	70 / 70 / 9	70 / 70 / 9	65 / 54 / 8	70 / 70 / 9
Suspension	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1	2:1
Shaft enclosure	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete
Design dossier	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 1000	ACIN3 2010	AC2050-18	ACIN3 2010	AC2050-18	AC2050-18	AC2050-18	AC2050-18	AC2050-18

- Fixings every 1500 mm: V=1,0 m/s. Optional: fixing brackets every 3000 mm.
- Fixings every 3000 mm: V=1,6 m/s.
- Start-up current = 1.8 * Rated current.
- Height of doors 2000 mm.
- The number of ropes depends on the total weight of the lift.

PRODUCT OPTIONS:

- Reduced overhead of up to 2900 mm. In overheads less than 3400 through to 2900 mm, the level of safety required in EN 81-21 For 4 passengers, consult about feasability.
- Reduced pit of up to 695 mm. In pits less than 1050 through to 695 mm, the level of safety required in EN 81-21. For 4 passengers, consult about feasability.
- Adaptable to singl-phase mains up to 6 passengers and Rated speed 0.5 m/s.
- Safety gear on counterweight for all madels. From 4 to 6 passengers, consult about feasability.
- All models can be adapted to modular structures. Consult about feasability.
- Optional: V=2,5 m/s. Please ask us for more information..

NOTE: The values included in this table correspond to pre-established conditions and may be modified, according to the specific characteristics of each installation.

LEGEND AH Shaft width | FH Shaft depth | AC Car width | HC Car height | FC Car depth | OH Headroom | F Pit | PL Standard clear entrance | R Travel range

Comfort

you can see and feel it...

The level of COMFORT in a lift can be felt both by those who use it, as well as by the residents of a building.

Let's see the parameters which are used to measure comfort, which parameters are measured, the scopes of measurement, how it is regulated and the values offered by MPGO! Evolution.

MEASUREMENT PARAMETERS

The comfort of a lift, both for those who use it as well as for the residents of a building, can be measured using the following parameters:

NOISE
Noise not desired by the receiver, this generally being unpleasant.
This is measured in dB (A), a unit of measurement which represents how the human ear filters the noise level.

VIBRATIONS
Oscillations undesired by the receiver, these generally being unpleasant.
These are mainly transmitted to the car in two ways: Vertically, i.e. through the components which are between the car and the machine (electric ropes) and horizontally, i.e. between the car and guide rails (guide shoes).
These are measured in milli-g (1 milli-g is equivalent to 0.01 m/s^2).

SCOPES OF MEASUREMENT

During the operating of the lift, the noise and vibration levels should be taken into account in four outstanding areas for the lift's comfort:

- Inside the car: where the comfort of the trip is measured (1)
- Areas adjacent to the shaft (for example, the room in the apartment which shares a wall with the lift) (2)
- Lift shaft (3)
- Top floor (where the machine room and controller are located) (4)

APPLICABLE STANDARDS:

- VDI 2566-2:2004 Acoustic design for machine room less lifts. (German Standard)
- ISO 18738:2003 - Lifts (elevators) - Measurement of lift ride quality

CURRENT LEGISLATION, in addition to specific legislation for lifts:

- Technical Building Code. DB-HR sound protection
- Spanish Law on Noise, RD (Royal Decree) 1367/2007
- Regional decrees and municipal regulations

Car interior (quality of ride) 1

The ride quality for the passenger in the lift is based on sensations he/she perceives during the trip inside the car. Therefore, the parameters which most affect passengers in this aspect are:

Jerk: A scalar magnitude which expresses the changes in acceleration per unit of time. It represents the "pulling" sensation which is felt when the lift moves. It is measured in the units of the International System (m/s^3).

Sound: The sound level during the operating of the lift must be low enough in order to be able to hold a conversation, but loud enough so that passengers know the lift is moving. It is measured in dB (A).

Vibrations: Both vertical and horizontal vibrations.

VALUES OFFERED BY MP GO! EVOLUTION:
Car sound level: Medium level: 50 ± 3 dB (A)
Jerk ≤ 1.5 m/s^3
Vibrations: · Vertical: ISO A95 ≤ 15 ± 5 milli-g's · Horizontal: ISO A95 ≤ 8 ± 1 milli-g's

Areas adjacent to the shaft 2

The parameter with which the comfort of the lift is measured is its SOUND LEVEL.

The **standard VDI 2566-2:2004** establishes a maximum sound level of 30 dBA.

The **Spanish Law on Noise, RD (Royal Decree) 1367/2007**, establishes a maximum sound level of 30 dBA if they are protected areas (living rooms and bedrooms) and 35 dBA if the areas are not protected.

The **Spanish Technical Building Code (TBC)** sets out that construction must guarantee the following insulation:

Acoustic insulation between an installation area (lift shaft) and a protected area (living room, bedroom, etc.) must be at least **55 dBA**.

Acoustic insulation between an installation area (lift shaft) and a non-protected area (stairway, kitchen, etc.) must be at least 45 dBA.

A proper installation of MP GO! Evolution ensures compliance with established levels.

Lift shaft 3

The parameter with which the comfort of the lift is measured is its SOUND LEVEL.

Standard VDI 2566-2:2004 establishes a maximum noise level (Max. LAF) of 75 dBA.

The values offered by MP GO! Evolution are:
Medium level: LpAeq = 65 dBA.
Maximum level: LpAmax = 68 dBA.

Top floor 4

The parameter with which the comfort of the lift is measured is its SOUND LEVEL.

Standard VDI 2566-2:2004 establishes a maximum noise level (Max. LAF) for access doors of 65 dBA.