





## 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**

**FEATURES**

TYPE:	Gearless Lift
SUSPENSION:	2:1
LOAD:	450 kg. to 1125 kg
CAPACITY:	6 to 15 persons
SPEED:	1 - 1.6 m/s.
TRAVEL RANGE:	Up to 48 metres
STOPS:	16 stops
ENTRANCES	Single entrance and double 180° entrance
SERIES:	"S" Without a machine room

**CAR**

MODEL:	D100 with single beam photocell (Optional: curtain photocell) Jamb arrow direction. Optional: other car models, see catalogues)
EXTERIOR DIMENSIONS:	See table
HEIGHT:	2,100 mm. (Optional: other heights)

**CAR DOORS**

TYPE:	TYPE: Automatic: 2 side-opening panels. VVVF (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:	E120 (800-1000) PF30 (1300) (Optional: other classifications)

**SHAFT**

DIMENSIONS:	See table
PIT:	See table

**CONTROL 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:	LCD display (Optional 2 digit display with Leds made up of 7 segments)
SAFETY:	Emergency light and telephone

**FLOOR OPERATING PANEL**

MODEL:	P001, door frames
FINISH:	Stainless steel plate (XO2)
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:	V5 controller and inverter. Down collective or universal. (Optional: Microbasic)
CONTROLLER CABINET:	On the highest floor for "S" series. Epoxy finish (Optional: cabinet may be located on any floor)

**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.

**COLD-DRAWN / MACHINED**

COLD-DRAWN / MACHINED	In accordance with ISO 7465 Bracketed
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**FIXINGS**

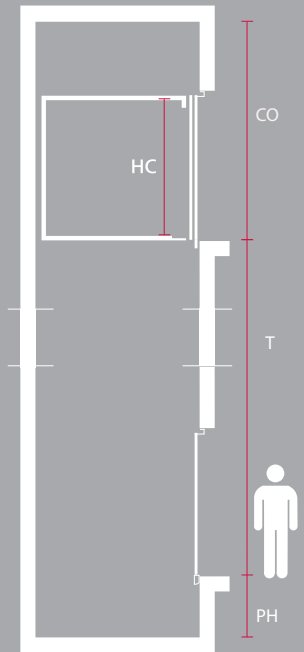
Fixing brackets and plugs for enclosure.

**POWER**

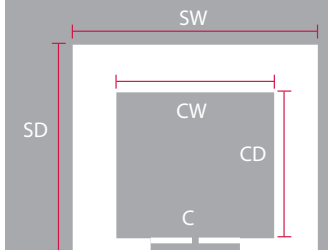
POWER SUPPLY VOLTAGE:	380 v three-phase (Optional: 220 v, 400 v, 415 v three-phase)
LIGHTING VOLTAGE:	220 v
FREQUENCY:	50 Hz (Optional: 60Hz)

(\*) NOTE: Specifications correspond to the basic rate model.

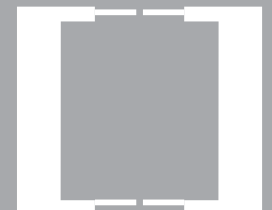
DIAGRAM



STANDARD ENTRANCE



DOUBLE 180° ENTRANCE





	S SERIES									
	MP 610GO!	MP 616GO!	MP 810GO!	MP 816GO!	MP 1010GO!	MP 1016GO!	MP 1310GO!	MP 1316GO!	MP 1510GO!	MP 1516GO!
Capacity (persons)	6	6	8	8	10	10	13 (*)	13 (*)	15 (*)	15 (*)
Speed (m/s)	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
Power (hp/kW)	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
Nominal Intensity (A)	11.6	22.2	14.9	22.2	16.5	34.2	18.9	34.2	18.9	34.2
Q capacity (kg)	450/480	450/480	600/630	600/630	750/800	750/800	1000	1000	1125	1125
Clearance (mm)	800	800	800	800	900	900	900	900	1000	1000
Car width (mm)	1000	1000	1100	1100	1200	1200	1100	1100	1200	1200
Car depth (mm)	1250	1250	1400	1400	1500	1500	2100	2100	2150	2150
Height (mm)	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100
Shaft width (mm)	1500	1500	1600	1600	1700	1700	1600	1600	1700	1700
Shaft Depth (mm)	1500	1500	1650	1650	1750	1750	2350	2350	2400	2400
PH pit (mm)	1025	1155	1025	1155	1025	1155	1025	1155	1025	1155
OH Headroom (mm)	3400	3600	3400	3600	3400	3600	3400	3600	3400	3600
No. ropes and diameter (mm)	5x6.5	5x6.5	6x6.5	6x6.5	7x6.5	7x6.5	8x6.5	8x6.5	9x6.5	9x6.5
D.B.G. Distance between guide rails (mm)	1050/1100	1050/1100	1150/1200	1150/1200	1250/1300	1250/1300	1150/1200	1150/1200	1250/1300	1250/1300
Distance between brackets (mm)	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	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
Counterweight guide rail (sections of 5 m)	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
Suspension	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
Design dossier	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010	ACIN3 2010

(\*) NOTE: MP PASSENGER range series D and C car interior designs. For the MP GLASS range, counterweight safety gear model MPGO! Mega.

- Fixings every 1500 mm: MP610, MP810, MP1010, MP1310, MP1510.
- Fixings every 3000 mm: MP616, MP816, MP1016, MP1316, MP1516.
- Start-up intensity = 1.8 \* Nominal intensity.
- Height of doors 2000 mm.
- The number of ropes depends on the total weight of the lift.
- Headroom 3400 mm and pit 1200 mm, in accordance with EN81-1, without applying compensatory safety measures (rubber floor and s = 1 m/s).
- The minimum shaft width is included in the table. The minimum recommended shaft width is shown in the drawings. Recommended shaft width = minimum SW + 100 mm.

PRODUCT OPTIONS:

- Reduced overhead of up to 3000 mm. In overheads less than 3400 through to 3000 mm, the level of safety required in 81-21 "New lift in existing building" is applied.
- Reduced pit of up to 695 mm. In pits less than 1050 through to 695 mm, the level of safety required in 81-21 "New lift in existing building" is applied.



# 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<sup>2</sup>).





### 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:

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Inside the car: where the comfort of the trip is measured (1)

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Areas adjacent to the shaft (for example, the room in the apartment which shares a wall with the lift) (2)

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Lift shaft (3)

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Top floor (where the machine room and controller are located) (4)

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### APPLICABLE STANDARDS:

VDI 2566-2:2004 Acoustic design for machine room less lifts. (German Standard)

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ISO 18738:2003 - Lifts (elevators) - Measurement of lift ride quality

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### CURRENT LEGISLATION, in addition to specific legislation for lifts:

Technical Building Code. DB-HR sound protection

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Spanish Law on Noise, RD (Royal Decree) 1367/2007

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Regional decrees and municipal regulations

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## Car interior (quality of ride) <sup>1</sup>

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.

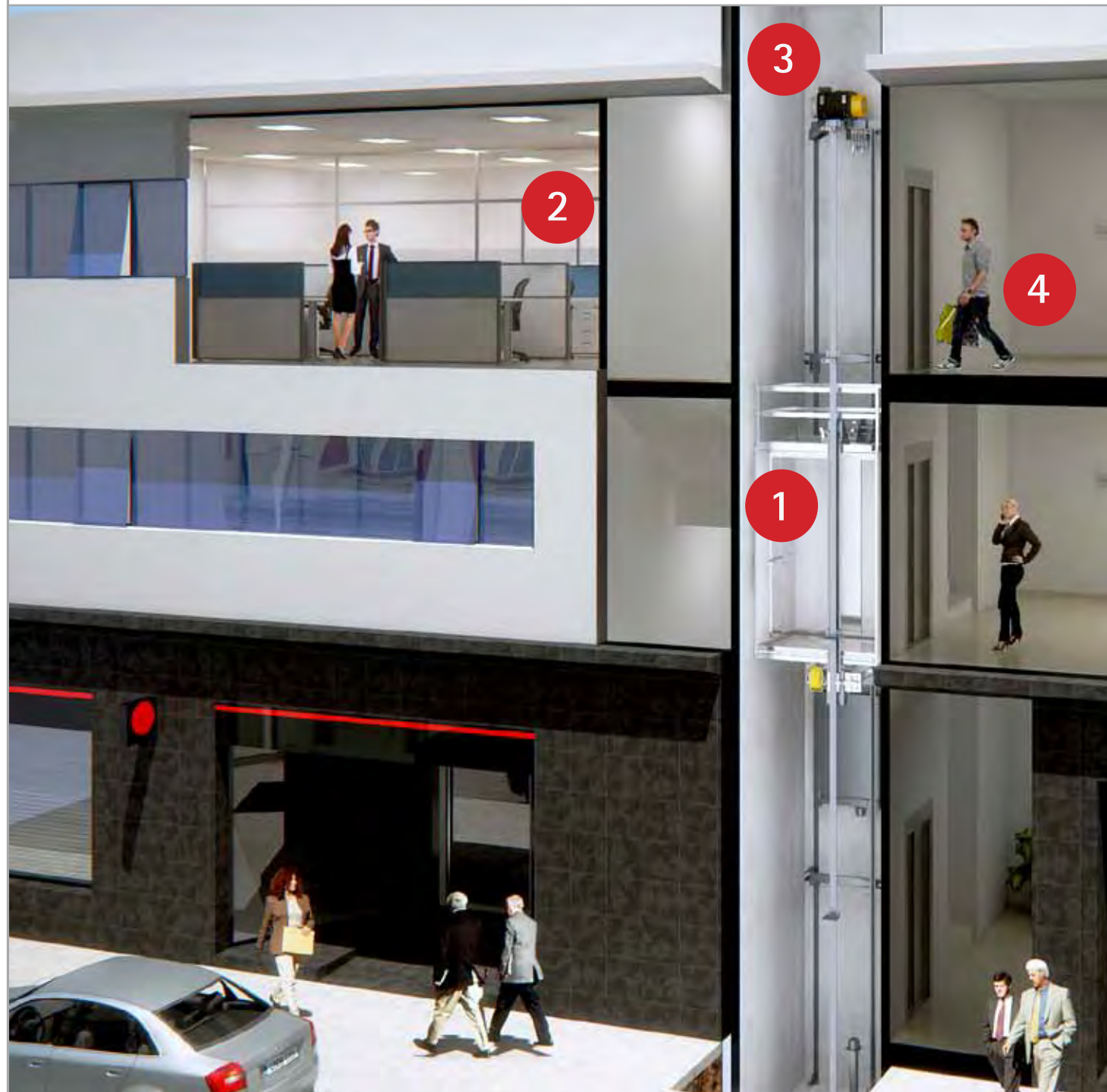
### VALUES OFFERED BY MP GO! EVOLUTION:

Car sound level: Medium level:  $50 \pm 3$  dB (A)

Jerk  $\leq 1.5$   $m/s^3$

Vibrations:

- Vertical: ISO A95  $\leq 15 \pm 5$  milli-g's
- Horizontal: ISO A95  $\leq 8 \pm 1$  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:  $L_{pAeq} = 65$  dBA.  
Maximum level:  $L_{pAmax} = 68$  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.

Los valores que ofrece MP GO! Evolution son:  $L_{pAeq} = 62$  dBA.

