

EvoDrive AUTOMATIC INTERNAL DOOR

MOTION4
DOORS



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MOTION4 is a company specialized in the development, design and production of automation systems based on linear motor technology for home, residential and commercial use, as well as custom made solutions for different industries.

Based in Barcelona, Spain, Linear Motor Applications, S.L. (LMA) was created in 2008 by partners with more than 25 years of experience in the automatic door industry.

With the strong belief that in the near future the automation of doors, windows and other similar applications would be based in this advanced technology, we have created five different brands for specific segments: doors, windows, curtains, industrial and contract.

Linear motors have proved to be the most efficient way to automate elements with horizontal movement, reducing traditional automation systems to a small compact unit, minimising maintenance by having fewer mechanical components.

What today represents a manual effort, we transform it to an automatic movement

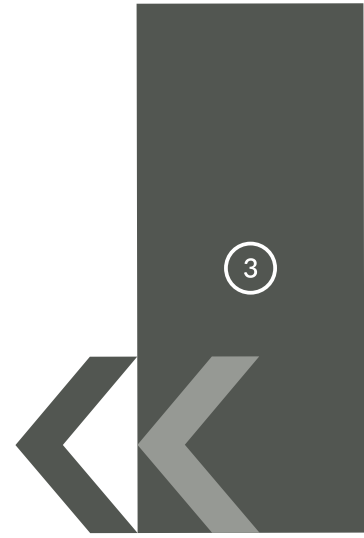
MOTION4
DOORS

MOTION4
WINDOWS

MOTION4
CURTAINS

MOTION4
CONTRACT

MOTION4
INDUSTRIAL



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Motion in style



5

Space saving solutions

6

Convenience



ABOUT THE Spice
Love of THE Wine You're WITH
WINE IS BOTTLED Poetry

MENU

Filet of Barbarie Duckbreast in Madeira
gravy with
pommes-gratin-dauphinoise and fine
vegetables
Saddle of salt-meadow-lamb in lem-
on-thyme-sauce with noisette potatoe
and vegetables ragout
In tomatoes braised knuckle of lamb

KITCHEN

Desserts
Crème Brûlée with Bourbon-Vanilla and fresh berries
Parfait Charlotte
Lime-Sorbet with fresh fruits
Pralinee-Nougat-Mousse

NACK BISTRO
HOME
BON APPETIT

ALME
Slow

Design

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EvoDrive automatic drive

A Linear motor is an electrically-powered motor that instead of rotating it produces a linear force along its length.

Thrust is caused through the interaction of magnetic fields within the motors, by magnetic attraction and repulsion.

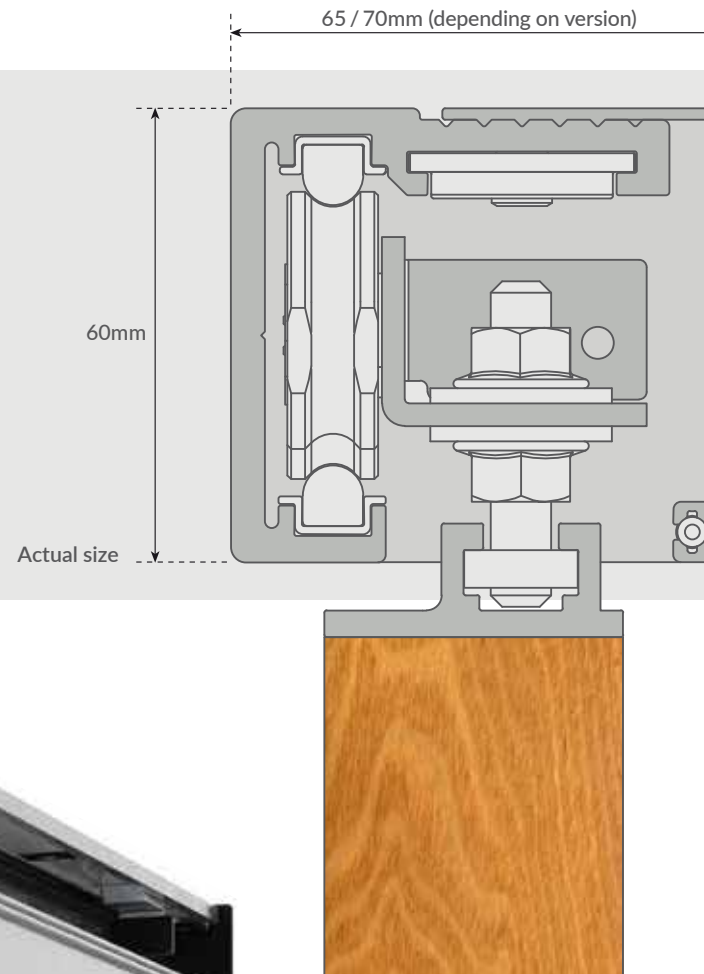
Unlike traditional drive units, a linear motor drive does not have pulleys, belts, arms and other mechanical elements, resulting in a very compact and stylish housing of 60 x 65 mm, very appropriate for indoor use.

The installation process is simplified, while maintenance costs reduce dramatically compared to traditional technologies using DC motors.

1. POWER SUPPLY: 230 V AC
2. INTERCONNECTION BOX
3. LEAF CARRIERS
4. THREE PHASE AC MOTOR
5. MAGNETS
6. MOTOR DRIVER
7. DIP SWITCHES
8. ALUMINIUM HOUSING
9. COVER
10. SIDE COVERS

Bluetooth™

Communication between the electronic control panel ② and motor driver ⑥ is via Wireless Bluetooth, to reduce installation times and problems arising from poor cable connections.



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Possible applications

- HOTELS
- PRIVATE HOMES
- OFFICE PARTITIONS
- HOSPITALS
- SHELTERED HOUSING
- RESTAURANTS
- AIRPORTS
- SMOKING ROOMS



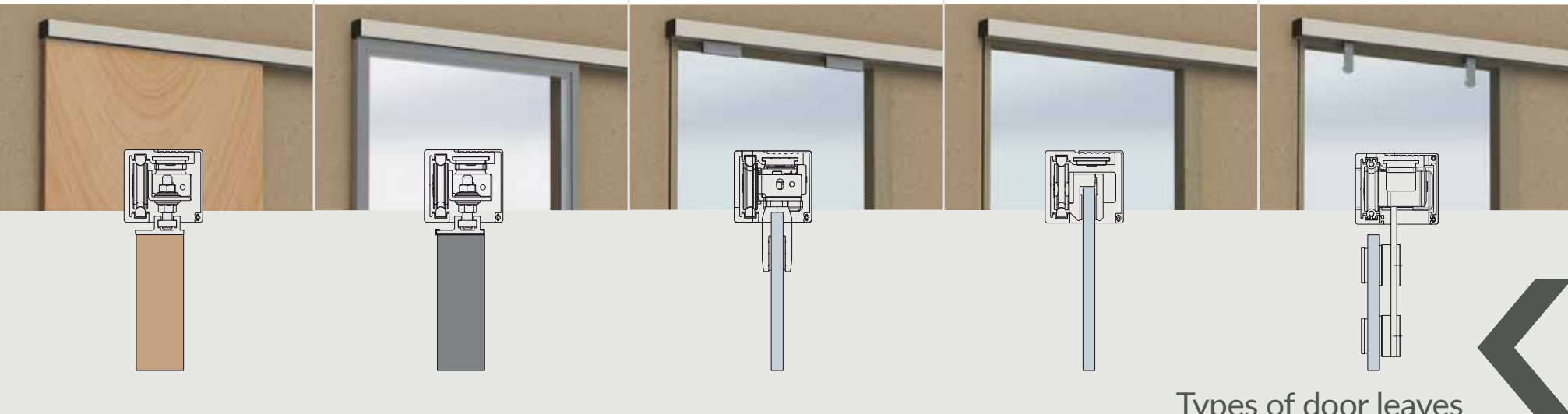
1. 40mm wooden leaves

2. Aluminium leaves

3. Glass leaves
(8 to 12mm) with top clamps

4. Full glass leaves
(8 to 12mm)

5. Glass leaves
(8 to 12mm) with TWINS adaptor

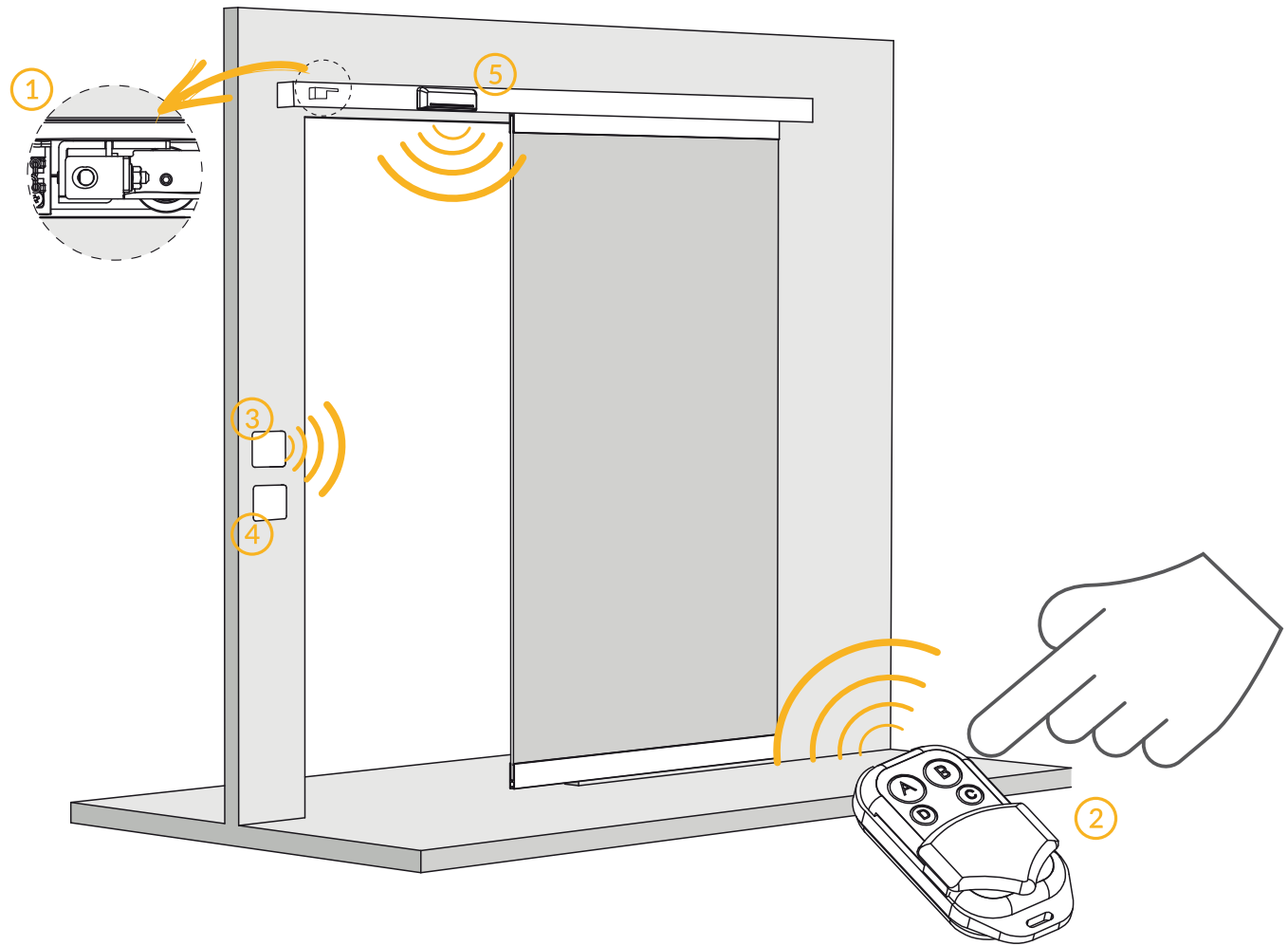


Types of door leaves

Advantages of the EvoDrive

Innovative A step ahead of all other known technologies • **Elegant and stylish** Compact size • **Quick to install** Real “Plug-n-play”

Reliable Less mechanical parts, less wear • **Easy to maintain** Less mechanical elements: no pulleys, belts or clamps... • **Safe and durable** Complies with EN16005



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Accessories



- 1. Automatic lock**
24 V DC power supply
Two models available:
fail-safe and fail secure



- 2. Remote control**
Four operating modes: Auto / Open / Close / Exit Only
Receiver incorporated in the main control board
Pocked size transmitter - 12V DC battery



- 3. Touch-less switch**
The door is activated by
simply approaching your
hand or elbow



- 4. Push button**
Press to activate the door.
Optionally, press to open, and
press a second time to close



- 5. Infrared sensor**
When the sensor detects
presence or movement,
the door activates

Main technical features

- Compact aluminium housing: only **60x65/70mm** (depending on version)
- Minimum clear opening: **750mm** Drive length: **1.550mm**
- Maximum clear opening: **1.400mm** Drive length: **2.850mm**
- Leaf weight up to **80Kg**
- Adjustable opening speed: **200 to 800mm/s**
- Adjustable acceleration and braking curves: **200 to 800mm/s²**
- Low operating noise: **<50dB**
- Power supply: **230/110V AC 50-60Hz**
- Power consumption:
 - In operation **80W**
 - Peaks (0,2 sec) **150W**
 - Stand-by **5W**

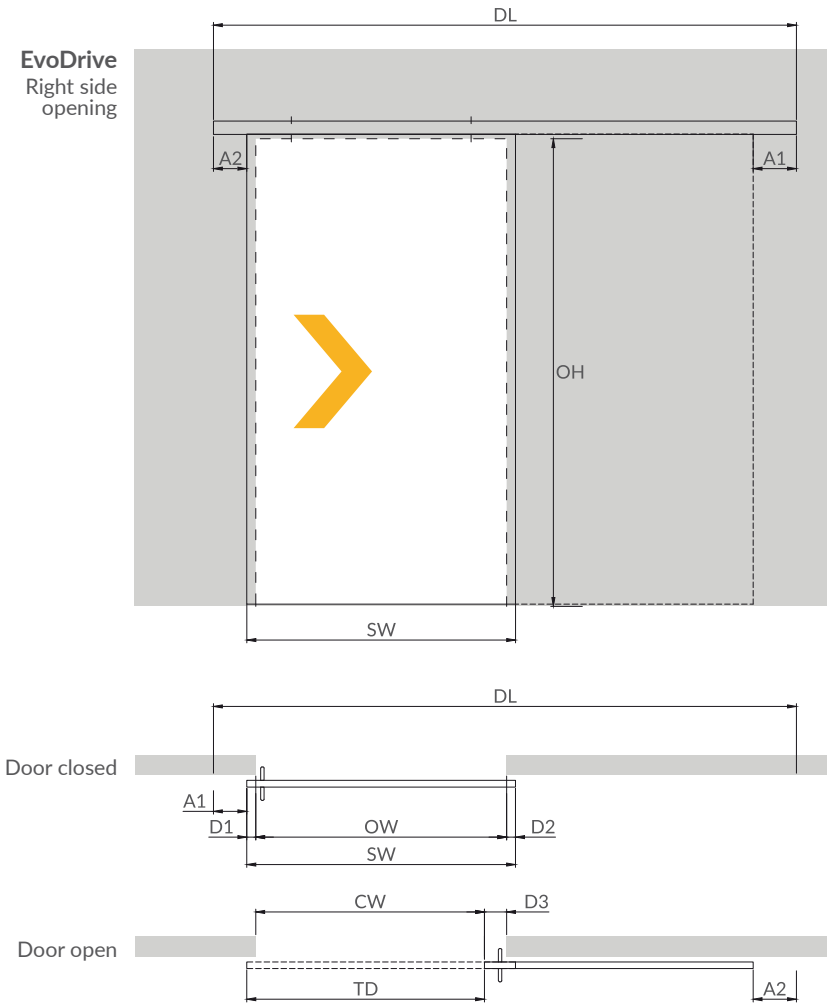
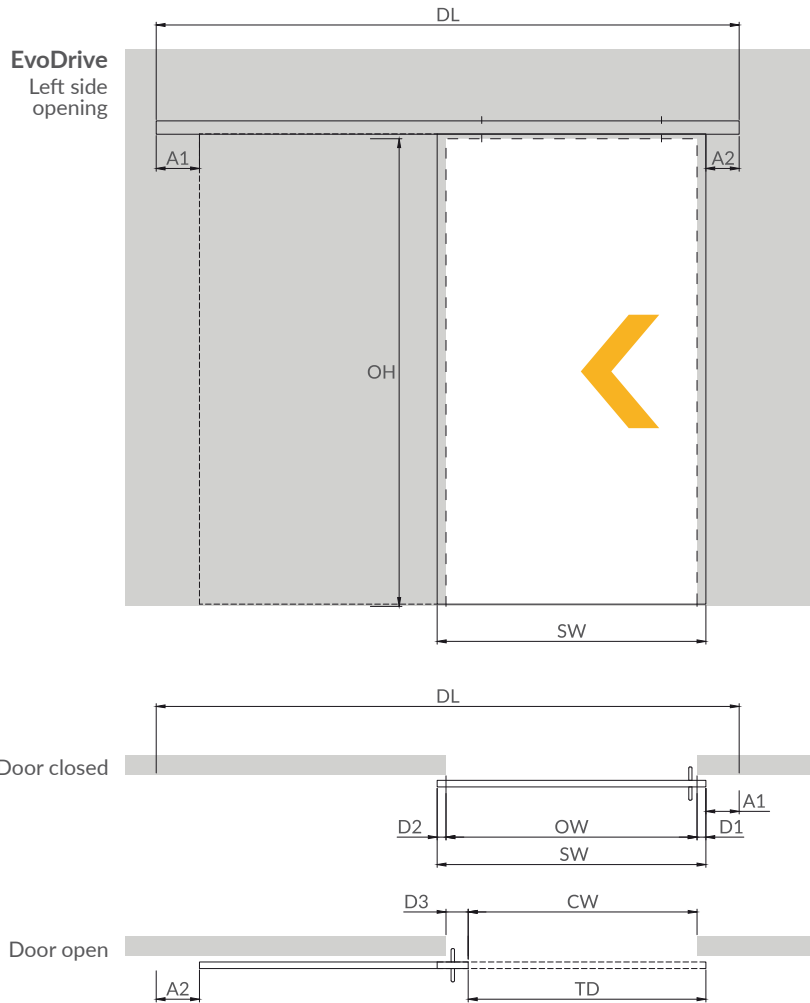
Motor technical features

- Electric three phase AC motor type LSMPM - Linear Synchronous Motor with Permanent Magnets
- Tension: 24V DC (standard); 36 - 48V DC (under request)
- Peak current: 5A
- Operating current: 3A
- Motor driver
 - Magnetic position feedback with 3 hall cells.
 - Motion control by means of a driver with field oriented control (FOC)
 - Wireless communication via Bluetooth

Control panel technical features

- Operated by Microcontroller (MCU)
- Wireless communication via Bluetooth
- 5 operating modes
 - Automatic
 - Open
 - Closed or Closed/Lock (with optional auto lock)
 - Exit Only / Access control mode
 - WC mode (optional)
- Functions
 - Push&go
 - Cleaning mode
- Adjustable parameters
 - Opening direction: right or left
 - "Low energy" or normal mode
 - Opening speed
 - Closing force
 - Reopening sensitivity
 - Hold open time
 - Leaf weight
- Conform to European norms and directives in force
 - Directive 2006/42/EC on Machinery
 - Directive 2004/108/EC on "Electromagnetic Compatibility (EMC)"
 - Directive 2004/95/EC on "Safety of low voltage electrical appliances"
 - EN16005 "Power operated pedestrian doors. Safety in use"

Technical specifications



Single slide interior door

SPECIFICATION TEXT:

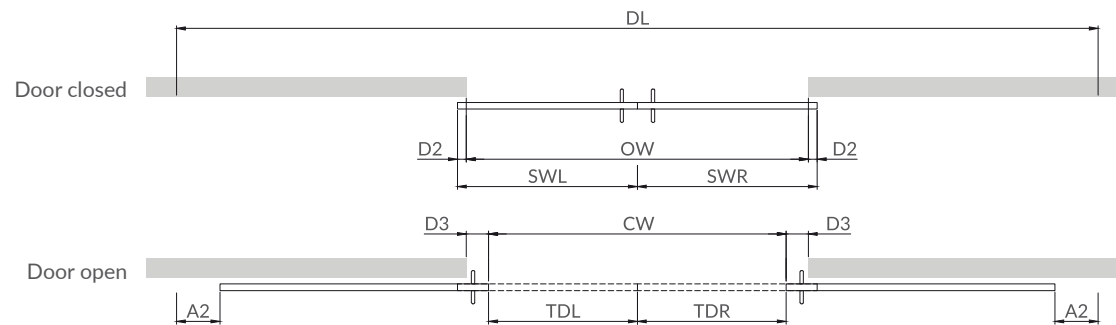
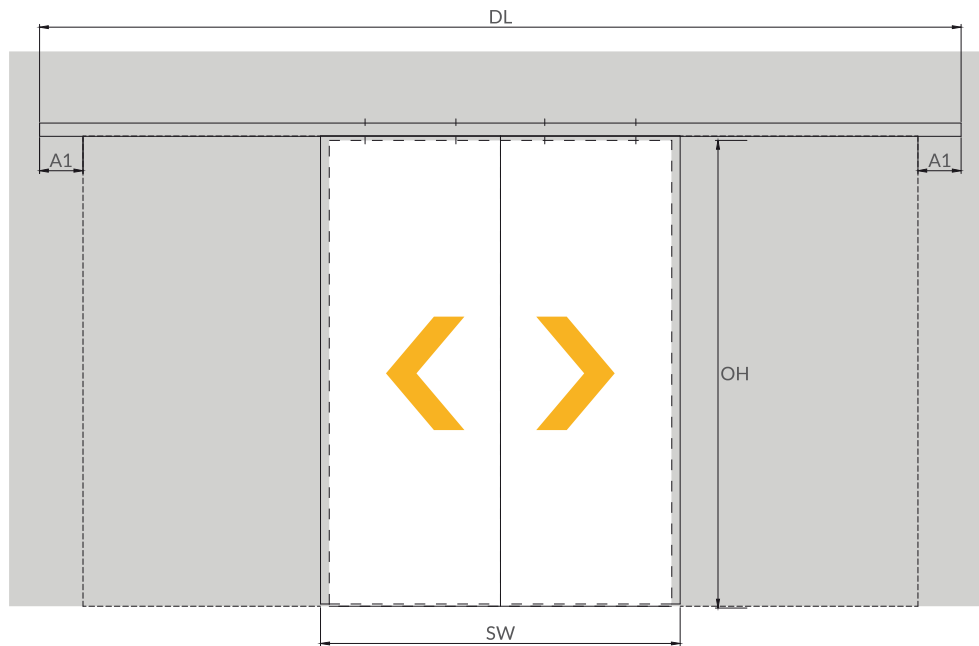
Automatic drive for interior single sliding door model EvoDrive by MOTION4, with linear motor technology. Composed of a 60mm high x 65mm deep aluminium housing, a three phase AC synchronous motor type LSMPPM (Linear Synchronous Motor with Permanent Magnets), operating at 24V, and motor driver connected to the main control board via Bluetooth. The motor moves along the drive unit by means of attraction and repulsion of the magnets which are fixed aligned on the aluminium housing.

The single sliding drive unit has a total length of _____ mm, for a clear opening of _____ mm, opening from right to left.

The single sliding drive unit has a total length of _____ mm, for a clear opening of _____ mm, opening from left to right.

The automatic drive system fully complies with European Standard EN16005

EvoDrive
Bi-part opening



Bi-part interior door

SPECIFICATION TEXT:

Automatic drive for interior bi-part sliding door model EvoDrive by MOTION4, with linear motor technology. Composed of a 60mm high x 65mm deep aluminium housing, two three phase AC synchronous motors type LSMPM (Linear Synchronous Motor with Permanent Magnets), operating at 24V, and motor drivers connected to the main control board via Bluetooth. The motors move along the drive unit by means of attraction and repulsion of the magnets which are fixed aligned on the aluminium housing.

The automatic drive unit has a total length of _____ mm, for a clear opening of _____ mm, with the two door leaves opening in opposite directions.

The automatic drive system fully complies with European Standard EN16005.

Legend:

- DL Drive length
- OH Opening height
- OW Opening width
- CW Clear width
- SW Width of Sliding leaf
- TD Travelling distance
- D1/D2 Overlap
- D3 Finger protection
- Ax Header extension

Part Numbers:

61013021	"EvoDrive" automatic drive for single sliding door. Complete with cover, remote control. Fully assembled	
61023021	"EvoDrive" automatic drive for bi-part sliding door. Complete with cover, remote control. Fully assembled	
69620004	Automatic lock, fail-safe	
69111003	Remote control (additional)	

Accessories for door leaves:

67630001	Wood leaf adaptor and floor guide	
67640001	Aluminium leaf adaptor and floor guide	
67625001	Leaf hangers and floor guide for 8-12mm glass leaf with clamps	
67625002	Leaf hangers and floor guide for 8-12mm for full glass leaf	
67625003	Leaf hangers and floor guide for 8-12mm glass leaf, type TWINS	
Activation and safety:		
69360002	Touch-less switch	
69130002	Push button	
69320003	Activation and safety IR sensor	





MOTION4

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