

PAL 150 SP comes from COIL's experience in the field of doors for highly sanitized environments.

Designed specifically for the partitioning of operating and/or storage areas with controlled atmosphere, specific in the food, chemical and pharmaceutical

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Designed specifically for the partitioning of operating and/or storage areas with controlled atmosphere, specific in the food, chemical and pharmaceutical industries, that usually require special features such as:

- Frequent wash down capability
- Positive air tight feature: the production rooms considered as 'white zones' are kept in overpressure to prevent external contamination; the more the door is airtight, the less it will cost to maintain this condition.
- reliability: given the environmental conditions, this type of automation must be able to work without the need for extraordinary technical maintenance

## Air tightness

PAL 150 SP provides optimal insulation of rooms with different temperatures and air quality, with high leakage tightness.

The particular design of PAL 150 SP door features a header box with a rotary drum and a mobile bulkhead which prevents unwanted air entrapment from the uppermost area of the winding curtain and the surface of the horizontal support beam.

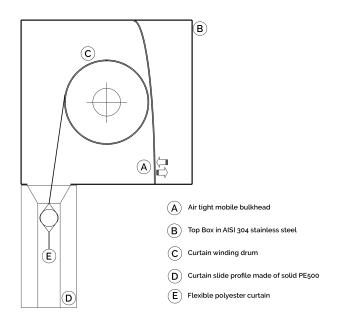
PAL 150 SP allows best air tightness between the flexible curtain and the side tracks. This is achieved by special low friction, wear-resistant strips applied on either side of the curtain.

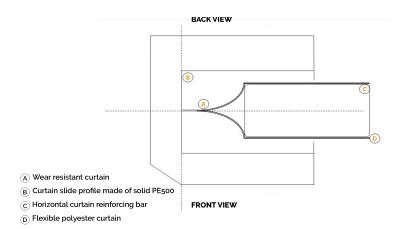
### Clean room facilities

Very high hygienic levels are achieved thanks to:

- Basic structure components made of materials, certified for use in food processing areas, which can be washed down with aggressive cleaning chemicals.
- No side brushes or wipe liners which may house bacteria nests.
- Special side tracks featuring one piece construction and no corners.
- High pressure wash down possibility also for the curtain winding drum.





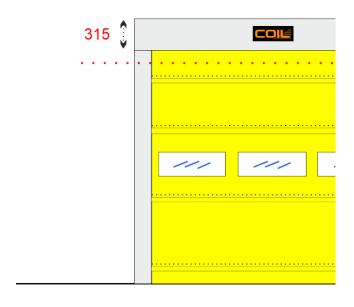




# Operating controls

This door is usually fitted with a standard COIL electronic control panel, fail-open mode, with a 3-phase 400 V. 50 Hz. mains supply. The ride up speed has been set to 0.9 m/sec. Upon request, a control panel with inverter, 230V-.single phase can be supplied. This optional control panel allows a choice of different curtain speed, both for ride up and descent, with a max, ride up speed to 1,2 m/sec.









## **Technical features**

### **Self-support structure**

Self-support structure with side tracks and continuous smooth surface without corners. The side jambs, made of galvanised steel or AISI 304 Stainless Steel, feature an open design for wash down operations.

The top section features a fully enclosed galvanised or stainless steel header box.

## **Drive Motor assembly**

Right or Left side, a 3-phase self-braking motor, 220/380 V, with rating of 0.6 kW. complete with safety overheat detector. Non reversible oil-bath speed reducer with worm screw coupled with the winding drum. Electro-magnet lock brake. The drive motor is fitted inside a waterproof casing rated IP 55

## **Opening Speed**

Standard opening speed 0.9 m/sec, up to 1.5 m/sec with INVERTER 230 V single-phase electronic programmer (optional).

#### Flexible Curtain

Made of Class 2 self - extinguishing polyester curtain with one row of transparent windows Flexible air tight side seal system. Horizontal reinforcement bars fitted inside curtain pockets sealed by thermal-welding.

#### Wind pressure resistance

UNI EN 12424

Classe 1/2. Air pressure value with the door in Up or Down operation is approx 240 Pascal.

#### Air leakage

UNI EN 12426

Given the unique design features, PAL 150 SP has high air permeability values and can be installed in rooms up to Class 3 of EN 12426 (6 m³/m²/ h at 50 Pa). The indicative leakage values, for a door with dimensions mm. 3000 X 3000H, are around 150 - 250 m³/ m²/h.

#### Safety device

Manual emergency opening by means of a pushbutton fitted on one side of the door jambs. Manual operation In the event of power failure or breakdown. Safety detector: when an obstacle is detected a dual photocell beam stops the curtain descent and reverses its travel, sending it up to an open position.

#### Control Box

COIL door is supplied with an exclusive electronic control unit powered by 400V three-phase, equipped with electronic limit switches with absolute multi-turn encoder.

It also offers the possibility of expansion and connection to external devices (fire or emergency security systems) and remote control. Equipped with a large and specific display for programming, diagnostics and checking of operating cycles.

Alternatively, the door can be supplied with the exclusive electronic programmer with single-phase INVERTER 230 V, for the regulation and customization of the upward and downward speeds of the door curtain, the slowdown in the opening and closing limit switch phases.

## **Opening devices**

Opening and closing of automatic doors occur by using a variety of controls. These include Manual Commands such as Wall Pushbutton, or Pull Cord from ceiling, or Manual Remote Control using a Radio Transmitter. Automatic commands are also available including Floor Induction Loops (which works only when a metal vehicle treads on the induction loop areas), or mono/stereo Radars. which is activated by the passage of a metal mass and allows control of the opening of the door only if a vehicle approaches the door (the pedestrian does not activate the opening) or by Radar. In this case, any movement of people or vehicles in its range, controls the opening of the door.



# Warranty

Standard 12 months.

Manufactured with the best electronic materials and components, PAL 150 SP doors are tested in the most severe applications in industry and commerce and are covered by a standard 12-month warranty.

## Certifications

Product in compliance with the product standard UNI EN 13241:2016 Industrial and commercial closures. All COIL doors are supplied with the original CE certificate.

CE certification ensures that construction and design of the product complies with requirements of the following safety directives:

- UNI EN 13241:2016 Product standard for Industrial and Commercial Closures
- 305/2011 Construction Products Directive
- 2014/35/EU Low Voltage Directive or LVD
- 2014/30/EU Electromagnetic Compatibility Directive or EMC Directive
- 2006/42/EC Machinery Directive
- UNI EN 12604 Mechanical aspects
- UNI EN 12453 Safety in use of motorized doors
- UNI EN 12424 Wind load resistance

## For more information:

Gruppo Graflex Graflex S.r.l. Via Risorgimento, 54 20017 RHO (Milano) - Italia

Ufficio Commerciale Tel.: +39 02 3565157 E-mail: sales@coil.it www.coil.it

Enter the COIL site directly from your smartphone by scanning the QR code:



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