Syston Doors

Hi Speed Roll Up Door
Heavy duty
PAL 150/200 N

Overview

Maximum standard dimensions 6000 wide x 5500 high. The PAL 150 is particularly recommended for transit areas on large industrial and commercial sites. The twin-moulded polyester fabric curtains is reinforced by steel tubes especially calculated when greater wind-resistance is required.

The PAL 150 Stainless (AISI 304 Stainless Steel) is designed to ensure the highest hygiene standards, for applications in the food, chemical and pharmaceutical industries.

The PAL 150 Pneumatic with totally pneumatic motor has been specifically designed for applications in explosive environments.

The **PAL 200** is made to satisfy special safety requirements. This version is equipped with a counterbalance spring in one of the uprights that, in the event of power failure, releases the motor brake and causes the door to rise automatically or by means of a push-button at user height. The door can also be integrated into central security (e.g. fire prevention) systems.

Product compliant with Directive 89 / 392 CE

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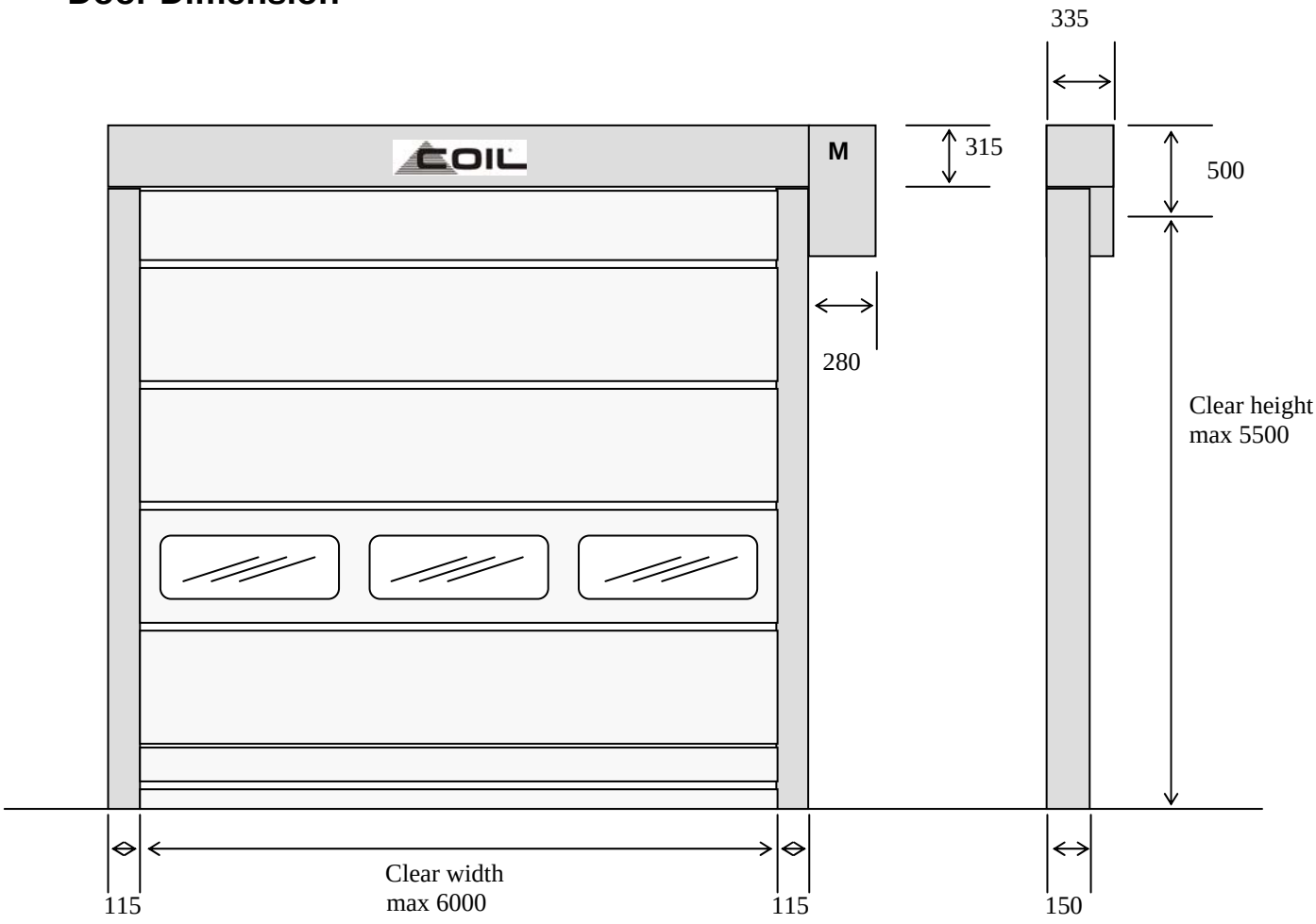
Door Dimension



(190) PAL 200N w/ counterbalancing spring (115) (275)

Technical Specification

- Self-supporting structure
  Made from special galvanised steel profile, dimensioned to ensure durability and protection in all situations, even against accidental impact. Full width canopy and motor cover as standard. Optional Structure made from AISI 304 stainless steel or RAL painted.
- Drive shaft
  Made from tubular galvanised steel, diameter 152 mm, flanged. Rotates on bench supports with self-aligning ball bearings.
- Sliding mechanism
  Ultra-silent sliding mechanism, featuring lateral guides with twin rubber seal guides

- Curtain
  Made from trevira-type twin-moulded polyester fabric, self-extinguishing Class 2, with pockets for strengthening tubes. Curtains available in a selection of colours.

- Vision Panels
  One row of transparent PVC windows for safety and interior lighting. Optional Additional rows of windows.
- Optional bottom bar
  Aluminium profile with rubber seal.
- Wind strengthening bars/Wind Resistance
  Made from tubular steel, these bars guarantee perfect closing of the curtain, even in the event of wind speeds up to 60 km/h. (Calculated at maximum opening dimension).
  Optional Wind resistance up to 100 km/h.

- Safety photocell
  One Pair of transmitter/receiver type UNI 8612 compliant. Stops downward movement of the door and returns it to the open position should any obstacle be detected by the threshold beam. Optional Additional pairs as required by choice, or current Health and Safety Standards. Optional Photocells up-rated from IP55 to IP57.
- Optional Bottom Safety Edge
  Opto Electronic with signal amplifier interrupts door descent and ensures door reopening in the presence of obstacles in the doorway.

- PT Control Box/Board
  On the Standard control box is a up push buttons and emergency push/lock button. On the Plus control box is a lockable power switch, up and down push buttons, emergency push/lock button, and an automatic/manual selector. The box itself is a robust enclosure (protection degree IP 55, in compliance with updated CEE/CEI 44/5 and DIN standards). IP 65 compliant push-button board. The solid-state microprocessor digital electronic instrument panel affords easy programming and rapid replacement operations in the event of faults, as well as ensures interfacing with remote controls and timer programming. A self-diagnosis circuit detects and indicates malfunctioning by means of dedicated LED lamps. The board also features a safety heat detector.
- Electrical system
  Pre-wired with rapid external connectors for quick, safe connection between the control board and the mains power system.
- Optional opening devices
  A full range of remote controls are available e.g. mono/stereo radar, pushbuttons, radio control, induction loop system, pull cord, etc.
- Optional Interlock logic
  For interfacing a series of doors.
- Optional partial opening function
  For automatic door opening to preselected height.

- Emergency opening
  In the event of power failure or malfunction, lifting of the door is by brake release and a snap insertion manual wind, both at user-height.
  The PAL 200 comes with a counterbalance spring inserted in one of the vertical uprights, allowing lifting of the door by the brake release control only.

- Automatic Emergency/Panic Opening (Patented) - Optional for PAL 200 only
  In the event of power failure, the door can either lift automatically or by means of a push button at user height. The exclusive design features of this system allow it to be integrated into central security (e.g. fire prevention) systems. Safety Note In the case of doors equipped with an anti-panic system (with electronic brake), a power failure leaves the motor brake open and the system without one of the features designed to prevent uncontrolled descent of the door. For this reason, a "parachute" (safety descent) device is fitted. The device comprises a gear wheel-pawl system, which is normally kept disengaged by the tension of the connection belt between the spring and the ribbed pulley on the roller axis. In the event of spring breakage, the release of belt tension causes the pawl to lock the gear wheel and prevent uncontrolled descent of the door.

- Motor assembly
  Three-phase self-braking assembly powered by 220/380 V, with power ratings from 0.75 to 1.5 kW.
  Comes with safety heat detector. Electromagnetic lock brake.
  Irreversible gear-motor Oil-immersed, worm screw type, directly driven by drive shaft.
  Cam limit-switch assembly..
- Opening/closing speed
  Up to 0.7 m/sec.

PAL 150 Pneumatic version for use in explosive atmospheres

Special features of the pneumatic version:

Motor assembly
Reversible pneumatic motor with 1.1 kW at 3,000 rpm, pressure supply of 7 bar.

Safety Edge
With twin pneumatic signal amplifier; interrupts door descent and ensures door reopening in the presence of obstacles in the doorway.

Pneumatic system
Pre-wired with rapid external connectors for quick, safe connection between the control board and the mains pressure system.

Control board
Housed inside a robust enclosure (protection degree IP 55), operates to 6 Atm. Comes complete with pressure reducer and lubrication assembly, 95% oil mist filter. Duty ports, open/close operation push-buttons and manual/automatic selector switch. Timing logic for programming between 0 and 30 sec. Pneumatic rib control with adjustable pause time.

Emergency opening
Air tank with 100 litre capacity

Opening speed
approx. 0.5 m/sec.

Accessories
Pneumatic push-button
Pneumatic chain
Pneumatic pressure device