

# PST / PSE SEALED AND HERMETIC DOORS



PST / PSE  
SLIDING DOORS FOR  
OPERATING ROOMS  
AND CLEAN ROOMS

# PST

## LAMINATED AND STAINLESS STEEL SEALED DOOR



PST L manual



PST L automatic



PST Pb L laminated



PST L laminated



PST L laminated - varnished case



PSE Pb I Stain stell



PST I stainless steel



Lead screen

PB LEAD VERSION FOR RX PROTECTION IN RADIOLOGICAL AREAS

The PST sealed sliding door is made to minimize the passage of dust in the air, containing bacteria and pathogens, in operating and clean rooms, thanks to a special system of Ponzi extruded aluminium profiles and strong rubber sealing gaskets. The door wing, in class 1 fire-proof for hospital use, is made of a flush insulating sandwich panel, (60 mm thick) with a HPL laminated surface of different colours, to be chosen from our sample, in stainless steel, scotch-brite brushed finish and sight with a full of coating. The chassis is made of perimeter aluminium anodized RAL frames and doorstop in the canopy. The RX screening solution is also available in Pb 1 mm and in Pb 2 mm versions for operating rooms. The opening of the PST can be done manually with the use of two fixed stainless steel handles mounted on the door wing, or automatically with Ponzi AS1 automation that allows the door to open with no manual contact. For exclusive hospital use, it is powerful, silent, with electronics designed for controls, security and pc networking.

- | A S E P S I S + H Y G I E N E I N C L E A N R O O M S | -

# PSE

## LAMINATED AND STAINLESS STEEL SEALED DOOR



PSE Ponzi Hermetic door is similar to the PST version for its system and its series of profiles. Custom-made, it seals all four perimeter sides, ensuring the tightness. Thanks to an innovative track, in the final phase of sliding, the moving door wing performs a combined movement of sliding, crushing and vertical translation on the perimeter canopy. The gaskets are sealed on the frame and the floor of the door, which closes at 45° evenly, thus exploiting the weight. The opening and closing movement is sliding and therefore the occupied space is rationalized and the air blast is highly reduced, with limitation of turbulences. With this system it is possible to control the requirements of the air conditioning and pressuring system of the operating room. The automation is of AS1 type, specially designed to ensure the movement of translation and crushing continually and silently. There are security devices: photocells and active presence detectors. Ponzi PSE is the first hospital door provided with a test report, performed in a testing institute.

—| CERTIFIED HERMETICITY TEST 120 PASCAL |—

# ACCESSORIES

## HANDLES, WINDOWS, SENSORS AND OPTIONS



Laminated finish



Stainless steel finish



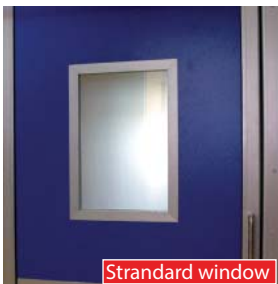
PSE standard handles



Recessed handle



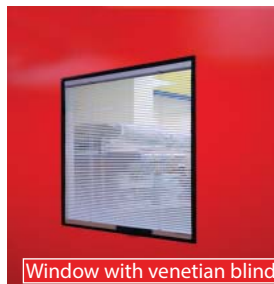
Handle



Standard window



Flush window



Window with venetian blind



Standard button



Fool switch



Touchless sensor



Standard Key Selector



Electronic selector



Keypad

Ponzi PSE-PST hospital doors system can be completed with different accessories and options for a customized look and a suitable functionality in every location. There are different colours of plates and varnish of perimeter aluminium profiles. The door wings can be moved with external handles or stainless steel recessed handles or, in the hermetic version, with level handles for driving and starting. The framed windows, flush to the panel, can be supplied with insulated transparent glass and/or complete with internal Venetian blind with adjustable or electric slats. The opening devices can be various, touches sensitive or with access control systems: keypads or key external selectors.



DYNAMIC SLIDING PST VERSION

Dynamic special PST, door with panel and simple sealed gaskets. Made with a frame of extruded aluminium profiles with rounded corners with a honeycomb panel coated with HPL plastic laminates in both sides and high-density Class 1 fire-proof polystyrene inside. The frame of the panel can be provided with panels/glazing from 40 to 10 mm.

# TECHNIQUE CHARACTERISTICS

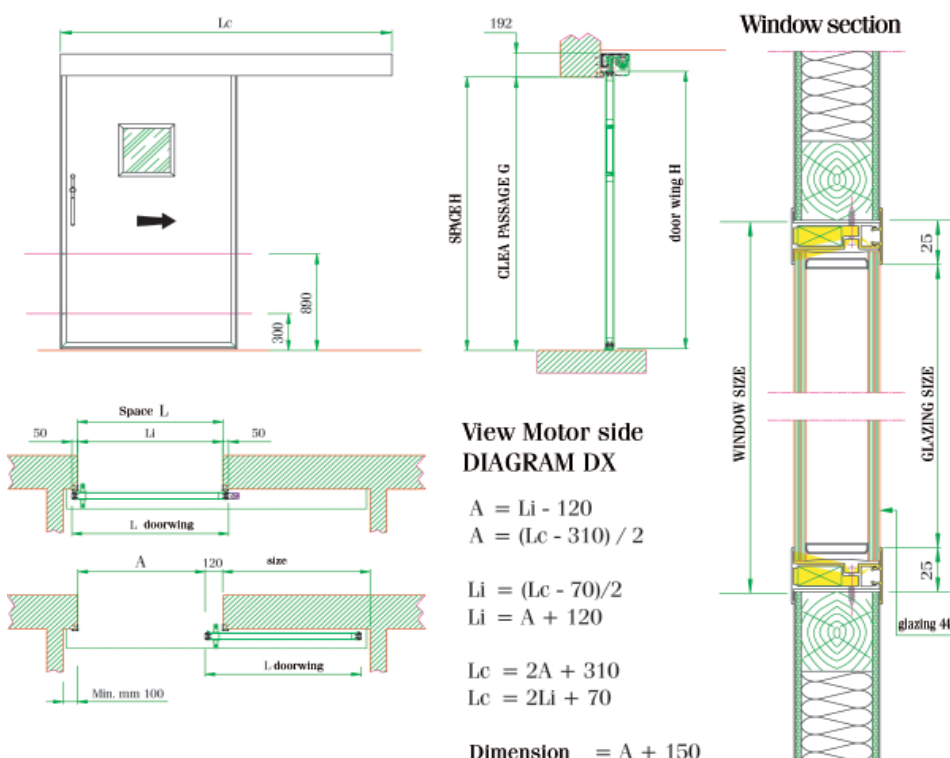


- ① PSE/PST - section of the door wing insulated sandwich panel
- ② PSE/PST - horizontal sliding of the carriage on the track
- ③ PSE - traslation and dropping of the door wing for tightness
- ④ PSE - crushing of gaskets on the perimeter canopy

- ⑤ Numeric digital display function selector
- ⑥ Key mechanical function selector
- ⑦ Active infrared touchess sensor
- ⑧ Foot switch for passage

PST and PSE doors are mainly made with one door wing or two door wings in special versions. Sizes range from about 800 mm to 2000 mm, with a varying standard height from 2100 mm to 2300 mm, the door wings weight can vary in one wing solution from 150 kg up to a maximum weight of 200 kg, reached with PONZI AS1MAX automation. Ponzi hospital doors are made according to ISO 9001 procedures and quality certifications, as well as automations comply with current regulations and it is completely made with recycled materials. PST- PSE doors are completed with aluminium profiles positioned on the three external sides of the door space, ensuring the sealing and air tight in automatic and manual versions. The tightness and sealing are thus ensured without thresholds, guides or profiles in the passage area of the floor. Perimeter mall cover to chad the wall and made of aluminium or stainless steel sheet are available optionally.

## TECHNICAL DIMENSIONS



For a proper planning it is necessary to evaluate the dimensions, following technical drawings and calculation formulas attached. The presence of standard opening handles needed for the safety of users also in automatic versions narrows the opening passage of 120 mm. Therefore it is necessary to consider this space during the carrying out of clear door openings and the calculation of passages for stretchers or trolleys transit. It is necessary to consider the automation dimensions in height that is equal to 175 mm in height and 230 mm in depth. To fix the automation it is necessary to verify the presence of masonry or reinforced structural element (it is not possible to install the doors on the plasterboard walls or false ceiling directly). The carter is standard positioned outside, mainly in the corridor.

# TECHNOLOGY

## PST/PSE SPECIFICATIONS

SLIDING DOOR with one PONZI type panelled aluminium door wing

- PST-L/I sealed on the three perimeter sides, equipped with gaskets, provided with horizontal sliding movement.
- PSE-L/I sealed on the four perimeter sides, provided with a sliding movement with a vertical and horizontal translation of the door wing in the closing phase, which ensures perfect air-tightness.

In the MANUAL version the door consists of: a wall covering fixed frame (canopy), perimetrical on the three sides of the opening door space for 150 mm standard wall thickness, made of aluminium or stainless steel sheet; a doorway cover-wires frame, made of special extruded aluminium alloy, specifically designed for specific use, prearranged to correspond to the specific gaskets installed on the door wing panel, in closing position; standard finish in anodized natural silver, 60 mm thick door wing made with a perimeter frame in special rounded profiles in extruded aluminium alloy, specifically designed for specific use, anodized natural silver finish, Ars 1 colour, flush sandwich panel coated with Abet Print type plastic laminate fin 6, colour to be chosen from sample or stainless steel plate with perimeter sealing gaskets made of EPDM type elastomer and lever handle in stainless steel for manual opening and closing. The self supporting panel with sandwich structure is made with two plastic laminate sheets (one in each side) or stainless steel sheet, two 5 mm sheets in MDF (one for each side) and insulating, sound-proof, Class 1 fire-proof high-density expanded polyurathene inside. Solid wooden perimeter frame. The sliding mechanism and the guide are made with upper rail specifically designed and extruded in special aluminium alloy, prearranged for wall mounting, anodized natural silver finish. Two steel carriages with big wheels in nylon 6.6 mounted on double ball bearings, adjustable in height, depth and anti-derailment sliding guide, made with special anodized natural silver aluminium profile, built-in under the door. Special floor runners with double staggered cone (opening side) and single cone (closing side) are made in anti-friction and anti-wearing plastic mounted on a stainless steel plate, for the perfect sliding and guiding of the door wing. Covering carter composed and designed specifically with dust rounded profile and built with aluminium and stainless steel profiles. Sealing gaskets and finish are made with hygienic and non-toxic, non-organic silicone sealants. In addition the AUTOMATIC version provides automation for PONZI AS1 type sliding doors specifically designed and made, equipped with a low voltage and high mechanical reversibility electric reduction unit, 2-channels optical encoders for position, speed and acceleration detection, mounted on the drive shaft directly, microprocessor control board with specific software which manages acceleration, translation, approaching and braking automatically, depending on the door wings weight and boundary conditions, electronic anti-crushing system, both in closing and opening, with triple- integrated control on the control board and complying with current regulations, toothed belt transmission system made of neoprene coated with anti-wearing and anti-friction material, reinforced with glass fiber / kevlar inserts, stabilized 200W filtered power supply with 230V-50 Hz voltage and 24 Volt DC operation; controls for opening: n. 2 elbow buttons; security controls: two pairs of photocells.



## QUALITY - CERTIFICATES

PST and PSE doors are built according the highest quality standards and in compliance with European Machinery Directive 98/37/EEC, Directive 89/336/EEC and Directive 93/68/EEC. Ponzi is a certified company with ISO 9001 total quality system, from design to manufacture and installation. It offers a global assistance and maintenance service on automatic doors, operating through a call centre which is active throughout the whole country. PONZI PSE doors are also the first "Made in Italy" hermetic doors, equipped with a special sealing and permeability certificate with test performed in testing institute.



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