

VLO Dock, HLO Dock



WIŚNIEWSKI

GATES | WINDOWS | DOORS | FENCES

DOCK DOORS MakroPro 2.0 with VLO Dock, HLO Dock tracks

Intended use: The design of the door was adapted to the special needs of logistics and cargo handling facilities. The door includes vertical and/or horizontal ceiling-mounted tracks, a leaf made of steel panels infilled with freon-free polyurethane foam or glazed aluminium panels. The structure is made of galvanized elements. The door is sealed around the entire circumference. A safe torsion spring system is used to balance the leaf weight. WIŚNIEWSKI dock doors combined with INKEMA loading and unloading systems are reliable solutions for professional cargo handling docks.

Panel 40 [mm]



THERMAL INSULATION

Steel panels are made of galvanized sheet, filled with freon-free, hardened polyurethane foam and coated with polyester paint on both sides. This ensures very good thermal insulation and acoustic properties. Each door features a system of flexible and robust gaskets both along the entire circumference and between the panels, which considerably contributes to the insulating qualities of the door.



SAFETY

The safety systems foremostly consist in minimizing all traces of risk. Regardless of the method of the WIŚNIEWSKI door operation, our doors ensure comfort and safety. Our products are fully compliant with the PN-EN 13241-1 standard.



FUNCTIONALITY

Thanks to our broad range of track systems, WIŚNIEWSKI industrial doors can be matched with all types of industrial halls. A well selected track type enables you to take advantage of all the benefits that our doors have to offer no matter if the door is installed in newly built or in refurbished buildings.



STRUCTURE

The sectional door is installed behind the opening, it opens vertically upwards and does not take any space on the forecourt. Sectional doors let you use the space available in front of the gate and inside the building to its maximum potential. Our solutions enable the door to operate without disturbing the operations inside the industrial hall. Thanks to numerous safety systems, our doors are safe in each phase of opening and closing, regardless of the method of operation: manual or automatic.

The leaf weight is perfectly balanced thanks to the use of a torsion spring system which is seated on the drive shaft. Springs are preselected with computer precision and guarantee the best balancing of the door, maximum comfort and safety of use. The doors are made of panels with a special profile that prevents crushing fingers. All the steel elements are galvanized (tracks, frames, fastening elements).

The door is fitted with guiding sliding rollers with bearings and bush fittings (quiet) providing proper running of the door curtain. Tracks featuring a special double profile prevent it from derailing. Comfortable operation of the door is ensured by our chain hoist or electric drive unit.

Door panels are coated with high quality polyester paints. This provides optimum protection against the weather conditions and ensures many years of operation.

Due to the corrosion protection of the doors, they can be used according to their intended use in atmospheric corrosion class environments C1, C2, C3 in accordance with PN-EN ISO 12944-2 and PN-EN ISO 14713.

Automatic Operating Units
Proven and reliable automatic operating units by GfA ELEKTROMATEN.

Springs
Torsion springs are made using the shot peening technology that increases their life. The guaranteed minimum number of cycles: 25.000.

Safeguard
Each spring is fitted with a safeguard against the effects of the spring breaking.

Tracks and opening frames
Made of galvanized sheet 2 [mm] thick provide a solid and durable structure.

Emergency opening
Enables opening the door in case of a power outage (using the chain hoist).

Track joining
Tracks and opening frames are joined with screws which increases adjustability.

Safety solution for tracks
Double safety solution for tracks preventing guiding rollers from derailing.

Cable safeguard
Safeguard counteracting the effects of the break of load bearing cables with length adjustment from the floor level. This type of brake shortens the time required for levelling the door during service works. Due to safety considerations, the moving part is located under a plastic cover.

Safeguard
The safeguard that prevents prising of the door is a simple method that prevents the door from being opened from the outside.

Bottom gasket
High quality EPDM gaskets perfectly adapt to the shape of the ground and prevent water from penetrating inside under the door.

THERMOSET™ PACKAGE AS STANDARD:

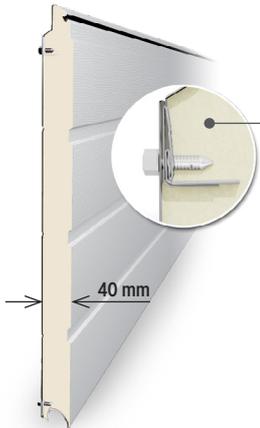
Double-lip top gasket
The warm, elongated, two-lip gasket ensures double sealing in the top section of the door.

Corner gasket
Corner gasket maximum sealing of the corner of the door.

Double-lip side gasket
The warm, three-chamber, two-lip, hard and soft side gasket is the most efficient solution for eliminating thermal bridges, while at the same time providing a safe distance between the lintel and the door curtain.



PANEL STRUCTURE



Robust and reliable design.

Our whole range of industrial sectional doors follows identical design principles. Thanks to our robust and reliable design, you can rest assured that the door will meet even the most extreme requirements and operating conditions. Special solutions, such as the original panel built using the **5-ply** sheet bending system ensures stable fastening of elements, which further contributes to the strength of the structure. The top section is fitted with a lip gasket. The internal side of the panel in RAL 9002.

RIB DESIGNS



G - No ribs



W - High ribs



N - Low ribs



V - V ribs

TEXTURES



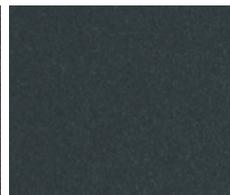
Woodgrain



Smoothgrain

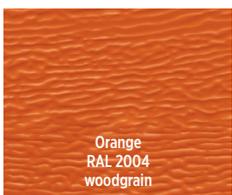


Sandgrain

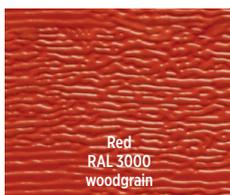


Silkline

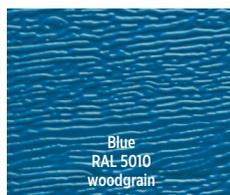
COLOURS | STANDARD COLOURS



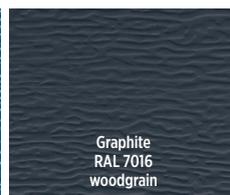
Orange
RAL 2004
woodgrain



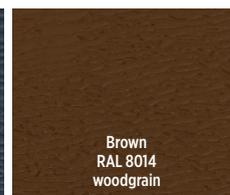
Red
RAL 3000
woodgrain



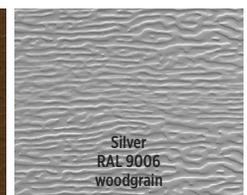
Blue
RAL 5010
woodgrain



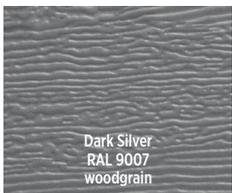
Graphite
RAL 7016
woodgrain



Brown
RAL 8014
woodgrain



Silver
RAL 9006
woodgrain



Dark Silver
RAL 9007
woodgrain



White
RAL 9016
woodgrain



COLOURS | SPECIAL COLOURS

Graphite RAL 7016 silklime	Silver RAL 9006 silklime	White RAL 9016 silklime	Anthracite Sandgrain	Golden Oak woodgrain	Golden Oak smoothgrain
Nut Brown woodgrain	Nut Brown smoothgrain	Anthracite Grey 701605-167 smoothgrain	Cream White 137905-167 smoothgrain	Dark Green 612505-167 smoothgrain	Metbrush Silver F436-1002 smoothgrain
Silbergrau 116700 smoothgrain	White 915205-168 smoothgrain	Chocolate Brown 887505-168 smoothgrain	Anthracite Quartz 436-1014 smoothgrain	AnTEAK 3241002-195 smoothgrain	Dark Oak 2052089-167 smoothgrain
Swamp Oak 3167004-167 smoothgrain	Soft Cherry 3214009-195 smoothgrain	Macore 3162002-167 smoothgrain	Oregon 1192001-167 smoothgrain	Sapeli 2065021-167 smoothgrain	Sjena Noce 49237 PN smoothgrain
Sjena PL 49254-015 smoothgrain	Sjena Rosso 49233 PR smoothgrain	Winchester 49240 XA smoothgrain	Black Cherry 3202001-167 smoothgrain	Natural Oak 3118076-1168 smoothgrain	Douglas Fir 3152009-1167 smoothgrain
Rustic Oak 3149008-167 smoothgrain	Sheffield Oak Brown F 436-3087 smoothgrain	Sheffield Oak Light F 456-3081 smoothgrain	Sheffield Oak Grey F 436-3086 smoothgrain	Brush Schwarzbraun F436-1023 smoothgrain	Earl Platin 119500 smoothgrain
Black Ulti-mat PX47097 smoothgrain	Woodec Turner Oak Malt F4703001 smoothgrain	Woodec Sheffield Oak Alpine F4703002 smoothgrain	Woodec Sheffield Oak Concrete F4703003 smoothgrain	Woodec Turner Oak Toffee F470-3004 smoothgrain	Anthracite Quartz Mat F470-1014 smoothgrain
Umbragrau F436-60657 smoothgrain	Fenstergrau F436-6066 smoothgrain	Cremeweiss F456-6001 smoothgrain	Anthrazitgrau F436-6003 smoothgrain	Dark Grey Silk 4367003 smoothgrain	



WIŚNIEWSKI sectional doors are available in a wide range of colours. You can match the door to the individual character of the building and your needs so that the door not only closes off the building, but constitutes its integral part that perfectly matches the company colours, façade or the surrounding environment.



TRACKS

VLO Dock – Vertical tracks with a lowered shaft for loading and unloading docks.

With the shaft located by the lintel, access for servicing and maintenance works is facilitated and makes the process of installation easier $N_{min} = H_o + 440$ [mm].



The cantilever door with the VLO Dock tracks can be mounted in facilities where the opening frames cannot be installed along the entire height, e.g.:

- in buildings which are partially built with concrete, prefabricated elements up to a certain height, and with the remainder built with composite boards,
- when a steel substructure cannot be made along the entire height of the door. In these situations, the door can be installed, but the door opening frames should be installed up to a height of $H_o + 450$ [mm].

Dimensional range for MakroPro 2.0 doors with VLO Dock tracks

Opening height (Ho) in [mm] up to	Opening width (So) in [mm] up to				
	2,000	2,250	2,500	2,750	3,000
2,000					
2,125					
2,250					
2,375					
2,500					
2,625					
2,750					
2,875					
3,000					
3,125					
3,250					

Required installation parameters for the VLO Dock tracks

	Sj		So ⁽¹⁾
	HJ		Ho ⁽²⁾
	Nmin	Manually-operated door, chain hoist Side drive unit	= Ho + 440 [mm]
	W1min or W2min	From the non-drive end	150 [mm]
		For a chain hoist	250 [mm]
		For a side drive unit	290 [mm] ⁽³⁾
Emin		600 [mm]	

⁽¹⁾ – Rubber gaskets remain in the clear opening of the door. They do not constitute a fixed obstacle.

⁽²⁾ – Only applies to doors with an electric drive unit or a chain transmission.

⁽³⁾ – The minimum side clearance, including a margin for collision-free installation and removal of the opening mechanism, requires additional 110 [mm] of free side clearance.



HLO Dock – High tracks with a lowered shaft for loading and unloading docks.

With the shaft located by the lintel, access for servicing and maintenance works is facilitated, and makes the process of installation easier $N_{min} = 1,700$ [mm].



Dimensional range for MakroPro 2.0 doors with HLO Dock tracks

Opening height (Ho) in [mm] up to	Opening width (So) in [mm] up to				
	2,000	2,250	2,500	2,750	3,000
2,000					
2,125					
2,250					
2,375					
2,500					
2,625					
2,750					
2,875					
3,000					
3,125					
3,250					

Required installation parameters for the HLO Dock tracks

			Sj	So⁽¹⁾
			Hj	Ho⁽²⁾
	Nmin	Manually-operated door, chain hoist Side drive unit		= 1,700 [mm]
	W1min or W2min	From the non-drive end		150 [mm]
		For a chain hoist		250 [mm]
		For a side drive unit		290 [mm]⁽³⁾
			Emin	Ho - N + 1,100 [mm]⁽⁴⁾

⁽¹⁾ – Rubber gaskets remain in the clear opening of the door. They do not constitute a fixed obstacle.

⁽²⁾ – Only applies to doors with an electric drive unit or a chain transmission.

⁽³⁾ – The minimum side clearance, including a margin for collision-free installation and removal of the opening mechanism, requires additional 110 [mm] of free side clearance.

⁽⁴⁾ – Design applicable to the lintel provided in the order, but not below 2,000 [mm].



OPTIONAL ACCESSORIES

GLASS PANES

Intended use: for double glazing of glazed aluminium panels and VISUAL glazing.



No-Scratch.

Glass pane with a special coating improving its strength, very good resistance to scratching and sunlight compared with standard glass.



Satin.

Opaque glass pane. Double glazed pane opaque from the outside and clear from the inside. Light transmission 78%.



Glass pane R.

Opaque (or frosted) double glazed pane clear from the inside. Light transmission (77-79%).



Grey.

Clear glass with a slight brown hue. Double glazed pane clear from the inside, non-coloured from the inside. Light transmission (51%).

WINDOWS



Type B-3 oval.

Made of double, clear acrylic glass, smooth frame surface. Black external and internal frame. Internal/external frame made of ABS. External dimensions of the frame 667x347 [mm]. Light transmission 86%.



Type A-3.

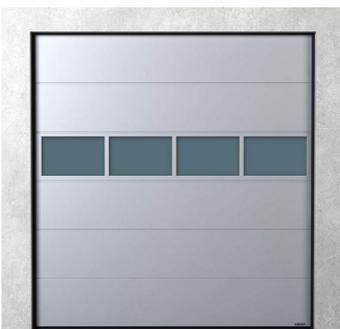
Made of a double transparent acrylic pane; the frame surface is smooth. The outer and inner frames are black. The outer/inner frame is made of ABS. Frame outside dimensions: 643x337 [mm]. Transmittance of light: 86%



Type B-1.

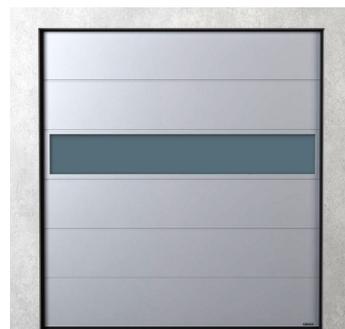
Made of double, clear acrylic glass. Black external and internal frame. Internal/external frame made of ABS. External dimensions of the frame 610x200 [mm]. Light transmission 86%.

GLAZED PANELS



MakroPro 2.0 doors can be glazed up to 50% of the aluminium panel with glazing bars in relation to the total number of panels. The panel is painted on both sides in the external door colour. Available with doors $S_o \leq 7,000$ [mm] and $H_o \leq 5,500$ [mm] with glazing units: No-Scratch, "R", Satin, and Grey.

GLAZED PANEL



Aluminium panel with a clear acrylic glass without glazing bars – VISUAL. The panel is painted on both sides in the external door colour. Available with MakroPro 2.0 doors $S_o \leq 4,000$ [mm] and $H_o \leq 4,000$ [mm] with glazing units: No-Scratch, "R", Satin, and Grey for $S_o \leq 3,000$ [mm].

VENTILATED PANEL



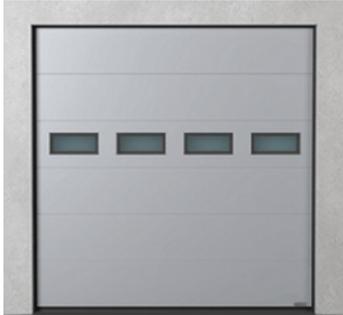
Aluminium panel infilled with a single layer of galvanized expanded steel mesh or double layer of galvanized perforated steel sheet. The panel is painted on both sides in the external door colour.

The air flow for the expanded mesh panel is 7,504 [m³/h] per 1 [m²] of mesh surface area in accordance with PN-EN 12427 (~70 % panel surface area).

The air flow for the panel with double perforated sheet is 3,051 [m³/h] per 1 [m²] of perforated sheet in accordance with PN-EN 12427 (~70% panel surface area).



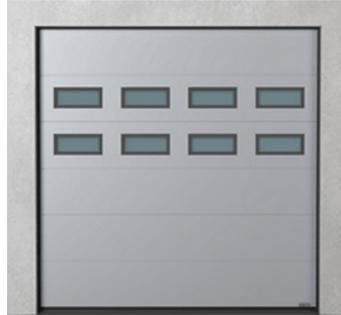
EXAMPLE MakroPro 2.0 DOOR DESIGNS



Door with window B-1.



Door with window A-3.



Door with window B-1 (two panels).



Door with window A-3 (two panels).



Door with a glazed panel.



Door with a glazed panel (two panels).



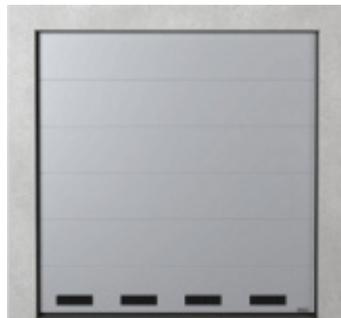
Door with a glazed Visual panel.



Door with ventilation grilles K-1.



Door with ventilation grilles K-2.



Door with ventilation grilles K-3.



Door with a ventilated panel (expanded mesh).

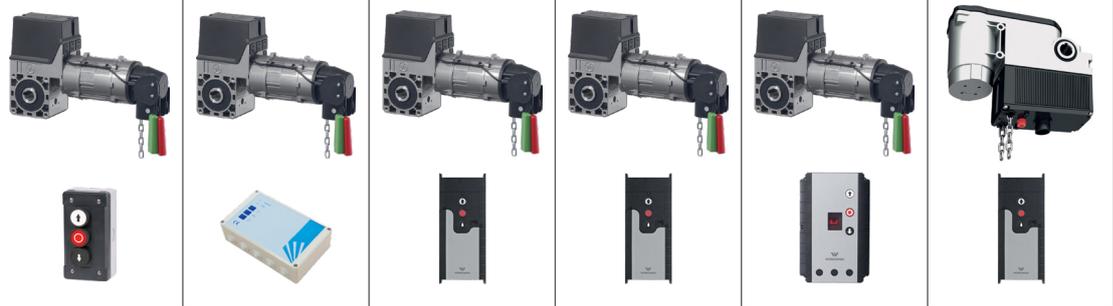


Door with a ventilated panel (double perforated sheet).



AUTOMATIC OPERATING UNIT KITS

The top-quality GfA automatic operating units available with WISNIOWSKI doors ensure reliable operation, the highest comfort of use, and many years of usage.



Technical data	Totmann 230	Automatik 230	Totmann	Automatik	Automatik S	Automatik FU
Mains	1x230 [V]; 50-60 [Hz]	1x230 [V]; 50-60 [Hz]	3x400 [V]; 50-60 [Hz]	3x400 [V]; 50-60 [Hz]	3x400 [V]; 50-60 [Hz]	1x230 [V] lub 3x400 [V]; 50-60 [Hz]
Motor supply	1x230 [V]; 50 [Hz]	1x230 [V]; 50 [Hz]	3x400 [V]; 50 [Hz]	3x400 [V]; 50 [Hz]	3x400 [V]; 50 [Hz]	3x400 [V]; 50 [Hz]
Limit switch	Mechanical, available from drive unit level	Mechanical, available from drive unit level	Electronic, available from operator level			
Central control unit	Integrated with the drive unit	T 720; separate	TS 959; separate	TS 970; separate	TS 981; separate	TS 970, TS 971 or TS 981; separate
Display	no	no	yes	yes	yes	yes
Emergency opening	yes	yes	yes	yes	yes	yes
Rotational speed	24 [RPM]; fixed	24 [RPM]; fixed	24 [RPM] ⁽¹⁾ ; fixed	24 [RPM] ⁽¹⁾ ; fixed	24 [RPM] ⁽¹⁾ ; fixed	12 - 60 [RPM] ⁽²⁾ ; adjustable
Motor power	0.37 [kW]	0.37 [kW]	0.3 - 0.45 [kW] ⁽³⁾	0.3 - 0.45 [kW] ⁽³⁾	0.3 - 0.45 [kW] ⁽³⁾	0.4 - 0.85 [kW] ⁽³⁾
Rated current	3.5 [A]	3.5 [A]	1.1 - 2.5 [A] ⁽³⁾	1.1 - 2.5 [A] ⁽³⁾	1.1 - 2.5 [A] ⁽³⁾	6.6 - 7.35 [A] ⁽³⁾

Functionality	Totmann 230	Automatik 230	Totmann	Automatik	Automatik S	Automatik FU
Quick programming	yes	yes	yes	yes	yes	yes
Obstacle detection	no	yes; safety edge	no	yes; safety edge	yes; safety edge	yes; safety edge
Automatic closing	no	yes; 10 [s] or 30 [s] or 90 [s]	no	yes; from 1 ÷ 240 [s]	yes; from 1 ÷ 240 [s]	yes; from 1 ÷ 240 [s]
Release in end position	no	no	no	no	no	yes
RWA - heat and smoke extraction	no	no	no	no	yes	no
Traffic control	no	no	no	no	yes	no
Exterior lighting control	no	no	yes	yes	yes	yes
Partial opening of the door	no	no	no	yes	yes	yes
Cycle counter	no	no	yes	yes	yes	yes
Recent fault logging	no	no	yes	yes	yes	yes

Expandability	Totmann 230	Automatik 230	Totmann	Automatik	Automatik S	Automatik FU
Signal light	no	yes	yes	yes	yes	yes
LED signal lights (red - green)	no	no	no	yes	yes	yes
Compatible with photocells	no	yes	no	yes	yes	yes
ER quick uncoupling of the drive	no	no	no	yes ⁽⁴⁾	yes ⁽⁴⁾	no
Drive unit in the IP65 version	no	no	no	yes	yes	yes
TS 971 controller	no	no	no	yes	no	yes
WSD module - wireless signal transmission from the optical strip	no	no	no	yes ⁽⁵⁾	no	yes ⁽⁵⁾
Safety barrier	no	yes	no	yes	yes	yes
Exterior lighting control	no	no	yes	yes	yes	yes
Motion sensor	no	no	no	yes	yes	yes
Induction loop detector	no	no	no	yes	yes	yes
Safety photocells	no	no	no	yes	yes	yes
Acoustic signal	no	no	no	yes	yes	yes

⁽¹⁾ - applies to the SE 5.24 and SE 9.24 drive unit, ⁽²⁾ - applies to the SE 8.60 FU drive unit, ⁽³⁾ - depends on the drive type, ⁽⁴⁾ - applies to the SE 9.24 drive unit, ⁽⁵⁾ - only available with the TS 971 controller.



Technical data	BFT Argo
Power supply / Motor	230 [V], 50-60 [Hz] / 24 [V] DC
Force	– / 55 [Nm]
Efficiency	10
Number of parking spaces	–
Single-piece track	–
Transmission	gear
Travel speed / rotational	– / 30 rpm
Central control unit	built-in, installed on the shaft
Radio receiver	BFT, built-in - 433 MHz
Radio receiver storage	63 transmitters
Auto selection of operating parameters	yes
Limit switches	encoder
Emergency uncoupling	yes
Application	sectional
Dynamic shutting (up and over doors)	no
Rotating automatic operating unit head	no
Warranty	2 years

Functionality	
Obstacle detection	yes
Obstacle detection adjustment	yes
Action following obstacle detection	stop or partial opening
Automatic closing	yes
Release in end position	yes
Additional lighting	yes
Independent additional lighting control	no
Delayed drive unit light switch off	yes
Display	yes
Partial opening of the door - slightly open	yes
Cycle counter	yes
RWA - heat and smoke extraction	yes
Traffic control	no



OPTIONAL ACCESSORIES



Code keypad.

Operates the door after an individual access code is provided. Can be installed indoors or outdoors.



Proximity card reader.

Can be controlled with proximity cards or fobs. Just place the card/fob against the reader to operate the door drive.



Warning lamp.

Warning function. Orange blinking light indicates that the door is operating.



LED signal lights.

Facilitates traffic management around the door. Set includes two lights: green and red indicating that the door is open or closed.



External key switch.

The switch requires a key for the door to operate. Recommended where access must always be controlled.



Microwave motion sensor.

The sensor automatically opens the door when a vehicle or a person is in front of the entrance.



Acoustic signal.

Warning function. Acoustic signals indicate when the door operates.



Transmitter.

Works with the radio receiver and controls the drive unit through radio waves. One remote control can operate four individual doors.



Photocells.

If an obstacle appears in the clear passage, the infrared beam is interrupted, the door stops and returns to the open position.



Pull switch.

Sequential door control without using a transmitter.



Safety barrier.

Secures clear passage in case of accidental door curtain movement.



GALLERY









TECHNICAL DATA

	MakroPro 2.0
Curtain	Panel made of galvanized steel sheet with two-side polyester coating, galvanized and painted on both sides, infilled with high density PU foam $g=42 \text{ kg/m}^2$ without HCFC
Minimum number of cycles	25.000
Thermal transmittance factor of the panel U [$\text{W/m}^2\text{xK}$]	0.48
Watertightness (class)	class 3 in accordance with 13241-1 section 4.4.2
Wind load resistance class	class 3 in accordance with 13241-1 section 4.4.3
Air permeability class	class 4 in accordance with PN-EN 13241-1 section 4.4.6
Reaction to fire NFP	Fire properties B Smoke production s2 Flaming droplets d0 In accordance with EN 13501-1+A1:2010
Acoustic absorption coefficient Rw [dB] without wicket door	23 in accordance with PN-EN ISO 717-1: 1999
Drive type / power supply type	GfA series SE, BFT Argo / 1x230 V / 3x400 V
Safeguards	Special shape of the panel preventing the crushing of fingers, safeguards against breaking of load-bearing cables, safeguard against breaking of springs (on each spring), lock/latch opening sensor, safety edge (in doors with an electric drive, Automatik type). Options: photocells, light barrier, safeguard against prising, double track profiling prevents guiding rollers from derailing.
Optional accessories	Various types of tracks, electric drive unit, chain transmission, ventilated panel, glazing with an aluminium panel (without/ with a thermal break), VISUAL glazing without glazing bars, portholes, glass panes: No-Scratch, Satin, Glass pane R, Grey, ventilation grilles, auxiliary lock, springs 50.000 cycles, 100.000 cycles, fume extractor flap, steel fascia, aluminium fascia, photocells, light curtain, code keypad, motion sensor, signal light, LED signal light (red-green), transmitter, acoustic signal, magnetic card reader, pull switch, safety edge wireless transmission system, drive for continuous operation.
Maximum width / height of the door [mm]	3,000 / 3,250
Available panel rib designs	G - No ribs, W - High ribs, N - Low ribs, V - V ribs
Available panel structures	woodgrain, smoothgrain, sandgrain, silkline
Standard RAL colours	RAL 2004, RAL 3000, RAL 5010, RAL 7016, RAL 8014, RAL 9006, RAL 9007, RAL 9016
Custom colours	other RAL colours, special colours, including wood imitating colours, (film coated panels)
Track type	HLO Dock, VLO Dock



WIŚNIOWSKI

WIŚNIOWSKI Sp. z o.o. S.K.A.
PL 33-311 Wielogłowy 153
tel. +48 18 44 77 111
Fax +48 18 44 77 110

www.wisniowski.eu

Let us inspire you!
See other solutions from WIŚNIOWSKI!



The products shown in the pictures often feature special accessories and do not always correspond to their standard versions • The technical data sheet does not constitute an offer within the meaning of the Polish Civil Code • The manufacturer reserves the right to introduce changes without notice • NOTE: The colours shown in the technical data sheet are for reference only • All rights reserved • Copying and use, in part or in full, is prohibited without the consent of WIŚNIOWSKI Sp. z o.o. S.K.A. • MakroPro 2.0 DOCK/01.23/EN.