

INDUSTRIAL DOORS



WIŚNIEWSKI

GATES | WINDOWS | DOORS | FENCES

SECTIONAL DOORS MakroTherm 2.0

Intended use: Industrial sectional doors are intended to be used in residential buildings, public utility buildings, industrial facilities, including the food industry (without direct food contact), and in indoor car parks. The door includes vertical and/or horizontal ceiling-mounted tracks and a leaf made of steel panels infilled with freon-free polyurethane foam. 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.

For the 60 [mm] panel



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.



SAFETY

The safety systems involve above all the minimization of 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.



FUNCTIONAL

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, regardless of whether the door is installed in newly built or refurbished buildings.



STRUCTURE

The sectional door is installed behind the opening, it opens vertically upwards and does not take up any space on the forecourt. Sectional doors let you use the space available in front of the door and inside the building to its maximum potential. Thanks to our broad range of track systems, WISNIOWSKI industrial doors can be matched with all types of buildings, even non-standard ones. Our solutions enable the door to operate without disturbing the operations inside the industrial hall. Thanks to numerous safety systems, our doors are safe at every stage 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 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 protects fingers against being crushed. All the steel elements are galvanized (tracks, frames, fastening elements). The door is fitted with double guiding sliding rollers with bearings in sliding cylinders providing proper running

of the door curtain, while the tracks featuring a special profile prevent it from derailing. Electric drive gates are fitted with a modular control system which enables the connection of multiple devices compatible with the door.

Large dimension gates are additionally reinforced with special elements that increase the rigidity of the entire structure. Door panels are coated with high quality polyester paints. This provides optimum protection against the weather conditions and ensures many years of operation. Thanks to the vast range of colours, WISNIOWSKI industrial doors can be easily matched with the building's façade. WISNIOWSKI doors are an investment that stands the test of time.

Due to the corrosion protection of the doors, they can be used in line with 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.

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.

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.

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

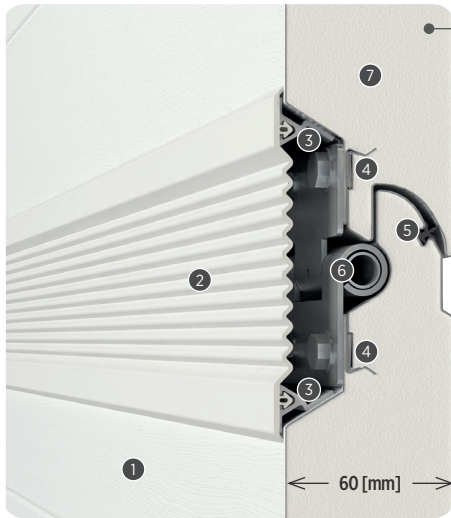
Bottom gasket
High quality EPDM gaskets perfectly adapt to the shape of the ground and prevent water from penetrating inside under the door.

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 withstand the most demanding operating conditions. Doors made of INNOVO panels, **60 [mm] thick**, are recommended for energyefficient buildings. They help the door maintain an optimum temperature inside the garage. 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.

- ① Closed panel construction.
- ② Flexible panel joint cover.
- ③ Aluminium profile for fastening flexible covers.
- ④ Five sheet layers at the hinges.
- ⑤ Panel joint seal.
- ⑥ Concealed hinge.
- ⑦ Freon-free polyurethane foam.

RIB DESIGNS



G - No ribs



W - High ribs



N - Low ribs



V - V ribs

TEXTURES



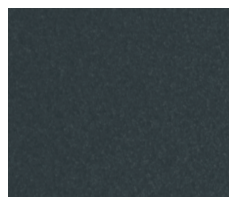
Woodgrain



Smoothgrain

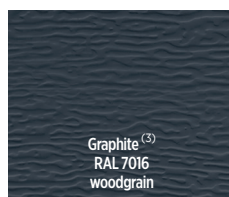
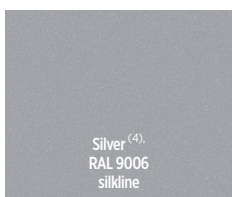


Sandgrain



Silkline

COLOURS | STANDARD COLOURS



⁽¹⁾ - the colour of the panel without ribs (G), ⁽²⁾ - the colour of the panel with high ribs (W), ⁽³⁾ - the colour of the panel with low ribs (N), ⁽⁴⁾ - the colour of the panel with V ribs (V).



COLOURS | SPECIAL COLOURS

<p>Anthracite ^{(1),(2)} sandgrain</p>	<p>Golden Oak ^{(1),(2)} woodgrain</p>	<p>Golden Oak ^{(1),(2)} smoothgrain</p>	<p>Anthracite Grey ⁽¹⁾ 701605-167 smoothgrain</p>	<p>Cream White ⁽¹⁾ 137905-167 smoothgrain</p>	<p>Dark Green ⁽¹⁾ 612505-167 smoothgrain</p>
<p>Metbrush Silver ⁽¹⁾ F436-1002 smoothgrain</p>	<p>Silbergrau ⁽¹⁾ 116700 smoothgrain</p>	<p>White ⁽¹⁾ 915205-168 smoothgrain</p>	<p>Chocolate Brown ⁽¹⁾ 887505-167 smoothgrain</p>	<p>Anthracite Quartz ⁽¹⁾ 436-1014 smoothgrain</p>	<p>AnTEAK ⁽¹⁾ 3241002-195 smoothgrain</p>
<p>Dark Oak ⁽¹⁾ 2052089-167 smoothgrain</p>	<p>Swamp Oak ⁽¹⁾ 3167004-167 smoothgrain</p>	<p>Soft Cherry ⁽¹⁾ 3214009-195 smoothgrain</p>	<p>Macore ⁽¹⁾ 3162002-167 smoothgrain</p>	<p>Oregon ⁽¹⁾ 1192001-167 smoothgrain</p>	<p>Sapeli ⁽¹⁾ 2065021-167 smoothgrain</p>
<p>Siena Noce ⁽¹⁾ 49237 PN smoothgrain</p>	<p>Siena PL ⁽¹⁾ 49254-015 smoothgrain</p>	<p>Siena Rosso ⁽¹⁾ 49233 PR smoothgrain</p>	<p>Winchester ⁽¹⁾ 49240 XA smoothgrain</p>	<p>Black Cherry ⁽¹⁾ 3202001-167 smoothgrain</p>	<p>Natural Oak ⁽¹⁾ 3118076-1168 smoothgrain</p>
<p>Daglesia ⁽¹⁾ 3152009-1167 smoothgrain</p>	<p>Rustic Oak ⁽¹⁾ 3149008-167 smoothgrain</p>	<p>Sheffield Oak Brown ⁽¹⁾ F 436-3087 smoothgrain</p>	<p>Sheffield Oak Light ⁽¹⁾ F 456-3081 smoothgrain</p>	<p>Sheffield Oak Grey ⁽¹⁾ F 436-3086 smoothgrain</p>	<p>Brusch Schwarzbraun ⁽¹⁾ F436-1023 smoothgrain</p>
<p>Earl Platin ⁽¹⁾ 119500 smoothgrain</p>	<p>Black Ulti-mat ⁽¹⁾ PX47097 smoothgrain</p>	<p>Woodec turner oak malt ⁽¹⁾ F4703001 smoothgrain</p>	<p>Woodec Sheffield Oak Alpine ⁽¹⁾ F4703002 smoothgrain</p>	<p>Woodec Sheffield Oak Concrete ⁽¹⁾ F4703003 smoothgrain</p>	<p>Woodec Turner Oak Toffee ⁽¹⁾ F470-3004 smoothgrain</p>
<p>Anthracite Quartz Matt ⁽¹⁾ F470-1014 smoothgrain</p>	<p>Umbragrau ⁽¹⁾ F436-60657 smoothgrain</p>	<p>Fenstergrau ⁽¹⁾ F436-6066 smoothgrain</p>	<p>Cremeweiss ⁽¹⁾ F456-6001 smoothgrain</p>	<p>Anthrazitgrau ⁽¹⁾ F436-6003 smoothgrain</p>	<p>Dark Grey Silk ⁽¹⁾ 4367003 smoothgrain</p>



WISNIOWSKI 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.

⁽¹⁾ - the colour of the panel without ribs (G), ⁽²⁾ - the colour of the panel with high ribs (W).



TRACKS

STL – Standard guides.

Track system for buildings with a standard lintel $N_{min} = 435, 520$ [mm].
 For buildings where horizontal ceiling tracks can be used.



Dimensional range for MakroTherm 2.0 doors with STL tracks

Opening height (Ho) [mm] up to	Opening width (So) in [mm] up to																				
	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	6999
2000																					
2125																					
2250																					
2375																					
2500																					
2625																					
2750																					
2875																					
3000																					
3125																					
3250																					
3375																					
3500																					
3625																					
3750																					
3875																					
4000																					
4125																					
4250																					
4375																					
4500																					
4625																					
4750																					
4875																					
5000																					
5125																					
5250																					
5375																					
5500																					

$N_{min} = 520$ [mm]

$N_{min} = 435$ [mm]



HL – High guides.

Track system for buildings with a high lintel $N_{min} > 600$ [mm].
Frequently used in industrial hall type buildings.



Dimensional range for MakroTherm 2.0 doors with HL tracks

Opening height (Ho) in [mm] up to	Opening width (So) in [mm] up to																					
	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	6999	
2000																						
2125																						
2250																						
2375																						
2500																						
2625																						
2750																						
2875																						
3000																						
3125																						
3250																						
3375																						
3500																						
3625																						
3750																						
3875																						
4000																						
4125																						
4250																						
4375																						
4500																						
4625																						
4750																						
4875																						
5000																						



VL – Vertical guides.

Track system for buildings with a very high lintel:

$$N_{min} = H_o + 650 \text{ [mm]}.$$

Frequently used in industrial hall type buildings, mostly in buildings where horizontal or diagonal ceiling tracks cannot be used as they would otherwise interfere with indoor systems or gantry operation.



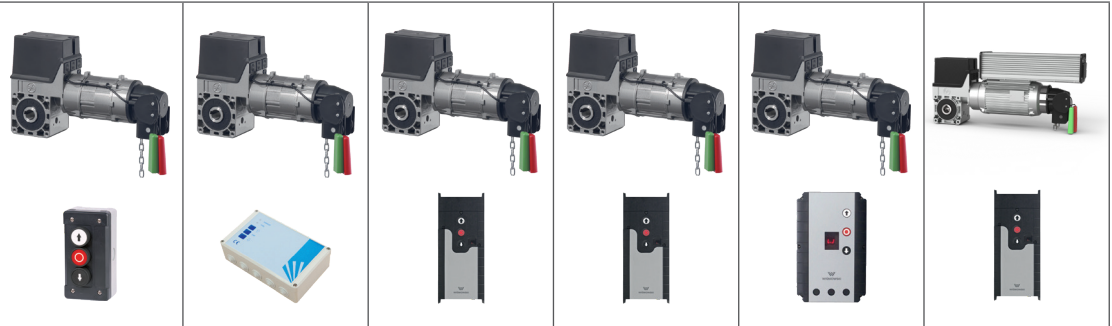
Dimensional range for MakroTherm 2.0 doors with VL tracks

Opening height (Ho) in [mm] up to	Opening width (So) in [mm] up to																				
	2000	2250	2500	2750	3000	3250	3500	3750	4000	4250	4500	4750	5000	5250	5500	5750	6000	6250	6500	6750	
2000																					
2125																					
2250																					
2375																					
2500																					
2625																					
2750																					
2875																					
3000																					
3125																					
3250																					
3375																					
3500																					
3625																					
3750																					
3875																					
4000																					
4125																					
4250																					
4375																					
4500																					



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] or 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]	1x230 [V] or 3x400 [V]; 50 [Hz]
Limit switch	Mechanical, available from drive unit level	Mechanical, available from drive unit level	Electronic, available from operator level	Electronic, available from operator level	Electronic, available from operator 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	10-80 [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⁾	2.1 - 8 [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
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 14.80 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.



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



MakroTherm 2.0 doors.



MakroTherm 2.0 doors (as seen from the inside).



TECHNICAL DATA

	MakroTherm 2.0
Leaf	Panel, 60 [mm] thick, made of galvanized steel sheet with two-side polyester coating, galvanized and painted on both sides, infilled with high density PU foam $g=42 \text{ kg/m}^3$ without HCFC
Minimum number of cycles	25,000
Thermal transmittance factor of the panel U [$\text{W/m}^2\text{xK}$]	0.33
Watertightness class	class 2 in accordance with PN-EN 13241-1 section 4.4.2
Wind load resistance class	class 4 in accordance with PN-EN 13241-1 section 4.4.3
Air permeability class	class 5 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
Sound reduction index Rw [dB]	24 in accordance with PN-EN ISO 717-1: 1999
Drive type / power supply type	GfA series SE / 1x230 V / 3x400 V
Safeguards	Special shape of the panel protecting fingers against being crushed, safeguards against breaking of load-bearing cables, safeguard against breaking of springs (on each spring), lock/latch opening sensor, safety edge (in doors with electric drive, Automatik type) Options: photocells, light barrier, safeguard against prising.
Optional accessories	Various types of tracks, electric drive unit, chain hoist, rope hoist, 50,000 cycle springs, 100,000 cycle springs, photocells, light curtain, code lock, motion sensor, signal light, LED signal light (red - green), transmitter, acoustic signal, magnetic card reader, pull switch, safety edge wireless transmission system, drive unit for continuous operation.
Maximum width / height of the door [mm]	6,999 / 5,500
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 7016, RAL 9006, RAL 9016
Custom colours	other RAL colours, special colours, including wood imitating colours, (film coated panels)
Track type	STL, HL, VL



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. • MakroTherm 2.0/11.21/EN.