



# Personnel and material airlocks

Product documentation



Discover our  
product range

## **Your solution for comprehensive physical security!**

With us at your side, you can enjoy the highest level of professionalism, absolute discretion, and bespoke support – all from a single source. You benefit from innovative security solutions that are specially tailored and produced to your requirements. Trust in our expertise to make your environment safe. For you and your customers.



## **4 Cabin airlock**

Controlled access by an authorised person with the highest security requirements. Thanks to a modular construction, we can adapt the personnel airlock to any needs.

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## **12 Single-door airlock**

This personnel airlock offers you ultimate comfort in minimal space, with a door width of 1.1 m.

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## **14 Round lock**

Reliable access control for the highest design requirements.

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## **18 Speed gate**

With our speed gates, you can manage large flows of people while satisfying the highest design requirements.

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## **20 Intelligent person counting**

The SMARTcount system for high-precision anti-tailgating by means of artificial intelligence.

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## **24 Material lock**

Controlled material transport between two different safety zones.

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## **26 Biometric access control**

The access solution with biometrics – a complete solution from TBS for broad application.

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# 4 Cabin airlock

MS SENSO and MS CONTACT

The classic cabin airlock with two doors and side walls is self-supporting and easy to use. The lock is used to separate individuals. This ensures that only one person passes into a specific zone.



**Burglar-proof up to RC4**



**Bullet-proof up to FB7**



**Fire protection up to EI90**



**Escape route suitable per EN179**

The cabin airlock can be built in resistance classes up to RC4, with bullet resistance up to FB7, and fire protection up to EI90. An escape route is also secured in emergency situations, in accordance with applicable standards.

## Your advantages

No structural measures on the ground thanks to integration of the sensors in the cabin ceiling

Easy to integrate into infrastructure

Integrates into existing access control systems

Clear user guidance for easy operation and high acceptance



Discover our classic cabin airlock



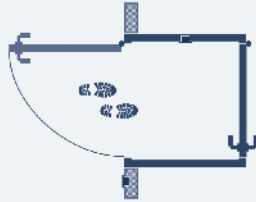


The classic cabin airlock  
MS SENSO



The MS CONTACT design variant guarantees an  
escape route in accordance with EN 179

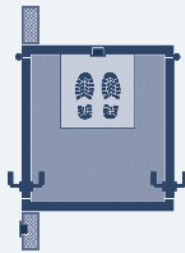
**1 Entering the Cabin airlock**



The anti-tailgating system with infrared sensors ensures that only one authorised person can pass through the airlock each time. Optical distinction of individuals enables process-reliable separation at the highest level, and in milliseconds.

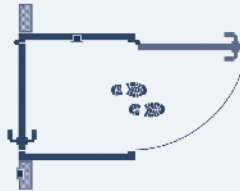
- Verification to ID1 (badge, code and / or biometrics)
- Door 1 is released, and the airlock cabin can be entered

**2 Separation in the cabin**



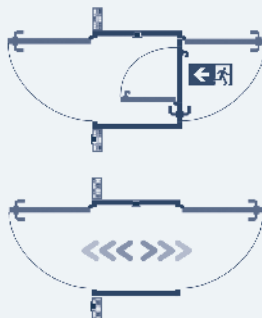
- It is always possible to leave the cabin again in the outward direction by using the go back switch
- Separation via ceiling sensors and ID2 verification (badge, code and / or biometrics)

**3 Successfully pass through**



- Verification successfully completed
- Door 2 is released
- Pass through into the safe zone

**4 Additional features**



- Escape route in accordance with SN EN 179
- Entrance for strangers
- Transport opening

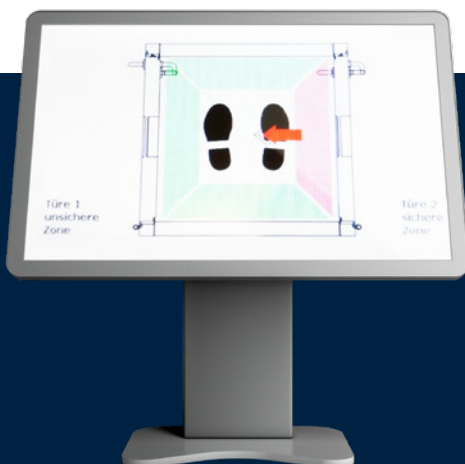
**MS SENSO**



**MS CONTACT**



Cabin type	K1	K2	K3	K4
Height (A)	2300	2300	2300	2300
Width (B)	950	1060	1260	1360
Depth (C)	900	900	1300	1400
Through access height	2000	2000	2000	2000
Through access width	850	900	900	1000
Escape route in accordance with EN 179			x	x



**Intuitive user guidance**

The user is optimally guided when passing through by means of LED displays/buttons or touchscreen. Thanks to the visual displays, it is also possible for untrained persons to pass through the airlock comfortably. Particularly with personnel airlocks, as used in the public sector, or when dealing with large numbers of people, this is very helpful.

# 8 Cabin airlock

MS SENSO modular



Discover our modular cabin airlock

Does your specific situation require individual separation of people? Then the modular cabin airlock is just the right solution.

A customised cabin size, combined with your desired door types and tailored to your security requirements, the MS SENSO Modular meets every individual need. Whether it needs to be a large-capacity airlock, escape route compliant, or wheelchair-accessible, thanks to the modular design, there are no limits. Let us configure your your custom cabin airlock together.



**Modular structure**



**Burglar-proof up to RC4**



**Bullet-proof up to FB7**



**Fire protection up to EI90**



**Escape route suitable per EN179**



**Accessible for those with disabilities**

## Your advantages

The greatest possible flexibility due to modular design

Thanks to integration of all electronics in the airlock ceiling, or use of side consoles, there is no need for expensive adjustment work for the existing floor.

Controlled access is also possible for people in wheelchairs

Escape route compliance in accordance with EN 179 and EN 1125

Possible for a very high frequency of people to pass through thanks to group individualisation through video analysis

Integrates into any infrastructure and connects to existing access control systems

Clear user guidance, resulting in fewer rejections and higher acceptance among users.

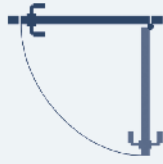


Individual cabin airlock with double-leaf doors



The sectional frame system used and the associated design of the elements enable flexible and quick set-up. There are almost no limits in terms of aesthetics.

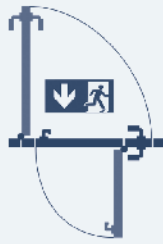
**1 Single door**



The classic leaf door, constructed using a tubular frame profile system.

- RC2-RC4
- FB4-FB7
- EI30-EI90
- Smoke protection
- Thermal property
- Automated door leaf

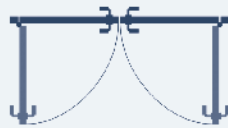
**2 Door-in-door system**



The classic leaf door with integrated escape door. The patented «door-in-door» system was developed by MS Protect and allows the door to open in the escape-route direction

- RC2-RC3
- FB4-FB7
- EI30-EI90
- Smoke protection
- Escape route compliant
- Automated door leaf

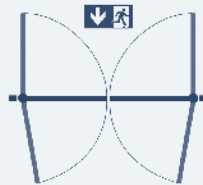
**3 Double doors**



The classic double door is equipped with a tubular frame profile system and enables wider doorways.

- RC2-RC4
- FB4
- EI30
- Thermal properties
- Escape route compliant
- Automated door leaf

**4 Double swing doors**



The almost inconspicuous glass swing doors can be pushed open in the outward direction in escape situations.

- Escape route compliant
- Automated

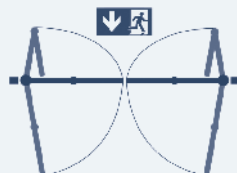
**5a Folding doors**



The folding doors offer individual through access widths and, thanks to the small swivel range, are ideal for small amounts of floorspace.

- RCO – RC2
- Thermal property
- Automated

**5b With break-out Function**



- Escape route compliant with swing-out function in the escape-route direction as well

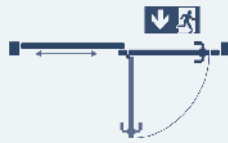
**6a Sliding doors**



The classic sliding door is available in a single or double-wing design.

- RCO-RC3
- EI30
- Thermal property
- Automated

**6b Sliding doors with swing-out swing door**



The escape-route-compatible sliding door is made possible thanks to the swing-out system.

- RCO-RC2
- Escape route compliant
- Automated

**MS SENSO Modular model**



Cabin type	K5	K6	K7
Height (A)	2400	2400	Custom-made
Width (B)	1250	1330	Custom-made
Depth (C)	1195	1195	Custom-made
Through access height (a)	2090	2090	Custom-made
Through access width (b)	945	1096	Custom-made

# 12 Single-door airlock

MS SESA 3000



Find out more  
about single-door locks

This type of airlock is ideal for very small spaces. An open cabin prevents direct entry. The separating door will only close again and clear the way for entry into the safe zone with appropriate verification.

## Your advantages

Person is never locked between two doors  
(claustrophobia)

Individual separation via cabin and sensors

Escape route opens in the direction of escape

Large transport opening for barrier-free transport

Doors do not have large swivel ranges



Burglar-proof up to RC4









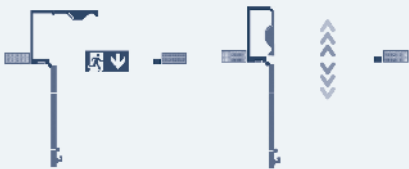
Bullet-proof up to FB7



Fire protection up to EI90



Escape route compliant per EN179

<p><b>1 Entering the secure zone</b></p>		<ul style="list-style-type: none"> <li>• Verification to ID1 (badge, code and/or biometrics)</li> <li>• Separating door opens</li> </ul>
<p><b>2 Separation</b></p>		<ul style="list-style-type: none"> <li>• Entry into the separation niche</li> <li>• Before separation, you can leave the cabin at any time in the outward direction (an advantage for people with claustrophobia)</li> <li>• Separation and ID2 verification (badge, code and/or biometrics)</li> </ul>
<p><b>3 Passing through</b></p>		<ul style="list-style-type: none"> <li>• Separating door closes</li> <li>• Pass through into the safe zone</li> </ul>
<p><b>1 Exiting the safe zone</b></p>		<ul style="list-style-type: none"> <li>• Person enters the separation niche</li> <li>• Before exiting, they can leave the cabin in the inside direction at any time (an advantage for people with claustrophobia)</li> </ul>
<p><b>2 Confirmation Exit</b></p>		<ul style="list-style-type: none"> <li>• Verification or confirmation of exit by means of a button</li> <li>• Lock with separating door opens</li> </ul>
<p><b>3 Exiting the airlock</b></p>		<ul style="list-style-type: none"> <li>• Pass through into the safe zone</li> <li>• Separating door closes automatically</li> </ul>
<p><b>Additional features</b></p>		<ul style="list-style-type: none"> <li>• Escape route in accordance with SN EN 179</li> <li>• Barrier-free transport opening</li> <li>• Anti-burglary protection RC2 – RC4</li> <li>• Fire protection EI30 – EI90</li> <li>• Bullet-proof FB4 – FB7</li> </ul>

# Round locks

Also often referred to as cylinder airlocks, the round lock has two curved, sliding doors, which ensure the airlock function. The self-supporting design and simple system are what characterise this airlock variant.

## Your advantages

Easy to integrate into infrastructure

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Integrates into existing access controls

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Clear user guidance for easy operation and high acceptance

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Find out more about round locks





Design



Bullet-proof up to FB6



Burglar-proof up to RC4



Round lock with turnstile design variant  
Controlled access with the highest standards in terms of design

**1 Entering the round lock**



Also often referred to as a cylinder lock, the round lock has two curved, sliding doors, which ensure the airlock function. The self-supporting design and simple system are what characterise this airlock variant.

- Verification to ID1 (badge, code and/or biometrics)
- The round lock opens

**2 Separation in the round lock**



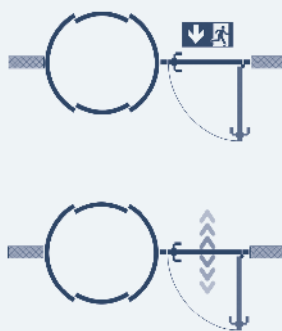
- Entry into the round lock
- The round lock closes automatically
- Separation via sensors in the round lock

**3 Successfully pass through**



- Verification successfully completed
- Door 2 is released and opens automatically
- Pass through into the safe zone

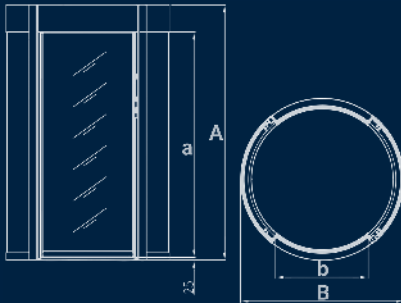
**Additional features**



- Escape route in accordance with SN EN 179 (via additional door)
- Entrance for strangers
- Transport opening (via additional door)
- Anti-burglary protection RC2–RC3

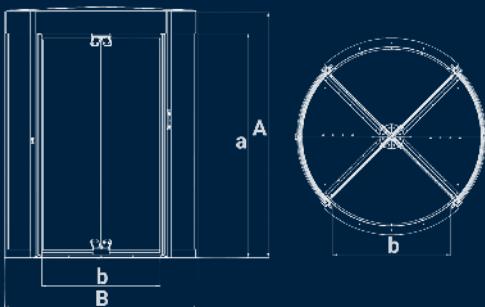
The escape route must be safeguarded with an additional door. It can be located immediately next to the airlock, or further away. The local regulations have to be considered for this.

Round lock



Type	R1	R2	R3	R4
Cabin subdivision	No	No	No	No
Height (A)	2575	2350	2350	2575
Outside diameter (B)	1052	1152	1500	1750
Clear opening height (a)	2300	2074	2074	2300
Clear opening width (b)	580	650	900	900
Approx. weight in kg	700 kg	680 kg	1000 kg	1200 kg

Round lock with turnstile



Type	R5	R6	R7
Cabin subdivision	3 divisions	3 divisions	4 divisions
Outside diameter (B)	1810	1810	1970
Height (A)	2300	2505	2505
Clear opening height (a)	2073	2300	2300
Clear opening width (b)	785	785	1206
Approx. weight in kg	980 kg	1100 kg	1400 kg

# Speed gates



Find out more  
about sensor airlocks

Quick-opening swivel arms made of tempered safety glass, in combination with an intelligent sensors system, ensure immediate and reliable person control.



High pass frequency



Escape route compliant



Design

## Sensor airlock



### Design

Housing and drive unit made of stainless steel, Swivel arms and lateral glazing made of tempered glass

Clearance-free, low-maintenance and durable drive technology

Variable programming of the time the doors are held open for

Panic function

Integrated alarm system

Individual voice output (MP3)

LAN interface

A base unit can be customized augmented with one or more tandem units. The passage width can also be freely chosen, between 550 mm, 1000 mm and 1200 mm.

The swivel arms can also be designed in different heights to make climbing over more difficult.

We will be happy to work with you to develop the ideal solution



Integration of your own company logo is possible with all common access control systems.



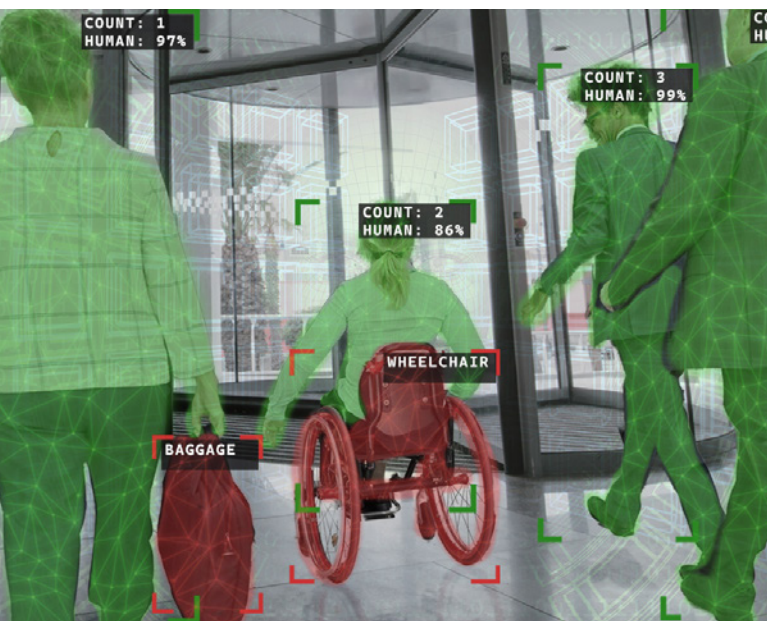
# Intelligent person counting

SMARTcount



Find out more about  
intelligent person counting

The intelligent camera system for counting people with a high degree of precision. Unlike with the simple individual separation of persons, such as with a turnstile or round lock, the SMARTcount evaluates several people simultaneously in a fraction of a second. By means of the self-learning algorithm, the system records and differentiates between persons and objects. Due to its compactness, the SMARTcount is also quick and easy to install.



## Your advantages

Individual separation in groups –  
controlled entry

Easy to integrate into infrastructure

Integrates into existing access control systems

Complete separation: material transport and  
wheelchair accessibility

No restrictions due to premises



Integration into existing premises



High pass frequency



Individual separation of persons  
by means of artificial intelligence



Accessible for people with disabilities

The person counting system allows the controlled entry of several people at the same time. Within the airlock, a sensor counts the people, who then identify themselves accordingly. After successful verification, the inner airlock door opens, and the people can pass in a controlled manner.

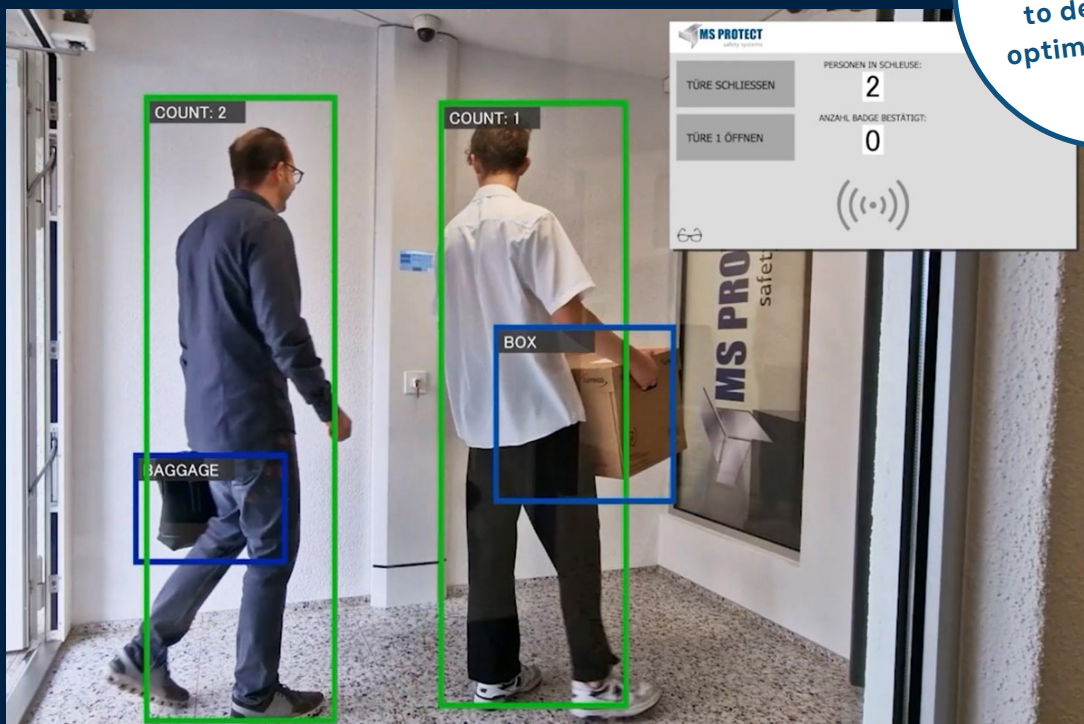
### Full separation – material transport and wheelchair accessibility

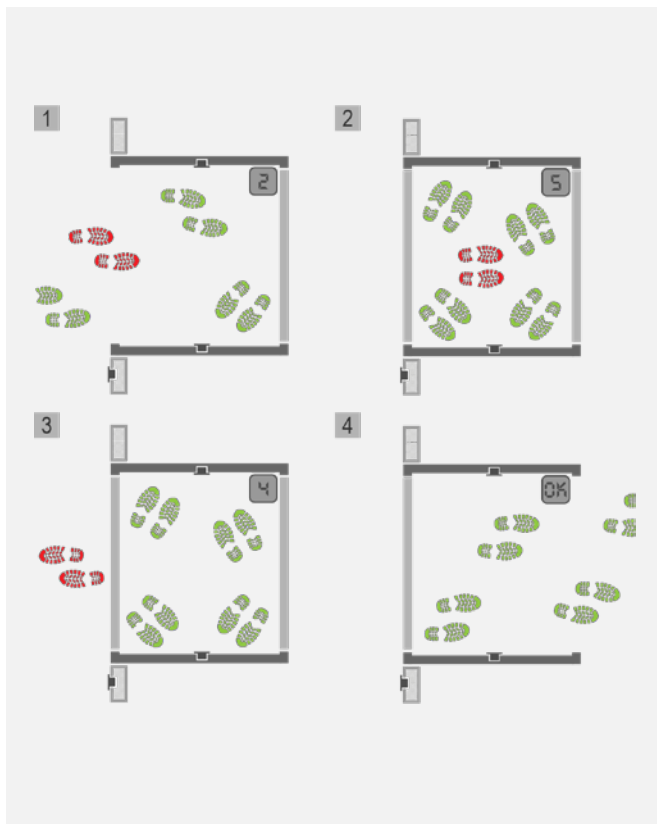
Thanks to the SMARTcount airlock, you can also transport pallets, crates or other large objects, without the system's separation functionality being impaired. Video analysis and fast processors enable the recognition and separation of wheelchairs and walking aids. The SMARTcount system therefore guarantees you complete, precise individual separation, even with large objects.

### No restrictions due to premises

SMART Count adapts to your building and can be installed quickly, as well as independently of the height or length of the envisaged space. Integration of additional, non-proprietary doors or airlocks is possible.

We will be happy to work with you to develop the optimum solution





### Your advantages

Very high pass frequency

High-precision detection of people and objects

Simultaneous individual separation in groups in a short time

Easy to use and process-reliable

Minimal construction measures, and integration of existing components

Wheelchair-accessible

Material transport

Escape route possible via airlock

### Sequence for entry

1. Entry of several people into the airlock
2. 5 people counted, 4 people can verify themselves
3. The unauthorised person exits, and 4 people are counted, 4 people are able to verify themselves
4. The 4 verified persons pass through



### Signalling

User-friendly operation and process-reliable

Separation process

The person-counting system guides authorised persons throughout the entire separation process via a display. LED light signals support them in a process-reliable and simple manner, thanks to the individual person separation system. The doors can also be operated easily from the inside during the person counting process via a touch panel, in order to let in more people.



# Material airlock



Find out more  
about material airlocks

With the classic material, pallet or suitcase airlock, materials are safely conveyed in a controlled manner between two different safety zones. We are able to offer the airlock in resistance classes up to RC4, with bullet resistance up to FB7, and fire protection up to EI90. By means of ingenious sensors, the passage of people is prevented.

## Advantages

No structural measures on the ground thanks to integration of the sensors in the ceiling

Integrates into any infrastructure and into existing access controls

Can be relocated

Clear user guidance

Aesthetic integration



Sensors for reliable detection of materials and people



Burglar-proof up to RC4



Bullet-proof up to FB7

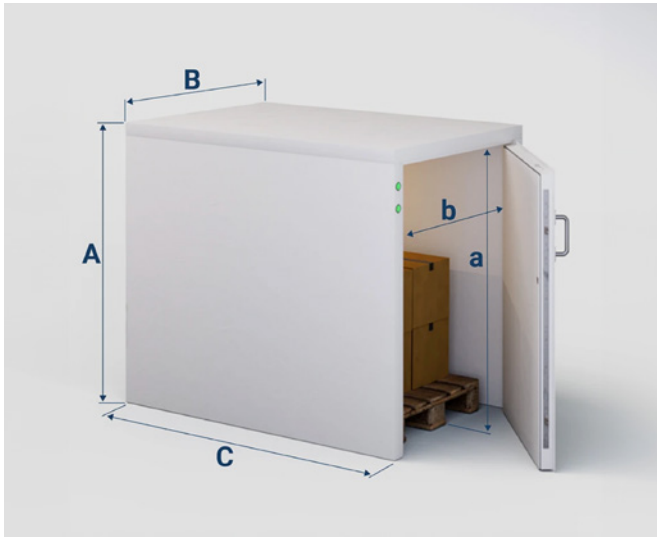


Fire protection up to EI90



We will be happy  
to work with you  
to develop the  
ideal solution

## MS Material airlock



Cabin type	M1	M2	M3	M4	M5	M6
Doors	1-leaf	1-leaf	1-leaf	1-leaf	2-leaf	1- or 2-leaf
Height (A)	550	1100	1396	1620	2500	Custom- made
Width (B)	650	800	1140	1140	1870	Custom-made
Depth (C)	650	1000	1600	1600	2500	Custom-made
Through access height (a)	478	935	1316	1520	2420	Custom-made
Through access width (b)	506	640	940	940	1750	Custom-made
Usable depth (inside)	518	840	1480	1480	2380	Custom-made

Combined material airlock with simultaneous separation of individual people



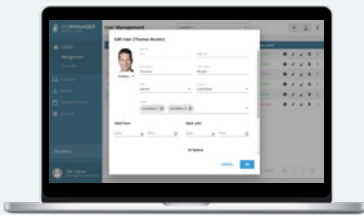
# Biometric access control



Find out more about  
our biometrics solutions

The access solution with biometrics for highly sensitive entry points into buildings – A complete solution for broad application. We will also help you with planning and implementing this. As individual as your request, you will receive a tailor-made solution for your building.

## Software



ENTERPRISE is a secure and multi-feature web-based software solution for managing biometric user data and equipment.

- Secure and encrypted data storage
- High scalability, even across multiple locations

## 3D Flash+



An advanced facial recognition solution. With the innovative walk-through method, it enables identity verification while the person is walking past the camera.

- Contactless registration
- Walk-through feature

## 3D Air



A contactless fingerprint scanner for high-precision 3D image capture. This system sets new standards for contactless fingerprint recognition.

- The only one of its kind in the world
- Maximum comfort and safety
- Contactless, with live recognition

### 3D Fly



The contactless hand scanner captures fingerprints quickly and efficiently, with unmatched speed and precision.

- High pass frequency
- Contactless
- Four-finger principle

### 3D Light



A versatile facial recognition terminal, with combined iris recognition. Optionally, with temperature sensor and mask check.

- Identification via the eyes
- Hybrid recognition
- Contactless

### 2D Sense



A touch-based biometrics terminal for convenient pleasant use. The capacitive touch sensor offers the highest level of reliability and user satisfaction.

- Identification via fingerprint
- User guidance via touch screen

### 2D Iron



This robust fingerprint sensor is the ideal solution for indoor and outdoor use. Even in harsh environmental conditions, this terminal offers outstanding identification performance.

- Identification via fingerprint
- Detection even in the case of wet, oily, or dirty fingers



#### Flexible integration of access control systems

All our airlocks are compatible with all standard access control systems on the market.

As an option, we offer the complete solution from TBS (Touchless Biometric Systems).

*Note: TBS is already fully integrated with many access control system providers.*



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Further  
information