

## Risik evaluation according to Appendix I of the Machinery Directive with reference to EN 16005

### Automatic Sliding Doors

#### General Remarks / Bases

According to the Machinery Directive 2006/42/EG, a risk evaluation must be carried out taking into account the intended user group of the doors. The technical safety requirements to be met by automatic door systems are specified in DIN 18650 and EN 16005 which form the basis for the selection of various protective measures. In addition, the regulations of ASR A 1.7 and AutSchR (German regulations) must also be taken into consideration.

By principle, an avoidance of hazardous points is to be given priority over a protection of hazardous points. If during the commissioning of the door system a deviation from the present risk evaluation is determined, the appropriate measures must be taken in order to guarantee a safe operation of the door system.

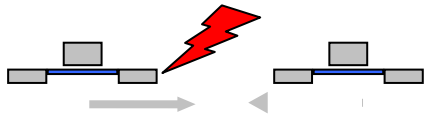
#### Information with regard to the installation site

The hazardous points must be identified and the appropriate protection measures be defined already in the offer phase in order to ensure the highest possible level of personal safety. To this end, the planner needs to evaluate not only the structural measures on the basis of the local conditions but also the groups of users to be expected. Basically, it is assumed that the doors will be used by vulnerable persons in need of particular protection. For this reason, the present document does not mention all the protection possibilities specified in the standard. Attention shall be drawn to residual risks.

<b>Installation site:</b>	<b>Drive type:</b>	
<b>Clear height:</b>	<b>Clear width:</b>	
<b><u>Object data:</u></b>		
Address: _____	Offer No.: _____	
Street: _____	Order No.: _____	
Post code / City: _____	Phone: _____	
Contact person: _____	E-mail: _____	
<b><u>Particular structural conditions (such as e.g. obstacle in front of the door leaf, high wind loads, sills, etc.):</u></b>		
<b>The protective measures described below must be complied with.</b>		
Date, Name	Signature Customer	Signature Seller
<b>The protective measures described below are fulfilled.</b>		
We herewith confirm that all the hazardous points have been sufficiently secured by the defined measures.		
Date, Name	Signature Fitter	

## I. Operative condition – power-operated closing cycle - protection of main closing edge

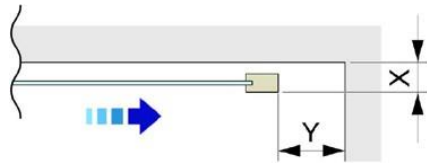
### Against impact / crushing



- Safety curtain on both sides over the complete clear width

## II. Operative condition – power-operated opening cycle - protection of secondary closing

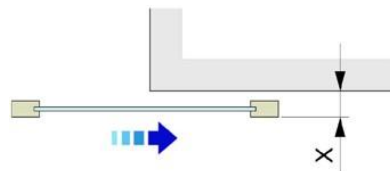
### Against crushing



- Separating protective device (e.g. protection leaf \*)
- Safety distances are observed  
If  $(Y) \geq 200$  mm and  $(x) \leq 100$  and the door leaves move along a smooth part, the hazard of crushing the body is not considered relevant.  
With telescopic sliding doors, the distance to the slow door leaf applies.

- Vertical electro-sensitive protective device

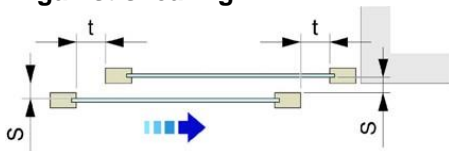
### Against impact



- Separating protective device (e.g. protection leaf \*)
- Safety distances are observed  
 $x \leq 100$  or  
 $100 < x \leq 150$  in connection with force limiting system  
With telescopic sliding doors, the distance to the slow door leaf applies

- Vertical electro-sensitive protective device

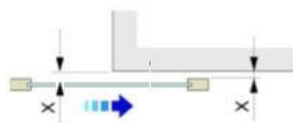
### Against shearing



- Separating protective device (e.g. protection leaf \*)
- Safety distances are observed  
if  $S \leq 8$  then  $t \leq 0$  or if  $S > 8$  then  $t \geq 25$

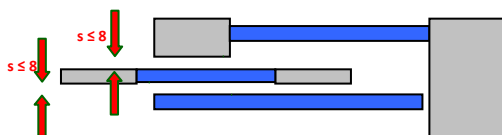
- Vertical electro-sensitive protective device

### Against getting caught-in

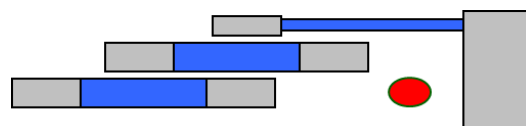


- Separating protective device (e.g. protection leaf \*)
- Safety distances are observed  
 $x \leq 8$

### \* Example protection of door leaf



### Example protection presence detector



The protective measure with protection door leaves is not possible with telescopic sliding doors.

Moreover, the risk evaluation does not exempt the planner from the obligation to study the product-specific EN standards and national regulations.