



## EXPERT ASSESSMENT

<b>Certificate No.:</b>	G 328-2
<b>Testing Body:</b>	TÜV SÜD Industrie Service GmbH Department New Technologies Gottlieb-Daimler-Str. 7 70794 Filderstadt - Germany
<b>Certificate Holder:</b>	Hans & Jos. Kronenberg GmbH Kurt-Schumacher-Str. 1 51427 Bergisch Gladbach - Germany
<b>Manufacturer</b>	Hans & Jos. Kronenberg GmbH Kurt-Schumacher-Str. 1 51427 Bergisch Gladbach - Germany
<b>Product:</b>	Safety contact with positive operation with tactile contacts for use as lock contact of landing door and car door locking devices or as door switch of lift doors
<b>Type:</b>	HZ
<b>Basis of examination:</b>	- EN 81-20:2020 - EN 81-50:2020
<b>Test report:</b>	G 328-2 dated 2023-09-05
<b>Outcome:</b>	The product conforms to the requirements of the basis of examination if the requirements of the annex to this expert assessment are kept.
<b>Date of Issue:</b>	2023-09-05
<b>Valid until:</b>	2028-09-04



Mark Dietz

Technical Body LCC

# Annex to the Expert Assessment No. G 328-2 of 2023-09-05



## 1 Scope of application

- 1.1 The safety switch with forced actuation, type HZ, basically consists of spring-loaded, double-break tactile contacts.
- 1.2 The slight transverse movement of the contacts ensures that they are self-cleaning. The housing of the switch consists of two housing parts, which are firmly connected to each other via 11 latching lugs. The housing material of the switch consists of insulating material (thermoplastic, self-extinguishing). The clamping screws for the electrical connection are designed with captive, self-lifting clamping plates on the clamping screws.
- 1.3 The two tactile contacts are housed in separate contact chambers.
- 1.4 The electrical connection cables are fed through the cable entry into the connection chamber of the safety switch.
- 1.5 The housing of the safety switch, type HZ is designed in protection class IP 20.
- 1.6 The safety switch with forced actuation, type HZ can be actuated with the following switch bridges:
  - Switch bridge, type PZ 18; with 18 mm long contact pins; insulated screw-on plate: 40.5 mm long; longitudinally adjustable by  $\pm 2$  mm.
  - Switch bridge, type PZ 21; with 21 mm long contact pins; insulated screw-on plate: 40.5 mm long; longitudinally adjustable by  $\pm 2$  mm
  - Switch bridge, type DZ 18; with 18 mm long contact pins; insulated screw-on plate: 70 mm long; longitudinally adjustable by  $\pm 4$  mm
  - Switch bridge, type DZ 21; with 21 mm long contact pins; insulated screw-on plate: 70 mm long; adjustable by  $\pm 4$  mm in longitudinal direction
  - Switch bridge, type PZ 18SO; with 18 mm long contact pins; insulated screw-on plate: 44 mm long; adjustable by  $\pm 2$  mm in transverse direction

The height of the contact pin insulation is identical for each of the switch bridges listed above. In the case of the switch bridges with 21 mm long contact pins, the bare contact pin is 3 mm longer than the switch bridges with 18 mm long contact pins.

## 2 Conditions

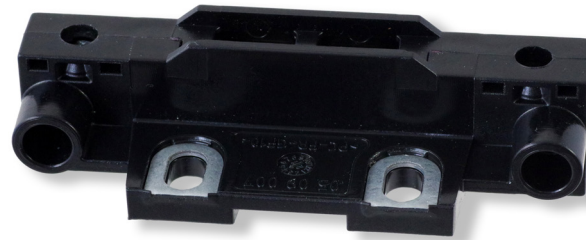
- 2.1 Electrical nominal values of the safety contact
  - Alternating current: 230 V / 2 A
  - Direct current: 200 V / 2 A
- 2.2 For identification and information about the fundamental method of construction of the safety contact the
  - Datasheet "Türschalter HZ" dated May 2023
  - with test remark of 2023-09-05, has to be enclosed to this Confirmation about a test assessment.
- 2.3 The creepage distances of the switch of at least 4 mm and the clearances of the switch of at least 3 mm in relation to conductive or metallic components in the surroundings, must be guaranteed by the arrangement of the switch-box and the switch-bridge or by inserting additional insulating shims.

**Annex to the Expert Assessment  
No. G 328-2 of 2023-09-05**



**3 Remarks**

- 3.1 This confirmation about a test assessment was issued according to the following standards:
- EN 81-20:2020, 5.11.2.2
  - EN 81-50:2020, 5.2.2.4
- 3.2 The test results refer only to the test product and to the related certificate concerning the Confirmation about a test assessment.
- 3.3 The Confirmation about a test assessment may be used only in connection with the pertinent Annex.
- 3.4 For legal reasons, this expert assessment does not correspond to an EC type-examination certificate according to Annex IV of Directive 2014/33/EU (Lift Directive), but can be used as a decision-making aid.
- 3.5 This certificate does not assess the observance of the requirements with regard to “protection classes provided by enclosures according to EN 60529 (IP-Code) concerning protection against foreign matter (objects) and against water” for electric devices.
- 3.6 The product shall be clearly labelled with the name of the manufacturer and the type specification, to be able to check the conformity of the examined product with the series production.
- 3.7 This test report does not assess the fire behaviour of the safety switch and the switch bridges.
- 3.8 Safety switches are not included in the list of safety components (Annex III of Directive 2014/33/EU). Therefore, an EU-type examination certificate according to Annex IV Section A (EU-type examination for safety components) of Directive 2014/33/EU cannot be issued for them.
- 3.9 This Confirmation about a test assessment is based on the state of the art, which is documented through the current harmonized standards. Changes resp. extensions of these standards or a further development of the state of the art may make a revision of this report necessary.
- 3.10 If new knowledge should occur, the test laboratory reserves the right, to give additional conditions concerning the use of the safety contact, or to modify existing conditions.



## Merkmale

- Sicherheitsschalter mit Zwangsbetätigung
- Gehäuse aus Thermoplast, selbstverlöschend
- großzügiger Einlauf bei kleinem Schwenkradius am Hakenriegel
- hohe Kontaktsicherheit durch Selbstreinigung
- geräuscharme Funktionsweise
- Befestigungsunterlagen aus Metall zur sicheren Befestigung
- optional mit UL-Kennzeichnung

## features

- safety switch with positive contact
- enclosure made of thermoplastic, self-extinguishing
- large-scale feed opening at small swiveling radius at hook lock
- high contact safety by self-cleaning
- quiet functioning
- mounting brackets made of metal for secure fixation
- as option with UL-marking



*W. Ch*

05.09.2023

## Bestellangaben / order information codes:

HZ Sperrmittelschalter für Hakenriegel  
switch for locking mechanism for hook bolt

**Technische Daten:**

Normen	EN 81-20, EN 81-50, EN 60947-5-1
Schaltleistung	U <sub>i</sub> = 500 V I <sub>th</sub> = 6 A U <sub>imp</sub> = 4 kV AC-15: U <sub>e</sub> = 230 V I <sub>e</sub> = 2 A DC-13: U <sub>e</sub> = 200 V I <sub>e</sub> = 2 A
Kurzschlussfestigkeit	T10 A F 16 A
Kontaktwerkstoff	Feinsilber
Betätigungskraft	Anfangskraft 0,5 N Endkraft 2,0 N
Anschluss	über Schraubklemme max. 2,5 mm <sup>2</sup> , unverlierbar
Schutzart	IP20
Umgebungstemperatur	-30 °C bis +80 °C
Einbaulage	beliebig
Gewicht	20 g

**technical data:**

norms	EN 81-20, EN 81-50, EN 60947-5-1
switching capacity	U <sub>i</sub> = 500 V I <sub>th</sub> = 6 A U <sub>imp</sub> = 4 kV AC-15: U <sub>e</sub> = 230 V I <sub>e</sub> = 2 A DC-13: U <sub>e</sub> = 200 V I <sub>e</sub> = 2 A
short-circuit capacity	T10 A F 16 A
contact material	fine silver
actuation force	initial force 0.5 N ultimate force 2.0 N
connection	by screw terminal max. 2.5 mm <sup>2</sup> , captive
level of protection	IP20
ambient air temperature	-30 °C up to +80 °C
installation position	any
weight	20 g

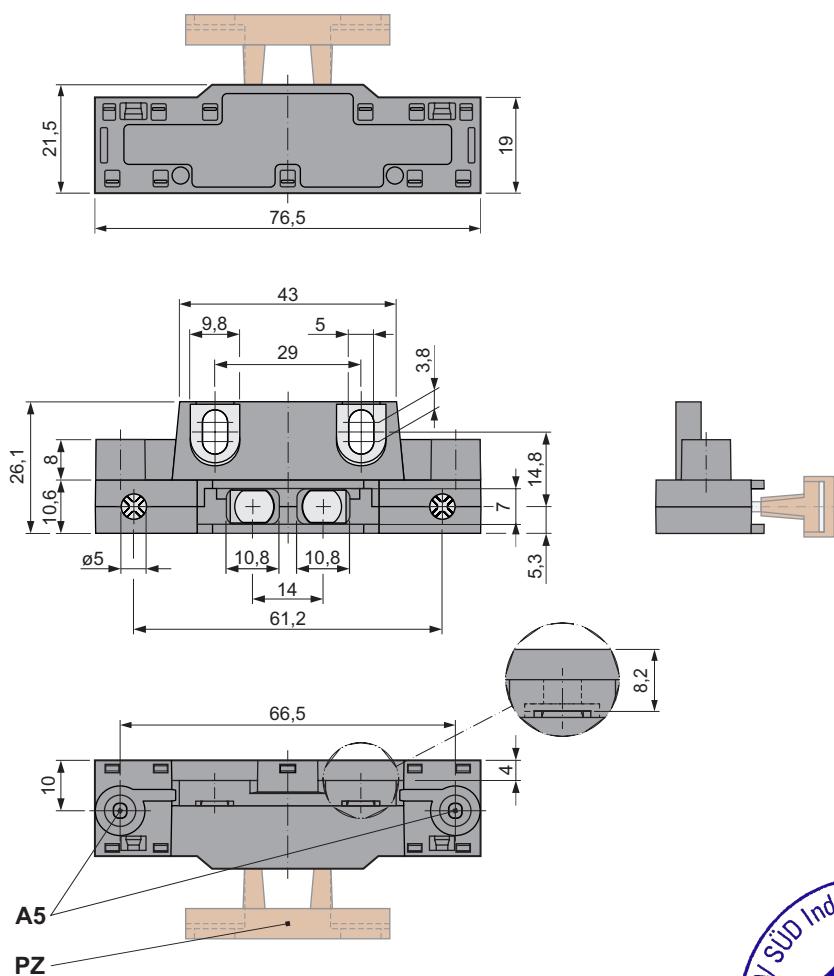


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05.09.2023

**Zubehör / accessories:**

PZ18	Kontaktbrücke, Höhe 18 mm / contact bridge, height 18 mm
PZ21	Kontaktbrücke, Höhe 21 mm / contact bridge, height 21 mm
PZ-U1	Unterlage, 1 mm dick für PZ18, PZ21 / pad, 1 mm thick for PZ18, PZ21
PZ-U5	Unterlage, 5 mm dick für PZ18, PZ21 / pad, 5 mm thick for PZ18, PZ21

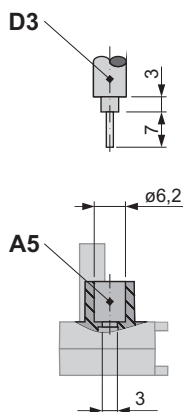
Geräteabmessungen / device dimensions:



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Kabeleinführung / cable entry:



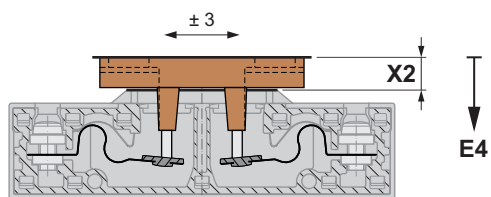
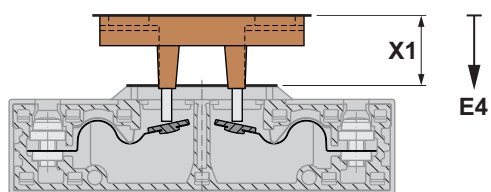
A5 Kabeleinführung zweiadrig, max.  $\varnothing$  6 mm  
cable entry twin core, max.  $\varnothing$  6 mm

D3 Abisolierung der Anschlussleitung  
stripping of connection cable

PZ Kontaktbrücke PZ18 oder PZ21  
contact bridge PZ18 or PZ21

Schaltweg X / contact travel X:

am Beispiel von HZ mit PZ21 / by the example of HZ with PZ21



X	Schaltweg (in mm) contact travel (in mm)	PZ18 <sup>*)</sup>	
X1	Kontaktberührung contact touch	10	13
X <sub>opt.</sub>	optimaler Durchhub optimal overtravel	7	9
X2	maximaler Durchhub maximum overtravel	6	6

<sup>\*)</sup> reduzierter Durchhub  
reduced overtravel



*W. O. C.*

05.09.2023