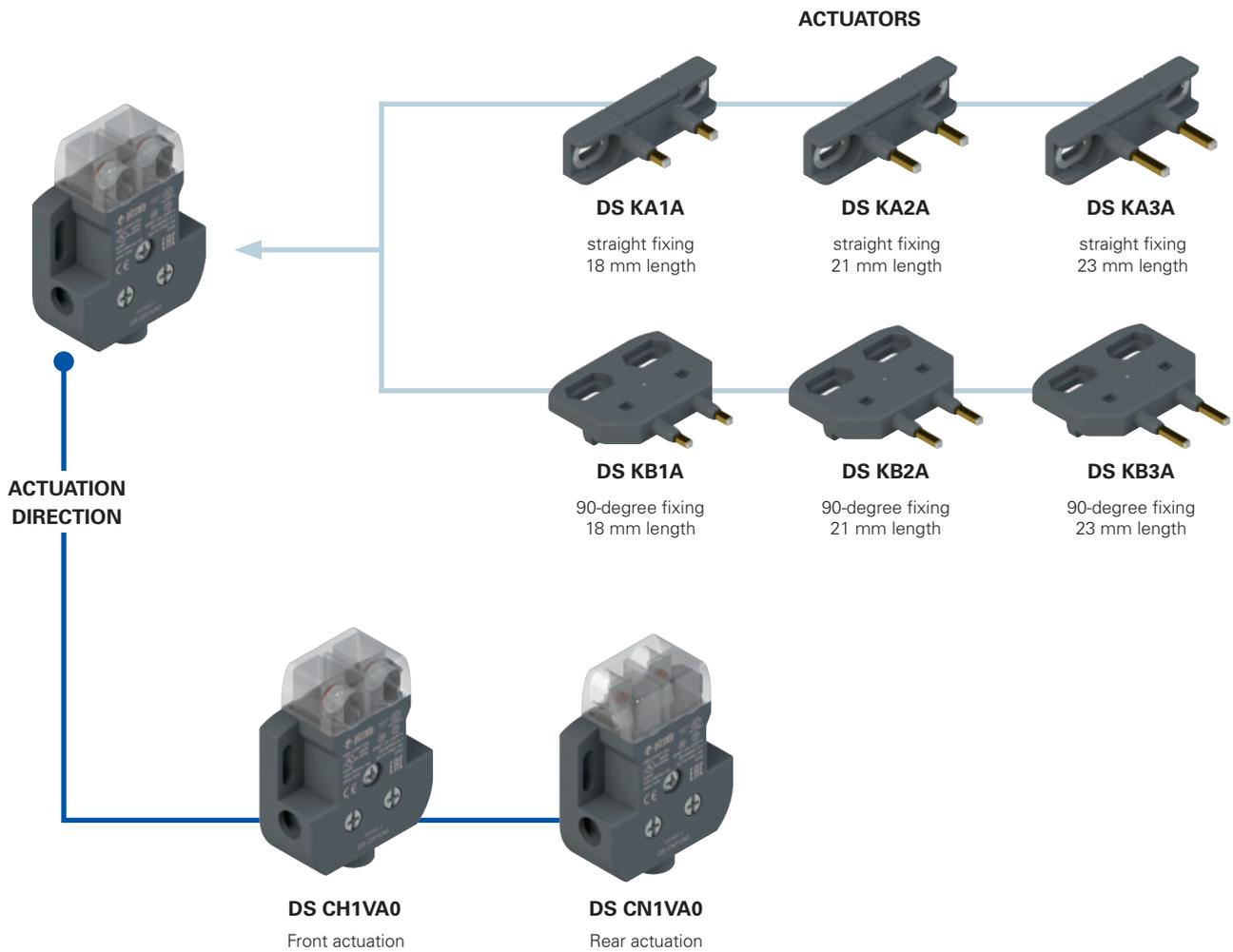


## Selection diagram



—●— product options  
—→— sold separately as accessory

**Code structure for switch****Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.**DS CH1VA0**

Actuation direction	
<b>H</b>	Front actuation Dimensions 60 x 44 x 19 mm
<b>N</b>	Rear actuation Dimensions 60 x 44 x 19 mm

**Code structure for actuator****Attention!** The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.**DS KA1A**

Body design		Contact type	
<b>A</b>	Mounting hole spacing 29 mm straight fixing	<b>1</b>	actuator for internal contacts, 18 mm length
<b>B</b>	Mounting hole spacing 20 mm 90-degree fixing	<b>2</b>	actuator for internal contacts, 21 mm length
		<b>3</b>	actuator for internal contacts, 23 mm length



### Main features

- Housing made of glass fibre reinforced technopolymer, self-extinguishing
- Self-cleaning contacts in solid silver
- 3 wiring options
- Protection degree IP20
- Transparent orientable head

### Quality marks:



UL approval: E131787  
 CCC approval: 2013010305602310  
 EAC approval: RU C-IT.AД35.B.00454

### Technical data

#### Description

Double interruption positive opening safety switch. Suitable for controlling automatic lift doors.

#### Housing

Housing made of glass fiber reinforced technopolymer, self-extinguishing and shock-proof  
 Protection degree acc. to EN 60529: IP20

#### General data

Ambient temperature: -30°C ... +80°C  
 (humidity ≤ 95%, without condensation)  
 Max. operating frequency: 3600 operating cycles/hour  
 Mechanical endurance: 20 million operating cycles  
 Mechanical interlock, not coded: type 1 acc. to EN ISO 14119  
 Safety parameter  $B_{10D}$ : 40,000,000 for NC contacts  
 Max. actuation speed: 0.5 m/s  
 Min. actuation speed: 1 mm/s  
 Max. actuating force: 1.5 N  
 Tightening torques for installation: see page 144

#### Connections:

Cable cross section (flexible copper strands): min. 1 x 0.5 mm<sup>2</sup> (1 x AWG 20)  
 max 1 x 2.5 mm<sup>2</sup> (1 x AWG 14)  
 Cable stripping length: 7 mm

#### In compliance with standards:

IEC 60947-5-1, EN 60947-5-1, EN 60947-1, EN 60529, EN ISO 14119, EN 60529, EN IEC 63000, EN 81-20, EN 81-50, UL 508, CSA 22.2 No.14.

#### Approvals:

IEC 60947-5-1, UL 508, CSA 22.2 No.14, GB/T14048.5-2017.

#### Compliance with the requirements of:

Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU, Lift Directive 2014/33/EU, RoHS Directive 2011/65/EU.

#### Positive contact opening in conformity with standards:

IEC 60947-5-1, EN 60947-5-1.

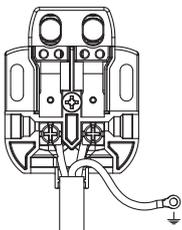
### Electrical data

Thermal current ( $I_{th}$ ): 6 A  
 Rated insulation voltage ( $U_i$ ): 500 Vac  
 Impulse withstand voltage ( $U_{imp}$ ): 6 kV  
 Protection against short circuits: type gG fuse  
 6 A 500 V  
 Pollution degree: 3

### Utilization categories:

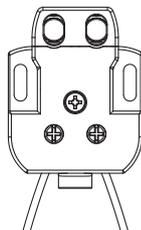
Acc. to	Acc. to	Acc. to	Ratings:
EN 60947-5-1,	EN 81-50	EN 81-50	Acc. to
EN 81-20 par. 5.11.2.2	par. 5.2.2.4	par. 5.2.2.2	UL508
AC15 (50, 60 Hz):	AC (50, 60 Hz):	AC (50, 60 Hz):	AC (50, 60 Hz):
$U_e$ (V) 120 250	230 Vac	230 Vdc	AC 300
$I_e$ (A) 3 3	2 A	2 A	DC:
DC13:	DC:	DC:	Q300
$U_e$ (V) 125 250	200 Vdc	125 Vdc	
$I_e$ (A) 0.8 0.45	2 A	1 A	

### Three wiring options



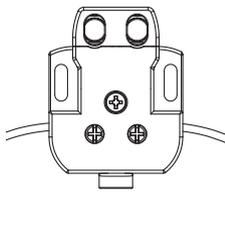
Standard wiring

With bipolar cable through the centre hole, on the bottom of the housing. It is also possible to use a tripolar cable, with the ground wire exiting via a lateral hole to earth other metallic parts.



Fast bottom wiring

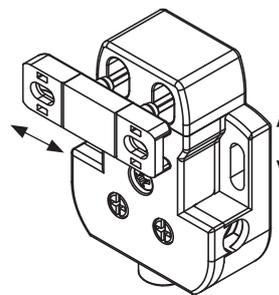
With two monopolar cables fed through two holes provided on the bottom of the housing. There is no need to open the contact cover during this procedure.



Fast lateral wiring

With two monopolar cables fed through two holes provided on the side of the housing. There is no need to open the contact cover during this procedure.

### Transparent head and slotted holes

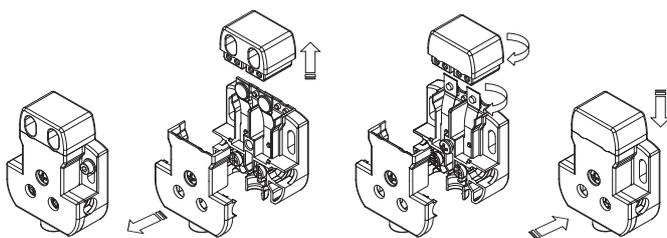


Head transparent on all sides, to allow adjustment and centering of the actuator in relation to contacts.

The slotted holes on the actuator and in the contact housing allow for correct alignment of both devices.

### Rotating head

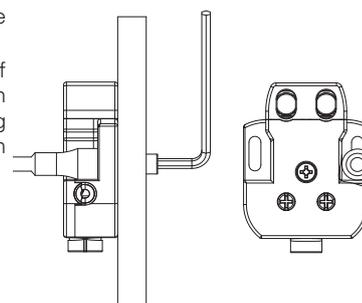
Turning the head and contact springs by 180°, a door contact with rear actuation can be converted to front actuation. Simply by loosening three screws.



### Rear fixing of the housing

The special housing shape allows rear fixing.

You also have the option of inserting a tubular wrench close to the mounting holes, to hold the nut in place during fixing.



### Dimensional drawings

Packs of **10 pcs.**

	Front actuation Switch without actuator A= Actuator insertion direction	Rear actuation Switch without actuator A= Actuator insertion direction
Slow action contacts	DS CH1VA0  1NC	DS CN1VA0  1NC
Maximum actuation travel	6 mm	6 mm
Travel diagram		

#### Legend

Closed contact | Open contact | Positive opening travel | Minimum 2 mm opening travel between contacts, in accordance with UNI EN 81-20

### Centring device

Packs of **100 pcs.**

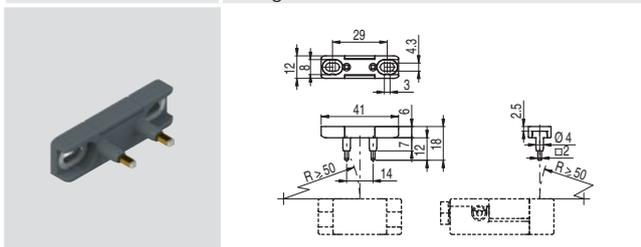
Article	Description
VD CE1A20	Centring device

Centring device compatible with DS KA●● and DS KB●● actuators. Facilitates actuator centring with DS C●1VA switches during installation.

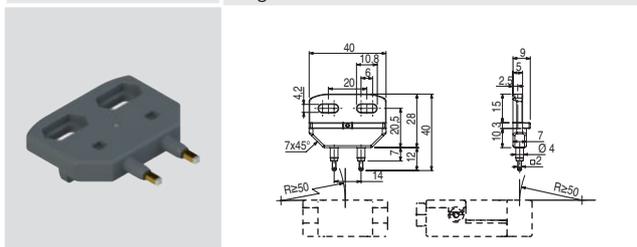
### Actuators

Packs of **10 pcs.**

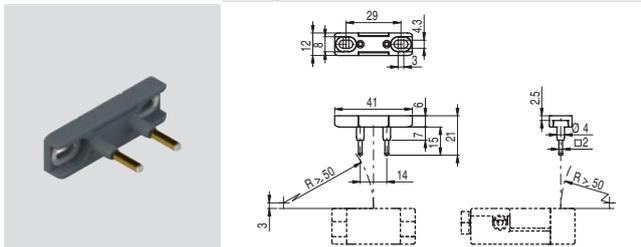
Article	Description
DS KA1A	Straight actuator



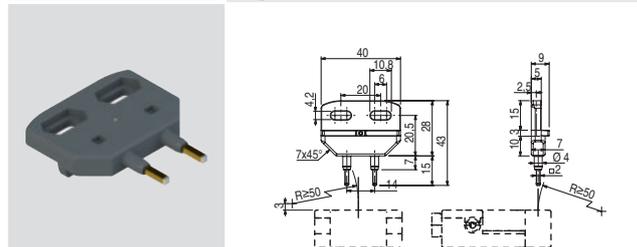
Article	Description
DS KB1A	Angled actuator



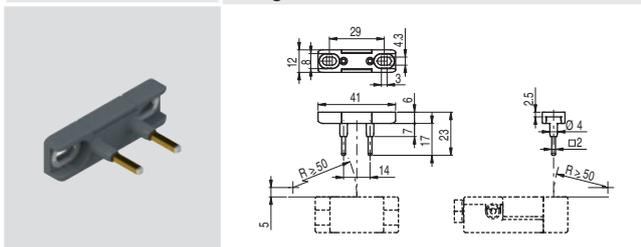
Article	Description
DS KA2A	Straight actuator (*)



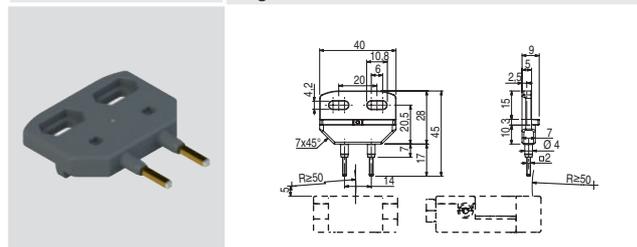
Article	Description
DS KB2A	Angled actuator (*)



Article	Description
DS KA3A	Straight actuator (*)



Article	Description
DS KB3A	Angled actuator (*)



(\*) **ATTENTION:** When inserting the actuator, never exceed the maximum actuating travel.

All values in the drawings are in mm

Accessories See page 135

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)