Main data

- Housing made of glass-reinforced polymer, self-extinguishing
- Self-cleaning contacts made of solid silver
- Possibility of application with the cable side close to the wall
- Azionamento frontale
- Protection degree from IP00 to IP20
- Transparent cover

Markings and quality marks:

Approval IMQ: CA50.00541
EN 81-1:2005
EN 81-2:2005
230 VAC - 2 A

Approval UL: E131787

Technical data

Description

Safety switches with double interruption and positive opening. Suitable for the control of automatic lift doors.

Housing

Made of glass-reinforced polymer, self-extinguishing, shock-proof thermoplastic resin

Protection degree:	IP00 (DS A•5VA) IP20 (DS A•1VA)

General data

Ambient temperature:	from -30°C to +80°C (humidity ≤ 95%, without condensation)
Max operating frequency:	3600 operations cycles[1]/hour
Mechanical endurance:	10 millions of operations cycles[1] (DS A•1VA) 5 millions of operations cycles[1] (DS A•5VA)
Max actuating speed:	0,5 m/s
Min. actuating speed:	1 mm/s
Max actuating force	1,5 N
Driving torque for installation:	see page 75

(1) One operation cycle means two movements, one to close and one to open contacts, as foreseen by EN 60947-5-1 standard.

Cross section of the conductors (flexible copper wire)

min.	1 x 0,5 mm²	(1 x AWG 20)
max.	1 x 2,5 mm²	(1 x AWG 14)

In conformity with standards:

IEC 60947-5-1, EN 60947-5-1, EN 60529, EN 60529, EN 81-1, EN 81-2

In conformity with requirements requested by:

Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and Electromagnetic Compatibility 2004/108/EC.

Positive contact opening in conformity with standards:

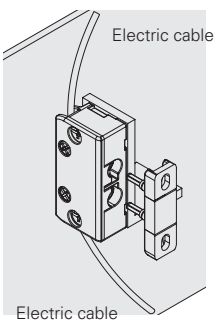
IEC 60947-5-1, EN 60947-5-1, VDE 0660-206.

Electrical data

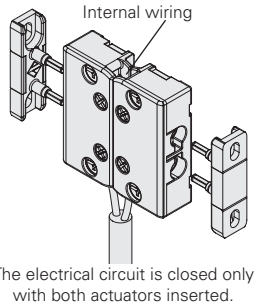
		According EN 60947-5-1 EN 81 par. 14.1.2.2	According EN 81 par. F.1.2.4	According EN 81 par. F.1.2.2.1.1
Thermal current (Ith):	4 A	Utilization categories:		
Rated insulation voltage (Ui):	500 Vac	AC15 (50, 60 Hz)	AC (50, 60 Hz)	AC (50, 60 Hz)
Rated impulse with stand voltage (Uimp):	6 KV	Ue (V) 120 250	230 Vac	230 Vac
Protection against short circuits:	fuse 4 A 500 V type gG	Ie (A) 3 3	2 A	2 A
		DC13	DC:	DC:
Pollution degree:	3	Ue (V) 125 250	200 Vdc	125 Vdc
		Ie (A) 0,55 0,27	2 A	0,5 A

Application examples DS A series

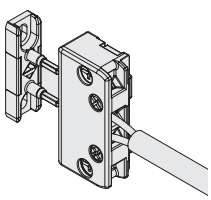
These devices have several cable outputs to allow installation also in restricted spaces, for example:



Door switches close to the wall installation



Door switches side by side installation



Back cable output

Data type approved by UL

Utilization categories Q300 (69 VA, 125-250 Vdc), 120-240 Vac, 3 A pilot duty, 5 A thermal current

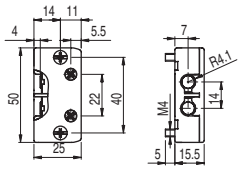
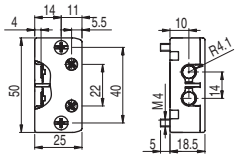
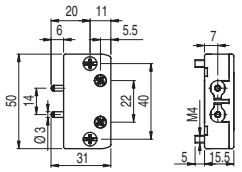
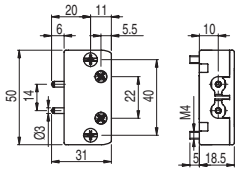
For all contact blocks use 60 or 75 °C copper (Cu) conductor and wire size No. 12-14 AWG.
Terminal tightening torque of 7,1 lb in (0.8 Nm).

In conformity with standard: UL 508

Please contact our technical service for the list of approved products.

Dimensional drawings

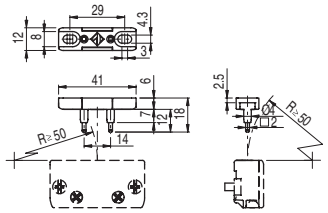
10 pcs packs

	Door switches with positive opening - internal contacts		Door switches with positive opening - external contacts	
	Switch without actuator	Switch without actuator	Switch without actuator	Switch without actuator
				
Slow action contacts	DS AA1VA 1NC	DS AE1VA 1NC	DS AA5VA 1NC	DS AE5VA 1NC
Max actuating travel	8 mm	8 mm	6 mm	6 mm

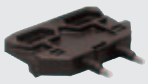
Actuators for door switches with internal contacts (DS A•1VA)

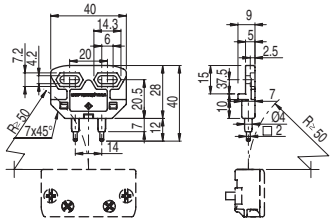
10 pcs packs

Article	Description
DS KA1A	Straight actuator

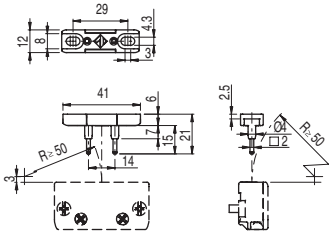


Article	Description
DS KB1A	Right-angled actuator

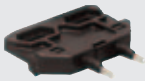


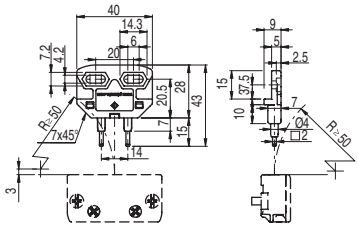


Article	Description
DS KA2A	Straight actuator

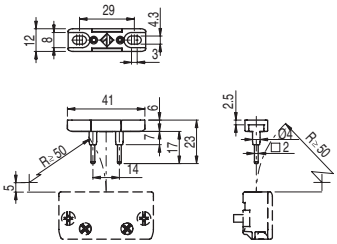


Article	Description
DS KB2A	Right-angled actuator

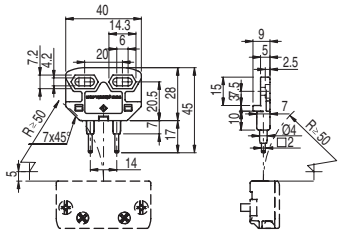




Article	Description
DS KA3A	Straight actuator



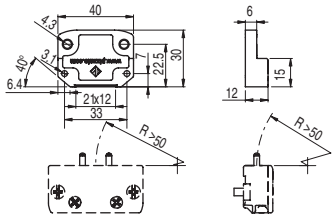
Article	Description
DS KB3A	Right-angled actuator



Actuators for door switches with external contacts (DS A•5VA)

10 pcs packs

Article	Description
DS KP5A	Plane actuator



Items with code on the **green** background are available in stock

➔ 2D and 3D files available on **www.pizzato.com**

All measures in the drawings are in mm

Main data

- Housing made of glass-reinforced polymer, self-extinguishing
- Self-cleaning contacts made of solid silver
- Three wiring possibilities
- Protection degree IP20
- Transparent cover

Markings and quality marks:

CE

Approval IMQ: pending
Approval UL: pending

Technical data

Description
Safety switches with double interruption and positive opening. Suitable for the control of automatic lift doors.

Housing
Made of glass-reinforced polymer, self-extinguishing, shock-proof thermoplastic resin

Protection degree:	IP20

General data

Ambient temperature:	from -30°C to +80°C (humidity ≤ 95%, without condensation)
Max operating frequency:	3600 operations cycles[1]/hour
Mechanical endurance:	20 millions of operations cycles[1]
Max actuating speed:	0,5 m/s
Min. actuating speed:	1 mm/s
Max actuating force	1,5 N
Driving torque for installation:	see page 75

(1) One operation cycle means two movements, one to close and one to open contacts, as foreseen by EN 60947-5-1 standard.

Cross section of the conductors (flexible copper wire)

min.	1 x 0,5 mm²	(1 x AWG 20)
max.	1 x 2,5 mm²	(1 x AWG 14)

In conformity with standards:
IEC 60947-5-1, EN 60947-5-1, EN 60529, EN 60529, EN 81-1, EN 81-2

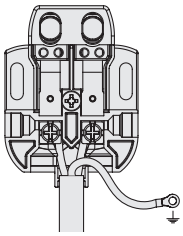
In conformity with requirements requested by:
Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and Electromagnetic Compatibility 2004/108/EC.
Positive contact opening in conformity with standards:
IEC 60947-5-1, EN 60947-5-1, VDE 0660-206.

Electrical data

Thermal current (Ith):	6 A
Rated insulation voltage (Ui):	500 Vac
Rated impulse with stand voltage (Uimp):	6 KV
Protection against short circuits:	fuse 6 A 500 V type gG
Pollution degree:	3

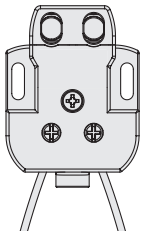
According EN 60947-5-1 EN 81 par. 14.1.2.2			According EN 81 par. F.1.2.4	According EN 81 par. F.1.2.2.1.1	According UL508
Utilization categories:					Ratings:
AC15 (50, 60 Hz)			AC (50, 60 Hz)	AC (50, 60 Hz)	AC (50, 60 Hz)
Ue (V)	120	250	230 Vac	230 Vdc	C300
Ie (A)	3	3	2 A	2 A	
DC13			DC:	DC:	DC:
Ue (V)	125	250	200 Vdc	125 Vdc	Q300
Ie (A)	0,8	0,45	2 A	1 A	

Three wiring possibilities



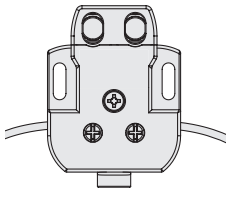
Standard wiring

With a bipolar cable through the central hole on the housing bottom. Furthermore, using a three-pole cable it is possible to use the lateral hole with a wire for earthing other metal parts.



Fast bottom wiring

With two monopolar cables through two holes on the housing bottom. During this operation there is no need to open the contact cover.



Fast lateral wiring

With two monopolar cables through two holes on the housing sides. During this operation there is no need to open the contact cover.

Transparent head and slotted holes

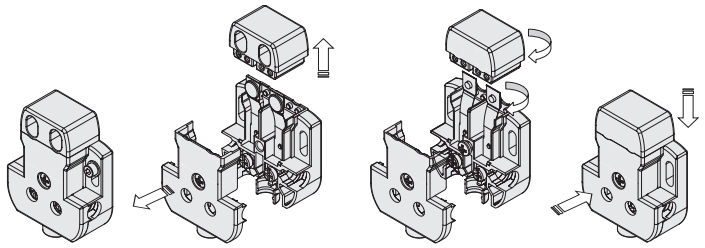
Transparent head on all sides in order to allow adjustment and centering of the actuator with the contacts.

The slotted holes on the actuator and on the contact housing allow to obtain a correct alignment between these two devices.

Items with code on the **green** background are available in stock

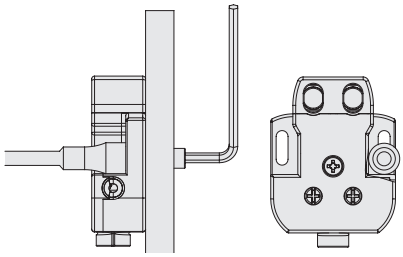
Rotating heads

By rotating the head and the contact reeds of 180° it is possible to transform a door switch with frontal actuation into a door switch with actuation from back. The whole operation is possible by simply unscrewing three screws.



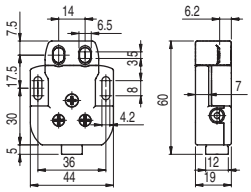
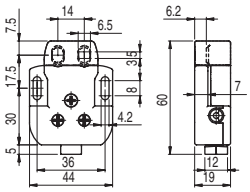
Housing back fixing

The particular shape of the housing allows fixing from the back. In fact near the fixing holes it is possible to fit a tubular wrench in order to keep hold of the nut while fixing.



Dimensional drawings

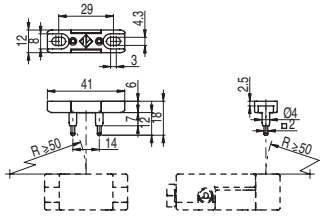
10 pcs packs

	frontal actuation	back actuation
	Switch without actuator	Switch without actuator
		
Slow action contacts	DS CH1VA0 1NC	DS CN1VA0 1NC
Max actuating travel	6 mm	6 mm

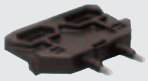
Actuators

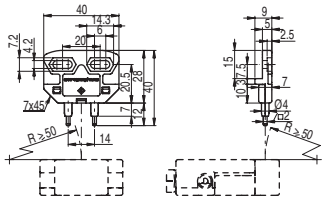
10 pcs packs

Article	Description
DS KA1A	Straight actuator

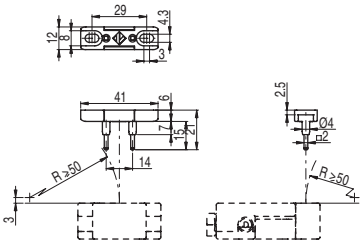


Article	Description
DS KB1A	Right-angled actuator

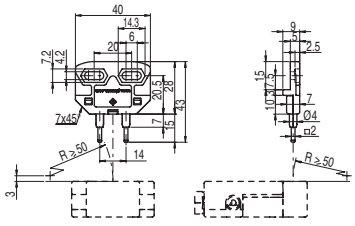




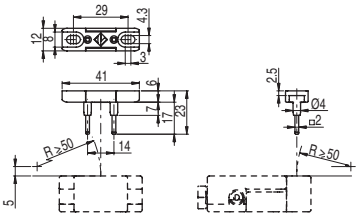
Article	Description
DS KA2A	Straight actuator



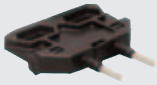
Article	Description
DS KB2A	Right-angled actuator

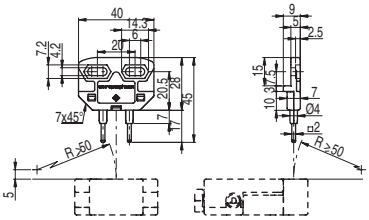


Article	Description
DS KA3A	Straight actuator



Article	Description
DS KB3A	Right-angled actuator





➔ 2D and 3D files available on **www.pizzato.com**

All measures in the drawings are in mm