

# Ø 16 mm Key Selector Switches



## S16KR Series CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

### Features

- Compact, space-saving 16 mm installation diameter
- Short rear-length size of only 29.5 mm
- Independent detachable contacts

### Specifications

Series	S16KR Series
Actuation angle	2-position: 90°±5°, 3-position: 45°±5°
Actuation force	20 to 120 N·mm
Installation	Extended
Shock	500 m/s <sup>2</sup> (≈ 30 G) in each X, Y, Z direction for 3 times
Shock (malfunction)	100 m/s <sup>2</sup> (≈ 10 G) in each X, Y, Z direction for 3 times
Vibration	1.5 mm amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours
Vibration (malfunction)	1.5 mm amplitude at frequency of 10 to 55Hz (for 1 min) in each X, Y, Z direction for 10 minutes
Mechanical life cycle (control unit life cycle)	≥ 250,000 operations (20 operations/min)
Ambient temperature	-15 to 55 °C, storage: -25 to 65 °C (no freezing or condensation)
Ambient humidity	35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)
Protection structure	Control unit: IP65 (IEC standard)
Approval	CE <sup>01)</sup>
Control unit weight	Round: ≈ 16 g, Square: ≈ 16.2 g, Rectangular: ≈ 17.1 g
Housing weight	≈ 1.4 g

01) IEC-60947-5-1

Contact blocks	
Power supply / current	250 VAC~ / 3 A
Dielectric strength	2,000 VAC~ 50/60 Hz for 1 minute (between other polarities), 1,000 VAC~ 50/60 Hz for 1 minute (between same polarities)
Insulation resistance	≥ 100 MΩ (500 VDC== megger)
Contact resistance	≤ 50 mΩ (initial)
Electrical life cycle	≥ 100,000 operations (20 operations/min)
Contact material	AgNi10
Terminal tensile force	≤ 30 N
Terminal soldering time	At the end of tips within 3 sec with 350 °C (30 W-soldering machine)
Approval	CE
Weight	≈ 1.6 g
LED blocks	
Rated voltage	5 / 12 / 24 VDC== model
Current consumption	Refer to the below Current consumption table.
Approval	CE
Weight	≈ 1.9 g

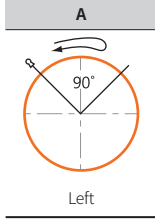
Current consumption	Red	Blue	Green	Yellow	White
SA16-L5□ (5 VDC==)	6 to 9 mA	10 to 14 mA	5 to 7 mA	12 to 16 mA	10 to 14 mA
SA16-L12□ (12 VDC==)	9 to 14 mA	10 to 15 mA	5 to 9 mA	10 to 16 mA	9 to 14 mA
SA16-L24□ (24 VDC==)	15 to 20 mA	20 to 26 mA	16 to 22 mA	27 to 35 mA	23 to 30 mA

### Sold Separately

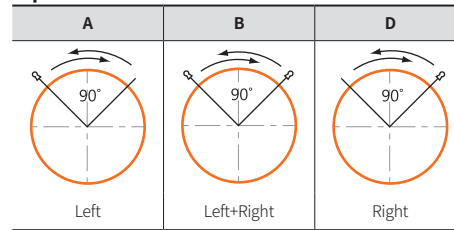
- Contact blocks (SA□-C□□)
- LED blocks (SA□-L□□□)
- Locking handle (SA□-LH)

## Key Removal Position

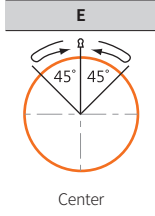
### 2-position spring return



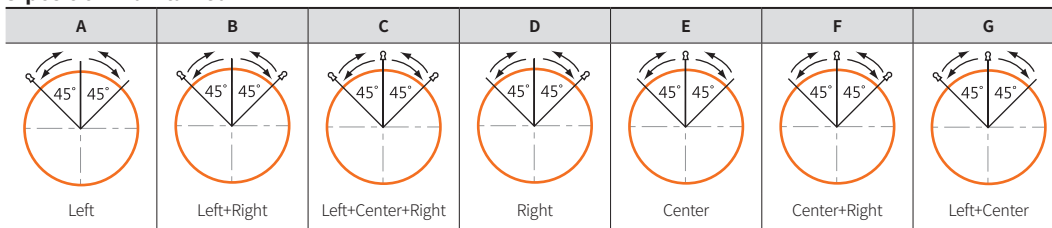
### 2-position maintained



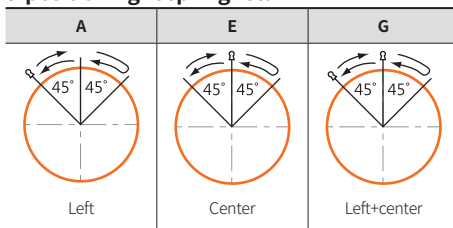
### 3-position two-way spring return



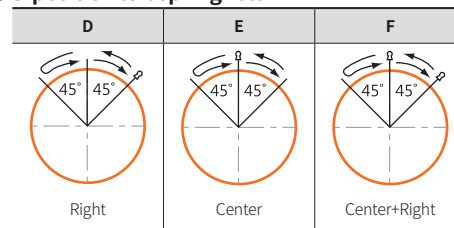
### 3-position maintained



### 3-position right spring return



### 3-position left spring return



## Ordering Information

This is only for reference. For selecting the specified model, follow the Autonics website.

Model is based on control unit+block combination. Control units or blocks are sold separately. In case of block, refer to control switch accessories.

<b>S16KR</b>	<b>①</b>	-	<b>②</b>	<b>③</b>	<b>K</b>	<b>④</b>
		Control unit				Block

### ① Appearance

No mark: Round  
S: Square  
T: Rectangular

### ② Operation

1: 2-position spring return  
2: 2-position maintained  
3: 3-position two-way spring return  
4: 3-position maintained  
5: 3-position right spring return  
6: 3-position left spring return

### ③ Key removal position

Refer to Key Removal Position.

### ④ Contact block

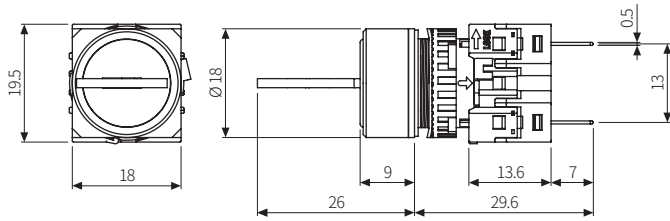
C: 1 C contact  
2C: 2 C contacts

Model	Contact block		LED block
	C contact		DC voltage
S16KR-1AKC	1		-
S16KR-1AK2C	2		-
S16KR-2AKC	1		-
S16KR-2AK2C	2		-
S16KR-2BKC	1		-
S16KR-2BK2C	2		-
S16KR-2DKC	1		-
S16KR-2DK2C	2		-
S16KR-3EK2C	2		-
S16KR-4AK2C	2		-
S16KR-4BK2C	2		-
S16KR-4CK2C	2		-
S16KR-4DK2C	2		-
S16KR-4EK2C	2		-
S16KR-4FK2C	2		-
S16KR-4GK2C	2		-
S16KR-5AK2C	2		-
S16KR-5EK2C	2		-
S16KR-5GK2C	2		-
S16KR-6DK2C	2		-
S16KR-6EK2C	2		-
S16KR-6FK2C	2		-
S16KRS-1AKC	1		-
S16KRS-1AK2C	2		-
S16KRS-2AKC	1		-
S16KRS-2AK2C	2		-
S16KRS-2BKC	1		-
S16KRS-2BK2C	2		-
S16KRS-2DKC	1		-
S16KRS-2DK2C	2		-
S16KRS-3EK2C	2		-
S16KRS-4AK2C	2		-
S16KRS-4BK2C	2		-
S16KRS-4CK2C	2		-
S16KRS-4DK2C	2		-
S16KRS-4EK2C	2		-
S16KRS-4FK2C	2		-
S16KRS-4GK2C	2		-
S16KRS-5AK2C	2		-
S16KRS-5EK2C	2		-
S16KRS-5GK2C	2		-
S16KRS-6DK2C	2		-
S16KRS-6EK2C	2		-
S16KRS-6FK2C	2		-
S16KRT-1AKC	1		-
S16KRT-1AK2C	2		-
S16KRT-2AKC	1		-
S16KRT-2AK2C	2		-
S16KRT-2BKC	1		-
S16KRT-2BK2C	2		-
S16KRT-2DKC	1		-
S16KRT-2DK2C	2		-
S16KRT-3EK2C	2		-
S16KRT-4AK2C	2		-
S16KRT-4BK2C	2		-
S16KRT-4CK2C	2		-
S16KRT-4DK2C	2		-
S16KRT-4EK2C	2		-
S16KRT-4FK2C	2		-
S16KRT-4GK2C	2		-
S16KRT-5AK2C	2		-
S16KRT-5EK2C	2		-
S16KRT-5GK2C	2		-
S16KRT-6DK2C	2		-
S16KRT-6EK2C	2		-
S16KRT-6FK2C	2		-

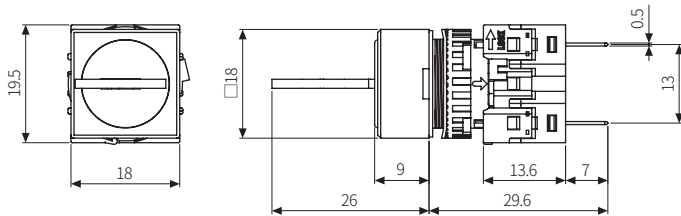
## Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.
- Panel thickness:  $\leq 3.5$  mm

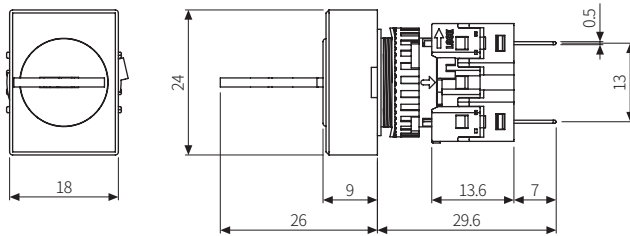
### ■ S16KR-□ (round)



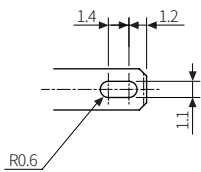
### ■ S16KRS-□ (square)



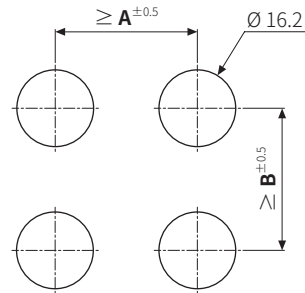
### ■ S16KRT-□ (rectangular)



### ■ Terminal pin



### ■ Panel cut-out



	A	B
Round	20	21
Square	20	21
Rectangular	25	21