

Data Sheet

powered
by
Autonics

Ø 30 mm Key Selector Switches



S3KF 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

- Smooth operation
- High electrical conductivity
- Long-lasting durability

Data Sheet

Specifications

Series	S3KF Series
Actuation angle	2-position: [Spring return] $60^\circ \pm 5^\circ$ [Maintained] $90^\circ \pm 5^\circ$ 3-position: [Spring return] $60^\circ \pm 5^\circ$ [Maintained] $90^\circ \pm 5^\circ$
Actuation force	0.5 kgf (4.9 N) (per 1 contact)
Installation	Flush
Shock	300 m/s ² ($\approx$ 30 G) in each X, Y, Z direction for 3 times
Shock (malfunction)	100 m/s ² ($\approx$ 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 55 Hz (for 1 min) in each X, Y, Z direction for 10 minutes
Mechanical life cycle (control unit life cycle)	$\geq$ 100,000 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: IP52 (IEC standard)
Approval	CE, RoHS, REACH, ENEC, UL, VDE
Control unit weight	$\approx$ 41 g
Housing weight	$\approx$ 7 g

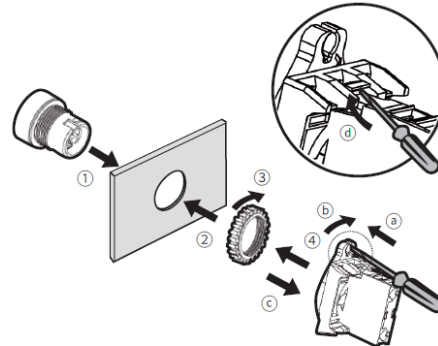
Contact blocks	
Power supply / current	110 VAC ~ / 10 A, 250 VAC ~ / 6 A
Dielectric strength	2,500 VAC ~ 50/60 Hz for 1 minute
Insulation resistance	$\geq$ 1,000 M Ω (500 VDC = megger)
Contact resistance	$\leq$ 20 m Ω (initial)
Electrical life cycle	$\geq$ 100,000 operations (20 operations/min)
Contact material	AgNi10
Approval	CE, RoHS, REACH, ENEC, UL, VDE
Weight	Modular type: $\approx$ 10 g, Singular type: $\approx$ 11 g

Sold Separately

- Contact blocks (SA□-C□□)
- Locking handle (SA□-LH)
- Switch washer (SA-SW□)

Assembly / Disassembly

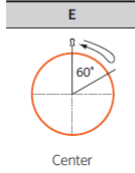
- Assembly order: ①→②→③→④
- Disassembly order: a→b→c→d



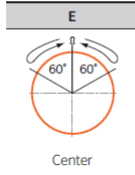
Control Switches	Panel thickness	Tightening torque
Ø 22/25/30 mm	Max. 6 mm	$\leq$ 1.96 N·m

Key Removal Position

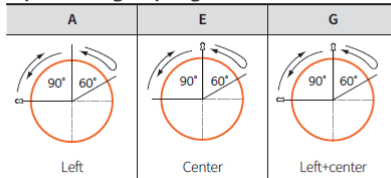
2-position spring return



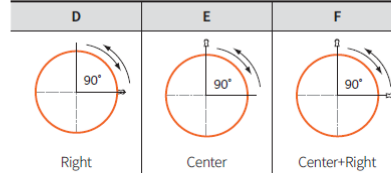
3-position two-way spring return



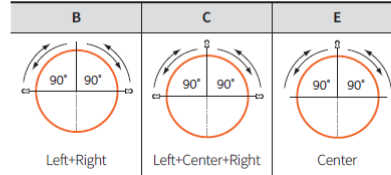
3-position right spring return



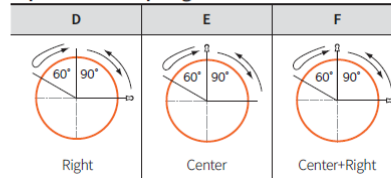
2-position maintained



3-position maintained



3-position left spring return



Data Sheet

S3KF	-	1	2	S	3	4
Control unit					Block	

1 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

2 Key removal position

Refer to Key Removal Position.

3 Contact block

- A: 1 A contact (2-position)
- B: 1 B contact (2-position)
- 2A: 2 A contacts
- 2B: 2 B contacts
- AB: 1 A contact, 1 B contact

4 Block

- No mark: Singular type
- M: Modular type

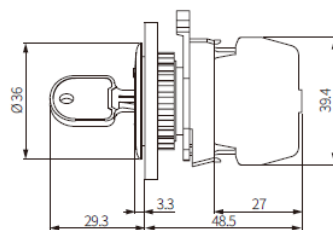
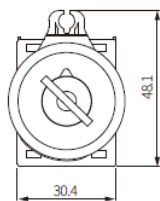
Model	Contact block		LED block	
	A contact	B contact	AC/DC voltage	AC voltage
S3KF-1ESA(M)	1	-	-	-
S3KF-1ES2A(M)	2	-		
S3KF-1ESB(M)	-	1		
S3KF-1ES2B(M)	-	2	-	-
S3KF-1ESAB(M)	1	1		
S3KF-2DSA(M)	1	-		
S3KF-2DS2A(M)	2	-	-	-
S3KF-2DSB(M)	-	1		
S3KF-2DS2B(M)	-	2		
S3KF-2DSAB(M)	1	1	-	-
S3KF-2ESA(M)	1	-		
S3KF-2ES2A(M)	2	-		
S3KF-2ESB(M)	-	1	-	-
S3KF-2ES2B(M)	-	2		
S3KF-2ESAB(M)	1	1		
S3KF-2FSA(M)	1	-	-	-
S3KF-2FS2A(M)	2	-		
S3KF-2FSB(M)	-	1		
S3KF-2FS2B(M)	-	2	-	-
S3KF-2FSAB(M)	1	1		
S3KF-3ES2A(M)	2	-		
S3KF-3ES2B(M)	-	2	-	-
S3KF-3ESAB(M)	1	1		
S3KF-4BS2A(M)	2	-	-	-
S3KF-4BS2B(M)	-	2		
S3KF-4BSAB(M)	1	1		
S3KF-4CS2A(M)	2	-	-	-
S3KF-4CS2B(M)	-	2		
S3KF-4CSAB(M)	1	1		
S3KF-4ES2A(M)	2	-	-	-
S3KF-4ES2B(M)	-	2		
S3KF-4ESAB(M)	1	1		
S3KF-5AS2A(M)	2	-	-	-
S3KF-5AS2B(M)	-	2		
S3KF-5ASAB(M)	1	1		
S3KF-5ES2A(M)	2	-	-	-
S3KF-5ES2B(M)	-	2		
S3KF-5ESAB(M)	1	1		
S3KF-5GS2A(M)	2	-	-	-
S3KF-5GS2B(M)	-	2		
S3KF-5GSAB(M)	1	1		
S3KF-5ES2A(M)	2	-	-	-
S3KF-5ES2B(M)	-	2		
S3KF-5ESAB(M)	1	1		
S3KF-5GS2A(M)	2	-	-	-
S3KF-5GS2B(M)	-	2		
S3KF-5GSAB(M)	1	1		
S3KF-6DS2A(M)	2	-	-	-
S3KF-6DS2B(M)	-	2		
S3KF-6DSAB(M)	1	1		
S3KF-6ES2A(M)	2	-	-	-
S3KF-6ES2B(M)	-	2		
S3KF-6ESAB(M)	1	1		
S3KF-6FS2A(M)	2	-	-	-
S3KF-6FS2B(M)	-	2		
S3KF-6FSAB(M)	1	1		

Data Sheet

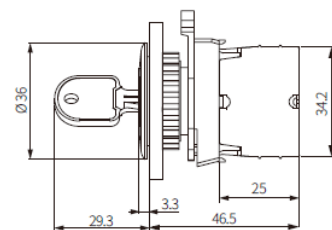
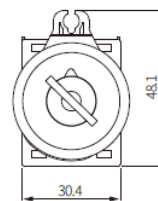
Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.
- Panel thickness: ≤ 6 mm

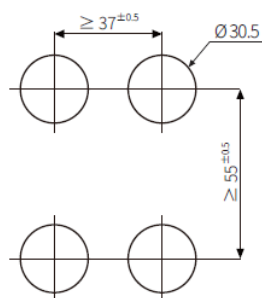
■ S3KF-□ (singular type block)



■ S3KF-□ M (modular type block)



■ Panel cut-out



Item No.	Model No.	Description	Key removal position
2585998	S3KF-2DS	30 mm, Key selector switch, 2 position, Maintained	Right 90°
2585999	S2KF-2FS	30 mm, Key selector switch, 2 position, Maintained	Center, Right 90°

Data Sheet

Contact blocks and LED blocks

Item No.	Model	Description
2465053	SA-CA	Contact block, A contact, Singular type
2465054	SA-CAM	Contact block, A contact, Modular type
2465055	SA-CB	Contact block, B contact, Singular type
2465056	SA-CBM	Contact block, B contact, Modular type
2465057	SA-LD	LED block, White, Singular type, 12-24 V/DC V/AC
2465058	SA-LDM	LED block, White, Modular type, 12-24 V/DC V/AC
2465059	SA-LA	LED block, White, Singular type, 110-240 V/AC
2465060	SA-LAM	LED block, White, Modular type, 110-240 V/AC
2465061	SA-LAB	LED block, Blue, Singular type, 110-240 V/AC
2465062	SA-LAG	LED block, Green, Singular type, 110-240 V/AC
2465063	SA-LAR	LED block, Red, Singular type, 110-240 V/AC
2465064	SA-LAY	LED block, Yellow, Singular type, 110-240 V/AC
2465065	SA-LABM	LED block, Blue, Modular type, 110-240 V/AC
2465066	SA-LAGM	LED block, Green, Modular type, 110-240 V/AC
2465067	SA-LARM	LED block, Red, Modular type, 110-240 V/AC
2465068	SA-LAYM	LED block, Yellow, Modular type, 110-240 V/AC
2465069	SA-LDBM	LED block, Blue, Modular type, 12-24 V/DC V/AC
2465070	SA-LDGM	LED block, Green, Modular type, 12-24 V/DC V/AC
2465071	SA-LDRM	LED block, Red, Modular type, 12-24 V/DC V/AC
2465072	SA-LDYM	LED block, Yellow, Modular type, 12-24 V/DC V/AC
2465073	SA-LDR	LED block, Red, Singular type, 12-24 V/DC V/AC
2465674	SA-LDG	LED block, Green, Singular type, 12-24 V/DC V/AC
2465074	SA-LDY	LED block, Yellow, Singular type, 12-24 V/DC V/AC
2465075	SA-LDB	LED block, Blue, Singular type, 12-24 V/DC V/AC