20210408 Autonics

Ø 16 mm Emergency Switches



S16ER 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	S16ER Series
Actuation distance	2 to 4 mm
Actuation angle	35° ± 7°
Actuation force	1.7 to 4.7 kgf (17 to 47 N)
Installation	Extended
Shock	$500 \text{ m/s}^2 (\approx 30 \text{ G}) \text{ in each X, Y, Z direction for 3 times}$
Shock (malfunction)	100 m/s² (≈ 10 G) in each X, Y, Z direction for 3 times
Vibration	$1.5\mathrm{mm}$ amplitude at frequency of 10 to $55\mathrm{Hz}$ (for $1\mathrm{min}$) in each X, Y, Z direction for $2\mathrm{hours}$
Vibration (malfunction)	$1.5\mathrm{mm}$ 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)	≥ 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: IP65 (IEC standard)
Approval	C € ⁰¹⁾
Control unit weight	≈ 11.5 g
Housing weight	≈ 1.4 g

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Contact blocks				
Power supply / current	250 VAC~/3A			
Dielectric strength	$2,000 \text{VAC} \sim 50/60 \text{Hz}$ for 1 minute (between other polarities), $1,000 \text{VAC} \sim 50/60 \text{Hz}$ for 1 minute (between same polarities)			
Insulation resistance	$\geq 100 \mathrm{M}\Omega (500 \mathrm{VDC}$			
Contact resistance	$\leq 50 \mathrm{m}\Omega$ (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	C € № c PN us EFIC			
Weight	≈ 1.6 g			
LED blocks				
Rated voltage	5/12/24 VDC model			
Current consumption	Refer to the below Current consumption table.			
Approval	C€ 2 32 us [H]			
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

Reset

Turn reset	Pull reset

Sold Separately

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

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.

■ Non-illuminated

S16ER	-	Е	1	R	0	
		Control unit			Block	

Model	Contact block	LED block
Model	B contact	DC voltage
S16ER-E1RB	1	
S16ER-E1R2B	2	-

Contact block

B: 1 B contact

2B: 2 B contacts

■ Illuminated

Control unit Block	S16ER	-	E	3	R	0	2
			Control unit			Blo	ock

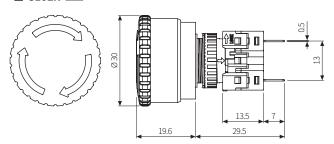
Contact block	LED block
B: 1 B contact	5: 5 VDC==
2B: 2 B contacts	12: 12 VDC==
	24: 24 VDC==

Model	Contact block	LED block
Model	B contact	DC voltage
S16ER-E3RB5		1 (5 VDC==)
S16ER-E3RB12	1	1 (12 VDC==)
S16ER-E3RB24		1 (24 VDC==)
S16ER-E3R2B5		1 (5 VDC==)
S16ER-E3R2B12	2	1 (12 VDC==)
S16ER-E3R2B24		1 (24 VDC==)

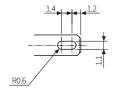
Dimensions

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

■ S16ER-



■ Terminal pin



■ Panel cut-out

