

Ø 22/25 mm Emergency Switches



S2ER 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

Specifications

Series	S2ER Series
Actuation distance	5.0 to 5.5 mm
Actuation angle	40° ± 7°
Actuation force	0.5 kgf (4.9 N) (per 1 contact)
Installation	Extended
Shock	300 m/s ² (≈ 30 G) in each X, Y, Z direction for 3 times
Shock (malfunction)	100 m/s ² (≈ 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)	≥ 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 ENEC EAC PS
Control unit weight	D30: ≈ 22.5 g D40: ≈ 22.5 g D60: ≈ 27 g
Housing weight	≈ 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	≥ 1,000 MΩ (500 VDC≡ megger)
Contact resistance	≤ 20 mΩ (initial)
Electrical life cycle	≥ 100,000 operations (20 operations/min)
Contact material	AgNi10
Approval	CE ENEC EAC PS
Weight	Modular type: ≈ 10 g, Singular type: ≈ 11 g
LED blocks	
Rated voltage	AC/DC voltage type: 12-24 VAC~ 50/60 Hz, 12-24 VDC≡ AC voltage type: 110-220 VAC~ 50/60 Hz
Current consumption	≤ 20 mA
Approval	CE ENEC EAC
Weight	AC/DC voltage type: ≈ 11 g, AC voltage type: ≈ 12 g

Sold Separately

- Contact blocks (SA□-C□□)
- LED blocks (SA□-L□□□)
- Switch enclosures (SA-□B□)
- Locking handle (SA□-LH)
- Switch washer (SA-SW□)
- Emergency switch nameplates (SA-N□)
- Emergency switch protective shrouds (SA-EG□)

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.

S2ER	-	E	①	R	②	③	④
Control unit				Block			

① Button type

- 1: (Non-illuminated) D30 + Long head
- 2: (Non-illuminated) D30 + Short head
- 3: (Non-illuminated) D40 + Short head
- 4: (Illuminated) D40 + Short head
- 5: (Non-illuminated) D60 + Short head

② Contact block

- A: 1 A contact
- 2A: 2 A contacts
- 3A: 3 A contacts
- B: 1 B contact
- 2B: 2 B contacts
- 3B: 3 B contacts
- AB: 1 A contact, 1 B contact
- 2AB: 2 A contacts, 1 B contact
- A2B: 1 A contact, 2 B contacts

③ LED block (D40)

- D: 1 AC/DC voltage type
- L: 1 AC voltage type

④ Block

- No mark: Singular type
- M: Modular type

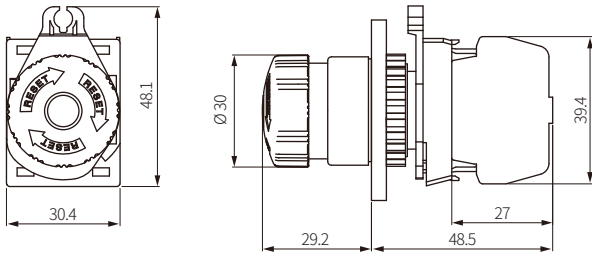
Model	Contact block		LED block	
	A contact	B contact	AC/DC voltage	AC voltage
S2ER-E1RA(M)	1	-		
S2ER-E1R2A(M)	2	-		
S2ER-E1R3A(M)	3	-		
S2ER-E1RB(M)	-	1		
S2ER-E1R2B(M)	-	2	-	-
S2ER-E1R3B(M)	-	3		
S2ER-E1RAB(M)	1	1		
S2ER-E1R2AB(M)	2	1		
S2ER-E1R2AB(M)	1	2		
S2ER-E2RA(M)	1	-		
S2ER-E2R2A(M)	2	-		
S2ER-E2R3A(M)	3	-		
S2ER-E2RB(M)	-	1		
S2ER-E2R2B(M)	-	2	-	-
S2ER-E2R3B(M)	-	3		
S2ER-E2RAB(M)	1	1		
S2ER-E2R2AB(M)	2	1		
S2ER-E2R2AB(M)	1	2		
S2ER-E3RA(M)	1	-		
S2ER-E3RA(M)	2	-		
S2ER-E3R3A(M)	3	-		
S2ER-E3RB(M)	-	1		
S2ER-E3RB-EL ⁰¹⁾	-	1		
S2ER-E3R2B(M)	-	2		
S2ER-E3R3B(M)	-	3		
S2ER-E3RAB(M)	1	1		
S2ER-E3R2AB(M)	2	1		
S2ER-E3R2AB(M)	1	2		
S2ER-E4RAD(M)	1	-		
S2ER-E4R2AD(M)	2	-	1	-
S2ER-E4RBD(M)	-	1		
S2ER-E4R2BD(M)	-	2		
S2ER-E4RABL(M)	1	1	-	1
S2ER-E5RA(M)	1	-		
S2ER-E5R2A(M)	2	-		
S2ER-E5R3A(M)	3	-		
S2ER-E5RB(M)	-	1		
S2ER-E5R2B(M)	-	2	-	-
S2ER-E5R3B(M)	-	3		
S2ER-E5RAB(M)	1	1		
S2ER-E5R2AB(M)	2	1		
S2ER-E5R2AB(M)	1	2		

01) Acquired KC (HU02054-20014)

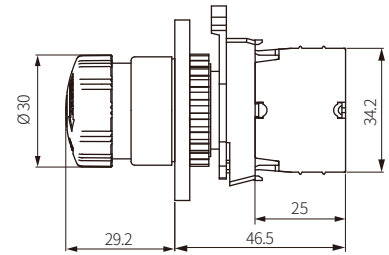
Dimensions

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

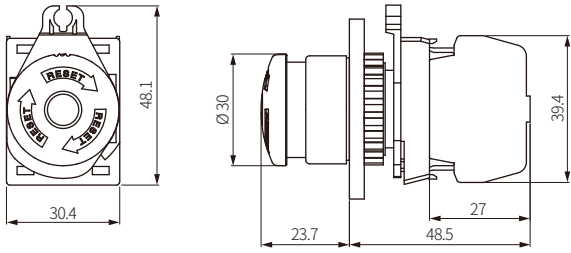
■ S2ER-E1R □ (D30 + long head, singular type block)



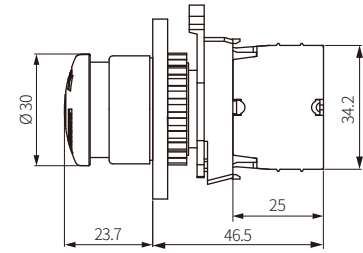
■ S2ER-E1R □ M (D30 + long head, modular type block)



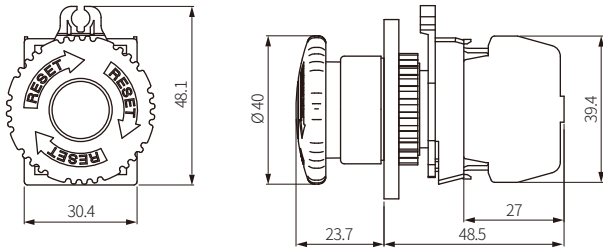
■ S2ER-E2R □ (D30 + short head, singular type block)



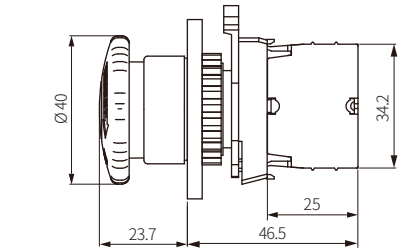
■ S2ER-E2R □ M (D30 + short head, modular type block)



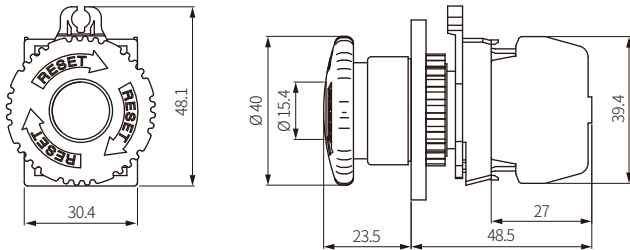
■ S2ER-E3R □ (D40 + short head, singular type block)



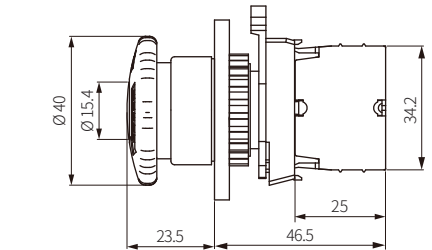
■ S2ER-E3R □ M (D40 + short head, modular type block)



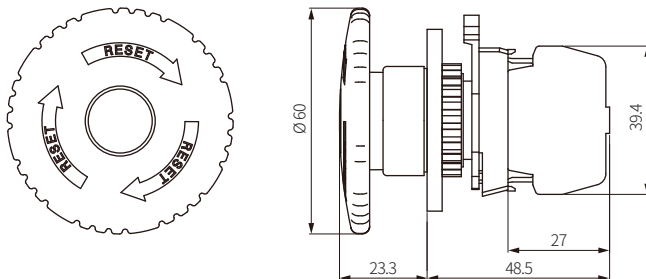
■ S2ER-E4R □ (D40 + short head, singular type block)



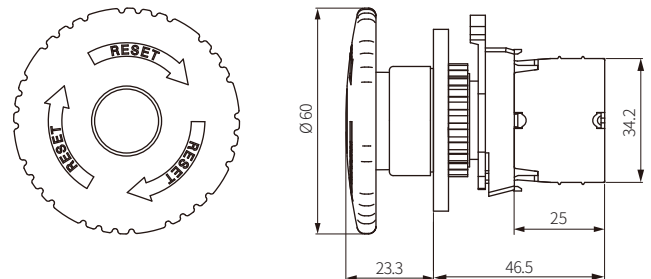
■ S2ER-E4R □ M (D40 + short head, modular type block)



■ S2ER-E5R □ (D60 + short head, singular type block)

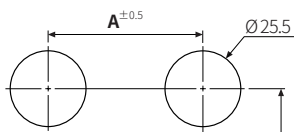


■ S2ER-E5R □ M (D60 + short head, modular type block)

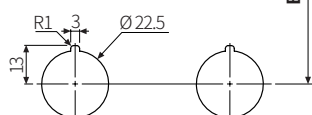


■ Panel cut-out

<Mounting round: $\varnothing 25$ >







<Mounting round: $\varnothing 22$ >







	A	B
D30	≥ 33	≥ 55
D40	≥ 55	≥ 55
D60	≥ 80	≥ 80

Ø 22/25 mm, Ø 30 mm, □ 30 mm Control Switches Accessories

Contact Blocks (SA□ -C□ □)

Model	Contact	Features	Applied switches	Appearance
SA-CAM	A contact (normally open)	<ul style="list-style-type: none"> Modular type Ring / Fork terminal available Modular connection (up to 3 units) 	Ø 22/25 mm, Ø 30 mm, □ 30 mm Control switches	
SA-CBM	B contact (normally closed)			
SA-CA	A contact (normally open)	<ul style="list-style-type: none"> Singular type (dust-resistant contact point) Fork terminal available Loose screw prevention 		
SA-CB	B contact (normally closed)			




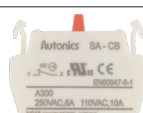
Power supply / current	110 VAC~ / 10 A, 250 VAC~ / 6 A
Dielectric strength	2,500 VAC~ 50/60 Hz for 1 minute
Insulation resistance	≥ 1,000 MΩ (500 VDC≡ megger)
Contact resistance	≤ 20 mΩ (initial)
Electrical life cycle	≥ 100,000 operations (20 operations/min)
Contact material	AgNi10
Approval	CE    
Weight	Modular type: ≈ 10 g, Singular type: ≈ 11 g

■ Removal




Separate the unit using a flat-head (-) screwdriver.



LED Blocks (SA□ -L□ □)

Model	Power supply	Features	Applied switches	Appearance
SA-LD□ M	AC/DC voltage type 12-24 VAC~ 50/60 Hz 12-24 VDC≡	<ul style="list-style-type: none"> Modular type Ring / Fork terminal available Modular connection (up to 3 units) 	Ø 22/25 mm, Ø 30 mm, □ 30 mm Control switches, Pilot lights	
SA-LA□ M	AC voltage type 110-220 VAC~ 50/60 Hz			
SA-LD□	AC/DC voltage type 12-24 VAC~ 50/60 Hz 12-24 VDC≡	<ul style="list-style-type: none"> Singular type (dust-resistant contact point) Fork terminal available Loose screw prevention 		
SA-LA□	AC voltage type 110-220 VAC~ 50/60 Hz			

□ : Color (R: Red / B: Blue / G: Green / Y: Yellow / W: White)


Rated voltage	AC/DC voltage type: 12-24 VAC~ 50/60 Hz, 12-24 VDC≡ AC voltage type: 110-220 VAC~ 50/60 Hz
Current consumption	≤ 20 mA
Approval	CE   
Weight	AC/DC voltage type: ≈ 11 g, AC voltage type: ≈ 12 g

■ Removal

Separate the unit using a flat-head (-) screwdriver. Same as contact removal method.

Locking Handle (SA□ -LH)

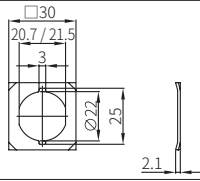

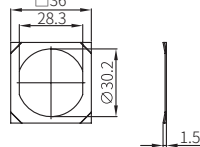

- For locking switch nuts behind the panels.

Model	Applied switches	Appearance
SA-LH	Ø 22/25 mm, Ø 30 mm, □ 30 mm Control switches, Pilot lights ⁰¹⁾	

01) Except Ø 30 mm round pressure switches (extended).

Switch Washer (SA-SW□)

- The washer helps to improve switch tightening force.
- Unit: mm, For the detailed drawings, follow the Autonics web site.

Model	Applied switches	Dimensions	Appearance
SA-SW2	Ø 22/25 mm Control switches, Pilot lights		
SA-SW3	Ø 30 mm Control switches, Pilot lights		

Switch Enclosures (SA-□ B□)

Model	Shape	Applied switches	Appearance
SA-SB□	Square	Ø 22/25 mm Control switches	
SA-TB□	Triangle		

□ : Number of holes (1 to 5)

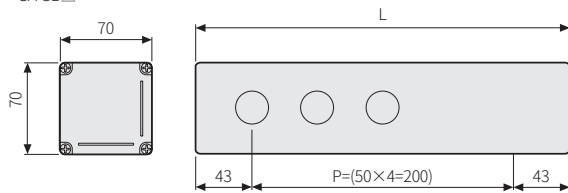
You can order the other size and the number of holes.

■ Dimensions

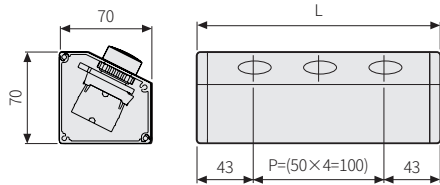
Unit: mm, For the detailed drawings, follow the Autonics web site.

Model	Holes	L
SA-□ B1	1	86
SA-□ B2	2	136
SA-□ B3	3	186
SA-□ B4	4	236
SA-□ B5	5	286

• SA-SB□



• SA-TB□



Switch Waterproof Cap (SA-W□)

- IP65 protection structure with waterproof cap
- Unit: mm, For the detailed drawings, follow the Autonics web site.

Model	Applied switches	Dimensions	Appearance
SA-WP	Ø 22/25 mm Round non-illuminated / extended push button switches		
SA-WL	Ø 22/25 mm Round illuminated / extended push button switches		

Emergency Switch Nameplates (SA-N□)

- Unit: mm, For the detailed drawings, follow the Autonics web site.
- Standard color is yellow. Luminous nameplates are optional.

Model	Applied switches	Appearance
SA-NS	Ø 22/25 mm Emergency switches ⁰¹⁾	<ul style="list-style-type: none"> • D60 × d25
SA-NL	Ø 22/25 mm Emergency switches	<ul style="list-style-type: none"> • D80 × d25

01) Except Ø 22/25 mm Emergency switch D60.

Emergency Switch Protective Shrouds (SA-EG□)

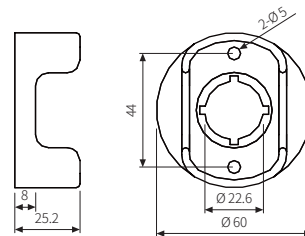
- Protective shrouds to prevent accidental/incorrect operation.

Model	Applied switches	Appearance
SA-EG1	Ø 22/25 mm Emergency switches ⁰¹⁾	
SA-EG2 / SA-EG3		

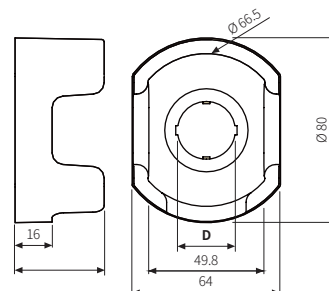
01) Except Ø 22/25 mm Emergency switch D60.

■ Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics web site.
- SA-EG1



• SA-EG2 / EG3



Model	D
SA-EG2	Ø 22.5
SA-EG3	Ø 25.5