

Data Sheet

powered
by **Autonics**

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

Data Sheet

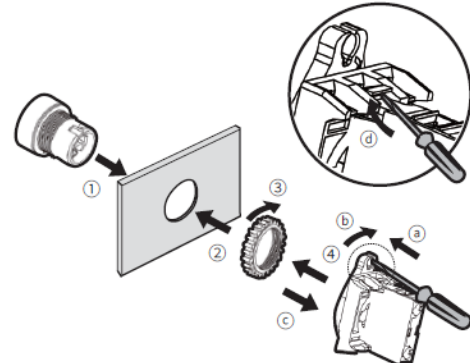
Specifications	
Series	S2ER Series
Actuation distance	5.0 to 5.5 mm
Actuation angle	40° ± 7°
Actuation force	0.5 kgf (4.9 N) (per 1 contact)
Installation	Extended
Shock	300 m/s ² (≈ 30 G) in each X, Y, Z direction for 3 times
Shock (malfunction)	100 m/s ² (≈ 10 G) in each X, Y, Z direction for 3 times
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 ENEC
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 ENEC
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 ENEC
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□)

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	≤ 1.96 N·m

Data Sheet

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

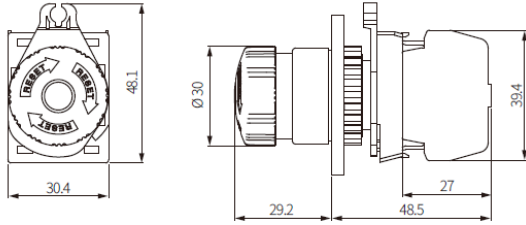
Model	Contact block		LED block	
	A contact	B contact	AC/DC voltage	AC voltage
S2ER-E1RA(M)	1	-	-	-
S2ER-E1R2A(M)	2	-	-	-
S2ER-E1R3A(M)	3	-	-	-
S2ER-E1RB(M)	-	1	-	-
S2ER-E1R2B(M)	-	2	-	-
S2ER-E1R3B(M)	-	3	-	-
S2ER-E1RAB(M)	1	1	-	-
S2ER-E1R2AB(M)	2	1	-	-
S2ER-E1RA2B(M)	1	2	-	-
S2ER-E2RA(M)	1	-	-	-
S2ER-E2R2A(M)	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-E2RA2B(M)	1	2	-	-
S2ER-E3RA(M)	1	-	-	-
S2ER-E3R2A(M)	2	-	-	-
S2ER-E3R3A(M)	3	-	-	-
S2ER-E3RB(M)	-	1	-	-
S2ER-E3RB-EL ⁽⁰⁾	-	1	-	-
S2ER-E3R2B(M)	-	2	-	-
S2ER-E3R3B(M)	-	3	-	-
S2ER-E3RAB(M)	1	1	-	-
S2ER-E3R2AB(M)	2	1	-	-
S2ER-E3RA2B(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-E5RA2B(M)	1	2	-	-

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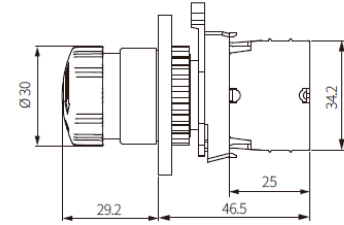
Dimensions

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

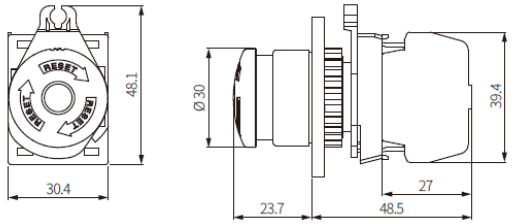
■ S2ER-E1R □ (D30 + long head, singular type block)



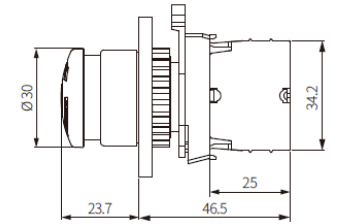
■ S2ER-E1R □ M (D30 + long head, modular type block)



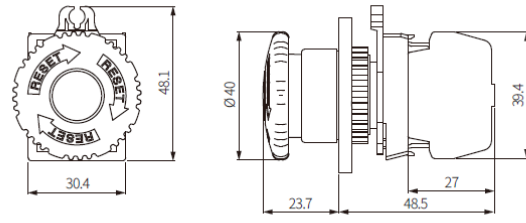
■ S2ER-E2R □ (D30 + short head, singular type block)



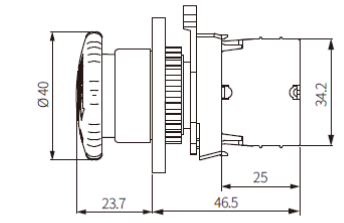
■ S2ER-E2R □ M (D30 + short head, modular type block)



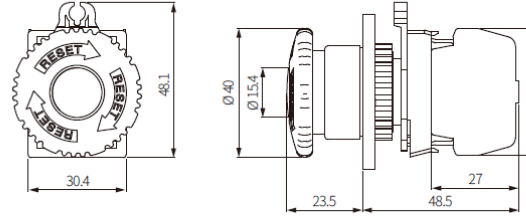
■ S2ER-E3R □ (D40 + short head, singular type block)



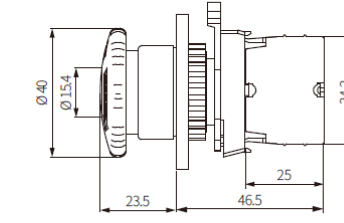
■ S2ER-E3R □ M (D40 + short head, modular type block)



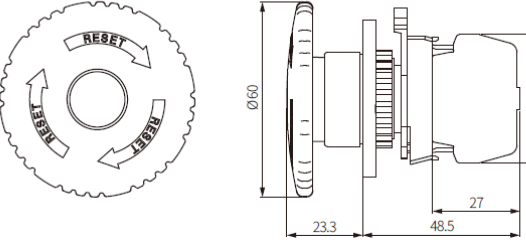
■ S2ER-E4R □ (D40 + short head, singular type block)



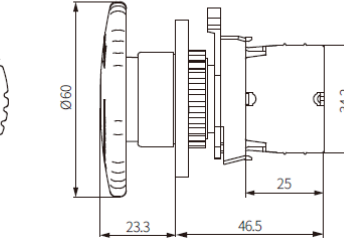
■ S2ER-E4R □ M (D40 + short head, modular type block)



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

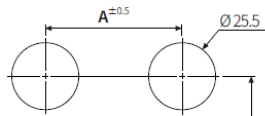


■ S2ER-E5R □ M (D60 + short head, modular type block)

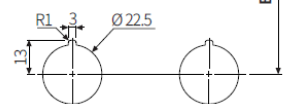


■ Panel cut-out

<Mounting round: Ø 25>



<Mounting round: Ø 22>



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

Data Sheet

Item No.	Model No.	Description	Illumination
2586006	S2ER-E3R	22/25 mm, Red, D40+short head	Non-illuminated
2586007	S2ER-E4R	22/25 mm, Red, D40+short head	Illuminated

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