

One Stop Solution for Your Safety Emergency Stop Button Switches

SF2ER Series

The SF2ER series emergency stop button switches are used to stop operation of machines during emergency situations and prevent injuries or hazards. The switches are push-lock / turn-reset methods and are available in various head sizes.

Safety Standards

IEC/EN 60947-5-1/5
EN ISO 13850
GB/T 14048.5

Certifications



Various Head Sizes

Users can select various head sizes for diverse application settings.



D30



D40



D60

EMS/EMO Buttons

Button head markings are available so that users can select whether to stop operation entirely or partially depending on the situation.

- EMS (Emergency Machine Stop) = stop power supply of dangerous operations
- EMO (Emergency Machine Off) = stop main power supply



EMS

Emergency Machine Stop



EMO

Emergency Machine Off



No Mark





Various Accessories (Sold Separately)

Various accessories are available, including guard rings, nameplates, and radial support.



Guard ring

Standard type	Circle type	Lock type	Metal type	Embedded type (no spacer)	Embedded type (spacer×1)	Embedded type (spacer×2)
 Color: ○○	 Color: ○○	 Color: ○	 Color: ○	 Color: ○	 Color: ○	 Color: ○
GUARD-SF2ER(W)	GUARD2-SF2ER(W)	This guard ring is sold only as protection guard ring + name plate set. * single metal latch sold separately: GUARD3-SF2ER-L	GUARD2-SF2ER-M	GUARD4-SF2ER	GUARD41-SF2ER	GUARD42-SF2ER



Name plate

Ø 90, STOP	Ø 90, OFF	Ø 60, STOP	Ø 60, OFF
			
SF2ER-B	SF2ER-B2	SF2ER-B3	SF2ER-B4

Radial support

Rubber packing	Radial support
	
BK-SF2ER-RP	BK-SF2ER-P

Contact block

A contact (Normally Open)	B contact (Normally Closed)
	
SFEA-CA	SFEA-CB

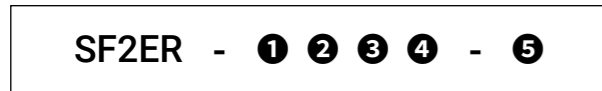
Emergency Stop Switches

SF2ER Series

Technical Overview

Ordering Information

This is only for reference. For selecting the specific model, follow the Autonics web site.



1 Operation

E: Push-lock, turn-reset

2 Button

- 1: D30 (short head, non-illuminated)
- 2: D40 (short head, non-illuminated)
- 3: D60 (short head, non-illuminated)

3 Color

R: Red

4 Contact block

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

5 Mark

- No-mark: No-mark
- A: EMO
- S: EMS

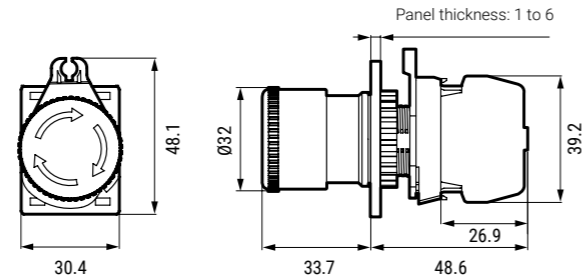
* Sold Separately

- Protection guard ring
- Name plate
- Contact block
- Protection guard ring + Name plate set
- Radial support rubber packing / Radial support
- Switch nut fixing handle

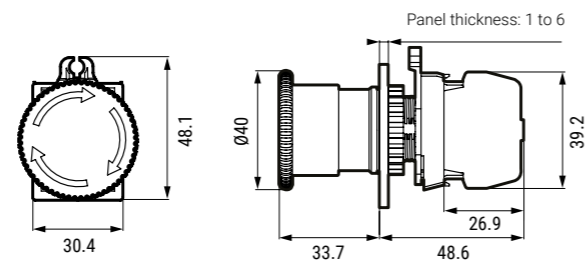
Dimensions

Unit: mm, For the detailed dimensions of the product, follow the Autonics web site.

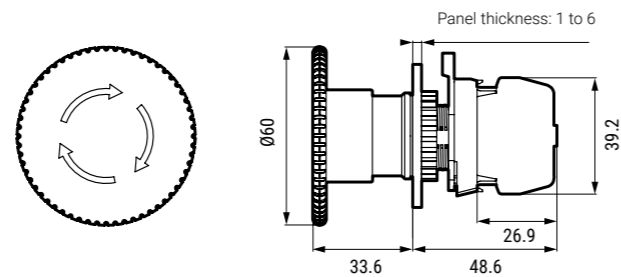
■ D30 (short head, non-illuminated)



■ D40 (short head, non-illuminated)

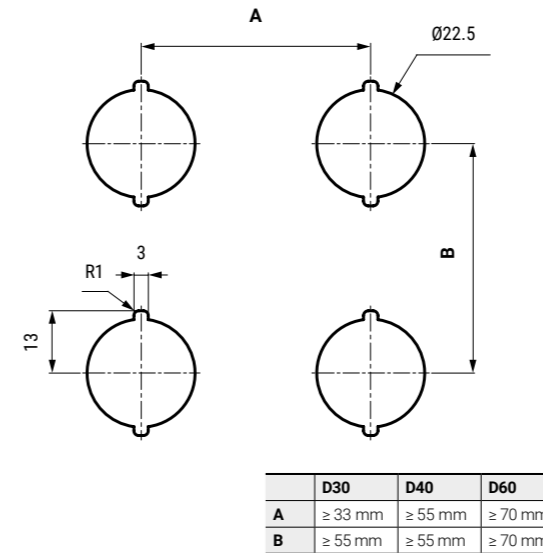


■ D60 (short head, non-illuminated)

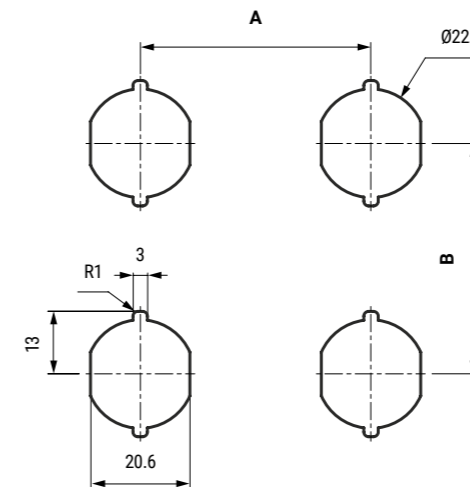


■ Panel cut-out

• General



• For anti-rotation



	General	With guard ring ⁰¹⁾	With radial support
Panel thickness	1 to 6 mm	1 to 2.3 mm	1.5 to 6 mm

01) For the panel thickness when using embedded-type guard rings, refer to the product manual.

Contact capacity

• IEC (EN60947-5-1)

	Rated current	10 A			
		Rated voltage	24 V	110 V	220 V
AC	Resistive load (AC-12)	10 A	10 A	6 A	3 A
	Inductive load (AC-15)	10 A	5 A	3 A	2 A
DC	Resistive load (DC-12)	10 A	2 A	0.6 A	0.2 A
	Inductive load (DC-13)	1.5 A	0.5 A	0.2 A	0.1 A

• UL / CSA (UL508, CSA C22.2 No. 14)

A300

Rated voltage	Through current	Current (A)		Volt ampere (VA)	
		Making	Breaking	Making	Breaking
AC120 V	10 A	60	6	7,200	720
AC240 V		30	3		

Q300

Rated voltage	Through current	Current (A)		Volt ampere (VA)	
		Making	Breaking	Making	Breaking
DC125 V	2.5 A	0.55	0.55	69	69
DC250 V		0.27	0.27		

Guard ring + Name plate set (Sold Separately)

Guard ring	Name plate	Model
Standard type	Ø 60, STOP	GUARD-SF2ER-S
	Ø 60, OFF	GUARD-SF2ER-A
Standard type white	Ø 60, STOP	GUARD2-SF2ER-S-W
Circle type	Ø 60, STOP	GUARD2-SF2ER-S
	Ø 60, OFF	GUARD2-SF2ER-A
Circle type white	Ø 60, STOP	GUARD3-SF2ER-S-W
Lock type	Ø 60, STOP	GUARD3-SF2ER-S
	Ø 60, OFF	GUARD3-SF2ER-A
Metal type	Ø 60, STOP	GUARD2-SF2ER-S-M
	Ø 60, OFF	GUARD2-SF2ER-A-M

Specifications

Model	SF2ER-□□□□-□
Rated voltage/current	IEC: AC-15 (220 VAC~, 3 A), DC-13 (220 VDC=, 0.2 A) UL: A300, Q300
Contact operating power	30 to 40 W / 1 contact
Operation distance	4.7 mm ± 0.5
Contact operating angle	CW (clock wise) 33 to 37°
Rotation torque	0.04 to 0.05 N m
Allowable operation frequency	Mechanical: 20 times/minute, electrical: 20 times/minute
Life cycle	Mechanical: ≥ 250,000 times, electrical: ≥ 100,000 times
Applicable wire	AWG 18 (0.823 mm ²)
Insulation resistance	≥ 100 MΩ (500 VDC= megger)
Dielectric strength	2,500 VAC~ 50/60 Hz for 1 minute
Vibration	1.5 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 2 hours
Vibration (malfunction)	1.5 mm double amplitude at frequency of 10 to 55 Hz in each X, Y, Z direction for 10 minutes
Shock	1,000 m/s ² (≈ 100 g) in each X, Y, Z direction for 3 times
Shock (malfunction)	250 m/s ² (≈ 25 g) in each X, Y, Z direction for 3 times
Ambient temperature	-20 to 65°C, storage: -40 to 70 °C (at no freezing or condensation)
Ambient humidity	35 to 85 %RH, storage: 35 to 85 %RH (at no freezing or condensation)
Protection structure	IP65 (oil resistant, IEC standards)
Material	Button: PC, body: PA6, lever in fixing unit: PA6
Approval	CE (TUV NORD) ENEC (TUV NORD) S ENEC (TUV NORD) ENEC (TUV NORD)
Weight	≈ 69.3 g

01) Setting and resetting once is counted as one operation.

02) UL approved ambient temperature: 55 °C

03) It is only for part from front of the panel. Protection structure is guaranteed only when the switch is installed on flat and smooth surface with mounting holes Ø22mm.

04) It is switch with three contact blocks.