



<b>S</b>	<b>2</b>	<b>ER</b>	<b>-</b>	<b>E1</b>	<b>R</b>	<b>B</b>	<b>D</b>
①	②	③		④	⑤	⑥	⑦

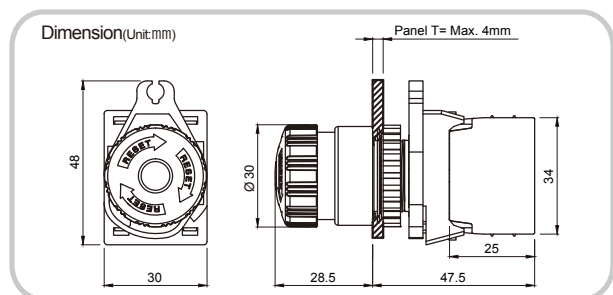
Classification	Ordering Information							Description	
	①	②	③	-	④	⑤	⑥		⑦
Model	S							Control switches	
Dimension	2							Ø22/25	
Appearance			ER					Emergency switches	
Operation				E1				Head Ø30(L) Push-Lock, Turn-Reset	
				E2				Head Ø30(S) Push-Lock, Turn-Reset	
				E3				Head Ø40 Push-Lock, Turn-Reset	
				E4				Head Ø40 Push-Lock, Turn-Reset(Illuminated)	
				E5				Head Ø60 Push-Lock, Turn-Reset	
Color					R			RED	
Contact / LED Block						A		A (Normal Open) 110VAC/10A, 250VAC/6A	
						B		B (Normal Close) 110VAC/10A, 250VAC/6A	
						D		LED 12-24VDC/AC	
						L		LED 110-220VAC	

## ● Ø22/25 Head D30L Emergency Switches (Non-Flush)



Model	Contacts	
	A Contact	B Contact
S2ER - E1RA	1EA	
" - " 2A	2EA	
" - " 3A	3EA	
" - " B		1EA
" - " 2B		2EA
" - " 3B		3EA
" - " AB	1EA	1EA
" - " 2AB	2EA	1EA
" - " A2B	1EA	2EA

- Space-saving design
- Mounting hole layout : Ø22.5 / 25.5mm
- PUSH LOCK & TURN RESET



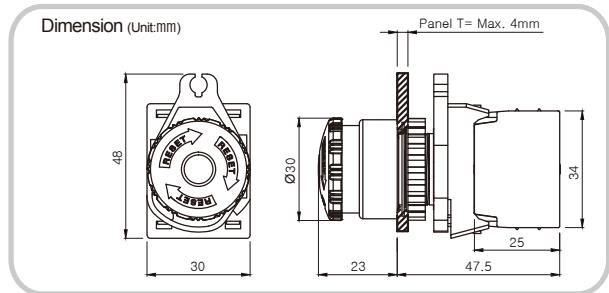


## ● Ø22/25 Head D30S Emergency Switches (Non-Flush)



Model	Contacts	
	A Contact	B Contact
S2ER - E2RA	1EA	
" - " 2A	2EA	
" - " 3A	3EA	
" - " B		1EA
" - " 2B		2EA
" - " 3B		3EA
" - " AB	1EA	1EA
" - " 2AB	2EA	1EA
" - " A2B	1EA	2EA

- Space-saving design
- Mounting hole layout : Ø22.5 / 25.5mm
- PUSH LOCK & TURN RESET

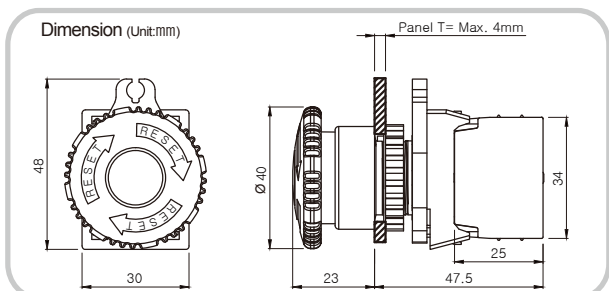


## ● Ø22/25 Head D40 Emergency Switches (Non-Flush)



Model	Contacts	
	A Contact	B Contact
S2ER - E3RA	1EA	
" - " 2A	2EA	
" - " 3A	3EA	
" - " B		1EA
" - " 2B		2EA
" - " 3B		3EA
" - " AB	1EA	1EA
" - " 2AB	2EA	1EA
" - " A2B	1EA	2EA

- Simple and elegant design
- Mounting hole layout : Ø22.5 / 25.5mm
- PUSH LOCK & TURN RESET



Push Button Switches

Push Button Switches (Illuminated)

Selector Switches

Double Push Button Switches

Start Push Button Switches

Emergency Switches

Emergency Switches (Illuminated)

Pilot Lamps

Accessories

Magnetic Buzzers

Piezo Buzzers

Sockets

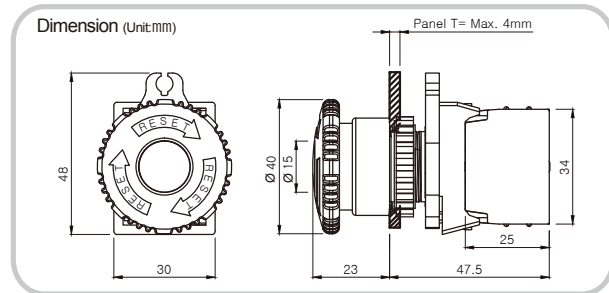


● **Ø22/25 Head D40 Emergency Switches (Illuminated Non-Flush)**



Model	Contacts		LED	
	A Contact	B Contact	DC Type	AC Type
S2ER - E4RAD	1EA		1EA	
" - " 2AD	2EA		1EA	
" - " BD		1EA	1EA	
" - " 2BD		2EA	1EA	
" - " ABD	1EA	1EA	1EA	
" - " AL	1EA			1EA
" - " 2AL	2EA			1EA
" - " BL		1EA		1EA
" - " 2BL		2EA		1EA
" - " ABL	1EA	1EA		1EA

- Improved visibility with high luminance LED
- Mounting hole layout : Ø22.5 / 25.5mm
- PUSH LOCK & TURN RESET

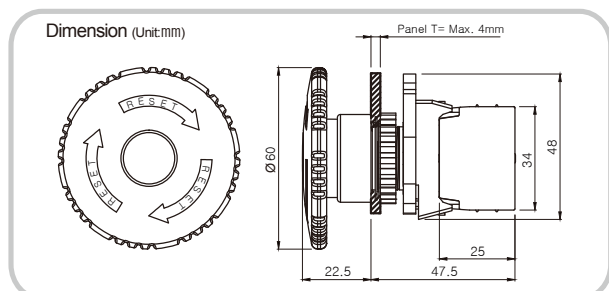


● **Ø22/25 Head D60 Emergency Switches (Non-Flush)**



Model	Contacts	
	A Contact	B Contact
S2ER - E5RA	1EA	
" - " 2A	2EA	
" - " 3A	3EA	
" - " B		1EA
" - " 2B		2EA
" - " 3B		3EA
" - " AB	1EA	1EA
" - " 2AB	2EA	1EA
" - " A2B	1EA	2EA



- Increasing user convenience with large size head (Ø60)
- Mounting hole layout : Ø22.5 / 25.5mm
- PUSH LOCK & TURN RESET



## Control Switches Series

Items	Push Button Switches			Push Button Switches(Illuminated)		Double Push Button Switches	Start Push Button Switches
	Non-Flush Ø22 / 25	Non-Flush Ø30	Flush Ø30	Non-Flush Ø22 / 25	Flush Ø30	Non-Flush Ø22 / 25	Non-Flush Ø22 / 25
Mounting Hole Dimension	Ø22 / 25	Ø30	Ø30	Ø22 / 25	Ø30	Ø22 / 25	Ø22 / 25
Model	S2PR - P1	S3PR - P1	S3PF - P1	S2PR - P3	S3PF - P3	S2TR - P3	S2BR - P1
Appearance							
Page	06	07	07	08	08	12	13
Items	Selector Switches, Non-Flush			Selector Switches, Non-Flush			
	Short Lever Ø22 / 25		Long Lever Ø22 / 25	Short Lever Ø30		Long Lever Ø30	
Mounting Hole Dimension	Ø22 / 25		Ø22 / 25	Ø30		Ø30	
Model	S2SR - S3,5,7		S2SR - S4,6,8	S3SF - S3,5,7		S3SF - S4,6,8	
Appearance							
Page	10		10	11		11	
Items	Ø30 Emergency Switches		Ø40 Emergency Switches		Ø60 Emergency Switches		
	Large Head Ø22 / 25	Small Head Ø22 / 25	Non-Illuminated Ø22 / 25	Illuminated Ø22 / 25	Non-Illuminated Ø22 / 25		
Mounting Hole Dimension	Ø22 / 25	Ø22 / 25	Ø22 / 25	Ø22 / 25	Ø22 / 25		
Model	S2ER - E1	S2ER - E2	S2ER - E3	S2ER - E4	S2ER - E5		
Appearance							
Page	14	15	15	16	16		
Items	Dome Type / Horn Type / Flat Type Pilot Lamps						
	Dome Type Ø22 / 25	Horn Type Ø22 / 25	Flat Type Ø22 / 25	Flat Type, Flush Ø30			
Mounting Hole Dimension	Ø22 / 25	Ø22 / 25	Ø22 / 25	Ø30			
Model	L2RR - L1	L2RR - L2	L2RR - L3	L3RF - L3			
Appearance							
Page	17	18	18	19			

## Specifications

<b>Mechanical Characteristics</b>	Actuating Travel	5.5mm (0 ~ -0.5)	
	Actuating Force	4.9N (0.5Kgf) (at 1 contact)	
	Shock	Shock Resistance	500m/s <sup>2</sup> (50G) in each of x,y,z directions for 3 times
		Mechanical Malfunction	100m/s <sup>2</sup> (10G) in each of x,y,z directions for 3 times
	Vibration	Vibration Resistance	1.5mm amplitude at frequency of 10~55Hz(for 1minute) in each of x,y,z directions for 2 hours
Mechanical Malfunction		1.5mm amplitude at frequency of 10~55Hz(for 1minute) in each of x,y,z directions for 10 minutes	
	Mechanical Life Time	Min. 1 Million (20 times/min)	
<b>Electrical Characteristics</b>	Rated Voltage/Current	110VAC/10A, 250VAC/6A	
	Dielectric Strength	2000VAC 50/60Hz for 1 minute	
	Insulation Resistance	Min.100MΩ (at 500VDC)	
	Contact Resistance	Max.20mΩ (Initial value)	
	Electric Life Cycle	Min. 100 thousand (20 times/min)	
<b>LED block</b>	Rated Voltage	DC type : 12-24VAC/DC, AC type : 110-220VAC	
	Power Consumption	Max. 20mA	
	Ambient Temperature	-15 ~ 55 °C (at non-freezing status)	
<b>Environmental Characteristics</b>	Ambient Humidity	35 ~ 85%RH	
	Storage Temperature	-25 ~ 65 °C (at non-freezing status)	
	Protection Degree	IP52 (IP 50 for double push button switch)	
<b>Approval</b>	 (Emergency switches is  process of certification)		