# Ø 22/25 mm **Push Button Switches**



## **S2PR 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

### **Safety Considerations**

- Observe all 'Safety Considerations' for safe and proper operation to avoid hazards.
- ▲ symbol indicates caution due to special circumstances in which hazards may occur.

⚠ Warning Failure to follow instructions may result in serious injury or death.

- 01. Fail-safe device must be installed when using the unit with machinery that may cause serious injury or substantial economic loss. (e.g. nuclear power control, medical equipment, ships, vehicles, railways, aircraft, combustion apparatus, safety equipment, crime / disaster prevention devices, etc.) Failure to follow this instruction may result in personal injury, economic loss or
- 02. Do not use the unit in the place where flammable / explosive / corrosive gas, high humidity, direct sunlight, radiant heat, vibration, impact, or salinity may be present.
  - Failure to follow this instruction may result in explosion or fire
- 03. Install on a device panel to use.
  - Failure to follow this instruction may result in fire or electric shock.
- 04. Do not connect, repair, or inspect the unit while connected to a power
  - Failure to follow this instruction may result in fire or electric shock

**05. Do not disassemble or modify the unit.**Failure to follow this instruction may result in fire or electric shock.

▲ Caution Failure to follow instructions may result in injury or product damage.

01. This unit shall not be used outdoors.

Failure to follow this instruction may result in shortening the life cycle of the product or electric shock.

02. Use the unit within the rated specifications. Failure to follow this instruction may result in fire or product damage.

03. Do not use the load beyond rated switching capacity contact. Failure to follow this instruction may result in fire, relay broken, contact melt, insulation failure or contact failure

04. For wiring the product, do not pull the wiring excessively or apply excessive

Failure to follow this instruction may result in product damage or malfunction.

- 05. Use dry cloth to clean the unit, and do not use water or organic solvent. Failure to follow this instruction may result in fire or electric shock
- 06. Keep the product away from metal chip, dust, and wire residue which from flowing into the unit.

Failure to follow this instruction may result in fire or product damage.

## **Specifications**

Series	S2PR Series			
Actuation distance	5.0 to 5.5 mm			
Actuation force	0.5 kgf (4.9 N) (per 1 contact)			
Installation	Extended			
Shock	300 m/s² (≈ 30 G) 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 mm double amplitude at frequency of 10 to 55 Hz in each X, V direction for 2 hours			
Vibration (malfunction)	$1.5\mathrm{mm}$ double amplitude at frequency of 10 to 55Hz in each X, Y, Z direction for 10 minutes			
Mechanical life cycle (control unit life cycle)	Returned: ≥ 1 million 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)			
Certification	CE LK & NI IN W NI NI WE STATE OF STATE			
Control unit weight	Round : ≈ 14.5 g, Square: ≈ 15.5 g			
Housing weight	≈7g			

Contact blocks				
Power supply / current	110 VAC~ / 10 A, 250 VAC~ / 6 A			
Dielectric strength	Between the charging part and the case :3,000 VAC ~ 50/60 Hz for 1 minute			
Insulation resistance	≥ 1,000 MΩ (500 VDC== megger)			
Contact resistance	$\leq$ 20 m $\Omega$ (initial)			
Electrical life cycle	≥ 100,000 operations (20 operations/min)			
Contact material	AgNi10			
Certification	CE EK . PAL us [H] (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			
Certification	C € EK ¢ <b>PN</b> us ENI			
Weight	AC/DC voltage type: $\approx 11$ g, AC voltage type: $\approx 12$ g			

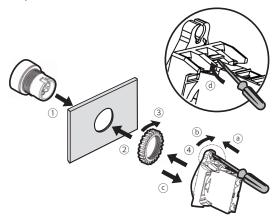
## **Sold Separately**

- Contact blocks (SA□-C□□)

- Switch washer (SA-SW□)
- Switch waterproof cap (SA-W $\square$ )

## Assembly / Disassembly

- Assembly order: 1)  $\rightarrow$  2)  $\rightarrow$  3)  $\rightarrow$  4
- Disassembly order: ⓐ $\rightarrow$ 6 $\rightarrow$ c $\rightarrow$ d



Control Switches	Panel thickness	Tightening torque	
Ø 22/25/30 mm	Max. 6 mm	≤ 1.47 N·m	

### **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

**S2** 6 Ø Control unit Block

### Switch type

PR: Push button switch

### 2 Appearance

No mark: Round S: Square

## Appearance

P. Extended

E: Button extended (round)

### **4** Illuminated

1: Non-illuminated

### **G** Color

R: Red

B: Blue

G: Green

Y: Yellow

K: Black

### 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

### **1** Block type

No mark: Singular type M: Modular type

### **■** Illuminated



### Switch type

PR: Push button switch

### 2 Appearance

No mark: Round

S: Square

### **3** Character marking

No mark: Push (control unit + singular type block)

No mark: None (control unit + modular type block)

U: None (control unit) 01)

### Appearance

P: Extended

E: Button extended (round)

### **6** Illuminated

3: Illuminated

## **7** Arrow direction (square)

No mark: No mark L: Left / Right U: Up / Down

### 3 Contact block

A: 1 A contact 2A: 2 A contacts B: 1 B contact 2B: 2 B contacts

AB: 1 A contact, 1 B contact

### • LED block

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

### Block type

No mark: Singular type M: Modular type

## **3** Color

R: Red B: Blue

G: Green

Y: Yellow

W· White

01) Only available for control unit. Select the block separately

Model	Contact block		LED block	
Model	A contact	B contact	AC/DC voltage	AC voltage
S2PR-P1□A(M)	1	-		
S2PR-P1□2A(M)	2	-	-	-
S2PR-P1□3A(M)	3	-		
S2PR-P1□B(M)	=	1		
S2PR-P1□2B(M)	-	2	-	=
S2PR-P1□3B(M)	=	3		
S2PR-P1□AB(M)	1	1		
S2PR-P1□2AB(M)	2	1	-	=
S2PR-P1□A2B(M)	1	2		
S2PR-E1□A(M)	1	-		
S2PR-E1□2A(M)	2	-	-	-
S2PR-E1□3A(M)	3	-		
S2PR-E1□B(M)	-	1		-
S2PR-E1□2B(M)	-	2	-	
S2PR-E1□3B(M)	=	3		
S2PR-E1□AB(M)	1	1		
S2PR-E1□2AB(M)	2	1	-	-
S2PR-E1□A2B(M)	1	2		
S2PRS-P1□A(M)	1	-		
S2PRS-P1□2A(M)	2	-	-	-
S2PRS-P1□3A(M)	3	-		
S2PRS-P1□B(M)	=	1		
S2PRS-P1□2B(M)	-	2	-	-
S2PRS-P1□3B(M)	-	3		
S2PRS-P1□AB(M)	1	1		
S2PRS-P1□2AB(M)	2	1	-	-
S2PRS-P1□A2B(M)	1	2		

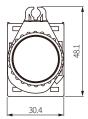
Madal	Contact block		LED block	LED block	
Model	A contact	B contact	AC/DC voltage	AC voltage	
S2PR-P3□AD(M)	1	-			
S2PR-P3□2AD(M)	2	-		-	
S2PR-P3□BD(M)	-	1	1		
S2PR-P3□2BD(M)	-	2			
S2PR-P3□ABD(M)	1	1			
S2PR-P3□AL(M)	1	-			
S2PR-P3□2AL(M)	2	-			
S2PR-P3□BL(M)	-	1		1	
S2PR-P3□2BL(M)	-	2			
S2PR-P3□ABL(M)	1	1	_		
S2PR-E3□AD(M)	1	-			
S2PR-E3□2AD(M)	2	-			
S2PR-E3□BD(M)	-	1	$\dashv_1$		
	1-	2	<b>-</b>		
S2PR-E3 2BD(M)	1	1	$\dashv$		
S2PR-E3 ABD(M)	-				
S2PR-E3 AL(M)	1		_		
S2PR-E3□2AL(M)	2	-	_		
S2PR-E3□BL(M)	-	1	-	1	
S2PR-E3□2BL(M)	-	2			
S2PR-E3□ABL(M)	1	1			
S2PRS-P3□AD(M)	1	=			
S2PRS-P3□2AD(M)	2	-			
S2PRS-P3□BD(M)	-	1	1	-	
S2PRS-P3□2BD(M)	-	2			
S2PRS-P3 ABD(M)	1	1			
S2PRS-P3□AL(M)	1	=			
S2PRS-P3□2AL(M)	2	-		1	
S2PRS-P3□BL(M)	-	1	-		
S2PRS-P3□2BL(M)	-	2			
S2PRS-P3□ABL(M)	1	1			
S2PRS-P3□LAD(M)	1	-			
S2PRS-P3□L2AD(M)	2	-			
S2PRS-P3□LBD(M)	-	1	1	-	
S2PRS-P3 L2BD(M)	-	2			
S2PRS-P3 LABD(M)	1	1	_		
S2PRS-P3□LAL(M)	1	-			
S2PRS-P3 L2AL(M)	2	-			
S2PRS-P3 LBL(M)	-	1	_	1	
S2PRS-P3 L2BL(M)	-	2	$\dashv$		
S2PRS-P3 LABL(M)	1	1	$\dashv$		
	1	-			
S2PRS-P3 UAD(M)	2	-	-		
S2PRS-P3 U2AD(M)	ļ-				
S2PRS-P3 UBD(M)	-	1	$ \frac{1}{2}$	_	
S2PRS-P3 U2BD(M)	-	2	_		
S2PRS-P3 UABD(M)	1	1			
S2PRS-P3 UAL(M)	1	-	_		
S2PRS-P3 U2AL(M)	2	-		1	
S2PRS-P3□UBL(M)	-	1	-		
S2PRS-P3□U2BL(M)	-	2			
S2PRS-P3□UABL(M)	1	1			

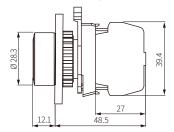
### **Dimensions**

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

### ■ S2PR-P1

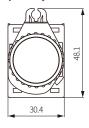
(round, non-illuminated, extended, singular type block)

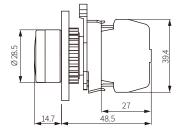




■ S2PR-P3 ....

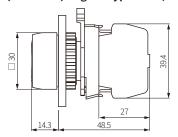
(round, illuminated, extended, singular type block)



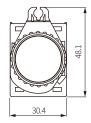


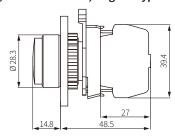
■ S2PRS-P (square, extended, singular type block)





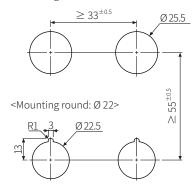
■ S2PR-E (round, button extended, singular type block)



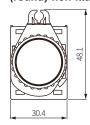


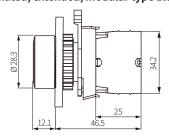
■ Panel cut-out

<Mounting round: Ø 25>

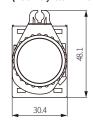


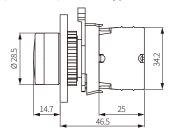
■ S2PR-P1 M (round, non-illuminated, extended, modular type block)



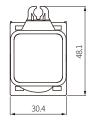


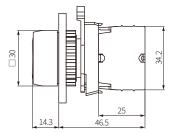
■ S2PR-P3 M (round, illuminated, extended, modular type block)





■ S2PRS-P M (square, extended, modular type block)





■ S2PR-E M (round, button extended, modular type block)

