# Ø 30 mm Push Button Switches



# S3PR / S3PF 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 fire.
- 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 source.
  - 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 force

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	S3PR Series	S3PF Series		
Actuation distance	5.0 to 5.5 mm			
Actuation force	0.5 kgf (4.9 N) (per 1 contact)			
Installation	Extended Flush			
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, Y, Z direction for 2 hours			
Vibration (malfunction)	1.5 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	(引 ) III av LP 。 3			
Control unit weight	21.5 g			
Housing weight	≈7 g			

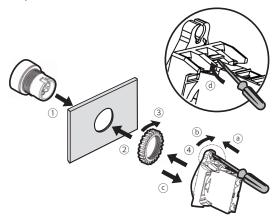
Contact blocks		
Power supply / current	110 VAC~ / 10 A, 250 VAC~ / 6 A	
Dielectric strength	Between the charging part and the case : 3,000 VAC ~ 50/60 Hz for 1 minute	
Insulation resistance	$\geq$ 1,000 M $\Omega$ (500 VDC== megger)	
Contact resistance	$\leq$ 20 m $\Omega$ (initial)	
Electrical life cycle	≥ 100,000 operations (20 operations/min)	
Contact material	AgNi10	
Certification	(\$ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥	
Weight	Modular type: $\approx 10$ g, Singular type: $\approx 11$ g	
LED blocks		
Rated voltage	AC/DC voltage type: 12-24 VAC $\sim$ 50/60 Hz, 12-24 VDC $\Longrightarrow$ AC voltage type: 110-220 VAC $\sim$ 50/60 Hz	
Current consumption	≤ 20 mA	
Certification	C € EK c <b>PU</b> us ERI	
Weight	AC/DC voltage type: ≈ 11 g, AC voltage type: ≈ 12 g	

# **Sold Separately**

- Contact blocks (SA $\square$ -C $\square$ )
- LED blocks (SA□-L□□□)
   Locking handle (SA□-LH)
- Switch washer (SA-SW□)

## Assembly / Disassembly

- Assembly order: 1)  $\rightarrow$  2)  $\rightarrow$  3)  $\rightarrow$  4)
- Disassembly order: ⓐ $\rightarrow$ b $\rightarrow$ 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



Switch type

PR: Round push button switch (extended) A: 1 A contact PF: Round push button switch (flush)

2 Illuminated P1: Non-illuminated Color

R: Red B: Blue G: Green Y: Yellow K: Black

Contact block

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

Block type

No mark: Singular type M: Modular type

**3** Contact block

A: 1 A contact 2A: 2 A contacts

2B: 2 B contacts

**3** LED block D: 1 AC/DC voltage type

**7** Block type

L: 1 AC voltage type

No mark: Singular type M: Modular type

### **■** Illuminated

<b>S3</b>	0	2	-	3	4	6	6	0
Control unit					Block			

Switch type

PF: Round push button switch (flush)

2 Character marking

No mark: Push (control unit + singular type  $\ B: 1 \ B$  contact block) AB: 1 A contact, 1 B contact

No mark: None (control unit + modular

type block) U: None (control unit) 01)

**②** Illuminated

P3: Illuminated

Color R: Red B: Blue

G: Green Y: Yellow W: White

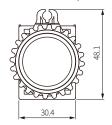
01) Only available for control unit. Select the block separately.

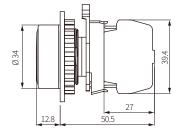
	Contact block		LED block	
Model	A contact	B contact	AC/DC voltage	AC voltage
S3PR-P1□A(M)	1	-		
S3PR-P1□2A(M)	2	-		-
S3PR-P1□3A(M)	3	-		
S3PR-P1□B(M)	-	1		
S3PR-P1□2B(M)	-	2	-	
S3PR-P1□3B(M)	-	3		
S3PR-P1□AB(M)	1	1		
S3PR-P1□2AB(M)	2	1		
S3PR-P1□A2B(M)	1	2		
S3PF-P1□A(M)	1	-		-
S3PF-P1□2A(M)	2	-		
S3PF-P1□3A(M)	3	-		
S3PF-P1□B(M)	-	1		
S3PF-P1□2B(M)	-	2	-	
S3PF-P1□3B(M)	-	3		
S3PF-P1□AB(M)	1	1		
S3PF-P1□2AB(M)	2	1		
S3PF-P1□A2B(M)	1	2		

Model	Contact block		LED block	LED block	
модец	A contact	B contact	AC/DC voltage	AC voltage	
S3PF-P3□AD(M)	1	-		-	
S3PF-P3□2AD(M)	2	-			
S3PF-P3□BD(M)	-	1	1		
S3PF-P3□2BD(M)	-	2			
S3PF-P3□ABD(M)	1	1		1	
S3PF-P3□AL(M)	1	-			
S3PF-P3□2AL(M)	2	-			
S3PF-P3□BL(M)	-	1	-	1	
S3PF-P3□2BL(M)	-	2			
S3PF-P3□ABL(M)	1	1			

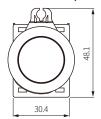
### **Dimensions**

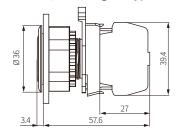
- Unit: mm, For the detailed drawings, follow the Autonics website.
- Panel thickness: ≤ 6 mm
- S3PR-P1 (non-illuminated, extended, singular type block)



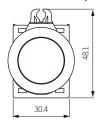


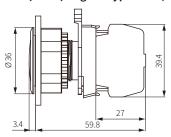
■ S3PF-P1 (non-illuminated, flush, singular type block)



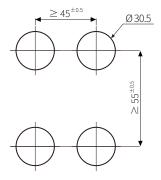


■ S3PF□-P3 □ (illuminated, flush, singular type block)

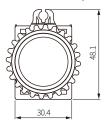


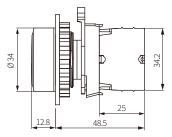


■ Panel cut-out

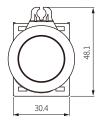


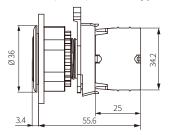
■ S3PR-P1 M (non-illuminated, extended, modular type block)





■ S3PF-P1 M (non-illuminated, flush, modular type block)





■ S3PF□-P3 □ M (illuminated, flush, modular type block)

