20210408 Autonics

Ø 16 mm Mushroom-Head Push Button Switches



S16BR 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

- Compact, space-saving 16 mm installation diameter
- Short rear-length size of only 29.5 mm
- Independent detachable contacts

Specifications

Series	S16BR Series		
Actuation distance	3 mm		
Actuation force	0.2 to 0.35 kgf (2 to 3.5 N)		
Installation	Extended		
Shock	500 m/s² (≈ 30 G) in each X, Y, Z direction for 3 times		
Shock (malfunction)	$100 \text{ m/s}^2 (\approx 10 \text{ G})$ in each X, Y, Z direction for 3 times		
Vibration	$1.5\mathrm{mm}$ amplitude at frequency of 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours		
Vibration (malfunction)	$1.5\mathrm{mm}$ amplitude at frequency of 10 to 55Hz (for 1 min) in each X,Y, Z direction for 10 minutes		
Mechanical life cycle (control unit life cycle)	≥ 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: IP65 (IEC standard)		
Approval	C € ⁽¹⁾		
Control unit weight	≈ 4.1 g		
Housing weight	≈ 1.4 g		

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Contact blocks			
Power supply / current	250 VAC~/3 A		
Dielectric strength	$2,000 \text{VAC} \sim 50/60 \text{Hz}$ for 1 minute (between other polarities), $1,000 \text{VAC} \sim 50/60 \text{Hz}$ for 1 minute (between same polarities)		
Insulation resistance	\geq 100 M Ω (500 VDC== megger)		
Contact resistance	\leq 50 m Ω (initial)		
Electrical life cycle	≥ 100,000 operations (20 operations/min)		
Contact material	AgNi10		
Terminal tensile force	≤ 30 N		
Terminal soldering time	At the end of tips within 3 sec with 350 °C (30 W-soldering machine)		
Approval	C € № c PN us ERI		
Weight	≈ 1.6 g		
LED blocks			
Rated voltage	5/12/24 VDC== model		
Current consumption	otion Refer to the below Current consumption table.		
Approval	C € c PAX us EFIC		
Weight	≈ 1.9 g		

Current consumption	Red	Blue	Green	Yellow	White
SA16-L5□ (5 VDC==)	6 to 9 mA	10 to 14 mA	5 to 7 mA	12 to 16 mA	10 to 14 mA
SA16-L12□ (12 VDC==)	9 to 14 mA	10 to 15 mA	5 to 9 mA	10 to 16 mA	9 to 14 mA
SA16-L24□ (24 VDC=)	15 to 20 mA	20 to 26 mA	16 to 22 mA	27 to 35 mA	23 to 30 mA

Sold Separately

- Contact blocks (SA□-C□□)
- LED blocks (SA \square -L \square \square)
- Locking handle (SA□-LH)

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

S16BR	-	Н	1	0	2
	Control unit				Block

 ● Color
 ● Contact block

 R: Red
 C: 1 C contact

 G: Green
 2C: 2 C contacts

 3C: 3 C contacts

Model	Contact block	LED block
Model	C contact	DC voltage
S16BR-H1□C	1	
S16BR-H1□2C	2	-
S16BR-H1□3C	3	

■ Illuminated

S16BR	-	Н	3	0	2	3
		Control unit			Blo	ock

1 Color R: Red G: Green ② Contact block
C:1C contact

3 LED block 5: 5 VDC== 12: 12 VDC== 24: 24 VDC==

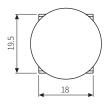
2C: 2 C contacts

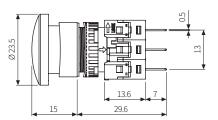
Model	Contact block	LED block
Model	C contact	DC voltage
S16BR-H3□C5		1 (5 VDC==)
S16BR-H3□C12	1	1 (12 VDC=)
S16BR-H3□C24		1 (24 VDC==)
S16BR-H3□2C5		1 (5 VDC==)
S16BR-H3□2C12	2	1 (12 VDC=)
S16BR-H3□2C24		1 (24 VDC==)

Dimensions

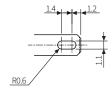
- \bullet Unit: mm, For the detailed drawings, follow the Autonics website.
- Panel thickness: ≤ 3.5 mm

■ S16BR-





■ Terminal pin



■ Panel cut-out

