

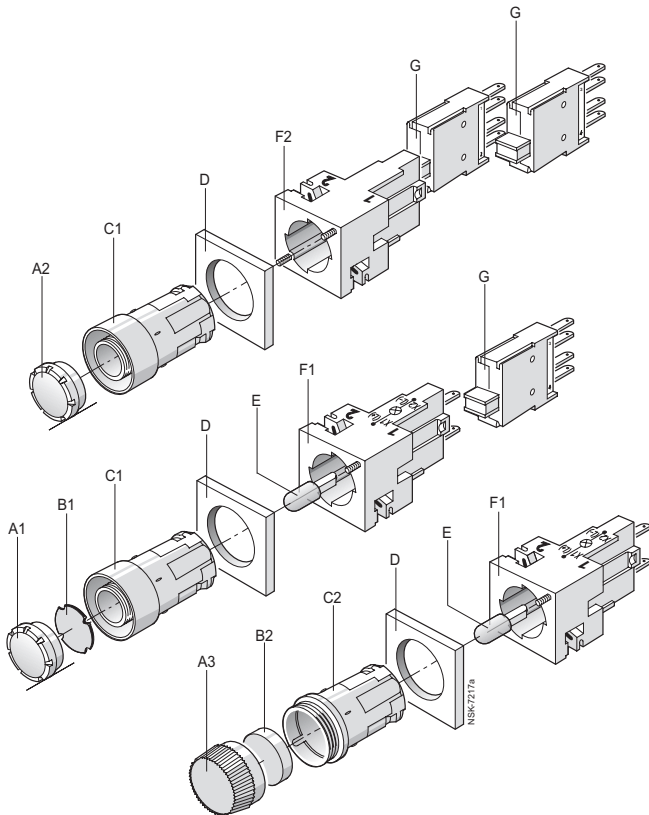
3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

Description

The 3SB2 pushbutton units and indicator lights are provided for front plate mounting and rear conductor connection.

The 3SB units are climate-proof.



- A1 Illuminated button, flat
- A2 Button, flat
- A3 Screw lens for indicator light
- B1 Insert label for inscription
- B2 Insert cap for inscription
- C1 Collar with extruded front ring
- C2 Collar for indicator light
- D Frame for square design
- E Wedge-Base lamps W2 × 4.6 d
- F1 Lampholder with holder
- F2 Holder
- G Contact blocks for snapping onto holder and/or lampholder (1 NO or 1 NC)

Design

Two versions are available:

Round design

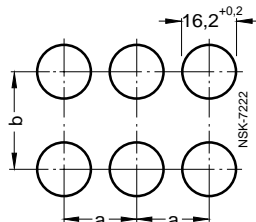
The 3SB2 pushbutton units and indicator lights are assembled with the elements – actuator, holder, contact block and lampholder. Depending on the specific application, various versions can be assembled. For the most frequent applications complete units are offered.

Square design

With square, black frames the round design is supplemented to a square design. The frames are inserted underneath the round actuator. Further mounting is the same as for the round design.

Mounting and fixing

Mounting dimensions acc. to EN 50 007:



Minimum clearance	a	b
Round version	19	19
Square version without inscription plate	21	21
Round and square versions with inscription plate	21	32
2 knobs and 3 switching positions, latching, mounted side by side	21	21

Connection

The contact blocks and the lamp holder are equipped with tab connectors in accordance with IEC 60 760 which can also be used as solder-pin terminals.

To permit through-connection all terminals are provided with 2 tabs.

For fixing, the actuator or the lens assembly is inserted from the front into the hole in the front-plate. Four small nubs ensure a secure fitting in the hole. The holder is plugged on the actuator or the lens assembly from behind and automatically snaps into place. The element is screwed down tightly with 2 screws on the holder and thus levels panel thickness from 1 to 6 mm.

The contact blocks are inserted into the holder with slide slots and held down with two snap brackets. If a command position is equipped with an indicator light or illuminated pushbutton, the holder already incorporates connections for the lamp. It is also used for fixing the contact blocks.

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Technical data acc. to
IEC 60 947-5-1 and DIN VDE 0660

Rated insulation voltage U_i	250 V
Rated operational voltage U_e	UC 250 V
Conventional free-air thermal current I_{th}, Rated operational current I_e	$I_e/AC-12$ 10 A $I_e/AC-15$ <ul style="list-style-type: none"> • 24 V 4 A • 60 V 4 A • 110 V 4 A • 230 V 4 A $I_e/DC-12$ <ul style="list-style-type: none"> • 24 V 6 A • 60 V 5 A • 110 V 2.5 A • 230 V 1 A $I_e/DC-13$ <ul style="list-style-type: none"> • 24 V 3 A • 60 V 1.5 A • 110 V 0.7 A • 230 V 0.3 A
Ⓢ, Ⓢ- and Ⓢ data	
Rated voltage:	
• Contact block	AC 250 V max.
• Indicator lights	Lamps with Wedge-Base W2 × 4.6 d: max. 60 V; 1 W
Conventional free-air thermal current I_{th}	5 A
Switching capacity	B 300, R 300 (see Section 17)
Contact safety	
Test voltage/test current	5 V/1 mA
Short-circuit protection (Without any welding according to DIN VDE 0660, Part 200)	
• DIAZED fuse links with utilization categories gL/gG	10 A TDz, 16 A Dz
• Miniature circuit breaker with C characteristic according to DIN VDE 0641	10 A
Mechanical endurance	
• Pushbutton units and contact blocks	10×10^6 operating cycles
• Actuators, rotary or latching	3×10^5 operating cycles
• Illuminated pushbutton units	3×10^6 operating cycles
Electrical endurance	
with AC-15 duty	
with 3TF3, 3TF40 to 3TF43 contactors	10×10^6 operating cycles
Climatic stress	Climate-proof; suitable for use on board ship
Ambient temperature	-25 to +60 °C
Degree of protection	IP 65
Lamps	Wedge-Base W2 × 4.6 d: 6, 12, 24, 30, 48, 60 V; max. 1 W
Conductor sizes	
Tab connection: with tab connectors for push-on sleeves to IEC 60 760	Tab connector 2 × 2.8/0.8 mm
Safety measures	Safety requirements are met automatically when the actuators and lens assemblies <u>are mounted on metal front plates and housings</u> . When mounted in insulated housings, the "protective insulation safety requirements" are met.
Safety from finger-touch	With voltages > AC 50 V or DC 120 V insulating sleeves must be fitted to the unassigned tab connections.
Shock resistance according to IEC 60 068, Part 2-27	
Shock amplitude	≤ 50 g
Shock duration	11 ms
Shock form	Sine half-wave

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

3SB22 complete units Selection and ordering data

	Version	Colour of actuator	Contact blocks	Order No.	Price	Weight approx.	Packing	
			Version	Preferred type	1 unit	kg	Units	
 <p>Pushbutton and illuminated pushbutton with flat button</p>	Pushbutton units with flat button							
		black	1 NO	▶ 3SB22 02-0AB01		0.015	1	
		black	1 NC	▶ 3SB22 03-0AB01				
		red	1 NC	▶ 3SB22 03-0AC01				
		yellow	1 NO	▶ 3SB22 02-0AD01				
		green	1 NO	▶ 3SB22 02-0AE01				
		blue	1 NO	▶ 3SB22 02-0AF01				
		white	1 NO	▶ 3SB22 02-0AG01				
		clear ¹⁾	1 NO	▶ 3SB22 02-0AH01				
	Illuminated pushbutton units with flat button							
		with lamp holder W2 × 4,6 d ²⁾	red	1 NC	▶ 3SB22 07-0AC01		0.017	1
			yellow ¹⁾	1 NO	▶ 3SB22 06-0AD01			
			green	1 NO	▶ 3SB22 06-0AE01			
			blue	1 NO	▶ 3SB22 06-0AF01		0.022	1
		clear ¹⁾	1 NO	▶ 3SB22 06-0AH01				
	Operational voltage UC 24 V with lamp holder W2 × 4,6 d and incandescent lamp 24 V	red	1 NC	▶ 3SB22 27-0AC01		0.018	1	
		yellow ¹⁾	1 NO	▶ 3SB22 26-0AD01				
		green	1 NO	▶ 3SB22 26-0AE01				
		blue	1 NO	▶ 3SB22 26-0AF01				
		clear ¹⁾	1 NO	▶ 3SB22 26-0AH01				
 <p>Pushbutton and illuminated pushbutton unit with raised button</p>	Pushbutton units with raised button							
		black	1 NO	▶ 3SB22 02-0LB01		0.015	1	
		red	1 NC	3SB22 03-0LC01				
		yellow ¹⁾	1 NO	3SB22 02-0LD01				
		blue	1 NO	3SB22 02-0LF01				
		clear ¹⁾	1 NO	3SB22 02-0LH01				
	Illuminated pushbutton units with raised button							
		with lamp holder W2 × 4,6 d ²⁾	red	1 NC	3SB22 07-0LC01		0.017	1
			yellow ¹⁾	1 NO	3SB22 06-0LD01			
			green	1 NO	3SB22 06-0LE01			
			blue	1 NO	3SB22 06-0LF01		0.018	1
			clear ¹⁾	1 NO	3SB22 06-0LH01			
		Operational voltage UC 24 V with lamp holder W2 × 4,6 d and incandescent lamp 24 V	red	1 NC	3SB22 27-0LC01			
			yellow ¹⁾	1 NO	3SB22 26-0LD01			
		green	1 NO	3SB22 26-0LE01				
		blue	1 NO	3SB22 26-0LF01				
		clear ¹⁾	1 NO	3SB22 26-0LH01				





























1) Inscription by inserting a label is possible.


2) Wedge-Base lamps see page 9/15.

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

3SB22 complete units
Selection and ordering data












Version	Type	Colour of actuator/ key with- drawable at position	Contact blocks	Order No.	Price	Weight approx.	
						kg	Units
	Knob, 2 positions switching sequence O-I, maintained contact type 	black red	1 NO 1 NO 1 NO 1 NO	 3SB22 02-2AB01 3SB22 02-2AC01 3SB22 02-2AE01 3SB22 02-2AG01	1 unit	0.017	1
	Knob, 3 positions switching sequence I-O-II, maintained contact type  momentary 	black red green white	1 NO, 1 NO 1 NO, 1 NO 1 NO, 1 NO 1 NO, 1 NO	 3SB22 10-2DB01 3SB22 10-2DC01 3SB22 10-2DE01 3SB22 10-2DG01  3SB22 10-2EB01 3SB22 10-2EC01 3SB22 10-2EE01 3SB22 10-2EG01	0.017 0.022	1 1	
	Safety lock, 2 positions switching sequence O-I, maintained contact type 	CES	Lock No. SB2 O O + I	 3SB22 02-4LA01  3SB22 02-4LB01		0.03	1
	Safety lock, 3 positions switching sequence I-O-II, maintained contact type 	CES	Lock No. SB2 O I + O + II	3SB22 10-4PA01 3SB22 10-4PB01		0.035	1
	momentary 	O	1 NO, 1 NO	3SB22 10-4QA01		0.035	1
	Indicator lights with lamp holder W2 × 4.6 d ¹⁾	red yellow green white clear		 3SB22 04-6BC06  3SB22 04-6BD06  3SB22 04-6BE06  3SB22 04-6BG06  3SB22 04-6BH06		0.012	1
	Operational voltage UC 24 V with lamp holder W2 × 4,6 d and incandescent lamp 24 V	red yellow green white clear		 3SB22 24-6BC06  3SB22 24-6BD06  3SB22 24-6BE06  3SB22 24-6BG06  3SB22 24-6BH06		0.013	1
	EMERGENCY-STOP mushroom- shaped pushbutton unit to EN 418 with yellow backing plate	red	1 NC 	 3SB22 03-1AC01 		0.043	1

 Safety function according to IEC 60 947-5-1-3 and DIN VDE 0660, Part 200.
1) Wedge-Base lamps see page 9/15.

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

Pushbuttons and knobs Selection and ordering data

Version	Colour of actuator	Order No.	Price	Weight approx.	Packing
		▶ Preferred type	1 unit	kg	Units
Pushbutton and illuminated pushbutton unit with flat button 	Pushbutton units with flat button black red yellow green blue white clear ¹⁾	▶ 3SB20 00-0AB01 ▶ 3SB20 00-0AC01 ▶ 3SB20 00-0AD01 ▶ 3SB20 00-0AE01 ▶ 3SB20 00-0AF01 ▶ 3SB20 00-0AG01 ▶ 3SB20 00-0AH01		0.005	10
	Illuminated pushbutton units with flat button red yellow ¹⁾ green blue white clear ¹⁾	▶ 3SB20 01-0AC01 ▶ 3SB20 01-0AD01 ▶ 3SB20 01-0AE01 ▶ 3SB20 01-0AF01 ▶ 3SB20 00-0AG01 ▶ 3SB20 00-0AH01		0.005	10
Pushbutton and illuminated pushbutton unit with raised button 	Pushbutton units with raised button black red yellow blue white clear ¹⁾	▶ 3SB20 00-0LB01 ▶ 3SB20 00-0LC01 ▶ 3SB20 00-0LD01 ▶ 3SB20 00-0LF01 ▶ 3SB20 00-0LG01 ▶ 3SB20 00-0LH01		0.006	10
	Illuminated pushbutton units with raised button red yellow ¹⁾ green blue clear ¹⁾	▶ 3SB20 01-0LC01 ▶ 3SB20 01-0LD01 ▶ 3SB20 01-0LE01 ▶ 3SB20 01-0LF01 ▶ 3SB20 00-0LH01		0.006	10
EMERGENCY STOP mushroom-shaped pushbutton 	EMERGENCY-STOP mushroom-shaped pushbutton unit²⁾ according to EN 418, latching latch automatically when depressed; unlatch when turned to the left 	▶ 3SB20 00-1AC01		0.013	5
Knob 	Knob, 2 positions  Switching sequence O-I, maintained-contact type, 62° operating angle	black red green white	▶ 3SB20 00-2AB01 ▶ 3SB20 00-2AC01 ▶ 3SB20 00-2AE01 ▶ 3SB20 00-2AG01	0.007	10
	 Switching sequence O-I, momentary contact type (return from the right), 50° operating angle	black red green	▶ 3SB20 00-2BB01 ▶ 3SB20 00-2BC01 ▶ 3SB20 00-2BE01	0.007	10
	 Switching sequence O-I, maintained-contact type, 90° operating angle	black red green white	▶ 3SB20 00-2HB01 ▶ 3SB20 00-2HC01 ▶ 3SB20 00-2HE01 ▶ 3SB20 00-2HG01	0.007	10
Knob, 3 positions	 Switching sequence O-II, maintained contact type, 2 × 62° operating angle	black red green white	▶ 3SB20 00-2DB01 ▶ 3SB20 00-2DC01 ▶ 3SB20 00-2DE01 ▶ 3SB20 00-2DG01	0.007	10
	 Switching sequence I-O-II, momentary contact type (return from right and left), 2 × 50° operating angle	black red green white	▶ 3SB20 00-2EB01 ▶ 3SB20 00-2EC01 ▶ 3SB20 00-2EE01 ▶ 3SB20 00-2EG01	0.007	10
	 Switching sequence I-O-II, maintained contact type, 2 × 90° operating angle	black	▶ 3SB20 00-2JB01	0.007	10







1) Inscription by inserting a label is possible.

2) The mushroom-shaped pushbutton unit cannot be combined with 3SB29 00-0... backing plate and 3SB29 02-0AA single frame!

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

Locks and lens assemblies Selection and ordering data

Version	Type	Lock No.	Key with- drawable at position	Order No.	Price	Weight approx.	Packing	
				▶ Preferred type	1 unit	kg	Unit	
3SB20 safety locks								
CES safety lock 	Safety locks with 2 keys, 2 positions							
		Switching sequence O-I, maintained-contact type, 62° operating angle	CES SB2	O+I O	▶ 3SB20 00-4LB01 ▶ 3SB20 00-4LA01		0.02	5
		Switching sequence O-I, momentary-contact type (return from the right), 50° operating angle	CES SB2	O	▶ 3SB20 00-4MA01		0.02	5
	Safety locks with 2 keys, 3 positions							
		Switching sequence I + O + II, maintained-contact type, 2 x 62° operating angle	CES SB2	I+O+II O	▶ 3SB20 00-4PB01 ▶ 3SB20 00-4PA01		0.02	5
		Switching sequence I + O + II, momentary-contact type (return from the right and left), 2 x 50° operating angle	CES SB2	O	▶ 3SB20 00-4QA01		0.02	5
3SB20 indicator light								
indicator light 	Indicator lights with concentric rings (Inscription with insert cap not possible)		red yellow green blue white clear	▶ 3SB20 01-6BC06 ▶ 3SB20 01-6BD06 ▶ 3SB20 01-6BE06 ▶ 3SB20 01-6BF06 ▶ 3SB20 01-6BG06 ▶ 3SB20 01-6BH06		0.005	10	
	Indicator lights suitable for inscription with insert caps¹⁾		red yellow green blue clear	3SB20 01-6CC06 3SB20 01-6CD06 3SB20 01-6CE06 3SB20 01-6CF06 3SB20 01-6CH06		0.005	10	





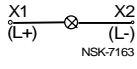
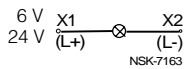



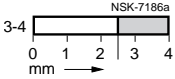
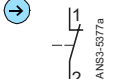
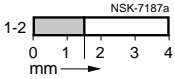
1) Insert caps see pages 9/11 to 9/12.

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

Lamp holders and contact blocks

Selection and ordering data

Version	Symbols	Contact travel	Order No.	Price	Weight approx.	Packing
		 contact closed  contact open	▶ Preferred type	1 unit	kg	Units
Holder for 2 contact blocks		Holder is used as fixing part for actuators and contact blocks				
		Holder for 2 contact blocks Inscription with sequence number 1–2	▶ 3SB29 08–0AA		0.005	5
Lamp holder		Lampholder with holder and tab connections according to IEC 60 760 is also used as fixing part for actuators and contact blocks				
		Lampholder W2 × 4.6 d	▶ 3SB23 04–2A		0.006	5
						
		Lampholder W2 × 4.6 d with incandescent lamp	▶ 3SB23 04–2F 3SB23 04–2H		0.007	5
						
Voltage reducer		Voltage reducer ¹⁾ for connecting a 48-V lamp 3SB29 08–1AE to AC 230 V	▶ 3SB24 04–3D		0.02	20
		Hint: If two of these voltage reducers are connected in series, a 3SB39 08–1.A 24-V-LED lamp can be connected to 230 V AC.				
Contact block		Contact blocks with tab connections 2 × 2.8–0.8 mm according to IEC 60 760 as components of holder and lampholder				
		Contact blocks with one contact ²⁾ 1 NO	▶ 3SB24 04–0B		0.005	20
						
						
		1 NC	▶ 3SB24 04–0C		0.005	20
						
						

➔ Safety function according to IEC 60 947-5-1-3 and DIN VDE 0660, Part 200.

1) Use support point terminal according to DIN VDE 0660, Part 500

2) Push-on sleeve and insulation sleeve see page 9/15.

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

Mounting on printed-circuit boards

Specifications

IEC 60 947-5-1 and
DIN VDE 0660.

Design

The 3SB2 contact blocks and lampholders are intended for use with printed-circuit boards.

The pushbutton unit comprises an actuator, e.g. 3SB2 plain pushbutton, illuminated pushbutton or indicator light (see page 9/6), which is mounted in the front plate, and a contact block and a lampholder which are soldered to the printed-circuit board. For this purpose, the contact blocks and lampholders are provided with 0.8 mm x 0.8 mm solder pins (length 3.5 mm).

Only 16 mm diameter actuators can be used.

Mounting

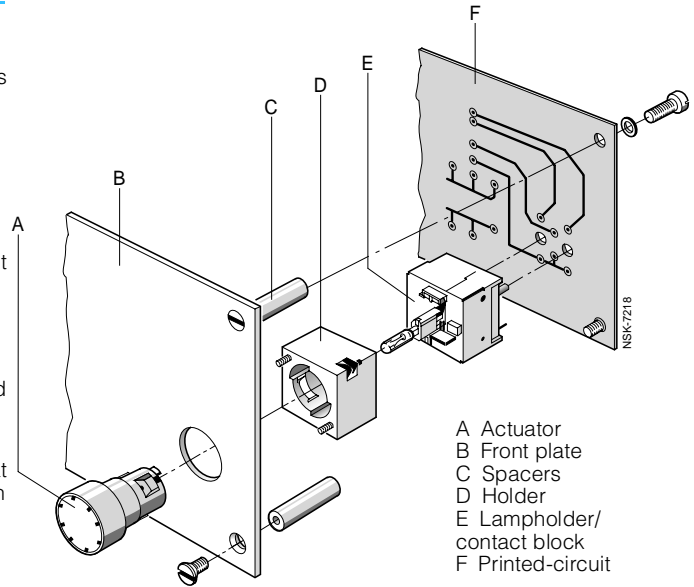
The mounting dimensions conform to EN 50 007 (see drawings adjacent)

The actuators are mounted in the same way as 3SB2 front-plate mounting devices (see page 9/2).

The contact blocks and lampholders plug into printed-circuit board by means of their soldering pins and can be flow-soldered.

After soldering, the devices must be flush with the board and perpendicular to it.

The printed-circuit board must be supported on spacers so that it cannot sag or bend more than 0.1 mm.



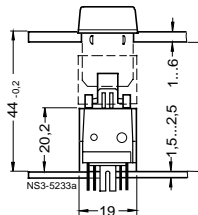
A Actuator
B Front plate
C Spacers
D Holder
E Lampholder/
contact block
F Printed-circuit

Technical data

see page 9/3.

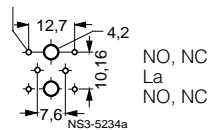
Mounting dimensions

Illuminated pushbutton
with contact block and
lampholder with solder pins



Distance of the solder pins

Solder terminal $\varnothing 1.3^{+0.1}$



Length of the spacer $a = 44^{-0.2}$
minus front panel thickness.

Length is reduced by 0.8 mm
when backing plates are used.

In order to avoid bending of the
board effected by operating the
unit, a sufficient number of
spacers in the following dis-
tances should be provided:

Board thickness	Max. distance between the spacers*
1.5 mm	80 mm
2.5 mm	150 mm
when EMER- GENCY-STOP devices are used generally 50 mm	

* The values apply to boards made
of epoxy resin glass fabric-base
laminates.

Holder and lampholder with solder pins Selection and ordering data

Version	Symbols	Order No.	Price	Weight approx.	Packing
		▶ Preferred type	1 unit	kg	Units
Holder	Holder For fixing the actuators in the front- plate with solder pins	▶ 3SB29 08-0AB		0.006	5
	Lampholder Wedge-Base W2 x 4.6 d	3SB24 55-2A		0.006	5



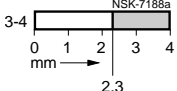

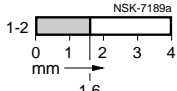

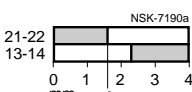

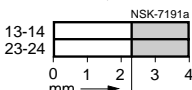

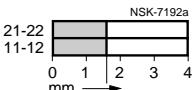

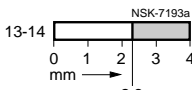

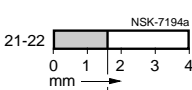

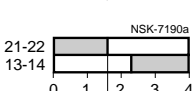

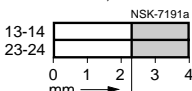

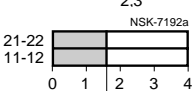


3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

Contact blocks and lampholders with solder pins

Selection and ordering data

Version	Symbols	Contact travel	Order No.	Price	Weight approx	Packing
				1 unit	kg	Unit
Contact block 3SB24 55-0 	Contact blocks					
	1 NO			3SB24 55-0B	0.006	5
	1 NC			3SB24 55-0C	0.006	5
	1 NO + 1 NC			3SB24 55-0J	0.007	5
	1 NO + 1 NO			3SB24 55-0E	0.007	5
1 NC + 1 NC			3SB24 55-0F	0.007	5	
	Contact blocks and lampholder					
1 NO, Wedge-Base W2 x 4.6 d			3SB24 55-1B	0.008	5	
1 NC, Wedge-Base W2 x 4.6 d			3SB24 55-1C	0.008	5	
1 NO + 1 NC, Wedge-Base W2 x 4.6 d			3SB24 55-1J	0.008	5	
1 NO + 1 NO, Wedge-Base W2 x 4.6 d			3SB24 55-1E	0.008	5	
1 NC + 1 NC, Wedge-Base W2 x 4.6 d			3SB24 55-1F	0.008	5	

 Safety function according to IEC 60 947-5-1-3 and DIN VDE 0660, Part 200.

3SB2 Pushbutton Units and Indicator Lights








16 mm Mounting Diameter

Inscription labels and insert caps Selection and ordering data

Clear pushbuttons, illuminated pushbuttons and indicator lights can be fitted with inscription labels and caps for identification purposes.

These labels and caps are made of a milky-transparent moulded plastic with black lettering and can be fitted in any 90° position.

The inscription (also the special inscription) has capital initial letters. The symbols (also non-catalog) are in accordance with DIN 30 600.

Inscription	Consecutive No. acc. to DIN 30 600	Inscription labels for flat pushbuttons and illuminated pushbuttons		Insert caps for raised pushbuttons and illuminated pushbuttons		Insert caps for indicator lights		Packing Unit
		Order No.	Price 1 unit	Order No.	Price 1 unit	Order No.	Price 1 unit	
Blank		3SB29 01-4AA		3SB29 01-5AA		3SB29 01-7AA		1
Ein		3SB29 01-4AB		3SB29 01-5AB		–		
On		3SB29 01-4EB		–		–		
Aus		3SB29 01-4AC		3SB29 01-5AC		–		
Halt		3SB29 01-4AK		–		–		
Stop		3SB29 01-4EL		–		–		
Auf		3SB29 01-4AD		3SB29 01-5AD		–		
Zu		3SB29 01-4AL		3SB29 01-5AL		–		
Test		3SB29 01-4EN		–		–		
Start		3SB29 01-4EK		–		–		
Auf		3SB29 01-4AD		3SB29 01-5AD		–		1
Ab		3SB29 01-4AE		–		–		
Vor		3SB29 01-4AF		3SB29 01-5AF		–		
Zurück		3SB29 01-4AG		3SB29 01-5AG		–		
Rechts		3SB29 01-4AH		–		–		
Links		3SB29 01-4AJ		–		–		
Langsam		3SB29 01-4AN		–		–		
Störung		3SB29 01-4AQ		–		–		
Reset		3SB29 01-4EM		–		3SB29 01-7AQ		
0		3SB29 01-4RA		3SB29 01-5RA		–		1
1		3SB29 01-4RB		3SB29 01-5RB		–		
2		3SB29 01-4RC		3SB29 01-5RC		–		
3		3SB29 01-4RD		3SB29 01-5RD		–		
4		3SB29 01-4RE		3SB29 01-5RE		–		
5		3SB29 01-4RF		3SB29 01-5RF		–		
6		3SB29 01-4RG		3SB29 01-5RG		–		
7		3SB29 01-4RH		3SB29 01-5RH		–		
8		3SB29 01-4RJ		3SB29 01-5RJ		–		
9		3SB29 01-4RK		3SB29 01-5RK		–		
Symbols								
	Off	15	3SB29 01-4MB	3SB29 01-5MB		–		1
	On	16	3SB29 01-4MC	3SB29 01-5MC		–		
		–	3SB29 01-4MD	–		–		
Equipment symbols								
	Electric motor	42	3SB29 01-4PA	–		–		1
	Horn	155	3SB29 01-4PB	–		–		
	Pump	695	3SB29 01-4PD	–		3SB29 01-7PD		
	Coolant pump	713	3SB29 01-4PE	–		–		

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

Inscription labels and insert caps

Selection and ordering data

Symbol	Significance	Consecutive No. acc. to DIN 30 600	Inscription labels for flat pushbuttons and illuminated pushbuttons		Insert caps for raised pushbuttons and illuminated pushbuttons		Insert caps for indicator lights		Packing
			Order No.	Price	Order No.	Price	Order No.	Price	
			▶ Preferred type	1 unit		1 unit		1 unit	Units
Motion symbols									
	Motion in direction of arrow	28	▶ 3SB29 01-4NA		3SB29 01-5NA		–		1
	Motion in direction of arrow	28 b	3SB29 01-4NB		3SB29 01-5NB		–		
	Clockwise rotation	100	3SB29 01-4NC		–		–		
	Anti-clockwise rotation	114	3SB29 01-4ND		–		–		
	Feed	1919	3SB29 01-4NE		–		–		
	Increase, plus	40	3SB29 01-4NG		3SB29 01-5NG		–		
	Decrease, minus	41	3SB29 01-4MC		3SB29 01-5MC		–		
Control symbols									
	Tensioning	259	3SB29 01-4QB		3SB29 01-5QB		–		1
	Release	169	3SB29 01-4QC		3SB29 01-5QC		3SB29 01-7QC		
	Brake off	266	3SB29 01-4QE		–		–		
	Lock	46	3SB29 01-4QF		–		–		
	Unlock	45	3SB29 01-4QG		3SB29 01-5QG		–		
	On/Off momentary-contact	19	3SB29 01-4QJ		–		–		
	Manual operation	35	3SB29 01-4QK		–		3SB29 01-7QK		
	Automatic sequence	267	3SB29 01-4QL		3SB29 01-5QL		–		
Further symbols acc. to DIN Technical Report 4 When ordering, supplement the Order No. with Order Code „K3Y“ and state the consecutive No. acc. to DIN Technical Report 4 as well (special symbols on request)			3SB29 01-4AZ K3Y		3SB29 01-5AZ K3Y		3SB29 01-7AZ K3Y		1
Labels and caps with inscriptions and symbols not listed above: There is space for one line with a maximum of 6 letters each 3 mm high.			3SB29 01-4AZ K0Y, K1Y, K2Y or K9Y		3SB29 01-5AZ K0Y, K1Y, K2Y or K9Y		3SB29 01-7AZ K0Y, K1Y, K2Y or K9Y		1

Supplement the Order No. with the following Order Code:

- Capital initial letters **K0Y**
- Capital letters **K1Y**
- Small letters **K2Y**
- Acc. to the order **K9Y**

When ordering supplement the Order No. with corresponding Order Code and state the required inscription in plain text. In the case of special inscriptions in languages other than German give the exact spelling and specify the language.

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

Backing plates Selection and ordering data

Consist of a black moulded-plastic holder and an adhesive inscription plate (silver with black letters).

The inscription (also the special inscription) has capital initial letters.

In the case of special inscriptions with words in languages other than German give the exact spelling and specify the language.

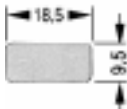
Note mounting dimensions!

Version	Order No.	Price	Packing
	▶ Preferred type	1 unit	Units
Backing plate for inscription plate	▶ 3SB29 02-0AB		1
Adhesive inscription plate¹⁾ 9.5 × 18.5 mm			
Inscription			
without inscription	▶ 3SB29 01-2AA		1
Ein On	3SB29 01-2AB 3SB29 01-2EB		
Aus Off	3SB29 01-2AC 3SB29 01-2EC		
Auf Zu	3SB29 01-2AD 3SB29 01-2AL		
Vor Zurück	3SB29 01-2AF 3SB29 01-2AG		1
Störung Fault	3SB29 01-2AQ 3SB29 01-2EW		
Einrichten Reset	3SB29 01-2AR 3SB29 01-2EM		1
Hand 0 Auto Man 0 Auto	3SB29 01-2BE 3SB29 01-2ET		
Start	3SB29 01-2EL		
Schnell	3SB29 01-2AM		1
Langsam	3SB29 01-2AN		
Betrieb	3SB29 01-2AP		
Hand Auto	3SB29 01-2BA		
Symbols			
O	3SB29 01-2MB		1
I	3SB29 01-2MC		
O I	3SB29 01-2MF		
→	3SB29 01-2NA		
Inscription plates not listed above			
2 lines with 11 letters each are possible Font sizes: 4 mm (1 line) 3 mm (2 lines)	3SB29 01-2XZ K0Y, K1Y, K2Y, K3Y or K9Y		1
Supplement the Order No. with following Order Code:			
- Capital initial letters	K0Y		
- Capital letters	K1Y		
- Small letters	K2Y		
- Symbols.	K3Y		
- Acc. to the order	K9Y		
		When ordering supplement the Order No. with corresponding Order Code and state the required inscription in plain text. In the case of special inscriptions in languages other than German give the exact spelling and specify the language. For further symbols state the consecutive No. acc. to DIN 30 600 as well.	

Holder



Inscription plate



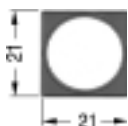
1) Must not be used with the 3SB2...-1AC01 EMERGENCY STOP mushroom-shaped pushbutton unit.

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter






Square design Selection and ordering data

The 3SB2 pushbutton units and indication lights can be constructed in square design using square frames of black moulded-plastic in combination with the actuators and lens assemblies.



Version	Order No.	Price	Packing
	▶ Preferred type	1 unit	Units
Single Frame¹⁾	▶ 3SB29 02-0AA		1

Accessories and spare parts

	Version	Colour	Order No.	Price	VPE
			▶ Preferred type	1 unit	Units
	Button, flat for pushbutton units	black red yellow green blue white clear	3SB29 10-0AB 3SB29 10-0AC 3SB29 10-0AD		1
	for illuminated pushbutton units	red yellow green blue white clear	3SB29 10-0AE 3SB29 10-0AF 3SB29 10-0AG 3SB29 10-0AH ▶ 3SB29 10-0CC 3SB29 10-0CD ▶ 3SB29 10-0CE 3SB29 10-0CF 3SB29 10-0AG 3SB29 10-0AH		
	Button, raised for pushbutton units	black red yellow clear	3SB29 10-0BB 3SB29 10-0BC 3SB29 10-0BD 3SB29 10-0BH		1
	for illuminated pushbutton units	red yellow clear	3SB29 10-0DC 3SB29 10-0DD 3SB29 10-0BH		
	Screw lenses with concentric rings	red yellow green blue white clear	▶ 3SB29 10-1AC ▶ 3SB29 10-1AD ▶ 3SB29 10-1AE ▶ 3SB29 10-1AF ▶ 3SB29 10-1AG ▶ 3SB29 10-1AH		1
	for inscription with insert cap	red yellow green blue clear	3SB29 10-1BC 3SB29 10-1BD 3SB29 10-1BE 3SB29 10-1BF 3SB29 10-1BH		
	Backing plate 50 mm dia., self-adhesive as contrast surface	yellow			
	blank		▶ 3SB29 08-2AF		1
	with inscription NOT-AUS (in German only)		▶ 3SB29 08-2AG		
	Key for CES safety lock lock No. SB2		3SB29 08-2AJ		1

1) Must not be used with the 3SB2...-1AC01 EMERGENCY-STOP mushroom-shaped pushbutton unit.

3SB2 Pushbutton Units and Indicator Lights

16 mm Mounting Diameter

Accessories and spare parts

Version	Lamp voltage	Order No.	Price	Packing
		▶ Preferred type	1 unit	Units
	Protective cap, clear silicone for pushbutton units with flat and with raised button	▶ 3SB29 08-3AB		1
	Wedge-Base incandescent lamps W2 × 4.6 d 1.0 W	▶ 3SB29 08-1AA ▶ 3SB29 08-1AB ▶ 3SB29 08-1AC ▶ 3SB29 08-1AD ▶ 3SB29 08-1AE ▶ 3SB29 08-1AF		10
	Wedge-Base LEDs, super-bright W2 × 4.6 d	▶ 3SB39 01-1SB ▶ 3SB39 01-1RB ▶ 3SB39 01-1TB ▶ 3SB39 01-1UB ▶ 3SB29 08-1BD		10
	Lamp grip for lamps with base W2 × 4.6 d	▶ 3SB29 08-2AB		1
	Mounting tool for pushbuttons and screw lenses	▶ 3SB29 08-2AC		1
	Dismounting tool for holder and lamp holder with holder	▶ 3SB29 08-2AA		1
	Blank plug black plastic (Degree of protection IP 65)	▶ 3SB29 08-3AA		50
	Push-on sleeve for tab connectors 2.8 × 0.8 mm Cross-section 0.5 to 1.5 mm ²	▶ 3SB29 08-8AA		250
	Insulation sleeve for tab connectors pluggable from the front	▶ 3SB29 08-8AB		1
	Compression tool KRBC 0560 for both tab connectors	Please order from: Lapp GmbH Kabelwerk Gewerbestraße D-70565 Stuttgart Germany Tel.: x49 7 11/78 38-02 Fax: x49 7 11/78 38-40 1 (Order No. 61790950)		1
	Complete plug for connecting contact blocks and lamp holders (up to 10 connec- tions). Provides safety from fingertouch acc. to DIN VDE 0106 Part 100 and VBG 4.	3SB29 08-8AD		1
	Push-on sleeves for complete plug	▶ 3SB29 08-8AE		1