Control and Signaling Devices

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Control and Signaling Devices

Introduction

■ Overview

	3SB 2	SIGNUM 3SB3	SIGNUM 3SB3	SIGNUM 3SB3
Pushbuttons and indicator lights				
Design				
Nominal diameter	16 mm	22 mm	22 mm	22 mm
Version	Plastic, round	Plastic, round	Plastic, square	Metal, round
Actuating elements				
Pushbuttons and switches	✔	✔	✔	✔
Illuminated pushbuttons and switches	✔	✔	✔	✔
Mushroom pushbuttons	–	✔	–	✔
Push-pull buttons	–	✔	–	✔
EMERGENCY-STOP mushroom pushbuttons	✔	✔	✔	✔
Non-illuminated selector switches	✔	✔	✔	✔
Key-operated switches	✔	✔	✔	✔
Special actuating elements				
Joystick switches	–	✔	–	–
Twin pushbuttons	–	✔	–	–
Potentiometer operating mechanisms	–	✔	–	–
Indicators				
Indicator lights	✔	✔	✔	✔
Acoustic signaling devices	–	✔	–	–
Switch blocks				
Single-pole	✔	✔	✔	✔
Double-pole	✔	✔	✔	✔
Lampholders				
Wedge base	✔	✔ (with solder pins)	✔ (with solder pins)	✔ (with solder pins)
BA 9s base	–	✔	✔	✔
with integrated LED	–	✔	✔	✔
Connections				
Plug-in connection	✔	–	–	–
Screw connection	–	✔	✔	✔
Spring-loaded terminal	–	✔	✔	✔
Solder pins	✔	✔	✔	✔
AS-Interface	–	✔	✔	✔

AS-Interface solutions

Control and signaling devices of the SIGNUM 3SB3 series can be connected to the AS-Interface communication system quickly and easily with the help of various solutions.

AS-Interface EMERGENCY-STOP

It is now possible to directly connect EMERGENCY-STOP devices over the standard AS-Interface using failsafe communication. This only applies for EMERGENCY-STOP devices of SIGNUM 3SB3 control devices for front panel mounting and for mounting in an enclosure.

AS-Interface front panel module

The front panel module contains one 4I/4O slave, four SIGNUM 3SB3 control devices as well as the necessary mounting accessories.

The module is mounted on the rear of a group of four control devices arranged horizontally or vertically and fixed with screws. For mounting control devices, a grid pattern of 30 mm × 45 mm must be used. Contact is made with the trapezoidal section of the AS-Interface cable by means of a terminal on the rear of the module using the insulation piercing method.

The module is addressed using the AS-Interface connections or the integrated addressing socket.

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	SIGNUM 3SB3	SIGNUM 3SB3	SIGNUM 3SF3	SIGNUM 3SB4
	Enclosure	**Enclosure**	**AS-Interface**	**Control panel**
Design				
Nominal diameter	22 mm	22 mm	22 mm	22 mm
Version	Plastic, round	Metal, round	Plastic, round	Plastic/metal
Actuators				
Pushbuttons and switches	✔	✔	✔	✔
Illuminated pushbuttons and switches	✔	✔	✔	✔
Mushroom pushbuttons	✔	✔	✔	✔
Push-pull buttons	✔	✔	✔	✔
EMERGENCY-STOP mushroom pushbuttons	✔	✔	✔	✔
Non-illuminated selector switches	✔	✔	✔	✔
Key-operated switches	✔	✔	✔	✔
Indicators				
Indicator lights	✔	✔	✔	✔
Acoustic signaling devices	✔	–	✔	✔
Special actuators				
Joystick switches	–	–	–	–
Twin pushbuttons	–	–	–	–
Potentiometer operating mechanism	–	–	–	✔
Membrane keypads	–	–	–	✔
Switch blocks				
Single-pole	✔	✔		✔
Double-pole	–	–		✔
Lampholders				
Wedge base	–	–		–
BA 9s base	✔	✔		✔
with integrated LED	✔	✔		✔
Connections				
Plug-in connection	–	–	–	✔
Screw connection	✔	✔	–	✔
Spring-loaded terminal	✔	✔	–	✔
Solder pins	–	–	–	✔
AS-Interface	–	–	✔	✔
PROFIBUS DP	–	–	–	✔

AS-Interface solutions

Control and signaling devices of the SIGNUM 3SB3 series can be connected to the AS-Interface communication system quickly and easily with the help of various solutions.

AS-Interface enclosure

The enclosures without EMERGENCY-STOP contain a 4I/4O application module; an F adapter is mounted onto EMERGENCY-STOP enclosures. The switch blocks and lampholders of the control devices as well as the AS-Interface slave are soldered onto a supporting printed circuit board and screwed onto the control devices.
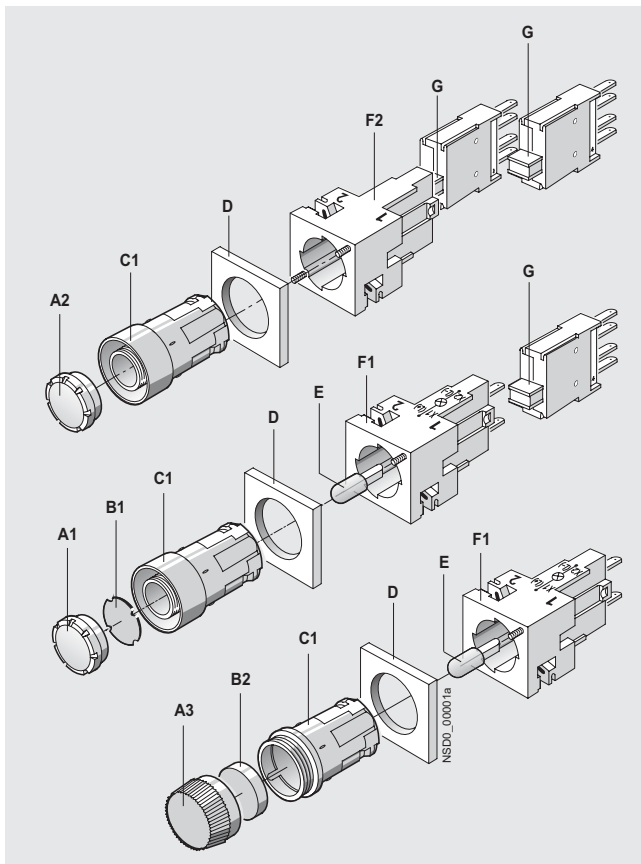
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General data

■ Overview

The 3SB2 pushbuttons and indicator lights are provided for front plate mounting and rear connection with flat connectors. For use on PCBs, switch blocks and lampholders with solder pins are also available.

The devices are climate-proof and suitable for marine applications.

Standards

IEC 60947-5-1 (VDE 0660 Part 200).

■ Design

A1 Illuminated pushbutton, flat
A2 Pushbutton, 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 rectangular design
E Wedge-base lamps W2 × 4.6 d
F1 Lampholder with holder
F2 Holder
G Switch blocks (1 NO or 1 NC) for snapping onto holder or lampholder

Design

Two versions are available:

- Round design: The 3SB2 pushbuttons and indicator lights are assembled with the elements – actuator, holder, switch block and lampholder. Depending on the specific application, various versions can be assembled. Complete units are offered for the most commonly used applications.
- Square design: With square, black frames the round units can be given a square look. The frames are inserted underneath the round actuators. Further mounting is the same as for the round design.

Mounting and fixing

Mounting dimensions acc. to EN 50007.
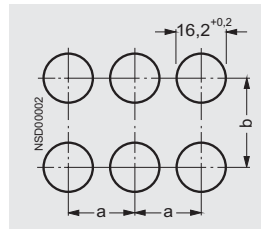
Minimum clearance	A	B
Round design	19	19
Square design without labeling plate	21	21
Round and square design with labeling plate	21	32
For 2 selector switches with 3 switch positions, latching, side by side	21	21

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.

One or two switch blocks can be mounted on the holder. They are inserted into the holder with slide slots and held down with two snap brackets.

If a command point is fitted with an indicator light or illuminated pushbutton, a lamp socket with holder must be used instead of a holder. It is suitable for incandescent lamps or LEDs with sockets of type W2 × 4.6 d.

Connections

The switch blocks and the lampholder are equipped with flat connectors in accordance with IEC 60760 which can also be used as solder-pin terminals.

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

General data

For PCB mounting

The command point comprises the actuator – e.g. 3SB2 pushbutton, illuminated pushbutton or indicator light –, which is mounted in the front plate, and a switch block and a lampholder which are soldered to the PCB. For this purpose, the switch blocks and lampholders are fitted with 0.8 mm × 0.8 mm solder pins of length 3.5 mm.


A Actuator
B Front panel
C Spacer
D Holder
E Lampholder/ actuator
F PCB
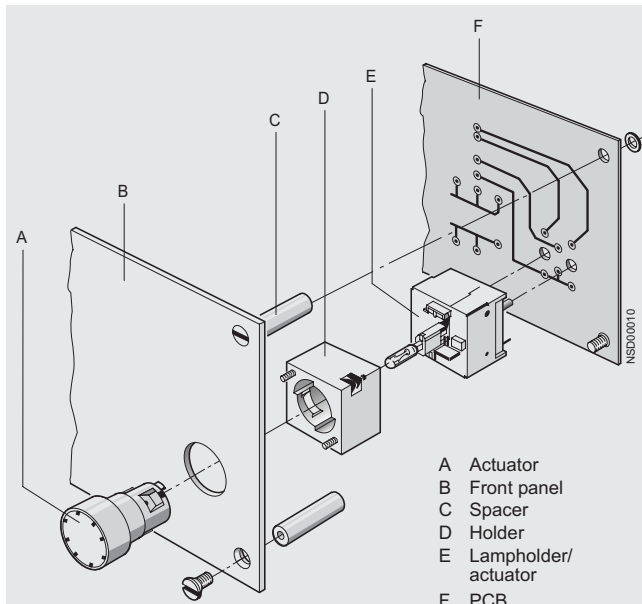
Mounting and fixing

Mounting dimensions acc. to EN 50007.

The actuators are mounted in the same way as 3SB2 front plate mounting devices.

The switch blocks and lampholders plugged into the 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.

Illuminated pushbuttons with switch blocks and lampholders with solder pins
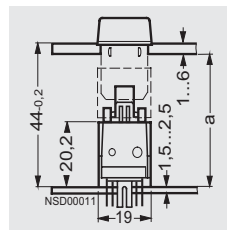
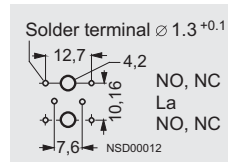Length a of spacing bolts
$a = 44^{-0.2}$ minus front panel thickness

When using name plates, the length a is reduced by 0.8 mm.

To avoid bending the PCB when the pushbuttons are operated, sufficient spacers must be provided as shown in the table below:

PCB thickness	Max. distance between spacers
1.5 mm	80 mm
2.5 mm	150 mm
When using EMERGENCY-STOP pushbuttons	always 50 mm

These details are based on epoxy resin glass fiber mat.

Spacing of solder pins

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General data

Technical specifications

Regulations, standards	IEC 60947-5-1, EN 60947-5-1 (VDE 0660 Part 200), IEC 60947-5-5, EN 60947-5-5	
Rated insulation voltage U_i	250 V	
Continuous thermal current I_{th}	10 A	
Rated operating current I_e at rated operating voltage U_e		
• Alternating current AC-12	At U_e 230 V	I_e 10 A
• Alternating current AC-15	At U_e 24 V 60 V 110 V 230 V	I_e 4 A 4 A 4 A 4 A
• Direct current DC-12	At U_e 24 V 60 V 110 V 230 V	I_e 6 A 5 A 2.5 A 1 A
• Direct current DC-13	At U_e 24 V 60 V 110 V 230 V	I_e 3 A 1.5 A 0.7 A 0.3 A
Contact stability Test voltage/test current	5 V/1 mA	
Short-circuit protection completely weld-free according to IEC 60947-5-1 • DIAZED fuse links, operational class gL/gG • Circuit-breakers with C characteristic according to IEC 60898 (VDE 0641)	10 A TDz, 16 A Dz 10 A	
Mechanical endurance • Pushbuttons and switch blocks • Actuating elements, rotary or latching • Illuminated pushbuttons	10×10^6 operating cycles 3×10^5 operating cycles 3×10^6 operating cycles	
Electrical endurance • For operational class AC-15 with 3RT10 15 to 3RT10 26 contactors	10×10^6 operating cycles	
Climatic withstand capability	Climate-proof; suitable for marine applications	
Ambient temperature • During operation, non-illuminated devices and with LED • During operation, devices with incandescent lamp • During storage, transport	–25 to +70 °C –25 to +60 °C –40 to +80 °C	
Degree of protection acc. to IEC 60529 (VDE 0470 Part 1) • Connection of switch blocks and lampholders behind the front panel • Contact chambers of the switch blocks behind the front panel • Actuators and indicators • Actuator and indicators with protective cap	IP00 IP40 IP65 IP67	
Lamps • Base • Operating voltage range	Wedge base W2 × 4.6 d 6, 12, 24, 30, 48, 60 V; max. 1 W	
Connection Clamp-type terminal with flat connectors for plug-in sleeves to IEC 60760	Flat connector 2 × 2.8/0.8 mm	
Safety measures • For mounting in metal front plates and enclosures • For fitting into enclosures with total insulation	The actuating elements and lens assemblies must not be included in the protective measures. The protective measure "Total insulation" is retained.	
Finger-safe acc. to DIN VDE 0106 Part 100 and VBG 4	With voltages > AC 50 V or DC 120 V insulating sleeves must be fitted to the unassigned tab connections.	
Shock resistance acc. to IEC 60068-2-27 Shock amplitude Shock duration Shock form	≤ 50 g 11 ms Half-sine	

Data acc. to UL and CSA

Rated voltage • Switch blocks • Indicator lights	AC 250 V max. Lamp with wedge base W2 × 4.6 d: max. 60 V; 1 W	
Continuous current	5 A	
Switching capacity	B 300, R 300	

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■ **Selection and ordering data**

Version	Color Actuator	Switch blocks Version	DT	Order No.	PS*	Weight per PU, approx. kg
Pushbutton with flat button	black	1 NO	►	**3SB22 02-0AB01**	1 unit	0.023
	black	1 NC	B	**3SB22 03-0AB01**	1 unit	0.023
	red	1 NC	►	**3SB22 03-0AC01**	1 unit	0.023
	yellow	1 NO	B	**3SB22 02-0AD01**	1 unit	0.023
	green	1 NO	►	**3SB22 02-0AE01**	1 unit	0.023
	blue	1 NO	B	**3SB22 02-0AF01**	1 unit	0.023
	white	1 NO	►	**3SB22 02-0AG01**	1 unit	0.024
	clear[1]	1 NO	B	**3SB22 02-0AH01**	1 unit	0.023
Illuminated pushbutton with flat button with lampholder W2 x 4.6 d[2]	red	1 NC	►	**3SB22 07-0AC01**	1 unit	0.025
	yellow[1]	1 NO	B	**3SB22 06-0AD01**	1 unit	0.025
	green	1 NO	►	**3SB22 06-0AE01**	1 unit	0.025
	blue	1 NO	B	**3SB22 06-0AF01**	1 unit	0.025
	clear[1]	1 NO	►	**3SB22 06-0AH01**	1 unit	0.024
Illuminated pushbutton with flat button with lampholder W2 x 4.6 d and incandescent lamp 24 V	red	1 NC	►	**3SB22 27-0AC01**	1 unit	0.025
	yellow[1]	1 NO	B	**3SB22 26-0AD01**	1 unit	0.025
	green	1 NO	►	**3SB22 26-0AE01**	1 unit	0.025
	blue	1 NO	B	**3SB22 26-0AF01**	1 unit	0.025
	clear[1]	1 NO	►	**3SB22 26-0AH01**	1 unit	0.025
Pushbutton with raised button	black	1 NO	B	**3SB22 02-0LB01**	1 unit	0.024
	red	1 NC	B	**3SB22 03-0LC01**	1 unit	0.024
	yellow	1 NO	B	**3SB22 02-0LD01**	1 unit	0.023
	blue	1 NO	B	**3SB22 02-0LF01**	1 unit	0.024
	clear[1]	1 NO	B	**3SB22 02-0LH01**	1 unit	0.024
Illuminated pushbutton with raised button with lampholder W2 x 4.6 d[2]	red	1 NC	B	**3SB22 07-0LC01**	1 unit	0.025
	yellow[1]	1 NO	B	**3SB22 06-0LD01**	1 unit	0.025
	green	1 NO	B	**3SB22 06-0LE01**	1 unit	0.025
	blue	1 NO	B	**3SB22 06-0LF01**	1 unit	0.022
	clear[1]	1 NO	B	**3SB22 06-0LH01**	1 unit	0.025
Illuminated pushbutton with raised button with lampholder W2 x 4.6 d and incandescent lamp 24 V	red	1 NC	B	**3SB22 27-0LC01**	1 unit	0.027
	yellow[1]	1 NO	B	**3SB22 26-0LD01**	1 unit	0.026
	green	1 NO	B	**3SB22 26-0LE01**	1 unit	0.026
	blue	1 NO	B	**3SB22 26-0LF01**	1 unit	0.025
	clear[1]	1 NO	B	**3SB22 26-0LH01**	1 unit	0.026
EMERGENCY-STOP mushroom pushbuttons acc. to EN 418, latching latches automatically when pressed; unlatches by turning the mushroom head anticlockwise with yellow name plate with inscription "EMERGENCY-STOP"	red	1 NC → [3]	►	**3SB22 03-1AC01**	1 unit	0.032

Pushbuttons and illuminated pushbuttons with flat button

Pushbuttons and illuminated pushbuttons with raised button

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EMERGENCY-STOP mushroom pushbuttons

1) Inscription is possible by inserting a label.

2) For wedge base lamps, see Accessories.

3) Positive opening according to IEC 60947-5-1, Appendix K.

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Pushbuttons and Indicator Lights
16 mm Nominal Diameter

Complete unit combinations

	Version	Color Actuator	Switch blocks	DT	Order No.	PS*	Weight per PU, approx.
			Version				kg
Non-illuminated selector switches	**Selector switch, 2 switch positions** switching sequence O-I latching	black	1 NO	►	**3SB22 02-2AB01**	1 unit	0.026
		red	1 NO	B	**3SB22 02-2AC01**	1 unit	0.025
		green	1 NO	B	**3SB22 02-2AE01**	1 unit	0.025
		white	1 NO	B	**3SB22 02-2AG01**	1 unit	0.026
	Selector switch, 3 switch positions switching sequence I-O-II latching	black	1 NO, 1 NO	►	**3SB22 10-2DB01**	1 unit	0.030
		red	1 NO, 1 NO	B	**3SB22 10-2DC01**	1 unit	0.028
		green	1 NO, 1 NO	B	**3SB22 10-2DE01**	1 unit	0.030
		white	1 NO, 1 NO	B	**3SB22 10-2DG01**	1 unit	0.029
	Selector switch, 3 switch positions switching sequence I-O-II momentary contact type	black	1 NO, 1 NO	►	**3SB22 10-2EB01**	1 unit	0.030
		red	1 NO, 1 NO	B	**3SB22 10-2EC01**	1 unit	0.029
		green	1 NO, 1 NO	B	**3SB22 10-2EE01**	1 unit	0.029
		white	1 NO, 1 NO	B	**3SB22 10-2EG01**	1 unit	0.029

	Version	Lock No.	Switch blocks	Key removal position	DT	Order No.	PS*	Weight per PU, approx.
			Version					kg
CES key-operated switch	**CES key-operated switch, 2 switch positions** switching sequence O-I latching	SB 2	1 NO	O	►	**3SB22 02-4LA01**	1 unit	0.053
			1 NO	O + I	B	**3SB22 02-4LB01**	1 unit	0.053
	CES key-operated switch, 3 switch positions switching sequence I-O-II latching	SB 2	1 NO, 1 NO	O	B	**3SB22 10-4PA01**	1 unit	0.056
			1 NO, 1 NO	I + O + II	B	**3SB22 10-4PB01**	1 unit	0.056
	CES key-operated switch, 3 switch positions switching sequence I-O-II momentary contact type	SB 2	1 NO, 1 NO	O	B	**3SB22 10-4QA01**	1 unit	0.057

	Version	Color Actuator		DT	Order No.	PS*	Weight per PU, approx.
							kg
Indicator lights	**Indicator light** with lampholder W2 x 4.6 d without lamp[1]	red		►	**3SB22 04-6BC06**	1 unit	0.020
		yellow		B	**3SB22 04-6BD06**	1 unit	0.020
		green		►	**3SB22 04-6BE06**	1 unit	0.020
		white		►	**3SB22 04-6BG06**	1 unit	0.020
		clear		B	**3SB22 04-6BH06**	1 unit	0.020
	Indicator light with lampholder W2 x 4.6 d and incandescent lamp 24 V	red		►	**3SB22 24-6BC06**	1 unit	0.021
		yellow		B	**3SB22 24-6BD06**	1 unit	0.021
		green		►	**3SB22 24-6BE06**	1 unit	0.021
		white		►	**3SB22 24-6BG06**	1 unit	0.020
		clear		B	**3SB22 24-6BH06**	1 unit	0.021

1) For wedge base lamps, see Accessories.

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* This quantity or a multiple thereof can be ordered

Selection and ordering data

	Version	Color Actuator	DT	Order No.	PS*	Weight per PU, approx. kg
Pushbutton and illuminated pushbutton with flat button	**Pushbutton with flat button**	black	▶	**3SB20 00-0AB01**	1 unit	0.005
		red	▶	**3SB20 00-0AC01**	1 unit	0.005
		yellow	B	**3SB20 00-0AD01**	1 unit	0.005
		green	▶	**3SB20 00-0AE01**	1 unit	0.005
		blue	B	**3SB20 00-0AF01**	1 unit	0.005
		white	▶	**3SB20 00-0AG01**	1 unit	0.005
		clear[1]	B	**3SB20 00-0AH01**	1 unit	0.005
	Illuminated pushbutton with flat button	red	▶	**3SB20 01-0AC01**	1 unit	0.005
		yellow[1]	B	**3SB20 01-0AD01**	1 unit	0.006
		green	▶	**3SB20 01-0AE01**	1 unit	0.005
		blue	B	**3SB20 01-0AF01**	1 unit	0.005
		white	▶	**3SB20 00-0AG01**	1 unit	0.005
		clear[1]	B	**3SB20 00-0AH01**	1 unit	0.005
Pushbutton and illuminated pushbutton with raised button	**Pushbutton with raised button**	black	B	**3SB20 00-0LB01**	1 unit	0.005
		red	B	**3SB20 00-0LC01**	1 unit	0.005
		yellow	B	**3SB20 00-0LD01**	1 unit	0.005
		blue	B	**3SB20 00-0LF01**	1 unit	0.006
		white	B	**3SB20 00-0LG01**	1 unit	0.020
		clear[1]	B	**3SB20 00-0LH01**	1 unit	0.006
	Illuminated pushbutton with raised button	red	B	**3SB20 01-0LC01**	1 unit	0.005
		yellow[1]	B	**3SB20 01-0LD01**	1 unit	0.005
		green	B	**3SB20 01-0LE01**	1 unit	0.005
		blue	B	**3SB20 01-0LF01**	1 unit	0.006
		clear[1]	B	**3SB20 00-0LH01**	1 unit	0.006
EMERGENCY-STOP mushroom pushbuttons	**EMERGENCY-STOP mushroom pushbutton according to EN 418, latching** [2] latches automatically when pressed; Unlatches by turning the mushroom head anti-clockwise	red	▶	**3SB20 00-1AC01**	1 unit	0.015

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1) Inscription is possible by inserting a label.
2) The mushroom pushbutton cannot be combined with 3SB29 00-0... name plate and 3SB29 02-0AA single frame.

	Version	Color Actuator	DT	Order No.	PS*	Weight per PU, approx. kg
Selector switches	**Selector switches with 2 switch positions** Switching sequence O-I, latching, 62° operating angle	black	▶	**3SB20 00-2AB01**	1 unit	0.008
		red	A	**3SB20 00-2AC01**	1 unit	0.008
		green	B	**3SB20 00-2AE01**	1 unit	0.007
		white	B	**3SB20 00-2AG01**	1 unit	0.008
	Selector switches with 2 switch positions Switching sequence O-I momentary contact type (reset from the right) 50° operating angle	black	A	**3SB20 00-2BB01**	1 unit	0.008
		red	B	**3SB20 00-2BC01**	1 unit	0.008
		green	B	**3SB20 00-2BE01**	1 unit	0.008
	Selector switches with 2 switch positions Switching sequence O-I, latching, 90° operating angle	black	B	**3SB20 00-2HB01**	1 unit	0.009
		red	B	**3SB20 00-2HC01**	1 unit	0.008
		green	C	**3SB20 00-2HE01**	1 unit	0.007
		white	B	**3SB20 00-2HG01**	1 unit	0.008
	Selector switches with 3 switch positions Switching sequence I-O-II, latching, 2 x 62° operating angle	black	▶	**3SB20 00-2DB01**	1 unit	0.008
		red	C	**3SB20 00-2DC01**	1 unit	0.007
		green	B	**3SB20 00-2DE01**	1 unit	0.007
		white	B	**3SB20 00-2DG01**	1 unit	0.007
	Selector switches with 3 switch positions Switching sequence I-O-II momentary contact type (reset from the right and left) 2 x 50° operating angle	black	▶	**3SB20 00-2EB01**	1 unit	0.008
		red	B	**3SB20 00-2EC01**	1 unit	0.007
		green	B	**3SB20 00-2EE01**	1 unit	0.008
		white	B	**3SB20 00-2EG01**	1 unit	0.007
	Selector switches with 3 switch positions Switching sequence I-O-II, latching, 2 x 90° operating angle	black	B	**3SB20 00-2JB01**	1 unit	0.008

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Actuating and signaling elements

		Version	Lock No.	Key removal position	DT	Order No.	PS*	Weight per PU, approx.
								kg
		CES key-operated switch with 2 keys, 2 switch positions switching sequence O-I latching 62° operating angle	SB2	O+I O	B ▶	**3SB20 00-4LB01** **3SB20 00-4LA01**	1 unit 1 unit	0.035 0.036
		CES key-operated switch with 2 keys, 2 switch positions switching sequence O-I momentary contact type (reset from the right) 50° operating angle	SB2	O	▶	**3SB20 00-4MA01**	1 unit	0.035
		CES key-operated switch with 2 keys, 3 switch positions switching sequence I+O+II latching 2 x 62° operating angle	SB2	I+O+II O	B B	**3SB20 00-4PB01** **3SB20 00-4PA01**	1 unit 1 unit	0.035 0.035
		CES key-operated switch with 2 keys, 3 switch positions switching sequence I-O-II momentary contact type (reset from the right) 2 x 50° operating angle	SB2	O	B	**3SB20 00-4QA01**	1 unit	0.038

CES key-operated switch

Version		Color screw lens	DT	Order No.	PS*	Weight per PU, approx.
						kg
Indicator light with concentric rings (inscription by inserting a cap is not possible)		red yellow green blue white clear	▶ B ▶ B ▶ B	**3SB20 01-6BC06** **3SB20 01-6BD06** **3SB20 01-6BE06** **3SB20 01-6BF06** **3SB20 01-6BG06** **3SB20 01-6BH06**	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	0.004 0.004 0.004 0.004 0.004 0.004
Indicator light, smooth, for inscription by inserting a cap[1]		red yellow green blue clear	B B B B B	**3SB20 01-6CC06** **3SB20 01-6CD06** **3SB20 01-6CE06** **3SB20 01-6CF06** **3SB20 01-6CH06**	1 unit 1 unit 1 unit 1 unit 1 unit	0.017 0.005 0.004 0.004 0.020

Indicator light

1) For insert caps, see Accessories.

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* This quantity or a multiple thereof can be ordered

Switch blocks and lampholders

■ **Selection and ordering data**

Version	Symbols	Contact travel □ contact closed □ contact open	DT	Order No.	PS*	Weight per PU, approx. kg
Switch blocks and lampholders with tab connectors 2 × 2.8–0.8 mm acc. to IEC 60760						
Holder for fixing the actuating element and the switch blocks						
Holder for 2 switch blocks Inscription with sequence digit 1-2			►	3SB29 08-0AA	5 units	0.008
Lamp socket with holder for fixing the actuator and the switch blocks						
Lampholder W2 x 4.6 d	X1 (L+) ⊗ X2 (L-) NSD00003		►	3SB23 04-2A	1 unit	0.009
Lampholder W2 x 4.6 d • with 6 V incandescent lamp	X1 (L+) ⊗ X2 (L-) NSD00003		B	3SB23 04-2F	1 unit	0.010
• with 24 V incandescent lamp			B	3SB23 04-2H	1 unit	0.010
Series element [1] for connecting the 3SB29 08-1AE (48 V) lamp to AC 230 V	X1 ⊣⊢ X2 NSD0_0005a		B	3SB24 04-3D	1 unit	0.008
Switch blocks for fixing in the holder or lampholder						
Switch block with one contact [2] 1 NO	3 ⌐ 4 NSD00006	3-4 NSD00008 0 1 2 3 4 mm →	►	3SB24 04-0B	1 unit	0.004
1 NC → [3]	1 ⌐ 2 NSD00007	1-2 NSD00009 0 1 2 3 4 mm →	►	3SB24 04-0C	1 unit	0.004
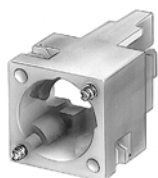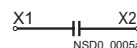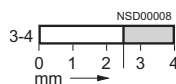
Holder

Lampholder

Series element

Switch block
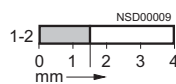
1) Use support point terminal according to IEC 60 439-1.

2) For plug-in and insulating sleeves, see Accessories.

3) Positive opening according to IEC 60 947-5-1, Appendix K.

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Switch blocks and lampholders

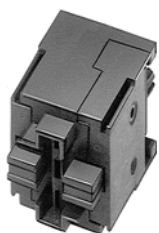| Version	Symbols	Contact travel ■ contact closed □ contact open	DT	Order No.	PS*	Weight per PU, approx. kg
Switch blocks and lampholders with solder pins						
Holder for switch blocks with solder pins for fixing the actuating elements in the front panel			B	**3SB29 08-0AB**	5 units	0.006
Lampholder wedge base W2 x 4.6 d	(L+) X1 ⊗ NSD00013 (L-) X2		B	**3SB24 55-2A**	1 unit	0.008
Switch block						
1 NO	3 NSD00006 4	3-4 NSD00015 0 1 2 3 4 mm → 2,3	B	**3SB24 55-0B**	1 unit	0.008
1 NC →1)	1 NSD00007 2	1-2 NSD00017 0 1 2 3 4 mm → 1,6	B	**3SB24 55-0C**	1 unit	0.008
1 NO + 1 NC →1)	13 21 NSD00018 14 22	21-22 13-14 NSD00019 0 1 2 3 4 mm → 1,6	B	**3SB24 55-0J**	1 unit	0.010
1 NO + 1 NO	13 23 NSD00020 14 24	13-14 23-24 NSD00021 0 1 2 3 4 mm → 2,3	B	**3SB24 55-0E**	1 unit	0.009
1 NC + 1 NC →1)	11 21 NSD00022 12 22	21-22 11-12 NSD00023 0 1 2 3 4 mm → 1,6	B	**3SB24 55-0F**	1 unit	0.009
Switch block and lampholder, wedge base W2 x 4.6 d						
1 NO	13 X1 ⊗ NSD00024 14 X2	13-14 NSD01082 0 1 2 3 4 mm → 2,3	B	**3SB24 55-1B**	1 unit	0.009
1 NC →1)	21 X1 ⊗ NSD00025 22 X2	21-22 NSD01083 0 1 2 3 4 mm → 1,6	B	**3SB24 55-1C**	1 unit	0.009
1 NO + 1 NC →1)	13 21 X1 ⊗ NSD00026 14 22 X2	21-22 13-14 NSD00019 0 1 2 3 4 mm → 1,6	B	**3SB24 55-1J**	1 unit	0.010
1 NO + 1 NO	13 23 X1 ⊗ NSD00027 14 24 X2	13-14 23-24 NSD00021 0 1 2 3 4 mm → 2,3	B	**3SB24 55-1E**	1 unit	0.010
1 NC + 1 NC →1)	11 21 X1 ⊗ NSD00028 12 22 X2	21-22 11-12 NSD00023 0 1 2 3 4 mm → 1,6	C	**3SB24 55-1F**	1 unit	0.010
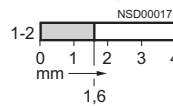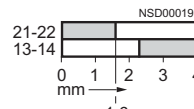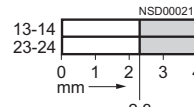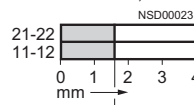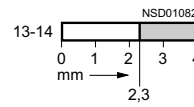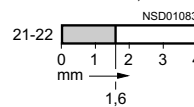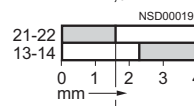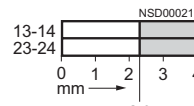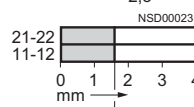
Holder

Switch block with solder pins

9

1) Positive opening according to IEC 60947-5-1, Appendix K.

* This quantity or a multiple thereof can be ordered

Accessories and spare parts
Insert labels and insert caps

Overview

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

The insert labels and insert caps are made of a milky-transparent plastic with black lettering; they can be fitted in any 90° angle.

Inscription

The lettering has uppercase initial letters. The symbols, including those not listed in the catalog, are in accordance with DIN Report 4.

For customized labels, see Options.

Selection and ordering data

Inscription	Symbols with number acc. to DIN Report 4	DT	Insert labels for pushbuttons and illuminated pushbuttons, flat	PS*	Weight per PU, approx.	DT	Insert caps for pushbuttons and illuminated pushbuttons, raised	PS*	Weight per PU, approx.
			Order No.		kg		Order No.		kg
For self-inscription									
Without inscription	-	B	3SB29 01-4AA	10 units	0.100	B	3SB29 01-5AA	10 units	0.100
With inscription									
Ein		B	3SB29 01-4AB	10 units	0.100	B	3SB29 01-5AB	10 units	0.100
Aus		B	3SB29 01-4AC	10 units	0.100	B	3SB29 01-5AC	10 units	0.100
Auf		B	3SB29 01-4AD	10 units	0.100	B	3SB29 01-5AD	10 units	0.100
Ab		B	3SB29 01-4AE	10 units	0.100		-		
Vor		B	3SB29 01-4AF	10 units	0.100	B	3SB29 01-5AF	10 units	0.100
Zurück		B	3SB29 01-4AG	10 units	0.100	B	3SB29 01-5AG	10 units	0.100
Rechts		B	3SB29 01-4AH	10 units	0.100		-		
Links		B	3SB29 01-4AJ	10 units	0.100		-		
Halt		C	3SB29 01-4AK	10 units	0.100		-		
Zu		B	3SB29 01-4AL	10 units	0.100	B	3SB29 01-5AL	10 units	0.100
Langsam		C	3SB29 01-4AN	10 units	0.100		-		
Störung		B	3SB29 01-4AQ	10 units	0.100		-		
On		C	3SB29 01-4EB	10 units	0.100		-		
Start		B	3SB29 01-4EK	10 units	0.100		-		
Stop		B	3SB29 01-4EL	10 units	0.100		-		
Reset		B	3SB29 01-4EM	10 units	0.100		-		
Test		B	3SB29 01-4EN	10 units	0.100		-		
0		B	3SB29 01-4RA	10 units	0.100	C	3SB29 01-5RA	10 units	0.100
1		B	3SB29 01-4RB	10 units	0.100	B	3SB29 01-5RB	10 units	0.100
2		B	3SB29 01-4RC	10 units	0.100	B	3SB29 01-5RC	10 units	0.100
3		B	3SB29 01-4RD	10 units	0.100	B	3SB29 01-5RD	10 units	0.100
4		B	3SB29 01-4RE	10 units	0.100	B	3SB29 01-5RE	10 units	0.100
5		C	3SB29 01-4RF	10 units	0.100	B	3SB29 01-5RF	10 units	0.100
6		C	3SB29 01-4RG	10 units	0.100	B	3SB29 01-5RG	10 units	0.100
7		C	3SB29 01-4RH	10 units	0.100	B	3SB29 01-5RH	10 units	0.100
8		C	3SB29 01-4RJ	10 units	0.100	B	3SB29 01-5RJ	10 units	0.100
9		C	3SB29 01-4RK	10 units	0.100	B	3SB29 01-5RK	10 units	0.100
Symbol for ON/OFF									
O (Off)	No. 15	B	3SB29 01-4MB	10 units	0.100	C	3SB29 01-5MB	10 units	0.100
I (On)	No. 16	B	3SB29 01-4MC	10 units	0.100	B	3SB29 01-5MC	10 units	0.100
II (On)	-	C	3SB29 01-4MD	10 units	0.100		-		

* This quantity or a multiple thereof can be ordered

Pushbuttons and Indicator Lights
16 mm Nominal Diameter

Accessories and spare parts
Insert labels and insert caps

Inscription	Symbols with number acc. to DIN Report 4	DT	Insert labels for pushbuttons and illuminated pushbuttons, flat	PS*	Weight per PU, approx.	DT	Insert caps for pushbuttons and illuminated pushbuttons, raised	PS*	Weight per PU, approx.
			Order No.		kg		Order No.		kg
Equipment symbols									
Electric motor	No. 42	B	3SB29 01-4PA	10 units	0.100		-		
Horn	No. 155	B	3SB29 01-4PB	10 units	0.100		-		
Pump	No. 695	C	3SB29 01-4PD	10 units	0.100		-		
Coolant pump	No. 713	B	3SB29 01-4PE	10 units	0.100		-		
Motion symbols									
Motion in direction of arrow	No. 28	B	3SB29 01-4NA	10 units	0.100	B	3SB29 01-5NA	10 units	0.100
Motion in direction of arrow	No. 28 b	B	3SB29 01-4NB	10 units	0.100	B	3SB29 01-5NB	10 units	0.100
Clockwise rotation	No. 100	B	3SB29 01-4NC	10 units	0.100		-		
Anticlockwise rotation	No. 114	B	3SB29 01-4ND	10 units	0.100		-		
Fast motion	No. 1919	C	3SB29 01-4NE	10 units	0.100		-		
Increase (plus)	No. 40	B	3SB29 01-4NG	10 units	0.100	B	3SB29 01-5NG	10 units	0.100
Decrease (minus)	No. 41	B	3SB29 01-4MC	10 units	0.100	B	3SB29 01-5MC	10 units	0.100
Control symbols									
Clamp	No. 259	B	3SB29 01-4QB	10 units	0.100	B	3SB29 01-5QB	10 units	0.100
Release	No. 169	B	3SB29 01-4QC	10 units	0.100	B	3SB29 01-5QC	10 units	0.100
Brake off	No. 266	C	3SB29 01-4QE	10 units	0.100		-		
Lock	No. 46	C	3SB29 01-4QF	10 units	0.100		-		
Unlock	No. 45	B	3SB29 01-4QG	10 units	0.100	C	3SB29 01-5QG	10 units	0.100
On/Off, momentary contact	No. 19	B	3SB29 01-4QJ	10 units	0.100		-		
Manual operation	No. 35	B	3SB29 01-4QK	10 units	0.100		-		
Automatic sequence	No. 267	B	3SB29 01-4QL	10 units	0.100	B	3SB29 01-5QL	10 units	0.100
Customized inscriptions									
Further symbols according to DIN Report 4 Please add the short code **"K3Y"** to the Order No. and also specify the serial number in accordance with DIN Report 4.		C	3SB29 01-4AZ **K3Y**	1 unit		C	3SB29 01-5AZ **K3Y**	1 unit	
Any inscription or symbol 1 line of text with up to 6 characters of 3 mm in height. Please add the appropriate order code onto the Order No. and specify the inscription or the symbol required.		C	3SB29 01-4AZ **K0Y, K1Y, K2Y** or **K9Y**	1 unit		C	3SB29 01-5AZ **K0Y, K1Y, K2Y** or **K9Y**	1 unit	

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* This quantity or a multiple thereof can be ordered

Accessories and spare parts
Insert labels and insert caps

Inscription		Symbols with number acc. to DIN Report 4	DT	**Insert caps** for indicator lights	PS*	Weight per PU, approx.
				Order No.		kg
For self-inscription						
Without inscription		-	B	**3SB29 01-7AA**	10 units	0.100
With inscription						
Fault		-	B	**3SB29 01-7AQ**	10 units	0.100
Symbols						
Pump	◯	No. 695	B	**3SB29 01-7PD**	10 units	0.100
Release	◄I►	No. 169	B	**3SB29 01-7QC**	10 units	0.100
Manual operation	🖐	No. 35	B	**3SB29 01-7QK**	10 units	0.100
Customized inscription						
Further symbols according to DIN Report 4 Please add the short code **"K3Y"** to the Order No. and also specify the serial number in accordance with DIN Report 4.			C	**3SB29 01-7AZ K3Y**	1 unit	
Any inscription or symbol 1 line of text with up to 6 characters of 3 mm in height. Please add the appropriate order code onto the Order No. and specify the inscription or the symbol required.			C	**3SB29 01-7AZ K0Y, K1Y, K2Y** or **K9Y**	1 unit	

■ **Options**

Customized inscription

Labels and caps can be inscribed with text and symbols not listed in the ordering data. One line with up to 6 letters is possible, with 3 mm letter height.

Supplement the Order No. with the following Order Code:

- Text in upper/lowercase: **K0Y**
- Text in uppercase: **K1Y**
- Text in lowercase: **K2Y**
- Symbols to DIN Report 4: **K3Y**
- Inscription or symbols according to order form supplement: **K9Y**

When ordering, specify the required inscription in plain text in addition to the order number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language.

For special symbols (short code K9Y), a CAD drawing in DXF format should be submitted.

Ordering examples

3SB29 01–4AZ
K1Y
Z = Pump

3SB29 01–4AZ
K3Y
573

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Accessories and spare parts
Name plates

■ **Overview**
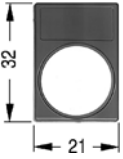
The name plates consist of a black molded-plastic label holder and labeling plate (silver with black letters) for sticking into the label holder.

Note insert dimensions!

Inscription

The lettering is lowercase with uppercase initial letters. The symbols, including those not listed in the catalog, are in accordance with DIN Report 4.

■ **Selection and ordering data**

Inscription	Symbols with number acc. to DIN Report 4	DT	Order No.	PS*	Weight per PU, approx.
					kg
Label holder					
Label holder for labeling plate [1]		B	**3SB29 02-0AB**	10 units	0.100
Labeling plates self-adhesive 9.5 mm × 18.5 mm					
Blank		▶	**3SB29 01-2AA**	10 units	0.100
On		B	**3SB29 01-2AB**	10 units	0.100
Off		B	**3SB29 01-2AC**	10 units	0.100
Open		B	**3SB29 01-2AD**	10 units	0.100
Close		B	**3SB29 01-2AL**	10 units	0.100
Forward		B	**3SB29 01-2AF**	10 units	0.100
Backward		B	**3SB29 01-2AG**	10 units	0.100
Fast		C	**3SB29 01-2AM**	10 units	0.100
Slow		C	**3SB29 01-2AN**	10 units	0.100
Operation		B	**3SB29 01-2AP**	10 units	0.100
Fault		B	**3SB29 01-2AQ**	10 units	0.100
Set up		B	**3SB29 01-2AR**	10 units	0.100
On		B	**3SB29 01-2EB**	10 units	0.100
Off		B	**3SB29 01-2EC**	10 units	0.100
Start		B	**3SB29 01-2EL**	10 units	0.100
Reset		B	**3SB29 01-2EM**	10 units	0.100
Fault		B	**3SB29 01-2EW**	10 units	0.100
Hand Auto		B	**3SB29 01-2BA**	10 units	0.100
Hand 0 Auto		B	**3SB29 01-2BE**	10 units	0.100
Man 0 Auto		B	**3SB29 01-2ET**	10 units	0.100
Symbols					
O (Off)	No. 15	B	**3SB29 01-2MB**	10 units	0.100
I (On)	No. 16	B	**3SB29 01-2MC**	10 units	0.100
O I (horizontal)	-	B	**3SB29 01-2MF**	10 units	0.100
Motion in direction of arrow	No. 28	C	**3SB29 01-2NA**	10 units	0.100
Labels with labeling and symbols other than those listed above 2 lines of text with 11 characters each. Font size: 4 mm (1 line) or 3 mm (2 lines)		C	**3SB29 01-2XZ K0Y, K1Y, K2Y, K3Y** or **K9Y**	1 unit	

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

■ **Options**

Customized inscription

The labels can be inscribed with text and symbols not listed in the ordering data. Two lines of 11 characters are permitted with a font size of 4 mm (1 line) or 3 mm (2 lines).

Supplement the Order No. with the following Order Code:
• Text in upper/lowercase: **K0Y**
• Text in uppercase: **K1Y**
• Text in lowercase: **K2Y**
• Symbols with number to DIN Report 4: **K3Y**
• Inscription or symbols according to order form supplement: **K9Y**

When ordering, specify the required inscription in plain text in addition to the order number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language.

For special symbols (short code K9Y), a CAD drawing in DXF format can be submitted.

Ordering examples

3SB29 01–2XZ
K1Y
Z = Pump

3SB29 01–2XZ
K3Y
573

* This quantity or a multiple thereof can be ordered

■ Selection and ordering data

	Version	Lamp voltage	Color	DT	Order No.	PS*	Weight per PU, approx.
		V					kg
	Button, flat for pushbuttons		black	B	3SB29 10-0AB	10 units	0.100
			red	B	3SB29 10-0AC	10 units	0.100
			yellow	B	3SB29 10-0AD	10 units	0.100
			green	B	3SB29 10-0AE	10 units	0.100
			blue	B	3SB29 10-0AF	10 units	0.100
			white	B	3SB29 10-0AG	10 units	0.100
			clear	B	3SB29 10-0AH	10 units	0.100
	Button, flat for illuminated pushbuttons		red	B	3SB29 10-0CC	10 units	0.100
			yellow	B	3SB29 10-0CD	10 units	0.100
			green	B	3SB29 10-0CE	10 units	0.100
			blue	B	3SB29 10-0CF	10 units	0.100
			white	B	3SB29 10-0AG	10 units	0.100
			clear	B	3SB29 10-0AH	10 units	0.100
	Button, raised for pushbuttons		black	B	3SB29 10-0BB	1 unit	0.001
			red	B	3SB29 10-0BC	1 unit	0.001
			yellow	B	3SB29 10-0BD	1 unit	0.001
			clear	B	3SB29 10-0BH	1 unit	0.001
	Button, raised for illuminated pushbuttons		red	B	3SB29 10-0DC	1 unit	0.001
			yellow	B	3SB29 10-0DD	1 unit	0.001
			clear	B	3SB29 10-0BH	1 unit	0.001
	Screw lens with concentric rings		red	▶	3SB29 10-1AC	10 units	0.100
			yellow	▶	3SB29 10-1AD	10 units	0.100
			green	▶	3SB29 10-1AE	10 units	0.100
			blue	B	3SB29 10-1AF	10 units	0.100
			white	▶	3SB29 10-1AG	10 units	0.100
			clear	B	3SB29 10-1AH	10 units	0.100
	Screw lens smooth, for inscription with insert cap		red	B	3SB29 10-1BC	10 units	0.100
			yellow	B	3SB29 10-1BD	10 units	0.100
			green	B	3SB29 10-1BE	10 units	0.100
			blue	B	3SB29 10-1BF	10 units	0.100
			clear	B	3SB29 10-1BH	10 units	0.100
	Incandescent lamp Wedge base W2 × 4.6 d, 1.0 W	6		B	3SB29 08-1AA	10 units	0.100
		12		B	3SB29 08-1AB	10 units	0.100
		24		▶	3SB29 08-1AC	10 units	0.100
		30		B	3SB29 08-1AD	10 units	0.100
		48		B	3SB29 08-1AE	10 units	0.001
		60		B	3SB29 08-1AF	10 units	0.001
	LED, super-bright Wedge base W2 × 4.6 d	DC 24	red	B	3SB39 01-1SB	10 units	0.001
			yellow	B	3SB39 01-1RB	10 units	0.001
			green	B	3SB39 01-1TB	10 units	0.001
			white	B	3SB39 01-1UB	10 units	0.001
			blue	B	3SB29 08-1BD	10 units	0.001

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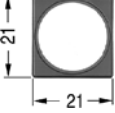
* This quantity or a multiple thereof can be ordered

Accessories and spare parts
Mounting parts and spare parts

	Version	DT	Order No.	PS*	Weight per PU, approx.
					kg
	Single frame for square design	▶	3SB29 02-0AA	10 units	0.100
	Disassembly tool for holders and lamp sockets with holders	▶	3SB29 08-2AA	1 unit	0.015
	Lamp extractor for lamps with sockets W2 × 4.6 d	▶	3SB29 08-2AB	250 units	0.003
	Mounting tool for buttons and screw lenses	▶	3SB29 08-2AC	1 unit	0.012
	Name plate, yellow, Ø 50 mm, as backing plate for EMERGENCY-STOP, self-adhesive • blank • with inscription "NOT-AUS"	▶ ▶	3SB29 08-2AF 3SB29 08-2AG	1 unit 1 unit	0.001 0.001
	Key for CES key-operated switch, lock No. SB2	B	3SB29 08-2AJ	1 unit	0.004
	Blanking plug black molded plastic (IP 65 degree of protection)	B	3SB29 08-3AA	1 unit	0.005
	Protective cap, clear silicone, for pushbuttons with flat and raised buttons	B	3SB29 08-3AB	1 unit	0.002
	Plug-in sleeve for flat connectors 2.8 × 0.8 mm, cross-section 0.5 ... 1.5 mm^2	▶	3SB29 08-8AA	250 units	0.029
	Insulation sleeve for flat connectors, connection from the front	▶	3SB29 08-8AB	250 units	0.029
	Complete connector [1] for connecting switch blocks and lampholders (up to 10 connections). Provides safety from finger-touch acc. to DIN VDE 0106 Part 100 and VBG 4.	▶	3SB29 08-8AD	1 unit	0.005
	Plug-in sleeve with locating spring for latching in complete connector	B	3SB29 08-8AE	10 units	0.030
	Crimping pliers KRBC 0560 for plug-in sleeves (both designs)		Lapp GmbH Kabelwerk Gewerbestraße 70565 Stuttgart Tel: 0049 7 11/78 38-02 Fax: 0049 7 11/78 38-401 (Order No. 61790950)		

1) Required plug-in sleeves must be ordered separately.

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* This quantity or a multiple thereof can be ordered

■ Dimension drawings

Actuators

Pushbutton or illuminated pushbutton
with flat pushbutton
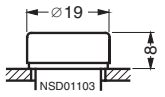
Ø19
8
NSD01103

Pushbutton or illuminated pushbuttons
with raised button

Ø19
12
NSD00141

Selector switch

9,5 · 12,5
17
NSD00142

CES key-operated switch

Ø19
(4.0*)
20
NSD00143
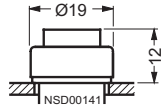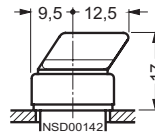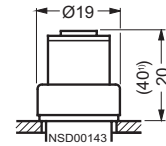
* with key

EMERGENCY-STOP mushroom pushbuttons

Ø28,5
21
NSD00144

Indicator light

Ø19
9
NSD00145
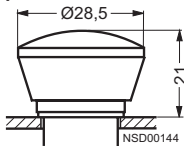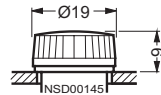
Switch blocks with tab connection

Pushbutton and switch block
with holder for front panel mounting

Ø19
8
1...6
50
NSD00140
□19
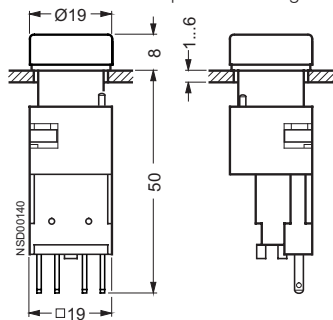
Switch blocks with soldering pins for use on printed circuit boards

Illuminated pushbutton
with switch block and lampholder with solder pins

$44^{-0.2}$
20,2
1...6
1,5...2,5
a
19
NSD00011
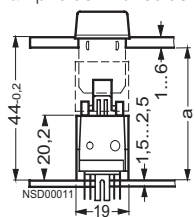
Length **a** of spacer bolts $a = 44^{-0.2}$ minus front plate thickness.

When using name plates, the length **a** is reduced by 0.8 mm.

To avoid bending of the PCB when the actuator is operated, sufficient spacers must be provided spaced as shown in the table below:

PCB thickness	Max. distance between spacers
1.5 mm	80 mm
2.5 mm	150 mm
When using EMERGENCY-STOP buttons	generally 50 mm

These details are based on epoxy resin glass fiber mat.

Solder pin spacing

Solder terminal $\varnothing 1.3^{+0.1}$
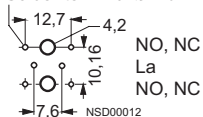
12,7 · 4,2
10,16
7,6
NSD00012
NO, NC
La
NO, NC

Mounting dimensions
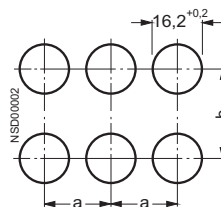
$16,2^{+0.2}$
b
a · a
NSD00002

	a	b
Minimum distance		
Round design	19	19
Square design without labeling plate	21	21
Round and square designs with labeling plates	21	32
For 2 selector switches and 3 switch positions, maintained contact, side by side	21	21

Accessories

Complete plug

20 · 19
1,8
19
NSD00149
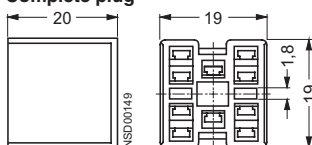
General data

■ Overview

SIGNUM is a new range of plastic and metal control devices for front plate mounting and rear wire connection.

SIGNUM is of modern industrial design with a very flat construction and can be installed rapidly by a single person.

In addition, SIGNUM Metallic is designed for the world market with a high degree of protection according to IP67 and NEMA 4.

Standards

IEC 60947-1, EN 60947-1 (VDE 0660 Part 100).

IEC 60947-5-1, EN 60947-5-1 (VDE 0660 Part 200).

Design

SIGNUM can be supplied

- In molded plastic in a flat, round and square design, as well as
- In metal in a round design.

A combination of membrane keyboards and 3SB3 devices in plastic supports the flat appearance. The flat construction makes cleaning easy.

The operating surfaces of the pushbuttons and indicator lights are concave. The lenses of the indicator lights are convex.

AS-Interface solutions

The SIGNUM 3SB3 control and signaling devices can be connected to the AS-Interface communication system quickly and safely with the help of various solutions.

The following solutions are available:

- AS-Interface enclosure (with 1 to 6 command points),
- AS-Interface EMERGENCY-STOP,
- AS-Interface front panel module (for 4 command points).

For selection and ordering data as well as detailed information, see Catalog IK PI.

■ Design

One command point comprises an actuating element or lens assembly in front of the control panel as well as a holder for fixing and switch blocks and/or lampholder behind the control panel.

The holder for the round version can be turned and can therefore be used for control panel depths of 1 to 4 mm or 3 to 6 mm.

The control panel depth of 1 to 4 mm can be compensated with the holder for the square design.

The normal version can be fitted with two switch blocks.

When three switch blocks or one lampholder and two switch blocks are required, an additional holder must be plugged into the operating element. For actuating a central switch block when using a selector switch, key-operated switch and on-off push-button, a holder with pressure supports is required.

Complete units are offered for the most commonly used applications.

Holder

The holder is set to a switchboard thickness of 1 to 4 mm when delivered and is placed in the direction of the arrow ↑ 1–4 mm ↑ on the actuator/indicator from the back. The fixing screw is located underneath, on the right.

For a switchboard thickness of 3 to 6 mm, the holder is reversed and mounted in the direction of the arrow at ↑ 3–6 mm ↑ and the fixing screw is located on the upper right. In this case, the fixing screw must be rotated anticlockwise to its limit before mounting the holder.

When label holders, protective caps or similar accessories are used, the greatest permissible panel thickness must be reduced by wall thickness of the accessory component.

Switch blocks and lampholders

The switch blocks are fitted with a slow-action contact (1 NO contact or 1 NC contact) with double operating contacts. These ensure a high switching reliability even with small voltages and currents, such as 5 V/1 mA. They are suitable for use in solid-state systems as well as conventional controls.

The switch contacts of the NC contact are positively driven.

For illuminated elements, lampholders with an integrated LED or with a base for replaceable bulbs can be supplied.

Switch blocks and lampholders feature terminal designations in accordance with EN 50013.

Mounting

SIGNUM devices are easily and rapidly connected:

- Actuators or indicator lights are positioned in the opening of the front panel from the front
- Position the holder from the rear
- Tighten the screw on the holder
- Snap on the switch block or the lampholder directly onto the operating mechanism from the back

Terminals

The following types are available

- Screw terminal connection
- Spring-loaded terminals
- Solder terminals (0.8 mm × 0.8 mm solder pins)

The devices with screw connection are designed with the SIGUT connection system. The open terminals, screws that cannot be lost, funnel-shaped wiring openings and screwdriver fed openings save time when connecting and make it possible that motorized screwdrivers are used.

The devices with spring-loaded terminals can be connected quickly; and when single-pole blocks are used, the command points can be butt-mounted.

Inscription

Direct inscription using a laser or by means of insert labels or name plates.

Enclosure

Plastic enclosures with 1, 2, 3, 4 or 6 actuators are available for the round model. Enclosures with more than 6 actuators can be supplied upon request. They are suitable for the round and square models.

9

Front plate mounting

A Actuating element
B Front panel
C Holder
D Switch block
E Lampholder
F Mounting element

Used on printed-circuit boards
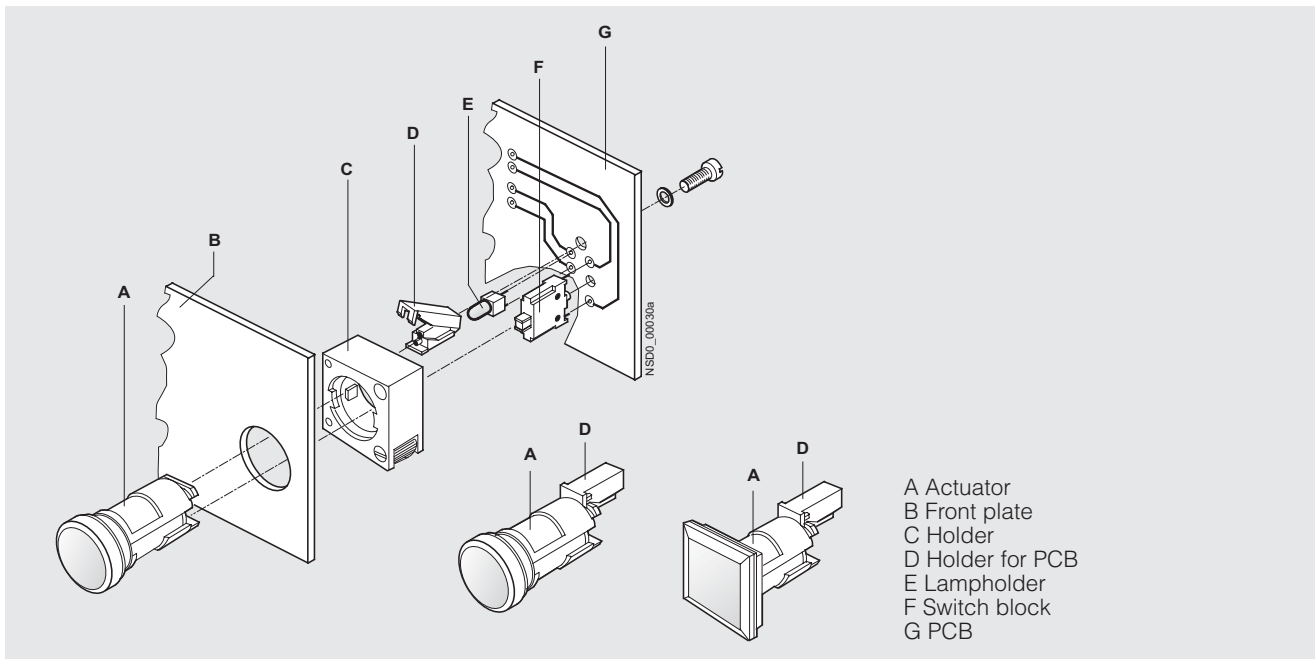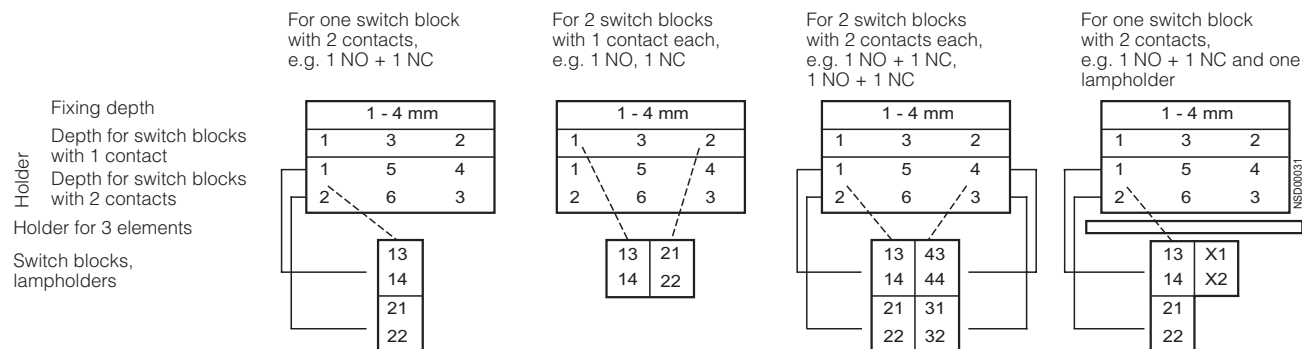
A Actuator
B Front plate
C Holder
D Holder for PCB
E Lampholder
F Switch block
G PCB

Contact assignment

Fixing depth	For one switch block with 2 contacts, e.g. 1 NO + 1 NC	For 2 switch blocks with 1 contact each, e.g. 1 NO, 1 NC	For 2 switch blocks with 2 contacts each, e.g. 1 NO + 1 NC, 1 NO + 1 NC	For one switch block with 2 contacts, e.g. 1 NO + 1 NC and one lampholder

Holder
Depth for switch blocks with 1 contact
Depth for switch blocks with 2 contacts
Holder for 3 elements
Switch blocks, lampholders

9

General data

Technical specifications

Data acc. to IEC/EN 60947-5-1, IEC/EN 60947-5-5		
Rated insulation voltage U_i		
For pollution severity according to IEC 60947-1	Class 3	
• Components with screw connection and spring-loaded terminals	400 V	
• Components with solder pins	250 V	
Rated impulse withstand voltage U_{imp}		
• Screw connection, spring-loaded terminals	6 kV	
• Soldered connection	4 kV	
Conventional free-air thermal current I_{th}	10 A	
Rated operating current I_e at rated operating voltage U_e		
• Alternating current 50/60 Hz, AC-12	At U_e	I_e
- Screw connection and spring-loaded terminals / solder pins	24 V	10 A / 10 A
	48 V	10 A / 10 A
	110 V	10 A / 10 A
	230 V	10 A / 10 A
	400 V	10 A / –
• Alternating current 50/60 Hz, AC-15	At U_e	I_e
- Screw connection and spring-loaded terminals / solder pins	24 V	6 A / 4 A
	48 V	6 A / 4 A
	110 V	6 A / 4 A
	230 V	6 A / 4 A
	400 V	3 A / –
• Direct current DC-12	At U_e	I_e
- Screw connection and spring-loaded terminals and solder pins	24 V	10 A
	48 V	5 A
	110 V	2.5 A
	230 V	1 A
• Direct current DC-13	At U_e	I_e
- Screw connection and spring-loaded terminals and solder pins	24 V	3 A
	48 V	1.5 A
	110 V	0.7 A
	230 V	0.3 A
Contact stability		
Test voltage/test current	5 V/1 mA	
Short-circuit protection completely weld-free according to IEC 60947-5-1		
• DIAZED fuse links, operational class gL/gG	10 A TDz, 16 A Dz	
• Miniature circuit-breaker with C characteristic according to IEC 60898 (VDE 0641)	10 A	
Mechanical endurance		
• Pushbuttons and switch blocks	10×10^6 operating cycles	
• Actuators, rotary or maintained contact	3×10^5 operating cycles	
• Illuminated pushbuttons	3×10^6 operating cycles	
Electrical endurance		
• For operational class AC-15 with 3RT10 15 to 3RT10 26 contactors	10×10^6 operating cycles	
• With operational class DC-12, DC-13	The endurance life of the contacts is not only dependent on the breaking current but also on the voltage, the inductivity of the current circuit and the switching speed.	
Operating frequency	1000 make-break operations per hour	
Climatic withstand capability acc. to DIN 50017	Climate-proof KTW24; suitable for marine applications	
Ambient temperature		
• During operation, non-illuminated devices and complete with LED	–25 to +70 °C	
• During operation, devices with incandescent lamp	–25 to +60 °C	
• During storage, transport	–40 to +80 °C	
Degree of protection acc. to IEC 60529 (VDE 0470 Part 1)		
• Connection of switch blocks and lampholders behind the front panel	IP20	
• Contact chambers of the switch blocks behind the front panel	IP40	
• Plastic actuators and indicators	IP66; IP67 with protective caps	
• Plastic on-off pushbuttons	IP65	
• Metal actuators and indicators	IP67 and NEMA Type 4	
• Molded-plastic enclosure	IP65	
• Metal enclosure	IP67 and NEMA Type 4	
Lampholders		
• Screw connection, spring-loaded terminals	For lamps with BA 9s base; incandescent, glow and LED lamps	
• Soldered connection	For lamps with wedge base W2 × 4.6 d; glow and LED lamps	

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Data acc. to IEC/EN 60947-5-1, IEC/EN 60947-5-5	
Conductor cross-sections	
• Screw connection	
- Finely stranded, with end sleeves to DIN 46228	2 × (0.5 ... 1.5) mm²
- Solid	2 × (1 ... 2.5) mm²
- Solid with end sleeves to DIN 46228	2 × (0.5 ... 0.75) mm²
- Solid or stranded	2 × AWG 18 ... 14
• Spring-loaded terminal	
- Solid or stranded, without end sleeves	2 × (0.25 ... 1.5) mm²
- Finely stranded, with end sleeves to DIN 46228	2 × (0.25 ... 0.75) mm²
- Solid or stranded	2 × AWG 24 ... 16
• Soldered connection	Solder pins 0.8 mm × 0.8 mm
Tightening torque	
• Screw on holder	max. 1 Nm
• Terminal screws	0.8 Nm
Terminal designations to EN 50013	Digit on the holder, function digit on the switch block
Device identification	With snap-on label
Safety measures	
• Plastic	Safety requirements are met automatically when the actuators and lens assemblies are mounted on metal front plates and enclosures.
	When mounted in insulated enclosures, the "protective insulation" safety requirements are met.
• Metal version	Grounding is necessary for operation on protective extra-low voltage.
Touch protection (screw-type, spring-loaded terminals)	Finger-safe to VDE 0660, Part 514 and BGV A2
Shock resistance according to IEC 60068, Part 2-27	
For shock duration of	11 ms
For shock type	Half-sine
• Devices without incandescent lamp	≤ 50 g
• Devices with incandescent lamp	≤ 30 g
Vibration resistance according to IEC 60068, Part 2-6	
For frequency of	20 ... 200 Hz
• Acceleration	5 g

Data acc. to UL and CSA	
Rated voltage	
• Switch blocks	AC 300 V
• Lampholders	
- With lamp with BA 9s base	AC 125 V; 2.5 W
- With lamp with wedge base	AC 60 V; 1 W
- With integrated LED	AC/DC 24 V, AC 110 V, AC 230 V
Continuous current	10 A
Switching capacity	A 300; R 300; A 600 same polarity

9

Pushbuttons and Indicator Lights

SIGNUM 22 mm Nominal Diameter

Plastic version, round
Complete unit combinations

■ Selection and ordering data

	Version	Rated voltage for lamp	Color of actuator	Contacts for front plate mounting	DT	Order No.	PS*	Weight per PU, approx.
		V						kg
	Pushbutton with flat button		black	1 NO	▶	**3SB32 02-0AA11**	1 unit	0.040
			black	1 NC	B	**3SB32 03-0AA11**	1 unit	0.040
			red	1 NC	▶	**3SB32 03-0AA21**	1 unit	0.040
			yellow	1 NO	B	**3SB32 02-0AA31**	1 unit	0.040
			green	1 NO	▶	**3SB32 02-0AA41**	1 unit	0.040
			blue	1 NO	B	**3SB32 02-0AA51**	1 unit	0.040
			white	1 NO	▶	**3SB32 02-0AA61**	1 unit	0.040
			black	1 NO + 1 NC	B	**3SB32 01-0AA11**	1 unit	0.047
			red	1 NO + 1 NC	B	**3SB32 01-0AA21**	1 unit	0.047
			yellow	1 NO + 1 NC	B	**3SB32 01-0AA31**	1 unit	0.047
			green	1 NO + 1 NC	B	**3SB32 01-0AA41**	1 unit	0.047
			blue	1 NO + 1 NC	B	**3SB32 01-0AA51**	1 unit	0.047
			white	1 NO + 1 NC	B	**3SB32 01-0AA61**	1 unit	0.047
	Illuminated pushbutton with flat button with integrated LED	AC/DC 24	red[1]	1 NC	▶	**3SB32 46-0AA21**	1 unit	0.052
			yellow[1]	1 NO	B	**3SB32 45-0AA31**	1 unit	0.050
			green[1]	1 NO	▶	**3SB32 45-0AA41**	1 unit	0.051
			blue[1]	1 NO	B	**3SB32 45-0AA51**	1 unit	0.050
			white	1 NO	B	**3SB32 45-0AA61**	1 unit	0.051
			clear[1]	1 NO	▶	**3SB32 45-0AA71**	1 unit	0.051
		AC/DC 24	red[1]	1 NO + 1 NC	B	**3SB32 47-0AA21**	1 unit	0.058
			yellow[1]	1 NO + 1 NC	B	**3SB32 47-0AA31**	1 unit	0.058
			green[1]	1 NO + 1 NC	B	**3SB32 47-0AA41**	1 unit	0.058
			blue[1]	1 NO + 1 NC	B	**3SB32 47-0AA51**	1 unit	0.058
			white	1 NO + 1 NC	B	**3SB32 47-0AA61**	1 unit	0.057
			clear[1]	1 NO + 1 NC	B	**3SB32 47-0AA71**	1 unit	0.058
		AC 110	red[1]	1 NC	B	**3SB32 50-0AA21**	1 unit	0.050
			yellow[1]	1 NO	B	**3SB32 57-0AA31**	1 unit	0.051
			green[1]	1 NO	B	**3SB32 57-0AA41**	1 unit	0.051
			blue[1]	1 NO	B	**3SB32 57-0AA51**	1 unit	0.051
			white	1 NO	B	**3SB32 57-0AA61**	1 unit	0.051
			clear[1]	1 NO	B	**3SB32 57-0AA71**	1 unit	0.050
		AC 110	red[1]	1 NO + 1 NC	B	**3SB32 51-0AA21**	1 unit	0.058
			yellow[1]	1 NO + 1 NC	B	**3SB32 51-0AA31**	1 unit	0.058
			green[1]	1 NO + 1 NC	B	**3SB32 51-0AA41**	1 unit	0.058
			blue[1]	1 NO + 1 NC	C	**3SB32 51-0AA51**	1 unit	0.060
			white	1 NO + 1 NC	B	**3SB32 51-0AA61**	1 unit	0.058
			clear[1]	1 NO + 1 NC	B	**3SB32 51-0AA71**	1 unit	0.058
		AC 230	red[1]	1 NC	▶	**3SB32 54-0AA21**	1 unit	0.051
			yellow[1]	1 NO	B	**3SB32 53-0AA31**	1 unit	0.051
			green[1]	1 NO	▶	**3SB32 53-0AA41**	1 unit	0.052
			blue[1]	1 NO	B	**3SB32 53-0AA51**	1 unit	0.051
			white	1 NO	B	**3SB32 53-0AA61**	1 unit	0.051
			clear[1]	1 NO	▶	**3SB32 53-0AA71**	1 unit	0.052
		AC 230	red[1]	1 NO + 1 NC	B	**3SB32 55-0AA21**	1 unit	0.058
			yellow[1]	1 NO + 1 NC	B	**3SB32 55-0AA31**	1 unit	0.058
			green[1]	1 NO + 1 NC	B	**3SB32 55-0AA41**	1 unit	0.058
			blue[1]	1 NO + 1 NC	B	**3SB32 55-0AA51**	1 unit	0.058
			white	1 NO + 1 NC	B	**3SB32 55-0AA61**	1 unit	0.058
			clear[1]	1 NO + 1 NC	B	**3SB32 55-0AA71**	1 unit	0.058
	Illuminated pushbutton with flat button with BA 9s lampholder, without lamp		red[1]	1 NC	B	**3SB32 07-0AA21**	1 unit	0.050
			yellow[1]	1 NO	B	**3SB32 06-0AA31**	1 unit	0.050
			green[1]	1 NO	B	**3SB32 06-0AA41**	1 unit	0.050
			blue[1]	1 NO	B	**3SB32 06-0AA51**	1 unit	0.050
			white	1 NO	B	**3SB32 06-0AA61**	1 unit	0.050
			clear[1]	1 NO	B	**3SB32 06-0AA71**	1 unit	0.050
			red[1]	1 NO + 1 NC	B	**3SB32 05-0AA21**	1 unit	0.057
			yellow[1]	1 NO + 1 NC	B	**3SB32 05-0AA31**	1 unit	0.056
			green[1]	1 NO + 1 NC	B	**3SB32 05-0AA41**	1 unit	0.057
			blue[1]	1 NO + 1 NC	B	**3SB32 05-0AA51**	1 unit	0.056
			white	1 NO + 1 NC	B	**3SB32 05-0AA61**	1 unit	0.057
			clear[1]	1 NO + 1 NC	B	**3SB32 05-0AA71**	1 unit	0.057
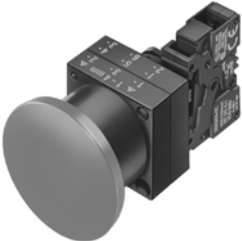
Pushbutton
with flat button

Illuminated pushbutton
with flat button

1) Inscription is possible by inserting a label.

9

* This quantity or a multiple thereof can be ordered

Plastic version, round
Complete unit combinations

	Version	Color of actuator	Contacts for front plate mounting	DT	Order No.	PS*	Weight per PU, approx. kg
Mushroom push-pull-button	**Mushroom push-pull button, Ø 40 mm, latching** pull to unlatch	red	1 NC 1 NO + 1 NC	► B	**3SB32 03-1CA21** **3SB32 01-1CA21**	1 unit 1 unit	0.052 0.058

EMERGENCY-STOP control devices according to EN 418 with yellow name plate, Ø 80 mm, labeled.
Can also be used with 3TK28 contactor safety combinations (see Section 11)

	Version	Color of actuator	Contacts for front plate mounting	DT	Order No.	PS*	Weight per PU, approx. kg
EMERGENCY-STOP mushroom pushbutton	**Mushroom pushbutton, Ø 40 mm, with positive latching function** rotate to unlatch	red	1 NC → 1) 1 NO + 1 NC → 1)	► B	**3SB32 03-1HA20** **3SB32 01-1HA20**	1 unit 1 unit	0.072 0.078

96 4041

1) Positive opening according to IEC 60947-5-1, Appendix K.

	Version	Color of actuator / Lock No.	Contacts for front plate mounting	DT	Order No.	PS*	Weight per PU, approx. kg
Selector switch	**Selector switch, 2 switch positions** switching sequence O-I 50° operating angle latching	black	1 NO 1 NO + 1 NC	► B	**3SB32 02-2KA11** **3SB32 01-2KA11**	1 unit 1 unit	0.044 0.051
	Selector switches, 3 switch positions switching sequence I-O-II 2 × 50° operating angle latching	black black	1 NO, 1 NO 1 NO + 1 NC, 1 NO + 1 NC	► B	**3SB32 10-2DA11** **3SB32 08-2DA11**	1 unit 1 unit	0.054 0.067
	Selector switches, 3 switch positions switching sequence I-O-II 2 × 50° operating angle momentary contact type	black black	1 NO, 1 NO 1 NO + 1 NC, 1 NO + 1 NC	B B	**3SB32 10-2EA11** **3SB32 08-2EA11**	1 unit 1 unit	0.054 0.068
RONIS key-operated switch	**Key-operated switch, RONIS, flat, 2 switch positions** switching sequence O-I 50° operating angle latching	SB 30	1 NO 1 NO + 1 NC	► B	**3SB32 02-4AD11** **3SB32 01-4AD11**	1 unit 1 unit	0.070 0.076

* This quantity or a multiple thereof can be ordered

9

Plastic version, round
Complete unit combinations

	Version	Rated voltage of lamp	Color of lens	DT	Order No.	PS*	Weight per PU, approx.
		V					kg
	Indicator light with smooth lens with integrated LED	AC/DC 24	red	►	**3SB32 44-6AA20**	1 unit	0.038
			yellow	B	**3SB32 44-6AA30**	1 unit	0.038
			green	►	**3SB32 44-6AA40**	1 unit	0.038
			blue	B	**3SB32 44-6AA50**	1 unit	0.038
			white	B	**3SB32 44-6AA60**	1 unit	0.038
			clear	►	**3SB32 44-6AA70**	1 unit	0.038
		AC 110	red	B	**3SB32 48-6AA20**	1 unit	0.039
			yellow	B	**3SB32 48-6AA30**	1 unit	0.038
			green	B	**3SB32 48-6AA40**	1 unit	0.039
			blue	B	**3SB32 48-6AA50**	1 unit	0.038
			white	B	**3SB32 48-6AA60**	1 unit	0.038
			clear	B	**3SB32 48-6AA70**	1 unit	0.038
		AC 230	red	►	**3SB32 52-6AA20**	1 unit	0.039
			yellow	B	**3SB32 52-6AA30**	1 unit	0.040
			green	►	**3SB32 52-6AA40**	1 unit	0.039
			blue	B	**3SB32 52-6AA50**	1 unit	0.039
			white	B	**3SB32 52-6AA60**	1 unit	0.039
			clear	►	**3SB32 52-6AA70**	1 unit	0.039
	Indicator light with smooth lens with BA 9s lampholder, without lamp		red	B	**3SB32 04-6AA20**	1 unit	0.037
			yellow	B	**3SB32 04-6AA30**	1 unit	0.037
			green	B	**3SB32 04-6AA40**	1 unit	0.037
			blue	B	**3SB32 04-6AA50**	1 unit	0.037
			white	B	**3SB32 04-6AA60**	1 unit	0.037
			clear	B	**3SB32 04-6AA70**	1 unit	0.037
	Indicator light with lens with concentric rings with integrated LED	AC/DC 24	red	►	**3SB32 44-6BA20**	1 unit	0.038
			yellow	B	**3SB32 44-6BA30**	1 unit	0.038
			green	►	**3SB32 44-6BA40**	1 unit	0.038
			blue	B	**3SB32 44-6BA50**	1 unit	0.038
			white	B	**3SB32 44-6BA60**	1 unit	0.038
			clear	►	**3SB32 44-6BA70**	1 unit	0.038
		AC 110	red	B	**3SB32 48-6BA20**	1 unit	0.038
			yellow	B	**3SB32 48-6BA30**	1 unit	0.038
			green	B	**3SB32 48-6BA40**	1 unit	0.038
			blue	B	**3SB32 48-6BA50**	1 unit	0.037
			white	B	**3SB32 48-6BA60**	1 unit	0.038
			clear	B	**3SB32 48-6BA70**	1 unit	0.038
		AC 230	red	►	**3SB32 52-6BA20**	1 unit	0.039
			yellow	B	**3SB32 52-6BA30**	1 unit	0.039
			green	►	**3SB32 52-6BA40**	1 unit	0.039
			blue	B	**3SB32 52-6BA50**	1 unit	0.039
			white	B	**3SB32 52-6BA60**	1 unit	0.039
			clear	►	**3SB32 52-6BA70**	1 unit	0.040
	Indicator light with lens with concentric rings with BA 9s lampholder without lamp		red	B	**3SB32 04-6BA20**	1 unit	0.038
			yellow	B	**3SB32 04-6BA30**	1 unit	0.037
			green	B	**3SB32 04-6BA40**	1 unit	0.038
			blue	B	**3SB32 04-6BA50**	1 unit	0.038
			white	B	**3SB32 04-6BA60**	1 unit	0.037
			clear	B	**3SB32 04-6BA70**	1 unit	0.037
	Acoustic signal device, IP65 [1] continuous sound 2.4 kHz min. operating current 10 mA, min. sound pressure 80 dB/10 cm	AC/DC 24	black	B	**3SB32 33-7BA10**	1 unit	0.042
		AC/DC 115		B	**3SB32 34-7BA10**	1 unit	0.043
		AC/DC 230		B	**3SB32 35-7BA10**	1 unit	0.042
	Operating mechanism for potentiometer IP65 [1] [2]			B	**3SB10 00-7CH07**	1 unit	0.030
	Pushbutton with extended stroke (12 mm), IP65 [1] for operating relays		black	B	**3SB30 00-0EA11**	1 unit	0.021

Indicator light with smooth lens

Indicator light with lens with concentric rings

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Acoustic signal device

Operating mechanism for potentiometer

Pushbutton with 12 mm stroke

1) Mounting in 3SB38 enclosure is not possible.

2) The potentiometer is not included in the scope of supply.

* This quantity or a multiple thereof can be ordered

Overview
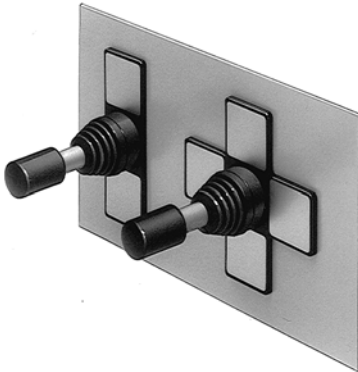
Application

Joystick switches control auxiliary circuits permitting movements in various directions of machines and equipment.

The switches are designed for front panel mounting. They are climate-proof.

Technical specifications

Standards: IEC 60947-5-1 (VDE 0660 Part 200).

Rated operating currents for DC according to table:

Type	3SB1201-7	
Operational class	DC-12	DC-13
Rated operating current I_e at rated operating voltage U_e		
• At DC 24 V	10	5
• At DC 110 V	2	0.5
• At DC 230 V	0.5	0.2

Design

The 3SB14 00–0J switch block is used, which due to its depth cannot be built into enclosures.

Switches are available
• With 2 or 4 positions,
• Latching or momentary contact type,
• With or without mechanical interlocking.

Version with mechanical locking in the O position

The switch is unlatched with the unlatching selector switch at the front of the actuating lever.

Inscription

For labeling, a name plate is available, consisting of a black, molded-plastic label holder and two or four adhesive labeling plates of 27 mm x 27 mm in size. They can be supplied with and without inscription.

Note insert dimensions!

The lettering has uppercase initial letters. 5 lines with 11 letters each are possible, engraved lettering.

For an inscription, the following order codes must be appended to the Order No.:

"K0Y" for upper/lowercase
"K1Y" for uppercase
"K2Y" for lowercase
"K3Y" for symbol acc. to DIN Report 4
"K9Y" for inscription acc. to order form supplement

When ordering, specify the required inscription in plain text in addition to the order number and order code. For inscriptions in languages other than German, give the exact spelling and specify the language.

For symbols, in addition to the short code, specify the consecutive No. according to DIN Report 4.

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Plastic version, round
Joystick switch, complete

■ **Selection and ordering data**

Version	Contact travel ▨ contact closed ☐ contact open	DT	Order No. For Order No. suffixes below	PS*	Weight per PU, approx. kg
Joystick switches, complete					
2 switch positions, 1 NO per direction					
Horizontal, momentary contact type Ⓐ⓪Ⓑ NSD01079	NSD01077 43-44 ▨☐ A 33-34 ☐▨ B 0				
Without mechanical locking in the O position		B	**3SB12 01-7DV..**	1 unit	0.065
With mechanical locking in the O position		B	**3SB12 01-7DW..**	1 unit	0.065
Vertical, momentary contact type Ⓓ⓪Ⓒ NSD01080	NSD01078 13-14 ▨☐ D 23-24 ☐▨ C 0				
Without mechanical locking in the O position		B	**3SB12 01-7FV..**	1 unit	0.065
With mechanical locking in the O position		B	**3SB12 01-7FW..**	1 unit	0.065
Horizontal, latching Ⓐ⓪Ⓑ NSD01079	NSD01077 43-44 ▨☐ A 33-34 ☐▨ B 0				
Without mechanical locking in the O position		B	**3SB12 01-7EV..**	1 unit	0.065
With mechanical locking in the O position		B	**3SB12 01-7EW..**	1 unit	0.065
Vertical, latching Ⓓ⓪Ⓒ NSD01080	NSD01078 13-14 ▨☐ D 23-24 ☐▨ C 0				
Without mechanical locking in the O position		B	**3SB12 01-7GV..**	1 unit	0.065
With mechanical locking in the O position		B	**3SB12 01-7GW..**	1 unit	0.065
4 switch positions, 1 NO per direction **Momentary-contact type** Ⓓ Ⓐ⓪Ⓑ Ⓒ NSD00076	43-44 ▨☐ A 33-34 ☐▨ B 13-14 ▨☐ D 23-24 ☐▨ C 0 NSD00077				
Without mechanical locking in the O position		B	**3SB12 08-7JV..**	1 unit	0.085
With mechanical locking in the O position		B	**3SB12 08-7JW..**	1 unit	0.085
Latching Ⓓ Ⓐ⓪Ⓑ Ⓒ NSD00076	43-44 ▨☐ A 33-34 ☐▨ B 13-14 ▨☐ D 23-24 ☐▨ C 0 NSD00077				
Without mechanical locking in the O position		B	**3SB12 08-7KV..**	1 unit	0.085
With mechanical locking in the O position		B	**3SB12 08-7KW..**	1 unit	0.085
Order No. suffix					
Actuator with molded plastic front ring, black			**3SB12 0 . -7 . . 01**		
Actuator with metal front ring			**3SB12 0 . -7 . . 20**		
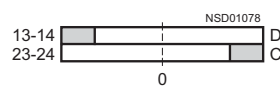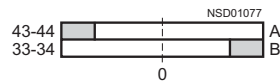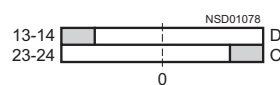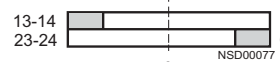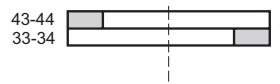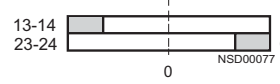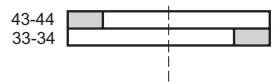
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*** This quantity or a multiple thereof can be ordered**

Plastic version, round
Joystick switch, complete

Version	DT	Order No.	PS*	Weight per PU, approx.
				kg
Name plates				
Label holder for joystick switch				
2 positions, horizontal	B	**3SB19 06–0AU**	1 unit	0.003
2 positions, vertical	B	**3SB19 06–0AV**	1 unit	0.003
4 positions	B	**3SB19 06–0AW**	1 unit	0.006
Labeling plate 27 mm × 27 mm				
Without inscription	B	**3SB19 06–2AA**	10 units	0.100
With inscription	B	**3SB19 06–2XZ**	1 unit	0.001
(5 lines each with 11 letters are possible, text engraved)		**K0Y, K1Y, K2Y, K3Y** or **K9Y**		

Label holder for
2 positions, vertical
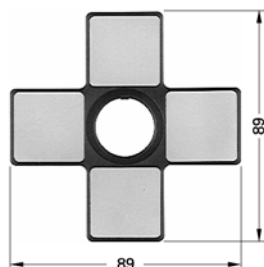
Label holder for
4 switch positions

Design switch blocks	Symbols	Contact travel ▭ contact closed ▢ contact open	DT	Order No.	PS*	Weight per PU, approx.
						kg
Spare switch blocks						
Switch block with 2 contacts 1 NO, 1 NO			C	**3SB14 00–0J**	1 unit	0.016
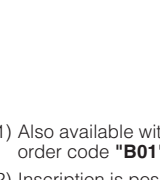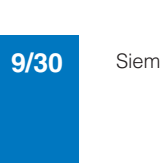
Plastic version, round
Actuating and signaling elements

Selection and ordering data

Version	Inscription	Color actuator	DT	Order No.	PS*	Weight per PU, approx. kg
Pushbuttons with holder[1]						
Pushbutton with flat button		black	▶	3SB30 00-0AA11	5 units	0.025
		red	▶	3SB30 00-0AA21	5 units	0.025
		yellow	B	3SB30 00-0AA31	5 units	0.025
		green	▶	3SB30 00-0AA41	5 units	0.025
		blue	B	3SB30 00-0AA51	5 units	0.024
		white	▶	3SB30 00-0AA61	5 units	0.025
		gray[2]	B	3SB30 00-0AB51	5 units	0.025
		clear[2]	B	3SB30 00-0AA71	5 units	0.025
	I	green	B	3SB30 00-0AA81	5 units	0.025
	O	red	B	3SB30 00-0AB01	5 units	0.025
	I	white	B	3SB30 00-0AB11	5 units	0.025
	O	black	B	3SB30 00-0AB21	5 units	0.025
Pushbutton with raised button		black	B	3SB30 00-0BA11	1 unit	0.025
		red	B	3SB30 00-0BA21	1 unit	0.025
		yellow	B	3SB30 00-0BA31	1 unit	0.025
		green	B	3SB30 00-0BA41	1 unit	0.025
		blue	B	3SB30 00-0BA51	1 unit	0.025
		white	B	3SB30 00-0BA61	1 unit	0.026
Pushbutton with raised button, latching after pressing by clockwise rotation, unlatching by anti-clockwise rotation		black	▶	3SB30 00-0CA11	1 unit	0.032
		red	B	3SB30 00-0CA21	1 unit	0.032
Pushbutton with raised front ring (height 13 mm)		black	B	3SB30 00-0AA12	1 unit	0.026
		red	B	3SB30 00-0AA22	1 unit	0.030
		yellow	B	3SB30 00-0AA32	1 unit	0.045
		green	B	3SB30 00-0AA42	1 unit	0.026
		blue	B	3SB30 00-0AA52	1 unit	0.026
		white	B	3SB30 00-0AA62	1 unit	0.026
Pushbutton with raised front ring castellated (height 13 mm)		black	B	3SB30 00-0AA13	1 unit	0.026
		red	B	3SB30 00-0AA23	1 unit	0.030
		yellow	B	3SB30 00-0AA33	1 unit	0.028
		green	B	3SB30 00-0AA43	1 unit	0.026
Illuminated pushbutton with flat button incl. holder for 3 elements		red[2]	▶	3SB30 01-0AA21	5 units	0.025
		yellow[2]	▶	3SB30 01-0AA31	5 units	0.026
		green[2]	▶	3SB30 01-0AA41	5 units	0.026
		blue[2]	B	3SB30 01-0AA51	5 units	0.026
		white	B	3SB30 01-0AA61	5 units	0.025
		clear[2]	▶	3SB30 01-0AA71	5 units	0.025
Illuminated pushbutton with raised button incl. holder for 3 elements		red	B	3SB30 01-0BA21	1 unit	0.026
		yellow	B	3SB30 01-0BA31	1 unit	0.026
		green	B	3SB30 01-0BA41	1 unit	0.026
		blue	B	3SB30 01-0BA51	1 unit	0.026
		clear	B	3SB30 01-0BA71	1 unit	0.026
Pushbutton with flat pushbutton, latching, unlatching by pressing again		black	B	3SB30 00-0DA11	1 unit	0.025
		red	B	3SB30 00-0DA21	1 unit	0.025
		yellow	B	3SB30 00-0DA31	1 unit	0.025
		green	B	3SB30 00-0DA41	1 unit	0.026
		blue	B	3SB30 00-0DA51	1 unit	0.025
		white	B	3SB30 00-0DA61	1 unit	0.025
		gray	C	3SB30 00-0DB51	1 unit	0.075
Illuminated pushbutton with flat button, latching, unlatching by pressing again, incl. holder for 3 elements		red[2]	B	3SB30 01-0DA21	1 unit	0.026
		yellow[2]	B	3SB30 01-0DA31	1 unit	0.027
		green[2]	B	3SB30 01-0DA41	1 unit	0.026
		blue[2]	B	3SB30 01-0DA51	1 unit	0.026
		white	B	3SB30 01-0DA61	1 unit	0.026
		clear[2]	B	3SB30 01-0DA71	1 unit	0.026

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) Inscription is possible by inserting a label.

* This quantity or a multiple thereof can be ordered

Plastic version, round
Actuating and signaling elements

Version	Color actuator	DT	Order No.	PS*	Weight per PU, approx. kg
Mushroom pushbuttons with holders[1]					
Mushroom pushbutton, Ø 30 mm	black	B	3SB30 00-1DA11	1 unit	0.032
	red	B	3SB30 00-1DA21	1 unit	0.032
	yellow	B	3SB30 00-1DA31	1 unit	0.032
	green	B	3SB30 00-1DA41	1 unit	0.032
Mushroom pushbutton, Ø 40 mm	black	▶	3SB30 00-1GA11	1 unit	0.033
	red	▶	3SB30 00-1GA21	1 unit	0.033
	yellow	B	3SB30 00-1GA31	1 unit	0.033
	green	B	3SB30 00-1GA41	1 unit	0.033
Mushroom pushbutton, Ø 60 mm	black	B	3SB30 00-1QA11	1 unit	0.050
	red	B	3SB30 00-1QA21	1 unit	0.050
	green	B	3SB30 00-1QA41	1 unit	0.050
Illuminated mushroom pushbutton, Ø 30 mm incl. holder for 3 elements	yellow	B	3SB30 01-1DA31	1 unit	0.032
	green	B	3SB30 01-1DA41	1 unit	0.034
	white	B	3SB30 01-1DA61	1 unit	0.034
Illuminated mushroom pushbutton, Ø 40 mm incl. holder for 3 elements	yellow	B	3SB30 01-1GA31	1 unit	0.034
	green	B	3SB30 01-1GA41	1 unit	0.034
	white	B	3SB30 01-1GA61	1 unit	0.034
Push-pull button, Ø 30 mm, latching pull to unlatch	black	B	3SB30 00-1EA11	1 unit	0.032
	red[2]	B	3SB30 00-1EA21	1 unit	0.032
Push-pull button, Ø 40 mm, latching pull to unlatch	black	▶	3SB30 00-1CA11	1 unit	0.033
	red	▶	3SB30 00-1CA21	1 unit	0.034
Push-pull button, Ø 60 mm, latching pull to unlatch	black	B	3SB30 00-1RA11	1 unit	0.050
	red	B	3SB30 00-1RA21	1 unit	0.050
Push-pull button, Ø 30 mm, can be illuminated, latching, pull to unlatch incl. holder for 3 elements	red	B	3SB30 01-1EA21	1 unit	0.033
	yellow	B	3SB30 01-1EA31	1 unit	0.037
	green	B	3SB30 01-1EA41	1 unit	0.033
	blue	B	3SB30 01-1EA51	1 unit	0.034
	clear	B	3SB30 01-1EA71	1 unit	0.060
Push-pull-button, Ø 40 mm, can be illuminated, latching, pull to unlatch incl. holder for 3 elements	red	B	3SB30 01-1CA21	1 unit	0.035
	yellow	B	3SB30 01-1CA31	1 unit	0.034
	green	B	3SB30 01-1CA41	1 unit	0.034
	blue	B	3SB30 01-1CA51	1 unit	0.034
	clear	B	3SB30 01-1CA71	1 unit	0.034

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) Maximum permissible fittings: 3 single-pole and 2 double-pole switch blocks. When using the 3SB39 01-0AB holder, the central command position must not be empty.

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Plastic version, round
Actuating and signaling elements

	Version	Version illumination	Color actuator	DT	Order No.	PS*	Weight per PU, approx.
							kg

Selector switches with holders[1]

	Selector switches with 2 switch positions						
	Switching sequence O-I 50° operating angle latching	**Non-illuminated**	black	▶	**3SB30 00-2KA11**	1 unit	0.028
			red	B	**3SB30 00-2KA21**	1 unit	0.029
			green	B	**3SB30 00-2KA41**	1 unit	0.028
			white	B	**3SB30 00-2KA61**	1 unit	0.028
		Illuminated incl. holder for 3 elements	red	B	**3SB30 01-2KA21**	1 unit	0.030
			yellow	B	**3SB30 01-2KA31**	1 unit	0.029
			green	B	**3SB30 01-2KA41**	1 unit	0.029
			blue	B	**3SB30 01-2KA51**	1 unit	0.029
			clear	B	**3SB30 01-2KA71**	1 unit	0.029
	Switching sequence O-I 50° operating angle momentary contact type	**Non-illuminated**	black	▶	**3SB30 00-2LA11**	1 unit	0.029
			red	B	**3SB30 00-2LA21**	1 unit	0.028
			green	B	**3SB30 00-2LA41**	1 unit	0.028
			white	B	**3SB30 00-2LA61**	1 unit	0.028
		Illuminated incl. holder for 3 elements	red	B	**3SB30 01-2LA21**	1 unit	0.029
			yellow	B	**3SB30 01-2LA31**	1 unit	0.029
			green	B	**3SB30 01-2LA41**	1 unit	0.029
			blue	B	**3SB30 01-2LA51**	1 unit	0.029
			clear	B	**3SB30 01-2LA71**	1 unit	0.029
	Non-illuminated selector switches with 3 switch positions						
	Switching sequence I-O-II 2 x 50° operating angle latching	**Non-illuminated**	black	▶	**3SB30 00-2DA11**	1 unit	0.028
			red	B	**3SB30 00-2DA21**	1 unit	0.028
			green	B	**3SB30 00-2DA41**	1 unit	0.029
			white	B	**3SB30 00-2DA61**	1 unit	0.028
		Illuminated incl. holder for 3 elements	red	B	**3SB30 01-2DA21**	1 unit	0.030
			yellow	B	**3SB30 01-2DA31**	1 unit	0.029
			green	B	**3SB30 01-2DA41**	1 unit	0.030
			blue	B	**3SB30 01-2DA51**	1 unit	0.029
			clear	B	**3SB30 01-2DA71**	1 unit	0.030
	Switching sequence I-O-II 2 x 50° operating angle momentary contact type	**Non-illuminated**	black	▶	**3SB30 00-2EA11**	1 unit	0.029
			red	B	**3SB30 00-2EA21**	1 unit	0.028
			green	B	**3SB30 00-2EA41**	1 unit	0.028
			white	B	**3SB30 00-2EA61**	1 unit	0.028
		Illuminated incl. holder for 3 elements	red	B	**3SB30 01-2EA21**	1 unit	0.029
			yellow	B	**3SB30 01-2EA31**	1 unit	0.030
			green	B	**3SB30 01-2EA41**	1 unit	0.030
			blue	B	**3SB30 01-2EA51**	1 unit	0.029
			clear	B	**3SB30 01-2EA71**	1 unit	0.030
	Switching sequence I-O-II 2 x 50° operating angle momentary contact to the left, latching to the right (reset from left)	**Non-illuminated**	black	▶	**3SB30 00-2GA11**	1 unit	0.028
			red	B	**3SB30 00-2GA21**	1 unit	0.029
			green	B	**3SB30 00-2GA41**	1 unit	0.028
			white	B	**3SB30 00-2GA61**	1 unit	0.030
		Illuminated incl. holder for 3 elements	red	B	**3SB30 01-2GA21**	1 unit	0.033
			yellow	B	**3SB30 01-2GA31**	1 unit	0.045
			green	B	**3SB30 01-2GA41**	1 unit	0.029
			blue	B	**3SB30 01-2GA51**	1 unit	0.029
			clear	B	**3SB30 01-2GA71**	1 unit	0.030
	Switching sequence I-O-II 2 x 50° operating angle latching to the left, momentary contact type to the right (return from right)	**Non-illuminated**	black	B	**3SB30 00-2FA11**	1 unit	0.028
			red	B	**3SB30 00-2FA21**	1 unit	0.029
			green	B	**3SB30 00-2FA41**	1 unit	0.029
			white	B	**3SB30 00-2FA61**	1 unit	0.028
		Illuminated incl. holder for 3 elements	red	B	**3SB30 01-2FA21**	1 unit	0.060
			yellow	B	**3SB30 01-2FA31**	1 unit	0.060
			green	B	**3SB30 01-2FA41**	1 unit	0.030
			blue	C	**3SB30 01-2FA51**	1 unit	0.035
			clear	B	**3SB30 01-2FA71**	1 unit	0.037

non-illuminated

illuminated

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code "B01".

* This quantity or a multiple thereof can be ordered

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Plastic version, round
Actuating and signaling elements

Version	Version key-operated switch			DT	Order No.	PS*	Weight per PU, approx.
	Type	Lock No.	Key removal position				
							kg
Key-operated switches with holders[1]							
Key-operated switch with 2 keys, 2 positions							
Switching sequence O-I 50° operating angle latching	RONIS	SB 30	O+I	B	3SB30 00-4HD11	1 unit	0.059
			O	B	3SB30 00-4HD01	1 unit	0.060
			I	B	3SB30 00-4HD21	1 unit	0.060
Switching sequence O-I 50° operating angle latching	RONIS	SB 30	O+I	▶	3SB30 00-4AD11	1 unit	0.060
			O	▶	3SB30 00-4AD01	1 unit	0.060
			I	B	3SB30 00-4AD21	1 unit	0.060
	CES	SSG 10	O+I	▶	3SB30 00-4LD11	1 unit	0.139
			O	▶	3SB30 00-4LD01	1 unit	0.143
			I	B	3SB30 00-4LD21	1 unit	0.142
		LSG 1	O+I	B	3SB30 00-4LF01	1 unit	0.140
			O	B	3SB30 00-4LF11	1 unit	0.144
	IKON	360012 K1	O+I	B	3SB30 00-5LD11	1 unit	0.148
			O	B	3SB30 00-5LD01	1 unit	0.150
	BKS	S1	O+I	B	3SB30 00-5AD11	1 unit	0.136
			O	B	3SB30 00-5AD01	1 unit	0.138
			I	B	3SB30 00-5AD21	1 unit	0.140
		E1 for VW[2]	O+I	B	3SB30 00-5AE01	1 unit	0.125
			O	B	3SB30 00-5AE11	1 unit	0.128
		E2 for VW[2]	O+I	B	3SB30 00-5AE21	1 unit	0.125
			O	B	3SB30 00-5AE31	1 unit	0.129
		E7 for VW[2]	O+I	B	3SB30 00-5AE41	1 unit	0.124
			O	B	3SB30 00-5AE51	1 unit	0.128
		E9 for VW[2]	O+I	B	3SB30 00-5AE61	1 unit	0.125
			O	B	3SB30 00-5AE71	1 unit	0.127
	O.M.R.[3]	73038 light blue	O+I	B	3SB30 00-3AG11	1 unit	0.190
			O	B	3SB30 00-3AG01	1 unit	0.126
		73037 red	O+I	B	3SB30 00-3AH11	1 unit	0.150
			O	B	3SB30 00-3AH01	1 unit	0.126
			I	B	3SB30 00-3AH21	1 unit	0.125
		73034 black	O+I	B	3SB30 00-3AJ11	1 unit	0.127
			O	B	3SB30 00-3AJ01	1 unit	0.125
		73033 yellow	O+I	B	3SB30 00-3AK11	1 unit	0.160
			O	B	3SB30 00-3AK01	1 unit	0.120
Switching sequence O-I 50° operating angle momentary contact type	RONIS	SB 30	O	▶	3SB30 00-4BD01	1 unit	0.060
	CES	SSG 10	O	▶	3SB30 00-4MD01	1 unit	0.143
		LSG 1	O	B	3SB30 00-4MF11	1 unit	0.144
	IKON	360012 K1	O	B	3SB30 00-5MD01	1 unit	0.150
	BKS	S1	O	B	3SB30 00-5BD01	1 unit	0.141
	O.M.R.[3]	73038 light blue	O	B	3SB30 00-3BG01	1 unit	0.126
		73037 red	O	B	3SB30 00-3BH01	1 unit	0.127
		73034 black	O	B	3SB30 00-3BJ01	1 unit	0.140
		73033 yellow	O	B	3SB30 00-3BK01	1 unit	0.126

RONIS key-operated switch

CES key-operated switch

IKON key-operated switch

BKS key-operated switch

O.M.R. key-operated switch

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) Supplied without the key.

3) Designed to FIAT specification; also available for other customers.

* This quantity or a multiple thereof can be ordered

Plastic version, round
Actuating and signaling elements

Version		Version key-operated switch			DT	Order No.	PS*	Weight per PU, approx.
		Type	Lock No.	Key removal position				kg
Key-operated switches with holders[1]								
		Key-operated switch with 2 keys and 3 switch positions						
	RONIS key-operated switch	Switching sequence I-O-II 2 x 50° operating angle latching	RONIS	SB 30	I+O+II	B	**3SB30 00-4DD11**	1 unit	0.060
					O	B	**3SB30 00-4DD01**	1 unit	0.060
					I+II	B	**3SB30 00-4DD41**	1 unit	0.060
					I	B	**3SB30 00-4DD21**	1 unit	0.060
					II	B	**3SB30 00-4DD31**	1 unit	0.060
					O+I	B	**3SB30 00-4DD51**	1 unit	0.060
			CES	SSG 10	I+O+II	B	**3SB30 00-4PD11**	1 unit	0.140
					O	B	**3SB30 00-4PD01**	1 unit	0.144
					I+II	B	**3SB30 00-4PD41**	1 unit	0.142
					I	B	**3SB30 00-4PD21**	1 unit	0.144
					II	B	**3SB30 00-4PD31**	1 unit	0.144
			IKON	360012 K1	I+O+II	B	**3SB30 00-5PD11**	1 unit	0.149
			BKS	S1	I+O+II	B	**3SB30 00-5DD11**	1 unit	0.136
					O	B	**3SB30 00-5DD01**	1 unit	0.141
					II	C	**3SB30 00-5DD31**	1 unit	0.137
			O.M.R.[2]	73038 light blue	I+O+II	B	**3SB30 00-3DG11**	1 unit	0.125
					O	B	**3SB30 00-3DG01**	1 unit	0.127
					O+I	B	**3SB30 00-3DG51**	1 unit	0.125
				73037 red	I+O+II	B	**3SB30 00-3DH11**	1 unit	0.127
					O	B	**3SB30 00-3DH01**	1 unit	0.125
					O+I	B	**3SB30 00-3DH51**	1 unit	0.125
				73034 black	I+O+II	B	**3SB30 00-3DJ11**	1 unit	0.126
					O	B	**3SB30 00-3DJ01**	1 unit	0.128
				73033 yellow	I+O+II	B	**3SB30 00-3DK11**	1 unit	0.125
					O	C	**3SB30 00-3DK01**	1 unit	0.128
	BKS key-operated switch	Switching sequence I-O-II 2 x 50° operating angle momentary contact type	RONIS	SB 30	O	B	**3SB30 00-4ED01**	1 unit	0.060
			CES	SSG 10	O	B	**3SB30 00-4QD01**	1 unit	0.144
			IKON	360012 K1	O	B	**3SB30 00-5QD01**	1 unit	0.153
			BKS	S1	O	B	**3SB30 00-5ED01**	1 unit	0.140
			O.M.R.[2]	73038 light blue	O	B	**3SB30 00-3EG01**	1 unit	0.130
				73037 red	O	B	**3SB30 00-3EH01**	1 unit	0.123
				73034 black	O	B	**3SB30 00-3EJ01**	1 unit	0.128
	O.M.R. key-operated switch			73033 yellow	O	B	**3SB30 00-3EK01**	1 unit	0.128

RONIS key-operated switch

CES key-operated switch

IKON key-operated switch

BKS key-operated switch

O.M.R. key-operated switch

1) Also available without holder. Supplement Order No. with **"-Z"** and quote order code **"B01"**.

2) Designed to FIAT specification; also available for other customers.

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* This quantity or a multiple thereof can be ordered

Plastic version, round
Actuating and signaling elements

Version	Version key-operated switch			DT	Order No.	PS*	Weight per PU, approx.
	Type	Lock No.	Key removal position				
							kg
Key-operated switches with holders[1]							
	Key-operated switch with 2 keys and 3 switch positions						
	Switching sequence I-O-II 2 x 50° operating angle momentary contact type to the left, latching to the right (return from left)	RONIS	SB 30	O + II	B	**3SB30 00-4GD61**	1 unit	0.060
				O	B	**3SB30 00-4GD01**	1 unit	0.061
				II	B	**3SB30 00-4GD31**	1 unit	0.061
		CES	SSG 10	O + II	B	**3SB30 00-4SD61**	5 units	0.142
				O	B	**3SB30 00-4SD01**	5 units	0.144
				II	B	**3SB30 00-4SD31**	5 units	0.144
		BKS	S1	O	B	**3SB30 00-5GD01**	1 unit	0.141
	Switching sequence I-O-II 2 x 50° operating angle latching to the left, momentary contact type to the right (return from right)	RONIS	SB 30	O+I	B	**3SB30 00-4FD51**	1 unit	0.060
				O	B	**3SB30 00-4FD01**	1 unit	0.061
				I	B	**3SB30 00-4FD21**	1 unit	0.061
		CES	SSG 10	O+I	B	**3SB30 00-4RD51**	5 units	0.143
				O	B	**3SB30 00-4RD01**	5 units	0.144
				I	B	**3SB30 00-4RD21**	5 units	0.144
		IKON	350012 K1	O+I	B	**3SB30 00-5RD51**	1 unit	0.150
		BKS	S1	O+I	B	**3SB30 00-5FD51**	1 unit	0.137
				O	B	**3SB30 00-5FD01**	1 unit	0.141
				I	B	**3SB30 00-5FD21**	1 unit	0.141
		O.M.R.[2]	73038 light blue	O	B	**3SB30 00-3FG01**	1 unit	0.126
				I	C	**3SB30 00-3FG21**	1 unit	0.126
			73034 black	I	B	**3SB30 00-3FJ21**	1 unit	0.127

RONIS key-operated switch

CES key-operated switch

IKON key-operated switch

BKS key-operated switch

O.M.R. key-operated switch

1) Also available without holder. Supplement Order No. with **"-Z"** and quote order code **"B01"**.
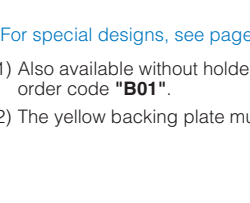
2) In accordance with FIAT standards; also available for other users.

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Plastic version, round
Actuating and signaling elements

Version	Color of actuator / position for key removal	Approval	DT	Order No.	PS*	Weight per PU, approx.
						kg
EMERGENCY-STOP control devices according to EN 418 and IEC 60947-5-5 with holder[1][2] **Also for use with 3TK28 contactor safety combinations (see Section 11)**						
EMERGENCY-STOP mushroom pushbutton, Ø 32 mm, with positive latching function acc. to EN 418, rotate to unlatch	red		B	**3SB30 00-1FA20**	1 unit	0.032
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, with positive latching function acc. to EN 418, rotate to unlatch	red	96 4041	▶	**3SB30 00-1HA20**	1 unit	0.055
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, with positive latching function acc. to EN 418, pull to unlatch	red		B	**3SB30 00-1TA20**	1 unit	0.050
EMERGENCY-STOP mushroom pushbutton, Ø 60 mm, with positive latching function acc. to EN 418, pull to unlatch	red		B	**3SB30 00-1AA20**	1 unit	0.086
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, with RONIS key-operated switch, lock No. SB 30, with positive latching to EN 418, unlocking only possible using key	red ON/OFF	96 4042	B	**3SB30 00-1BA20**	1 unit	0.086
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, with CES key-operated switch, lock No. SSG 10, with positive latching to EN 418, unlocking only possible using key	red ON/OFF	96 4042	B	**3SB30 00-1KA20**	1 unit	0.114
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, with BKS key-operated switch, lock No. S1 , with positive latching to EN 418, unlocking only possible using key	red ON/OFF	96 4042	B	**3SB30 00-1LA20**	1 unit	0.112
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, with O.M.R. key-operated switch, lock No. 73037, with positive latching to EN 418, unlocking only possible using key	red ON/OFF	96 4042	B	**3SB30 00-1MA20**	1 unit	0.120

Mushroom diameter 32 mm

Mushroom diameter 40 mm, rotate to unlatch

Mushroom diameter 40 mm, pull to unlatch

Mushroom diameter 60 mm

Mushroom diameter 40 mm, with key-operated switch

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) The yellow backing plate must be ordered separately, see Accessories.

* This quantity or a multiple thereof can be ordered

Plastic version, round
Actuating and signaling elements

Version	Color of lens	DT	Order No.	PS*	Weight per PU, approx. kg
Signaling elements with holders[1]					
Indicator light with smooth lens	red	►	3SB30 01-6AA20	5 units	0.023
	yellow	B	3SB30 01-6AA30	5 units	0.023
	green	►	3SB30 01-6AA40	5 units	0.022
	blue	B	3SB30 01-6AA50	5 units	0.022
	white	B	3SB30 01-6AA60	5 units	0.023
	clear	►	3SB30 01-6AA70	5 units	0.023
Indicator light with lens with concentric rings	red	B	3SB30 01-6BA20	5 units	0.022
	yellow	B	3SB30 01-6BA30	5 units	0.023
	green	B	3SB30 01-6BA40	5 units	0.023
	blue	B	3SB30 01-6BA50	5 units	0.023
	white	B	3SB30 01-6BA60	5 units	0.023
	clear	B	3SB30 01-6BA70	5 units	0.022
Acoustic signaling device, IP40 [2] for acoustic signal transformer DC 24 V with BA 9s base[3]	black	B	3SB30 00-7AA10	1 unit	0.024

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) Acoustic signal device, IP65, see complete device combinations.

3) To order acoustic signal transformer separately, see Accessories. The 3SB34 00-1A lampholder is also required.

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Plastic version, round
Actuating and signaling elements

Version	Inscription	Color of actuator	DT	Order No.	PS*	Weight per PU, approx.
						kg
On-Off pushbuttons with holders[1]						
On-Off pushbutton, with flat buttons	I/O [2] I/O [2]	green/red white/black	B B	**3SB31 00-8AC21** **3SB31 00-8AC31**	1 unit 1 unit	0.032 0.032
On-Off pushbutton, with flat and raised button	I/O [2] I/O [2]	green/red white/black	B B	**3SB31 00-8CC21** **3SB31 00-8CC31**	1 unit 1 unit	0.032 0.032
On-Off pushbutton with indicator light, with flat pushbuttons incl. holders for 3 elements	I/O [2] I/O [2]	green/red white/black	B B	**3SB31 01-8BC21** **3SB31 01-8BC31**	1 unit 1 unit	0.033 0.033
On-Off pushbutton with indicator light, with flat and raised pushbutton incl. holder for 3 elements	I/O [2] I/O [2]	green/red white/black	B B	**3SB31 01-8DC21** **3SB31 01-8DC31**	1 unit 1 unit	0.033 0.033

On-Off pushbutton with flat buttons

On-Off pushbutton with indicator light, with flat and raised buttons

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) Black inscription for green, red and white buttons; white inscription on black button.

Version	DT	Order No.	PS*	Weight per PU, approx.
				kg
Label holder, 70 mm × 30 mm for labeling plate 12.5 mm × 27 mm[1]	B	**3SB39 22-0AY**	5 unit	0.200
Protective cap, clear, silicone for IP67 degree of protection can be used for on-off pushbutton with flat buttons	B	**3SB39 21-0AQ**	1 unit	0.004

Labeling plate

Protective cap

1) For labeling plates, see page 9/68.

* This quantity or a multiple thereof can be ordered

■ Options

Special locks for key-operated switches

For special locks that are listed in the table below, the normal delivery time is 5 working days.

In the case, the Order No. of the relevant switch must be supplemented with **"–Z"**, the short code **"Y02"** and the required lock number.

Ordering example

3SB30 00–4LD01–Z
Y02
Z = SSG11

Special locks	Order No.
	Code
SB31 to SB49, T421, T455, T458	**3SB3. ..–4AD..–Z Y02**
	3SB3. ..–4BD..–Z Y02
	3SB3. ..–4DD..–Z Y02
	3SB3. ..–4ED..–Z Y02
	3SB3. ..–4GD..–Z Y02
	3SB3. ..–4FD..–Z Y02
SB31 to SB49, T421, T455, T458	**3SB3. ..–1BA20–Z Y02**
SSG 11 to SSG 15	**3SB3. ..–4LD..–Z Y02**
	3SB3. ..–4MD..–Z Y02
	3SB3. ..–4PD..–Z Y02
	3SB3. ..–4QD..–Z Y02
	3SB3. ..–4RD..–Z Y02
	3SB3. ..–4SD..–Z Y02
SSP 9	**3SB3. ..–1KA20–Z Y02**
E1, E2, E7, E9	**3SB3. ..–5AD..–Z Y02**
	3SB3. ..–5BD..–Z Y02
	3SB3. ..–5DD01–Z Y02
	3SB3. ..–5DD11–Z Y02
	3SB3. ..–5DD41–Z Y02
	3SB3. ..–5ED..–Z Y02
	3SB3. ..–5FD01–Z Y02
	3SB3. ..–5GD01–Z Y02
E 9	**3SB3. ..–5FD51–Z Y02**
E2, E7, E9	**3SB3. ..–1LA20–Z Y02**

For special locks that are not listed in the above table, the normal delivery time is 25 working days.

In this case, the Order No. of the relevant switch must be supplemented with **"–Z"**, the short code **"Y01"** and the required lock number.

Ordering example

3SB30 00–4LD01–Z
Y01
Z = SSG18

Versions

■ For applications in which access security is important and several lock numbers are used, we recommend the use of BKS, CES or IKON key-operated switches.

■ Special locks for VW (E1, E2, ...) will be delivered without keys, all others with 2 keys.

■ For all special locks, a price supplement applies.

Master and master-pass key systems

The following key systems can be supplied with BKS, CES, IKON and O.M.R. key-operated switches:

■ central lock systems,

■ master key systems,

■ central master key systems,

■ master-pass key systems.

Please enquire for price and delivery time.
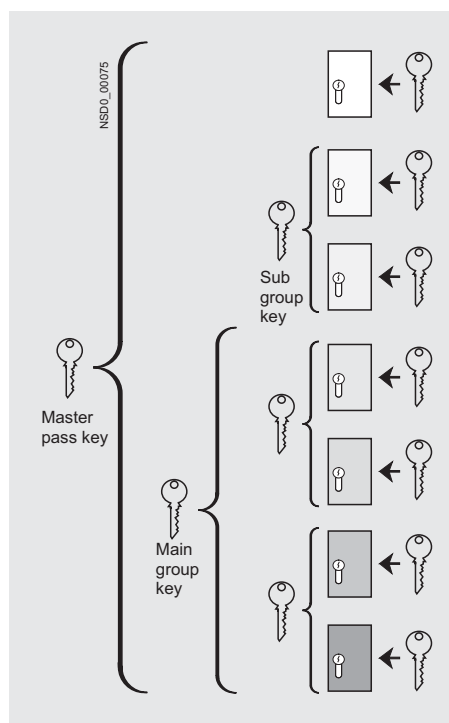
Example of master-pass key system

Plastic version, round
Actuating and signaling elements

Laser inscription

Actuating and signaling elements in plastic as well as metal design can be optionally inscribed with a laser.

The actuators of the pushbuttons, illuminated pushbuttons, mushroom pushbuttons and illuminated mushroom pushbuttons can be inscribed as well as the lenses of the indicator light.

Pushbutton with laser inscription

Notes on ordering

When ordering, supplement the Order No. of the actuating element or the indicator light with **"–Z"** and an order code:

• Text in upper/lowercase: **Y10**
• Text in uppercase: **Y11**
• Text in lowercase: **Y12**
• Symbols with number to DIN Report 4: **Y13**
• Inscription or symbols according to order form supplement: **Y19**

The required inscription must also be specified in plain text. In the case of inscriptions with words in languages other than German, give the exact spelling and specify the language.

For special symbols (short code Y19), a CAD drawing in DXF format should be submitted.

Ordering examples

A round pushbutton with the inscription "Reset" is required:

3SB30 00–0AA41–Z
Y10
Z = Reset (English)

A square pushbutton inscribed with symbol No. 1800 according to DIN Report 4:

3SB31 10–0AA31–Z
Y13
Z = 1800

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Plastic version, square
Complete unit combinations

■ **Selection and ordering data**

	Version	Lamp voltage V	Color of actuator	Contacts for front plate mounting	DT	Order No.	PS*	Weight per PU, approx. kg
Pushbutton	**Pushbutton with flat button**		black	1 NO	B	**3SB33 02-0AA11**	1 unit	0.039
			black	1 NC	B	**3SB33 03-0AA11**	1 unit	0.039
			red	1 NC	B	**3SB33 03-0AA21**	1 unit	0.040
			yellow	1 NO	B	**3SB33 02-0AA31**	1 unit	0.039
			green	1 NO	B	**3SB33 02-0AA41**	1 unit	0.039
			blue	1 NO	B	**3SB33 02-0AA51**	1 unit	0.039
			white	1 NO	B	**3SB33 02-0AA61**	1 unit	0.040
			black	1 NO + 1 NC	B	**3SB33 01-0AA11**	1 unit	0.046
			red	1 NO + 1 NC	B	**3SB33 01-0AA21**	1 unit	0.046
			yellow	1 NO + 1 NC	B	**3SB33 01-0AA31**	1 unit	0.047
			green	1 NO + 1 NC	B	**3SB33 01-0AA41**	1 unit	0.046
			blue	1 NO + 1 NC	C	**3SB33 01-0AA51**	1 unit	0.046
			white	1 NO + 1 NC	B	**3SB33 01-0AA61**	1 unit	0.046
Illuminated pushbutton	**Illuminated pushbutton with flat button** with integrated LED	AC/DC 24	red[1]	1 NC	B	**3SB33 46-0AA21**	1 unit	0.050
			yellow[1]	1 NO	B	**3SB33 45-0AA31**	1 unit	0.050
			green[1]	1 NO	B	**3SB33 45-0AA41**	1 unit	0.050
			blue[1]	1 NO	B	**3SB33 45-0AA51**	1 unit	0.050
			white	1 NO	B	**3SB33 45-0AA61**	1 unit	0.050
			clear[1]	1 NO	B	**3SB33 45-0AA71**	1 unit	0.050
			red[1]	1 NO + 1 NC	B	**3SB33 47-0AA21**	1 unit	0.056
			yellow[1]	1 NO + 1 NC	B	**3SB33 47-0AA31**	1 unit	0.057
			green[1]	1 NO + 1 NC	B	**3SB33 47-0AA41**	1 unit	0.057
			blue[1]	1 NO + 1 NC	B	**3SB33 47-0AA51**	1 unit	0.056
			white	1 NO + 1 NC	B	**3SB33 47-0AA61**	1 unit	0.057
			clear[1]	1 NO + 1 NC	B	**3SB33 47-0AA71**	1 unit	0.057
	Illuminated pushbutton with flat button with integrated LED	AC 230	red[1]	1 NC	B	**3SB33 54-0AA21**	1 unit	0.050
			yellow[1]	1 NO	C	**3SB33 53-0AA31**	1 unit	0.050
			green[1]	1 NO	B	**3SB33 53-0AA41**	1 unit	0.050
			blue[1]	1 NO	C	**3SB33 53-0AA51**	1 unit	0.050
			white	1 NO	B	**3SB33 53-0AA61**	1 unit	0.050
			clear[1]	1 NO	B	**3SB33 53-0AA71**	1 unit	0.050
			red[1]	1 NO + 1 NC	B	**3SB33 55-0AA21**	1 unit	0.058
			yellow[1]	1 NO + 1 NC	C	**3SB33 55-0AA31**	1 unit	0.057
			green[1]	1 NO + 1 NC	C	**3SB33 55-0AA41**	1 unit	0.057
			blue[1]	1 NO + 1 NC	C	**3SB33 55-0AA51**	1 unit	0.057
			white	1 NO + 1 NC	C	**3SB33 55-0AA61**	1 unit	0.057
			clear[1]	1 NO + 1 NC	B	**3SB33 55-0AA71**	1 unit	0.057
	Illuminated pushbutton with flat button with BA 9s lampholder without lamp		red[1]	1 NC	B	**3SB33 07-0AA21**	1 unit	0.050
			yellow[1]	1 NO	B	**3SB33 06-0AA31**	1 unit	0.049
			green[1]	1 NO	B	**3SB33 06-0AA41**	1 unit	0.049
			blue[1]	1 NO	B	**3SB33 06-0AA51**	1 unit	0.049
			white	1 NO	B	**3SB33 06-0AA61**	1 unit	0.049
			clear[1]	1 NO	B	**3SB33 06-0AA71**	1 unit	0.049
			red[1]	1 NO + 1 NC	B	**3SB33 05-0AA21**	1 unit	0.056
			yellow[1]	1 NO + 1 NC	B	**3SB33 05-0AA31**	1 unit	0.054
			green[1]	1 NO + 1 NC	B	**3SB33 05-0AA41**	1 unit	0.056
			blue[1]	1 NO + 1 NC	B	**3SB33 05-0AA51**	1 unit	0.056
			white	1 NO + 1 NC	B	**3SB33 05-0AA61**	1 unit	0.056
			clear[1]	1 NO + 1 NC	B	**3SB33 05-0AA71**	1 unit	0.056

EMERGENCY-STOP control devices according to EN 418 with yellow name plate, Ø 80 mm, labeled.
Can also be used with 3TK28 contactor safety combinations (see Part 11)

	Version	Lamp voltage V	Color of actuator	Contacts for front plate mounting	DT	Order No.	PS*	Weight per PU, approx. kg
EMERGENCY-STOP mushroom pushbuttons	**Mushroom pushbutton, Ø 40 mm, with positive latching function** rotate to unlatch		red	1 NC →[2]	B	**3SB33 03-1HA20**	1 unit	0.065
				1 NO + 1 NC →[2]	B	**3SB33 01-1HA20**	1 unit	0.080

1) Inscription is possible by inserting a label.

2) Positive opening according to IEC 60947-5-1, Appendix K.

9

Plastic version, square
Complete unit combinations

Indicator light
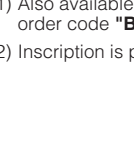
Version	Lamp voltage	Color of lens	DT	Order No.	PS*	Weight per PU, approx.
	V					kg
Indicator light with integrated LED	AC/DC 24	red	B	**3SB33 44-6AA20**	1 unit	0.039
		yellow	B	**3SB33 44-6AA30**	1 unit	0.039
		green	B	**3SB33 44-6AA40**	1 unit	0.039
		blue	B	**3SB33 44-6AA50**	1 unit	0.039
		white	B	**3SB33 44-6AA60**	1 unit	0.039
		clear	B	**3SB33 44-6AA70**	1 unit	0.039
Indicator light with integrated LED	AC 230	red	B	**3SB33 52-6AA20**	1 unit	0.039
		yellow	B	**3SB33 52-6AA30**	1 unit	0.039
		green	B	**3SB33 52-6AA40**	1 unit	0.039
		blue	B	**3SB33 52-6AA50**	1 unit	0.040
		white	B	**3SB33 52-6AA60**	1 unit	0.040
		clear	B	**3SB33 52-6AA70**	1 unit	0.040
Indicator light with BA 9s lampholder (without lamp)		red	B	**3SB33 04-6AA20**	1 unit	0.039
		yellow	B	**3SB33 04-6AA30**	1 unit	0.039
		green	B	**3SB33 04-6AA40**	1 unit	0.038
		blue	B	**3SB33 04-6AA50**	1 unit	0.038
		white	B	**3SB33 04-6AA60**	1 unit	0.038
		clear	B	**3SB33 04-6AA70**	1 unit	0.038

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* This quantity or a multiple thereof can be ordered

■ Selection and ordering data

|	Version	Color of actuator	DT	Order No.	PS*	Weight per PU, approx. kg
Pushbuttons with holders[1]						
Pushbutton	**Pushbutton** **with flat button**	black	B	**3SB31 10-0AA11**	5 units	0.024
		red	B	**3SB31 10-0AA21**	5 units	0.024
		yellow	B	**3SB31 10-0AA31**	5 units	0.024
		green	B	**3SB31 10-0AA41**	5 units	0.024
		blue	B	**3SB31 10-0AA51**	5 units	0.024
		white	B	**3SB31 10-0AA61**	5 units	0.024
		clear[2]	B	**3SB31 10-0AA71**	5 units	0.024
	Pushbutton with **with raised front ring** (height 13 mm)	black	B	**3SB31 10-0AA12**	1 unit	0.026
		red	B	**3SB31 10-0AA22**	1 unit	0.033
		white	B	**3SB31 10-0AA62**	1 unit	0.026
	Pushbutton **with raised front ring castellated** (height 13 mm)	black	C	**3SB31 10-0AA13**	1 unit	0.026
		yellow	C	**3SB31 10-0AA33**	1 unit	0.027
		green	C	**3SB31 10-0AA43**	1 unit	0.026
Illuminated pushbutton	**Illuminated pushbutton** **with flat button** incl. holder for 3 elements	red[2]	B	**3SB31 11-0AA21**	5 units	0.025
		yellow[2]	B	**3SB31 11-0AA31**	5 units	0.025
		green[2]	B	**3SB31 11-0AA41**	5 units	0.025
		blue[2]	B	**3SB31 11-0AA51**	5 units	0.025
		white	B	**3SB31 11-0AA61**	5 units	0.025
		clear[2]	B	**3SB31 11-0AA71**	5 units	0.025
Pushbutton	**Pushbutton, latching,** **with flat button** unlatching by pressing again	black	B	**3SB31 10-0DA11**	1 unit	0.024
		red	B	**3SB31 10-0DA21**	1 unit	0.024
		yellow	B	**3SB31 10-0DA31**	1 unit	0.025
		green	B	**3SB31 10-0DA41**	1 unit	0.024
		blue	C	**3SB31 10-0DA51**	1 unit	0.024
		white	B	**3SB31 10-0DA61**	1 unit	0.024
Illuminated pushbutton	**Illuminated pushbutton, latching,** **with flat button** incl. holder for 3 elements, unlatching by pressing again	red[2]	B	**3SB31 11-0DA21**	1 unit	0.025
		yellow[2]	B	**3SB31 11-0DA31**	1 unit	0.025
		green[2]	B	**3SB31 11-0DA41**	1 unit	0.025
		blue[2]	B	**3SB31 11-0DA51**	1 unit	0.025
		white	B	**3SB31 11-0DA61**	1 unit	0.025
		clear[2]	B	**3SB31 11-0DA71**	1 unit	0.025

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) Inscription is possible by inserting a label.

9

Plastic version, square
Actuating and signaling elements

Version	Version illumination	Color of actuator	DT	Order No.	PS*	Weight per PU, approx. kg
Selector switches with holders[1]						
Selector switch with 2 switch positions						
Switching sequence O-I, 50° operating angle, latching	**Non-illuminated**	black	B	**3SB31 10-2KA11**	1 unit	0.030
		red	B	**3SB31 10-2KA21**	1 unit	0.030
		green	B	**3SB31 10-2KA41**	1 unit	0.029
		white	B	**3SB31 10-2KA61**	1 unit	0.030
	Illuminated incl. holder for 3 elements	red	B	**3SB31 11-2KA21**	1 unit	0.031
		yellow	B	**3SB31 11-2KA31**	1 unit	0.031
		green	B	**3SB31 11-2KA41**	1 unit	0.031
		blue	B	**3SB31 11-2KA51**	1 unit	0.031
		clear	B	**3SB31 11-2KA71**	1 unit	0.031
Switching sequence O-I 50° operating angle momentary contact type	**Non-illuminated**	black	B	**3SB31 10-2LA11**	1 unit	0.030
		red	C	**3SB31 10-2LA21**	1 unit	0.030
		green	C	**3SB31 10-2LA41**	1 unit	0.029
		white	C	**3SB31 10-2LA61**	1 unit	0.030
	Illuminated incl. holder for 3 elements	red	B	**3SB31 11-2LA21**	1 unit	0.031
		yellow	C	**3SB31 11-2LA31**	1 unit	0.031
		green	C	**3SB31 11-2LA41**	1 unit	0.032
		blue	C	**3SB31 11-2LA51**	1 unit	0.031
		clear	B	**3SB31 11-2LA71**	1 unit	0.031
Selector switch with 3 switch positions						
Switching sequence I-O-II 2 × 50° operating angle latching	**Non-illuminated**	black	B	**3SB31 10-2DA11**	1 unit	0.031
		red	B	**3SB31 10-2DA21**	1 unit	0.030
		green	C	**3SB31 10-2DA41**	1 unit	0.030
		white	C	**3SB31 10-2DA61**	1 unit	0.030
	Illuminated incl. holder for 3 elements	red	B	**3SB31 11-2DA21**	1 unit	0.030
		yellow	B	**3SB31 11-2DA31**	1 unit	0.030
		green	B	**3SB31 11-2DA41**	1 unit	0.031
		blue	C	**3SB31 11-2DA51**	1 unit	0.035
		clear	B	**3SB31 11-2DA71**	1 unit	0.031
Switching sequence I-O-II 2 × 50° operating angle momentary contact type	**Non-illuminated**	black	B	**3SB31 10-2EA11**	1 unit	0.030
		red	B	**3SB31 10-2EA21**	1 unit	0.030
		green	C	**3SB31 10-2EA41**	1 unit	0.030
		white	C	**3SB31 10-2EA61**	1 unit	0.030
	Illuminated incl. holder for 3 elements	red	C	**3SB31 11-2EA21**	1 unit	0.031
		yellow	C	**3SB31 11-2EA31**	1 unit	0.037
		green	B	**3SB31 11-2EA41**	1 unit	0.031
		blue	C	**3SB31 11-2EA51**	1 unit	0.031
		clear	B	**3SB31 11-2EA71**	1 unit	0.031
Switching sequence I-O-II 2 xx 50° operating angle momentary contact type to the left, latching to the right (return from left)	**Non-illuminated** [2]	black	B	**3SB31 10-2GA11**	1 unit	0.040
		red	B	**3SB31 10-2GA21**	1 unit	0.023
		green	C	**3SB31 10-2GA41**	1 unit	0.030
		white	B	**3SB31 10-2GA61**	1 unit	0.037
Switching sequence I-O-II 2 × 50° operating angle latching to the left, momentary contact type to the right (return from right)	**Non-illuminated** [2]	black	B	**3SB31 10-2FA11**	1 unit	0.033
		red	C	**3SB31 10-2FA21**	1 unit	0.032
		green	B	**3SB31 10-2FA41**	1 unit	0.050
		white	B	**3SB31 10-2FA61**	1 unit	0.023

Selector switch

Selector switch, illuminated

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1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) Also available as illuminated selector switch. When ordering, add **"–Z"** to the order number and indicate "illuminated selector switch" and the color in plain text.

* This quantity or a multiple thereof can be ordered

Plastic version, square
Actuating and signaling elements

Version	Type	Lock No./Color	Key removal position	DT	Order No.	PS*	Weight per PU, approx. kg
Key-operated switches with holders[1]							
Key-operated switch with 2 keys, 2 positions							
Switching sequence O-I, 50° operating angle, latching	RONIS	SB 30	O+I	B	**3SB31 10-4AD11**	1 unit	0.061
			O	B	**3SB31 10-4AD01**	1 unit	0.061
			I	B	**3SB31 10-4AD21**	1 unit	0.061
	CES	SSG 10	O+I	B	**3SB31 10-4LD11**	1 unit	0.141
			O	B	**3SB31 10-4LD01**	1 unit	0.144
			I	B	**3SB31 10-4LD21**	1 unit	0.145
		LSG 1	O	C	**3SB31 10-4LF01**	1 unit	0.140
	IKON	360012 K1	O	B	**3SB31 10-5LD01**	1 unit	0.151
	BKS	S1	O+I	B	**3SB31 10-5AD11**	1 unit	0.140
			O	B	**3SB31 10-5AD01**	1 unit	0.143
		E1 for VW[2]	O+I	C	**3SB31 10-5AE01**	1 unit	0.125
		E2 for VW[2]	O	B	**3SB31 10-5AE31**	1 unit	0.130
		E7 for VW[2]	O+I	B	**3SB31 10-5AE41**	1 unit	0.126
			O	B	**3SB31 10-5AE51**	1 unit	0.133
		E9 for VW[2]	O	B	**3SB31 10-5AE71**	1 unit	0.130
	O.M.R.[3]	73038 light blue	O+I	B	**3SB31 10-3AG11**	1 unit	0.128
			O	B	**3SB31 10-3AG01**	1 unit	0.129
		73037 red	O+I	B	**3SB31 10-3AH11**	1 unit	0.135
			O	B	**3SB31 10-3AH01**	1 unit	0.127
		73034 black	O+I	B	**3SB31 10-3AJ11**	1 unit	0.127
			O	B	**3SB31 10-3AJ01**	1 unit	0.129
		73033 yellow	O+I	B	**3SB31 10-3AK11**	1 unit	0.126
			O	B	**3SB31 10-3AK01**	1 unit	0.129
Switching sequence O-I, 50° operating angle, momentary contact type (return from right)	RONIS	SB 30	O	B	**3SB31 10-4BD01**	1 unit	0.090
	CES	SSG 10	O	B	**3SB31 10-4MD01**	1 unit	0.145
	IKON	360012 K1	O	C	**3SB31 10-5MD01**	1 unit	0.151
	BKS	S1	O	C	**3SB31 10-5BD01**	1 unit	0.142
	O.M.R.[3]	73034 black	O	B	**3SB31 10-3BJ01**	1 unit	0.127

RONIS key-operated switch

CES key-operated switch

O.M.R. key-operated switch

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) Supplied without the key.

3) Designed to FIAT specification; also available for other customers.

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**Plastic version, square
Actuating and signaling elements**

Version	Type	Lock No./ Color	Key removal position	DT	Order No.	PS*	Weight per PU, approx. kg
Key-operated switches with holders[1]							
Key-operated switch with 2 keys and 3 switch positions							
Switching sequence I-O-II 2 × 50° operating angle latching	RONIS	SB 30	I+O+II	B	**3SB31 10-4DD11**	1 unit	0.060
			O	B	**3SB31 10-4DD01**	1 unit	0.062
			I+II	B	**3SB31 10-4DD41**	1 unit	0.061
	CES	SSG 10	I+O+II	B	**3SB31 10-4PD11**	1 unit	0.142
			O	B	**3SB31 10-4PD01**	1 unit	0.145
	O.M.R[2]	73037 red	O	C	**3SB31 10-3DH01**	1 unit	0.127
		73034 black	I+O+II	C	**3SB31 10-3DJ11**	1 unit	0.128
			O		**3SB31 10-3DJ01**		
Switching sequence I-O-II, 2 × 50° operating angle, latching (return from right and left)	RONIS flat	SB 30	O	B	**3SB31 10-4ED01**	1 unit	0.060
	CES	SSG 10	O	B	**3SB31 10-4QD01**	1 unit	0.145
	IKON	360012 K1	O		**3SB31 10-5QD01**		
Switching sequence I-O-II 2 × 50° operating angle momentary contact type to the left, latching to the right (return from left)	CES	SSG 10	O	B	**3SB31 10-4SD01**	1 unit	0.145
Switching sequence I-O-II 2 × 50° operating angle latching to the left, momentary contact type to the right (return from right)	RONIS	SB 30	O	C	**3SB31 10-4FD01**	1 unit	0.062
	CES	SSG 10	O+I	C	**3SB31 10-4RD51**	1 unit	0.144
	BKS	S1	I	C	**3SB31 10-5FD21**	1 unit	0.145

RONIS key-operated switch

CES key-operated switch

O.M.R. key-operated switch

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) Designed to FIAT specification; also available for other customers.

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* This quantity or a multiple thereof can be ordered

Plastic version, square
Actuating and signaling elements

Version	Color of actuator / position for key removal	DT	Order No.	PS*	Weight per PU, approx.
					kg
EMERGENCY-STOP control devices according to EN 418 and IEC 60947-5-5 with holder[1][2] **Also for use with 3TK28 contactor safety combinations (see Section 11)**					
Mushroom pushbutton, Ø 40 mm, **with positive latching,** rotate to unlatch the knob to the left	red	B	**3SB31 10-1HA20**	1 unit	0.056
Mushroom pushbutton, Ø 40 mm, **with positive latching,** **with RONIS key-operated switch** (with 2 keys), lock No. SB 30, unlatching is only possible with a key	red ON/OFF	B	**3SB31 10-1BA20**	1 unit	0.089
Mushroom pushbutton, Ø 40 mm, **with positive latching,** **with CES key-operated switch** (with 2 keys), lock No. SSG 10, unlatching is only possible with a key	red ON/OFF	B	**3SB31 10-1KA20**	1 unit	0.118
Mushroom pushbutton, Ø 40 mm, **with positive latching,** **with BKS key-operated switch** (with 2 keys), lock No. S1, unlocking only possible using key	red ON/OFF	B	**3SB31 10-1LA20**	1 unit	0.118
Mushroom pushbutton, Ø 40 mm, **with positive latching function,** **with O.M.R. key-operated switch** (with 2 keys), lock No. 73037, unlatching is only possible with a key	red ON/OFF	B	**3SB31 10-1MA20**	1 unit	0.125

EMERGENCY-STOP mushroom pushbutton

EMERGENCY-STOP mushroom pushbutton with key-operated switch

For special designs, see page 9/39.

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

2) The yellow backing plate must be ordered separately, see Accessories.

Version	Color of lens	DT	Order No.	PS*	Weight per PU, approx.
					kg
Signaling elements with holder[1]					
Indicator light	red	B	**3SB31 11-6AA20**	5 units	0.024
	yellow	B	**3SB31 11-6AA30**	5 units	0.024
	green	B	**3SB31 11-6AA40**	5 units	0.024
	blue	B	**3SB31 11-6AA50**	5 units	0.024
	white	B	**3SB31 11-6AA60**	5 units	0.024
	clear	B	**3SB31 11-6AA70**	5 units	0.024

Indicator light

1) Also available without holder. Supplement Order No. with **"–Z"** and quote order code **"B01"**.

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* This quantity or a multiple thereof can be ordered

Metal version, round
Complete unit combinations

■ Selection and ordering data

	Version	Lamp voltage	Color of actuator	Contacts for front plate mounting version	DT	Order No.	PS*	Weight per PU, approx.
		V						kg
	Pushbutton with flat button		black	1 NO	▶	**3SB36 02-0AA11**	1 unit	0.092
			black	1 NC	B	**3SB36 03-0AA11**	1 unit	0.092
			red	1 NC	▶	**3SB36 03-0AA21**	1 unit	0.092
			yellow	1 NO	B	**3SB36 02-0AA31**	1 unit	0.090
			green	1 NO	▶	**3SB36 02-0AA41**	1 unit	0.090
			blue	1 NO	B	**3SB36 02-0AA51**	1 unit	0.092
			white	1 NO	▶	**3SB36 02-0AA61**	1 unit	0.092
			black	1 NO + 1 NC	B	**3SB36 01-0AA11**	1 unit	0.099
			red	1 NO + 1 NC	B	**3SB36 01-0AA21**	1 unit	0.097
			yellow	1 NO + 1 NC	B	**3SB36 01-0AA31**	1 unit	0.097
			green	1 NO + 1 NC	B	**3SB36 01-0AA41**	1 unit	0.097
			blue	1 NO + 1 NC	B	**3SB36 01-0AA51**	1 unit	0.097
			white	1 NO + 1 NC	B	**3SB36 01-0AA61**	1 unit	0.097
	Illuminated pushbutton with flat button with integrated LED	AC/DC 24	red[1]	1 NC	▶	**3SB36 46-0AA21**	1 unit	0.100
			yellow[1]	1 NO	B	**3SB36 45-0AA31**	1 unit	0.103
			green[1]	1 NO	▶	**3SB36 45-0AA41**	1 unit	0.103
			blue[1]	1 NO	B	**3SB36 45-0AA51**	1 unit	0.101
			white	1 NO	B	**3SB36 45-0AA61**	1 unit	0.103
			clear[1]	1 NO	▶	**3SB36 45-0AA71**	1 unit	0.101
			red[1]	1 NO + 1 NC	B	**3SB36 47-0AA21**	1 unit	0.107
			yellow[1]	1 NO + 1 NC	B	**3SB36 47-0AA31**	1 unit	0.107
			green[1]	1 NO + 1 NC	B	**3SB36 47-0AA41**	1 unit	0.107
			blue[1]	1 NO + 1 NC	B	**3SB36 47-0AA51**	1 unit	0.107
			white	1 NO + 1 NC	B	**3SB36 47-0AA61**	1 unit	0.110
			clear[1]	1 NO + 1 NC	B	**3SB36 47-0AA71**	1 unit	0.107
	with integrated LED	AC 110	red[1]	1 NC	B	**3SB36 50-0AA21**	1 unit	0.103
			yellow[1]	1 NO	B	**3SB36 57-0AA31**	1 unit	0.095
			green[1]	1 NO	B	**3SB36 57-0AA41**	1 unit	0.103
			blue[1]	1 NO	B	**3SB36 57-0AA51**	1 unit	0.109
			white	1 NO	B	**3SB36 57-0AA61**	1 unit	0.099
			clear[1]	1 NO	B	**3SB36 57-0AA71**	1 unit	0.095
			red[1]	1 NO + 1 NC	B	**3SB36 51-0AA21**	1 unit	0.108
			yellow[1]	1 NO + 1 NC	B	**3SB36 51-0AA31**	1 unit	0.103
			green[1]	1 NO + 1 NC	B	**3SB36 51-0AA41**	1 unit	0.108
			blue[1]	1 NO + 1 NC	D	**3SB36 51-0AA51**	1 unit	0.103
			white	1 NO + 1 NC	B	**3SB36 51-0AA61**	1 unit	0.102
			clear[1]	1 NO + 1 NC	D	**3SB36 51-0AA71**	1 unit	0.107
	with integrated LED	AC 230	red[1]	1 NC	▶	**3SB36 54-0AA21**	1 unit	0.101
			yellow[1]	1 NO	B	**3SB36 53-0AA31**	1 unit	0.103
			green[1]	1 NO	▶	**3SB36 53-0AA41**	1 unit	0.104
			blue[1]	1 NO	B	**3SB36 53-0AA51**	1 unit	0.103
			white	1 NO	B	**3SB36 53-0AA61**	1 unit	0.101
			clear[1]	1 NO	▶	**3SB36 53-0AA71**	1 unit	0.101
			red[1]	1 NO + 1 NC	B	**3SB36 55-0AA21**	1 unit	0.106
			yellow[1]	1 NO + 1 NC	B	**3SB36 55-0AA31**	1 unit	0.106
			green[1]	1 NO + 1 NC	B	**3SB36 55-0AA41**	1 unit	0.108
			blue[1]	1 NO + 1 NC	D	**3SB36 55-0AA51**	1 unit	0.102
			white	1 NO + 1 NC	B	**3SB36 55-0AA61**	1 unit	0.108
			clear[1]	1 NO + 1 NC	B	**3SB36 55-0AA71**	1 unit	0.102
	with lampholder BA 9s, (without lamp)		red[1]	1 NC	B	**3SB36 07-0AA21**	1 unit	0.100
			yellow[1]	1 NO	B	**3SB36 06-0AA31**	1 unit	0.102
			green[1]	1 NO	B	**3SB36 06-0AA41**	1 unit	0.102
			blue[1]	1 NO	B	**3SB36 06-0AA51**	1 unit	0.100
			white	1 NO	B	**3SB36 06-0AA61**	1 unit	0.102
			clear[1]	1 NO	B	**3SB36 06-0AA71**	1 unit	0.100
			red[1]	1 NO + 1 NC	B	**3SB36 05-0AA21**	1 unit	0.107
			yellow[1]	1 NO + 1 NC	B	**3SB36 05-0AA31**	1 unit	0.105
			green[1]	1 NO + 1 NC	B	**3SB36 05-0AA41**	1 unit	0.107
			blue[1]	1 NO + 1 NC	B	**3SB36 05-0AA51**	1 unit	0.107
			white	1 NO + 1 NC	B	**3SB36 05-0AA61**	1 unit	0.106
			clear[1]	1 NO + 1 NC	B	**3SB36 05-0AA71**	1 unit	0.106
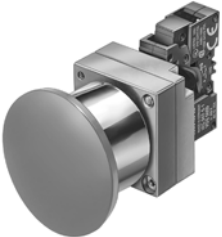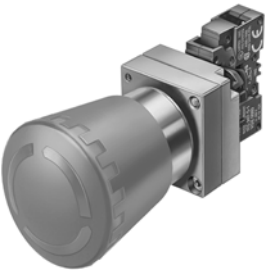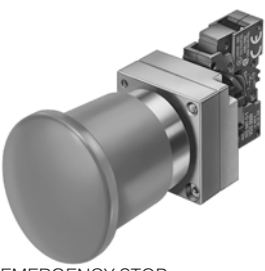
Pushbutton with flat button

Illuminated pushbutton with flat button

1) Inscription is possible by inserting a label.

* This quantity or a multiple thereof can be ordered

Metal version, round
Complete unit combinations
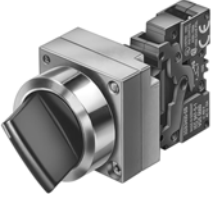
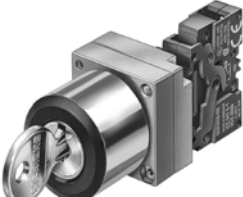|	Version	Color of actuator	Contacts for front plate mounting		DT	Order No.	PS*	Weight per PU, approx. kg
	Mushroom push-pull button, Ø 40 mm, **latching** pull to unlatch	red	1 NC		B	**3SB36 03-1CA21**	1 unit	0.100
			1 NO + 1 NC		B	**3SB36 01-1CA21**	1 unit	0.107

Mushroom push-pull button

EMERGENCY-STOP control devices according to EN 418 with yellow name plate, Ø 80 mm, labeled.
Can also be used with 3TK28 contactor safety combinations (see Section 11)

	Version	Color of actuator	Contacts for front plate mounting		DT	Order No.	PS*	Weight per PU, approx. kg
	Mushroom pushbutton, Ø 40 mm with positive latching rotate to unlatch	red	1 NC →1)		▶	**3SB36 03-1HA20**	1 unit	0.131
			1 NO + 1 NC →1)		B	**3SB36 01-1HA20**	1 unit	0.137

EMERGENCY-STOP
mushroom pushbutton with
rotary unlocking

	Version	Color of actuator	Contacts for front plate mounting		DT	Order No.	PS*	Weight per PU, approx. kg
	Mushroom pushbutton, Ø 40 mm with positive latching pull to unlatch	red	1 NC →1)		B	**3SB36 03-1TA20**	1 unit	0.131
			1 NO + 1 NC →1)		B	**3SB36 01-1TA20**	1 unit	0.137

EMERGENCY-STOP
mushroom pushbutton with
pull-to-unlatch mechanism

1) Positive opening according to IEC 60947-5-1, Appendix K.

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Metal version, round
Complete unit combinations

	Version	Color of handle/ lock No.	Contacts for front plate mounting version	DT	Order No.	PS*	Weight per PU, approx.
							kg
Non-illuminated selector switch	**Selector switch, 2 switch positions** switching sequence O-I 50° operating angle latching	black, **standard version**	1 NO 1 NO + 1 NC	▶ B	3SB36 02-2KA11 3SB36 01-2KA11	1 unit 1 unit	0.095 0.102
		black, **heavy duty version**	1 NO 1 NO + 1 NC	C C	3SB36 02-2PA11 3SB36 01-2PA11	1 unit 1 unit	0.111 0.119
	Selector switch, 3 switch positions switching sequence I-O-II 2 × 50° operating angle latching	black, **standard version**	1 NO, 1 NO 1 NO + 1 NC, 1 NO + 1 NC	▶ ▶	3SB36 10-2DA11 3SB36 08-2DA11	1 unit 1 unit	0.105 0.117
		black, **heavy duty version**	1 NO, 1 NO 1 NO + 1 NC, 1 NO + 1 NC	C C	3SB36 10-2SA11 3SB36 08-2SA11	1 unit 1 unit	0.121 0.134
	momentary-contact type	black, **standard version**	1 NO, 1 NO 1 NO + 1 NC, 1 NO + 1 NC	▶ B	3SB36 10-2EA11 3SB36 08-2EA11	1 unit 1 unit	0.103 0.119
		black, **heavy duty version**	1 NO, 1 NO 1 NO + 1 NC, 1 NO + 1 NC	C C	3SB36 10-2TA11 3SB36 08-2TA11	1 unit 1 unit	0.122 0.135
RONIS key-operated switch	**Key-operated switch RONIS, flat, 2 switch positions,** key can be removed in any position switching sequence O-I, 50° operating angle, latching	SB 30	1 NO 1 NO + 1 NC	▶ B	3SB36 02-4AD11 3SB36 01-4AD11	1 unit 1 unit	0.119 0.124

	Version	Lamp voltage	Color of lens	DT	Order No.	PS*	Weight per PU, approx.
		V					kg
Indicator light	**Indicator light with lens with concentric rings,** with integrated LED	AC/DC 24	red yellow green blue white clear	▶ B ▶ B B ▶	3SB36 44-6BA20 3SB36 44-6BA30 3SB36 44-6BA40 3SB36 44-6BA50 3SB36 44-6BA60 3SB36 44-6BA70	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	0.080 0.080 0.081 0.080 0.080 0.080
	with integrated LED	AC 110	red yellow green blue white clear	B B B B B B	3SB36 48-6BA20 3SB36 48-6BA30 3SB36 48-6BA40 3SB36 48-6BA50 3SB36 48-6BA60 3SB36 48-6BA70	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	0.081 0.081 0.081 0.077 0.081 0.075
	with integrated LED	AC 230	red yellow green blue white clear	▶ B ▶ B B ▶	3SB36 52-6BA20 3SB36 52-6BA30 3SB36 52-6BA40 3SB36 52-6BA50 3SB36 52-6BA60 3SB36 52-6BA70	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	0.081 0.081 0.081 0.079 0.081 0.081
	with lampholder BA 9s, (without lamp)		red yellow green blue white clear	B B B B B B	3SB36 04-6BA20 3SB36 04-6BA30 3SB36 04-6BA40 3SB36 04-6BA50 3SB36 04-6BA60 3SB36 04-6BA70	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	0.079 0.079 0.080 0.077 0.079 0.077

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* This quantity or a multiple thereof can be ordered

■ Selection and ordering data
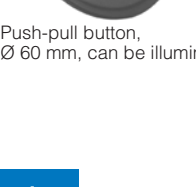
	Version	Inscription	Color of actuator	DT	Order No.	PS*	Weight per PU, approx. kg
Pushbuttons with holders							
	Pushbutton with flat button		black	▶	3SB35 00-0AA11	5 units	0.074
			red	▶	3SB35 00-0AA21	5 units	0.074
			yellow	B	3SB35 00-0AA31	5 units	0.074
			green	▶	3SB35 00-0AA41	5 units	0.074
			blue	B	3SB35 00-0AA51	5 units	0.074
			white	▶	3SB35 00-0AA61	5 units	0.074
			gray[1]	▶	3SB35 00-0AB51	5 units	0.073
			clear[1]	B	3SB35 00-0AA71	5 units	0.074
		I	green	B	3SB35 00-0AA81	5 units	0.074
		O	red	B	3SB35 00-0AB01	5 units	0.074
		I	white	B	3SB35 00-0AB11	5 units	0.074
		O	black	B	3SB35 00-0AB21	5 units	0.074
	Pushbutton with raised button		black	B	3SB35 00-0BA11	1 unit	0.075
			red	B	3SB35 00-0BA21	1 unit	0.075
			yellow	B	3SB35 00-0BA31	1 unit	0.075
			green	B	3SB35 00-0BA41	1 unit	0.074
			blue	B	3SB35 00-0BA51	1 unit	0.073
			white	B	3SB35 00-0BA61	1 unit	0.075
	Pushbutton with raised front ring (Height 15.5 mm)		black	B	3SB35 00-0AA12	1 unit	0.075
			red	B	3SB35 00-0AA22	1 unit	0.079
			yellow	B	3SB35 00-0AA32	1 unit	0.074
			green	B	3SB35 00-0AA42	1 unit	0.075
			blue	B	3SB35 00-0AA52	1 unit	0.074
			white	B	3SB35 00-0AA62	1 unit	0.079
	Illuminated pushbutton with flat button incl. holder for 3 elements		red[1]	▶	3SB35 01-0AA21	5 units	0.075
			yellow[1]	B	3SB35 01-0AA31	5 units	0.075
			green[1]	▶	3SB35 01-0AA41	5 units	0.075
			blue[1]	B	3SB35 01-0AA51	5 units	0.075
			white	B	3SB35 01-0AA61	5 units	0.075
			clear[1]	▶	3SB35 01-0AA71	5 units	0.075
	Illuminated pushbutton with raised button incl. holder for 3 elements		red	B	3SB35 01-0BA21	1 unit	0.074
			yellow	B	3SB35 01-0BA31	1 unit	0.075
			green	B	3SB35 01-0BA41	1 unit	0.076
			blue	B	3SB35 01-0BA51	1 unit	0.076
			clear	B	3SB35 01-0BA71	1 unit	0.075
	Pushbutton with flat button, latching, unlatching by pressing again		black	B	3SB35 00-0DA11	1 unit	0.077
			red	B	3SB35 00-0DA21	1 unit	0.076
			yellow	B	3SB35 00-0DA31	1 unit	0.076
			green	B	3SB35 00-0DA41	1 unit	0.077
			blue	B	3SB35 00-0DA51	1 unit	0.078
			white	B	3SB35 00-0DA61	1 unit	0.075
			gray	B	3SB35 00-0DB51	1 unit	0.077
	Illuminated pushbutton with flat button, latching, unlatching by pressing again		red[1]	B	3SB35 01-0DA21	1 unit	0.078
			yellow[1]	B	3SB35 01-0DA31	1 unit	0.078
			green[1]	B	3SB35 01-0DA41	1 unit	0.078
			blue[1]	B	3SB35 01-0DA51	1 unit	0.075
			white	B	3SB35 01-0DA61	1 unit	0.078
			clear[1]	B	3SB35 01-0DA71	1 unit	0.078

Pushbutton with flat button

Pushbutton with raised button

Pushbutton with raised front ring

Illuminated pushbutton with flat button

Illuminated pushbutton with raised button

1) Inscription is possible by inserting a label.

Metal version, round
Actuating and signaling elements
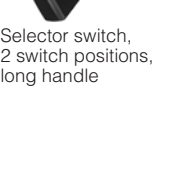
Version	Color of actuator	DT	Order No.	PS*	Weight per PU, approx. kg
Mushroom pushbuttons with holders					
Mushroom pushbutton, Ø 30 mm	black	B	**3SB35 00-1DA11**	1 unit	0.080
	red	B	**3SB35 00-1DA21**	1 unit	0.081
	yellow	B	**3SB35 00-1DA31**	1 unit	0.081
	green	B	**3SB35 00-1DA41**	1 unit	0.080
Mushroom pushbutton, Ø 40 mm	black	B	**3SB35 00-1GA11**	1 unit	0.084
	red	B	**3SB35 00-1GA21**	1 unit	0.084
	yellow	B	**3SB35 00-1GA31**	1 unit	0.084
	green	B	**3SB35 00-1GA41**	1 unit	0.084
Mushroom pushbutton, Ø 60 mm	black	B	**3SB35 00-1QA11**	1 unit	0.090
	red	B	**3SB35 00-1QA21**	1 unit	0.090
	yellow	B	**3SB35 00-1QA31**	1 unit	0.090
	green	B	**3SB35 00-1QA41**	1 unit	0.090
Illuminated mushroom pushbutton, Ø 30 mm incl. holder for 3 elements	yellow	B	**3SB35 01-1DA31**	1 unit	0.080
	green	B	**3SB35 01-1DA41**	1 unit	0.079
	white	B	**3SB35 01-1DA61**	1 unit	0.081
Illuminated mushroom pushbutton, Ø 40 mm incl. holder for 3 elements	yellow	B	**3SB35 01-1GA31**	1 unit	0.084
	green	B	**3SB35 01-1GA41**	1 unit	0.085
	white	B	**3SB35 01-1GA61**	1 unit	0.085
Illuminated mushroom pushbutton, Ø 60 mm incl. holder for 3 elements	yellow	B	**3SB35 01-1QA31**	1 unit	0.091
	green	B	**3SB35 01-1QA41**	1 unit	0.091
	white	B	**3SB35 01-1QA61**	1 unit	0.090
Push-pull button, Ø 30 mm, latching pull to unlatch	black	B	**3SB35 00-1EA11**	1 unit	0.081
	red	B	**3SB35 00-1EA21**	1 unit	0.080
Push-pull button, Ø 40 mm, latching pull to unlatch	black	B	**3SB35 00-1CA11**	1 unit	0.084
	red	B	**3SB35 00-1CA21**	1 unit	0.084
Push-pull button, Ø 60 mm, latching unlatches by pulling	black	B	**3SB35 00-1RA11**	1 unit	0.090
	red	B	**3SB35 00-1RA21**	1 unit	0.091
Push-pull button Ø 30 mm, latching, can be illuminated incl. holder for 3 elements, pull to unlatch	red	B	**3SB35 01-1EA21**	1 unit	0.082
	yellow	B	**3SB35 01-1EA31**	1 unit	0.080
	green	B	**3SB35 01-1EA41**	1 unit	0.080
	blue	B	**3SB35 01-1EA51**	1 unit	0.082
	clear	B	**3SB35 01-1EA71**	1 unit	0.080
Push-pull button, Ø 40 mm, can be illuminated, latching incl. holder for 3 elements pull to unlatch	red	B	**3SB35 01-1CA21**	1 unit	0.084
	yellow	B	**3SB35 01-1CA31**	1 unit	0.085
	green	B	**3SB35 01-1CA41**	1 unit	0.086
	blue	B	**3SB35 01-1CA51**	1 unit	0.084
	clear	B	**3SB35 01-1CA71**	1 unit	0.084
Push-pull button, Ø 60 mm, can be illuminated, latching incl. holder for 3 elements pull to unlatch	red	B	**3SB35 01-1RA21**	1 unit	0.092
	yellow	B	**3SB35 01-1RA31**	1 unit	0.089
	green	D	**3SB35 01-1RA41**	1 unit	0.090
	blue	B	**3SB35 01-1RA51**	1 unit	0.120
	clear	D	**3SB35 01-1RA71**	1 unit	0.090

Mushroom pushbutton, Ø 30 mm

Mushroom pushbutton, Ø 40 mm

Illuminated mushroom pushbutton, Ø 60 mm

Push-pull button, Ø 30 mm

Push-pull button, Ø 40 mm

Push-pull button, Ø 60 mm, can be illuminated

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* This quantity or a multiple thereof can be ordered

Metal version, round
Actuating and signaling elements

Version	Version Illumination	Color of actuator	DT	Order No.	PS*	Weight per PU, approx. kg
Selector switches with holders						
Selector switch with 2 switch positions						
Switching sequence O-I, 90° operating angle, latching	**Non-illuminated, standard version**	black	▶	3SB35 00-2HA11	1 unit	0.077
		red	A	3SB35 00-2HA21	1 unit	0.077
		green	D	3SB35 00-2HA41	1 unit	0.077
		white	B	3SB35 00-2HA61	1 unit	0.077
Switching sequence O-I, 50° operating angle, latching	**Non-illuminated, standard version**	black	▶	3SB35 00-2KA11	1 unit	0.078
		red	B	3SB35 00-2KA21	1 unit	0.078
		green	B	3SB35 00-2KA41	1 unit	0.078
		white	B	3SB35 00-2KA61	1 unit	0.078
	Illuminated, standard version, incl. holder for 3 elements	red	B	3SB35 01-2KA21	1 unit	0.078
		yellow	B	3SB35 01-2KA31	1 unit	0.078
		green	B	3SB35 01-2KA41	1 unit	0.079
		blue	B	3SB35 01-2KA51	1 unit	0.079
		clear	B	3SB35 01-2KA71	1 unit	0.079
	Non-illuminated, heavy-duty version	black	C	3SB35 00-2PA11	1 unit	0.102
		red	C	3SB35 00-2PA21	1 unit	0.103
		green	C	3SB35 00-2PA41	1 unit	0.101
		white	C	3SB35 00-2PA61	1 unit	0.101
	Illuminated, heavy-duty version, incl. holder for 3 elements	red	C	3SB35 01-2PA21	1 unit	0.103
		yellow	C	3SB35 01-2PA31	1 unit	0.102
		green	C	3SB35 01-2PA41	1 unit	0.103
		blue	C	3SB35 01-2PA51	1 unit	0.103
		clear	C	3SB35 01-2PA71	1 unit	0.103
	Non-illuminated, long handle	black	C	3SB35 00-3PA11	1 unit	0.101
		red	C	3SB35 00-3PA21	1 unit	0.101
		green	C	3SB35 00-3PA41	1 unit	0.102
		white	C	3SB35 00-3PA61	1 unit	0.104
	Illuminated, long handle, incl. holder for 3 elements	red	C	3SB35 01-3PA21	1 unit	0.103
		yellow	C	3SB35 01-3PA31	1 unit	0.103
		green	C	3SB35 01-3PA41	1 unit	0.103
		blue	C	3SB35 01-3PA51	1 unit	0.103
		clear	C	3SB35 01-3PA71	1 unit	0.103
Switching sequence O-I, 50° operating angle, momentary contact type (return from right)	**Non-illuminated, standard version**	black	▶	3SB35 00-2LA11	1 unit	0.078
		red	B	3SB35 00-2LA21	1 unit	0.075
		green	B	3SB35 00-2LA41	1 unit	0.076
		white	B	3SB35 00-2LA61	1 unit	0.078
	Illuminated, standard version, incl. holder for 3 elements	red	B	3SB35 01-2LA21	1 unit	0.080
		yellow	B	3SB35 01-2LA31	1 unit	0.082
		green	B	3SB35 01-2LA41	1 unit	0.078
		blue	B	3SB35 01-2LA51	1 unit	0.077
		clear	B	3SB35 01-2LA71	1 unit	0.078
	Non-illuminated, heavy-duty version	black	C	3SB35 00-2QA11	1 unit	0.103
		red	C	3SB35 00-2QA21	1 unit	0.098
		green	C	3SB35 00-2QA41	1 unit	0.101
		white	C	3SB35 00-2QA61	1 unit	0.101
	Illuminated, heavy-duty version, incl. holder for 3 elements	red	C	3SB35 01-2QA21	1 unit	0.103
		yellow	C	3SB35 01-2QA31	1 unit	0.102
		green	C	3SB35 01-2QA41	1 unit	0.103
		blue	C	3SB35 01-2QA51	1 unit	0.101
		clear	C	3SB35 01-2QA71	1 unit	0.105
	Non-illuminated, long handle	black	C	3SB35 00-3QA11	1 unit	0.102
		red	C	3SB35 00-3QA21	1 unit	0.100
		green	C	3SB35 00-3QA41	1 unit	0.100
		white	C	3SB35 00-3QA61	1 unit	0.102
	Illuminated, long handle, incl. holder for 3 elements	red	C	3SB35 01-3QA21	1 unit	0.102
		yellow	C	3SB35 01-3QA31	1 unit	0.103
		green	C	3SB35 01-3QA41	1 unit	0.103
		blue	C	3SB35 01-3QA51	1 unit	0.103
		clear	C	3SB35 01-3QA71	1 unit	0.103

Selector switch, 2 switch positions, standard version

Selector switch, 2 switch positions, heavy-duty version

Selector switch, 2 switch positions, long handle

9

Metal version, round
Actuating and signaling elements

	Version	Version illumination	Color of actuator	DT	Order No.	PS*	Weight per PU, approx.
							kg
Selector switches with holders							
	Non-illuminated selector switch with 3 switch positions						
Selector switch, 3 switch positions, standard version	Switching sequence I-O-II 2 × 50° operating angle latching	**Non-illuminated, standard version**	black	►	3SB35 00-2DA11	1 unit	0.078
			red	B	3SB35 00-2DA21	1 unit	0.078
			green	B	3SB35 00-2DA41	1 unit	0.079
			white	B	3SB35 00-2DA61	1 unit	0.075
		Illuminated, standard version incl. holder for 3 elements	red	B	3SB35 01-2DA21	1 unit	0.079
			yellow	B	3SB35 01-2DA31	1 unit	0.079
			green	B	3SB35 01-2DA41	1 unit	0.079
			blue	B	3SB35 01-2DA51	1 unit	0.078
			clear	B	3SB35 01-2DA71	1 unit	0.079
		Non-illuminated, heavy-duty version	black	C	3SB35 00-2SA11	1 unit	0.104
			red	C	3SB35 00-2SA21	1 unit	0.101
			green	C	3SB35 00-2SA41	1 unit	0.101
			white	C	3SB35 00-2SA61	1 unit	0.101
		Illuminated, heavy-duty version incl. holder for 3 elements	red	C	3SB35 01-2SA21	1 unit	0.104
Selector switch, 3 switch positions, heavy-duty version			yellow	C	3SB35 01-2SA31	1 unit	0.101
			green	C	3SB35 01-2SA41	1 unit	0.104
			blue	C	3SB35 01-2SA51	1 unit	0.102
			clear	C	3SB35 01-2SA71	1 unit	0.103
		Non-illuminated, long handle	black	C	3SB35 00-3SA11	1 unit	0.104
			red	C	3SB35 00-3SA21	1 unit	0.102
			green	C	3SB35 00-3SA41	1 unit	0.102
			white	C	3SB35 00-3SA61	1 unit	0.103
		Illuminated, long handle, incl. holder for 3 elements	red	C	3SB35 01-3SA21	1 unit	0.103
			yellow	C	3SB35 01-3SA31	1 unit	0.103
			green	C	3SB35 01-3SA41	1 unit	0.102
Selector switch, 3 switch positions, long handle			blue	C	3SB35 01-3SA51	1 unit	0.103
			clear	C	3SB35 01-3SA71	1 unit	0.101
	Switching sequence I-O-II, 2 × 50° operating angle, latching (return from right and left)	**Non-illuminated, standard version**	black	►	3SB35 00-2EA11	1 unit	0.077
			red	B	3SB35 00-2EA21	1 unit	0.076
			green	B	3SB35 00-2EA41	1 unit	0.077
			white	B	3SB35 00-2EA61	1 unit	0.075
		Illuminated, standard version incl. holder for 3 elements	red	B	3SB35 01-2EA21	1 unit	0.077
			yellow	B	3SB35 01-2EA31	1 unit	0.077
			green	B	3SB35 01-2EA41	1 unit	0.078
			blue	B	3SB35 01-2EA51	1 unit	0.079
			clear	B	3SB35 01-2EA71	1 unit	0.079
		Non-illuminated, heavy-duty version	black	C	3SB35 00-2TA11	1 unit	0.104
			red	C	3SB35 00-2TA21	1 unit	0.100
			green	C	3SB35 00-2TA41	1 unit	0.101
			white	C	3SB35 00-2TA61	1 unit	0.100
		Illuminated, heavy-duty version incl. holder for 3 elements	red	C	3SB35 01-2TA21	1 unit	0.102
			yellow	C	3SB35 01-2TA31	1 unit	0.103
			green	C	3SB35 01-2TA41	1 unit	0.101
			blue	C	3SB35 01-2TA51	1 unit	0.101
			clear	C	3SB35 01-2TA71	1 unit	0.104
		Non-illuminated, long handle	black	C	3SB35 00-3TA11	1 unit	0.104
			red	C	3SB35 00-3TA21	1 unit	0.101
			green	C	3SB35 00-3TA41	1 unit	0.102
			white	C	3SB35 00-3TA61	1 unit	0.102
		Illuminated, long handle incl. holder for 3 elements	red	C	3SB35 01-3TA21	1 unit	0.102
			yellow	C	3SB35 01-3TA31	1 unit	0.102
			green	C	3SB35 01-3TA41	1 unit	0.103
			blue	C	3SB35 01-3TA51	1 unit	0.102
			clear	C	3SB35 01-3TA71	1 unit	0.103

9

* This quantity or a multiple thereof can be ordered

**Metal version, round
Actuating and signaling elements**

Version		Color of actuator	DT	Order No.	PS*	Weight per PU, approx.
						kg
Selector switches with holders						
Non-illuminated selector switch with 3 switch positions						
Switching sequence I-O-II 2 × 50° operating angle momentary contact type to the left, latching to the right (return from left)	**Non-illuminated,**[1] **standard version**	black	B	**3SB35 00-2GA11**	1 unit	0.078
		red	B	**3SB35 00-2GA21**	1 unit	0.076
		green	B	**3SB35 00-2GA41**	1 unit	0.075
		white	B	**3SB35 00-2GA61**	1 unit	0.076
	Non-illuminated, heavy-duty version	black	C	**3SB35 00-2VA11**	1 unit	0.102
		red	C	**3SB35 00-2VA21**	1 unit	0.102
		green	C	**3SB35 00-2VA41**	1 unit	0.100
		white	C	**3SB35 00-2VA61**	1 unit	0.100
	Non-illuminated, long handle	black	C	**3SB35 00-3VA11**	1 unit	0.101
		red	C	**3SB35 00-3VA21**	1 unit	0.102
		green	C	**3SB35 00-3VA41**	1 unit	0.100
		white	C	**3SB35 00-3VA61**	1 unit	0.100
Switching sequence I-O-II 2 × 50° operating angle latching to the left, momentary contact type to the right (return from right)	**Non-illuminated,**[1] **standard version**	black	B	**3SB35 00-2FA11**	1 unit	0.077
		red	B	**3SB35 00-2FA21**	1 unit	0.076
		green	B	**3SB35 00-2FA41**	1 unit	0.075
		white	B	**3SB35 00-2FA61**	1 unit	0.076
	Non-illuminated, heavy-duty version	black	C	**3SB35 00-2UA11**	1 unit	0.101
		red	C	**3SB35 00-2UA21**	1 unit	0.101
		green	C	**3SB35 00-2UA41**	1 unit	0.102
		white	C	**3SB35 00-2UA61**	1 unit	0.101
	Non-illuminated, long handle	black	C	**3SB35 00-3UA11**	1 unit	0.102
		red	C	**3SB35 00-3UA21**	1 unit	0.100
		green	C	**3SB35 00-3UA41**	1 unit	0.100
		white	C	**3SB35 00-3UA61**	1 unit	0.102

Selector switch, 3 switch positions, standard version

Selector switch, 3 switch positions, heavy-duty version

Selector switch, 3 switch positions, long handle

1) Also available as illuminated selector switch. When ordering, add **"–Z"** to the order number and indicate "illuminated selector switch" and the color in plain text.

9

Metal version, round
Actuating and signaling elements

Version	Type	Lock No./ Color	Key removal position	DT	Order No.	PS*	Weight per PU, approx. kg
Key-operated switches with holders							
Key-operated switch with 2 keys, 2 switch positions							
Switching sequence O-I, 50° operating angle, latching	RONIS	SB 30	O+I	▶	3SB35 00-4AD11	1 unit	0.108
			O	▶	3SB35 00-4AD01	1 unit	0.108
			I	B	3SB35 00-4AD21	1 unit	0.107
	CES	SSG 10	O+I	▶	3SB35 00-4LD11	1 unit	0.186
			O	▶	3SB35 00-4LD01	1 unit	0.190
			I	B	3SB35 00-4LD21	1 unit	0.190
		LSG 1	O+I	B	3SB35 00-4LF01	1 unit	0.187
			O	B	3SB35 00-4LF11	1 unit	0.190
	IKON	360012 K1	O+I	B	3SB35 00-5LD11	1 unit	0.196
			O	B	3SB35 00-5LD01	1 unit	0.196
	BKS	S1	O+I	B	3SB35 00-5AD11	1 unit	0.184
			O	B	3SB35 00-5AD01	1 unit	0.188
			I	B	3SB35 00-5AD21	1 unit	0.186
		E1 for VW[1]	O+I	B	3SB35 00-5AE01	1 unit	0.169
			O	B	3SB35 00-5AE11	1 unit	0.176
		E2 for VW[1]	O+I	B	3SB35 00-5AE21	1 unit	0.170
			O	B	3SB35 00-5AE31	1 unit	0.174
		E7 for VW[1]	O+I	B	3SB35 00-5AE41	1 unit	0.170
			O	B	3SB35 00-5AE51	1 unit	0.176
		E9 for VW[1]	O+I	B	3SB35 00-5AE61	1 unit	0.169
			O	B	3SB35 00-5AE71	1 unit	0.174
	O.M.R.[2]	73038 light blue	O+I	B	3SB35 00-3AG11	1 unit	0.173
			O	B	3SB35 00-3AG01	1 unit	0.175
			I	B	3SB35 00-3AG21	1 unit	0.173
		73037 red	O+I	B	3SB35 00-3AH11	1 unit	0.172
			O	B	3SB35 00-3AH01	1 unit	0.172
			I	B	3SB35 00-3AH21	1 unit	0.174
		73034 black	O+I	B	3SB35 00-3AJ11	1 unit	0.172
			O	B	3SB35 00-3AJ01	1 unit	0.178
			I	B	3SB35 00-3AJ21	1 unit	0.173
		73033 yellow	O+I	B	3SB35 00-3AK11	1 unit	0.174
			O	B	3SB35 00-3AK01	1 unit	0.172
			I	B	3SB35 00-3AK21	1 unit	0.178
Switching sequence O-I, 50° operating angle, momentary contact type (return from right)	RONIS	SB 30	O	▶	3SB35 00-4BD01	1 unit	0.108
	CES	SSG 10	O	▶	3SB35 00-4MD01	1 unit	0.191
		LSG 1	O	B	3SB35 00-4MF11	1 unit	0.190
	IKON	360012 K1	O	B	3SB35 00-5MD01	1 unit	0.195
	BKS	S1	O	B	3SB35 00-5BD01	1 unit	0.187
	O.M.R.[2]	73038 light blue	O	B	3SB35 00-3BG01	1 unit	0.174
		73037 red	O	B	3SB35 00-3BH01	1 unit	0.173
		73034 black	O	B	3SB35 00-3BJ01	1 unit	0.173
		73033 yellow	O	B	3SB35 00-3BK01	1 unit	0.174

RONIS key-operated switch

CES key-operated switch

IKON key-operated switch

BKS key-operated switch

O.M.R. key-operated switch

1) Supplied without the key.
2) Designed to FIAT specification; also available for other customers.

* This quantity or a multiple thereof can be ordered

Metal version, round
Actuating and signaling elements

Version	Type	Lock No./ Color	Key removal position	DT	Order No.	PS*	Weight per PU, approx. kg
Key-operated switches with holders							
Key-operated switch with 2 keys, 3 switch positions							
Switching sequence I-O-II 2 × 50° operating angle latching	RONIS	SB 30	O+I+II	B	**3SB35 00-4DD11**	1 unit	0.108
			O	B	**3SB35 00-4DD01**	1 unit	0.108
			I+II	B	**3SB35 00-4DD41**	1 unit	0.112
			I	B	**3SB35 00-4DD21**	1 unit	0.108
			II	B	**3SB35 00-4DD31**	1 unit	0.107
			O+I	B	**3SB35 00-4DD51**	1 unit	0.110
	CES	SSG 10	O+I+II	B	**3SB35 00-4PD11**	1 unit	0.187
			O	B	**3SB35 00-4PD01**	1 unit	0.191
			I+II	B	**3SB35 00-4PD41**	1 unit	0.189
			I	B	**3SB35 00-4PD21**	1 unit	0.190
			II	B	**3SB35 00-4PD31**	1 unit	0.191
	IKON	360012 K1	O+I+II	B	**3SB35 00-5PD11**	1 unit	0.193
			O	B	**3SB35 00-5PD01**	1 unit	0.196
			I+II	C	**3SB35 00-5PD41**	1 unit	0.180
	BKS	S1	O+I+II	B	**3SB35 00-5DD11**	1 unit	0.183
			O	C	**3SB35 00-5DD01**	1 unit	0.187
			I+II	C	**3SB35 00-5DD41**	1 unit	0.184
			I	B	**3SB35 00-5DD21**	1 unit	0.187
			II	C	**3SB35 00-5DD31**	1 unit	0.187
	O.M.R[1]	73038 light blue	I+O+II	B	**3SB35 00-3DG11**	1 unit	0.171
			O	B	**3SB35 00-3DG01**	1 unit	0.171
			I+II	C	**3SB35 00-3DG41**	1 unit	0.174
		73037 red	I+O+II	B	**3SB35 00-3DH11**	1 unit	0.173
			O	B	**3SB35 00-3DH01**	1 unit	0.173
			I+II	C	**3SB35 00-3DH41**	1 unit	0.170
		73034 black	I+O+II	B	**3SB35 00-3DJ11**	1 unit	0.172
			O	B	**3SB35 00-3DJ01**	1 unit	0.173
			I+II	C	**3SB35 00-3DJ41**	1 unit	0.171
		73033 yellow	I+O+II	C	**3SB35 00-3DK11**	1 unit	0.172
			O	B	**3SB35 00-3DK01**	1 unit	0.173
			I+II	C	**3SB35 00-3DK41**	1 unit	0.173
Switching sequence I-O-II, 2 × 50° operating angle, latching (return from right and left)	RONIS	SB 30	O	B	**3SB35 00-4ED01**	1 unit	0.109
	CES	SSG 10	O	B	**3SB35 00-4QD01**	1 unit	0.191
	IKON	360012 K1	O	B	**3SB35 00-5QD01**	1 unit	0.196
	BKS	S1	O	B	**3SB35 00-5ED01**	1 unit	0.189
	O.M.R	73038 light blue	O	C	**3SB35 00-3EG01**	1 unit	0.172
		73037 red	O	B	**3SB35 00-3EH01**	1 unit	0.175
		73034 black	O	B	**3SB35 00-3EJ01**	1 unit	0.173
		73033 yellow	O	B	**3SB35 00-3EK01**	1 unit	0.175

RONIS key-operated switch

CES key-operated switch

IKON key-operated switch

BKS key-operated switch

O.M.R. key-operated switch

1) Designed to FIAT specification; also available for other customers.

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Metal version, round
Actuating and signaling elements

| Version	Type	Lock No./ Color	Key removal position	DT	Order No.	PS*	Weight per PU, approx. kg
Key-operated switches with holder							
Key-operated switch with 2 keys, 3 switch positions							
Switching sequence I-O-II 2 × 50° operating angle momentary contact type to the left, latching to the right (return from left)	RONIS	SB 30	O + II	B	**3SB35 00-4GD61**	1 unit	0.107
			O	B	**3SB35 00-4GD01**	1 unit	0.108
			II	B	**3SB35 00-4GD31**	1 unit	0.106
	CES	SSG 10	O + II	B	**3SB35 00-4SD61**	1 unit	0.190
			O	B	**3SB35 00-4SD01**	1 unit	0.191
			II	B	**3SB35 00-4SD31**	1 unit	0.191
	IKON	360012 K1	O	C	**3SB35 00-5SD01**	1 unit	0.196
			II	C	**3SB35 00-5SD31**	1 unit	0.180
	BKS	S1	O + II	C	**3SB35 00-5GD61**	1 unit	0.175
			O	C	**3SB35 00-5GD01**	1 unit	0.175
			II	B	**3SB35 00-5GD31**	1 unit	0.188
	O.M.R	73038	O	C	**3SB35 00-3GG01**	1 unit	0.165
		light blue	II	C	**3SB35 00-3GG31**	1 unit	0.174
		73037	O	C	**3SB35 00-3GH01**	1 unit	0.173
		red	II	C	**3SB35 00-3GH31**	1 unit	0.165
		73034	O	C	**3SB35 00-3GJ01**	1 unit	0.170
		black	II	C	**3SB35 00-3GJ31**	1 unit	0.165
		73033	O	C	**3SB35 00-3GK01**	1 unit	0.165
		yellow	II	C	**3SB35 00-3GK31**	1 unit	0.165
Switching sequence I-O-II 2 × 50° operating angle latching to the left, momentary contact type to the right (return from right)	RONIS	SB 30	O+I	B	**3SB35 00-4FD51**	1 unit	0.107
			O	B	**3SB35 00-4FD01**	1 unit	0.108
			I	B	**3SB35 00-4FD21**	1 unit	0.109
	CES	SSG 10	O+I	B	**3SB35 00-4RD51**	1 unit	0.191
			O	B	**3SB35 00-4RD01**	1 unit	0.191
			I	B	**3SB35 00-4RD21**	1 unit	0.191
	IKON	360012 K1	O+I	C	**3SB35 00-5RD51**	1 unit	0.180
			O	C	**3SB35 00-5RD01**	1 unit	0.180
			I	B	**3SB35 00-5RD21**	1 unit	0.200
	BKS	S1	O+I	C	**3SB35 00-5FD51**	1 unit	0.175
			O	B	**3SB35 00-5FD01**	1 unit	0.190
			I	B	**3SB35 00-5FD21**	1 unit	0.190
	O.M.R	73038	O	B	**3SB35 00-3FG01**	1 unit	0.173
		light blue	I	B	**3SB35 00-3FG21**	1 unit	0.172
		73037	O	C	**3SB35 00-3FH01**	1 unit	0.175
		red	I	C	**3SB35 00-3FH21**	1 unit	0.165
		73034	O	B	**3SB35 00-3FJ01**	1 unit	0.175
		black	I	C	**3SB35 00-3FJ21**	1 unit	0.175
		73033	O	B	**3SB35 00-3FK01**	1 unit	0.171
		yellow	I	B	**3SB35 00-3FK21**	1 unit	0.130

RONIS key-operated switch

CES key-operated switch

IKON key-operated switch

BKS key-operated switch

O.M.R. key-operated switch

* This quantity or a multiple thereof can be ordered

**Metal version, round
Actuating and signaling elements**

Version	Color of actuator / position for key removal	DT	Order No.	PS*	Weight per PU, approx.
					kg
EMERGENCY-STOP control devices according to EN 418 and IEC 60947-5-5 with holder[1] **Also for use with 3TK28 contactor safety combinations (see Section 11)**					
EMERGENCY-STOP mushroom pushbutton, Ø 32 mm, with positive latching function acc. to EN 418, rotate to unlatch	red	B	3SB35 00-1FA20	1 unit	0.080
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, with positive latching function acc. to EN 418, rotate to unlatch	red	►	3SB35 00-1HA20	1 unit	0.114
with unlocking device		B	3SB35 00-1TA20	1 unit	0.113
EMERGENCY-STOP mushroom pushbutton, Ø 60 mm, with positive latching function acc. to EN 418, rotate to unlatch	red	B	3SB35 00-1AA20	1 unit	0.145
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, **with RONIS key-operated switch** (with 2 keys), lock No. SB 30, with positive latching to EN 418, unlocking using key	red ON/OFF	B	3SB35 00-1BA20	1 unit	0.145
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, **with CES key-operated switch** (with 2 keys), lock No. SSG 10, with positive latching to EN 418, unlocking using key	red ON/OFF	B	3SB35 00-1KA20	1 unit	0.173
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, **with IKON key-operated switch** (with 2 keys), lock No. 360012 K1 with positive latching to EN 418, unlocking using key	red ON/OFF	B	3SB35 00-1UA20	1 unit	0.173
EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, **with BKS key-operated switch** (with 2 keys), lock No. S1 , with positive latching to EN 418, unlocking using key	red ON/OFF	B	3SB35 00-1LA20	1 unit	0.171
Mushroom pushbutton, Ø 40 mm, **with O.M.R. key-operated switch** (with 2 keys), lock No. 73037 with positive latching to EN 418, unlocking using key	red ON/OFF	B	3SB35 00-1MA20	1 unit	0.179

Mushroom diameter 32 mm

Mushroom diameter 40 mm, rotate to unlatch

Mushroom diameter 40 mm, pull to unlatch

Mushroom diameter 60 mm

Mushroom diameter 40 mm, with key-operated switch

1) The yellow backing plates must be ordered separately, see Accessories.

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* This quantity or a multiple thereof can be ordered

Metal version, round
Actuating and signaling elements
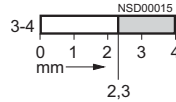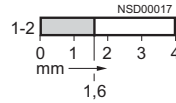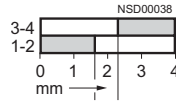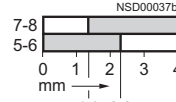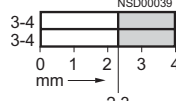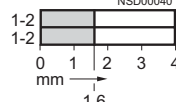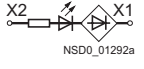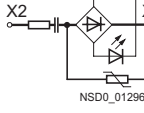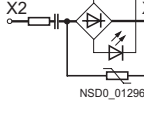
	Version	Color of lens	DT	Order No.	PS*	Weight per PU, approx. kg
Signaling elements with holders						
	Indicator light **with lens with concentric rings**	red	►	3SB35 01-6BA20	5 units	0.062
		yellow	B	3SB35 01-6BA30	5 units	0.062
		green	►	3SB35 01-6BA40	5 units	0.062
		blue	B	3SB35 01-6BA50	5 units	0.062
		white	B	3SB35 01-6BA60	5 units	0.062
		clear	►	3SB35 01-6BA70	5 units	0.062
	Indicator light **with smooth lens**	red	B	3SB35 01-6AA20	5 units	0.062
		yellow	B	3SB35 01-6AA30	5 units	0.062
		green	B	3SB35 01-6AA40	5 units	0.062
		blue	B	3SB35 01-6AA50	5 units	0.062
		white	►	3SB35 01-6AA60	5 units	0.062
		clear	B	3SB35 01-6AA70	5 units	0.062

Indicator light with smooth lens

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* This quantity or a multiple thereof can be ordered

Switch blocks and lampholders

Selection and ordering data

Version	Symbols	Color / contact travel ▢ contact closed ▢ contact open	DT	Order No.	PS*	Weight per PU, approx. kg
Switch blocks with screw terminals, for front plate mounting						
Switch block with one contact 50 mm mounting depth						
1 NO	NSD00006	NSD00015 3-4 / 0 1 2 3 4 mm / 2,3	►	3SB34 00-0B	1 unit	0.011
1 NC → 1)	NSD00007	NSD00017 1-2 / 0 1 2 3 4 mm / 1,6	►	3SB34 00-0C	1 unit	0.011
Switch blocks with 2 contacts 65 mm mounting depth (incl. device identification label)						
1 NO + 1 NC → 1)	NSD00033	NSD00038 3-4 / 1-2 / 0 1 2 3 4 mm / 1,6 2,3	►	3SB34 00-0A	1 unit	0.018
1 NO leading + 1 NC delayed	NSD00034	NSD00037b 7-8 / 5-6 / 0 1 2 3 4 mm / 1,3 2,2	B	3SB34 00-0H	1 unit	0.018
2 NO	NSD00035	NSD00039 3-4 / 3-4 / 0 1 2 3 4 mm / 2,3	B	3SB34 00-0D	1 unit	0.018
2 NC → 1)	NSD00036	NSD00040 1-2 / 1-2 / 0 1 2 3 4 mm / 1,6	B	3SB34 00-0E	1 unit	0.018
Lampholders with integrated LED						
AC/DC 24 V	X2 — X1 NSD0_01292a	yellow	B	3SB34 00-1PA	1 unit	0.011
		red	►	3SB34 00-1PB	1 unit	0.011
		green	►	3SB34 00-1PC	1 unit	0.011
		blue	B	3SB34 00-1PD	1 unit	0.011
		white	►	3SB34 00-1PE	1 unit	0.011
AC 110 V	X2 — X1 NSD0_01296a	yellow	B	3SB34 00-1QA	1 unit	0.011
		red	B	3SB34 00-1QB	1 unit	0.012
		green	B	3SB34 00-1QC	1 unit	0.012
		blue	B	3SB34 00-1QD	1 unit	0.011
		white	B	3SB34 00-1QE	1 unit	0.012
AC 230 V	X2 — X1 NSD0_01296a	yellow	B	3SB34 00-1RA	1 unit	0.012
		red	►	3SB34 00-1RB	1 unit	0.012
		green	►	3SB34 00-1RC	1 unit	0.012
		blue	B	3SB34 00-1RD	1 unit	0.012
		white	►	3SB34 00-1RE	1 unit	0.012

1) Positive opening according to IEC 60947-5-1, Appendix K.

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Switch blocks and lampholders

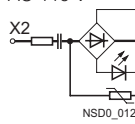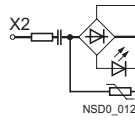| Version	Rated voltage lamp	Symbols	DT	Order No.	PS*	Weight per PU, approx.
	V					kg
Switch blocks with screw connection, for front plate mounting						
BA 9s lampholder, 50 mm mounting depth						
without lamp	according to lamp	X1 (L+) ⊗ X2 (L-) NSD00003	▶	**3SB34 00-1A**	1 unit	0.010
with 24 V incandescent lamp (3SX1 344)	AC/DC 24 V		B	**3SB34 00-1D**	1 unit	0.012
BA 9s lampholder, 50 mm mounting depth						
with built-in resistor for longer endurance and with 130 V lamp (3SX1 731) [1]	AC 110/130 V	X1 (L+) ▭ ⊗ X2 (L-) NSD00041	B	**3SB34 00-1B**	1 unit	0.013
with integrated voltage reducer and with 130 V lamp (3SX1 731)[1]	AC 230/240 V	X1 ▭ ⊗ ▷⊦ X2 NSD00042	B	**3SB34 00-1C**	1 unit	0.013
BA 9s lampholder, with separate lamp test function [2] [3]						
with integrated voltage reducer and with 130 V lamp (3SX1 731)[1]	AC 230/240 V	X5 X1 ▷⊦ ⊗ X2 NSD00043	B	**3SB34 00-1F**	1 unit	0.019
without lamp for incandescent lamp, max. 2.6 W for LED lamp, AC/DC Not suitable for LED, AC or DC	according to lamp	UC-LED X5 X1 (L+) ⊗ X2 (L-) NSD0_00044a	B	**3SB34 00-1G**	1 unit	0.016
without lamp for incandescent lamp, max. 2.6 W for LED lamp, AC or DC Also suitable for 230 V LED. For connecting to DC, X5 must be connected to L–.	according to lamp	X5 X2 (L-) X1 (L+) NSD00045	B	**3SB34 00-1L**	1 unit	0.017
without lamp for incandescent lamp, max. 2.6 W for glow lamp, AC	according to lamp	X5 X1 (L+) ⊕ ⊗ X2 (L-) NSD0_00046a	B	**3SB34 00-1H**	1 unit	0.016
Transformer for snapping onto 3SB34 00-1A lampholder for incandescent lamp, 2 W	127 V / 24 V	X1 ⊗ X2 NSD00047	B	**3SB34 00-3A**	1 unit	0.109
	240 V / 24 V		B	**3SB34 00-3C**	1 unit	0.108
	400 V / 24 V		B	**3SB34 00-3F**	1 unit	0.108
	127 V / 6 V		B	**3SB34 00-3M**	1 unit	0.108
	240 V / 6 V		B	**3SB34 00-3P**	1 unit	0.107
	400 V / 6 V		B	**3SB34 00-3S**	1 unit	0.107
Switch block with 2 diodes Type 1N 4007	U_{RMS} = max. 250 V I_{FAV} = 0.8 A at T_u = 60 °C	(L+) (L-) X5 ▷ X6 X7 ▷ X8 NSD00113	B	**3SB34 00-1N**	1 unit	0.015

1) Use these lamps only.
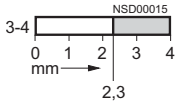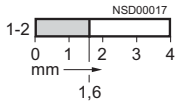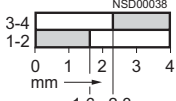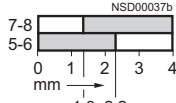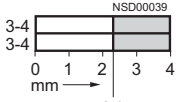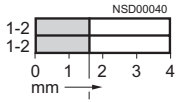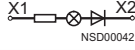
2) The lampholder with separate lamp test function can not be installed in an enclosure.

3) For example of circuits, see page 9/65.

Switch blocks and lampholders
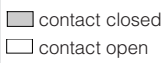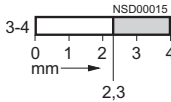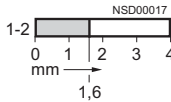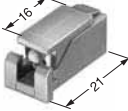
Version	Rated voltage lamp/ graphic symbol	Color/ contact travel ▓ contact closed ☐ contact open	DT	Order No.	PS*	Weight per PU, approx. kg
Switch blocks with spring-loaded terminals, for front panel mounting						
Switch block with 1 contact, 50 mm mounting depth, grid 30 mm x 30 mm						
1 NO	NSD00006	NSD00015 3-4 0 1 2 3 4 mm 2,3	B	**3SB34 03-0B**	1 unit	0.008
1 NC →1)	NSD00007	NSD00017 1-2 0 1 2 3 4 mm 1,6	B	**3SB34 03-0C**	1 unit	0.008
Switch block with 2 contacts, 65 mm mounting depth						
1 NO + 1 NC →1)	NSD00033	NSD00038 3-4 1-2 0 1 2 3 4 mm 1,6 2,3	B	**3SB34 03-0A**	1 unit	0.008
1 NO leading + 1 NC delayed	NSD00034	NSD00037b 7-8 5-6 0 1 2 3 4 mm 1,3 2,2	B	**3SB34 03-0H**	1 unit	0.008
2 NO	NSD00035	NSD00039 3-4 3-4 0 1 2 3 4 mm 2,3	B	**3SB34 03-0D**	1 unit	0.008
2 NC →1)	NSD00036	NSD00040 1-2 1-2 0 1 2 3 4 mm 1,6	B	**3SB34 03-0E**	1 unit	0.008
BA 9s lampholder, 50 mm mounting depth, 30 mm x 30 mm grid	according to lamp					
without lamp	X1 (L+) ⊗ X2 (L-) NSD00003		B	**3SB34 03-1A**	1 unit	0.008
with integrated voltage reducer and with 130 V lamp (3SX1 731)2)	AC 230/240 V X1 ⊗ X2 NSD00042		B	**3SB34 03-1C**	1 unit	0.010
Lampholder with integrated LED, 50 mm mounting depth, 30 mm x 30 mm grid	AC/DC 24 V X2 X1 NSD0_01292a	yellow red green blue white	B B B B B	**3SB34 03-1PA** **3SB34 03-1PB** **3SB34 03-1PC** **3SB34 03-1PD** **3SB34 03-1PE**	1 unit 1 unit 1 unit 1 unit 1 unit	0.010 0.010 0.010 0.010 0.010
	AC 110 V X2 X1 NSD0_01296a	yellow red green blue white	B B B B B	**3SB34 03-1QA** **3SB34 03-1QB** **3SB34 03-1QC** **3SB34 03-1QD** **3SB34 03-1QE**	1 unit 1 unit 1 unit 1 unit 1 unit	0.010 0.010 0.010 0.010 0.010
	AC 230 V X2 X1 NSD0_01296a	yellow red green blue white	B B B B B	**3SB34 03-1RA** **3SB34 03-1RB** **3SB34 03-1RC** **3SB34 03-1RD** **3SB34 03-1RE**	1 unit 1 unit 1 unit 1 unit 1 unit	0.010 0.010 0.010 0.010 0.010

1) Positive opening according to IEC 60947-5-1, Appendix K.
2) Use these lamps only.

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Switch blocks and lampholders

Version	Symbols	Contact travel ▨ contact closed ▯ contact open	DT	Order No.	PS*	Weight per PU, approx. kg
Holders for 3 switch blocks, for front panel mounting						
Holder for pushbuttons and switches [1] for snapping on 3 switch blocks			▶	**3SB39 01-0AB**	20 units	0.100
Holder for selector switches, key-operated switches and On-Off pushbuttons with pressure plate for actuating the central contact block			▶	**3SB39 01-0AC**	10 units	0.200
Switch blocks with soldering pins for use on printed circuit boards						
Switch block with one contact 44 mm mounting depth 1 NO	(NSD000006)	3-4 (NSD00015) 0 1 2 3 4 mm 2,3	B	**3SB34 11-0B**	1 unit	0.003
1 NC →[2]	(NSD000007)	1-2 (NSD00017) 0 1 2 3 4 mm 1,6	B	**3SB34 11-0C**	1 unit	0.003
Lampholder wedge base W2 × 4.6 d, without lamp, 44 mm mounting depth	X1 (L+) ⊗ X2 (L-) NSD00003		B	**3SB34 11-1A**	1 unit	0.002
Pressure plates for use on PCBs						
Pressure plates for selector switches and key-operated switches for actuating the central switch block			B	**3SB39 01-0AW**	10 units	0.100
Accessories for PCBs						
PCB holder for mounting the control devices on the PCB (screw supplied)			B	**3SB39 01-0AA**	10 units	0.100

1) Holder also for mushroom pushbutton and push-pull button.

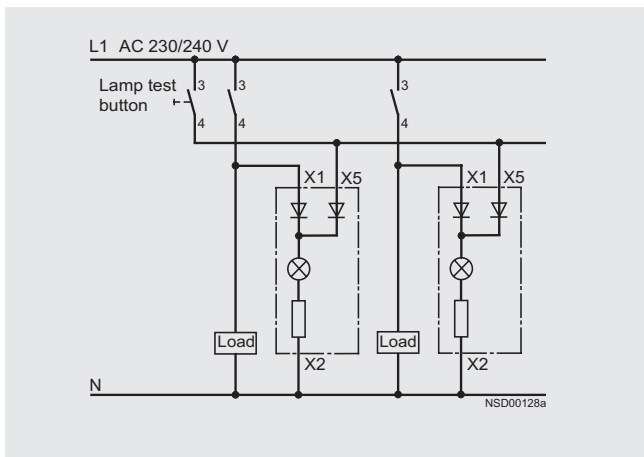2) Positive opening according to IEC 60947-5-1, Appendix K.

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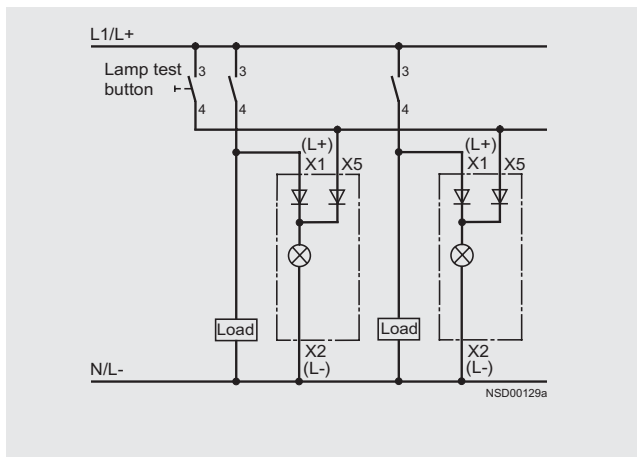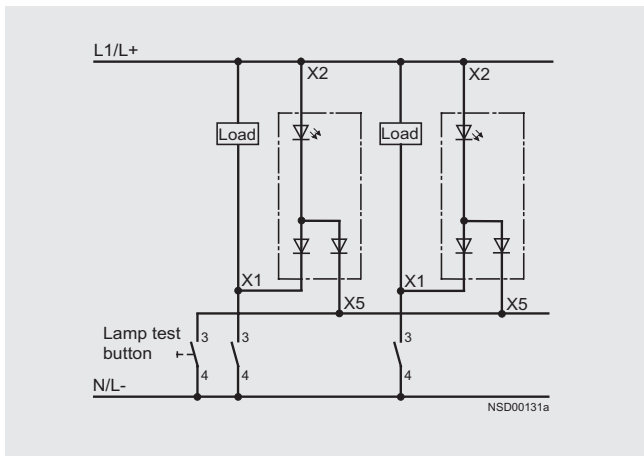*** This quantity or a multiple thereof can be ordered**
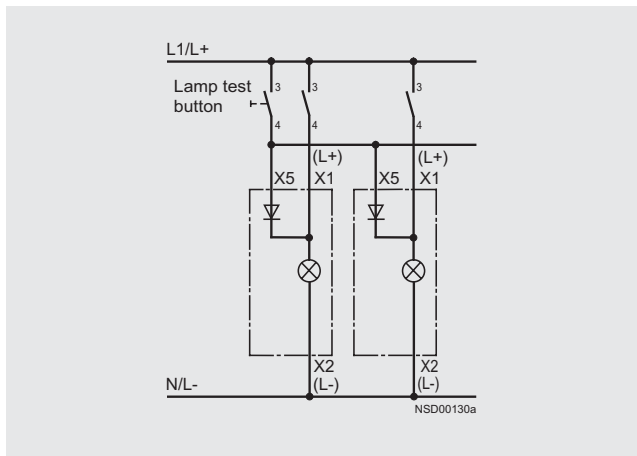
■ Circuit diagrams

3SB34 00–1F lampholder
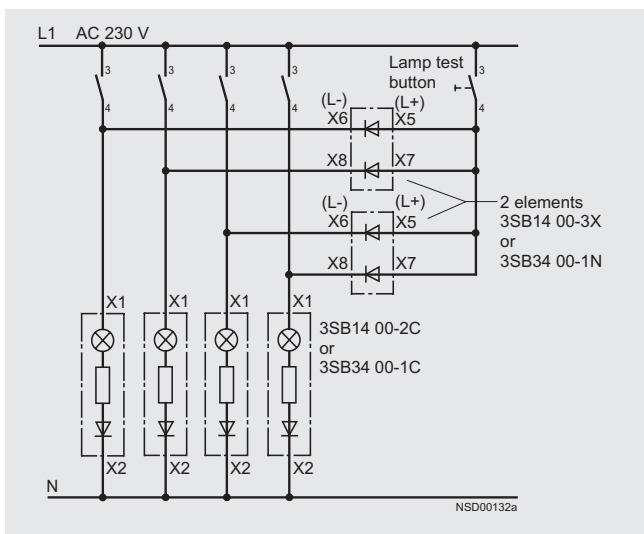incl. 130 V incandescent lamp

3SB34 00–1G lampholder
for incandescent lamps, max. 2.6 W or LED lamps, AC/DC

3SB34 00–1L lampholder
for incandescent lamps, max. 2.6 W or LED lamps, AC or DC

3SB34 00–1H lampholder
for incandescent lamps, max. 2.6 W or glow lamps, AC

Application examples for 3SB34 00–1N diode elements

■ Lamp test circuit,

■ Interference suppression,

■ Limiting voltage peaks,

■ Limiting DC coils,

■ Diode gates,

■ Rectifier circuits.

The diode element contains 2 diodes 1N 4007. The element can be snapped onto the holder as required.

Notes on using the lampholders with separate lamp test function

For connecting inductive loads in parallel (e.g. contactors), overvoltage damping is necessary.

The 3SB34 00–1H element is <u>not</u> suitable for operation with a parallel load.

Example for lamp test circuit with 3SB34 00–1N element

Accessories and spare parts
Insert labels

■ Overview

Pushbuttons (clear) and illuminated pushbuttons with a flat button can be fitted with insert labels for identification purposes.

These insert labels are made of clear, transparent molded-plastic with black inscription; they can be fitted in any 90° angle.

Inscription

The lettering has uppercase initial letters. The symbols, including those not listed in the catalog, are in accordance with DIN Report 4.

The insert labels without lettering are suitable for user marking with permanent pen.

■ Selection and ordering data

Inscription	DT	Insert label for pushbutton (clear) and illuminated pushbutton (flat) round design	PS*	Weight per PU, approx.	DT	Insert label for pushbutton (clear) and illuminated pushbutton (flat) square design	PS*	Weight per PU, approx.
		Order No.		kg		Order No.		kg
Without inscription	B	**3SB19 01-4AS**	10 units	0.100	B	**3SB39 40-4AA**	10 units	0.100
Ein	B	**3SB19 01-4AB**	10 units	0.100	B	**3SB39 40-4AB**	10 units	0.100
On	B	**3SB19 01-4EB**	10 units	0.100	C	**3SB39 40-4EB**	10 units	0.100
Off	B	**3SB19 01-4AC**	10 units	0.100	C	**3SB39 40-4AC**	10 units	0.100
Off	B	**3SB19 01-4EC**	10 units	0.100	C	**3SB39 40-4EC**	10 units	0.100
Auf	B	**3SB19 01-4AD**	10 units	0.100	B	**3SB39 40-4AD**	10 units	0.100
Up	B	**3SB19 01-4ED**	10 units	0.100	C	**3SB39 40-4ED**	10 units	0.100
Ab	B	**3SB19 01-4AE**	10 units	0.100	B	**3SB39 40-4AE**	10 units	0.100
Down	B	**3SB19 01-4EE**	10 units	0.100	C	**3SB39 40-4EE**	10 units	0.100
Vor	B	**3SB19 01-4AF**	10 units	0.100		-		
Forward	B	**3SB19 01-4EF**	10 units	0.100	C	**3SB39 40-4EF**	10 units	0.100
Zurück	B	**3SB19 01-4AG**	10 units	0.100		-		
Reverse	B	**3SB19 01-4EG**	10 units	0.100	C	**3SB39 40-4EG**	10 units	0.100
Rechts	B	**3SB19 01-4AH**	10 units	0.100	C	**3SB39 40-4AH**	10 units	0.100
Right	C	**3SB19 01-4EH**	10 units	0.100				
Links	B	**3SB19 01-4AJ**	10 units	0.100	C	**3SB39 40-4AJ**	10 units	0.100
Left	C	**3SB19 01-4EJ**	10 units	0.100		-		
Auf	B	**3SB19 01-4AD**	10 units	0.100	B	**3SB39 40-4AD**	10 units	0.100
Open	B	**3SB19 01-4EP**	10 units	0.100		-		
Zu	B	**3SB19 01-4AL**	10 units	0.100	B	**3SB39 40-4AL**	10 units	0.100
Close	B	**3SB19 01-4EQ**	10 units	0.100		-		
Schnell	B	**3SB19 01-4AM**	10 units	0.100	B	**3SB39 40-4AM**	10 units	0.100
Fast	B	**3SB19 01-4ER**	10 units	0.100		-		
Langsam	B	**3SB19 01-4AN**	10 units	0.100	B	**3SB39 40-4AN**	10 units	0.100
Slow	B	**3SB19 01-4ES**	10 units	0.100		-		
Operation	B	**3SB19 01-4AP**	10 units	0.100		-		
Running	B	**3SB19 01-4EV**	10 units	0.100	C	**3SB39 40-4EV**	10 units	0.100
Störung	B	**3SB19 01-4AQ**	10 units	0.100	C	**3SB39 40-4AQ**	10 units	0.100
Fault	B	**3SB19 01-4EW**	10 units	0.100	C	**3SB39 40-4EW**	10 units	0.100
Einrichten	B	**3SB19 01-4AR**	10 units	0.100		-		
Reset	B	**3SB19 01-4EM**	10 units	0.100	C	**3SB39 40-4EM**	10 units	0.100
Test	B	**3SB19 01-4EN**	10 units	0.100		-		
Start	B	**3SB19 01-4EK**	10 units	0.100	B	**3SB39 40-4EK**	10 units	0.100
Halt	B	**3SB19 01-4AK**	10 units	0.100	B	**3SB39 40-4AK**	10 units	0.100
Stop	B	**3SB19 01-4EL**	10 units	0.100	B	**3SB39 40-4EL**	10 units	0.100

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* This quantity or a multiple thereof can be ordered

Inscription symbols	Serial No. acc. to DIN Report 4	DT	Insert label for pushbutton (clear) and illuminated pushbutton (flat) round design	PS*	Weight per PU, approx.	DT	Insert label for pushbutton (clear) and illuminated pushbutton (flat) square design	PS*	Weight per PU, approx.
			Order No.		kg		Order No.		kg
Symbol for ON/OFF									
O (Off)	15	B	**3SB19 01-4MB**	10 units	0.100	B	**3SB39 40-4MB**	10 units	0.100
I (On)	16	B	**3SB19 01-4MC**	10 units	0.100	B	**3SB39 40-4MC**	10 units	0.100
II (On)	–	B	**3SB19 01-4MD**	10 units	0.100	B	**3SB39 40-4MD**	10 units	0.100
Equipment symbols									
Electric motor	42	B	**3SB19 01-4PA**	10 units	0.100	C	**3SB39 40-4PA**	10 units	0.100
Motion symbols									
Motion in direction of arrow	28	B	**3SB19 01-4NA**	10 units	0.100	B	**3SB39 40-4NA**	10 units	0.100
Increase, plus	40	B	**3SB19 01-4NG**	10 units	0.100	B	**3SB39 40-4NG**	10 units	0.100
Decrease, minus	41	B	**3SB19 01-4MC**	10 units	0.100	B	**3SB39 40-4MC**	10 units	0.100
Customized inscription									
Any inscription or symbol can be selected	–	B	**3SB19 01-4AZ** **K0Y, K2Y, K3Y** or **K9Y**	10 units		B	**3SB39 40-4AZ** **K0Y, K2Y, K3Y** or **K9Y**	10 units	

■ Options

Customized inscription

The labels can be inscribed with text and symbols not listed in the ordering data.

Append the following codes to the order number:

- Text in upper/lowercase: **K0Y**
- Text in uppercase: **K1Y**
- Text in lowercase: **K2Y**
- Symbols with number to DIN Report 4: **K3Y**
- Text or symbols according to order form supplement: **K9Y**

DIN Report 4 can be obtained from
Beuth Verlag GmbH, D-10772 Berlin

Ordering example

You want a label with image No. 1800 to DIN Report 4:

3SB19 01–4AZ
K3Y
Z = 1800

Notes on ordering

When ordering, specify the required inscription in plain text in addition to the order number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language.

By default, a letter height of 4 mm (for a single line of text) or 3 mm (for 2 or 3 lines of text) is used for text inscriptions.

The typeface used is Univers. Other letter heights and typefaces are possible, but must be specified when ordering.
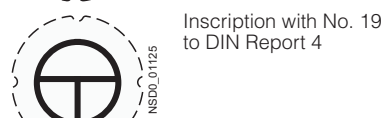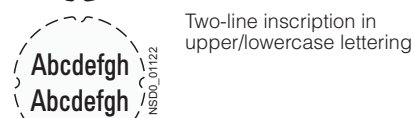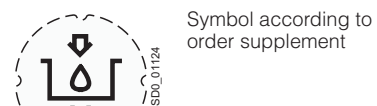
For round inscription labels, the maximum possible number of characters per line is:

- 10 characters for one line of text,
- 8 characters for 2 lines of text,
- 6 characters for 3 lines of text,
  but 10 characters in the middle line.

On square labels, 10 characters are possible per line.

For special symbols (short code K9Y), a CAD drawing in DXF format should be submitted.

Examples for customized inscription
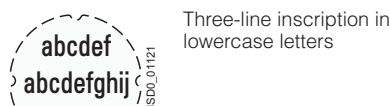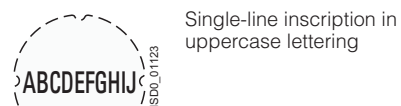
Single-line inscription in uppercase lettering

Three-line inscription in lowercase letters

Symbol according to order supplement

Two-line inscription in upper/lowercase lettering

Inscription with No. 19 to DIN Report 4

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Accessories and spare parts
Name plates

Overview

The name plates consist of a black molded-plastic label holder and a labeling plate (black with white print). Adhesive or snap-on mounting. They are not suitable for EMERGENCY-STOP pushbuttons.

Note insert dimensions!

Inscription

The lettering has uppercase initial letters.

Self-adhesive labels

The labeling plates are self-adhesive.

There are 2 sizes available for the round and square designs:
- 30 mm ×45 mm label holders with 12.5 mm ×27 mm labeling plate.
- 30 mm ×60 mm label holders with 27 mm ×27 mm labeling plate.

Snap-on labels

The following variants are available for the round program:
- 29.8 mm × 51 mm label holders with 17.5 mm × 28 mm labeling plates (inscription area: 17.5 mm × 27 mm).

Selection and ordering data

Inscription	DT	Labeling plate self-adhesive 12.5 mm × 27 mm Order No.	PS*	Weight per PU, approx. kg	DT	Labeling plate self-adhesive 27 mm × 27 mm Order No.	PS*	Weight per PU, approx. kg
blank	▶	**3SB39 02-1AA**	10 units	0.100	B	**3SB39 03-1AA**	10 units	0.100
Ein	B	**3SB39 02-1AB**	10 units	0.100	B	**3SB39 03-1AB**	10 units	0.100
On	B	**3SB39 02-1EB**	10 units	0.100	B	**3SB39 03-1EB**	10 units	0.100
Off	B	**3SB39 02-1AC**	10 units	0.100	B	**3SB39 03-1AC**	10 units	0.100
Off	B	**3SB39 02-1EC**	10 units	0.100	B	**3SB39 03-1EC**	10 units	0.100
Auf	B	**3SB39 02-1AD**	10 units	0.100	B	**3SB39 03-1AD**	10 units	0.100
Up	B	**3SB39 02-1ED**	10 units	0.100		-		
Ab	B	**3SB39 02-1AE**	10 units	0.100	B	**3SB39 03-1AE**	10 units	0.100
Down	B	**3SB39 02-1EE**	10 units	0.100		-		
Vor	B	**3SB39 02-1AF**	10 units	0.100	B	**3SB39 03-1AF**	10 units	0.100
Forward	B	**3SB39 02-1EF**	10 units	0.100		-		
Zurück	B	**3SB39 02-1AG**	10 units	0.100	B	**3SB39 03-1AG**	10 units	0.100
Reverse	B	**3SB39 02-1EG**	10 units	0.100		-		
Rechts	B	**3SB39 02-1AH**	10 units	0.100	B	**3SB39 03-1AH**	10 units	0.100
Right	B	**3SB39 02-1EH**	10 units	0.100		-		
Links	B	**3SB39 02-1AJ**	10 units	0.100	B	**3SB39 03-1AJ**	10 units	0.100
Left	B	**3SB39 02-1EJ**	10 units	0.100		-		
Auf	B	**3SB39 02-1AD**	10 units	0.100	B	**3SB39 03-1AD**	10 units	0.100
Open	B	**3SB39 02-1EP**	10 units	0.100		-		
Zu	B	**3SB39 02-1AL**	10 units	0.100	B	**3SB39 03-1AL**	10 units	0.100
Close	B	**3SB39 02-1EQ**	10 units	0.100		-		
Operation	B	**3SB39 02-1AP**	10 units	0.100	B	**3SB39 03-1AP**	10 units	0.100
Störung	B	**3SB39 02-1AQ**	10 units	0.100	B	**3SB39 03-1AQ**	10 units	0.100
Fault	B	**3SB39 02-1EW**	10 units	0.100		-		
Test	B	**3SB39 02-1EN**	10 units	0.100		-		
Start	B	**3SB39 02-1EL**	10 units	0.100	B	**3SB39 03-1EL**	10 units	0.100
Halt	B	**3SB39 02-1AK**	10 units	0.100	B	**3SB39 03-1AK**	10 units	0.100
Stop	B	**3SB39 02-1EK**	10 units	0.100		-		
Stop Start	B	**3SB39 02-1BC**	10 units	0.100	B	**3SB39 03-1BC**	10 units	0.100
Hand Auto	C	**3SB39 02-1BA**	10 units	0.100	B	**3SB39 03-1BA**	10 units	0.100
Man Auto	B	**3SB39 02-1EU**	10 units	0.100		-		
Symbols								
O	B	**3SB39 02-1MB**	10 units	0.100		-		
I	B	**3SB39 02-1MC**	10 units	0.100		-		
O I	B	**3SB39 02-1MF**	10 units	0.100	B	**3SB39 03-1MF**	10 units	0.100
1 2	B	**3SB39 02-1ML**	10 units	0.100		-		
→	B	**3SB39 02-1NA**	10 units	0.100	B	**3SB39 03-1NA**	10 units	0.100
↑	B	**3SB39 02-1NJ**	10 units	0.100		-		
Customized inscription								
Any inscription or symbol can be selected	B	**3SB39 02-1XZ** **K0Y, K1Y, K2Y, K3Y** or **K9Y**	10 units		B	**3SB39 03-1XZ** **K0Y, K1Y, K2Y, K3Y** or **K9Y**	10 units	
Label holder								
For round design	B	**3SB39 22-0AV**	10 units	0.200	B	**3SB39 23-0AV**	10 units	0.200
For square design	B	**3SB39 42-0AX**	5 units	0.200	B	**3SB39 43-0AX**	5 units	0.200
For potentiometer operating mechanism 3SB10 00-7CH07	B	**3SB39 22-0AW**	1 unit	0.004		-		

* This quantity or a multiple thereof can be ordered

Accessories and spare parts
Name plates

Inscription	DT	Labeling plate snap-on 17.5 mm × 28 mm	PS*	Weight per PU, approx.
		Order No.		kg
blank	B	**3SB39 05-1AA**	10 units	0.100
Ein	B	**3SB39 05-1AB**	10 units	0.100
Off	B	**3SB39 05-1AC**	10 units	0.100
Auf	B	**3SB39 05-1AD**	10 units	0.100
Ab	B	**3SB39 05-1AE**	10 units	0.100
Zurück	B	**3SB39 05-1AG**	10 units	0.100
Auf	B	**3SB39 05-1AD**	10 units	0.100
Zu	B	**3SB39 05-1AL**	10 units	0.100
Operation	B	**3SB39 05-1AP**	10 units	0.100
Störung	B	**3SB39 05-1AQ**	10 units	0.100
Start	B	**3SB39 05-1EL**	10 units	0.100
Halt	B	**3SB39 05-1AK**	10 units	0.100
Stop	B	**3SB39 05-1EK**	10 units	0.100
Stop Start	B	**3SB39 05-1BC**	10 units	0.100
Hand Auto	B	**3SB39 05-1BA**	10 units	0.100
Symbols				
O I	B	**3SB39 05-1MF**	10 units	0.100
→	B	**3SB39 05-1NA**	10 units	0.100
↑	B	**3SB39 05-1NJ**	10 units	0.100
Customized inscription				
Any inscription or symbol can be selected	B	**3SB39 05-1XZ K0Y, K1Y, K2Y, K3Y** or **K9Y**	10 units	
Label holders				
For round design	▶	**3SB39 25-0AV**	10 units	0.200

■ Options

Customized inscription

The labels can be inscribed with text and symbols not listed in the ordering data.

Append the following codes to the order number:

- Text in upper/lowercase: **K0Y**
- Text in uppercase: **K1Y**
- Text in lowercase: **K2Y**
- Symbols with number to DIN Report 4: **K3Y**
- Text or symbols according to order form supplement: **K9Y**

DIN Report 4 can be obtained from
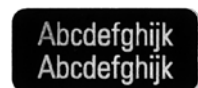Beuth Verlag GmbH, D-10772 Berlin

Ordering example

You want a label with image No. 1800 to DIN Report 4:

3SB39 02–1XZ
K3Y
Z = 1800

Examples for customized inscription

Single-line inscription in uppercase lettering

Two-line inscription in upper/lowercase lettering

Three-line inscription in lowercase letters

Notes on ordering

When ordering, specify the required inscription in plain text in addition to the order number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language.

The following letter heights are used as standard for text inscriptions:

- Label size 12.5 mm × 27 mm: 3 lines with font size of 4 mm (single-line), 3.5 mm (2 lines) or 2.5 mm (3 lines),
- Label size 27 mm × 27 mm: 5 lines with font size 4 mm (1 to 5 lines),
- Label size 17.5 mm × 28 mm: 3 lines with font size of 4 mm (1 to 2 lines) or 3 mm (3 lines).

Up to 10 characters per line are possible. The typeface used is Univers. Other letter heights and typefaces are possible, but must be specified when ordering.

For special symbols (short code K9Y), a CAD drawing in DXF format should be submitted.

Inscription with No. 35
to DIN Report 4

Symbol according to order supplement

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Accessories and spart parts
Buttons, lenses and keys

Selection and ordering data

	Version	Color	DT	Order No.	PS*	Weight per PU, approx. kg
	Button, flat for round illuminated pushbuttons, plastic design	red	B	**3SB39 30-0CA2**	10 units	0.200
		yellow	B	**3SB39 30-0CA3**	10 units	0.200
		green	B	**3SB39 30-0CA4**	10 units	0.200
		blue	B	**3SB39 30-0CA5**	10 units	0.200
		white	B	**3SB39 30-0CA6**	10 units	0.200
		clear	B	**3SB39 30-0CA7**	10 units	0.200
	Button, flat for square illuminated pushbuttons and switches, plastic design	red	B	**3SB39 50-0CA2**	10 units	0.100
		yellow	B	**3SB39 50-0CA3**	10 units	0.100
		green	B	**3SB39 50-0CA4**	10 units	0.100
		blue	B	**3SB39 50-0CA5**	10 units	0.100
		white	B	**3SB39 50-0CA6**	10 units	0.100
		clear	B	**3SB39 50-0CA7**	10 units	0.100
	Button, flat for round illuminated pushbuttons and switches, metal design	black	B	**3SB39 30-0EA1**	10 units	0.200
		red	B	**3SB39 30-0EA2**	10 units	0.200
		yellow	B	**3SB39 30-0EA3**	10 units	0.200
		green	B	**3SB39 30-0EA4**	10 units	0.200
		blue	B	**3SB39 30-0EA5**	10 units	0.200
		white	B	**3SB39 30-0EA6**	10 units	0.200
		clear	B	**3SB39 30-0EA7**	10 units	0.200
	Button, flat for round illuminated pushbuttons and switches, metal design	red	B	**3SB39 30-0GA2**	10 units	0.200
		yellow	B	**3SB39 30-0GA3**	10 units	0.200
		green	B	**3SB39 30-0GA4**	10 units	0.200
		blue	B	**3SB39 30-0GA5**	10 units	0.200
		white	B	**3SB39 30-0GA6**	10 units	0.200
		clear	B	**3SB39 30-0GA7**	10 units	0.200
	Lens, smooth for round indicator lights, plastic and metal designs	red	B	**3SB39 30-6BA2**	10 units	0.020
		yellow	B	**3SB39 30-6BA3**	10 units	0.020
		green	B	**3SB39 30-6BA4**	10 units	0.020
		blue	B	**3SB39 30-6BA5**	10 units	0.020
		white	B	**3SB39 30-6BA6**	10 units	0.020
		clear	B	**3SB39 30-6BA7**	10 units	0.020
	Lens, with concentric rings for round indicator lights, plastic and metal version	red	B	**3SB39 30-6CA2**	10 units	0.020
		yellow	B	**3SB39 30-6CA3**	10 units	0.020
		green	B	**3SB39 30-6CA4**	10 units	0.020
		blue	B	**3SB39 30-6CA5**	10 units	0.020
		white	B	**3SB39 30-6CA6**	10 units	0.020
		clear	B	**3SB39 30-6CA7**	10 units	0.020
	Lens, smooth for square indicator lights, plastic design	red	B	**3SB39 50-6AA2**	10 units	0.002
		yellow	B	**3SB39 50-6AA3**	10 units	0.002
		green	B	**3SB39 50-6AA4**	10 units	0.002
		blue	B	**3SB39 50-6AA5**	10 units	0.015
		white	B	**3SB39 50-6AA6**	10 units	0.002
		clear	B	**3SB39 50-6AA7**	10 units	0.002
	Mounting tool for buttons and lenses, metal design		B	**3SB39 21-0BC**	1 unit	0.024

Version, key-operated switch		Color	DT	Order No.	PS*	Weight per PU, approx. kg
Manufacturer	Lock No.					

Key for actuating elements

	Manufacturer	Lock No.	Color	DT	Order No.	PS*	Weight
	RONIS	SB 30		B	**3SB39 10-4A**	1 unit	0.012
	BKS	S1		A	**3SY1 066**	1 unit	0.007
	CES	LSG 1		B	**3SB19 10-2F**	1 unit	0.007
		SSG 10		▶	**3SY1 054**	1 unit	0.007
		SSP 9		A	**3SY1 052**	1 unit	0.008
	IKON	360012 K1		A	**3SY1 053**	1 unit	0.007
	O.M.R.	73038	light blue	B	**3SB19 10-2L**	1 unit	0.011
		73037	red	B	**3SB19 10-2M**	1 unit	0.009
		73034	black	B	**3SB19 10-2N**	1 unit	0.011
		73033	yellow	B	**3SB19 10-2P**	1 unit	0.011

Footnotes for page 9/71

1) Also for 230 V when used with a 3SB34 00-1C voltage reducer.

2) Due to the inherent orange color of glow lamps and their lower luminance level compared to incandescent lamps, it is recommended that they should only be used with clear or red screw lenses and in areas where ambient light levels are not very high.

3) For increased protection, the IP65 acoustic signaling device (complete device combinations) can be used.

* This quantity or a multiple thereof can be ordered

Selection and ordering data

Version	Lamp voltage V	Color	DT	Order No.	PS*	Weight per PU, approx. kg
Lamps, BA 9s bases						
Incandescent lamps 1.2 W, length up to 28 mm, max. bulb diameter 10 mm	AC/DC 24	clear	B	**3SB19 02-0AY**	10 units	0.003
Incandescent lamp 2 W, length up to 28 mm, max. bulb diameter 10 mm	AC/DC 6	clear	A	**3SX1 342**	10 units	0.003
	AC/DC 12		A	**3SX1 343**	10 units	0.003
	AC/DC 24		A	**3SX1 344**	10 units	0.003
	AC/DC 30		B	**3SB19 02-2AF**	1 unit	0.003
	AC/DC 48		B	**3SB19 02-1AP**	10 units	0.003
	AC/DC 60		A	**3SR9 424**	10 units	0.003
Incandescent lamp 2.6 W, length up to 28 mm, max. bulb diameter 10 mm	AC/DC 110 ... 130 [1]	clear	▶	**3SX1 731**	10 units	0.003
Multi-incandescent lamp endurance 25 000 h, high resistance to vibration, 1.2 W, max. operating current 50 mA	AC/DC 24	clear	B	**3SB19 02-2BU**	10 units	0.002
LED lamp, super-bright max. length 28 mm, 10 mm bulb diameter, max. operating current 15 mA	AC/DC 24	red	▶	**3SB39 01-1CA**	10 units	0.002
		yellow	B	**3SB39 01-1BA**	10 units	0.002
		green	▶	**3SB39 01-1DA**	10 units	0.002
		blue	B	**3SB39 01-1PA**	10 units	0.002
		white	▶	**3SB39 01-1QA**	10 units	0.002
	AC 130	red	B	**3SB39 01-1CD**	10 units	0.002
		yellow	B	**3SB39 01-1BD**	10 units	0.002
		green	B	**3SB39 01-1DD**	10 units	0.002
		blue	B	**3SB39 01-1PD**	10 units	0.002
		white	B	**3SB39 01-1QD**	10 units	0.002
	AC 230	red	B	**3SB39 01-1CF**	10 units	0.003
		yellow	B	**3SB39 01-1BF**	10 units	0.003
		green	B	**3SB39 01-1DF**	10 units	0.003
		blue	B	**3SB39 01-1PF**	10 units	0.003
		white	B	**3SB39 01-1QF**	10 units	0.003
LED lamp max. length 28 mm, 10 mm bulb diameter, max. operating current 15 mA	DC 22 ... 32	red	D	**3SB19 02-4AJ**	10 units	0.002
		yellow	D	**3SB19 02-4BJ**	10 units	0.002
		green	B	**3SB19 02-4CJ**	10 units	0.002
LED lamp, flashing (1.4 Hz), max. length 28 mm, bulb diameter 10 mm, operating current 24 ... 29 mA	DC 24	red	B	**3SB19 02-4LC**	10 units	0.002
		yellow	B	**3SB19 02-4MC**	10 units	0.002
		green	B	**3SB19 02-4NC**	10 units	0.002
Glow lamp [2] length 28 mm, bulb diameter 10 mm, operating current approx. 1.8 mA	AC 110	clear	A	**3SX1 703**	10 units	0.003
	AC 220	clear	A	**3SX1 701**	10 units	0.003
	AC 220	green	A	**3SX1 702**	10 units	0.003
Lamp extractor for lamps with BA 9s bases			▶	**3SB19 02-2AD**	1 unit	0.006
Lamp adapter for fitting a lamp with a wedge base socket into a BA 9s lampholder			B	**3SB19 02-1AU**	1 unit	0.002
Lamps, wedge base						
Incandescent lamp wedge base W2 × 4.6 d, 1.0 W	AC/DC 6	clear	B	**3SB29 08-1AA**	10 units	0.100
	AC/DC 12		B	**3SB29 08-1AB**	10 units	0.100
	AC/DC 24		▶	**3SB29 08-1AC**	10 units	0.100
	AC/DC 30		B	**3SB29 08-1AD**	10 units	0.100
	AC/DC 48		B	**3SB29 08-1AE**	10 units	0.001
	AC/DC 60		B	**3SB29 08-1AF**	10 units	0.001
LED lamp, super-bright wedge base W2 × 4.6 d, operating current 10 mA	DC 24	red	B	**3SB39 01-1SB**	10 units	0.001
		yellow	B	**3SB39 01-1RB**	10 units	0.001
		green	B	**3SB39 01-1TB**	10 units	0.001
		white	B	**3SB39 01-1UB**	10 units	0.001
		blue	B	**3SB29 08-1BD**	10 units	0.001
Lamp extractor for lamps with sockets W2 × 4.6 d			▶	**3SB29 08-2AB**	1 unit	0.003
Acoustic signal transformers, BA 9s base						
Acoustic signal transformer, operating voltage DC 24 – 28 V, operating current 25 mA, 0.6 W, min. sound pressure 80 dB/10 cm	Acoustic signal- ing device [3]		B	**3SB19 02-2BN**	1 unit	0.004

For footnotes, see opposite page.

9

Accessories and spare parts
Protective covers

■ Selection and ordering data

	Version	Application	Color	DT	Order No.	PS*	Weight per PU, approx.
							kg
Protective caps, Elastolan, IP67 degree of protection							
	Protective cap, clear, for round design[1]	Flat button (plastic)	transparent	B	**3SB39 21-0AJ**	1 unit	0.001
		Raised button (plastic), flat button (metal)	transparent	B	**3SB39 21-0AM**	1 unit	0.002
	Material PVC	Raised button (metal)	transparent	B	**3SB19 02-2AN**	1 unit	0.003
	Protective cap, clear, for square design[1]	Flat button (plastic)	transparent	B	**3SB39 41-0AJ**	1 unit	0.002
Protective caps, Silicone, IP67 degree of protection							
	Protective cap, clear, for round design[1]	Flat button (plastic)	transparent	B	**3SB39 21-0AH**	1 unit	0.002
		Raised button (plastic), flat button (metal)	transparent	B	**3SB19 02-0AK**	1 unit	0.002
		Raised button (metal)	transparent	B	**3SB19 02-0AN**	1 unit	0.003
	Protective cap, clear, for round design[1]	Mushroom push-pull button, Ø 40 mm	transparent	B	**3SB19 02-2BH**	1 unit	0.006
	Protective cap, clear, for square design[1]	Flat button (plastic)	transparent	B	**3SB39 41-0AH**	1 unit	0.002
Further protective caps							
	Sealable cap for round design	Flat button (plastic)	black transparent	B B	**3SB19 02-0AL** **3SB19 02-2AR**	1 unit 1 unit	0.003 0.011
	Dust cover for use in dusty environments	Key-operated pushbuttons BKS, CES, IKON, O.M.R.	transparent	B	**3SB39 21-0BT**	1 unit	0.003

1) Not to be used with label holder.

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* This quantity or a multiple thereof can be ordered

Accessories and spare parts
Protective covers

	Version	Application	Color	DT	Order No.	PS*	Weight per PU, approx. kg
Protective collars							
	Protective collar for EMERGENCY-STOP[1] for round design, for front panel fixing	EMERGENCY-STOP mushroom pushbutton without key-operated switch	yellow	►	**3SB39 21-0AK**	1 unit	0.044
		EMERGENCY-STOP mushroom pushbutton with key-operated switch	yellow	B	**3SB39 21-0AX**	1 unit	0.051
	Sun collar for round design, for front panel fixing	Illuminated pushbuttons	black	B	**3SB39 21-0AS**	1 unit	0.003
Blanking plugs for spare command positions							
	Blanking plug for plastic version, round		black	►	**3SB39 21-0AA**	10 units	0.012
	Blanking plug for plastic version, square		black	B	**3SB39 41-0AA**	1 unit	0.013
	Blanking plug for metal version, round		aluminized	B	**3SB19 02-0AQ**	10 units	0.080

1) The protective collar can only be used to protect against inadvertent actuating and must be fitted to allow unimpeded access to the EMERGENCY-STOP mushroom pushbutton.

9

Accessories and spare parts
Miscellaneous accessories

■ **Selection and ordering data**
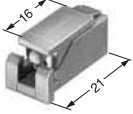
	Version	Application	Color/inscription	DT	Order No.	PS*	Weight per PU, approx. kg
Yellow name plates, as backing plate for EMERGENCY-STOP							
	Name plate, round, self-adhesive, external diameter 80 mm, 23 mm drilled hole (round design)	EMERGENCY-STOP mushroom pushbuttons	blank	B	3SB39 21-0AB	1 unit	0.002
			4-languages, G, En, It, Sp	X	3SB39 21-0BW	1 unit	0.001
			NOT-AUS	B	3SB39 21-0AC	1 unit	0.001
			EMERGENCY-STOP	B	3SB39 21-0AD	1 unit	0.002
			ARRET D'URGENCE	B	3SB39 21-0AG	1 unit	0.002
			EMERGENZA	B	3SB39 21-0AN	1 unit	0.002
	Name plate, round, self-adhesive, outer diameter 80 mm, cut-out 26 mm × 26 mm (square design)	EMERGENCY-STOP mushroom pushbuttons	blank	B	3SB39 41-0AB	1 unit	0.001
			NOT-AUS	B	3SB39 41-0AC	1 unit	0.001
			EMERGENCY-STOP	B	3SB39 41-0AD	1 unit	0.002
	Name plate, round, 1 mm thick, external diameter 75 mm, hole 22.5 mm (round design)	EMERGENCY-STOP mushroom pushbuttons	blank	B	3SB19 02-2BA	1 unit	0.006
			NOT-AUS	B	3SB19 02-2BB	1 unit	0.007
Holders and pressure plates							
	Holder for pushbuttons and switches for snapping on 3 switch blocks	Pushbuttons, push-pull buttons, mushroom pushbuttons with front panel fixing		►	3SB39 01-0AB	20 units	0.100
	Holder for selector switch, key-operated switch and On-Off push-button with pressure plate for actuating the central switch block	Selector switch, key-operated switches and On-Off pushbuttons with front plate mounting		►	3SB39 01-0AC	10 units	0.200
	Pressure plate for selector switches and key-operated switches for actuating the central switch block	Selector switches and key-operated switches for use on PCB or with base mounting		B	3SB39 01-0AW	10 units	0.100
Holders							
	Holder for plastic version, round			►	3SB39 31-0AA	10 units	0.014
	Holder for plastic version, square			B	3SB39 51-0AA	1 unit	0.013
	Holder for metal version, round			►	3SB39 31-0AC	10 units	0.044
	Grounding screw for grounding metal actuators for fitting in front plates made of non-conducting materials			B	3SB39 21-0BD	50 units	0.100

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This quantity or a multiple thereof can be ordered

Accessories and spare parts
Miscellaneous accessories

Version	Application	Color	DT	Order No.	PS*	Weight per PU, approx. kg
Tools						
Blanking tool 26 mm × 26 mm, for square designs			B	**3SB39 41-0AF**	1 unit	0.817
Hole drilling template for 30 mm × 30 mm grid, horizontal, for round and square designs			B	**3SB19 02-2BG**	1 unit	0.015
Mounting tool for potentiometer operating mechanism and for pushbutton with extended stroke			A	**3SX1 707**	1 unit	0.018
Diverse accessories						
Single frame for square design of the round version		black	B	**3SB39 21-0AU**	5 units	0.002
Adapter Adapter for 30.5 mm mounting holes, comprising a metal disk with an adhesive layer on one side	As thrust ring for a thin plastic front plate		B	**3SB39 21-0AE**	1 unit	0.008
PCB holder for mounting the control devices on the PCB (screw supplied)	Switch blocks and lampholders for solder connection		B	**3SB39 01-0AA**	10 units	0.100
Extension plunger for compensation of the distance between a pushbutton and the unlatching button of a thermal overload relay	Pushbuttons with extended stroke		A	**3SX1 335**	1 unit	0.004
Equipment labels (Order No. and price per packing)			B	**3TX4 210-0H**	100 units	0.029

9

Enclosures

Area of application

Enclosed pushbuttons and indicator lights are used for hand operated control devices with separately allocated control. The devices are climate-proof.

Standards

IEC 60947-5-1 (VDE 0660 Part 200).

Design
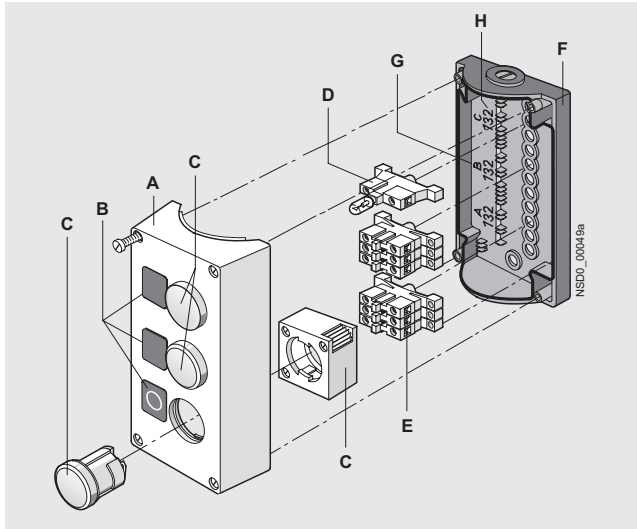
A Top part of enclosure
B Labeling plates
C Actuating element with holder
D Function digit
E Switch blocks, lampholders for base mounting
F Bottom part of enclosure
G Identification letters for the command points
H Identification number

Enclosure

Molded-plastic and metal enclosures with 1, 2, 3, 4 or 6 command points are available. The mounting holes are located external to the terminal compartment.

Cable routing: on the top and bottom narrow ends of the enclosure for an M20/M25 metric cable gland.

Enclosure color:
- Cover RAL 7035 (light gray)
- For EMERGENCY-STOP RAL 1004 (yellow)
- Base RAL 9005 (black)

The molded-plastic enclosures comply with the "total insulation" specification.

Customer-specific enclosures

Enclosures with more than 6 command points can also be supplied with AS-Interface connection.

Actuators

Round actuators and lens assemblies for a mounting diameter of 22 mm can be used.

The actuators are fitted through the hole in the cover of the enclosure and are connected to the holder supplied with the actuator and secured in position.

Switch blocks and lampholders

Switch blocks and lampholders are snapped into the enclosure. For each command point, the following components can be fitted:
- 3 switch blocks or
- 2 switch blocks + 1 lampholder or lampholder with integrated voltage reducer.

The switch blocks have moving double-break contacts and therefore a high contact stability, i.e. they are also suitable for use in solid-state controls. Function numbering is shown on the switch block.

Single-pole switch blocks and lampholders for front plate mounting can also be used.

Enclosures with standard fittings

Overview

With 1 to 3 command points, operating voltage up to 400 V, vertical mounting type.

The actuator/indicator is fixed with an enclosure nut. If required it can be disassembled with a 27 mm socket wrench or with a 3SX17 07 ring nut wrench.

With base fixing switch blocks (snapped into the base of the enclosure).

Molded-plastic enclosures are equipped with actuators and indicators made of plastic, metal enclosures are equipped with actuators and indicators made of metal.

Color of cover of enclosure:
- Grey, RAL 7035, or
- Yellow, RAL 1004

Color of the base of the enclosure:
- Black, RAL 9005

Selection and ordering data

Equipment	Switch block function	Number of command points	DT	Molded-plastic enclosure	PS*	Weight per PU, approx.	DT	Metal enclosure	PS*	Weight per PU, approx.
				Order No.		kg		Order No.		kg
Enclosures with standard fittings										
Cable entry top and bottom per 1 × M20										
A = Pushbutton green, label "I"	1 NO	1	B	**3SB38 01-0DA3**	1 unit	0.209	B	3SB38 01-2DA3	1 unit	on req.
A = Pushbutton red, label "O"	1 NC	1	B	**3SB38 01-0DB3**	1 unit	0.209	B	3SB38 01-2DB3	1 unit	on req.
A = Pushbutton white label "I"	1 NO	1	B	**3SB38 01-0DD3**	1 unit	0.205	B	3SB38 01-2DD3	1 unit	on req.
A = Pushbutton black label "O"	1 NC	1	B	**3SB38 01-0DE3**	1 unit	0.205	B	3SB38 01-2DE3	1 unit	on req.
A = EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, with positive latching function according to EN 418 with yellow top part, without protective collar	1 NC	1	B	**3SB38 01-0DG3**	1 unit	0.242	B	3SB38 01-2DG3	1 unit	on req.
A = EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, with positive latching function according to EN 418 with yellow top part, with protective collar [1]	1 NC	1	B	**3SB38 01-0DF3**	1 unit	0.270	B	3SB38 01-2DF3	1 unit	on req.
B = Green pushbutton, label "I", A = Red pushbutton, label "O"	1 NO, 1NC	2	B	**3SB38 02-0DA3**	1 unit	0.261	B	3SB38 02-2DA3	1 unit	on req.
B = White pushbutton, label "I", A = Black pushbutton, label "O"	1 NO, 1NC	2	B	**3SB38 02-0DB3**	1 unit	0.260	B	3SB38 02-2DB3	1 unit	on req.
C = Clear indicator light, label without inscription, B = Green pushbutton, label "I", A = White pushbutton, label "O"	BA 9s, 1 NO, 1NC	3	B	**3SB38 03-0DA3**	1 unit	0.329	B	3SB38 03-2DA3	1 unit	on req.
C = Black pushbutton, label "II", B = Black pushbutton, label "I", A = Red pushbutton, label "O"	1 NO, 1 NO, 1NC	3	C	**3SB38 03-0DB3**	1 unit	0.324	B	3SB38 03-2DB3	1 unit	on req.
C = Clear indicator light, label without inscription, B = White pushbutton, label "I", A = Black pushbutton, label "O"	BA 9s, 1 NO, 1NC	3	C	**3SB38 03-0DC3**	1 unit	0.350	B	3SB38 03-2DC3	1 unit	on req.

1) The protective collar can only be used to protect against inadvertent actuating and must be fitted to allow unimpeded access to the EMERGENCY-STOP mushroom pushbutton.
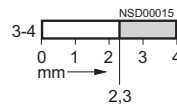
9

Empty enclosures and individual elements

■ Selection and ordering data

Version	Number of command points	DT	Molded-plastic enclosure	PS*	Weight per PU, approx.	DT	Metal enclosure	PS*	Weight per PU, approx.
			Order No.		kg		Order No.		kg

Empty enclosures

**Cable entry top and bottom
each 1 × M20 for 1 to 3 command points,
each 1 × M25 for 4 and 6 command points**

Version	Number	DT	Molded-plastic	PS*	Weight	DT	Metal enclosure	PS*	Weight
for switch blocks, lampholders and accessories with snap-on base mounting, also 1-pole front plate elements can be used (switching state remains on opening) With gray top section	1	B	3SB38 01-0AA3	1 unit	0.185	B	3SB38 01-2AA3	1 unit	on req.
	2	B	3SB38 02-0AA3	1 unit	0.214	B	3SB38 02-2AA3	1 unit	on req.
	3	B	3SB38 03-0AA3	1 unit	0.258	B	3SB38 03-2AA3	1 unit	on req.
	4	B	3SB38 04-0AA3	1 unit	0.301	B	3SB38 04-2AA3	1 unit	on req.
	6	B	3SB38 06-0AA3	1 unit	0.415	B	3SB38 06-2AA3	1 unit	on req.
for EMERGENCY-STOP, for switch blocks, lampholders and accessories with snap-on base mounting, also 1-pole front plate elements can be used (switching state remains on opening)									
with yellow top part, without protective collar	1	B	3SB38 01-0AB3	1 unit	0.185	B	3SB38 01-2AB3	1 unit	on req.
with yellow top part, with protective collar[1]	1	B	3SB38 01-0AD3	1 unit	0.213	B	3SB38 01-2AD3	1 unit	on req.

1) The protective collar can only be used to protect against inadvertent actuating and must be fitted to allow unimpeded access to the EMERGENCY-STOP mushroom pushbutton.

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Version	Rated voltage/graphic symbol	Color/contact travel	DT	Order No.	PS*	Weight per PU, approx.
						kg

Switch blocks with screw connection, for base mounting

Switch block with one contact

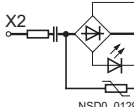| Version	Rated voltage/graphic symbol	Color/contact travel	DT	Order No.	PS*	Weight
1 NO	NSD00006	3-4 / 0 1 2 3 4 mm / 2,3 NSD00015	►	3SB34 20-0B	1 unit	0.012
1 NC [1]	NSD00007	1-2 / 0 1 2 3 4 mm / 1,6 NSD00017	►	3SB34 20-0C	1 unit	0.013
BA 9s lampholder						
without lamp	according to lamp X1 (L+) ⊗ X2 (L-) NSD00003		►	3SB34 20-1A	1 unit	0.012
with integrated voltage reducer and with 130 V lamp (3SX1 731)[2]	AC 230/240 V X1 ⊐⊗⊳⊢ X2 NSD00042	clear	B	3SB34 20-1C	1 unit	0.016
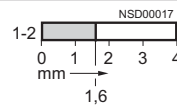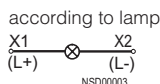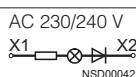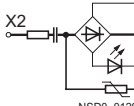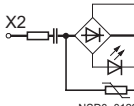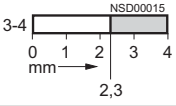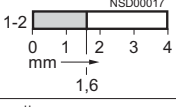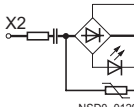
1) Positive opening according to IEC 60947-5-1, Appendix K.

2) Only use with this lamp.

* This quantity or a multiple thereof can be ordered

Empty enclosures and individual elements

Version	Rated voltage/ graphical symbols	Color/ contact travel	DT	Order No.	PS*	Weight per PU, approx. kg
Switch blocks with screw connection, for base mounting						
Lampholder with integrated LED	AC/DC 24 V NSD0_01292a	yellow	B	3SB34 20-1PA	1 unit	0.011
		red	▶	3SB34 20-1PB	1 unit	0.011
		green	▶	3SB34 20-1PC	1 unit	0.011
		blue	B	3SB34 20-1PD	1 unit	0.011
		white	▶	3SB34 20-1PE	1 unit	0.011
	AC 110 V NSD0_01296a	yellow	B	3SB34 20-1QA	1 unit	0.012
		red	B	3SB34 20-1QB	1 unit	0.012
		green	B	3SB34 20-1QC	1 unit	0.012
		blue	B	3SB34 20-1QD	1 unit	0.012
		white	B	3SB34 20-1QE	1 unit	0.012
	AC 230 V NSD0_01296a	yellow	B	3SB34 20-1RA	1 unit	0.012
		red	B	3SB34 20-1RB	1 unit	0.012
		green	B	3SB34 20-1RC	1 unit	0.012
		blue	B	3SB34 20-1RD	1 unit	0.012
		white	B	3SB34 20-1RE	1 unit	0.012
Support terminal		black	B	3SB39 01-0AG	1 unit	0.012
		blue	B	3SB39 01-0AH	1 unit	0.012
		green/yellow	B	3SB39 01-0AJ	1 unit	0.012
Switch blocks with spring-loaded terminals, for base mounting						
Switch block with one contact 1 NO	NSD00006	3-4 NSD00015	B	3SB34 23-0B	1 unit	0.012
1 NC ↗ [1]	NSD00007	1-2 NSD00017	B	3SB34 23-0C	1 unit	0.012
Lampholder with integrated LED	AC/DC 24 V NSD0_01292a	yellow	B	3SB34 23-1PA	1 unit	0.012
		red	B	3SB34 23-1PB	1 unit	0.012
		green	B	3SB34 23-1PC	1 unit	0.012
		blue	B	3SB34 23-1PD	1 unit	0.012
		white	B	3SB34 23-1PE	1 unit	0.012
	AC 110 V NSD0_01296a	yellow	B	3SB34 23-1QA	1 unit	0.012
		green	B	3SB34 23-1QC	1 unit	0.012
		red	B	3SB34 23-1QB	1 unit	0.012
		blue	B	3SB34 23-1QD	1 unit	0.012
		white	B	3SB34 23-1QE	1 unit	0.012
	AC 230 V NSD0_01296a	yellow	B	3SB34 23-1RA	1 unit	0.012
		blue	B	3SB34 23-1RD	1 unit	0.012
		green	B	3SB34 23-1RC	1 unit	0.012
		red	B	3SB34 23-1RB	1 unit	0.012
		white	B	3SB34 23-1RE	1 unit	0.012
Support terminal		black	B	3SB34 23-2F	1 unit	0.012
		blue	B	3SB34 23-2G	1 unit	0.012
		green/yellow	B	3SB34 23-2H	1 unit	0.012
Accessories						
Pressure plate for selector switches and key-operated switches for actuating the central switch block			B	3SB39 01-0AW	10 units	0.100

1) Positive opening according to IEC 60947-5-1, Appendix K.

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Enclosures with choice of fittings

■ Overview

With 1 to 6 command points,
operating voltage up to 400 V.

One command point comprises:

■ 1 actuator or indicator
■ Up to 3 switch blocks or lampholder,
■ 1 labeling plate

The equipment for the command points must be selected from the tables. For ordering, the order supplement is required.

Molded-plastic enclosures are equipped with actuators and indicators made of plastic, metal enclosures are equipped with actuators and indicators made of metal.

For routing the cable through, one opening for M20 is provided at the top and bottom (for 1 or 4 command points) or for M25 (for 6 command points).

Pricing

The prices are made up of the enclosure prices and a price supplement based on the choice of command points.

■ Selection and ordering data

	Version	Number of command points	DT	Molded-plastic enclosure	PS*	Weight per PU, approx.	DT	Metal enclosure	PS*	Weight per PU, approx.
				Order No.		kg		Order No.		kg
	With switch blocks and lamp fixtures, for base mounting	1	C	**3SB38 01-0AZ**	1 unit		C	**3SB38 01-2AZ**	1 unit	
		2	C	**3SB38 02-0AZ**	1 unit		C	**3SB38 02-2AZ**	1 unit	
		3	C	**3SB38 03-0AZ**	1 unit		C	**3SB38 03-2AZ**	1 unit	
		4	B	**3SB38 04-0AZ**	1 unit		C	**3SB38 04-2AZ**	1 unit	
		6	B	**3SB38 06-0AZ**	1 unit		C	**3SB38 06-2AZ**	1 unit	
	With single-pole switch blocks and lampholders, for front plate mounting	1	C	**3SB38 01-1AZ**	1 unit		C	**3SB38 01-3AZ**	1 unit	
		2	C	**3SB38 02-1AZ**	1 unit		C	**3SB38 02-3AZ**	1 unit	
		3	C	**3SB38 03-1AZ**	1 unit		C	**3SB38 03-3AZ**	1 unit	
		4	B	**3SB38 04-1AZ**	1 unit		C	**3SB38 04-3AZ**	1 unit	
		6	B	**3SB38 06-1AZ**	1 unit		C	**3SB38 06-3AZ**	1 unit	

3SB38 03- .AZ
(the components are only an example)

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* This quantity or a multiple thereof can be ordered

■ Options

Guide for completing the order form supplement

1. Enter the Item No.

2. Enter the quantity required

3. Enter the required Order No, e.g.:

- 3SB38 0.–0AZ for molded-plastic enclosure, base mounting switch blocks
- 3SB38 0.–1AZ for molded-plastic enclosure, switch blocks for front plate mounting
- 3SB38 0.–2AZ for metal enclosure, base mounting switch blocks
- 3SB38 0.–3AZ for metal enclosure, switch blocks for front plate mounting

Enter Order No. supplement for the 7th position (No. of command points).

4. Enter data in the diagram

4.1 Select actuating elements from the selection tables.

Enter the appropriate code. Mushroom pushbuttons of diameter 40 mm cannot be placed next to each other because of the close spacing.

The purpose of the identification letter (A to F) on the inside of the cover and base of the enclosure is to simplify ordering and complementing of enclosures.

Should a command point not be required, state the code for a blanking plug.

Please note IEC 60204-1 / EN 60204-1 (VDE 0113 Part 1):

- The OFF pushbutton should be black, the ON pushbutton white. Illuminated pushbuttons should not be used as OFF pushbuttons.
- A yellow name plate must be used in conjunction with a red EMERGENCY-STOP mushroom pushbutton. This is available at an additional charge (see 4.6).

4.2 Specify switch blocks, lampholders and voltage reducers for each command point

Select the codes for the desired equipment in accordance with the relevant table and enter them in the appropriate column. For the following devices, the quantity and type of required switch blocks, lampholders etc. must be entered:

- Pushbuttons,
- Actuators with 2 positions,
- Illuminated pushbuttons,
- Indicator lights.

Illuminated pushbuttons and indicator lights with a voltage reducer are supplied with an incandescent lamp.

If a lampholder without voltage reducer is to be supplied with a lamp, state the lamp voltage and, for 110 V, the lamp type (incandescent, glow lamp or LED lamp) under 4.3.

The relevant selection table contains all the possible combinations for 3-position actuators acc. to EN 50013. Enter the appropriate code. If a different arrangement of switch blocks is desired for a command point, this command point must be ordered without switch blocks. The switch blocks must be ordered separately and fitted into the enclosure.

The command points in the enclosure can be fitted with a maximum of 3 switch blocks or 2 switch blocks and 1 lampholder.

4.3 Notes on non-standard versions of equipment

Non-standard refers to equipment that differs from that listed in this catalog, e.g.

- Additional supply of lamps without voltage reducers: state lamp voltage and type of lamp (incandescent lamp, glow lamp or LED lamp).
- Insert labels for illuminated pushbuttons: Select and enter Order No.
- For lockable actuators: special locks (= different Lock No.).

When lampholders with LEDs are used, the required color of the LED can be specified here.

If the color is not specified, LEDs the same color as the actuating element will be used.

4.4 Inscription of the labeling plates

Simply enter the text, select labeling plates in accordance with the ordering data. If a blank plate is required, state "blank". The labeling plates are delivered loose.

If no labeling plate is to be fitted, enter "without plate".

Labeling plates with a special text can be supplied at an additional charge. Simply enter the text, and the labeling plates will then be delivered with the plates stuck to the cover of the enclosure.

The lettering has uppercase initial letters.

4.5 Tick the position of the labeling plate for horizontal or vertical mounting.

If no entry is made, the equipment will be supplied for vertical mounting.

Vertical mounting

ON	⊗ White or clear
ON	● White or green
OFF	◉ Black or red

Horizontal mounting

ON OFF ON

4.6 Special features (only when required)

Special features are versions of enclosures that differ from those listed in this catalog, e.g. if required, tick the yellow backing plate according to EN 60204 (VDE 0113 Part 1). Enclosures with only one command point will then be supplied with a yellow cover. Should the enclosure have more than one command point, a yellow name plate will be factory fitted at point "A". If the yellow name plate should be fixed to another command point, please state which one this is to be.

4.7 Type of actuating elements

Specify here whether an actuating element made of molded-plastic or metal should be fitted.

If this is not specified, molded-plastic actuators will be used with molded-plastic enclosures and metal actuators will be used with metal enclosures.

4.8 Connection system

Specify here whether contact blocks and lampholders should be used with spring-loaded terminals or screw connection.

If this is not specified, elements with screw connection will be used.

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Enclosures with choice of fittings

Order form supplement

Recipient:

Siemens AG, A&D CD GKA LZA
Amberg, Fax: (+49 96 21) 80-31 02

Date	Purchaser's order reference/Order ref 1	Supplier's order reference

1. Item No.

2. Quantity

3. Order No. (complete according to selection table)

3SB38 . . − . . Z

4. Equipment

4.4 Inscription of the labeling plates (up to 11 characters 1 to 3 lines)	4.1 Actuating elements (order codes)	4.2 Switch blocks, lampholders, voltage reducers (codes) *	4.3 Notes on special versions, e.g. LED, lamp voltage, insert labels, laser inscription, special lock

top or right

F

E

D

C

B

A

NSD00050

Bottom or left   A to F are identification letters on the inside of the covers and bases

4.5 Position of labeling plates for
- ❏ vertical mounting
- ❏ horizontal mounting

4.6 Special features, e.g.
- ❏ Yellow backing plate at command point "A" or yellow cover for enclosed units with only one command point
- ❏

4.7 Actuators
- ❏ Molded-plastic version
- ❏ Metal version

4.8 Connection system
- ❏ Screw connection
- ❏ Spring-loaded terminal

* If 3-position actuators are used, the numerical codes shown in this catalog for the switch block arrangement should be stated (e.g. 03 for 2 NO, 05 for 2 NC, etc.).

Select according to order form supplement, Section 4.1

Version	Codes for colors												
	black		red		yellow		green		blue		white		clear	
Actuating elements and signaling devices													
22.5 mm blank plug [1]	BV	BK	–		–		–		–		–		–	
Pushbutton with flat button	D	BK	D	RD	D	YE	D	GN	D	BU	D	WH	D	CL
Illuminated pushbutton with flat button	–		DL	RD	DL	YE	DL	GN	DL	BU	DL	WH	DL	CL
Pushbutton with raised button	DH	BK	DH	RD	DH	YE	–		DH	BU	–		–	
Illuminated pushbutton with raised button	–		DHL	RD	DHL	YE	DHL	GN	DHL	BU	–		DHL	CL
Pushbutton with raised front ring	DHF	BK	DHF	RD	DHF	YE	DHF	GN	DHF	BU	DHF	WH	–	
Pushbutton with raised front ring, castellated [1]	DFZ	BK	DFZ	RD	DFZ	YE	DFZ	GN	DFZ	BU	DFZ	WH	–	
Pushbutton with flat button	DS	BK	DS	RD	DS	YE	DS	GN	DS	BU	DS	WH	–	
Illuminated pushbutton with flat button	–		DLS	RD	DLS	YE	DLS	GN	DLS	BU	DLS	WH	DLS	CL
Mushroom pushbutton, Ø 30 mm	P30	BK	P30	RD	P30	YE	P30	GN	–		–		–	
Illuminated mushroom pushbutton, Ø 30 mm	–		–		PL30	YE	PL30	GN	–		PL30	WH	–	
Mushroom pushbutton, Ø 40 mm	P	BK	P	RD	P	YE	P	GN	–		–		–	
Illuminated mushroom pushbutton, Ø 40 mm	–		PL	RD	PL	YE	PL	GN	–		–		–	
Pushbutton with raised button, latching by pressing and turning to the right, rotate to unlatch to the left [1]	DHR	BK	DHR	RD	–		–		–		–		–	
EMERGENCY-STOP mushroom pushbutton acc. to EN 418, Ø 32 mm, with positive latching rotate to unlatch to the left			PRÜ 32	RD										
EMERGENCY-STOP mushroom pushbutton acc. to EN 418, Ø 40 mm, with positive latching rotate to unlatch to the left	–		PRÜ 40	RD	–		–		–		–		–	
EMERGENCY-STOP mushroom pushbutton acc. to EN 418, Ø 40 mm, with positive latching pull to unlatch	–		PRZ 40	RD										
EMERGENCY-STOP mushroom pushbutton acc. to EN 418, Ø 40 mm, with positive latching with RONIS key-operated switch, lock No. SB30	–		PRS 30	RD	–		–		–		–		–	
EMERGENCY-STOP mushroom pushbutton acc. to EN 418, Ø 40 mm, with positive latching with CES key-operated switch, lock No. SSG10	–		PRS 10	RD	–		–		–		–		–	
EMERGENCY-STOP mushroom pushbutton acc. to EN 418, Ø 40 mm, with positive latching with BKS key-operated switch, lock No. S1	–		PRS S1	RD	–		–		–		–		–	
EMERGENCY-STOP mushroom pushbutton acc. to EN 418, Ø 40 mm, with positive latching with O.M.R. key-operated switch, lock No. 73037	–		PRS 73	RD	–		–		–		–		–	
Acoustic signaling device, IP40 [1]	AMK	BK	–		–		–		–		–		–	
Indicator lights	–		L	RD	L	YE	L	GN	L	BU	L	WH	L	CL
Push-pull-button with snap action, Ø 30 mm	DZ 30	BK	DZ30	RD	–		–		–		–		–	
Push-pull-button, can be illuminated, with snap action, Ø 30 mm	–		DZB30	RD	DZB30	YE	DZB30	GN	DZB30	BU	–		DZB30	CL
Push-pull button with snap action, Ø 40 mm	DZ	BK	DZ	RD	–		–		–		–		–	
Push-pull button, can be illuminated, with snap action, Ø 40 mm	–		DZB	RD	DZB	YE	DZB	GN	DZB	BU	–		DZB	CL

1) Only in molded-plastic version.

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Enclosures with choice of fittings

Version	Codes for colors							
	black	red	yellow	green	blue	white	clear	

Selector switch with 2 switch positions

Switching sequence O–I latching

	black		red		yellow	green		blue		white		clear	
non-illuminated	K1	BK	K1	RD	–	K1	GN	–		K1	WH	–	
illuminated	–		BK1	RD	BK1 YE	BK1	GN	BK1	BU	–		BK1	CL

Switching sequence O–I momentary contact to the right (with return from the right)

	black		red		yellow	green		blue		white		clear	
non-illuminated	K2	BK	K2	RD	–	K2	GN	–		K2	WH	–	
illuminated	–		BK2	RD	BK2 YE	BK2	GN	BK2	BU	–		BK2	CL

Selector switch with 3 switch positions

Switching sequence I–O–II latching

	black		red		yellow	green		blue		white		clear	
non-illuminated	K4	BK	K4	RD	–	K4	GN	–		K4	WH	–	
illuminated	–		BK4	RD	BK4 YE	BK4	GN	BK4	BU	–		BK4	CL

Switching sequence I–O–II momentary contact (with reset from the right and left)

	black		red		yellow	green		blue		white		clear	
non-illuminated	K5	BK	K5	RD	–	K5	GN	–		K5	WH	–	
illuminated	–		BK5	RD	BK5 YE	BK5	GN	BK5	BU	–		BK5	CL

Switching sequence I–O–II latching to the right, momentary contact to the left (with return from the left)

	black		red		yellow	green		blue	white		clear	
non-illuminated	K6	BK	K6	RD	–	K6	GN	–	K6	WH	–	

Switching sequence I–O–II latching to the left, momentary contact to the right (with return from the right)

	black		red		yellow	green		blue	white		clear	
non-illuminated	K7	BK	K7	RD	–	K7	GN	–	K7	WH	–	

Version	Code Key removable in position						
	O	I	II	O and I	O and II	I and II	I, O and II

Key-operated switches with 2 switch positions

Switching sequence O–I latching

Version	O		I		II	O and I		O and II	I and II	I, O and II
RONIS type, lock No. SB30	RSB	1A	RSB	1E	–	RSB	1AE	–	–	–
CES type, lock No. SSG 10	CES	1A	CES	1E	–	CES	1AE	–	–	–
lock No. LSG 1	CESL	1A	–		–	CESL	1AE	–	–	–
IKON type, lock No. 360012 K1	Z-J	1A	–		–	Z-J	1AE	–	–	–
BKS type, lock No. S1	BKS	1A	BKS	1E	–	BKS	1AE	–	–	–
lock No. E1 (for VW)	BKS A	1A	–		–	BKS A	1AE	–	–	–
lock No. E2 (for VW)	BKS E	1A	–		–	BKS E	1AE	–	–	–
lock No. E7 (for VW)	BKS C	1A	–		–	BKS C	1AE	–	–	–
lock No. E9 for VW)	BKS B	1A	–		–	BKS B	1AE	–	–	–
O.M.R. type, black, lock No. 73034	OMR BK	1A	OMR BK	1E	–	OMR BK	1AE	–	–	–

Switching sequence O–I momentary contact to the right (with return from the right)

Version	O		I	II	O and I	O and II	I and II	I, O and II
RONIS type, lock No. SB30	RSB	2A	–	–	–	–	–	–
CES type, lock No. SSG 10	CES	2A	–	–	–	–	–	–
lock No. LSG 1	CESL	2A	–	–	–	–	–	–
IKON type, lock No. 360012 K1	Z-J	2A	–	–	–	–	–	–
BKS type, lock No. S1	BKS	2A	–	–	–	–	–	–
O.M.R. type, black, lock No. 73034	OMR BK	2A	–	–	–	–	–	–

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Enclosures with choice of fittings

Version	Code Key removable in position							
	O	I	II	O and I	O and II	I and II	I, O and II	

Key-operated switches with 3 switch positions

Switching sequence I–O–II latching

	O		I		II		O and I	O and II	I and II		I, O and II	
RONIS type, lock No. SB30	RSB	4A	RSB	4E	RSB	4D	–	–	RSB	4ED	RSB	4EAD
CES type, lock No. SSG 10	CES	4A	CES	4E	CES	4D	–	–	CES	4ED	CES	4EAD
IKON type, lock No. 360012 K1	Z-J	4A	Z-J	4E	Z-J	4D	–	–	Z-J	4ED	Z-J	4EAD
BKS type, lock No. S1	BKS	4A	BKS	4E	BKS	4D	–	–	BKS	4ED	BKS	4EAD
O.M.R. type, black, lock No. 73034	OMR BK	4A	–		–		–	–	OMR BK	4ED	OMR BK	4EAD

Switching sequence I–O–II momentary contact (with return from the right and left)

	O	I	II	O and I	O and II	I and II	I, O and II
RONIS type, lock No. SB30	RSB5A	–	–	–	–	–	–
CES type, lock No. SSG 10	CES5A	–	–	–	–	–	–
IKON type, lock No. 360012 K1	Z-J5A	–	–	–	–	–	–
BKS type, lock No. S1	BKS5A	–	–	–	–	–	–
O.M.R. type, black, lock No. 73034	OMR BK5A	–	–	–	–	–	–

Switching sequence I–O–II latching to the right, momentary contact to the left (with return from the left)

	O		I	II		O and I	O and II		I and II	I, O and II
RONIS type, lock No. SB30	RSB	6A	–	RSB	6D	–	RSB	6AD	–	–
CES type, lock No. SSG 10	CES	6A	–	CES	6D	–	CES	6AD	–	–
IKON type, lock No. 360012 K1	Z-J	6A	–	Z-J	6D	–	Z-J	6AD	–	–
BKS type, lock No. S1	BKS	6A	–	BKS	6D	–	BKS	6AD	–	–
O.M.R. type, black, lock No. 73034	OMR BK	6A	–	OMR BK	6D	–	OMR BK	6AD	–	–

Switching sequence I–O–II latching to the left, momentary contact to the right (with return from the right)

	O		I		II	O and I		O and II	I and II	I, O and II
RONIS type, lock No. SB30	RSB	7A	RSB	7E	–	RSB	7AE	–	–	–
CES type, lock No. SSG 10	CES	7A	CES	7E	–	CES	7AE	–	–	–
IKON type, lock No. 360012 K1	Z-J	7A	Z-J	7E	–	Z-J	7AE	–	–	–
BKS type, lock No. S1	BKS	7A	BKS	7E	–	BKS	7AE	–	–	–
O.M.R. type, black, lock No. 73034	OMR BK	7A	OMR BK	7E	–	–		–	–	–

9

Pushbuttons and Indicator Lights
SIGNUM 22 mm Nominal Diameter

Enclosures with choice of fittings

Select according to order form supplement, Section 4.2

	Version			Order code	
Switch blocks, lampholders and voltage reducers					
Codes for lampholders and actuators with 2 switch positions	Switch block		NO	**NO**	
			NC	**NC**	
	BA 9s lampholder without lamp [1]			**BA 9s**	
	BA 9s lampholder with lamp, Enter Order No. under 4.3 (Notes) [1] [2]			**BA 9s L**	
	BA 9s lampholder + voltage reducer + 130 V lamp [1]		AC 230 V	**BA 9s VL**	
	BA 9s lampholder + acoustic signal transformer [1]			**BA 9s S**	
	Lampholder with integrated LED		AC/DC 24 V	**LED24**	
			AC 110 V	**LED110**	
			AC 230 V	**LED230**	
	Holder for 3 snap-on switch blocks with front plate fixing				
	Holder for selector switch and key-operated switches with pressure plates, for actuating the central switch block, with front plate mounting				
	Pressure plate for selector switch and key-operated switch for operating the middle switch block, with base mounting				
	Support terminals		black	**Sk BK**	
			blue	**Sk BU**	
			green/yellow	**Sk GNYE**	

	Number and type of switch blocks	in position I		in position II		Order code	
		actuated	contact identification	actuated	contact identification		
Code for actuators with 3 switch positions	2 NO	1 NO	13/14	1 NO	23/24	**03**	
	1 NO+1 NC	1 NO	13/14	1 NC	21/22	**04**	
	2 NC	1 NC	11/12	1 NC	21/22	**05**	
	3 NO	2 NO	13/14 and 33/34	1 NO	23/24	**07**	
		1 NO	13/14	2 NO	23/24 and 33/34	**08**	
		2 NO	13/14 and 33/34 [3]	2 NO	23/24 and 33/34 [3]	**06**	
	2 NO+1 NC	2 NO	13/14 and 33/34	1 NC	21/22	**11**	
		1 NO	13/14	1 NC+1 NO	21/22 and 33/34	**12**	
		2 NO	13/14 and 33/34 [3]	1 NC+1 NO	21/22 and 33/34 [3]	**10**	
		1NO+1NC	13/14 and 31/32	1 NC+1 NC	23/24 and 31/32	**19**	
	1 NO+2 NC	1 NO+1 NC	13/14 and 31/32	1 NC	21/22	**14**	
		1 NO	13/14	2 NC	21/22 and 31/32	**15**	
		1 NO+1 NC	13/14 and 31/32 [3]	2 NC	21/22 and 31/32 [3]	**13**	
	3 NC	2 NC	11/12 and 31/32	1 NC	21/22	**17**	
		1 NC	11/12	2 NC	21/22 and 31/32	**18**	
		2 NC	11/12 and 31/32 [3]	2 NC	21/22 and 31/32 [3]	**16**	

Select according to order form supplement, Section 4.4

	Inscription		
Labeling plates	With inscription	Laser-printed inscription	
	Without inscription		

Special designs

	Version		
Pushbutton in enclosure	Fitting a yellow backing plate	Without inscription	
		With recess for labeling plate	
	Enclosure with yellow cover [4]		

1) Only for lampholders with screw connection.
2) For lamps, see page 9/71.
3) This switch block is actuated in positions I and II.
4) Only possible for enclosures with 1 command point.

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Labeling plates for enclosures

Overview

The labeling plates (black with white inscription) for enclosures have an adhesive layer on the back. The size of the labels is 22 mm × 22 mm.

Inscription

The lettering has uppercase initial letters.

Selection and ordering data

Inscription	DT	Order No.	PS*	Weight per PU, approx. kg
Blank				
Without inscription ▶		**3SB39 06-1AA**	10 units	0.100
With inscription				
Ein	B	**3SB39 06-1AB**	10 units	0.001
On	B	**3SB39 06-1EB**	10 units	0.001
Off	B	**3SB39 06-1AC**	10 units	0.001
Off	B	**3SB39 06-1EC**	10 units	0.001
Auf	B	**3SB39 06-1AD**	10 units	0.001
Up	B	**3SB39 06-1ED**	10 units	0.001
Ab	B	**3SB39 06-1AE**	10 units	0.001
Down	B	**3SB39 06-1EE**	10 units	0.001
Vor	B	**3SB39 06-1AF**	10 units	0.001
Forward	B	**3SB39 06-1EF**	10 units	0.001
Zurück	B	**3SB39 06-1AG**	10 units	0.001
Reverse	B	**3SB39 06-1EG**	10 units	0.001
Rechts	B	**3SB39 06-1AH**	10 units	0.001
Right	B	**3SB39 06-1EH**	10 units	0.001
Links	B	**3SB39 06-1AJ**	10 units	0.001
Left	B	**3SB39 06-1EJ**	10 units	0.001
Auf	B	**3BB3906-1AD**	10 units	0.001
Open	B	**3SB39 06-1EP**	10 units	0.001
Zu	B	**3SB39 06-1AL**	10 units	0.001
Close	B	**3SB39 06-1EQ**	10 units	0.001
Schnell	B	**3SB39 06 -1AM**	10 units	0.001
Fast	B	**3SB39 06 -1ER**	10 units	0.001
Langsam	B	**3SB39 06 -1AN**	10 units	0.001
Slow	B	**3SB39 06 -1ES**	10 units	0.001
Operation	B	**3SB39 06 -1AP**	10 units	0.001
Running	B	**3SB39 06 -1EV**	10 units	0.001
Störung	B	**3SB39 06 -1AQ**	10 units	0.001
Fault	B	**3SB39 06 -1EW**	10 units	0.001
Einrichten	B	**3SB39 06 -1AR**	10 units	0.001
Reset	B	**3SB39 06 -1EM**	10 units	0.001
Test	B	**3SB39 06 -1EN**	10 units	0.001
Start	B	**3SB39 06 -1EL**	10 units	0.001
Halt	B	**3SB39 06-1AK**	10 units	0.001
Stop	B	**3SB39 06-1EK**	10 units	0.001
NOT-AUS	B	**3SB39 06 -1AS**	10 units	0.001

Inscription	DT	Order No.	PS*	Weight per PU, approx. kg
Equipment				
Fan	B	**3SB39 06 -1CA**	10 units	0.001
Pump	B	**3SB39 06 -1CB**	10 units	0.001
Cooling	B	**3SB39 06 -1CC**	10 units	0.001
Heating	B	**3SB39 06 -1CD**	10 units	0.001
Lighting	B	**3SB39 06 -1CE**	10 units	0.001
Filter	B	**3SB39 06 -1CF**	10 units	0.001
Motor	C	**3SB39 06 -1CG**	10 units	0.001
Compressor	C	**3SB39 06 -1CH**	10 units	0.001
Symbol for ON/OFF				
O	B	**3SB39 06-1MB**	10 units	0.001
I	B	**3SB39 06-1MC**	10 units	0.001
II	B	**3SB39 06-1MD**	10 units	0.001
III	B	**3SB39 06-1ME**	10 units	0.001
O I (horizontal)	B	**3SB39 06-1MF**	10 units	0.001
I O II (horizontal)	B	**3SB39 06-1MG**	10 units	0.001
I O (vertical)	B	**3SB39 06-1MH**	10 units	0.001
II O I (vertical)	B	**3SB39 06-1MW**	10 units	0.001
Motion symbols				
→	B	**3SB39 06-1NA**	10 units	0.001
Customized inscription				
Any inscription or symbol can be selected	B	**3SB39 06-0XZ K0Y, K1Y, K2Y KY3** or **K9Y**	10 units	0.001

Options

Customized inscription

The labels can be inscribed with text and symbols not listed in the ordering data.

Append the following codes to the order number:
- Text in upper/lowercase: **K0Y**
- Text in uppercase: **K1Y**
- Text in lowercase: **K2Y**
- Symbols with number to DIN Report 4: **K3Y**
- Text or symbols according to order form supplement: **K9Y**

DIN Report 4 can be obtained from
Beuth Verlag GmbH, D-10772 Berlin

Ordering example

You want a label with image No. 267 to DIN Report 4:

3SB39 06–0XZ
K3Y
Z = 267

Notes on ordering

When ordering, specify the required inscription in plain text in addition to the order number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language.

3 lines with 11 letters each are possible, height of letters 4 mm (1 to 3 lines)

For special symbols (short code K9Y), a CAD drawing in DXF format should be submitted.

9

Accessories for enclosures

■ **Selection and ordering data**

	Device type	Version	Color/ inscription	DT	Order No.	PS*	Weight per PU, approx. kg
Blanking plugs							
	Blanking plug for round design, plastic		black	►	3SB39 21-0AA	10 units	0.012
Holders and pressure plates							
	Holder for pushbuttons and switches for snapping on 3 switch blocks, for front plate mounting			►	3SB39 01-0AB	20 units	0.100
	Holder for selector switch and key-operated switch with pressure plate for actuating the central switch block, for front plate mounting			►	3SB39 01-0AC	10 units	0.200
	Pressure plate for selector switch and key-operated switch for actuating the central switch block, for base mounting			B	3SB39 01-0AW	10 units	0.100
Accessories for enclosure							
	Yellow name plate as backing plate for EMERGENCY-STOP, self-adhesive		Without inscription	B	3SB19 02-1AQ	1 unit	0.001
			with inscription "EMERGENCY-STOP"	B	3SB19 02-2AQ	1 unit	0.001
			with recess for labeling plate	B	3SB39 21-0BV	1 unit	0.001
	M20 cable gland [1]			B	3SB39 01-0CK	1 unit	0.011
	M25 cable gland [1]			B	3SB39 01-0CM	1 unit	0.014
	M20 hexagonal nut for cable glands [1]			B	3SB39 01-0CL	10 units	0.100
	M25 hexagonal nut for cable glands [1]			B	3SB39 01-0CN	10 units	0.100

[1] For molded-plastic enclosures, a nut and cable gland are required, for metal enclosures only the cable gland is required.

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* This quantity or a multiple thereof can be ordered

■ Dimension drawings

Mounting dimensions

Round design

Ø22,3 $^{+0,4}_{-0}$

NSD0_00150

Square design

□26,0 $^{+0,2}_{-0}$

NSD0_00151
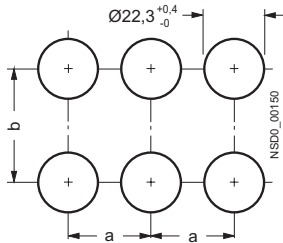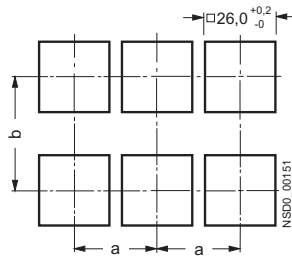
Minimum clearance	a	b
Switch blocks (1 contact) and lampholder		
• for front plate mounting, with screw terminals	30 [1]	45
• for front plate mounting, with spring-loaded terminals	30 [1]	30 [1]
• for use on PCB, with solder pins	30 [1]	30 [1]
Switch blocks with 2 contacts		
• for front plate mounting	30 [1]	50
When using holders for labeling plates		
• 12.5 mm × 27 mm	30 [1]	45 [2]
• 27.0 mm×27 mm	30 [1]	60

1) For mushroom pushbutton, EMERGENCY-STOP and push-pull button:
   Note mushroom diameter d = 40 mm or 60 mm.

2) 60 mm with switch blocks having two contacts.

Molded-plastic version, round

Pushbutton or illuminated pushbutton
with flat pushbutton and single-pole switch block (and lampholder)

NSD0_00152a

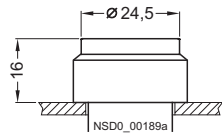**Pushbutton or illuminated pushbutton**
with raised button

Ø 24,5

NSD0_00153a

Pushbutton
with raised front ring

NSD0_01307

Pushbutton
with raised front ring castellated

NSD0_01308

Mushroom pushbutton, illuminated mushroom pushbutton, push-pull-button or illuminated push-pull-button,
Ø 30 mm

Ø30

NSD0_00191

Mushroom pushbutton, illuminated mushroom pushbutton, push-pull-button or illuminated push-pull-button,
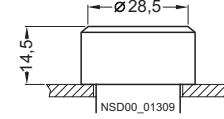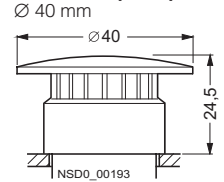Ø 40 mm

Ø40

NSD0_00157

Mushroom pushbutton, illuminated mushroom pushbutton, push-pull-button or illuminated push-pull-button,
Ø 60 mm

Ø 60

NSD0_00194

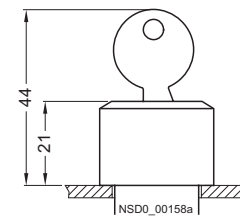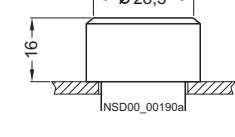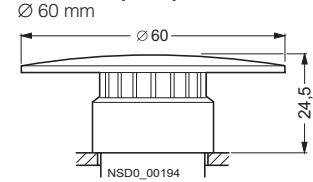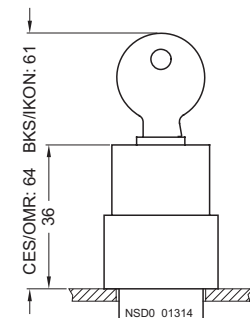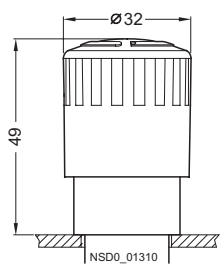**Selector switch or illuminated selector switch**

NSD0_00155a

RONIS key-operated switch

NSD0_00158a

BKS, CES, IKON, O.M.R. key-operated switches

NSD0_01314

Joystick switch

NSD0_00271

1) 82 with mechanical interlock, 77 without mechanical interlock

Pushbutton
with raised button, latchable

Ø 28,5
Ø 23,1

NSD0_00156a

Operating mechanism for potentiometer
with shaft Ø 6 mm, 30 ... 32 mm long

Ø29,5
Ø15

NSD0_00263

Pushbutton with extended stroke

Ø 30
Ø 24

M4   Pg 16

NSD0_01306

9

Project planning aids

EMERGENCY-STOP mushroom pushbutton, Ø 32 mm, pull to unlatch
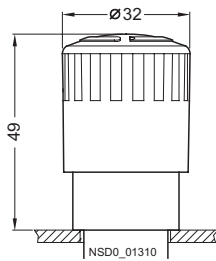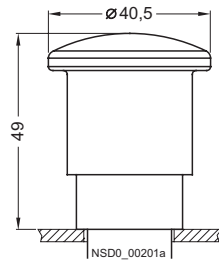
Ø 32
49
NSD0_01310

EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, pull to unlatch

Ø 40,5
49
NSD0_00201a

EMERGENCY-STOP mushroom pushbutton, Ø 40 mm, pull to unlatch

Ø 40,5
49
NSD0_00163a
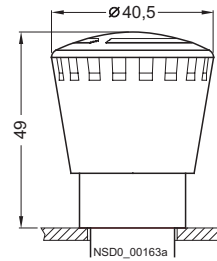
EMERGENCY-STOP mushroom pushbutton, Ø 60 mm, rotate to unlatch
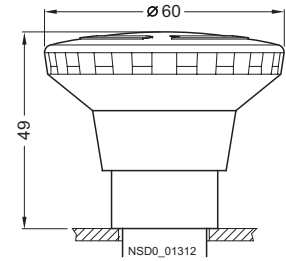
Ø 60
49
NSD0_01312

EMERGENCY-STOP mushroom pushbutton with RONIS key-operated switch

40,8
71
48
NSD0_00164a

EMERGENCY-STOP mushroom pushbutton with BKS, CES, IKON, O.M.R. key-operated switch

Ø 40,5
BKS/IKON: 80
CES/OMR: 83
57,5
NSD0_01316

Indicator light

Ø 28
11,5
NSD0_00169a

Holder

□ 30
17
NSD0_00170

Audible signal device

10
NSD0_00168

Blanking plug

Ø 28,5
6,5
18
NSD0_00173

On-Off pushbutton with flat buttons

10
NSD0_00171a
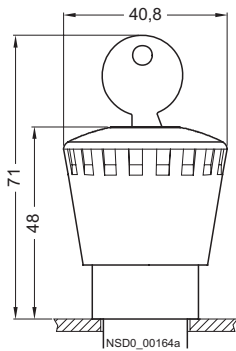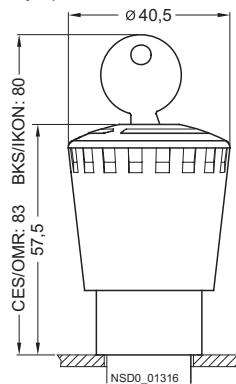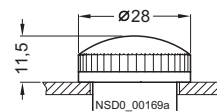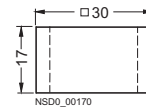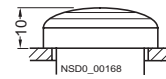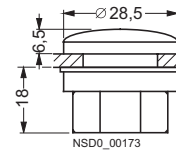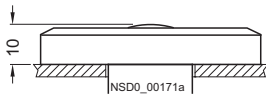
On-Off pushbutton with raised buttons

12
NSD0_00172a
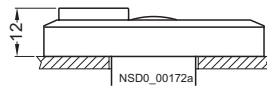
On-Off pushbutton with or without indicator light

NSD0_00174a
30
22,6
17,4
55
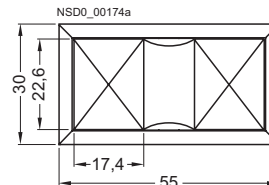
Top view

Operating mechanism for potentiometer with shaft Ø 6 mm, 30 ... 32 mm long
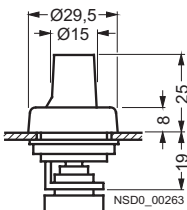
Ø 29,5
Ø 15
25
8
19
NSD0_00263

Pushbutton with extended stroke

Ø 30
Ø 24
32
16,5
M4
Pg 16
NSD0_01306

9
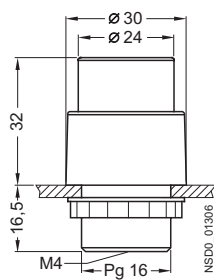
Plastic version, square

**Pushbutton or
illuminated pushbutton**
with flat pushbutton
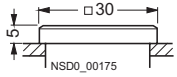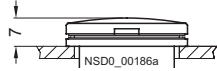
NSD0_00175

Indicator light

NSD0_00186a

**Selector switch or
illuminated selector switch**

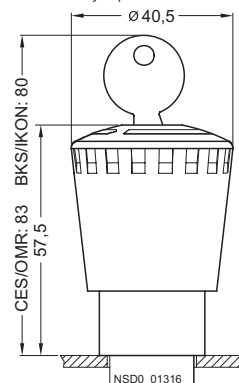NSD0_00176a

RONIS key-operated switch

NSD0_01320

**BKS, CES, IKON, O.M.R.
key-operated switch**

NSD0_01319
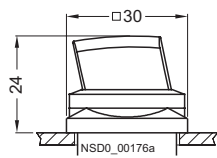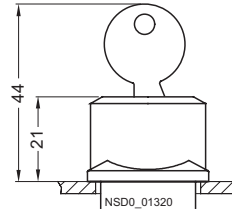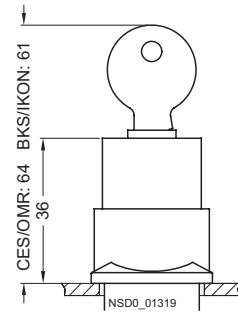
**EMERGENCY-STOP
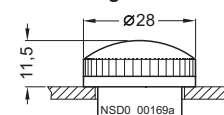mushroom pushbutton**
with safety lock
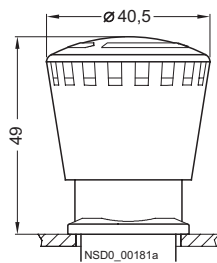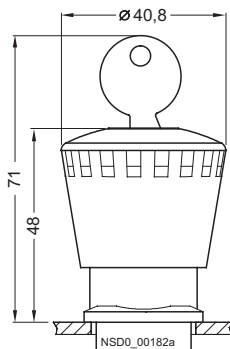
NSD0_00181a

**EMERGENCY-STOP
mushroom pushbutton**
with RONIS key-operated switch

NSD0_00182a

**EMERGENCY-STOP
mushroom pushbutton**
with BKS, CES, IKON, O.M.R.
key-operated switch

NSD0_01318

Holder

NSD0_00188

Blanking plug

NSD0_00187a

9
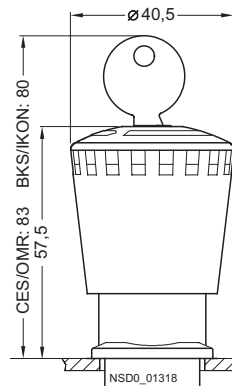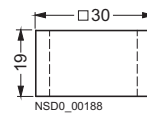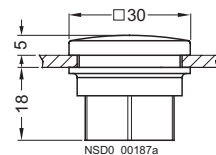
Project planning aids

Metal version, round

Pushbutton or illuminated pushbutton
with flat button and single-pole switch block (and lampholder)

NSD0_00295a

Pushbutton or illuminated pushbutton
with raised button

⌀24,5
16
NSD0_00189a

Pushbutton or illuminated pushbutton, latching,
with flat button

⌀28,5
14,5
NSD00_01309

Pushbutton
with raised front ring

⌀28,5
16
NSD00_00190a
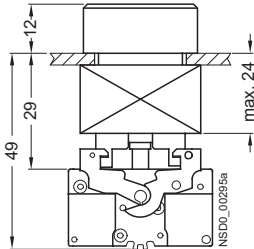
Selector switch or illuminated selector switch,
standard

24
NSD0_01311

Mushroom pushbutton, illuminated mushroom pushbutton, push-pull-button or illuminated push-pull-button, ⌀ 30 mm

⌀30
27,5
NSD0_00191

Mushroom pushbutton, illuminated mushroom pushbutton, push-pull-button or illuminated push-pull-button, ⌀ 40 mm

⌀40
24,5
NSD0_00193

Mushroom pushbutton, illuminated mushroom pushbutton, push-pull-button or illuminated push-pull-button, ⌀ 60 mm

⌀60
24,5
NSD0_00194

Selector switch or illuminated selector switch, heavy duty
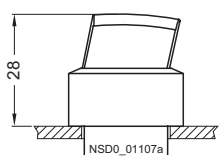
28
NSD0_01107a
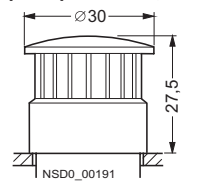
Selector switch or illuminated selector switch with long handle

28
NSD0_01105a

RONIS key-operated switch

44
21
NSD0_00158a

BKS, CES, IKON, O.M.R. key-operated switches

BKS/IKON: 61
CES/OMR: 64
36
NSD0_01314

EMERGENCY-STOP mushroom pushbutton,
⌀ 32 mm, rotate to unlatch

⌀32
49
NSD0_01310

EMERGENCY-STOP mushroom pushbutton,
⌀ 40 mm, pull to unlatch

⌀40,5
49
NSD0_00201a

EMERGENCY-STOP mushroom pushbutton,
⌀ 40 mm, rotate to unlatch

⌀40,5
49
NSD0_00163a

EMERGENCY-STOP mushroom pushbutton,
⌀ 60 mm, rotate to unlatch

⌀60
49
NSD0_01312

EMERGENCY-STOP mushroom pushbutton
with RONIS key-operated switch

40,8
71
48
NSD0_00164a

EMERGENCY-STOP mushroom pushbutton with BKS, CES, IKON, O.M.R. key-operated switch

⌀40,5
BKS/IKON: 80
CES/OMR: 83
57,5
NSD0_01316

Indicator light

⌀28
11,5
NSD0_00169a

Holder

□30
17
NSD0_00170

9

Switch blocks and lampholders

Screw connection, for front plate mounting

Switch block with 1 contact

36,5 — 20 — 25,5

NSD0_00212a

Switch block with 2 contacts

45 — 34 — 40

NSD0_00213a

BA 9s lampholder
with or without integrated voltage reducer

36,5 — 20 — 27,1

NSD0_00214a

BA 9s lampholder
with separate lamp test function

NSD0_00215a — 41,2 — 34,2 — 36,8 — 36 — 45,9

Lampholder with integrated LED

NSD0_01106a — 39,1 — 20 — 36

Pushbutton or illuminated pushbutton with switch blocks with 1 contact

□30 — max. 24 — 29 — 49

NSD0_00216a

Pushbutton with switch blocks with 1 contactL

20

NSD0_00217

Illuminated pushbutton with switch blocks with 1 contact and lampholder

10 — 30

NSD0_00218

Pushbutton or illuminated pushbutton with switch blocks with 2 contacts

29 — max. 24 — 63

NSD0_00219a

Illuminated pushbutton with switch blocks with 2 contacts and lampholder

□30 — 10 — 30

NSD0_00220a
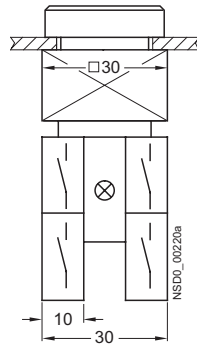
Illuminated pushbutton with switch blocks with 1 contact and lampholder with snapped-on transformer
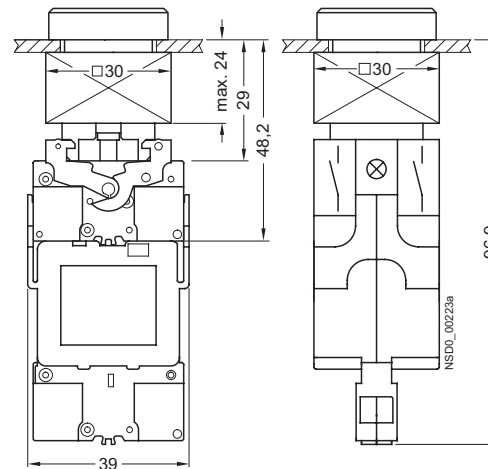
□30 — max. 24 — 29 — 48,2 — 39

□30 — 96,9

NSD0_00223a

Spring-loaded terminals, for front plate mounting

Switch block with 1 contact

30 — 21,2 — 26,6

NSD0_00210a

Switch block with 2 contacts

45 — 33,4 — 39

NSD0_01303

Lampholder BA 9s

30 — 21,2 — 28,2

NSD0_00211a

Lampholder with integrated LED

30 — 39,7 — 20,7

NSD0_01304

9
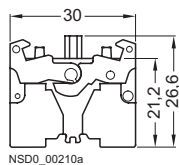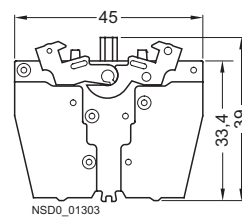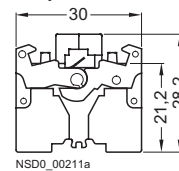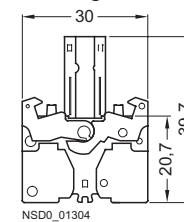
Project planning aids

With solder pins, for use on PCB

Switch block 1 NO and 1 NC

18,5
21
16
15,24
4
7,5

NSD0_00224

Lampholder

□ 7,3
28
4

NSD0_00225

Solder pin spacing

NO ① ② ③ NC

5,08
15,24
20,32
2,54

NSD0_00226a

min. 7,62,
max. 10,16
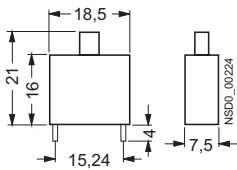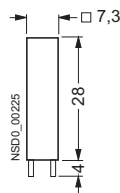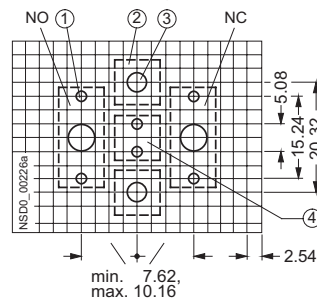
① Solder pin Ø1.3 $^{+0.1}$
② PCB holder
③ Centering hole Ø4.2 $^{+0.1}$
④ Lampholder

Pushbutton or illuminated pushbutton with switch blocks with 1 contact and PCB support
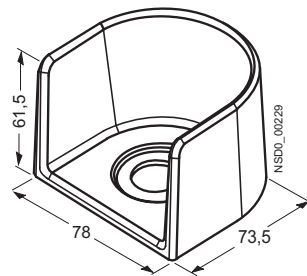
44

NSD0_00227a

min. 7,62,
max. 10,16
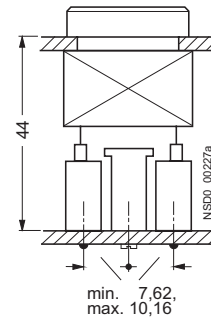
Accessories

3SB39 21–0AK protective collar
for front plate mounting [1],
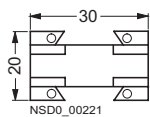for EMERGENCY-STOP mushroom
pushbutton without key-operated
switch

50,5
78
73,5

NSD0_00228
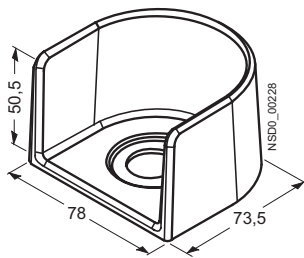
3SB39 21–0AX protective collar
for front plate mounting [1],
for EMERGENCY-STOP mushroom
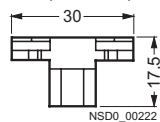pushbutton with key-operated switch

61,5
78
73,5

NSD0_00229

1) Can be used with a front plate thickness up to 4 mm.

Holder for mounting 3 elements

Holder for pushbuttons

30
20

NSD0_00221

Holder for selector switch, key-operated switch and On-Off pushbutton,
with pressure plate

30
17,5

NSD0_00222

9

Enclosures

Enclosure without protective collar, molded plastic

NSD0_00231

Rear view
for M4 screw

top and bottom with knockouts
for one gland each

Number of com-mand points	Length a	Spacing b	Spacing c
1	85	54	17,5
2	114	83	17,5
3	154	123	17,5
4	194	163	17,5
6	280	249	20,5

Enclosure without protective collar, metal

NSD0_01297a

Rear view
for M4 screw

top and bottom with opening
for one gland each

Number of com-mand points	Length a	Spacing b	Spacing c
1	85	54	21
2	114	83	21
3	154	123	21
4	194	163	21
6	280	249	21
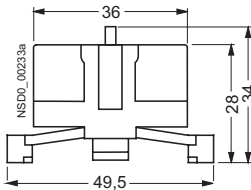
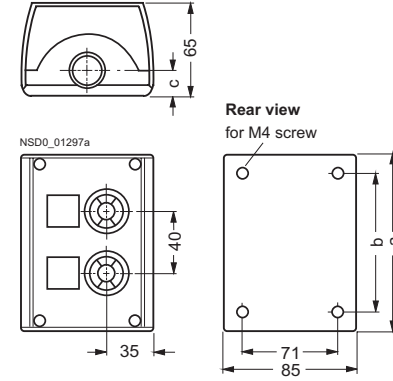**Enclosure with protective collar, molded plastic**
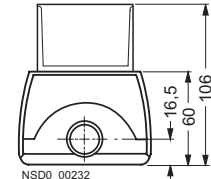

NSD0_00232

top and bottom with knockouts
for one gland each

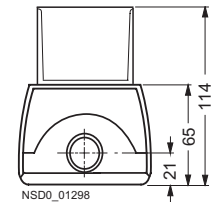**Enclosure with protective collar, metal**

NSD0_01298

top and bottom with opening
for one gland each

Screw connection, for base mounting

Switch block with 1 contact

NSD0_00233a

BA9s lampholder with or without integrated voltage reducer

NSD0_00234a

Lampholder with integrated LED

NSD0_01302

Spring-loaded terminals, for base mounting

Switch block with 1 contact

NSD0_01301

Lampholder with integrated LED

NSD0_01302

Support terminal

NSD0_01300

9
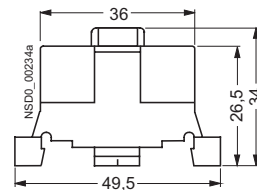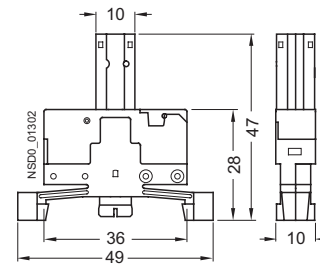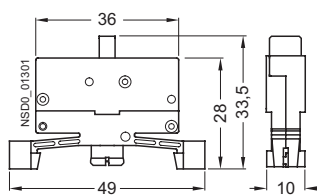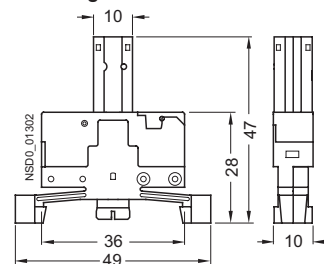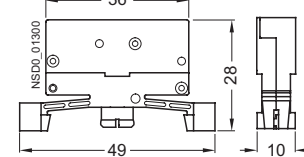
SIGNUM Complete Operating and Display Systems

Control panels

■ Overview

SIGNUM 3SB4 complete operator communication systems are interfaces that permit human/machine dialog.

The systems include the operator panel and the associated connection options.

SIGNUM 3SB4 complete operator communication systems are designed and supplied to meet customer-specific requirements. The Order No. is built up from modules according to the design.
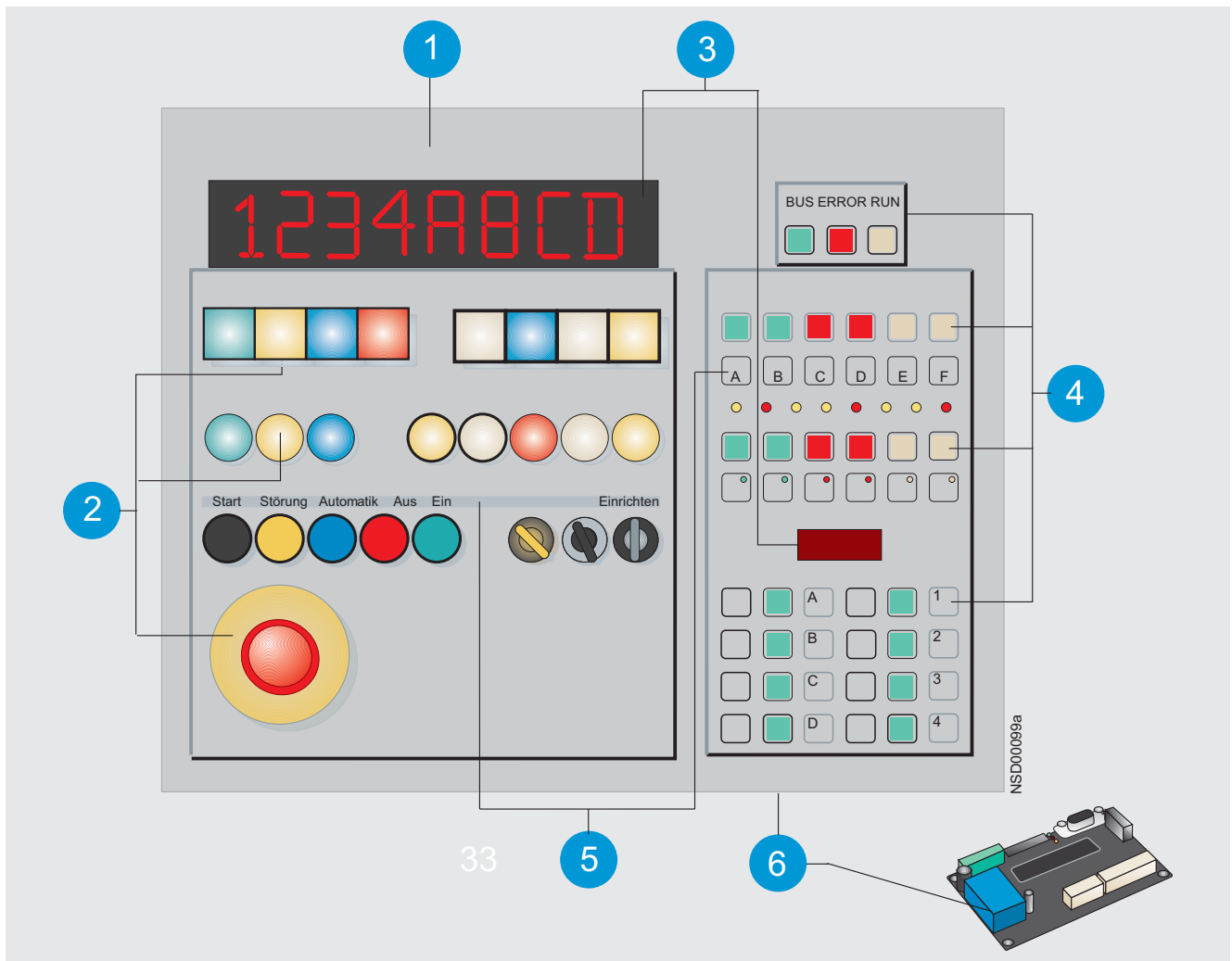
■ Design

Design options

❶ Front plates
- Any size and shape,
- Different materials, e.g. bare or anodized aluminum, sheet-steel, plastic; also film-coated
- Various colors

Equipment

❷ Conventional 3SB1, 3SB2 and SIGNUM 3SB3 pushbuttons and indicator lights, round or square design

❸ Indication and visualization components, e.g. multi-digit 7-segment displays and LED text displays

❹ Membrane keyboards with and without embossing, with metal spring washers or short-stroke keys, with point illumination or fully-illuminated keypads

- Integration of other flush-mounted devices, e.g. measuring instruments, potentiometer operating mechanisms (not shown)

❺ Inscription
- Printed on the front plate, anodized
- Direct on the operating surface of the pushbuttons or using insert labels or name plates
- Using foils: printed, with push-in strips.

Connections

On request, all designs can be supplied ready to connect:

❻ With interfaces for connection to an AS interface, PROFIBUS DP and other fieldbus systems

- Conventional with screw connections or with solder connections for assembly on printed circuit boards

Enclosure

On request, all versions are available in enclosures.

Control panels

Fieldbus systems

For the AS-Interface and PROFIBUS DP fieldbus systems and further bus systems, standardized solid-state units are available that can be used to link each individually designed control panel into the required bus environment without the need for costly programming work.

This function is available for both membrane keyboards, short-stroke keys and LEDs of the 3SB4 series, and for conventional SIGNUM 3SB3 control circuit devices.

Technical specifications

Fieldbus systems

Field bus interfaces for complete SIGNUM 3SB4 operator systems	16E/16A AS-Interface	PROFIBUS DP/I
Supply voltage	DC 24 V (from AS-Interface over the AS-i Bus)	DC 24 V
Static outputs	16	8
Static inputs	16	–
Multiplex LED	–	64
Multiplex keys	–	64
Serial interface	yes	yes
MFII interface	no	yes

Options

Delivery options

The control panels can be obtained directly from our partner Dyna Systems GmbH.

All the necessary equipment and services are available here from a single source.

- Advice during conception and design,
- Design suggestions,
- Development and supply of hardware by selection of suitable equipment,
- Development and supply of layouts for the printed circuit boards,
- Development and supply of the necessary software (function blocks, GSD files) for interfacing to the PLC,
- Preparation of necessary manufacturing and testing equipment,
- Manufacturing,
- Delivery with documentation (complete with necessary software),
- Customer service.

Examples for implementation

The following are available:

- Control panels with membrane keyboard
- Control panels with SIGNUM 3SB3 command and signaling devices
- Control panels with membrane keyboard and SIGNUM 3SB3 command and signaling devices
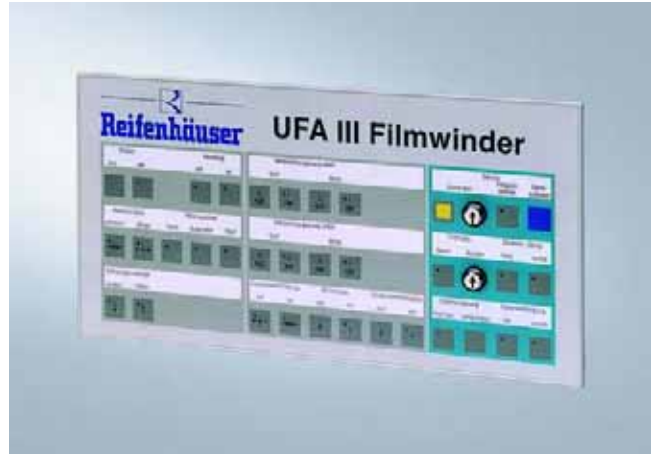
Operator panel with membrane keypad

Control panels with SIGNUM 3SB3 command and signaling devices

9

SIGNUM Complete Operating and Display Systems

LEDs

■ Technical specifications

LED display		Numeric	Alphanumeric
Type of display		7-segment LED	LED dot-matrix display
Color		Red or green	Red or green
Operating voltage range		DC 24 V (via AS-i bus for AS-Interface)	DC 24 V
Power consumption for digit height	10 mm	0.15 W per digit	–
	13 mm	0.15 W per digit	–
	17 mm	–	0.2 W per digit
	20 mm	0.2 W per digit	–
	30 mm	0.3 W per digit	0.3 W per digit
Display	With AS-i bus	0 ... 9 and A, b,-, blank	–
	With PROFIBUS DP	0 to 9 and A, b, C, d, E, F, H, L, o, P, r, U	ASCII code
	With A/D converter	000 ... ±1999	–
• Input ranges	With A/D converter	DC 0 to ±2 V, DC 0 to ±10 V, 0 to ±20 mA, 4 to 20 mA	–
• Display value	With A/D converter		–
- DC at 0 ... ±2 V		600 ... 1999	
- DC at 0 ... ±10 V		625 ... 1999	
- DC at 1 ... 5 V		for 1 V: –75 ... 275; for 5 V: 1730 ... 1999	
- at 0 ... 20 mA		580 ... 1999	
- at 4 ... 20 mA		at 4 mA: –435 ... 75; at 20 mA: 580 ... 1999	
• Decimal point	With A/D converter	Permanently adjustable to specification	–
Addressed		1 address per display. With AS-Interface: After the 15th addressing procedure, the display retains the last address	
Baud rate	With PROFIBUS DP	12 MBaud	1.5 MBaud
Enclosure		Flush mounting enclosure acc. to DIN, metal	
• Mounting		Screw clamps acc. to DIN	
• Degree of protection	At the front	IP54	
	With AS-Interface	IP65	
Ambient temperature	in operation	0 ... +50 °C	0 ... +45 °C
	during storage	–25 ... +70 °C	–10 ... +60 °C
EMC		Acc. to Guideline 89/336/EC (or EMVG)	
• Interference transmission		Basic specification IEC 61000-6-4, EN 61000-6-4 Product specification EN 55011, Group 1/2, Class A, March 1991 Edition Limit curve identical to EN 55022	
• Interference resistance		Basic specification IEC 61000-6-2, EN 61000-6-2	

■ Selection and ordering data

Design Character height, digits	Color	DT	Order No.	PS*	Weight per PU, approx. kg
Numeric LED display for flush mounting, with A/D converter [1]					
10 mm, 3 ½ digits	red	C	**3SB41 01–1AD**	1 unit	0.300
13 mm, 3 ½ digits	red	C	**3SB41 01–1BD**	1 unit	0.300
20 mm, 3 ½ digits	red	C	**3SB41 01–1CD**	1 unit	0.300
Numeric LED display for flush mounting, with AS-Interface [2] with 4 additional, isolated, digital inputs					
13 mm, 4 digits	red	C	**3SF41 02–1B**	1 unit	0.300
	green	C	**3SF41 02–2B**	1 unit	0.300
30 mm, 4 digits	red	C	**3SF41 02–1D**	1 unit	0.300
	green	C	**3SF41 02–2D**	1 unit	0.300
Numeric LED display for flush mounting, with PROFIBUS DP [3]					
13 mm, 6 digits	red	C	**3SF41 03–1BG**	1 unit	0.300
Alphanumeric LED display for flush mounting, with PROFIBUS DP [3]					
17 mm, 8 digits	red	C	**3SF41 13–1EJ**	1 unit	0.300
30 mm, 8 digits	red	C	**3SF41 13–1HJ**	1 unit	0.300

Further technical specifications as well as programming examples for function blocks and GSD files are available on the Internet:

www.siemens.de/bediensysteme

1) The input range and the measured variable must be stated in plain text in your order. Input ranges according to the table above without additional charge.

  All other input ranges not listed here can be ordered by specifying the range in plain text. This is subject to an extra charge (see above).

An extra charge also applies for indicating the measured variable or units, e.g. m, °C, mbar, m³/h (see above).

2) For interfacing with the PLC (S5, S7-300, S7-400), function block sample programs are included with each delivery.

3) The GSD file is included with every delivery.

* This quantity or a multiple thereof can be ordered

9

Options

Special designs of numeric displays, e.g. special sizes, can be obtained directly from our partners microSYST Systemelectronic GmbH.
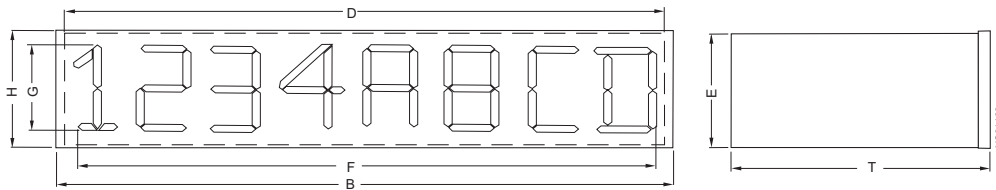
Dimension drawings

Numerical LED display for flush mounting
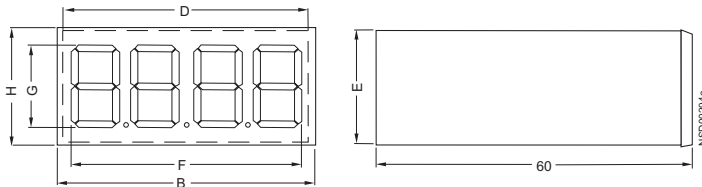
Character height G	B	H	D	E	Panel cutout
10	48	24	43.5	20	$45^{+0.6} \times 22.2^{+0.3}$
13	96	24	92	20	$92^{+0.8} \times 22.2^{+0.3}$
20	96	48	92	43	$92^{+0.8} \times 45^{+0.3}$
30	144	48	138	43	$138^{+0.6} \times 45^{+0.6}$

Alphanumeric LED display for flush mounting

Character height G	F	B	H	D	E	T	Panel cutout
17	139	168	24	158	20	61	$165^{+1} \times 21^{+0.3}$
30	225	264	48	254	40	40	$255^{+1} \times 41^{+0.6}$

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Control and Signaling Devices