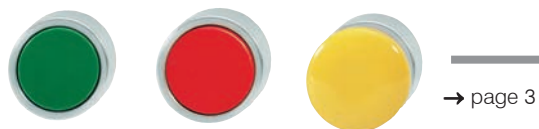


Acuators and Lens Caps 22mm IP67 (IP65), cULus Type12

Push Buttons



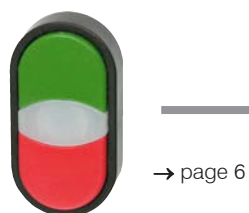
EMERGENCY STOP Buttons



Illuminated Operators



Double Push Buttons with Indicator Lamp IP65



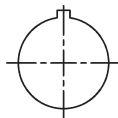
Lens Caps



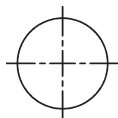
→ page 7

Mounting hole Ø 22,5mm

with key way



without key way



→ page 4



→ page 10

Wrench
for Actuators
Lens Caps and
Mono Block Multi Chip LED
J7049



Connectors

Thikness
0,5 - 4 mm
→ page 8

or



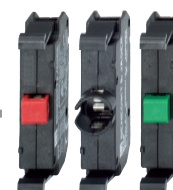
Thikness
1 - 6 mm
→ page 8



Connectors Lamp Holders



Actuator insert
→ page 8



→ page 8



LED
24-230V



Filament
6-130V



Glow-discharge
230V
→ page 9

Actuators 22mm IP67, Type12

Ring



Colour

Symbol

Alu

Black

Chrome

Pack Weight
pcs. kg/pc.

Push Buttons, Actuator Caps markable



red		B3D RT	BS3D RT	BC3D RT	10	0,014
red	0	B3D RT-0	BS3D RT-0	BC3D RT-0	10	0,014
green		B3D GN	BS3D GN	BC3D GN	10	0,014
green	I	B3D GN-I	BS3D GN-I	BC3D GN-I	10	0,014
green	II	B3D GN-II	BS3D GN-II	BC3D GN-II	10	0,014
green	→	B3D GN-PF	BS3D GN-PF	BC3D GN-PF	10	0,014
yellow		B3D GE	BS3D GE	BC3D GE	10	0,014
blue		B3D BL	BS3D BL	BC3D BL	10	0,014
weiß		B3D WS	BS3D WS	BC3D WS	10	0,014
black		B3D SW	BS3D SW	BC3D SW	10	0,014
black	→	B3D SW-PF	BS3D SW-PF	BC3D SW-PF	10	0,014

Push Buttons, Maintained, Actuator Caps markable



red		B3DR RT	BS3DR RT	BC3DR RT	10	0,014
green		B3DR GN	BS3DR GN	BC3DR GN	10	0,014
yellow		B3DR GE	BS3DR GE	BC3DR GE	10	0,014
blue		B3DR BL	BS3DR BL	BC3DR BL	10	0,014
weiß		B3DR WS	BS3DR WS	BC3DR WS	10	0,014
black		B3DR SW	BS3DR SW	BC3DR SW	10	0,014

Mushroom Head Ø28mm



red		B3P1 RT	BS3P1 RT	BC3P1 RT	10	0,017
red	0	B3P1 RT-0	BS3P1 RT-0	BC3P1 RT-0	10	0,017
green		B3P1 GN	BS3P1 GN	BC3P1 GN	10	0,017
yellow		B3P1 GE	BS3P1 GE	BC3P1 GE	10	0,017
blue		B3P1 BL	BS3P1 BL	BC3P1 BL	10	0,017
black		B3P1 SW	BS3P1 SW	BC3P1 SW	10	0,017

Mushroom Head Ø40mm



red	0	B3P14 RT-0	BS3P14 RT-0	BC3P14 RT-0	10	0,020
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Mushroom Head Ø40mm



red		BS3P44T RT	BS3P44T RT	BS3P44T RT	10	0,028
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Foot and Palm switch Ø70mm



red		BS3P14P RT	BS3P14P RT	BS3P14P RT	1	0,062
grey		BS3P14P GR	BS3P14P GR	BS3P14P GR	1	0,062

Actuators 22mm IP65, Type12

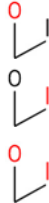
Ring						Pack Weight pcs. kg/pc.
	key removeable in	Alu	Black	Chrome		

Key Operated Rotary Switch with lock Ronis 455



B3SAR 0

maintained 60°



B3SAR 0	BS3SAR 0	BC3SAR 0	1	0,044
B3SAR 1	BS3SAR 1	BC3SAR 1	1	0,044
B3SAR 01	BS3SAR 01	BC3SAR 01	1	0,044



B3SARR 0

spring return 60°



B3SAT 0	BS3SAT 0	BC3SAT 0	1	0,044
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maintained 60°



B3SARR 0	BS3SARR 0	BC3SARR 0	1	0,044
B3SARR 102	BS3SARR 102	BC3SARR 102	1	0,044

spring return /maintained 60°



B3SATR 02	BS3SATR 02	BC3SATR 02	1	0,044
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spring return 60°



B3SATT 0	BS3SATT 0	BC3SATT 0	1	0,044
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Spare Key lock Ronis R455

B4-R455	1	0,007
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Colour Symbol

pcs. kg/pc.

Illuminated Push Buttons IP67, lamp max. 1,9W, lamps see page 13



red	B3DL RT	BS3DL RT	BC3DL RT	10	0,014
green	B3DL GN	BS3DL GN	BC3DL GN	10	0,014
yellow	B3DL GE	BS3DL GE	BC3DL GE	10	0,014
blue	B3DL BL	BS3DL BL	BC3DL BL	10	0,014
white	B3DL WS	BS3DL WS	BC3DL WS	10	0,014

Illuminated Push Buttons, Maintained IP67, lamp max. 1,9W, lamps see page 13



red	B3DLR RT	BS3DLR RT	BC3DLR RT	10	0,014
green	B3DLR GN	BS3DLR GN	BC3DLR GN	10	0,014
yellow	B3DLR GE	BS3DLR GE	BC3DLR GE	10	0,014
blue	B3DLR BL	BS3DLR BL	BC3DLR BL	10	0,014
white	B3DLR WS	BS3DLR WS	BC3DLR WS	10	0,014

Double Push Buttons, with indicator lamp white, lamp max. 1,9W, lamps see page 13



green red	B3DT G/R ¹⁾	BS3DT G/R	BC3DT G/R	10	0,016
white black	B3DT W/S ¹⁾	BS3DT W/S	BC3DT W/S	10	0,016
green red	B3DT GI/RO ¹⁾	BS3DT GI/RO	BC3DT GI/RO	10	0,016
white black	B3DT WI/SO ¹⁾	BS3DT WI/SO	BC3DT WI/SO	10	0,016

with non-standard marking on request

1) Plastic ring in alu design

suitable for Alu, Black and Chrome

Colour

Type

Pack Weight
pcs. kg/pc.

Lens Caps IP67 with fresnel lens, lamp max. 1,9W, lamps see page 13



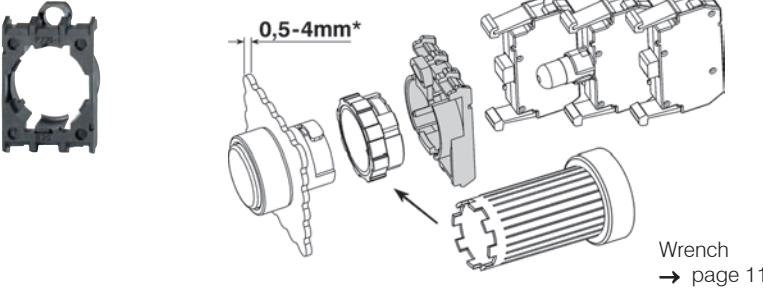
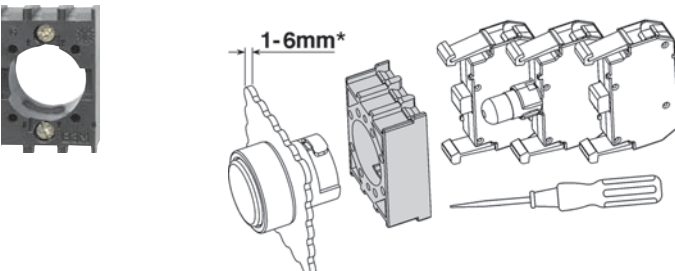
red	B3R RT	10	0,009
green	B3R GN	10	0,009
yellow	B3R GE	10	0,009
blue	B3R BL	10	0,009
clear	B3R KL	10	0,009
white	B3R WS	10	0,009

Lens Caps IP67, lamp max. 1,9W, lamps see page 13



red	B3RF RT	10	0,009
green	B3RF GN	10	0,009
yellow	B3RF GE	10	0,009
blue	B3RF BL	10	0,009
white	B3RF WS	10	0,009

Connectors

Specification	Description	Type	Pack pcs.	Weight kg/pc.
Connector B3S				
				
Connector B3M				
				

*) inclusive Thickness from Label Holder and Yellow Disk

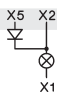
Contact Blocks and Lamp Holders for Panel Mounting

for voltage	Description	Type	Pack pcs.	Weight kg/pc.
Contact blocks				
	max. 690V AC 1 NC 	 B3T01 ²⁾	10	0,010
	max. 690V AC 1 NO	 B3T10 ²⁾	10	0,010
	Actuator insert to actuate the center contact block	P642	10	0,001

Lamp holders, socket BA9s

	max. 440V AC/DC direct connection, for lamps max. 1,9W (take care for active power consumption)	 B3F	10	0,012
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Lamp holders for lamp test circuits, socket BA9s

	max. 440V AC direct connection, for lamps max. 1,7W (active power consumption)	 B3FT	10	0,020
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1)  NC contact has a positive opening according to IEC/EN 60947-5-1

2) Contact blocks with gold contacts (B3T..G) on request
suitable for 17V= /1mA and for difficult ambient conditions.

Lamps

	Socket BA9s Lamp voltage	Power consumption		Type	Pack pcs.	Weight kg/pc.
LED lamps ²⁾ 10 years lifetime						
	20-30V AC/DC	17mA / 0,4W	for red lens caps	B3-L24 RTB	10	0,005
	20-30V AC/DC	17mA / 0,4W	for green lens caps	B3-L24 GNB	10	0,005
	20-30V AC/DC	17mA / 0,4W	for yellow lens caps	B3-L24 GEB	10	0,005
	20-30V AC/DC	17mA / 0,4W	for blue lens caps	B3-L24 BLB	10	0,005
	20-30V AC/DC	17mA / 0,4W	for white lens caps	B3-L24 WSB	10	0,005
	90-120V AC/DC	7mA / 0,8W	for red lens caps	B3-L110 RTB	10	0,005
	90-120V AC/DC	7mA / 0,8W	for green lens caps	B3-L110 GNB	10	0,005
	90-120V AC/DC	7mA / 0,8W	for yellow lens caps	B3-L110 GEB	10	0,005
	90-120V AC/DC	7mA / 0,8W	for blue lens caps	B3-L110 BLB	10	0,005
	90-120V AC/DC	7mA / 0,8W	for white lens caps	B3-L110 WSB	10	0,005
	200-250V AC/DC	4mA / 0,9W	for red lens caps	B3-L230 RTB	10	0,005
	200-250V AC/DC	4mA / 0,9W	for green lens caps	B3-L230 GNB	10	0,005
	200-250V AC/DC	4mA / 0,9W	for yellow lens caps	B3-L230 GEB	10	0,005
	200-250V AC/DC	4mA / 0,9W	for blue lens caps	B3-L230 BLB	10	0,005
	200-250V AC/DC	4mA / 0,9W	for white lens caps	B3-L230 WSB	10	0,005

Filament lamps

12V	1,2W	for all lens caps	B4-G12	50	0,005
24V	1,2W	for all lens caps	B4-G24	50	0,005
42V	1,2W	for all lens caps	B4-G42	50	0,005
48V	1,2W	for all lens caps	B4-G48	50	0,005
60V	1,2W	for all lens caps	B4-G60	50	0,005
110/120V ¹⁾	1,5/1,8W	for all lens caps	B4-G130	50	0,005

Glow-discharge lamps

	220-250V AC	0,3W	for clear, red, yellow lens caps	B4-GL230K	100	0,005
	220-250V AC	0,3W	for green, blue lens caps	B4-GL230G	100	0,005

1) Voltage marking 130V / 2W max. rated voltage 120V / 1,8W

2) suitable for B3FT lamp test lamp holders

Accessories









		Type	VPE Stk.	Gewicht kg/Stk.		
	Wrench	for mounting of actuators and lens caps B(S)3..	J7049	1	0,018	
	Marking plate	for marking of contact blocks B3T. and lamp holders B3F	P672-1	10	0,001	
	Lamp Installer	used to install or replace lamps BA9s	B4-7408	1	0,010	
	Spare Key	for B(S)3SA.. and BS3P44S3, Ronis R455	B4-R455	1	0,007	
		for B(S)3SB.. , Ronis R786	B4-R786	1	0,007	
	Hole Plug	black, for fixing holes Ø22,5mm	B3-DU SW	10	0,007	
		grey	B3-DU GR	10	0,007	
	Sealing Cover protection against coarse contamination	ambient temp. 0° - +50° C	P279-1	1	0,003	
		petrol-resistant, <i>not for B3D..R.. (maintained)</i> ambient temp. -25° - +55° C	P279-3	1	0,003	
		for double push buttons, petrol-resistant ambient temp. -25° - +55° C	P279-DT	1	0,003	
	Protection cover	against unintentional manipulation				
		Thikness 1mm yellow	B3-SK GE	1	0,04	
		Thikness 1mm grey	B3-SK GR	1	0,04	
	Protection ring with thread	against unintentional manipulation				
		has to be mounted instead of the existing ring	black	P921-1	1	0,012
			chrome	P921-2	1	0,012
			alu	P921-3	1	0,012

Label Holder and Legend Plates for Push Buttons B3, 22mm

				Type	Pack pcs.	Weight kg/pc.
Marking 1 or 2 lines						
	Label holder for legend plate BK4, black, Thikness 0,8mm				100	0,002
	Label holder for legend plate BK4, yellow, Thikness 0,8mm				10	0,002
	marking	Type	marking	Type	Pack pcs.	Weight kg/pc.
Legend plate alu, for label holder P751						
	blank	BK4-9736			100	0,0002
	I	BK4-I	II	BK4-II	10	0,0002
	III	BK4-III	IV	BK4-IV	10	0,0002
	V	BK4-V			10	0,0002
	→	BK4--->	←	BK4-<--	10	0,0002
	0 I	BK4-0-I	H 0 A	BK4-H 0 A	10	0,0002
	0 I	BK4-0 I	1 0 2	BK4-1 0 2	10	0,0002
	START	BK4-START	STOP	BK4-STOP	10	0,0002
	EIN	BK4-EIN	AUS	BK4-AUS	10	0,0002
	BETRIEB	BK4-BETRIEB	STÖRUNG	BK4-STÖRUNG	10	0,0002
	VOR	BK4-VOR	ZURÜCK	BK4-ZURÜCK	10	0,0002
	HEBEN	BK4-HEBEN	SENKEN	BK4-SENKEN	10	0,0002
	LINKS	BK4-LINKS	RECHTS	BK4-RECHTS	10	0,0002
	MEHR	BK4-MEHR	WENIGER	BK4-WENIGER	10	0,0002
	SCHNELL	BK4-SCHNELL	LANGSAM	BK4-LANGSAM	10	0,0002
	HELLER	BK4-HELLER	DUNKLER	BK4-DUNKLER	10	0,0002
	AUF	BK4-AUF	ZU	BK4-ZU	10	0,0002
	AB	BK4-AB	HALT	BK4-HALT	10	0,0002
	EILGANG	BK4-EILGANG	TIPPEN	BK4-TIPPEN	10	0,0002
Legend plate with non-standard marking (e. g.: BK4-MOTOR-START)						
	Text 1 line, max. 11 letters, letter height 3mm			BK4-...	1	0,0002
	Text 2 lines, max. 2 x 11 letters, letter height 3mm			BK4-...-...	1	0,0002
Legend plate yellow, for label holder P751-3						
	Legend plate yellow without marking			BK4-10827	10	0,0002
	Legend plate yellow with marking NOT-AUS			BK4-10827-1	10	0,0002
	Legend plate yellow with marking EMERGENCY STOP			BK4-10827-2	10	0,0002
	Legend plate yellow with marking ARRET D`URGENCE			BK4-10827-3	10	0,0002

Marking 3 or 4 lines



Label holder for legend plate BK8, black, Thikness 0,8mm				P761	10	0,002
Label holder for legend plate BK8, yellow, Thikness 0,8mm				P761-3	10	0,002
Label holder for BK8, for double push buttons only				P761-DT	10	0,002
Legend plate BK8 with for label holder P761 (with marking e. g.: BK8-WATER-PUMP-START)						
	Legend plate without marking			BK8-9736	10	0,0004
	Text 3 lines, max. 3 x 11 letters, letter height 3mm			BK8-...-...-...	10	0,0004
	Text 4 lines, max. 4 x 11 letters, letter height 3mm			BK8-...-...-...-...	10	0,0004

Connectors

Specification	Description	Type	Pack pcs.	Weight kg/pc.
Connector B3S		B3S	10	0,013

0,5-3mm*

Wrench
→ page 17

*) inclusive Thikness from Label Holder and Yellow Disk

Contact Blocks and Lamp Holders for Panel Mounting

	for voltage	Description	Type	Pack pcs.	Weight kg/pc.	
Contact blocks						
	max. 690V AC	1 NC 	21  22	B3T01 ²⁾	10	0,010
	max. 690V AC	1 NO	13  14	B3T10 ²⁾	10	0,010
	Actuator insert	to actuate the center contact block	P642	10	0,001	

Lamp holders, socket BA9s

	max. 440V AC/DC	direct connection, for lamps max. 1,9W (take care for active power consumption)		B3F	10	0,012
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Lamp holders for lamp test circuits, socket BA9s

	max. 440V AC	direct connection, for lamps max. 1,7W (active power consumption)		B3FT	10	0,020
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1) NC contact has a positive opening according to IEC/EN 60947-5-1

2) Contact blocks with gold contacts (B3T..G) on request suitable for 17V= /1mA and for difficult ambient conditions.

Lamps

LED lamps²⁾ 10 years lifetime



20-30V AC/DC	17mA / 0,4W	for red lens caps	B3-L24 RTB	10	0,005
20-30V AC/DC	17mA / 0,4W	for green lens caps	B3-L24 GNB	10	0,005
20-30V AC/DC	17mA / 0,4W	for yellow lens caps	B3-L24 GEB	10	0,005
20-30V AC/DC	17mA / 0,4W	for blue lens caps	B3-L24 BLB	10	0,005
20-30V AC/DC	17mA / 0,4W	for white lens caps	B3-L24 WSB	10	0,005
90-120V AC/DC	7mA / 0,8W	for red lens caps	B3-L110 RTB	10	0,005
90-120V AC/DC	7mA / 0,8W	for green lens caps	B3-L110 GNB	10	0,005
90-120V AC/DC	7mA / 0,8W	for yellow lens caps	B3-L110 GEB	10	0,005
90-120V AC/DC	7mA / 0,8W	for blue lens caps	B3-L110 BLB	10	0,005
90-120V AC/DC	7mA / 0,8W	for white lens caps	B3-L110 WSB	10	0,005
200-250V AC/DC	4mA / 0,9W	for red lens caps	B3-L230 RTB	10	0,005
200-250V AC/DC	4mA / 0,9W	for green lens caps	B3-L230 GNB	10	0,005
200-250V AC/DC	4mA / 0,9W	for yellow lens caps	B3-L230 GEB	10	0,005
200-250V AC/DC	4mA / 0,9W	for blue lens caps	B3-L230 BLB	10	0,005
200-250V AC/DC	4mA / 0,9W	for white lens caps	B3-L230 WSB	10	0,005

Filament lamps



12V	1,2W	for all lens caps	B4-G12	50	0,005
24V	1,2W	for all lens caps	B4-G24	50	0,005
42V	1,2W	for all lens caps	B4-G42	50	0,005
48V	1,2W	for all lens caps	B4-G48	50	0,005
60V	1,2W	for all lens caps	B4-G60	50	0,005
110/120V ¹⁾	1,5/1,8W	for all lens caps	B4-G130	50	0,005

Glow-discharge lamps



220-250V AC	0,3W	for clear, red, yellow lens caps	B4-GL230K	100	0,005
220-250V AC	0,3W	for green, blue lens caps	B4-GL230G	100	0,005

1) Voltage marking 130V / 2W max. rated voltage 120V / 1,8W

2) suitable for B3FT lamp test lamp holders

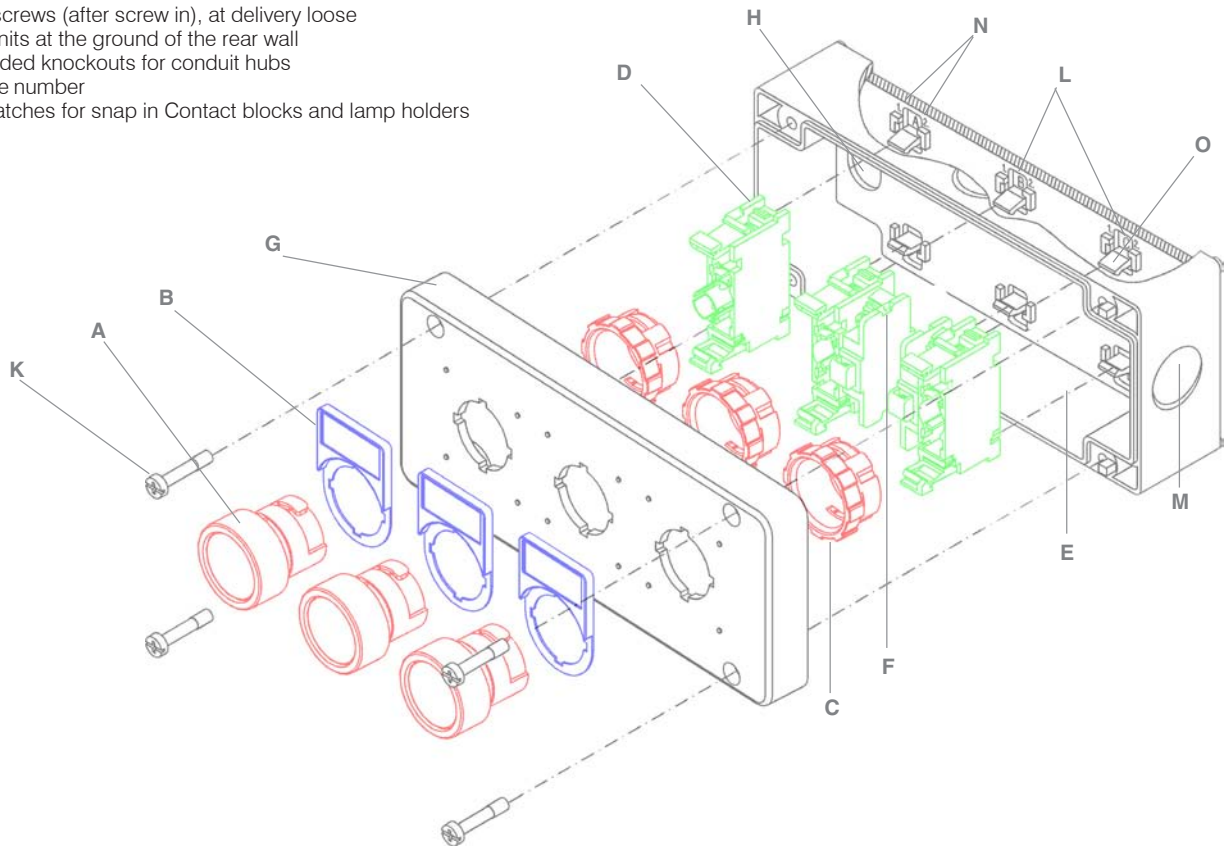
Accessories



		Type	VPE Stk.	Gewicht kg/Stk.
Wrench	for mounting of actuators and lens caps B(S)3..	J7049	1	0,018
Marking plate	for marking of contact blocks B3T. and lamp holders B3F	P672-1	10	0,001
Lamp Installer	used to install or replace lamps BA9s	B4-7408	1	0,010
Spare Key	for B(S)3SA.. and BS3P44S3, Ronis R455 for B(S)3SB.., Ronis R786	B4-R455 B4-R786	1 1	0,007 0,007
Protectiv cover sealable	against unintentional manipulation of buttons B5, (not for mushroom heads, rotary and swing knobs)	B5-SAP	1	0,008
Label holder	for legend plate BK5, black	P942-1	10	0,002
Legend plate	alu without marking Text 1 or 2 lines, max. 4 x 13 letters, letter height 3mm	BK5-11374	10	0,002
Adapter	to convert actuator Actuators 22mm to 30mm			
	alu	B5	10	0,017
	black	BS5	10	0,017
	chrome	BC5	10	0,017

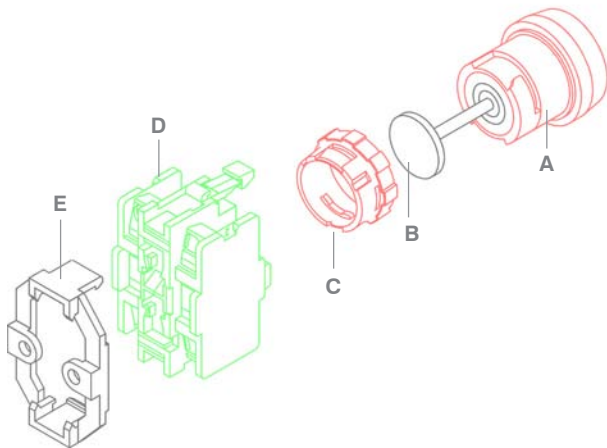
Assembled Stations BG.. IP67 cULus Type12

- A Actuators or Lens caps, see page 3 - 6
- B Legend plates with label holder
- C Ring and nut (included with actuator or lens cap)
- D Contact blocks and lamp holders, see page 20
- E Rear shroud
- F Function number
- G Cover
- H Pre-moulded knockouts in rear wall
- K Captive screws (after screw in), at delivery loose
- L Sign of units at the ground of the rear wall
- M Pre-moulded knockouts for conduit hubs
- N Sequence number
- O Spring-catches for snap in Contact blocks and lamp holders



Buttons for base mounting

- A Actuator Ø 22mm see page 3 - 6, Ø 30mm see page 13 - 15
- B Extension B4V...
- C Ring and nut (included with actuator or lens cap)
- D Contact block B4.. see page 20
- E Base B4U for base and DIN-rail mounting of contact blocks



Type		Pack pcs.	Weight kg/pc.
Mounting Plate for base and DIN-rail mounting of contact blocks			
Mounting Plate	for base and DIN-rail mounting of contact blocks and lamp holders B4.U...	B4U	10 0,010
Ring and Nut	for mounting former actuators and lens caps B4...	B3UP	10 0,004

Assembled Stations IP67 (IP65) Typ12

For conduit entries are in top and both small sides only one knockouts for conduit hubs Ø20,5mm, for M20 or PG13,5 provided.

		Diagram	Type	Pack pcs.	Weight kg/pc.
Plastic enclosed buttons and Pilot Lights					
	ON push button green	 14 — 13	BG10 GN	1	0,135
	OFF push button red	 22 — 21	BG10 RT	1	0,135
	Pilot light green	X2 — X1	BG01 GN	1	0,135
	Pilot light red		BG01 RT	1	0,135
	Key operated 0 - I ¹⁾ lock Ronis R455 60° maintained	 14 — 13	BG10SAR 0	1	0,165
	Key operated I - 0 - II ¹⁾ lock Ronis R455 60° maintained	 14 — 13 24 — 23	BG10SARR 0	1	0,172
	2 push buttons 0 - I	 22 — 21 14 — 13	BG20	1	0,200
	2 push buttons ← →	 14 — 13 14 — 13 22 — 21 22 — 21	BG20PF	1	0,200
	3 push buttons ← 0 →	 14 — 13 22 — 21 14 — 13 22 — 21 22 — 21	BG30PF	1	0,283
	3 push buttons I - 0 - II	 14 — 13 22 — 21 14 — 13 22 — 21 22 — 21	BG30	1	0,283
	2 push buttons 0 - I with pilot light green	 X2 — X1 22 — 21 14 — 13	BG21 GN	1	0,270
	Foot and palm button mushroom Ø70mm	 14 — 13 22 — 21	BG10P14P GR	1	0,187
Plastic enclosed EMERGENCY STOP buttons					
	EMERGENCY STOP button head Ø40mm unlock by turning	 14 — 13 22 — 21	BG10P34-11	1	0,145
	EMERGENCY STOP mushroom button Ø40mm according to EN418 unlock by pull	 14 — 13 22 — 21	BG10P44-11	1	0,145
	EMERGENCY STOP key operated button Ø40mm according to EN418 unlock by key	 14 — 13 22 — 21	BG10P44S3-11	1	0,178
	EMERGENCY STOP mushroom button Ø70mm unlock by turning	 14 — 13 22 — 21	BG10P34P-11	1	0,187

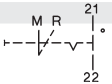
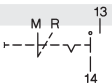
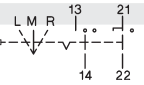
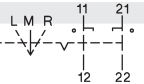
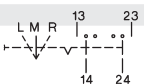
1) IP65

Enclosures BG.. IP67, Type12



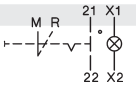
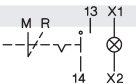
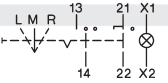
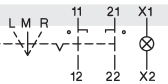
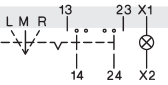
Number of units	Description	Type	Pack pcs.	Weight kg/pc.
1	3 knockouts Ø20,5mm (M20 or PG13,5)	BG1	1	0,108
2	3 knockouts Ø20,5mm (M20 or PG13,5)	BG2	1	0,145
3	3 knockouts Ø20,5mm (M20 or PG13,5)	BG3	1	0,188

Buttons and Lens Caps B3.. see page 3 to 6

Contacts	Lamp voltage	Wiring diagram	actuators with 2 or 3 switch positions	Type	Pack pcs.	Weight kg/pc.
Contact blocks for enclosures BG..						
1NC ¹⁾ 				B4TU01	10	0,015
1NO				B4TU10	10	0,015
1NO+1NC ¹⁾ 				B4TU11	10	0,022
2NC ¹⁾ 				B4TU02	10	0,022
2NO				B4TU20	10	0,022

Contact blocks with lamp holder, socket BA9s for LED or lamps, for enclosures BG..



1NC ¹⁾ 	max. 440V AC/DC			B4TU01F	10	0,020
1NO	max. 440V AC/DC			B4TU10F	10	0,020
1NO+1NC ¹⁾ 	max. 440V AC/DC			B4TU11F	10	0,027
2NC ¹⁾ 	max. 440V AC/DC			B4TU02F	10	0,027
2NO	max. 440V AC/DC			B4TU20F	10	0,027

Lamp holder, socket BA9s for LED or lamps

max. 440V AC/DC	direct connection, for lamps max. 1,9W (take care for active power consumption)		B4FU	10	0,013
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1)  NC contact has a positive opening according to IEC/EN 60947-5-1

Accessories for Plastic enclosed buttons

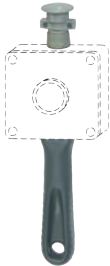


		Type	Pack pcs.	Weight kg/pc.
Wrench	for mounting of actuators and lens caps B(S)3..	J7049	1	0,018

Couple Part	to couple enclosures BKLG or assembled stations BG..	B4-8852	1	0,018
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Suspension Eye	for hanging stations	B4-9929	1	0,188
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Handle and Cable Inlet	to change enclosures BG.. or assembled stations BG.. into a hanging station	B4-9149	1	0,064
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Technical Data

Terminal markings for control units according to DIN EN 50013

Distinc. number	Contact elements	Distinc. number	Contact elements	Distinc. number	Contact elements	Distinc. number	Contact elements	Distinc. number	Contact elements	Colour code
10								01		 NO Green NC Red
20		11						02		
30		21		12				03		
40		31		22		13		04		

Data according to IEC 947-5-1, VDE 0660, EN 60947-5-1

Type		B3T	B4T
Rated insulation voltage U_i	V AC	690 ¹⁾	500
Utilization category AC12 Control of resistive loads and solid stateloads with isolation by opto couplers Rated current I_n			
	220-240V A	10	10
	380-415V A	10	10
	500V A	10	10
	690V A	10	-
Utilization category AC15 Control of electromagnetic load (> 72VA) Rated current I_n			
	220-240V A	6	6
	380-415V A	5	5
	500V A	3	3
	690V A	2	-
Utilization category DC12 L/R = 1ms Control of resistive loads and solid stateloads with isolation by opto couplers Rated current I_n			
	24V A	10	10
	60V A	6	6
	110V A	2,5	2,5
	220V A	0,8	0,8
Utilization category DC14 L/R = 15ms Control of electromagnetic loads having economy resistors in circuit Rated current I_n			
	24V A	8	8
	60V A	1	1
	110V A	2	2
	220V A	0,5	0,5
Utilization category DC13 L/R = 300ms Control of electromagnets Rated current I_n			
	24V A	2	2
	60V A	5	5
	110V A	0,5	0,5
	220V A	0,2	0,2
Making capacity	A	60	60
Breaking capacity $\cos \varphi = 0,7-1$	40-60Hz A	50	50
Mechanical life	millions of operations	10	10
Contact life (AC15)			
100VA	millions of operations	10	10
300VA	millions of operations	3	3
800VA	millions of operations	1	1
1200VA	millions of operations	0,5	0,5
Maximum frequency of operations	ops. per hour	600	600
Short circuit protection	slow, gL (gG) A	25	25
Type		B3F	B4F
Rated insulation voltage U_i	V AC	440 ²⁾	440 ²⁾
Lamp base		BA9s	

Type		B3., B4.
Protection degree (according to IEC 947-1) in assembled state, from the front from rear		IP65 IP00
Ambient temperature	°C	-20 to +50
Cable cross-section		
	solid, mm ²	0,5 - 2,5
	flexible, mm ²	0,5 - 2,5
	flexible with multicore cable end, mm ²	0,5 - 1,5
	number	2
Cables per clamp		
Mounting hole (according to IEC 947-1)	Ø mm	22,5
	Ø mm	30,5
Mounting position		optional
Terminal screws		Pozidriv No. 2 screws M3,5

Data according to cULus

Type	B3.	B4.
Contact Block for NO and NC	600 V AC max.	600 V AC max.
General use	10A	10A
Heavy pilot duty	A600	A600
Lamp Holder with socket BA9s	240V 2,6W max.	240V 2,6W max.
Wire (Contact and lamp holder)	14 - 18AWG	14 - 18AWG
Torque	9 lb/in.	9 lb/in.

Approvals

Country	USA, Canada UL	Europe	Register of Shipping	CENELEC CB- Certificates
Type	cULus	CE	Great Britain LRS	
B3T..	o	o	-	o
B3F..	o	o	-	o
B4TU..	o	o	o	o
B4T..UF	o	o	o	o
B4FU..	o	o	o	o
B3-MB..	-	o	-	-

o In standard version approved

- Not provided for test till now

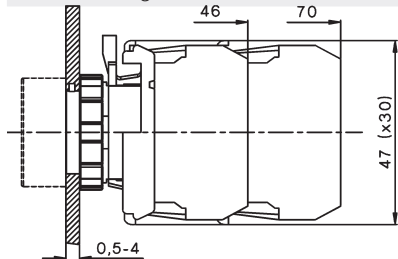
1) suitable for: earthed-neutral systems, overvoltage category I to IV, pollution degree 3 (standard-industry): $U_{imp} = 6kV$. Data for other conditions on request

2) suitable for: earthed-neutral systems, overvoltage category I to III, pollution degree 3 (standard-industry): $U_{imp} = 4kV$

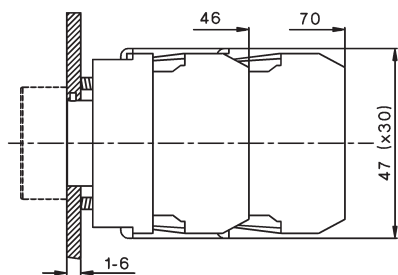
Dimensions

Actuators and Lens Caps 22mm

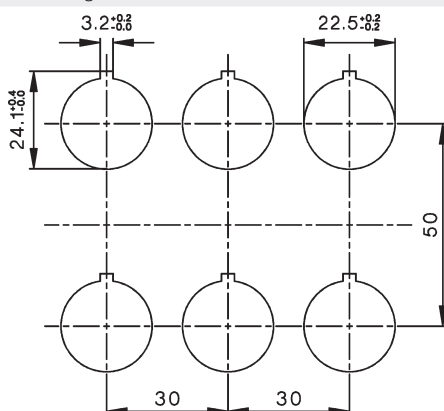
Panel mounting B3S



Panel mounting B3M

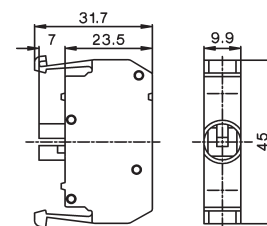


Mounting holes



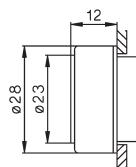
Dimensions of minimum space requirements according to IEC. Take to consideration the field of traverse of swing knobs (27mm) and the diameter of mushroom heads.

Contact blocks and Lampenhalter B3...



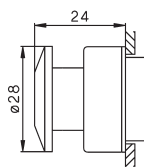
Actuators and Lens caps

Flush Head
Illuminated Flush Head



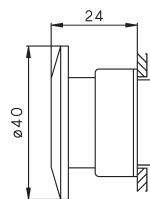
B3D(R), B3DL(R)
BS3D(R), BS3DL(R)
BC3D(R), BC3DL(R)

Mushroom Head Ø28mm
Emergency Stop Ø28mm



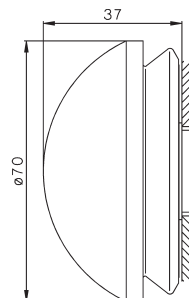
B3P1 bis B3P3
BS3P1 bis BS3P3
BC3P1 bis BC3P3

Mushroom Head Ø40mm
Emergency Stop Ø40mm



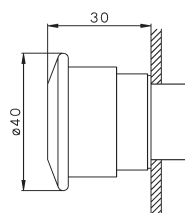
B3P14, B3P34
BS3P14, BS3P34
BC3P14, BC3P34

Mushroom Head Ø70mm
Emergency Stop Ø70mm



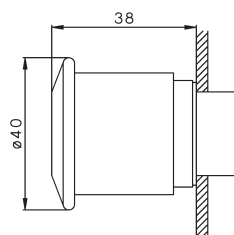
BS3P14P
BS3P34P

Push-and pull button Ø40mm



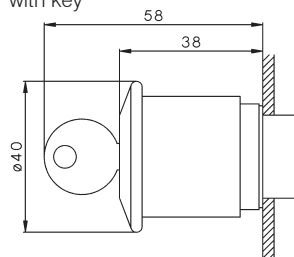
BS3P44

Push-and pull button Ø40mm



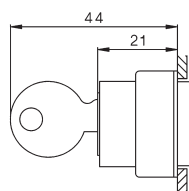
BS3P45

Push-and pull button Ø40mm
with key



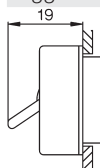
BS3P44S3

Lockable Push button



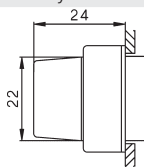
B3SAR., B3SAT.
BS3SAR., BS3SAT.
BC3SAR., BC3SAT.

Toggle



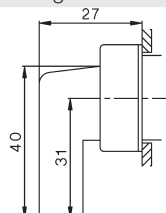
B3E
BS3E
BC3E

Rotary Knob



B3KN, B3KL
BS3KN, BS3KL
BC3KN, BC3KL

Swing Knob



B3KRL, B3KRN
BS3KRL, BS3KRN
BC3KRL, BC3KRN

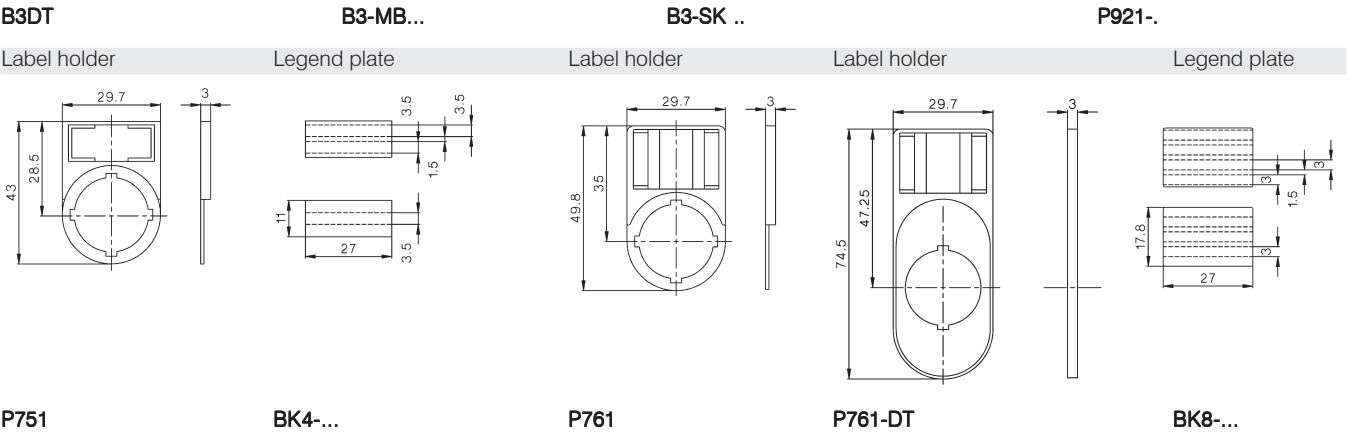
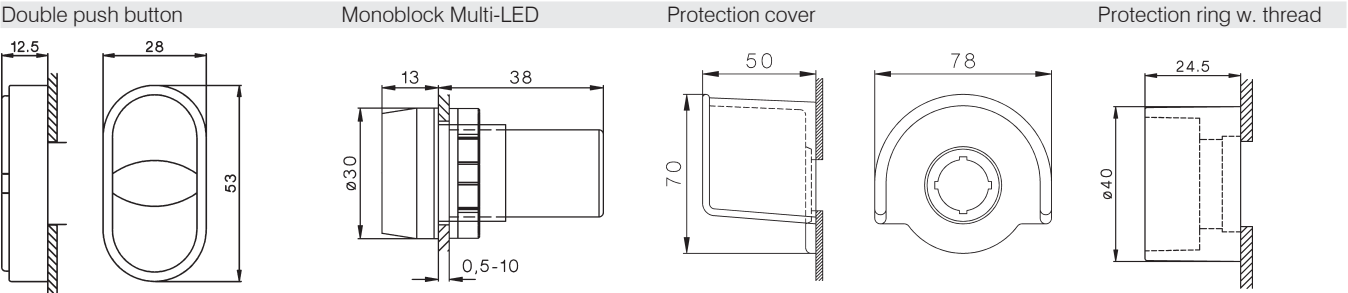
Lens Cap



B3R(F)

Dimensions

Actuators and Lens Caps 22mm

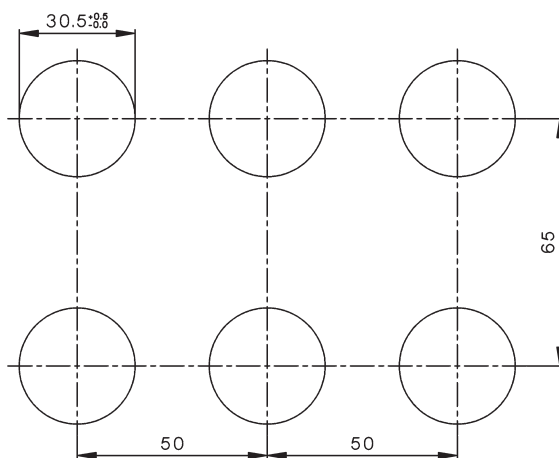
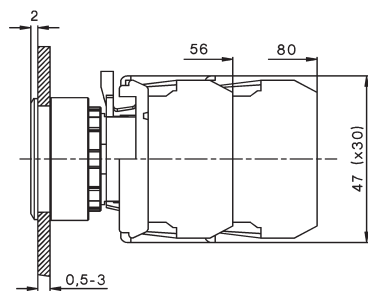


Dimensions

Actuators and Lens Caps 30mm

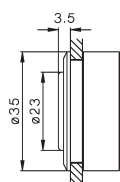
Panel mounting B3S

Mounting holes



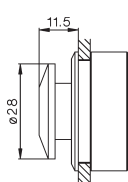
Actuators and Lens caps

Flush Head
Illuminated Flush Head



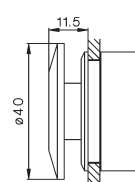
B5D(R), B5DL(R)
BS5D(R), BS5DL(R)

Mushroom Head Ø28mm
Emergency Stop Ø28mm



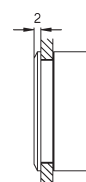
B5P1 to B5P3
BS5P1 to BS5P3

Mushroom Head Ø40mm
Emergency Stop Ø40mm



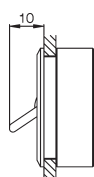
B5P14, B5P34
BS5P14, BS5P34

Lens Cap



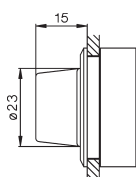
B5RF

Toggle



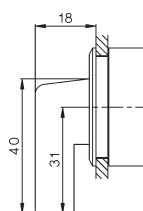
B5E
BS5E

Rotary Knob



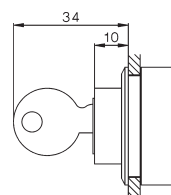
B5KN, B5KL
BS5KN, BS5KL

Swing Knob



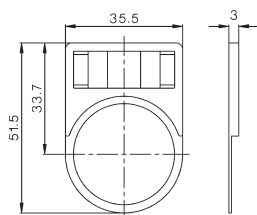
B5KRL, B5KRN
BS5KRL, BS5KRN

Lockable Push button



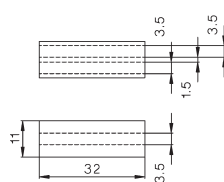
B5SAR., B5SAT.
BS5SAR., BS5SAT.

Label holder



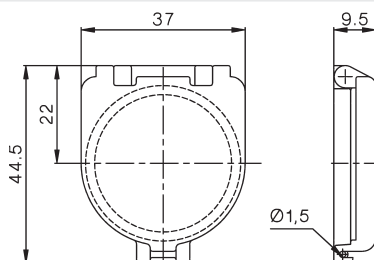
P761

Legend plate



BK5-...

Protectiv cover

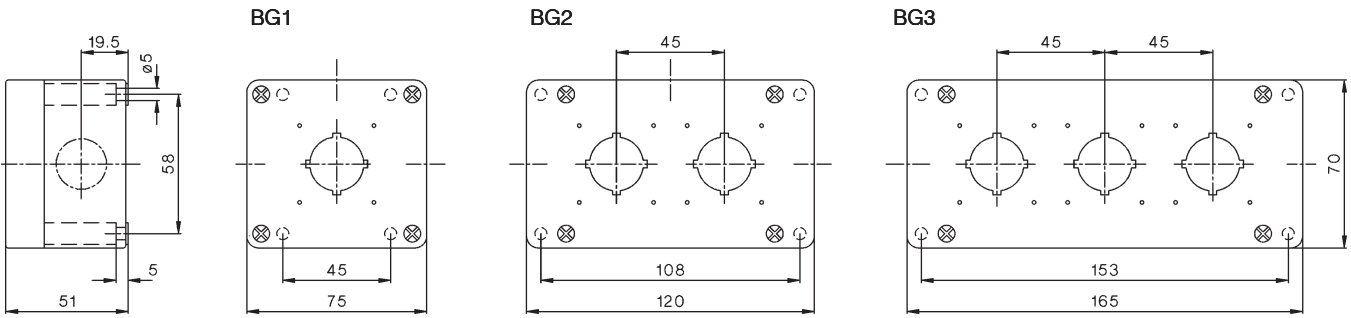


B5-SAP

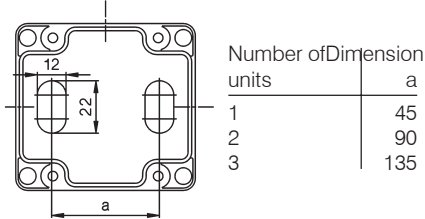
Dimensions

Enclosures for Custom Built Stations

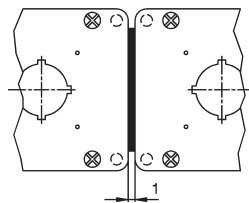
Three conduit entries (knockouts), each on top, left and right side, Ø20,5mm (M20 or PG13,5)



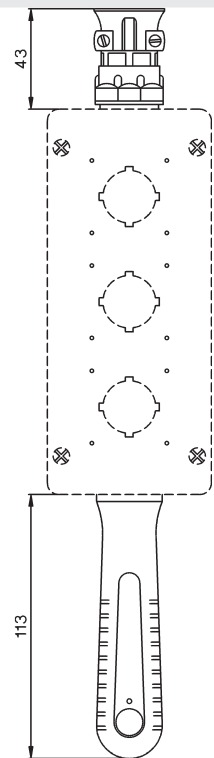
Conduit entries in the bottom (knockouts)



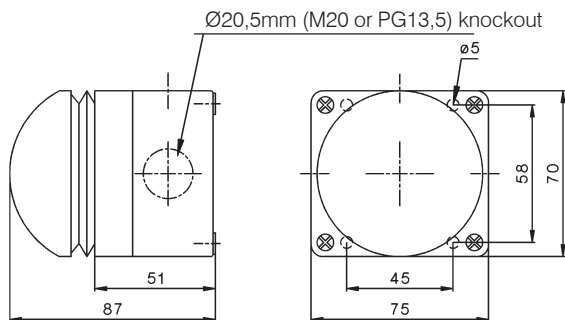
Coupled Enclosures B4-8852



Hanging Station B4-9149



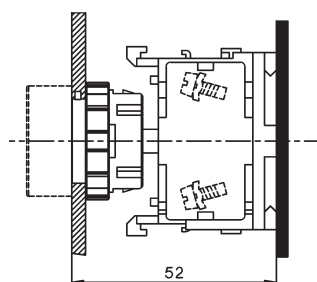
EMERGENCY STOP Push Button Ø70 mm, Foot switch BG10P34P, BG10P14P



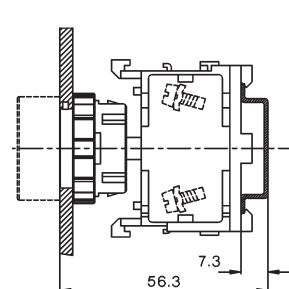
Dimensions

Actuators 22mm

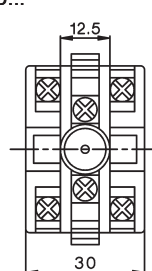
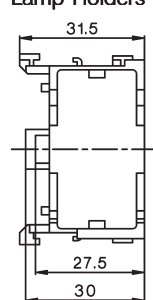
Base mounting



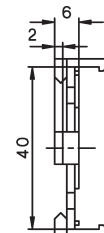
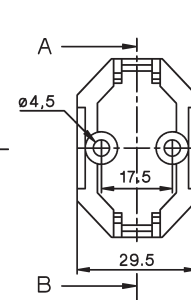
DIN-rail mounting



Contact blocks and
Lamp Holders B4.U...

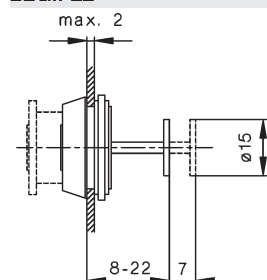


Base B4U



Push buttons for enclosures

B2G...-22



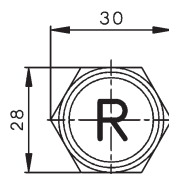
B2GRB

B2GR

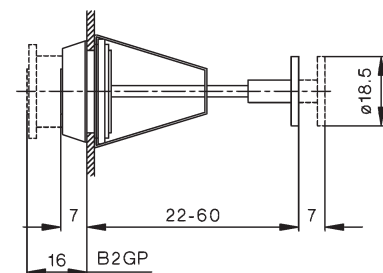
B2G0

B2GI

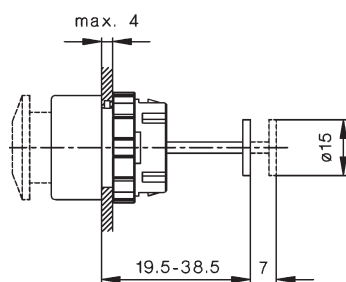
B2GP



B2G...-60



B3G...-31,5



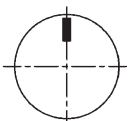
B3GRB

B3GR

B3G0

B3GI

B3GP



B3G...-60

