IMO

Pushbuttons

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Ø22.0mm Product Range

(IP65), cULus Type 12

Push Buttons

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IP65

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EMERGENCY STOP Buttons

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Illuminated Operators

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Double Push Buttons with Indicator Lamp, IP65

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Lens Caps

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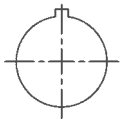
Mounting Hole
Ø 22.5mm

With Key Way



Without Key Way

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

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Connectors
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Thickness
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or

Thickness
1 - 6mm
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LED
24-230V

Filament
6-130V

Glow-discharge
230V
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Pushbuttons

(IP67), cULus Type 12

Push Buttons *(Actuator Caps Markable)*

Colour	Symbol	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	N/A	B3DRED	BS3DRED	BC3DRED	10	0.014
Red	0	B3DRED-0	BS3DRED-0	BC3DRED-0	10	0.014
Green	N/A	B3DGREEN	BS3DGREEN	BC3DGREEN	10	0.014
Green	I	B3DGREEN-I	BS3DGREEN-I	BC3DGREEN-I	10	0.014
Green	II	B3DGREEN-II	BS3DGREEN-II	BC3DGREEN-II	10	0.014
Green	→	B3DGREEN-PF	BS3DGREEN-PF	BC3DGREEN-PF	10	0.014
Yellow	N/A	B3DYELLOW	BS3DYELLOW	BC3DYELLOW	10	0.014
Blue	N/A	B3DBLUE	BS3DBLUE	BC3DBLUE	10	0.014
White	N/A	B3DWHITE	BS3DWHITE	BC3DWHITE	10	0.014
Black	N/A	B3DBLACK	BS3DBLACK	BC3DBLACK	10	0.014
Black	→	B3DBLACK-PF	BS3DBLACK-PF	BC3DBLACK-PF	10	0.014

Push Buttons Maintained *(Actuator Caps Markable)*

Colour	Symbol	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc
Red	N/A	B3DRRED	BS3DRRED	BC3DRRED	10	0.014
Green	N/A	B3DRGREEN	BS3DRGREEN	BC3DRGREEN	10	0.014
Yellow	N/A	B3DRWHITE	BS3DRYELLOW	BC3DRYELLOW	10	0.014
Blue	N/A	B3DR-BLUE	BS3DRBLUE	BC3DRBLUE	10	0.014
White	N/A	B3DR-WHITE	BS3DRWHITE	BC3DRWHITE	10	0.014
Black	N/A	B3DR-BLACK	BS3DRBLACK	BC3DRBLACK	10	0.014

Mushroom Head *Ø28mm*

Colour	Symbol	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	N/A	B3P1RED	BS3P1RED	BC3P1RED	10	0.017
Red	0	B3P1RED-0	BS3P1RED-0	BC3P1RED-0	10	0.017
Green	N/A	B3P1GREEN	BS3P1GREEN	BC3P1GREEN	10	0.017
Yellow	N/A	B3P1YELLOW	BS3P1YELLOW	BC3P1YELLOW	10	0.017
Blue	N/A	B3P1BLUE	BS3P1BLUE	BC3P1BLUE	10	0.017

Mushroom Head *Ø40mm*

Colour	Symbol	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	0	B3P14RED-0	BS3P14RED-0	BC3P14RED-0	10	0.020

Mushroom Head *Ø40mm*

Colour	Symbol	Part Number	Pack Pcs.	Weight kg/pc
Red	N/A	BS3P44TRED	10	0.028

Foot and Palm Switch *Ø70mm*

Colour	Symbol	Part Number	Pack Pcs.	Weight kg/pc
Red	N/A	BS3P14PRED	1	0.062
Grey	N/A	BS3P14PGREY	1	0.062

Emergency Stop Pushbuttons

(IP67), cULus Type 12

EMERGENCY STOP Push Buttons *According to EN ISO 13850, push to trip, pull to release, Ø40mm*

Colour	Marking	Part Number	Pack Pcs.	Weight kg/pc.
Red	30mm	BS3P44RED	10	0.028
Red	38mm	BS3P45RED	10	0.028

EMERGENCY STOP Push Buttons *According to EN ISO 13850, release by key, Ø40mm*

Colour	Symbol/High	Part Number	Pack Pcs.	Weight kg/pc.
Red	38mm	BS3P44S3	1	0.050
Lock Ronis R455	N/A	B4-R455	N/A	N/A

EMERGENCY STOP Push Buttons *Release by turning, Ø28mm*

Colour	Marking	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	N/A	B3P3RED	BS3P3RED	BC3P3RED	10	0.017
Red	0	B3P3RED-0	BS3P3RED-0	BC3P3RED-0	10	0.017

EMERGENCY STOP Push Buttons *Release by turning, Ø40mm*

Colour	Marking	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	0	B3P34RED-0	BS3P34RED-0	BC3P34RED-0	10	0.020
Red	→	B3P34RED-PF	BS3P34RED-PF	BC3P34RED-PF	10	0.020
Red (Illuminated)	N/A	B3P34LRED	BS3P34LRED	BC3P34LRED	10	0.020

EMERGENCY STOP Push Buttons *Release by turning, Ø70mm*

Colour	Part Number	Pack Pcs.	Weight kg/pc.
Red	BS3P34PRED	1	0.062

Yellow Disk *Thickness 1mm, Ø70mm*

Description	Part Number	Pack Pcs.	Weight kg/pc.
Neutral	B3-7603	1	0.004
With marking EMERGENCY STOP	B3-7603-2	1	0.004
2-side markings: NOT-AUS / EMERGENCY STOP	B3-7603-12	1	0.004
2-side markings: ARRET D`URGENCE / NØDSTOP	B3-7603-34	1	0.004
2-side markings: ARRET D`URGENCE / NOODSTOP	B3-7603-35	1	0.004

Protection Cover Against Unintentional Manupulation *Thickness 1mm*

Description	Part Number	Pack Pcs.	Weight kg/pc.
For Push Buttons Ø28mm and Ø40mm Yellow	B3-SK-YELLOW	1	0.04

Rotary & Toggle Knobs

c UL us *Type 12*

Rotary Knobs and Swing Knobs *IP65, Black*

Diagram	Type	Knob	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
	Maintained 60°	Rotary	B3KN2	BS3KN2	BC3KN2	10	0.020
		Swing	B3KRN2	BS3KRN2	BC3KRN2	10	0.020
	Spring Return 60°	Rotary	B3KN8	BS3KN8	BC3KN8	10	0.020
		Swing	B3KRN8	BS3KRN8	BC3KRN8	10	0.020
	Spring Return 60°	Rotary	B3KN1	BS3KN1	BC3KN1	10	0.020
		Swing	B3KRN1	BS3KRN1	BC3KRN1	10	0.020
	Maintained 60°	Rotary	B3KN3	BS3KN3	BC3KN3	10	0.020
		Swing	B3KRN3	BS3KRN3	BC3KRN3	10	0.020
	Maintained/Spring Return 60°	Rotary	B3KN6	BS3KN6	BC3KN6	10	0.020
	Maintained/Spring Return 60°	Rotary	B3KN7	BS3KN7	BC3KN7	10	0.020
	Maintained 120°	Rotary	B3KN9	BS3KN9	BC3KN9	10	0.020
	Maintained 90°	Rotary	B3KN10	BS3KN10	BC3KN10	10	0.020

Illuminated Rotary Knobs and Swing Knobs *Clear IP67, Lamp Max. 1.2W Black*

Diagram	Type	Knob	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
	Maintained 90°	Rotary	B3KL2	BS3KL2	BC3KL2	10	0.016
	Sring Return 60°	Rotary	B3KL1	BS3KL1	BC3KL1	10	0.016
		Swing	B3KRL1	BS3KRL1	BC3KRL1	10	0.016
	Maintained 60°	Rotary	B3KL3	BS3KL3	BC3KL3	10	0.016
		Swing	B3KRL3	BS3KRL3	BC3KRL3	10	0.016
	Maintained/Spring Return 60°	Rotary	B3KL6	BS3KL6	BC3KL6	10	0.016

Toggle *IP65*

Diagram	Type	Knob	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
O - I	N/A	N/A	B3E	BS3E	BC3E	10	0.017

Key Operated Rotary Switch With lock Ronis

Diagram	Type	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
	Maintained 60°	B3SAR0	BS3SAR0	BC3SAR0	1	0.044
	Maintained 60°	B3SAR1	BS3SAR1	BC3SAR1	1	0.044
	Maintained 60°	B3SAR01	BS3SAR01	BC3SAR01	1	0.044
	Spring Return 60°	B3SAT0	BS3SAT0	BC3SAT0	1	0.044
	Maintained 60°	B3SARR0	BS3SARR0	BC3SARR0	1	0.044
	Maintained 60°	B3SARR102	BS3SARR102	BC3SARR102	1	0.044
	Spring Return/Maintained 60°	B3SATR02	BS3SATR02	BC3SATR02	1	0.044
	Spring Return 60°	B3SATT0	BS3SATT0	BC3SATT0	1	0.044
N/A	Spare key lock Ronis R455	N/A	N/A	B4-R455	1	0.007

Illuminated Pushbuttons & Lens Caps

c UL us *Type 12*

Illuminated Push Buttons IP67, lamp max. 1.9W

Colour	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	B3DLRED	BS3DLRED	BC3DLRED	10	0.014
Green	B3DLGREEN	BS3DLGREEN	BC3DLGREEN	10	0.014
Yellow	B3DLYELLOW	BS3DLYELLOW	BC3DLYELLOW	10	0.014
Blue	B3DLBUE	BS3DLBLUE	BC3DLBLUE	10	0.014
White	B3DLWHITE	BS3DLWHITE	BC3DLWHITE	10	0.014

Illuminated Push Buttons Maintained IP67, lamp max. 1.9W

Colour	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	B3DLRRED	BS3DLRRED	BC3DLRRED	10	0.014
Green	B3DLRGREEN	BS3DLRGREEN	BC3DLRGREEN	10	0.014
Yellow	B3DLRYELLOW	BS3DLRYELLOW	BC3DLRYELLOW	10	0.014
Blue	B3DLRBLUE	BS3DLRBLUE	BC3DLRBLUE	10	0.014
White	B3DLRWHITE	BS3DLRWHITE	BC3DLRWHITE	10	0.014

Double Push Buttons With Indicator Lamp in white, lamp max. 1.9W, With non-standard marking upon request

Colour	Marking	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Green & Red	N/A	B3DT-GRE/RED[1)]	BS3DT-GRE/RED	BC3DT-GRE/RED	10	0.016
White & Black	N/A	B3DT-WHITE/BLACK[1)]	BS3DT-WHITE/BLACK	BC3DT-WHITE/BLACK	10	0.016
Green & Red	I & 0	B3DT-GRE-I/RED-O[1)]	BS3DT-GRE-1/RED-O	BC3DT-GRE-1/RED-O	10	0.016
White & Black	I & 0	B3DT-WHITE-I/BLACK-O[1)]	BS3DT-WHITE-1/BLACK-O	BC3D-WHITE-1/BLACK-O	10	0.016

Lens Caps IP67, with fresnel lens, lamp max. 1.9W, laser marking on request

Colour	Part Number	Pack Pcs.	Weight kg/pc.
Red	B3RRED	10	0.009
Green	B3RGREEN	10	0.009
Yellow	B3RYELLOW	10	0.009
Blue	B3RBUE	10	0.009
Clear	B3RVCLEAR	10	0.009
White	B3RWHITE	10	0.009

Suitable for Alu, Black and Chrome

Lens Caps Low, IP67, with fresnel lens, lamp max. 1.9W, laser marking on request

Colour	Part Number	Pack Pcs.	Weight kg/pc.
Red	B3RNRED	10	0.008
Green	B3RNGREEN	10	0.008
Yellow	B3RNYELLOW	10	0.008
Blue	B3RNBLUE	10	0.008
White	B3RNWHITE	10	0.008

Suitable for Alu, Black and Chrome

[1)] Plastic Ring in Alu design

Pushbutton Sets

With Contact Block and Connector

Push Buttons *IP67*

Actuator Colour	Symbol	Add On	Part Number	Pack Pcs.	Weight kg/pc.
Black	N/A	+connector +1NO	BS3DBLACK/10	1	0.037
Green	N/A	+connector +1NO	BS3DGREEN10	1	0.037
Yellow	N/A	+connector +1NO	BS3DYELLOW/10	1	0.037
Blue	N/A	+connector +1NO	BS3DBLUE/10	1	0.037
Red	N/A	+connector +1NC	BS3DRED/01	1	0.037
Green	I	+connector +1NO	BS3DGREEN-I/10	1	0.037
Red	O	+connector +1NC	BS3DRED-0/01	1	0.037

Double Push Buttons *IP65*

Actuator Colour	Add On	Part Number	Pack Pcs.	Weight kg/pc.
Green/Red	+connector +1NO +1NC	BS3DT-GRE/RED11	1	0.049

EMERGENCY STOP Push Buttons *IP67, Ø40mm*

Description	Add On	Part Number	Pack Pcs.	Weight kg/pc.
Pull to release acc. EN ISO 13850	+connector +1NO +1NC	BS3P44RED/11	1	0.061
Key release acc. EN ISO 13850	+connector +1NO +1NC	BS3P44S3RED/11	1	0.083
Twist release	+connector +1NO +1NC	BS3P34RED-0/11	1	0.053

Rotary Knobs *IP65*

Diagram	Add On	Part Number	Pack Pcs.	Weight kg/pc
	+connector +1NO	BS3KN2/10	1	0.043
	+connector +1NO +1NC	BS3KN2/11	1	0.053
	+connector +2NO	BS3KN3/20	1	0.053
	+connector +2NO	BS3KN1/20	1	0.053

Key Operated Rotary Switch *With Lock Ronis 455, IP65*

Key: *Key removeable in*

Diagram	Add On	Part Number	Pack Pcs.	Weight kg/pc
	+connector +1NO	BS3SAR 0/10	1	0.057
	+connector +1NO	BS3SAR 01/10	1	0.057
	+connector +1NO	BS3SAT 0/10	1	0.057
	+connector +2NO	BS3SARR 102/20	1	0.067
	+connector +2NO	BS3SARR 0/20	1	0.067

Connectors

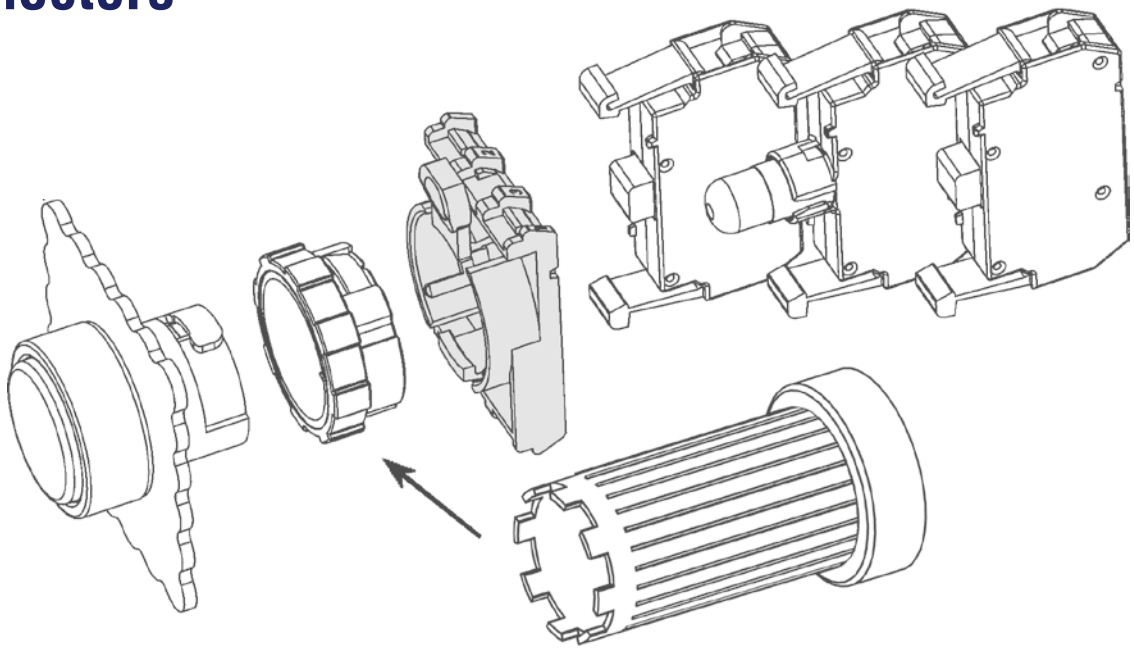
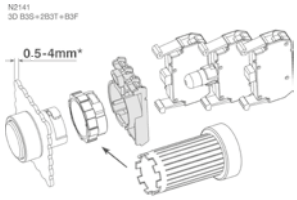
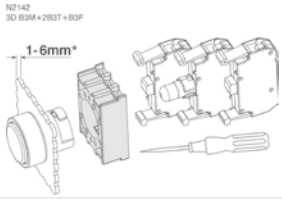


Diagram	Part Number	Pack Pcs.	Weight kg/pc.
	B35	10	0.013
	B3M	10	0.013

Includes thickness from label holder and yellow disk.

Accessories

Accessory	Description	Part Number	Pack Pcs.	Weight kg/pc.
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
Spare Key	For B(S)3SB.. , Ronis R786	B4-R786	1	0.007
Hole Plug Black	Black - For fixing holes Ø22.5mm	B3-DU-BLACK	10	0.007
Hole Plug Grey	Grey - For fixing holes Ø22.5mm	B3-DU-GREY	10	0.007
Sealing Cover	Ambient temperature 0° - +50°C	P279-1	1	0.003
Sealing Cover	Petrol resistant, not for B3D..R.. (maintained), ambient temperature -25° - +55°C	P279-3	1	0.003
Sealing Cover	For Double Push Buttons, petrol resistant, ambient temperature -25° +55°C	P279-DT	1	0.003
Protection Cover Yellow	Yellow - Thickness 1mm	BS-SK-YELLOW	1	0.04
Protection Cover Grey	Grey - Thickness 1mm	BS-SK-GREY	1	0.04
Protection Ring with Thread Black	Black	P921-1	1	0.012
Protection Ring with Thread Chrome	Chrome	P921-2	1	0.012
Protection Ring with Thread Alu	Alu	P921-3	1	0.012

Wrench

Lamp Installer

Hole Plug

Protection Cover

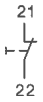
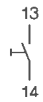
Protection Ring

Contact Blocks and Lamp Holders

For Panel Mounting

Contact Blocks *Screw Terminals, Contact Blocks with gold contacts (B3T..G) on request, suitable for 17V= /1mA and for difficult ambient conditions*

Key: ⊖ *NC Contact has a positive opening according to IEC/EN 60947-5-1*

Diagram	Voltage	Description	Part Number	Pack Pcs.	Weight kg/pc.
	Max. 690V AC	1 NC ⊖	B3T01[2)]	10	0.010
	Max. 690V AC	1 NO	B3T10[2)]	10	0.010

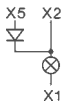
Contact Blocks *RAST 5 Terminal (Note Coding)*

Diagram	Voltage	Description	Part Number	Pack Pcs.	Weight kg/pc.
N/A	Actuator Insert	To actuate the center contact block	P642	10	0.001

Lamp Holders *Socket BA9s*

Diagram	Voltage	Description	Part Number	Pack Pcs.	Weight kg/pc.
	Max. 440V AC	Direct connection, for lamps max. 1.9W (Take care for active power consumption)	B3F	10	0.012

Lamp Holders For Lamp Test Circuits *Socket BA9s*

Diagram	Voltage	Description	Part Number	Pack Pcs.	Weight kg/pc.
	Max. 440V AC	Direct connection. For lamps Max 1.7W (Active power consumption)	B3FT	10	0.020

Lamps

Glow-discharge Lamps

Socket BA9s Lamp Voltage	Power Consumption	Part Number	Pack Pcs.	Weight kg/pc.
220-250V AC	0.3W for clear, red, yellow lens caps	NEON220-250	100	0.005

LED Lamps[2] *10 Years Lifetime*

Socket BA9s Lamp Voltage	Power Consumption	Part Number	Pack Pcs.	Weight kg/pc.
20-30V AC/DC	17mA / 0.4W for Red Lens Caps	B3-L24A-RED	10	0.005
20-30V AC/DC	17mA / 0.4W for Green Lens Caps	B3-L24A-GREEN	10	0.005
20-30V AC/DC	17mA / 0.4W for Green Lens Caps	B3-L24A-YELLOW	10	0.005
20-30V AC/DC	17mA / 0.4W for Blue Lens Caps	B3-L24A-BLUE	10	0.005
20-30V AC/DC	17mA / 0.4W for White Lens Caps	B3-L2A-WHITE	10	0.005
90-120V AC/DC	7mA / 0.8W for Red Lens Caps	B3-L110-RED	10	0.005
90-120V AC/DC	7mA / 0.8W for Green Lens Caps	B3-L110-GREEN	10	0.005
90-120V AC/DC	7mA / 0.8W for Yellow Lens Caps	B3-L110-YELLOW	10	0.005
90-120V AC/DC	7mA / 0.8W for Blue Lens Caps	B3-L110-BLUE	10	0.005
90-120V AC/DC	7mA / 0.8W for White Lens Caps	B3-L110-WHITE	10	0.005
200-250V AC/DC	4mA / 0.9W for Red Lens Caps	B3-L230-RED	10	0.005
200-250V AC/DC	4mA / 0.9W for Green Lens Caps	B3-L230-GREEN	10	0.005
200-250V AC/DC	4mA / 0.9W for Yellow Lens Caps	B3-L230-YELLOW	10	0.005
200-250V AC/DC	4mA / 0.9W for Blue Lens Caps	B3-L230-BLUE	10	0.005
200-250V AC/DC	4mA / 0.9W for White Lens Caps	B3-L230-WHITE	10	0.005

Filament Lamps

Socket BA9s Lamp Voltage	Power Consumption	Part Number	Pack Pcs.	Weight kg/pc.
12V	1.2W for all Lens Caps	Lamp 12V	50	N/A
24V	1.2W for all Lens Caps	Lamp 24V	50	0.005
42V	1.2W for all Lens Caps	Lamp 42V	50	0.005
48V	1.2W for all Lens Caps	Lamp 48V	50	0.005
60V	1.2W for all Lens Caps	Lamp 60V	50	0.005
110/120V[1]	1.5/1.8W for all Lens Caps	Lamp 110V	50	0.005

[1] Voltage marking 130V/2W max. rated voltage 120V/1.8W
[2] Suitable for B3FT lamp test holders

Label Holders and Legend Plates

Label Holder Marking 1 or 2 Lines

Description/Marking	Pack Pcs.	Weight kg/pc.
For Legend Plate BK4 black, Thickness 0.8mm	100	0.0002
Label holder for legend plate BK4, yellow, Thickness 0.8mm	10	0.0002

Legend Plate Alu For Label Holder P751 Marking 1 or 2 Lines

Part Number	Marking	Part Number	Marking	Pack Pcs.	Weight kg/pc.
BK4-9736	Blank	N/A	N/A	10	0.0002
BK4-I	I	BK4-II	II	10	0.0002
BK4-III	III	BK4-IV	IV	10	0.0002
BK4-V	V	N/A	N/A	10	0.0002
BK4--->	←	BK4-<--	←	10	0.0002
BK4-0-I	0 I	BK4-H 0 A	H 0 A	10	0.0002
BK4-0___I	0 I	BK4-1 0 2	1 0 2	10	0.0002
BK4-START	START	BK4-STOP	STOP	10	0.0002
BK4-ON	ON	BK4-OFF	OFF	10	0.0002
BK4-ON/OFF	ON/OFF	BK4-OFF	OFF	10	0.0002
BK4-POWERON	POWER ON	N/A	N/A	N/A	N/A
BK4-PLC-HEALTHY	PLC HEALTHY	N/A	N/A	N/A	N/A
BK4-CONTROL-ON	CONTROL ON	N/A	N/A	N/A	N/A
BK4-FORWARD	FORWARD	BK4-FAULT	FAULT	10	0.0002
BK4-REVERSE	REVERSE	BK4-TRIPPED	TRIPPED	10	0.0002
BK4-MAN-AUTO	MAN-AUTO	BK4-RUNNING	RUNNING	10	0.0002

Legend Plate With Non-standard Marking Marking 1 or 2 Lines

Description/Marking	Part Number	Pack Pcs.	Weight kg/pc.
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 Marking 1 or 2 Lines

Description/Marking	Part Number	Pack Pcs.	Weight kg/pc.
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	N/A	N/A	0.0002

Label Holder Marking 3 or 4 Lines

Description/Marking	Part Number	Pack Pcs.	Weight kg/pc.
Label Holder for Legend Plate BK8, black, Thickness 0.8mm	P761	10	0.002
Label Holder for Legend Plate BK8, yellow, Thickness 0.8mm	P761-3	10	0.002
Label Holder for BK8, for Double Push Buttons only	P761-DT	10	0.002

Label Holders and Legend Plates

Legend Plate BK8 For Label Holder P761 Marking 3 or 4 Lines

Description/Marking	Part Number	Pack Pcs.	Weight kg/pc.
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

Actuator Caps with Text

The Part Number must be completed with the code for colours (see table)

Part Number	Suffix for Marking	Marking	Part Number	- Suffix for Marking	Marking	Pack Pcs.	Weight kg/pc.
DK-BLACK	...-TEST	TEST	DK(L)	..-EMERGENCY STOP	EMERGENCY STOP	10	0.001
DK(L)	...-START	START	DK(L)	...-STOP	STOP	10	0.001
DK(L)	...-ON	ON	DK(L)	...-OUT	OUT	10	0.001
DK-RED	...-STOP	STOP	DK-BLUE	...-RESET	RESET	10	0.001

Actuator Caps with Symbols

The Part Number must be completed with the code for colours (see table)

Part Number	Suffix for Marking	Marking	Part Number	- Suffix for Marking	Marking	Pack Pcs.	Weight kg/pc.
DK(L)	..-100		DK(L)	..-101		10	0.001
DK(L)	..-102		DK(L)	..-103		10	0.001
DK(L)	..-200		DK(L)	..-201		10	0.001
DK(L)	..-202		DK(L)	..-203		10	0.001
DK(L)	..-204		DK(L)	..-205		10	0.001
DK(L)	..-300		DK(L)	..-301		10	0.001
DK(L)	..-302		DK(L)	..-303		10	0.001
DK(L)	..-304		DK(L)	..-305		10	0.001
DK(L)	..-306		DK(L)	..-307		10	0.001
DK(L)	..-400		DK(L)	..-401		10	0.001
DK(L)	..-402		DK(L)	..-403		10	0.001
DK(L)	..-404		DK(L)	..-405		10	0.001
DK(L)	..-406		DK(L)	..-407		10	0.001
DK(L)	..-408		DK(L)	..-409		10	0.001
DK(L)	..-410		DK(L)	..-411		10	0.001
DK(L)	..-412		DK(L)	..-413		10	0.001

Code for Colours

Colour	For Buttons*	For Illuminated Buttons*
Red	DK-RED-..	DKL-RED-..
Green	DK-GREEN-..	DKL-GREEN-..
Yellow	DK-YELLOW-..	DKL-YELLOW-..
Blue	DK-BLUE-..	DKL-BLUE-..
White	DK-WHITE-..	DKL-WHITE-..
Black	DK-BLACK-..	DKL-BLACK-..

*Must specify print

IMO

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Ø30.0mm Product Range

IP67 (IP65)

Push Buttons

→ Page 17

Mounting Hole
Ø 30.5mm

Connectors
→ Page 19

Contacts
Lamp Holder
→ Page 19

IP65

→ Page 18 & 19

EMERGENCY STOP Buttons

→ Page 17

→ Page 18

Actuator Insert
→ Page 20

Illuminated Operators

→ Page 19

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Thickness
0.5 - 3mm
→ Page 20

→ Page 20

Lens Caps

→ Page 19

LED
24-230V

Filament
6-130V

Glow-discharge

230V

→ Page 21

Wrench
J7049

→ Page 21

Pushbuttons Ø30mm

IP67

Push Buttons *Actuator Caps Markable*

Colour	Symbol	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	N/A	B5DRED	BS5DRED	BC5DRED	10	0.029
Red	0	B5DRED-0	BS5DRED-0	BC5DRED-0	10	0.029
Green	N/A	B5DGREEN	BS5DGREEN	BC5DGREEN	10	0.029
Green	I	B5DGREEN-I	BS5DGREEN-I	BC5DGREEN-I	10	0.029
Green	II	B5DGREEN-II	BS5DGREEN-II	BC5DGREEN-II	10	0.029
Green	→	B5DGREEN-PF	BS5DGREEN-PF	BC5DGREEN-PF	10	0.029
Yellow	N/A	B5DYELLOW	BS5DYELLOW	BC5DYELLOW	10	0.029
Blue	N/A	B5DBLUE	BS5DBLUE	BC5DBLUE	10	0.029
White	N/A	B5DWHITE	BS5DWHITE	BC5DWHITE	10	0.029
Black	N/A	B5DBLACK	BS5DBLACK	BC5DBLACK	10	0.029
Black	→	B5DBLACK-PF	BS5DBLACK-PF	BC5DBLACK-PF	10	0.029

Push Buttons Maintained *Actuator Caps Markable*

Colour	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	B5DRRED	BS5DRRED	BC5DRRED	10	0.029
Green	B5DRGREEN	BS5DRGREEN	BC5DRGREEN	10	0.029
Yellow	B5DRYELLOW	BS5DRYELLOW	BC5DRYELLOW	10	0.029
Blue	B5DRBLUE	BS5DRBLUE	BC5DRBLUE	10	0.029
White	B5DRWHITE	BS5DRWHITE	BC5DRWHITE	10	0.029
Black	B5DRBLACK	BS5DRBLACK	BC5DRBLACK	10	0.029

Mushroom Head *Ø28mm*

Colour	Symbol	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	N/A	B5P1RED	BS5P1RED	BC5P1RED	10	0.032
Red	0	B5P1RED-0	BS5P1RED-0	BC5P1RED-0	10	0.032
Green	N/A	B5P1GREEN	BS5P1GREEN	BC5P1GREEN	10	0.032
Yellow	N/A	B5P1YELLOW	BS5P1YELLOW	BC5P1YELLOW	10	0.032
Blue	N/A	B5P1BLUE	BS5P1BLUE	BC5P1BLUE	10	0.032
Black	N/A	B5P1BLACK	BS5P1BLACK	BC5P1BLACK	10	0.032

Mushroom Head *Ø40mm*

Colour	Symbol	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	0	B5P14RED-0	BS5P14RED-0	BC5P14RED-0	10	0.035

Emergency Stop Push Buttons *Ø28mm, release by turning, with Yellow Ring*

Colour	Symbol	Alu	Pack Pcs.	Weight kg/pc.
Red	N/A	B5P3RED-RGE	10	0.032
Red	0	B5P3RED-0-RGE	10	0.032

Emergency Stop Push Buttons *Ø40mm, release by turning*

Colour	Symbol	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	0	B5P34RED-0	BS5P34RED-0	BC5P34RED-0	10	0.035

Rotary Knobs & Illuminated Pushbuttons Ø30mm

IP67

Yellow Disk for Emergency Stop Push Buttons, Ø40mm, release by turning

Colour	Alu	Pack Pcs.	Weight kg/pc.
Neutral	B5-7603	1	0.004
With marking EMERGENCY STOP	B5-7603-1	1	0.004
With marking EMERGENCY STOP	B5-7603-2	1	0.004

Rotary Knobs and Swing Knobs IP65, Black

Diagram	Type	Knob	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
	Maintained 60°	Rotary	B5KN2	BS5KN2	BC5KN2	10	0.035
		Swing	B5KRN2	BS5KRN2	BC5KRN2	10	0.035
	Spring Return 60°	Rotary	B5KN8	BS5KN8	BC5KN8	10	0.035
		Swing	B5KRN8	BS5KRN8	BC5KRN8	10	0.035
	Spring Return 60°	Rotary	B5KN1	BS5KN1	BC5KN1	10	0.035
		Swing	B5KRN1	BS5KRN1	BC5KRN1	10	0.035
	Maintained 60°	Rotary	B5KN3	BS5KN3	BC5KN3	10	0.035
		Swing	B5KRN3	BS5KRN3	BC5KRN3	10	0.035
	Maintained/Spring Return 60°	Rotary	B5KN6	BS5KN6	BC5KN6	10	0.035
	Maintained/Spring Return 60°	Rotary	B5KN7	BS5KN7	BC5KN7	10	0.035
	Maintained 120°	Rotary	B5KN9	BS5KN9	BC5KN9	10	0.035
	Maintained 90°	Rotary	B5KN10	BS5KN10	BC5KN10	10	0.035

Illuminated Rotary Knobs and Swing Knobs IP67, Clear, Lamp Max. 1.2W

Diagram	Type	Knob	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
	Maintained 90°	Rotary	B5KL2	BS5KL2	BC5KL2	10	0.031
	Sring Return 60°	Rotary	B5KL1	BS5KL1	BC5KL1	10	0.031
		Swing	B5KRL1	BS5KRL1	BC5KRL1	10	0.031
	Maintained 60°	Rotary	B5KL3	BS5KL3	BC5KL3	10	0.031
		Swing	B5KRL3	BS5KRL3	BC5KRL3	10	0.031
	Maintained/Spring Return 60°	Rotary	B5KL6	BS5KL6	BC5KL6	10	0.031

Toggle IP65

Diagram	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
O - I	B5E	BS5E	BC5E	10	0.032

Key Operated Rotary Switch *With Lock Ronis*

Key: *Key removeable in*

Diagram	Type	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
	Maintained 60°	B5SAR0	BS5SAR0	BC5SAR0	1	0.059
	Maintained 60°	B5SAR1	BS5SAR1	BC5SAR1	1	0.059
	Maintained 60°	B5SAR01	BS5SAR01	BC5SAR01	1	0.059
	Spring Return 60°	B5SAT0	BS5SAT0	BC5SAT0	1	0.059
	Maintained 60°	B5SARR0	BS5SARR0	BC5SARR0	1	0.059
	Maintained 60°	B5SARR102	BS5SARR102	BC5SARR102	1	0.059
	Spring Return/Main-tained 60°	B5SATR02	BS5SATR02	BC5SATR02	1	0.059
	Spring Return 60°	B5SATT0	BS5SATT0	BC5SATT0	1	0.059
N/A	Spare key lock Ronis R455	N/A	N/A	B4-R455	1	0.059

Illuminated Push Buttons *IP67, Lamp Max. 1.9W*

Colour	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	B5DLRED	BS5DLRED	BC5DLRED	10	0.029
Green	B5 DLGREEN	BS5DLGREEN	BC5DLGREEN	10	0.029
Yellow	B5 DLYELLOW	BS5DLYELLOW	BC5DLYELLOW	10	0.029
Blue	B5DLBUE	BS5DLBLUE	BC5DLBLUE	10	0.029
White	B5DLWHITE	BS5DLWHITE	BC5DLWHITE	10	0.029

Illuminated Push Buttons *IP67, Maintained, Lamp Max. 1.9W*

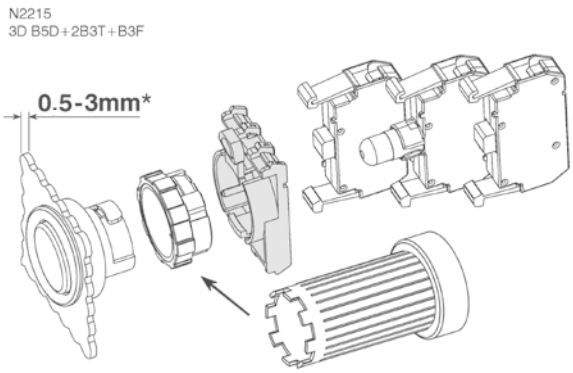
Colour	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	B5DLRRED	BS5DLRRED	BC5DLRRED	10	0.029
Green	B5DLRGREEN	BS5DLRGREEN	BC5DLRGREEN	10	0.029
Yellow	B5DLRYELLOW	BS5DLRYELLOW	BC5DLRYELLOW	10	0.029
Blue	B5DLRBLUE	BS5DLRBLUE	BC5DLRBLUE	10	0.029
White	B5DLRWHITE	BS5DLRWHITE	BC5DLRWHITE	10	0.029

Lens Caps *IP67, With fresnel lens, Lamp max. 1.9W*

Colour	Alu	Black	Chrome	Pack Pcs.	Weight kg/pc.
Red	B5RRED	BS5RRED	BC5RRED	10	0.029
Green	B5RGREEN	BS5RGREEN	BC5RGREEN	10	0.029
Yellow	B5RYELLOW	BS5RYELLOW	BC5RYELLOW	10	0.029
Blue	B5RBLUE	BS5RBLUE	BC5RBLUE	10	0.029
Clear	B5RCLEAR	BS5RCLEAR	BC5RCLEAR	10	0.029
White	B5RWHITE	BS5RWHITE	BC5RWHITE	10	0.029

Connectors

Connector B3S

Diagram	Part Number	Pack Pcs.	Weight kg/pc.
	B35	10	0.013

Includes thickness from Label Holder and Yellow Disk.

Contact Blocks and Lamp Holders

For Panel Mounting

Contact Blocks

Contact Blocks with gold contacts (B3T..G) on request, suitable for 17V = /1mA and for difficult ambient conditons.

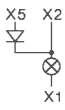
Key: ⊖ *= NC Contact has a positive opening according to IEC/EN 60947-5-1*

Diagram	Voltage	Description	Part Number	Pack Pcs.	Weight kg/pc.
	Max. 690V AC	1 NC ⊖	B3T01 [2)]	10	0.010
	Max. 690V AC	1 NO	B3T10 [2)]	10	0.010
N/A	Actuator Insert	To actuate the center Contact Block	P642	10	0.001

Lamp Holders, Socket BA9s

Diagram	Voltage	Description	Part Number	Pack Pcs.	Weight kg/pc.
	Max. 440V AC	Direct connection, for lamps max. 1.9W (Take care for active power consumption)	B3F	10	0.012

Lamp Holders for Lamp Test Circuits, Socket BA9s

Diagram	Voltage	Description	Part Number	Pack Pcs.	Weight kg/pc.
	Max. 440V AC	Direct connection. For lamps ax 1.7W (Active power consumption)	B3FT	10	0.020

Lamps

Glow-discharge Lamps

Socket BA9s Lamp Voltage	Power Consumption	Part Number	Pack Pcs.	Weight kg/pc.
220-250V AC	0.3W for clear, red, yellow Lens Caps	NEON220-250	100	0.005

LED Lamps[2] *10 Years Lifetime*

Socket BA9s Lamp Voltage	Power Consumption	Part Number	Pack Pcs.	Weight kg/pc.
20-30V AC/DC	17mA / 0.4W for Red Lens Caps	B3-L24A-RED	10	0.005
20-30V AC/DC	17mA / 0.4W for Green Lens Caps	B3-L24A-GREEN	10	0.005
20-30V AC/DC	17mA / 0.4W for Green Lens Caps	B3-L24A-YELLOW	10	0.005
20-30V AC/DC	17mA / 0.4W for Blue Lens Caps	B3-L24A-BLUE	10	0.005
20-30V AC/DC	17mA / 0.4W for White Lens Caps	B3-L2A-WHITE	10	0.005
90-120V AC/DC	7mA / 0.8W for Red Lens Caps	B3-L110-RED	10	0.005
90-120V AC/DC	7mA / 0.8W for Green Lens Caps	B3-L110-GREEN	10	0.005
90-120V AC/DC	7mA / 0.8W for Yellow Lens Caps	B3-L110-YELLOW	10	0.005
90-120V AC/DC	7mA / 0.8W for Blue Lens Caps	B3-L110-BLUE	10	0.005
90-120V AC/DC	7mA / 0.8W for White Lens Caps	B3-L110-WHITE	10	0.005
200-250V AC/DC	4mA / 0.9W for Red Lens Caps	B3-L230-RED	10	0.005
200-250V AC/DC	4mA / 0.9W for Green Lens Caps	B3-L230-GREEN	10	0.005
200-250V AC/DC	4mA / 0.9W for Yellow Lens Caps	B3-L230-YELLOW	10	0.005
200-250V AC/DC	4mA / 0.9W for Blue Lens Caps	B3-L230-BLUE	10	0.005
200-250V AC/DC	4mA / 0.9W for White Lens Caps	B3-L230-WHITE	10	0.005

Filament Lamps

Socket BA9s Lamp Voltage	Power Consumption	Type	Pack Pcs.	Weight kg/pc.
12V	1.2W for all Lens Caps	Lamp 12V	50	N/A
24V	1.2W for all Lens Caps	Lamp 24V	50	0.005
42V	1.2W for all Lens Caps	Lamp 42V	50	0.005
48V	1.2W for all Lens Caps	Lamp 48V	50	0.005
60V	1.2W for all Lens Caps	Lamp 60V	50	0.005
110/120V[1]	1.5/1.8W for all Lens Caps	Lamp 110V	50	0.005

[1] Voltage marking 130V/2W, max rated voltage 120V/1.8W
[2] Suitable for B3FT lamp test lamp holders

Accessories

Accessory	Description	Part Number	Pack Pcs.	Weight kg/pc.
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
Spare Key	For B(S)3SB.. , Ronis R786	B4-R786	1	0.007
Protective Sealable Cover	For protection 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 4x13 letters, letter height 3mm	BK5-11374	10	0.002
Adapter to convert Actuators 22mm to 30mm	Alu	B5	10	0.017
	Black	BS5	10	0.017
	Chrome	BC5	10	0.017

Marking Plate

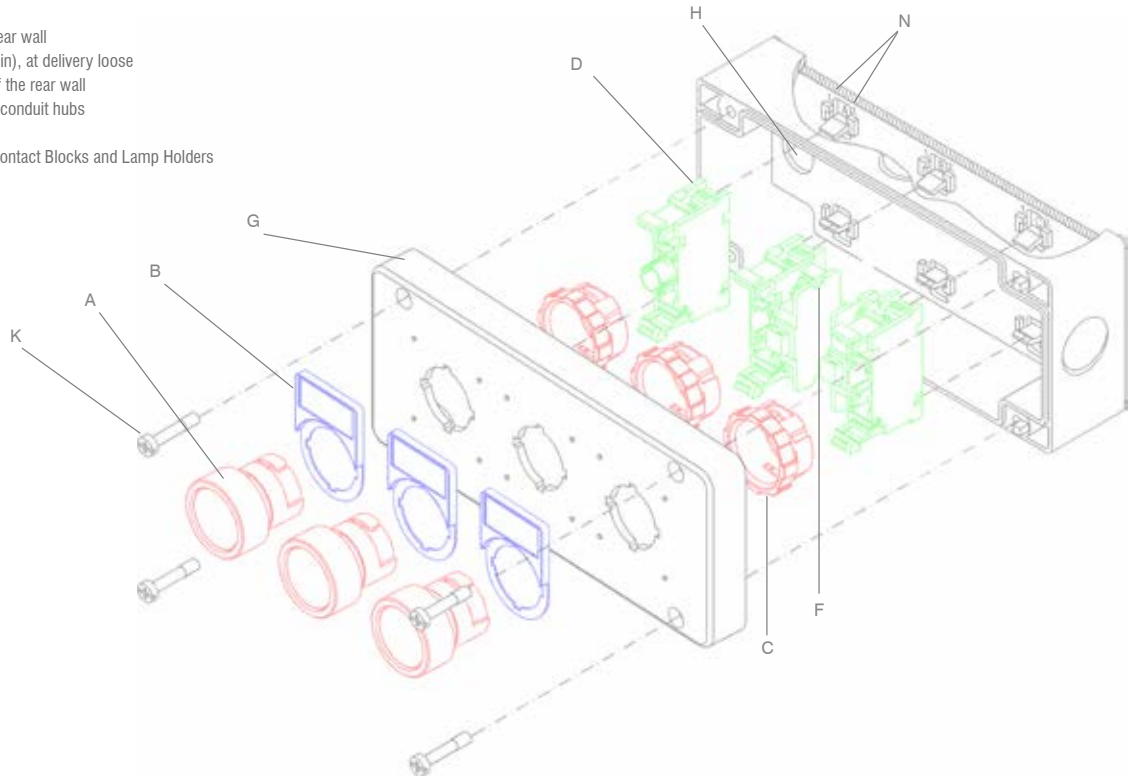
Protective Sealable Cover

Adapter to convert Actuators 22mm to 30mm (Alu)

Assembled Pushbutton Stations

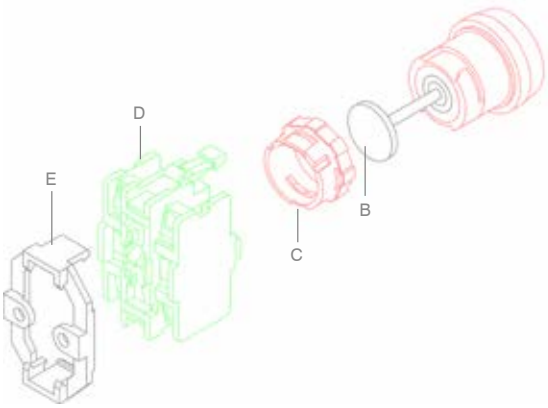
IP65 c UL us Type 12

A. Actuators or Lens caps
B. Legend plates with Label Holder
C. Ring and Nut (included with Actuator or Lens Cap)
D. Contact Blocks and Lamp Holders
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
B. Extension B4V...
C. Ring and Nut (included with actuator or lens cap)
D. Contact Block B4...
E. Base B4U for base and DIN-rail mounting of Contact Blocks



Mounting Plate

Decscription	*Part Number*	*Pack Pcs.*	*Weight kg/pc.*
For base and DIN-rail mounting of Contact Blocks and Lamp Holders B4.U...	B4U	10	0.010

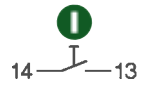
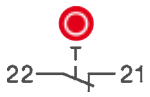
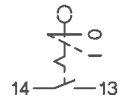
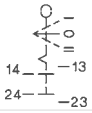
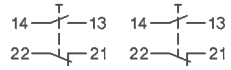
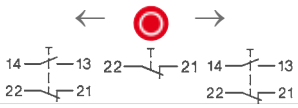
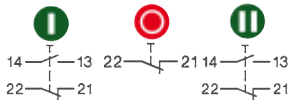
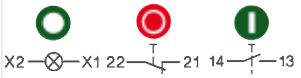
Ring and Nut

Decscription	*Part Number*	*Pack Pcs.*	*Weight kg/pc.*
For mounting forer Actuators and Lens Caps B4...	B3UP	N/A	0.004

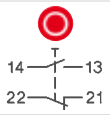
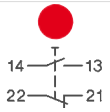
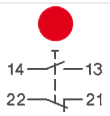
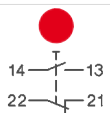
Assembled Pushbutton Stations

IP67(IP65) cULus Type 12

Plastic Enclosed Buttons and Pilot Lights

Diagram	Description	Part Number	Pack Pcs.	Weight kg/pc.
	On Push Button Green	BG10GREEN	1	0.135
	OFF Push Button Red	BG10RED	1	0.135
	Pilot Light Green	BG01GREEN	1	0.135
	Pilot Light Red	BG01RED	1	0.135
	Key operated 0 - I[1], Lock Ronis, 60° maintained	BG10SAR-0	1	0.165
	Key operated 0 - II[1] Lock Ronis, 60° maintained	BG10SARR-0	1	0.172
	2 Push Buttons 0 - I	BG20	1	0.200
	2 Push Buttons ← →	BG20PF	1	0.200
	3 Push Buttons ← 0 →	BG30PF	1	0.283
	3 Push Buttons I - 0 - II	BG30	1	0.283
	2 Push Buttons 0 - I with pilot light green	BG21GREEN	1	0.270

Plastic Enclosed Emergency Stop Buttons

Diagram	Description	Part Number	Pack Pcs.	Weight kg/pc.
	Emergency Stop Button, head Ø40mm, unlock by turning	BG10P34-11	1	0.145
	Emergency Stop Mushroom Button Ø40mm, according to EN418, unlock by pulling	BG10P44-11	1	0.145
	Emergency Stop Key, Ø40mm, according to EN418, unlock with key	BG10P44S3-11	1	0.178
	Emergency Stop Mushroom Button, Ø70mm, unlock by turning	BG10P34P-11	1	0.187

Components for Pushbutton Stations

IP67 cULus Type 12

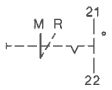
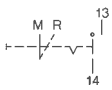
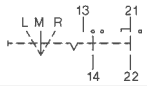
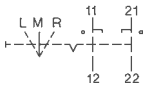
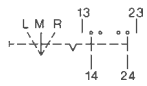
Knockouts

Description	Number Of Units	Type	Pack Pcs.	Weight kg/pc.
3 Knockouts Ø20.5mm (M20 or PG13.5)	1	BG1	1	0.108
3 Knockouts Ø20.5mm (M20 or PG13.5)	2	BG2	1	0.145
3 Knockouts Ø20.5mm (M20 or PG13.5)	3	BG3	1	0.188

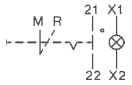
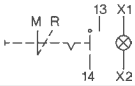
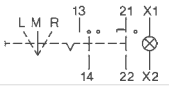
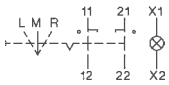
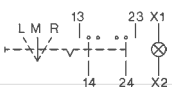
3 Knockouts

Contact Blocks for Enclosures BG...

Key: [1] → *NC Contact has a positive opening according to IEC/EN 60947-5-1*

Contacts	Wiring Diagram	Actuators With 2 or 3 Switch Positions	Part Number	Pack Pcs.	Weight kg/pc.
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...*

Contacts	Wiring Diagram	Actuators With 2 or 3 Switch Positions	Part Number	Type	Pack Pcs.	Weight kg/pc.
1NC			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			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*

Description	Actuators With 2 or 3 Switch Positions	Lamp Voltage	Type	Pack Pcs.	Weight kg/pc.
Direct Connecton, for lamps max. 1.9W (Take care for active power consumption)		Max. 440V AC/DC	B4FU	10	0.013

Pushbuttons for Enclosures

Pushbuttons Grey RAL7035

Description	Colour	Symbol	Length mm	Type	Pack Pcs.	Weight kg/pc.
Reset Push Button	Blue	R	8-22	B2GRB-22	10	0.005
Reset Push Button	Blue	R	22-60	B2GRB-60	10	0.016
Reset Push Button with stop function	Red	0/R	8-22	B2GR-22	10	0.005
Reset Push Button with stop function	Red	0/R	22-60	B2GR-60	10	0.016
Start Push Button	Green	I	8-22	B2GI-22	10	0.005
Start Push Button	Green	I	22-60	B2GI-60	10	0.016
Stop Push Button	Red	0	8-22	B2G0-22	10	0.005
Stop Push Button	Red	0	22-60	B2G0-60	10	0.016
Mushroom Head lockable Ø28mm	Red	0	8-22	B2GP-22	10	0.005
Mushroom Head lockable Ø28mm	Red	0	22-60	B2GP-60	10	0.016

Pushbuttons with Metal Ring

Specification	Colour	Symbol	Length mm	Type	Pack Pcs.	Weight kg/pc.
Reset Push Button	Blue	R	19.5-38.5	B3GRB-31.5	10	0.023
Reset Push Button	Blue	R	38.5-60	B3GRB-60	10	0.026
Reset Push Button with stop function	Red	0/R	19.5-38.5	B3GR-31.5	10	0.023
Reset Push Button with stop function	Red	0/R	38.5-60	B3GR-60	10	0.026
Start Push Button	Green	I	19.5-38.5	B3GI-31.5	10	0.023
Start Push Button	Green	I	38.5-60	B3GI-60	10	0.026
Stop Push Button	Red	0	19.5-38.5	B3G0-31.5	10	0.023
Stop Push Button	Red	0	38.5-60	B3G0-60	10	0.026
Mushroom Head lockable Ø28mm	Red	N/A	19.5-38.5	B3GP-31.5	10	0.023
Mushroom Head lockable Ø28mm	Red	N/A	38.5-60	B3GP-60	10	0.026

Extensions for Pushbuttons

Specification	Diameter Ø mm	Length mm	Type	Pack Pcs.	Weight kg/pc.
Self Adjusting Pin, for B(S,C) 3D... and B(2,C)3P..	15	19.5-38.5	B4V31.5	10	0.001
Self Adjusting pin, for B(S,C) 3D... and B(2,C)3P..	18.5	38.5-60	B4V60	10	0.004

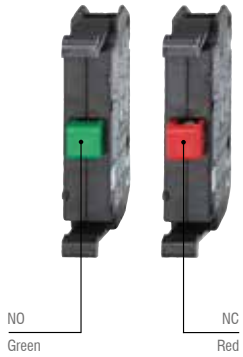
Accessories

Description	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
Suspension Eye - For Hanging Stations	B4-9929	1	0.188
Handle and Cable Inlet - To change encosures BG... or assembled stations BG... into a hanging station	B4-9149	1	0.064

Wrench

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	13 / 14							01	21 / 22	
20	13 23 / 14 24	11	13 21 / 14 22					02	11 21 / 12 22	
30	13 23 33 / 14 24 34	21	13 21 33 / 14 22 34	12	13 21 31 / 14 22 32			03	12 22 32 / 12 22 32	
40	13 23 33 43 / 14 24 34 44	31	13 21 33 43 / 14 22 34 44	22	13 21 31 43 / 14 22 32 44	13	13 21 31 41 / 14 22 32 42	04	11 21 31 41 / 12 22 32 42	

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_e**	220-240V 380-415V 500V 690V	A A A A	10 10 10 10	10 10 10 -
Utilization category AC15 Control of electromagnetic load (>72VA) **Rated current I_e**	220-240V 380-415V 500V 690V	A A A A	6 5 3 2	6 5 3 -
Utilization category DC12 L/R = 1ms Control of resistive loads and solid stateloads with isolation by opto couplers **Rated current I_e**	24V 60V 110V 220V	A A A A	10 6 2.5 0.8	10 6 2.5 0.8
Utilization category DC14 L/R = 15ms Control of electromagnetic loads having economy resistors in circuit **Rated current I_e**	24V 60V 110V 220V	A A A A	8 1 2 0.5	8 1 2 0.5
Utilization category DC13 L/R = 300ms Control of electromagnets **Rated current I_e**	24V 60V 110V 220V	A A A A	2 5 0.5 0.2	2 5 0.5 0.2
Making capacity **Breaking capacity** cosj = 0.7-1	40-60Hz	A A	60 50	60 50
Mechanical life		Millions of operations	10	10
Contact life (AC15) 100VA 300VA 800VA 1200VA		 Millions of operations Millions of operations Millions of operations Millions of operations	 10 3 1 0.5	 10 3 1 0.5
Maximum frequency of operations		Ops. per hour	600	600
Short circuit protection	Slow	A	25	25

Type	B3F	B4F
Rated inslation voltage U_i	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 LED Lamps (B3-Lxx)	°C °C	-40 to +60[3)] -40 to +40
Cable cross-section Cables per clamp	Solid, mm^2 Flexible, mm^2 Flexible with Multicore Cable End, mm^2 Number	 0.5 - 2.5 0.5 - 2.5 0.5 - 1.5 2
Mounting Hole (according to IEC 947-1)		Optional
Terminal Screws		Pozidriv No. 2 Screws M3,5

Data according to cULus

Type	B3	B4
Contact Block for NO and NC General use Heavy pilot duty	 600V AC max. 10A A600	 600V AC max. 10A A600
Lamp Holder with socket BA9s	240V 2.6W max.	240V 2.6W max.
Wire (Contact and Lamp Holder) Torque	14 - 18AWG 9lb/in.	14 - 18AWG 9lb/in.

Approvals

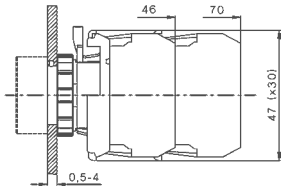
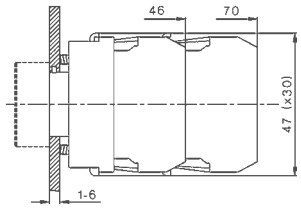
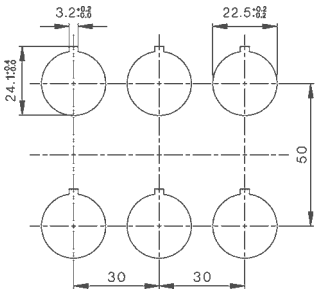
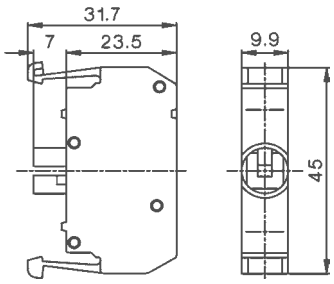
Key: o = In standard version approved
- = Not provided for test till now

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

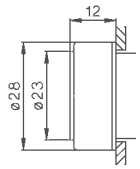
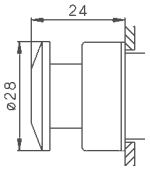
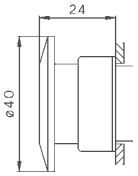
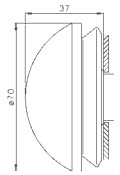
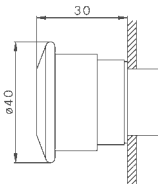
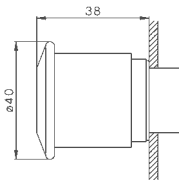
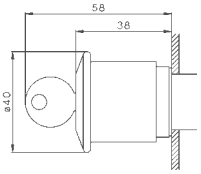
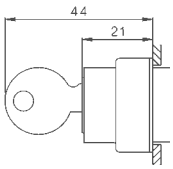
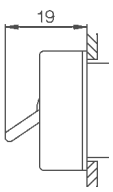
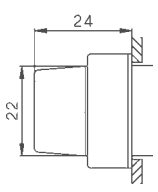
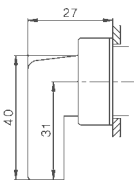
[1)] Suitable for: Earthed-neutral systems, overvoltage category I to IV, pollution degree 3 (standard industry) U_{imp} = 6kV.
Data for other conditions available upon request.
[2)] Suitable for: Earthed-neutral systems, overvoltage category I to III, pollution degree 3 (standard industry) U_{imp} = 4kV.
[3)] Except sealing cover.

Dimensions

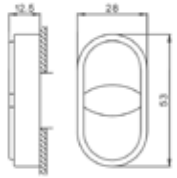
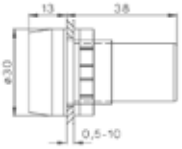
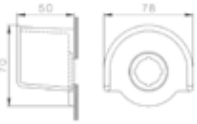
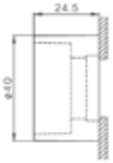
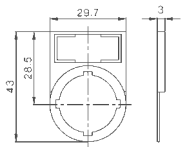
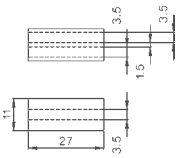
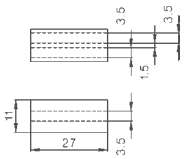
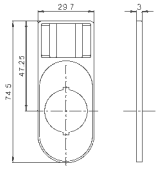
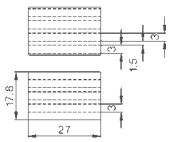
Ø22.0mm Pushbutton Mounting Dimensions (mm)

Panel mounting	Mounting Holes	Contact blocks and Lamp Holder B3...
B3S  B3M  	 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.	

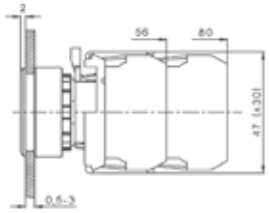
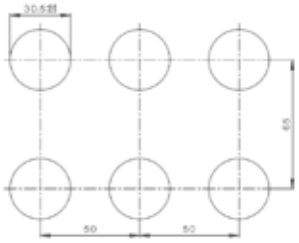
Ø22.0mm Pushbutton Dimensions (mm)

Flush Head Illuminated Flush Head	Mushroom Head Ø28mm Emergency Stop Ø28mm	Mushroom Head Ø40mm Emergency Stop Ø40mm	Mushroom Head Ø70mm Emergency Stop Ø70mm
 	 	 	
B3D(R), B3DL(R) BS3D(R), BS3DL(R) BC3D(R), BC3DL(R)	B3P1 bis B3P3 BS3P1 bis BS3P3 BC3P1 bis BC3P3	B3P14, B3P34 BS3P14, BS3P34 BC3P14, BC3P34	BS3P14P BS3P34P
Push and pull button Ø40mm	**Push and pull button Ø40mm**	**Push and pull button Ø40mm with key**	**Lockable push button**
 	 	 	
BS3P44	BS3P45	BS3P44S3	B3SAR., B3SAT. BS3SAR., BS3SAT. BC3SAR., BC3SAT.
Toggle	**Rotary Knob**	**Swing Knob**	**Lens Cap**
 	 	 	
B3E BS3E BC3E	B3KN, B3KL BS3KN, BS3KL BC3KN, BC3KL	B3KRL, B3KRN BS3KRL, BS3KRN BC3KRL, BC3KRN	B3R(F)

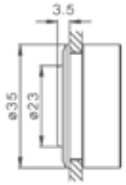
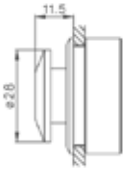
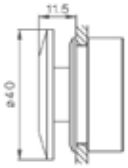
Illuminated Pushbutton Dimensions (mm)

Double Push button	Monoblock Multi-LED	Protection Cover	Protection Ring w. Thread	
				
B3DT	B3-MB...	B3-SK...	P921-.	
Label Holder	**Legend Plate**	**Label Holder**	**Label Holder**	**Legend Plate**
				
P751	BK4-...	P761	P761-DT	BK8-...

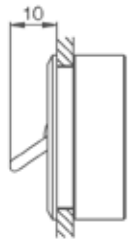
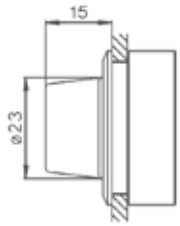
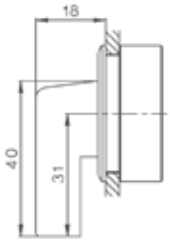
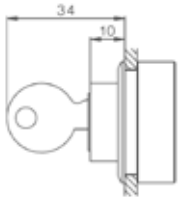
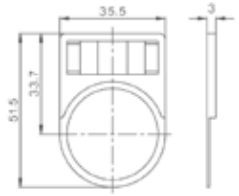
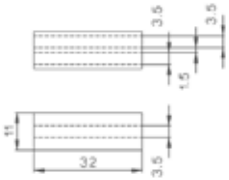
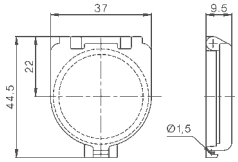
Ø30.0mm Pushbutton Mounting Dimensions (mm)

Panel mounting B3S	Mounting Holes
	

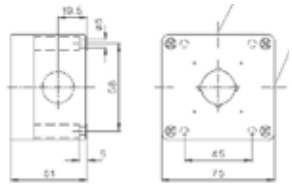
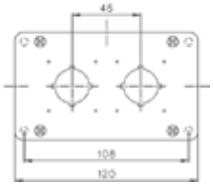
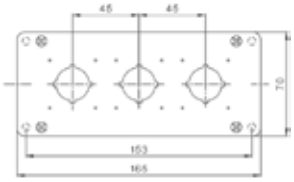
Ø30.0mm Pushbutton Dimensions (mm)

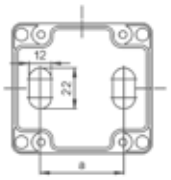
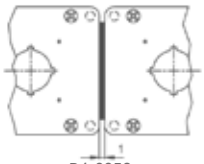
Flush Head Illuminated Flush Head	Mushroom Head Ø28mm Emergency Stop Ø28mm	Mushroom Head Ø40mm Emergency Stop Ø40mm	Lens Cap
			
B5D(R), B5DL(R) BS5D(R), BS5DL(R)	B5P1 to B5P3 BS5P1 to BS5P3	B5P14, B5P34 BS5P14, BS5P34	B5RF

Handle & Legend Plate Dimensions (mm)

Toggle	Rotary Knob	Swing Knob	Lockable Push Button
			
B5E	B5KN, B5KL	B5KRL, B5KRN	B5SAR, B5SAT
BS5E	BS5KN, BS5KL	BS5KRL, BS5KRN	BS5SAR, BS5SAT
Lable Holder	**Legend Plate**	**Protective Cover**	
			
P761	BK5-...	B5-SAP	

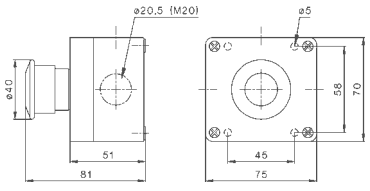
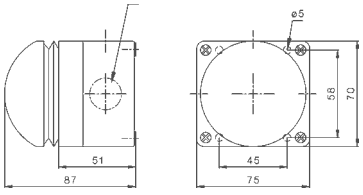
Pushbutton Enclosure Dimensions (mm)

Three conduit entries (Knockouts), each on top, left and right side, Ø20.5mm (M20 or PG13.5)		
		
BG1	BG2	BG3

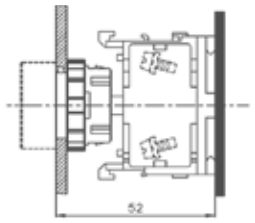
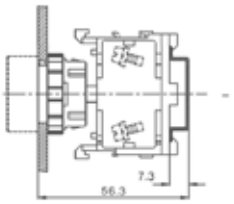
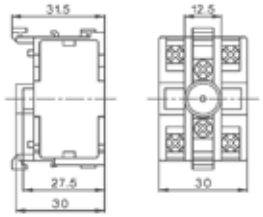
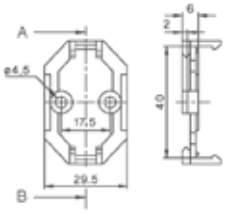
Conduit Entries in the Bottom (Knockouts)	Couple Enclosures
	

Units	A
1	45
2	90
3	135

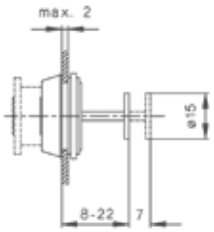
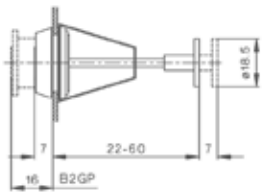
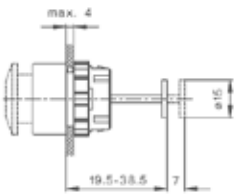
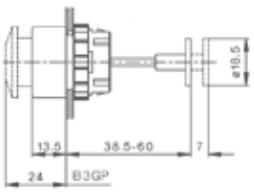
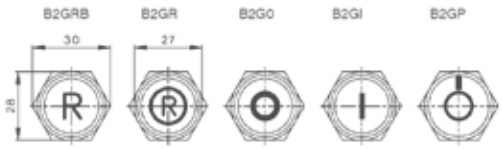
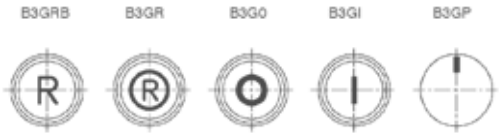
B4-8852

EMERGENCY STOP Push Button Ø40mm	EMERGENCY STOP Push Button Ø70mm, Foot switch
	Ø20.5mm (M20 or PG13,5) Knockout on top, left and right side 

Mounting Dimensions (mm)

Base Mounting	DIN-rail Mounting	Contact block and Lamp Holders B4.U	Base B4U
			

Push Buttons for Enclosures Dimensions (mm)

B2G..-22	B2G..-60	B3G..-31.5	B3G..-60
			
			

LED Pilot Lights

(IP65), cULus Ø22.5mm Single Hole Fixing

Introducing the LMB mono-block, multi-chip LED pilot light. The LMB range of LED pilot lights can be used in new installations, or a retrofit of an existing panel as they fit into a standard Ø22.5mm (7/8") hole. Besides having a bulb that outlasts a standard incandescent bulb type, LEDs are not affected by vibration or heat, making them suitable for almost every application.

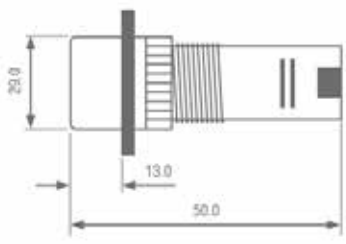
- *Multi-chip LED integrated onto light surface*
- *IP65 rated protection*
- *Single hole fixing Ø22.5mm*
- *Bright & colour intensive light distribution*
- *Temperature range: -25°C to +55°C*
- *cURus & CE approved*
- *MTBF > 30,000 hours*

LMB Series

Pilot Light Colour	Supply Voltage	Part Number
RED	12V AC/DC	LMB-12-RED
	24V AC/DC	LMB-24-RED
	110V AC	LMB-110-RED
	230V AC	LMB-230-RED
GREEN	12V AC/DC	LMB-12-GREEN
	24V AC/DC	LMB-24-GREEN
	110V AC	LMB-110-GREEN
	230V AC	LMB-230-GREEN
YELLOW	12V AC/DC	LMB-12-YELLOW
	24V AC/DC	LMB-24-YELLOW
	110V AC	LMB-110-YELLOW
	230V AC	LMB-230-YELLOW
WHITE	12V AC/DC	LMB-12-WHITE
	24V AC/DC	LMB-24-WHITE
	110V AC	LMB-110-WHITE
	230V AC	LMB-230-WHITE
BLUE	12V AC/DC	LMB-12-BLUE
	24V AC/DC	LMB-24-BLUE
	110V AC	LMB-110-BLUE
	230V AC	LMB-230-BLUE

LMB Series Dimensions (mm)

Ø22.5mm Fixing Hole



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Web: www.imoautomation.com

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Web: www.imopacific.com.au

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