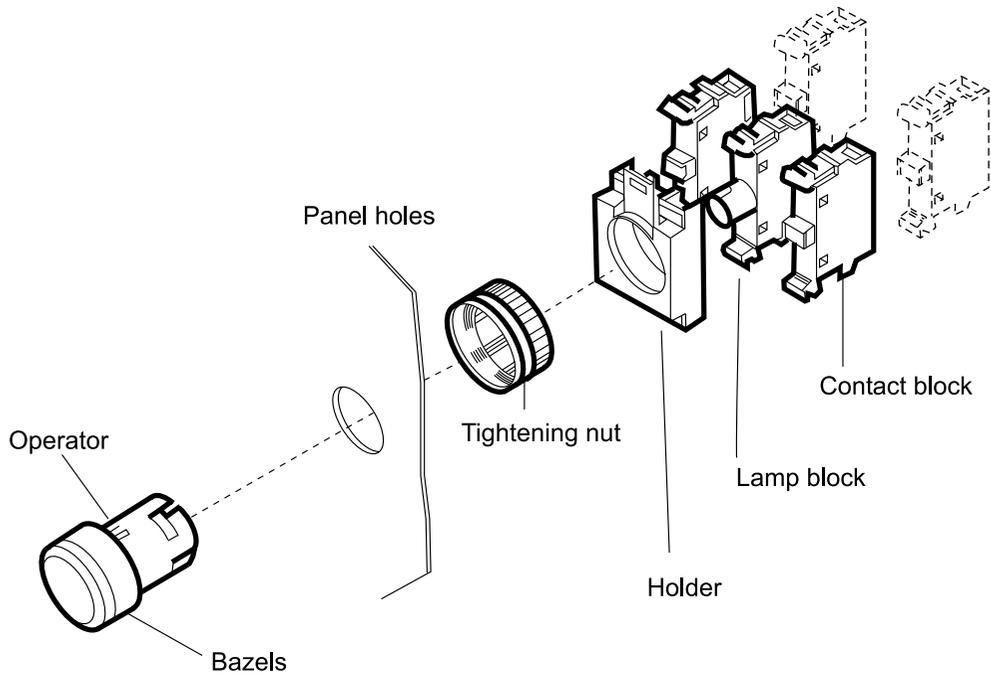


PUSHBUTTONS AND INDICATOR LIGHTS

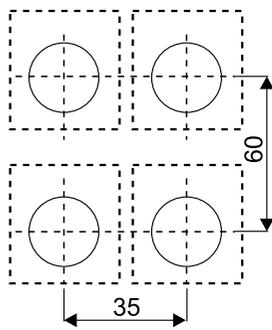
Pushbuttons, non-illuminated PB 22-1-	4/1
Pushbuttons, non-illuminated PB 22-2-	4/1
Mushroom Pushbuttons PB 22-4-	4/1
Toggle switches PB 22-6-	4/2
Pushbuttons, illuminated PB 22-8-	4/2
Pilot lights and buzzer PB 22-31	4/2
Selector switches, non-illuminated PB 22-11-	4/2
Selector switches, non-illuminated PB 22-13-	4/3
Selector switches, non-illuminated PB 22-12-	4/3
Selector switches, non-illuminated PB 22-16-	4/3
Selector switches, illuminated PB 22-25-	4/3
Selector switches, illuminated PB 22-14-	4/3
Selector switches, illuminated PB 22-26 -	4/3
Selector switches, illuminated PB 22-17-	4/3
Selector switches, illuminated PB 22-24-	4/3
Double pushbuttons, illuminated PB 22-42-	4/4
Double pushbuttons, non-illuminated PB 22-41-	4/4
Elements which are delivered separatly	4/4
Technical data	4/5
Dimenzional drawings	4/6
Pushbutton in insulated enclosures type PNPB	4/7

MOUNTING INSTRUCTION

4



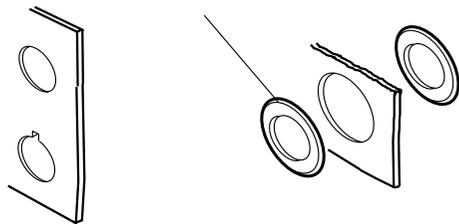
Panel holes



Ø 22.5

Ø 30.5

Hole adapter



PUSHBUTTONS 22 mm DIAMETER

Features

- 22 mm mounting diameter
- Adaptable design with actuators for any control function

Selection and ordering data

Pushbuttons, non-illuminated			complete
Design	button color	included blocks	Part No.
	red	1NC	PB 22-1-01R
	green	1NO	PB 22-1-10G
	yellow	1NO	PB 22-1-10Y
	blue	1NO	PB 22-1-10BL
	black	1NO	PB 22-1-10B
	white	1NO	PB 22-1-10W
	red	1NO+1NC	PB 22-1-11R
	green	1NO+1NC	PB 22-1-11G
	yellow	1NO+1NC	PB 22-1-11Y
	blue	1NO+1NC	PB 22-1-11BL
	black	1NO+1NC	PB 22-1-11B
	white	1NO+1NC	PB 22-1-11W
	Pushbuttons, non-illuminated		
	red	1NC	PB 22-2-01R
	green	1NO	PB 22-2-10G
	yellow	1NO	PB 22-2-10Y
	blue	1NO	PB 22-2-10BL
	black	1NO	PB 22-2-10B
	white	1NO	PB 22-2-10W
	red	1NO+1NC	PB 22-2-11R
	green	1NO+1NC	PB 22-2-11G
	yellow	1NO+1NC	PB 22-2-11Y
	blue	1NO+1NC	PB 22-2-11BL
	black	1NO+1NC	PB 22-2-11B
	white	1NO+1NC	PB 22-2-11W
	Mushroom pushbuttons		
	red	1NO	PB 22-4-10
		2NO	PB 22-4-20
		1NC	PB 22-4-01
		1NO+1NC	PB 22-4-11
		3NO	PB 22-4-30
		1NO+2NC	PB 22-4-12
		3NC	PB 22-4-03
		2NO+1NC	PB 22-4-21
		2NC	PB 22-4-02

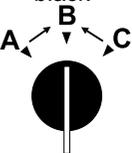
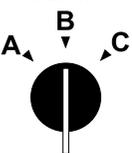
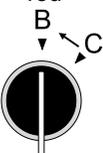
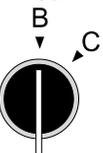
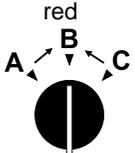
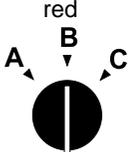
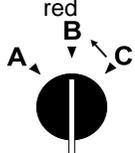
PUSHBUTTON AND INDICATOR LIGHTS 22 mm DIAMETER

Selection and ordering data

Toggle switches			complete	
Design	button color	included blocks	Part No.	
	Maintained	red	1NO	PB 22-6-10R
		green	1NO	PB 22-6-10G
		red	1NC	PB 22-6-01R
		green	1NC	PB 22-6-01G
		red	1NO+1NC	PB 22-6-11R
		green	1NO+1NC	PB 22-6-11G
		red	1NO+2NC	PB 22-6-12R
		green	1NO+2NC	PB 22-6-12G
		red	2NO+1NC	PB 22-6-21R
		green	2NO+1NC	PB 22-6-21G
		red	3NO	PB 22-6-30R
		green	3NO	PB 22-6-30G
Pushbuttons-illuminated			complete	
	Flat pushbuttons	red	1NO	PB 22-8-10R
		green	1NO	PB 22-8-10G
		yellow	1NO	PB 22-8-10Y
		blue	1NO	PB 22-8-10BL
		black	1NO	PB 22-8-10B
		white	1N	PB 22-8-10W
		red	1NO+1NC	PB 22-8-11R
		green	1NO+1NC	PB 22-8-11G
		yellow	1NO+1NC	PB 22-8-11Y
		blue	1NO+1NC	PB 22-8-11BL
		black	1NO+1NC	PB 22-8-11B
		white	1NO+1NC	PB 22-8-11W
Pilot lights and buzzer			complete	
		red	$24V \quad 2W$ $\frac{\text{---} \otimes \text{---}}{X1 \quad X2}$	PB 22-31-00R
		green		PB 22-31-00G
		yellow		PB 22-31-00Y
		blue		PB 22-31-00B
		white		PB 22-31-00W
		clear		PB 22-31-00C
Can be produced with lampes BA 9s-24V - 2W				
Selector switches, non-illuminated			complete	
	Two position momentary, spring return from C to B	black B ↙ ▼ ↘ C 	1NO	PB 22-11-10
			2NO	PB 22-11-20
			1NC	PB 22-11-01
			1NO+1NC	PB 22-11-11
			3NO	PB 22-11-30

PILOT DEVICES 22 mm DIAMETER

Selection and ordering data

Selector switches, non-illuminated			complete
Design	button color	included blocks	Part No.
 <p>Two position maintained</p>	black	1NO 2NO 1NC 1NO+1NC 3NO	PB 22-13-10 PB 22-13-20 PB 22-13-01 PB 22-13-11 PB 22-13-30
			
<p>Three position momentary, spring return from A to B and C to B</p>	black	2NO 1NO+1NC 2NC	PB 22-12-20 PB 22-12-11 PB 22-12-02
			
<p>Three position maintained</p>	black	2NO 1NO+1NC 2NC 2NO+1NC 1NO+2NC	PB 22-16-20 PB 22-16-11 PB 22-16-02 PB 22-16-21 PB 22-16-12
			
Selector switches, illuminated			complete
 <p>Two position momentary, spring return from C to B</p>	red	1NO+1LB 2NO+1LB 1NC+1LB 1NO+1NC+1LB	PB 22-25-10 PB 22-25-20 PB 22-25-01 PB 22-25-11
			
<p>Two position maintained</p>	red	1NO+1LB 2NO+1LB 1NC+1LB 1NO+1NC+1LB	PB 22-14-10 PB 22-14-20 PB 22-14-01 PB 22-14-11
			
<p>Three position momentary, spring return from A to B and C to B</p>	red	2NO+1LB 1NO+1NC+1LB 2NC+1LB	PB 22-26-20 PB 22-26-11 PB 22-26-02
			
<p>Three position maintained</p>	red	2NO+1LB 1NO+1NC+1LB 2NC+1LB	PB 22-17-20 PB 22-17-11 PB 22-17-02
			
<p>Three position momentary, spring return from C to B and maintained A</p>	red	2NO+1LB 1NO+1NC+1LB 2NC+1LB	PB 22-24-20 PB 22-24-11 PB 22-24-02
			

PILOT DEVICES 22 mm DIAMETER

Selection and ordering data

Double pushbuttons, illuminated

complete



Design	button color	included blocks	Part No.
MainLower button inscription 0/1	red/green red/green	1NO+1NC+1LB 1NO+1NC+1LB	PB 22-42-11R PB 22-42-11R-T

Double pushbuttons, non-illuminated

complete



Design	button color	included blocks	Part No.
Lower button inscription 0/1	red/green red/green	1NO+1NC 1NO+1NC	PB 22-41-11GR PB 22-41-11GR-Tx

Elements which are delivered separately

4

Part No.



Holder

C E- 3

S57057



Holder

CE - 5

S57145



Contact block

KE 10 NO



S57061



Contact block

KE 01 NC

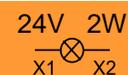


S57060



Lamp block*

PF-VA 9S



S57078

*Can be produced with lampes BA 9s-24V - 2W

TECHNICAL DATA

Mechanical life

pushbuttons	1 million operations
selector switches	0.5 million operations
toggle switches	0.3 million operations
mushroom pushbuttons	0.5 million operations
double pushbuttons	1 million operations

Lamp block

rated installation voltage	230V
base	BA9s
max.permissible power	2W

Temperature

ambient temperature during operation	-25° to +40°C
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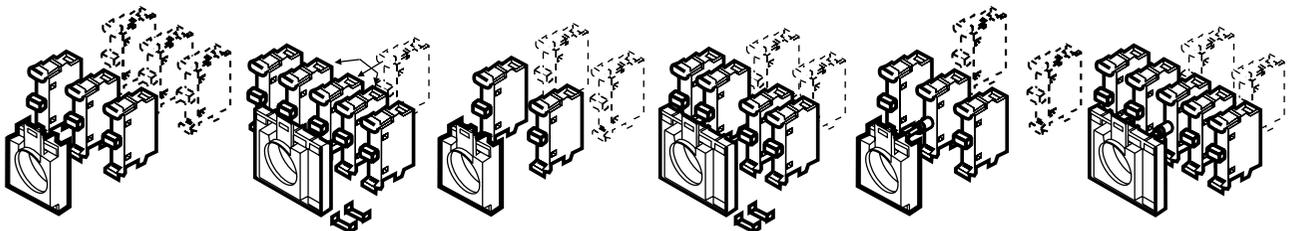
Terminals

connectable area	min.1 x 0.5mm ²
max	2 x 2.5mm ²
recommended torque	0.9Nm

Contact blocks

mechanical endurance	0.5 million operation
rated insulation voltage	690V
rated thermal current	10A
rated operational current, I _e	AC15 400V I _e = 6A
utilization category	DC13 220V I _e =0.25A

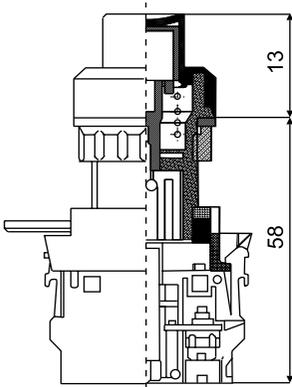
Max. number of contact blocks per button



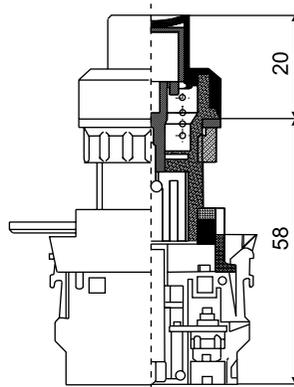
Buttons type PB 22 IEC 60529; IEC 60947-5-1

- Non- standard schemes can be produced on request of the clients.

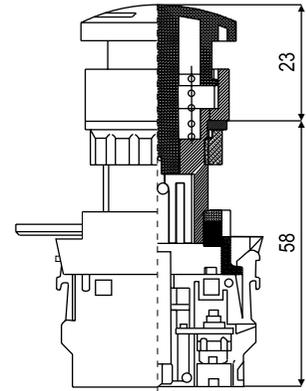
DIMENSIONS DRAWINGS in mm



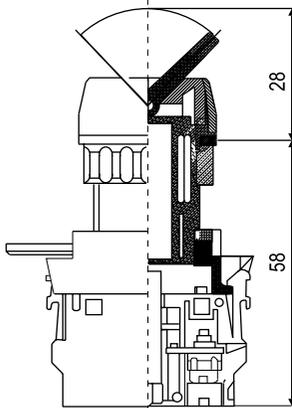
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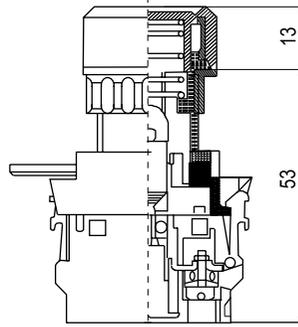
PB 22-2-



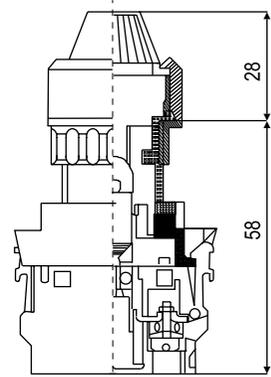
PB 22-4-



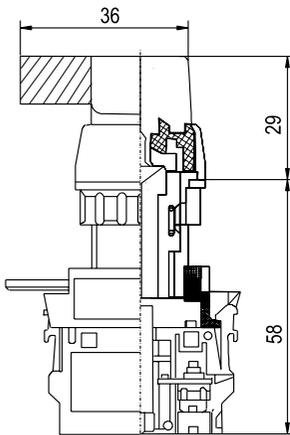
PB 22-6-



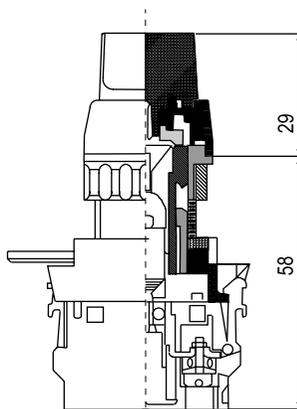
PB 22-8-



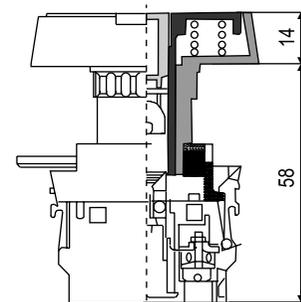
PB 22-31-



**PB 22-11-
PB 22-13-
PB 22-12-
PB 22-16-**



**PB 22-25-
PB 22-14-
PB 22-26-
PB 22-17-
PB 22-24-**



**PB 22-42-
PB 22-41-**

PUSHBUTTON IN INSULATED ENCLOSURES TYPE PNPB

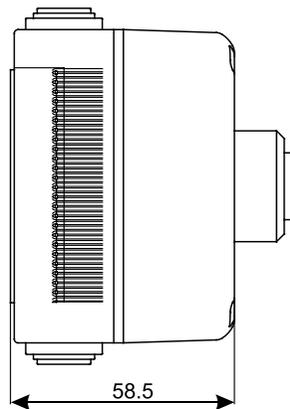
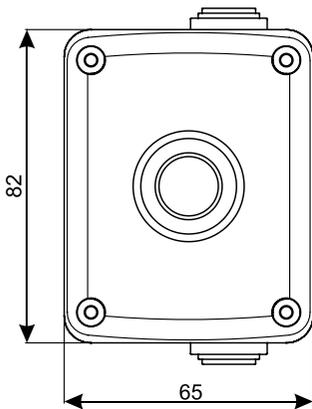
Selection and ordering data



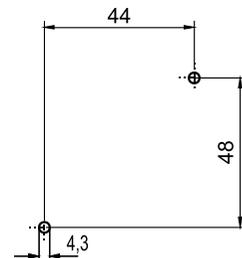
PNPB 22..

	IP 65	PNPB 22
Code: 1, 2, 4, 6, 8, 11, 12, 13, 14, 16, 17, 24, 25, 26, 41, 42		
Red - R, Green-G, Yellow-Y, Blue-BI, White-W, Black-B, Clear-C		

DIMENSION DRAWINGS (mm)



DRILLING PLAN



PNPB 22..

NOTES:

Color of enclosures is grey (RAL 7035)

