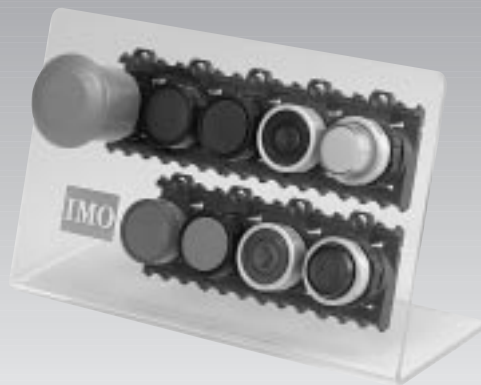


- IP65 protection
- Opaque or illuminated
- Metal or Black bezels
- Snap-on contact blocks
- Colour coded contacts
- Pushbutton stations
- International approvals including UL and CSA

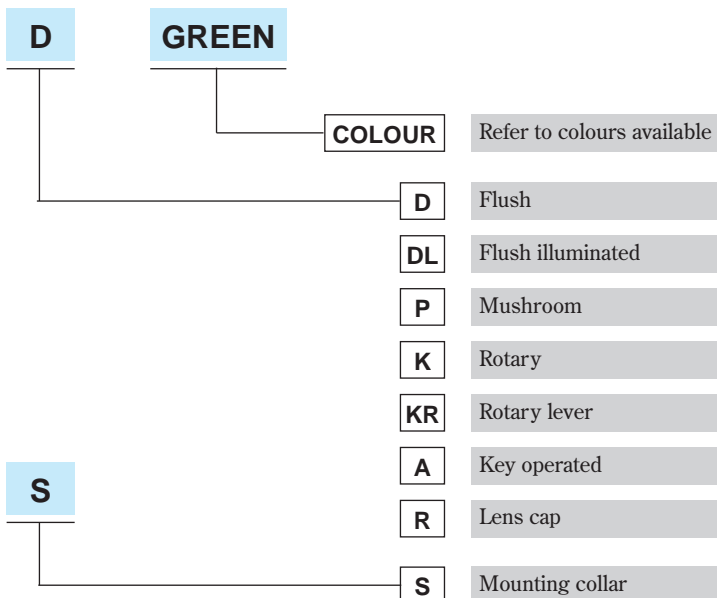
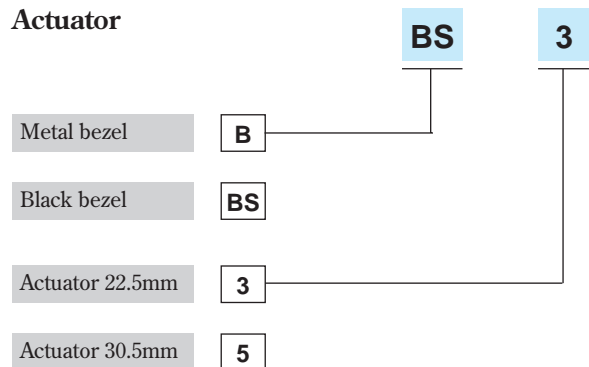
New Models



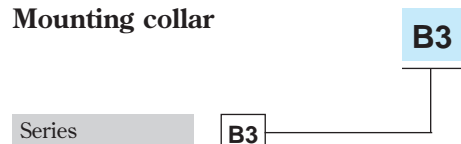
Options and ordering codes

To order – select actuator + mounting collar + contacts

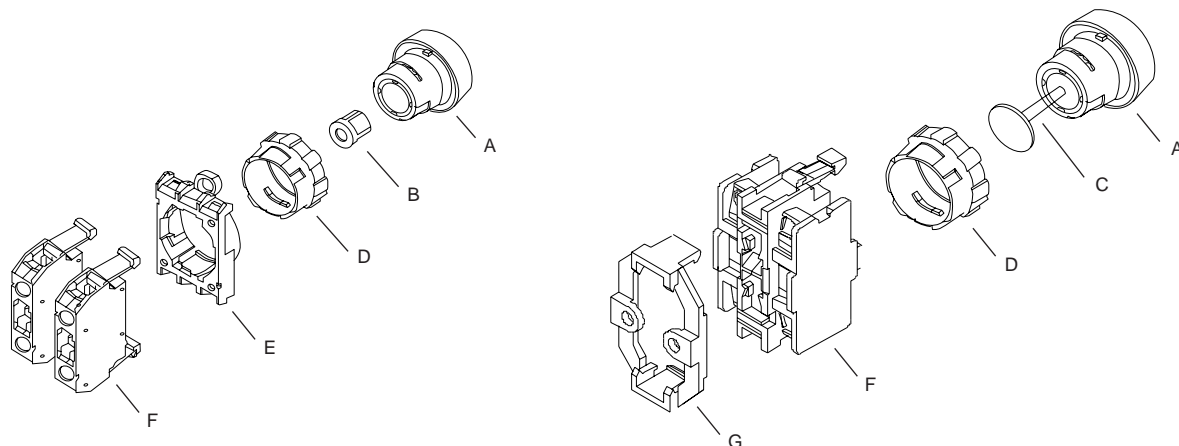
Actuator



Mounting collar



Exploded view











- A Actuator or lens cap.
 B P642 insert for use with contact in centre position
 C B4V extension bar
 D Locking ring
 E Mounting collar
 F Contact blocks/lampholders
 G Base/DIN rail mount

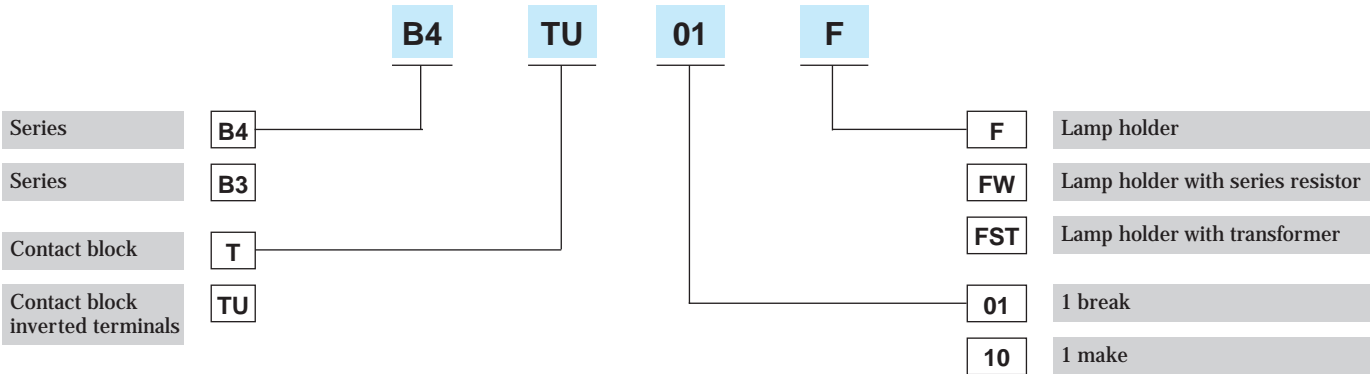
Selection and product pricing

OPAQUE ○ Metal Bezel ● Black Bezel

ILLUMINATED

Description		Description	
Momentary 	Flush ○ Green-Red-Black ● Yellow-Blue ○ Mushroom 28mm ○ Red-Red O-Yellow ● Black ○ Mushroom 40mm ○ Red O ●	Momentary 	Flush ○ Green-Red-White-Blue ○ Yellow-Clear ● * max 1.2W lamp
Maintained 	Mushroom 28mm ○ Twist to Release ● Red-Red O ○ Mushroom 40mm ○ Twist to Release ● Red O ○ Mushroom 40mm ○ Key Release ● Red ○ Mushroom 40mm ○ Pull to Release ● Red ○	Lens Cap 	Low Profile ○ Red-Yellow-Green ○ Clear-White-Blue ○ Plastic ● Red-Yellow-Green ● White-Blue ○ High Profile ○ Red-Yellow-Green ○ White-Blue ○ Flush ○ Red-Yellow-Green ● Clear-White-Blue ○
Rotary Knob 	3 posn. spring ○ Return to centre ● 60°-0-60° Black ○ 2 posn. maintained ○ 0-60° Black ● 3 posn. maintained ○ 60°-0-60° Black ● Lever 3 posn. ○ Spring return ● 60°-0-60° Black ○ Lever 3 posn. Maintained ○ 60°-0-60° Black ●	Rotary Knob 	3 posn. spring ○ Return to centre ● 60°-0-60° Clear ○ 2 posn. maintained ○ 0-90° Clear ● 3 posn. maintained ○ 60°-0-60° Clear ● Lever 3 posn. ○ Spring return ● 60°-0-60° Clear ○ Lever 3 posn. Maintained ○ 60°-0-60° Clear ●
Key Operated Maintained 	2 Posn. Key Remove-Off ○ 2 Posn. Key Remove-On ● 2 Posn. Key Remove-All ○ 3 Posn. Key Remove-Off ● 3 Posn. Key Remove-All ○ Spring return 2 Posn. Key Remove-Off ○ 3 Posn. Key Remove-Off ● 3 Posn. Key Remove-Off ○	Momentary B5 range (30.5mm) 	Flush ○ Green-Red ○ Yellow-Blue ● Illuminated Flush ○ Green-Red ○ Yellow-Blue ●
		€ Euro prices on request	

Options and ordering codes



Selection and product pricing

CONTACT ASSEMBLIES



Description
1 make
1 break

LAMP HOLDER AND CONTACT ASSEMBLIES








Description
Lamp holder only (1.7W max)
Lamp holder with dropper resistor 110 or 230V AC – down to 42V
Lamp holder with series resistor 230 down to 130V 2.6W
Lamp holder and transformer 230 or 415V AC – down to 6V
Transformer only 230 or 415V AC – down to 6V

Accessories



Description
Lamps BA9S 6V 24V 42V 1.2W 130V 2.6W Neon 240V 110V
Legend plate with holder Holder Blank Legends–start–stop–reset–fwd–rev–HOA
Mounting Collar Base or DIN mounting adaptor Sealing shroud 0 to 50°C Sealing shroud -40 to +60°C Spare key Adaptor ring for 30.5mm holes Coupler for BKLG enclosures Actuator – insert for centre position

Selection and product pricing

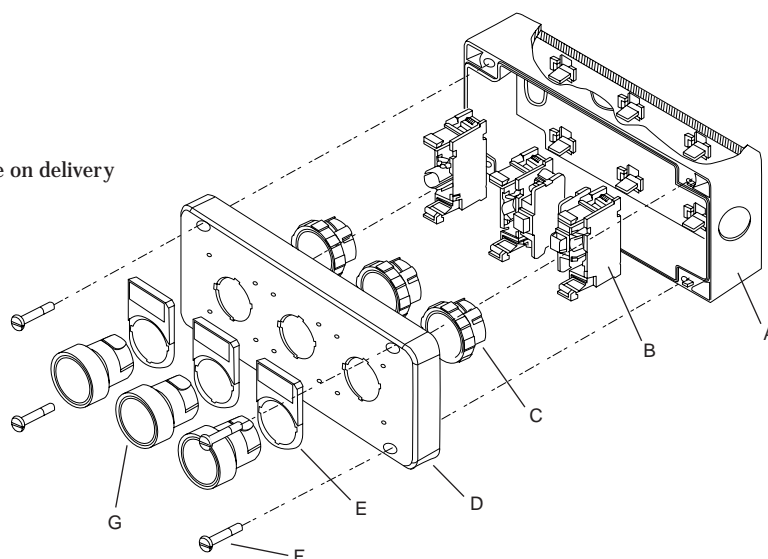
Description		Description	
 <p>Enclosures Single Single with yellow lid Double Triple</p>		 <p>Contacts <small>for use with enclosures</small> 1 make 1 break 2 makes 2 breaks 1 make + 1 break</p>	
 <p>Assembled units Emergency stop 40mm maintained turn to release yellow lid with 2 N/C contacts</p> <p>Emergency stop 40mm maintained key release yellow lid with 2 N/C contacts</p>		 <p>With lamp holder 1 make 1 break 2 makes 2 breaks 1 make + 1 break</p> <p>With series resistor 110 or 240V AC to 42V lamp 1 make 1 break</p>	
 <p>Start-stop flush green and red pushbuttons 2 way with 1 N/O and 1 N/C contact</p> <p>Mushroom pushbutton red Ø70mm yellow lid with 2 N/C contacts</p> <p>Foot and Palm switch mushroom pushbutton Ø70mm grey with 1 N/O and 1 N/C contacts</p>		<p>Lamp base only for BA9S</p> <p>Lamp base and resistor 110 or 240V AC to 42V lamp</p> <p>Transformer and lamp base 240 or 415V to 6V lamp</p>	

€ Euro prices on request











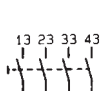
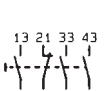
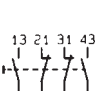
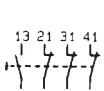
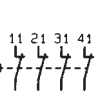
€ Euro prices on request

Exploded view enclosure assembly

- A** Enclosure base with built in contact block clips
- B** Contact blocks/lamp holders
- C** Locking ring
- D** Enclosure lid
- E** Legend plates
- F** Captive screws (after screw in) loose in enclosure on delivery
- G** Actuators and lens caps



Technical data

Terminal markings for control units according to DIN EN 50013										Colour code
Distinc. number	Contacts elements	Distinc. number	Contacts elements	Distinc. number	Contacts elements	Distinc. number	Contacts elements	Distinc. number	Contacts elements	<p>The actuators of the contact blocks are colour coded, green for NO, red for NC. The colour code permits to know the function of contacts at first sight and gives additional safety against wrong wiring.</p> 
10								01		
20		11						02		
30		21		12				03		
40		31		22		13		04		

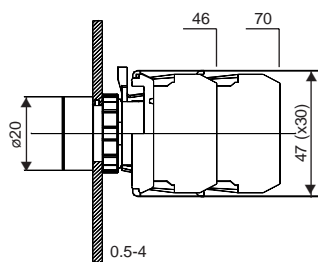
Specifications

Data according to IEC947-5-1, VDE0660, EN60947-5-1			
Rated insulation voltage		V AC	500
AC12 – resistive loads	220-240V	A	10
	380-415V	A	10
AC15 – Electromagnetic loads	220-240V	A	6
	380-415V	A	5
DC12 – resistive L/R = 1mS	24V	A	10
	60V	A	6
	110V	A	2.5
DC14 – Electromagnetic L/R = 15mS	220V	A	0.8
With economy resistors	24V	A	8
	60V	A	1
	110V	A	2
DC13 – Electromagnets L/R = 300mS	220V	A	0.5
	24V	A	2
	60V	A	5
	110V	A	0.5
	220V	A	0.2
Mechanical life	Millions of operations		10
Contact life (AC15)			
	100VA	Millions of operations	10
	300VA		3
	800VA		1
	1200VA		0.5
Maximum frequency of operations	Ops per hour		600
Short circuit protection	slow gL	A	10
Ambient temperature		°C	-20 to +50
Cable cross-section	Solid	mm ²	0.5 – 2.5
	Flexible	mm ²	0.5 – 2.5
	Cables per clamp		2
Mounting hole		Ømm	22.5
Mounting position			Optional
Terminal screws		Pozidrive No 2 screws	3.5

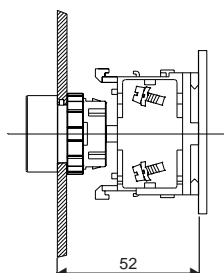
Dimensions (mm)

System B3

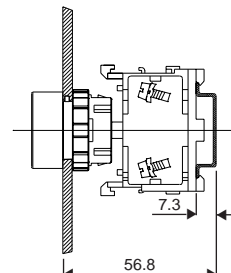
Panel mounting



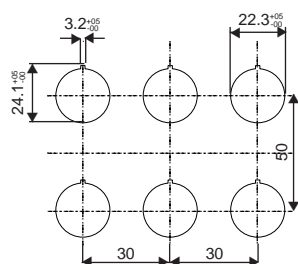
Base mounting



DIN-rail mounting



Mounting holes

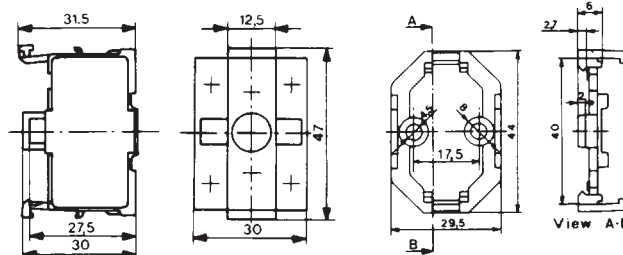


Dimensions of minimum space requirements (according to EN 50007 and IEC337-2C). Take to consideration the field of traverse of swing knobs (27mm) and the diameter of mushroom heads.

Contact blocks Lamp holders

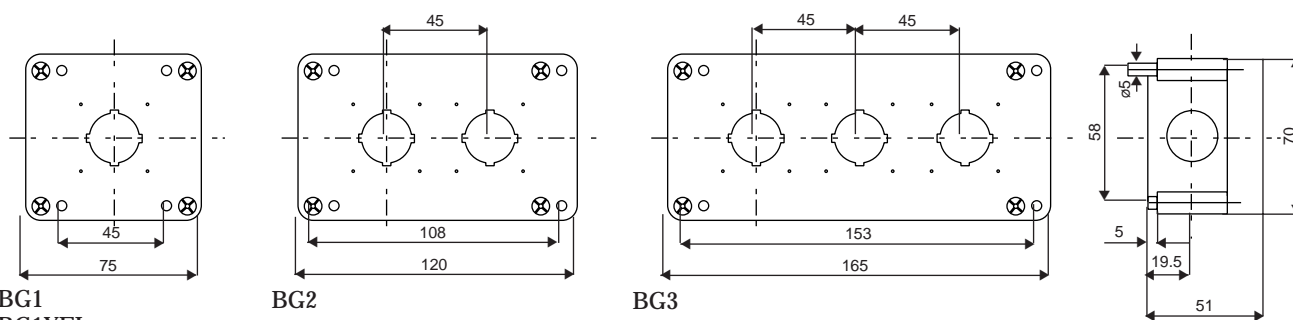
B4 . . .

Base B4U



Enclosures for Custom Built Stations

Three conduit entries (knockouts), each on top, left and right side, suitable for Pg 13.5. Version "CSA" with three knockouts Ø 22.2mm.



BG1
BG1YEL

BG2

BG3