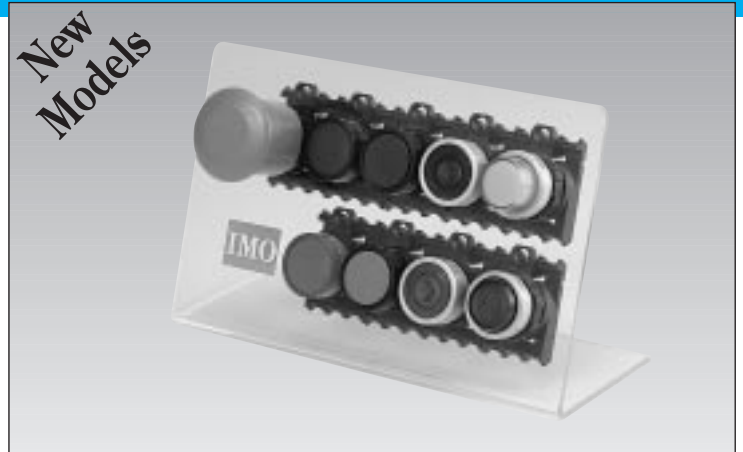


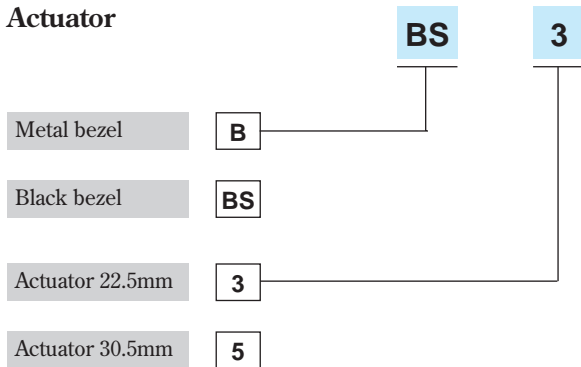
- IP65 protection
- Opaque or illuminated
- Metal or Black bezels
- Snap-on contact blocks
- Colour coded contacts
- Pushbutton stations
- International approvals including UL and CSA



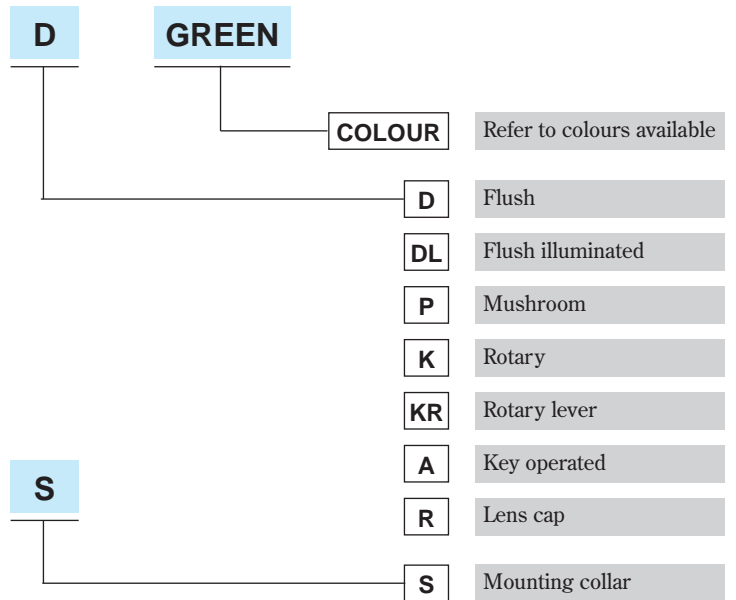
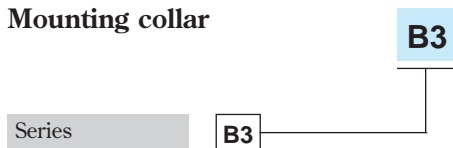
## Options and ordering codes

To order – select actuator + mounting collar + contacts

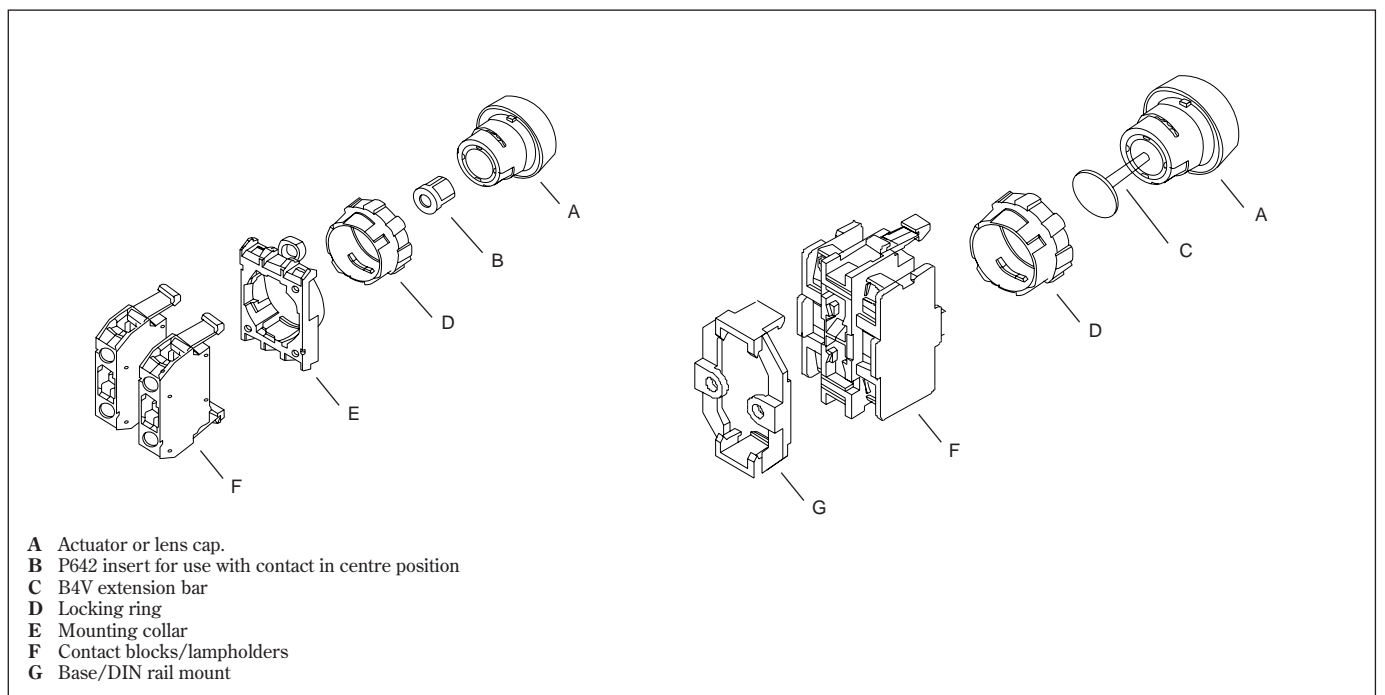
### Actuator



### Mounting collar











## Exploded view



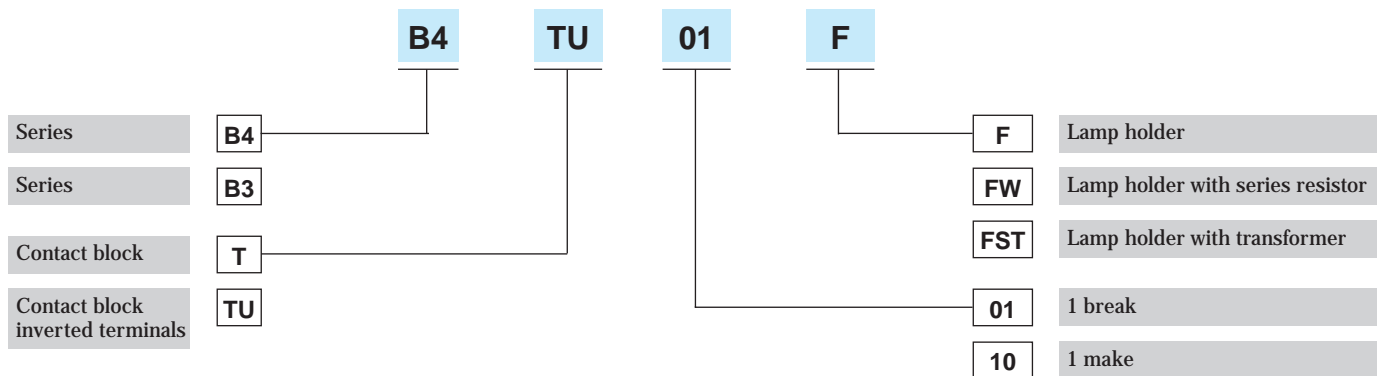
### Selection and product pricing

OPAQUE ○ Metal Bezel ● Black Bezel

ILLUMINATED

OPAQUE		ILLUMINATED	
Description		Description	
<b>Momentary</b>  <ul style="list-style-type: none"> <li>Flush ○</li> <li>Green-Red-Black ●</li> <li>Yellow-Blue ○</li> <li>Mushroom 28mm ○</li> <li>Red-Red O-Yellow ●</li> <li>Black ○</li> <li>Mushroom 40mm ○</li> <li>Red O ●</li> </ul>		<b>Momentary</b>  <ul style="list-style-type: none"> <li>Flush ○</li> <li>Green-Red-White-Blue ○</li> <li>Yellow-Clear ●</li> </ul> <p>* max 1.2W lamp</p>	
<b>Maintained</b>  <ul style="list-style-type: none"> <li>Mushroom 28mm ○</li> <li>Twist to Release Red-Red O ●</li> <li>Mushroom 40mm ○</li> <li>Twist to Release Red O ●</li> <li>Mushroom 40mm Key Release Red ●</li> <li>Mushroom 40mm Pull to Release Red ●</li> </ul>		<b>Lens Cap</b>  <ul style="list-style-type: none"> <li>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</li> </ul>	
<b>Rotary Knob</b>  <ul style="list-style-type: none"> <li>3 posn. spring Return to centre 60°-0-60° Black ○ ●</li> <li>2 posn. maintained 0-60° Black ○ ●</li> <li>3 posn. maintained 60°-0-60° Black ○ ●</li> <li>Lever 3 posn. Spring return 60°-0-60° Black ○ ●</li> <li>Lever 3 posn. Maintained 60°-0-60° Black ○ ●</li> </ul>		<b>Rotary Knob</b>  <ul style="list-style-type: none"> <li>3 posn. spring Return to centre 60°-0-60° Clear ○ ●</li> <li>2 posn. maintained 0-90° Clear ○ ●</li> <li>3 posn. maintained 60°-0-60° Clear ○ ●</li> <li>Lever 3 posn. Spring return 60°-0-60° Clear ○ ●</li> <li>Lever 3 posn. Maintained 60°-0-60° Clear ○ ●</li> </ul>	
<b>Key Operated Maintained</b>  <ul style="list-style-type: none"> <li>2 Posn. Key Remove-Off ○ ●</li> <li>2 Posn. Key Remove-On ○ ●</li> <li>2 Posn. Key Remove-All ○ ●</li> <li>3 Posn. Key Remove-Off ○ ●</li> <li>3 Posn. Key Remove-All ○ ●</li> <li>Spring return 2 Posn. Key Remove-Off ○ ●</li> <li>3 Posn. Key Remove-Off ○ ●</li> </ul>		<b>Momentary</b> B5 range (30.5mm)  <ul style="list-style-type: none"> <li>Flush Green-Red Yellow-Blue ○ ●</li> <li>Illuminated Flush Green-Red Yellow-Blue ○ ●</li> </ul>	
		€ 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

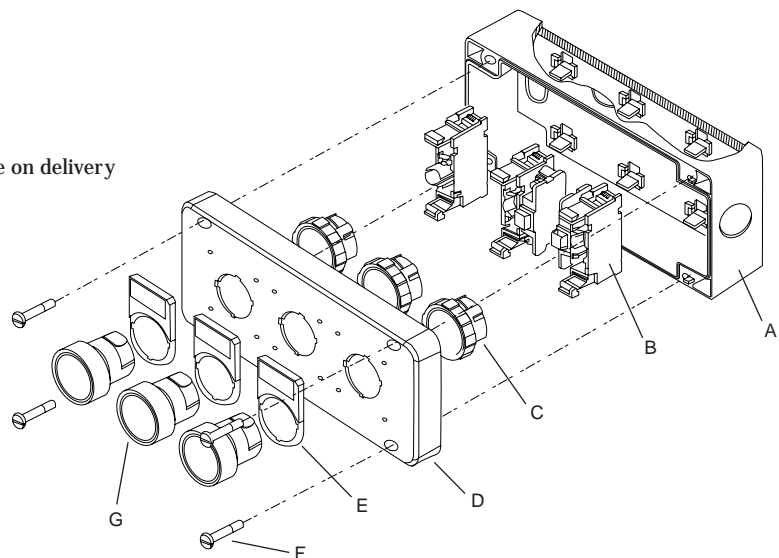
Description		Description	
 <p><b>Enclosures</b> Single Single with yellow lid Double Triple</p>		 <p><b>Contacts</b> <small>for use with enclosures</small> 1 make 1 break 2 makes 2 breaks 1 make + 1 break</p>	
 <p><b>Assembled units</b> Emergency stop 40mm maintained turn to release yellow lid with 2 N/C contacts</p>		 <p>With lamp holder 1 make 1 break 2 makes 2 breaks 1 make + 1 break</p>	
<p>Emergency stop 40mm maintained key release yellow lid with 2 N/C contacts</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>Lamp base only for BA9S</p>	
 <p>Mushroom pushbutton red Ø70mm yellow lid with 2 N/C contacts</p>		<p>Lamp base and resistor 110 or 240V AC to 42V lamp</p>	
<p>Foot and Palm switch mushroom pushbutton Ø70mm grey with 1 N/O and 1 N/C contacts</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	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.
10								01		
20		11						02		
30		21		12				03		
40		31		22		13		04		



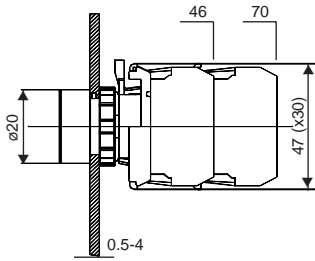
## Specifications

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 <sup>2</sup>	0.5 – 2.5
	Flexible	mm <sup>2</sup>	0.5 – 2.5
	Cables per clamp		2
Mounting hole		Ømm	22.5
Mounting position			Optional
Terminal screws			Pozidrive No 2 screws 3.5

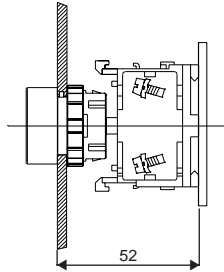
## Dimensions (mm)

### System B3

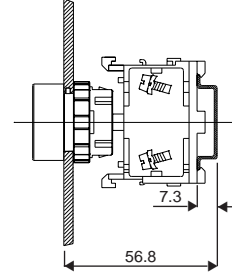
#### Panel mounting



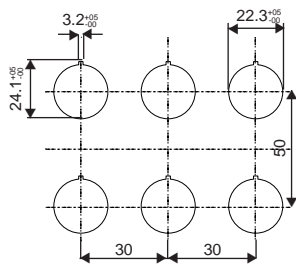
#### Base mounting



#### DIN-rail mounting

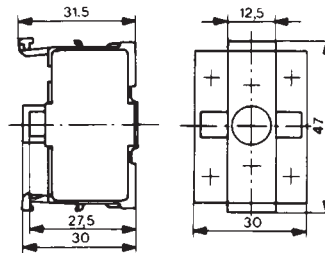


### Mounting holes

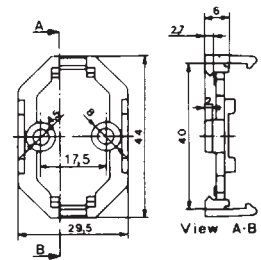


Dimensions of minimum space requirements (according to EN 50007 and IEC337-2C). Take to consideration the field of traverse of swing knobs (27mm) and the diameter of mushroom heads.

### 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.

