



## 22mm CONTROL & SIGNALING DEVICES

### ▶ QUICK REFERENCE GUIDE

NORTH AMERICAN EDITION

OUR COMMITMENT MAKES THE DIFFERENCE ▶ **BACO**<sup>®</sup>

# GUARANTEE, CONFORMITY OF LONG-LASTING PRODUCTS

BACO facilitates the daily work offering ingenious and easy to implement solutions

## ► A KEY PLAYER IN THE MARKET

As a key player on the market for control and signaling devices, cam switches and disconnect switches, BACO is recognized for its professional expertise and compliance with safety standards. BACO is committed not only to provide technical solutions that offer a perfect match for customers' requirements, but also to offer dedicated sales support and assistance. Users of electrical switches and control devices have come to trust BACO for reliable and durable components.

## ► A 10-YEAR GUARANTEE

We are committed to a demanding quality charter so you know you're getting the very best deal. Our products have a 10-year guarantee and are exceptionally reliable, that is why they are ideal for integration into systems that do not tolerate any failure.



## ► WIDELY USED AROUND THE WORLD

Conform to the best international standards:

- UL 508-CSA 22.2
- IEC 60947-5-5
- IEC 60947-5-4
- ISO 13850
- IEC 60947-5-1
- CCC
- BV MARINE RULES

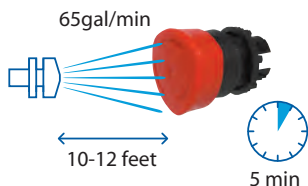


ISO 9001 & 14001 certified

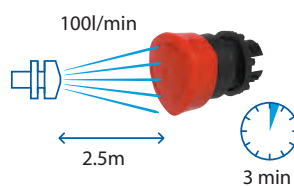


## ► HIGH DEGREES OF PROTECTION

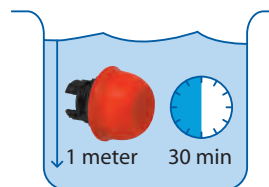
Waterproof according to NEMA and Ingress Protection (IP) Ratings:



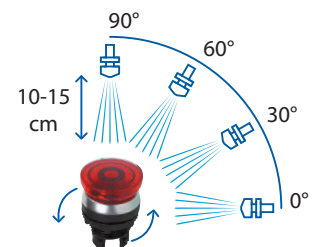
**NEMA 4x:** against strong water jets



**IP 66:** against strong water jets

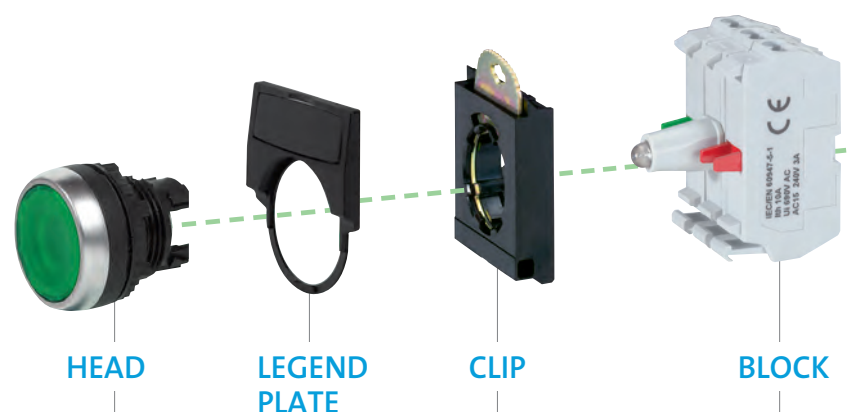


**IP 67:** against temporary water immersion



**IP 69K:** against water jets with high temperature and pressure

► **DESIGNED TO LAST**



*"Cleverly designed to be both ergonomic and clearly visible"*

- Insulating material ensures electrical safety
- Integrated anti-rotation tab
- Legend holder frame keeps NEMA 4x, IP 66 and IP 69K protection
- Auto-grip ring on all heads allows single hand mounting
- Choice of bezels: black or chrome plastic
- Innovative and varied functions
- Optimized dimensions

*"Flexibility of configuration: 1, 3 or 5 position clips. Contact blocks can be assembled in any order..."*

- Contact blocks are simply snapped onto the clip
- Four different types of terminal connections
- Metal latch on clip provides secure assembly to heads

*"Imagatively designed to be safe, robust and durable"*

- Securely fixed by clipping into place
- Stackable
- Grade protection: IP 20 as "finger safe" on screw and plug-in terminals
- Electrical insulation
- LED blocks combining long life and economy (100,000 hours)
- Corrosion resistant to many chemicals



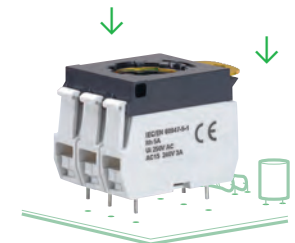
**SCREW TERMINALS**



**PLUG-IN TERMINALS**

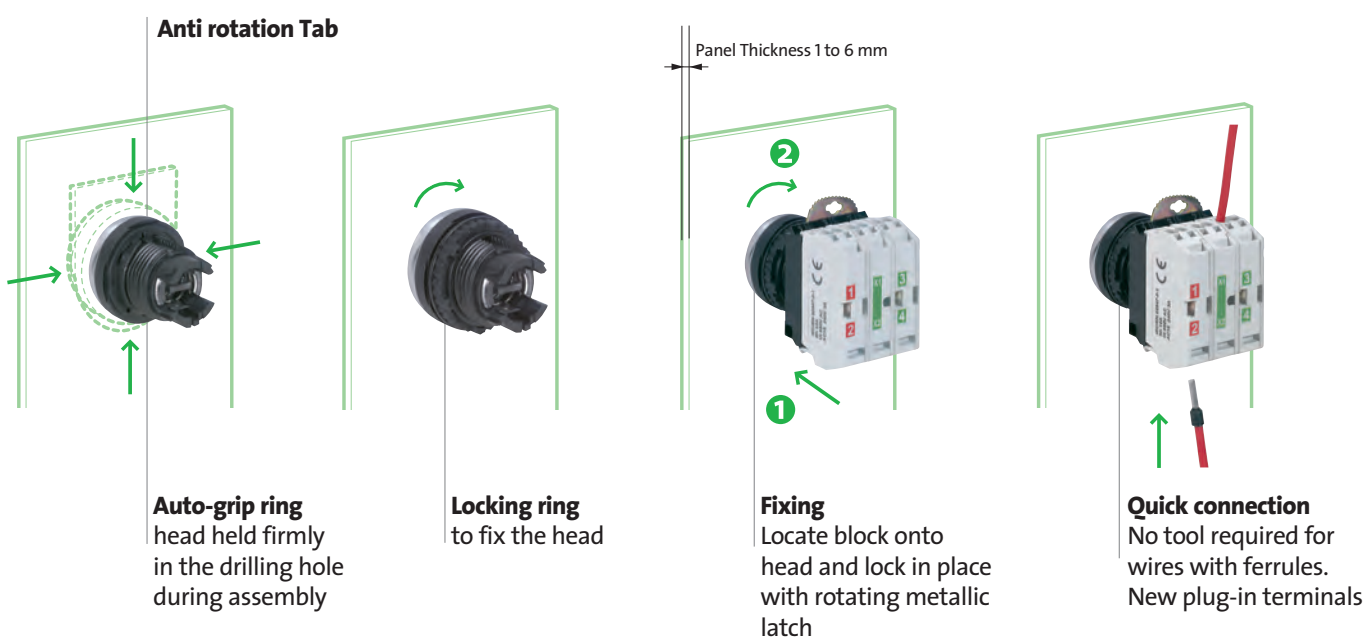


**FASTON TERMINALS**



**PIN STYLE TERMINALS (FOR PCB)**

► **QUICK AND EASY TO ASSEMBLE**



**Anti rotation Tab**

**Auto-grip ring**  
head held firmly in the drilling hole during assembly

**Locking ring**  
to fix the head

**Fixing**  
Locate block onto head and lock in place with rotating metallic latch

**Quick connection**  
No tool required for wires with ferrules. New plug-in terminals

Panel Thickness 1 to 6 mm





## ► PUSH-BUTTONS - NON ILLUMINATED

### SPRING RETURN - FLUSH



L21AA01/2/3/4/5/6/8

With engraving

- Red L21AA81
- Green L21AA82
- Black L21AA83

On demand engraving\*  
L21AA31/2/3/4/5/6 \_\_\_



Supplied with shroud  
L22AF01/2/3  
L22AG04/5/6

### SPRING RETURN - SUPER FLUSH



L23AA01/2/3/4/5/6

On demand engraving\*  
L23AA31/2/3/4/5/6 \_\_\_

### STAY-PUT - FLUSH



L21CA01/2/3/4/5/6

On demand engraving\*  
L21CA31/2/3/4/5/6 \_\_\_

### SPRING RETURN - PROJECTING



L21AB01/2/3/4/5/6

On demand engraving  
L21AB31/2/3/4/5/6 \_\_\_

### STAY-PUT - PROJECTING



L21CB01/2/3/4/5/6

## ► PUSH-BUTTONS - ILLUMINATED

### FLUSH



#### SPRING RETURN

L21AH10/20/40/50/60

On demand engraving\*  
L21AH31/2/4/5/6 \_\_\_

#### STAY PUT

L21CH10/20/40/50/60

On demand engraving\*  
L21CH31/2/4/5/6 \_\_\_

### PROJECTING



#### SPRING RETURN

L21AK10/20/40/50/60

#### STAY PUT

L21CK10/20/40/50/60

### SUPER FLUSH



#### SPRING RETURN

L23AH10/20/40/50/60

On demand engraving\*  
L23AH31/2/4/5/6 \_\_\_

#### STAY PUT

L23CH10/20/40/50/60

On demand engraving\*  
L23CH31/2/4/5/6 \_\_\_

## ► PUSH-BUTTONS WITHOUT BUTTON PLATE

### SPRING RETURN - FLUSH



Non illuminated  
L21AA00

Illuminated  
L21AH00

### BUTTON PLATES

#### FOR NON-ILLUMINATED PUSH-BUTTONS



Without engraving  
LT01/2/3/4/5/6

On demand engraving\*  
LT21/2/3/4/5/6 \_\_\_

#### FOR ILLUMINATED PUSH-BUTTONS



Without engraving  
LT10/20/40/50/60

On demand engraving\*  
LT31/2/4/5/6 \_\_\_

## ► ADJUSTABLE MECHANICAL PUSH-BUTTONS

### FLUSH



L21HA01/2/3/4/5/6

On demand engraving\*  
L21HA31/2/3/4/5/6/ \_\_\_

### PROJECTING



L21HB01/2/3/4/5/6

## ► PILOT LIGHTS

### MODULAR, SEPARATE UNITS



Without engraving  
L20SE10/20/40/50/60

On demand engraving\*  
L20SE31/2/4/5/6 \_\_\_



#### SUPER FLUSH

Without engraving  
L23SE10/20/40/50/60

### ONE PIECE, INTEGRATED LED



Replace "x" for voltage:  
L: 24V AC/DC  
M: 130V AC/DC  
H: 230V AC/DC

Without engraving  
L20SC10x/20x/40x/50x/60x



On demand engraving\*  
L20SC31x/2x/4x/5x/6x \_\_\_

## ► CLIPS



1 position  
331E



3 positions  
333E



5 positions  
335E

\* For "on demand engraving" products, please replace the \_\_\_ with the 3 digits code:

303 for ON, 304 for OFF, 301 for START, 302 for STOP, for more digit codes, please see our full line catalog at [www.bacocontrols.com](http://www.bacocontrols.com)



## ► MUSHROOM HEAD BUTTONS, ISO 13850 COMPLIANT

### STAY PUT, PULL TO RELEASE



**NON ILLUMINATED**  
 Ø 32mm  
**L22DQ01**  
 Ø 40mm  
**L22DR01**



**ILLUMINATED**  
 Ø 40mm  
**L22DN10**



Ø 54mm  
 with flag indicator  
**L22DU01A** 0 - I  
**L22DU01** STOP - I

### STAY PUT, TURN TO RELEASE



Ø 40mm  
**L22ER01**  
 Ø 40mm  
 with ISO 13850 symbol   
**L22ER01K**

### STAY PUT, TURN KEY TO RELEASE



Ø 32mm  
**L22GQ01**  
 Ø 40mm  
**L22GR01**

## ► MUSHROOM HEAD BUTTONS

### STAY PUT, NON ILLUMINATED



**TURN TO RELEASE**  
 Ø 32mm  
**L22EC01/2/3/4**  
 Ø 40mm  
**L22ED01/2/3/4**



**PULL TO RELEASE**  
 Ø 32mm  
**L22DC01**  
 Ø 40mm  
**L22DD01/2/3/4**



**TURN KEY TO RELEASE**  
 Ø 40mm  
**L22GM01/2/3/4**

### STAY PUT, ILLUMINATED



**TURN TO RELEASE**  
 Ø 32mm  
**L22EL10/20/40**  
 Ø 40mm  
**L22EM10/20/40**



**PULL TO RELEASE**  
 Ø 32mm  
**L22DL10**  
 Ø 40mm  
**L22DM10/20/40/50**

### SPRING RETURN



**NON ILLUMINATED**  
 Ø 32mm  
**L21AC01/2/3/4**  
 Ø 40mm  
**L21AD01/2/3/4/6**  
 Ø 70mm  
**L21AE01/3/6**



**ILLUMINATED**  
 Ø 32mm  
**L21AL10/20/40/50**

## ► CONTACT BLOCKS

### SCREW TERMINALS



NO 3 4 **33E10**  
 NC 1 2 **33E01**  
 NO/NC 2 1 4 3 **33E11**

### PLUG-IN TERMINALS



NO 3 4 **33R10**  
 NC 1 2 **33R01**



### FASTON TERMINALS

NO 3 4 **33D10**  
 NC 1 2 **33D01**

### PIN-STYLE TERMINALS



NO 3 4 **33P10**  
 NC 1 2 **33P01**

## ► LED BLOCKS Replace \_ by the corresponding letter: L, L4, M or H

### SCREW TERMINALS



Voltage:  
 L = 24 V AC/DC  
 L4 = 48 V AC/DC  
 M = 130 V AC  
 H = 230 V AC  
**33EAW/R/G/B/Y\_**  
**33EAWDM = 110 V DC**

### PLUG-IN TERMINALS



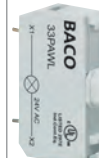
Voltage:  
 L = 24 V AC/DC  
 M = 130 V AC  
 H = 230 V AC  
**33RAW/R/G/B/Y\_**



### FASTON TERMINALS

Voltage:  
 L = 24 V AC/DC  
 M = 130 V AC  
 H = 230 V AC  
**33DAW/R/G/B/Y\_**

### PIN STYLE TERMINALS



(low voltage  
 24V AC/DC max)  
**33PAWL**  
**33PARL**  
**33PAGL**  
**33PABL**  
**33PAVL**



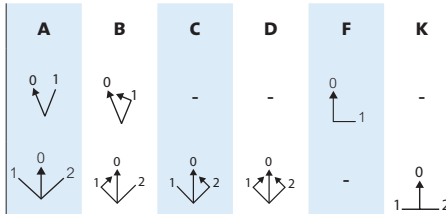
## ▶ SELECTOR SWITCHES Replace \_ by the corresponding letter: A, B, C...Y

### NON ILLUMINATED



2 positions  
L21T\_03  
3 positions  
L21U\_03

### WITH KNOB

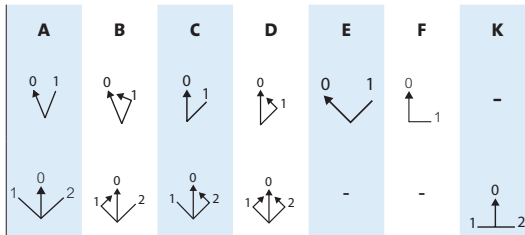


### NON ILLUMINATED

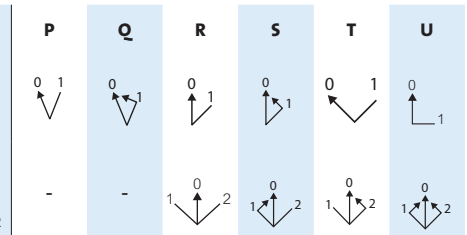


2 positions  
L21K\_01/2/3/8  
3 positions  
L21M\_01/2/3/8

### WITH HANDLE



### WITH LONG HANDLE

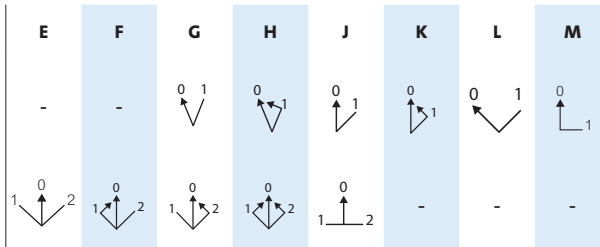


### ILLUMINATED

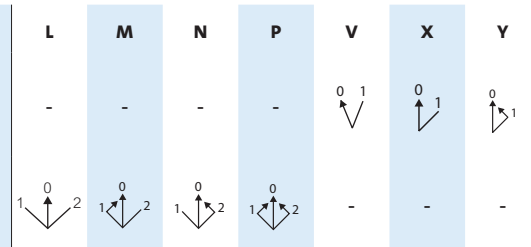


2 positions  
L21K\_10/20/30  
3 positions  
L21M\_10/20/30

### WITH HANDLE



### WITH LONG HANDLE

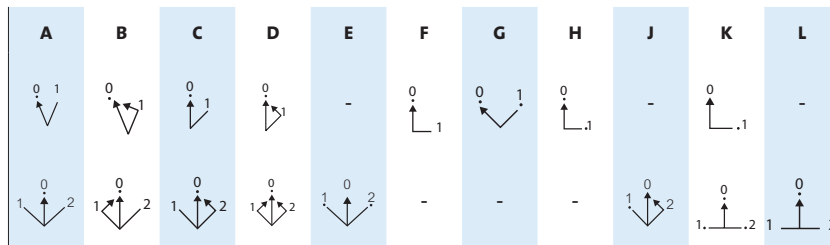


### NON ILLUMINATED



2 positions  
L21L\_00  
3 positions  
L21N\_00

### WITH KEY



• Position key removeable

## ▶ DOUBLE TOUCH AND TRIPLE TOUCH SPRING RETURN BUTTONS

### TWIN TOUCH FLUSH-FLUSH



	Non-illuminated		Illuminated
	L61QA21		L61QH21
	L61QA21B		L61QH21A
	L61QA53		L61QH53B
	L61QA22		L61QH22V
	L61QA22K		L61QH22A
	L61QA33C		L61QH33C

### FLUSH-PROJECTING



	Non-illuminated		Illuminated
	L61QB21		L61QK21
	L61QB21B		L61QK21A
	L61QB53		L61QK53

### TRIPLE TOUCH FLUSH-PROJECTING-FLUSH



	STOP	L61BA22
	STOP	L61BA22B
	STOP	L61BA22G
	STOP	L61BA22F
	UP	
	STOP	
	DOWN	
	OPEN	
	STOP	
	CLOSE	

## ▶ AUDIBLE WARNING BUZZERS



80 dB sound intensity at 10 cm  
 Supply voltage:  
 18 to 30V AC/DC  
**L22VA03L**  
 85 to 140V AC/DC  
**L22VA03M**  
 185 to 265V AC/DC  
**L22VA03H**

## ▶ USB COMMUNICATION INTERFACE



USB interface 3.0 type A/A

**L21VB03**

## ▶ JOYSTICKS



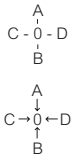
**LM2F** A - 0 - B

**LM2A** A → 0 ← B

**LM4F** C - 0 - D

**LMA4** C → 0 ← D

Contact block for Joystick **LM11**




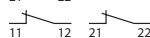
## ▶ CONTROL STATIONS



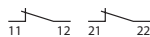
**Ø 40mm**  
 Engraved: Emergency Stop  
 Stay put, push-turn to reset  
**LBX10510**



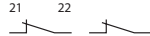
**Ø 40mm ISO 13850**  
 Engraved: Emergency Stop +   
 Stay put, push-turn to reset  
**LBX17301**  
**LBX17302**



Stay put, push-pull to reset  
**LBX15301**  
**LBX15302**



Stay put, key to reset  
**LBX11301**  
**LBX11302**



## ▶ EMPTY CONTROL STATIONS



**1 HOLE, BLACK BASE**  
 Grey cover **LBX0100**  
 Yellow cover **LBX0100J**  
 Black cover **LBX0100NR**  
 Red cover **LBX0100RN**



**1 HOLE, RED BASE**  
 Red cover **LBX0100RG**



**2 HOLES, BLACK BASE**  
 Grey cover **LBX0200**  
 Yellow cover **LBX0200J**

**3 HOLES, BLACK BASE**  
 Grey cover **LBX0300**

**4 HOLES, BLACK BASE**  
 Grey cover **LBX0400**

**5 HOLES, BLACK BASE**  
 Grey cover **LBX0500**



**CONTACT BLOCKS FOR CONTROL STATIONS**  
 Screw terminals  
 NO  **33510**  
 NC  **33501**



**LED BLOCKS FOR CONTROL STATIONS**  
 Screw terminals  
**335AW/R/G/B/Y\_**  
 Replace \_ by the corresponding letter:  
 L, M or H  
 L = 24V AC/DC  
 M = 130V AC  
 H = 230V AC

## ▶ ACCESSORIES



**ACCESSORIES Ø22mm**  
**LWA0219** Reduction ring Ø 30/22  
**LWA0225** Grey guard  
**LWA0226** Padlockable shroud  
**LWA0229** Blanking plug  
**LWA0230** Square Frame  
**LWA0234** Fixing tool  
**LWA0238** DIN rail adaptor  
**LWA0240** Yellow padlockable guard  
**LWA0242** Yellow guard ring  
**L21RP03** Button for potentiometer



**SHROUDS**  
**LWA0203/4/5** For non illuminated projecting buttons  
**LWA0228** For illuminated projecting buttons  
**LWA0251/2/3** For non illuminated flush buttons  
**LWA0255** For illuminated flush buttons  
**LWA0223** For double and triple touch buttons





**FRAMES**  
**LWP3** Standard black frame for LIA plates  
**LWG3** Large black frame for LIB plates  
**LWP4** Square black frame for LIA plates  
**LWP2** Black frame for twin and triple touch for LIA plates



**LEGEND PLATES**  
**LIA1/3/5/9** Standard plates  
**LIB1/3/5/9** Large plates

Standard and custom texts available.  
 Please contact us for details.



**METAL ROUND LEGEND PLATES**  
 According to ISO 13850  
**LWE16300** Ø60: Emergency stop +   
**LWE00300** Ø80: Emergency stop +   
**LWE16352** Ø60: Emergency stop  
**LWE00352** Ø80: Emergency stop

**PLASTIC ROUND LEGEND PLATES**  
**LWE60300** Ø60: Emergency stop  
**LWE80300** Ø80: Emergency stop



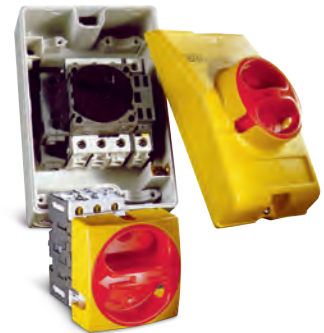
Please visit  
[www.bacocontrols.com](http://www.bacocontrols.com)  
for more information on all of the BACO product lines



**30mm CONTROL & SIGNALING DEVICES**



**CAM SWITCHES**



**DISCONNECT SWITCHES**

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