

► PILOT DEVICES

Maximum protection for severe environments



BACO provides solutions for severe environments

Some applications demand high performance in difficult environments such as outdoor use of machinery, high pressure cleaning. Environments subject to humidity, dust, etc.

Design that protects

Approved for tough industrial applications, BACO front elements are designed to reveal their advantages under the most adverse conditions.

Greater performance

Perfect for environments requiring greater protection from dust, submersion, and high-pressure, high-temperature spray-down.

► Common functions & accessories

Extra accessories can give you further customization options.

► Contents

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Greater performance

Maximum protection with BACO \emptyset 22mm control and signalling devices. All \emptyset 22 mm components feature an IP66 rating, and some carry IP67 when shrouded and some carry IP69K for wash down environments.

Baco operators like pushbuttons, selector switches, emergency stops, machine stops and pilot lights are designed for tough industrial environments. These robust pieces are approved according to IEC 60947-5-1 and meet protection degree IP66, when shrouded they are IP67 (see p. 28). All here below functions are IP69K on the front side and IP20 on the terminal side and also approved according to UL type 1, 3R, 4, 4X, 12 and 13.











IP66 - IP69K E-Stops

IP66 - IP69K operators

IP66 - IP69K selectors

IP66 - IP69K pilot devices

Accessories to perform

BACO \emptyset 22mm control and signalling devices can be equipped with protective shrouds which guarantee a degree of protection to IP67 shrouds prevent ingress of water and dust.



Shrouds for Twin touch operator



Shrouds for projected operator



Shrouds for flush operator



IP67 Shrouded Twin touch operator



IP67 Shrouded projected operator

Products for industrial environments

► BACO provides solutions for harsh industrial environments

BACO push buttons Ø 22mm are available in plastic bodies and can be fitted with an external shroud to protect against liquid and dust ingress into the head itself.

All front elements are rated to a minimum IP66 environmental rating, protecting against high seas, sprayed water and dirt. Many standard operators have more stringent IP67 and IP69K ratings, protecting from submersion and high-pressure/high-temperature wash down



High-pressure wash down

environments.

BACO operators to meet the needs of industries such as:

Outdoor Machinery Trucking/Transportation

Food processing Mobile Machines
Pharmaceutical Material Handling

Petrochemical Marine

Waste Treatment Metal Forming

Bottling Mining
Car Wash Centers Oil & Gas

Degree of ingress protection

► What is the meaning of IP66/67/69K protection degree?

IP66/IP67 protection degrees are degrees of protection provided by the standard (respectively against strong water jets and temporary water immersion). BACO has introduced on its products IP69K protection degree (against water jets with high temperature and pressure), to offer the maximum achievable and testable performances, fulfilling more strict standards.

Illuminated or non-illuminated, momentary or maintained action pushbuttons, selector switches, emergency stop buttons and pilot devices for harsh environments, sealed to IP67 or IP69K when manufactured after week 36 2015.

Does your application require IP69K or IP67 protected pushbuttons?

If your application is in the food, beverage or pharmaceutical industry chances are you already require IP69K ratings.

Any high-pressure, high-temperature wash down applications would benefit from this line of IP69K pushbuttons.

BACO L Series offers you 4 key functions and a range of colors to choose from.

We offer both illuminated or non-illuminated versions as well.

- See more at: http://www.baco-international.com







Outdoor machinery



Mining



Marine

► What is the meaning of IP66/67/69K protection degree? (continued)

▶ Waterproof according to IP66

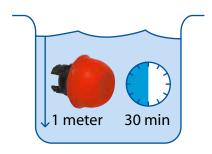
BACO's control & pilot devices are protected from total dust ingress.

Protected from high pressure water jets from any direction too.



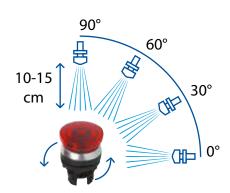
Waterproof according to IP67

BACO's control & pilot devices are perfect for tough environments where a waterproof enclosure is required. Shrouded modular devices are approved according to IP67. The products are protected against the effects of temporary immersion in water, one meter down, for up to 30 minutes.



► Tough and robust according to IP69K

The IP69K certification was initially developed for applications that need regular intensive cleaning (dump trucks, cement mixers, etc.). BACO's control devices are certified according to IP69K meaning you do not have to worry about treating them rough. Spray them with water or leave them out in the snow. They will stay reliable and functional.



► RECOMMENDATIONS

Protection class

The IP (Ingress Protection) rating system is published by the IEC (International Electrotechnical Commission) and classifies the degree of protection against solid objects and liquids in order to operate the electrical equipment.



- 1 Protection Against Solid Objects
- 2 Protection Against Liquids

First digit of IP-Codes

1.digit Meaning		Meaning	
ISO 20653	IEC 60529	Protection against objects	Effective against
О	0	No protection	No protection
1	1	Solid objects ≥ 50mm	Any large surface of the body, such as the back of a hand, but no protection against deliberate contact with a body part
2	2	Solid objects ≥ 12.5mm	Fingers or similar objects
3	3	Solid objects ≥ 2.5mm	Tools, thick wires, etc.
4	4	Solid objects ≥ 1mm	Most wires, screws, etc.
5K	5	Dust protected	Ingress of dust is not entirely prevented, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment; complete protection against contact
6K	6	Dust tight	No ingress of dust; complete protection against contact

Second digit of IP-Codes

2.digit		Meaning
ISO 20653	IEC 60529	Protection against water
0	0	No protection
1	1	Dripping water (vertically falling drops) shall have no harmful effect.
2	2	Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position.
3	3	Water falling as a spray at any angle up to 60° from the vertical shall have no harmful effect.
4	4	Water splashing against the enclosure from any direction shall have no harmful effect.
5	5	Water projected by a nozzle (6.3 mm) against enclosure from any direction shall have no harmful effects.
6	6	Water projected in powerful jets (12.5 mm nozzle) against the enclosure from any direction shall have no harmful effects.
7	7	Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1 m of submersion).
8	8	The equipment is suitable for continuous immersion in water under conditions which shall be specified by the manufacturer. Normally, this will mean that the equipment is hermetically sealed. However, with certain types of equipment, it can mean that water can enter but only in such a manner that it produces no harmful effects.
	9	Protected against close-range high pressure, high temperature spray downs.
9K		Protected against close-range high pressure, high temperature spray downs, specific for cars.

IP66 IP69K To be combined with a clip and electrical blocks Equipped with a locking ring Plastic chrome bezel - Black bezel on request Conform to IEC 60947-5-1, IEC 60529, ISO 20653

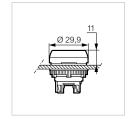


► PUSH-BUTTONS - NON ILLUMINATED

SPRING RETURN - FLUSH Cat. No.



L21AA02



Without engraving

Red

Green

Black

Yellow ○ White

Blue

L21AA01 L21AA02 L21AA03 L21AA04 L21AA05

L21AA06

With engraving

Red

Green

L21AA81 L21AA82

Black

L21AA83

On demand engraving

Symbol code to be added at the end of the catalogue number

Red Green

Black

Yellow

○ White

Blue

L21AA35 LLL

L21AA32 LLL

L21AA33 LLL

L21AA34 LLL

Without button plate **L21AA00**

Button plate (see p.31)



L21AA00

SPRING RETURN - PROJECTING





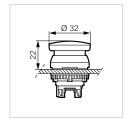
- Red Green Black
- Yellow
- White
- Blue

L21AB01 L21AB02 L21AB03 L21AB04 L21AB05 L21AB06

L21AB01

SPRING RETURN - MUSHROOM HEAD Ø 32





Push

Red Green

Black

Yellow

L21AC01 L21AC02 L21AC03 L21AC04

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► PUSH-BUTTONS - NON ILLUMINATED

SPRING RETURN - MUSHROOM HEAD Ø 40

Push

Cat. No.





- RedGreenBlackYellow
- YelloBlue

L21AD01 L21AD02 L21AD03 L21AD04

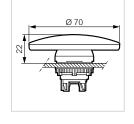
L21AD06

L21AD01

SPRING RETURN - MUSHROOM HEAD Ø 70

Push



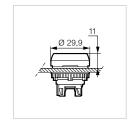


RedBlack

L21AE01 L21AE03

STAY-PUT - FLUSH





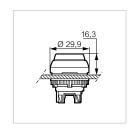
RedGreenBlackYellowWhiteBlue

L21CA01 L21CA02 L21CA03 L21CA04 L21CA05 L21CA06

L21CA01

STAY-PUT - PROJECTING Cat. No





Plastic chrome bezel Black bezel on request

- Red
- Green
- BlackYellow
- White
- Blue

L21CB01 L21CB02 L21CB03 L21CB04 L21CB05 L21CB06

L21CB02

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► MUSHROOM HEADS - NON ILLUMINATED

Push-turn to reset Cat. No. • Red • Red • Green • L22EC01 • Black • L22EC03 • Yellow • L22EC04

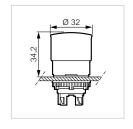
L22EC01

Ø 32 - STAY-PUT

Push-turn to reset

Red





L22DC01

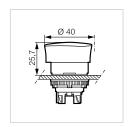
L22DC01

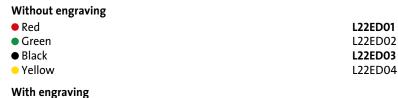
Ø 40 - STAY-PUT

Push-turn to reset

Red - engraving STOP - STOP - STOP







L22ED01

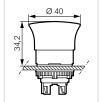
IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► MUSHROOM HEADS - NON ILLUMINATED

Ø 40 - STAY-PUT Push-pull to reset Cat. No.





RedBlack

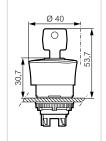
L22DD01 L22DD03

L22DD01

Ø 40 - STAY-PUT

Key to reset





Supplied with 2 keys profile n° 455 • Red

L22GM01

L22GM01

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



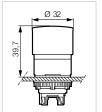
► ISO 13850 EMERGENCY STOP - NON ILLUMINATED

Ø 32 ISO 13850 - STAY-PUT

Push-pull

Cat. No.





Head position visible from the side with yellow collar Compliant with the requirements of emergency stop: IEC 60947-5-5 /ISO 13850

Red

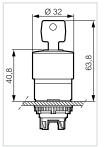
L22DQ01

L22DQ01

Ø 32 ISO 13850 - STAY-PUT

Key to reset





Supplied with 2 keys profile n° 455 Head position visible from the side with yellow collar Compliant with the requirements of emergency stop: IEC 60947-5-5 /ISO 13850

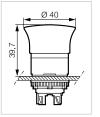
Red

L22GQ01

Ø 40 ISO 13850 - STAY-PUT

Push-pull to reset





Head position visible from the side with yellow collar Compliant with the requirements of emergency stop: IEC 60947-5-5 /ISO 13850

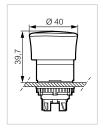
Red

L22DR01

Ø 40 ISO 13850 - STAY-PUT

Push-turn to reset





Head position visible from the side with yellow collar Compliant with the requirements of emergency stop: IEC 60947-5-5 /ISO 13850

Red

L22ER01

L22ER01

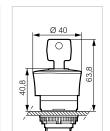
IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653

Supplied with 2 keys profile n° 455



► ISO 13850 EMERGENCY STOP - NON ILLUMINATED

Ø 40 ISO 13850 - STAY-PUT



Key to reset

ı collar

Head position visible from the side with yellow collar Compliant with the requirements of emergency stop: IEC 60947-5-5 /ISO 13850

Red

L22GR01

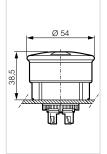
Cat. No.

L22GR01

Ø 54 ISO 13850 - STAY-PUT

Push-pull to reset with flag indicator





Double position indicator: head and collar Compliant with the requirements of emergency stop: IEC 60947-5-5 /ISO 13850

- Red- engraving O- I
- Red- engraving STOP I

L22DU01A L22DU01

L22DU01

IP66 IP69K To be combined with a clip and electrical blocks Equipped with a locking ring Plastic chrome bezel - Black bezel on request Conform to IEC 60947-5-1, IEC 60529, ISO 20653



Cat. No.

L21KF08

► SELECTOR SWITCHES - NON ILLUMINATED

2 positions



WITH HANDLE

L21KA03



Stay-put positions - 4 Red Green Black Grey	0 1 1 V	L21KA01 L21KA02 L21KA03 L21KA08
Spring return - 45° ● Red ● Green ● Black ● Grey	0	L21KB01 L21KB02 L21KB03 L21KB08
Stay-put positions - 4 Red Green Black Grey	0 1	L21KC01 L21KC02 L21KC03 L21KC08
Spring return - 45° ● Red ● Green ● Black ● Grey	⁰ 51	L21KD01 L21KD02 L21KD03 L21KD08
Stay-put positions - 9 ● Red ● Green ● Black ● Grey	0 1	L21KE01 L21KE02 L21KE03 L21KE08
Stay-put positions - 9 ● Red ● Green ● Black	0 1	L21KF01 L21KF02 L21KF03

Grey

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► SELECTOR SWITCHES - NON ILLUMINATED

WITH HANDLE 2 positions Cat. No.





L21MA03



L21MA08

Stay-put positions	- 4F°	
Red Green Black Grey	1 2	L21MA01 L21MA02 L21MA03 L21MA08
Spring return from	left to 0 - 45°	
● Red ● Green ● Black ● Grey	1 2	L21MB01 L21MB02 L21MB03 L21MB08
Spring return from	right to 0 - 45°	
● Red ● Green ● Black ● Grey	1 2	L21MC01 L21MC02 L21MC03 L21MC08
Spring return to 0	- 45°	
Red Green Black Grey	1 2 2	L21MD01 L21MD02 L21MD03 L21MD08
Stay-put positions	- 90°	
RedGreenBlackGrey	12	L21MK01 L21MK02 L21MK03 L21MK08

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► SELECTOR SWITCHES - NON ILLUMINATED

WITH LONG HANDLE 2 positions Cat. No.





Stay-put positions - 45°		
Red	0 1	L21KP01
Green	\bigvee	L21KP02
Black		L21KP03
● Grey		L21KP08
Spring return - 45°		
• Red	0	L21KQ01
Green	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	L21KQ02
● Black	V	L21KQ03
Stay-put positions - 45°		
• Red	0 1	L21KR01
Green	1/	L21KR02
● Black	•	L21KR03
Spring return - 45°	_	
• Red	0 ↑	L21KS01
• Green	[>1	L21KS02
● Black	V	L21KS03
Stay-put positions - 90°		
• Red	0 1	L21KT01
Green		L21KT01
Black		L21KT03
		LLINIOS
Stay-put positions - 90°	0	
Red	0 ↑	L21KU01
Green	<u>1</u>	L21KU02
Black		L21KU03

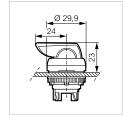
IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► SELECTOR SWITCHES - NON ILLUMINATED

WITH LONG HANDLE 3 positions Cat. No.





L21MR03

Stay-put positions - 45°	
Red Green Black Grey	L21MR01 L21MR02 L21MR03 L21MR08
Spring return from left to 0 - 45°	
Red Green Black Grey	L21MS01 L21MS02 L21MS03 L21MS08
Spring return from right to 0 - 45°	
Red Green Black Grey	L21MT01 L21MT02 L21MT03 L21MT08
Spring return to 0 - 45°	
Red 0 Green 1 Black Grey	L21MU01 L21MU02 L21MU03 L21MU08

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



L21LA00

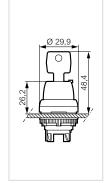
L21LB00

► SELECTOR SWITCHES - NON ILLUMINATED

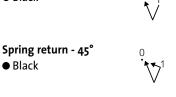
WITH KEY 2 positions Cat. No.



L21LG00



	Black
84	
	Spring return - 4



Supplied with 2 keys profile n° 455

Stay-put positions - 45°

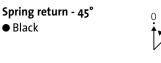


Key free in position:

0

Stay-put positions - 45° ● Black







Stay-put positions - 90° ● Black	0
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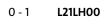
Stay-put positions - 90°	
● Black	



0 - 1	L21LG00

Stay-put positions - 90° ● Black





Stay-put positions - 90°

● Black



1 **L21LK00**

Key profile n° 1424 A and others (form p. 79)

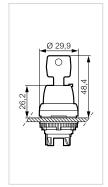
IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► SELECTOR SWITCHES - NON ILLUMINATED

WITH KEY 3 positions Cat. No.





L21NA00

Supplied with 2 keys prof	file n° 455		
Stay-put positions - 45° ● Black	1 2	0	L21NA00
Spring return from left to ● Black	0 0 - 45°	0	L21NB00
Spring return from right ● Black	to 0 - 45°	0	L21NC00
Spring return to 0 - 45° ● Black	1 2 2	0	L21ND00
Stay-put positions - 45° ● Black	1 2	1 - 2	L21NE00
Spring return from right ● Black	to 0 - 45° 1	1	L21NJ00
Stay-put positions - 90° ● Black	12	1 - 0 - 2	L21NK00
Stay-put positions - 90° ● Black	1 2	0	L21NLOO

Key free in position:

Key profile n° 1424 A and others (form p. 79)

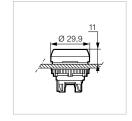
IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► PUSH-BUTTONS - ILLUMINATED

SPRING RETURN - FLUSH Cat. No.





Without engraving

Red
 Green
 Yellow
 White
 Blue
 L21AH10
 L21AH20
 L21AH40
 L21AH50
 L21AH60

On demand engraving

Symbol code to be added at the end of the catalogue number

L21AH3	1 📖
L21AH3	2 📖
L21AH3	4 📖
L21AH3	5 📖
L21AH3	6 📖
L21AH3	5 🗆

Without button plate L21AH00

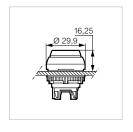
L21AH00

L21AA02

Button plates (see p.31)

SPRING RETURN - PROJECTING





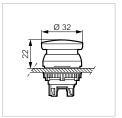
RedGreenYellowWhiteBlue

L21AK10 L21AK20 L21AK40 L21AK50 L21AK60

L21AK20

SPRING RETURN - MUSHROOM HEAD Ø 32





RedGreenYellowWhite

Push

L21AL10 L21AL20L21AL40
L21AL50

L21AL10

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► PUSH-BUTTONS - ILLUMINATED

STAY-PUT - FLUSH Réf.





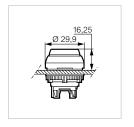
RedGreenYellowWhiteBlue

L21CH10 L21CH20 L21CH40 L21CH50 L21CH60

L21CH20

STAY-PUT - PROJECTING Réf.





RedGreenYellowWhiteBlue

L21CK10 L21CK20 L21CK40 L21CK50 L21CK60

L21CK20

Ø 32 - STAY-PUT Push-turn to reset Cat. No.





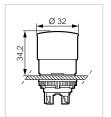
• Red L22EL10

Ø 32 - STAY-PUT

L22EL10

Push-pull to reset





• Red L22DL10

L22DL10

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► PUSH-BUTTONS - ILLUMINATED

Push-turn to reset

Cat. No.

Red
Green
L22EM10
Yellow

Push-turn to reset

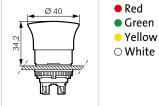
Cat. No.

L22EM10

Ø 40 - STAY-PUT

Push-turn to reset





L22DM10 L22DM20 L22DM40 L22DM50

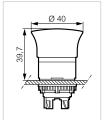
L22DM10

► ISO 13850 EMERGENCY STOP - ILLUMINATED

Ø 40 ISO 13850- STAY-PUT

Push-turn to reset





Black bezel Head position visible from the side with yellow collar Compliant with the requirements of emergency stop: IEC 60947-5-5 /ISO 13850

Red

L22DN10

L22DN10

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► SELECTOR SWITCHES - ILLUMINATED

WITH HANDLE Cat. No. 2 positions Stay-put positions - 45° Red L21KG10 Green L21KG20 Black L21KG30 Spring return - 45° Red L21KH10 Green L21KH20 L21KJ30 Black L21KH30 Stay-put positions - 45° Red L21KJ10 Green L21KJ20 Black L21KJ30 Spring return - 45° Red L21KK10 Green L21KK20 Black L21KK30 Stay-put positions - 90° Red L21KL10 Green L21KL20 Black L21KL30 Stay-put positions - 90° Red L21KM10 Green L21KM20 Black L21KM30

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► SELECTOR SWITCHES - ILLUMINATED

WITH HANDLE 3 positions Cat. No.





L21ME10

-	
Stay-put positions - 45° • Red • Green • Black	L21ME10 L21ME20 L21ME30
Spring return from left to 0 - 45° Red Green Black	L21MF10 L21MF20 L21MF30
Spring return from right to 0 - 45° ● Red ● Green ● Black	L21MG10 L21MG20 L21MG30
Spring return to 0 - 45° Red Green Black	L21MH10 L21MH20 L21MH30
Stay-put positions - 90° • Red • Green • Black	L21MJ10 L21MJ20 L21MJ30

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► SELECTOR SWITCHES - ILLUMINATED

WITH LONG HANDLE		2 positions	Cat. No.
	Ø 29,9 24	Stay-put positions - 45° ● Black	L21KV30
400		Stay-put positions - 45° ● Black	L21KX30
L21KV30		Spring return - 45° ● Black	L21KY30
WITH LONG HANDLE		3 positions	
	Ø 29.9 24	Stay-put positions - 45° ● Black 0 2	L21ML30
404		Spring return from left to 0 - 45° ● Black 0 1 2	L21MM30
L21ML30		Spring return from right to 0 - 45° ● Black 0 1 2	L21MN30
		Spring return to 0 - 45° ● Black 1	L21MP30

Pilot lights ø 22

IP66 IP69K
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► PILOT LIGHTS - SEPARATE UNITS

Cat. No.



L20SE20



To be combined with a clip and LED block

Without engraving

● Red	L20SE10
Green	L20SE20
Yellow	L20SE40
○ White	L20SE50
Blue	L20SE60

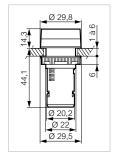
On demand engraving

Symbol code to be added at the end of the catalogue number

Red	L20SE31 LLL
● Green	L20SE32 LLL
Yellow	L20SE34 LLL
○ White	L20SE35 LLL
Blue	120SF36

► ONE-PIECE PILOT LIGHTS





To be used with BA9S bulbs (not supplied)

Direct supply

To be used without electrical block

Without engraving

Ribbed lens

■ Kea	LZUSAIU
Green	L20SA20
○ Colourless	L20SA30
Yellow	L20SA40
○ White	L20SA50
Blue	L20SA60

On demand engraving

Symbol code to be added at the end of the catalogue number

Smooth lens

Red	L20SA31 ∟⊥⊥
Green	L20SA32
○ Colourless	L20SA33
Yellow	L20SA34
○ White	L20SA35
Blue	L20SA36 ∟⊥⊥

Pilot lights Ø 22

IP66 IP69K

To be combined with a clip and electrical blocks Equipped with a locking ring Plastic chrome bezel - Black bezel on request Conform to IEC 60947-5-1, IEC 60529, ISO 20653



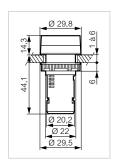
► ONE-PIECE PILOT LIGHTS

Cat. No.

L20SA60L







Supplied with LED bulb-type BA9S Smooth lens

24V

Without engraving

- Red
 Green
 Yellow
 White
 L20SA20L
 L20SA40L
 L20SA40L
 L20SA50L
- On demand engraving

Symbol code to be added at the end of the catalogue number

● Red L20SA31L ⊥⊥⊥

130V

Blue

Without engraving

	•	- C	
Red			L20SA10M
Green			L20SA20M
Yellow			L20SA40M
○ White			L20SA50M
Blue			L20SA60M

On demand engraving

Symbol code to be added at the end of the catalogue number

● Rea	L2USA3 IM L
Green	L20SA32M∟⊥⊥
Yellow	L20SA34MLLLL
○ Colourless	L20SA33M∟⊥⊥⊔
Blue	L20SA36MLLLL

230V

Without engraving

• Red	L20SA10H
Green	L20SA20H
Yellow	L20SA40H
○ White	L20SA50H
Blue	L20SA60H

On demand engraving

Symbol code to be added at the end of the catalogue number

• Red	L20SA31H ∟⊥⊥
Green	L20SA32H ∟⊥⊥
Yellow	L20SA34H ∟⊥⊥
○ Colourless	L20SA33H ∟⊥⊥
Blue	L20SA36H ∟⊥⊥

IP67 To be combined with a clip and electrical blocks Equipped with a locking ring Plastic chrome bezel - Black bezel on request Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► PUSH-BUTTONS - NON ILLUMINATED

SPRING RETURN - FLUSH Cat. No.





Supplied with shroud

Opaque

Red L22AF01 Green L22AF02 Black

Transparent

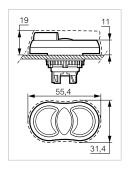
- Yellow $\bigcirc\, \text{White}$
- Blue

L22AF03

L22AG04 L22AG05 L22AG06

SPRING RETURN - FLUSH-PROJECTING





Supplied with transparent shroud

- Green
- Red

L62QM21

L62QM21

IP67
To be combined with a clip and electrical blocks
Equipped with a locking ring
Plastic chrome bezel - Black bezel on request
Conform to IEC 60947-5-1, IEC 60529, ISO 20653



► PUSH-BUTTONS - ILLUMINATED

SPRING RETURN - FLUSH Cat. No.





Supplied with transparent shroud

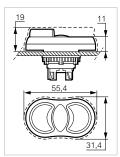
- Green
- YellowWhite
- Blue

L22AP10 L22AP20 L22AP40 L22AP50 L22AP60

L22AP40

SPRING RETURN - FLUSH-PROJECTING





Supplied with transparent shroud Central part illuminated

Green

Red

L62QN21

L62QN21

Accessories ø 22

IP67

► SHROUDS - REINFORCED DEGREE OF PROTECTION: IP 67

FOR PUSH-BUTTONS PROJECTING

Cat. No.



LWA0203

For spring return or stay-put buttons

○ Transparent

LWA0228

For non illuminated spring return buttons

- Red opaque
- Green opaque
- Black opaque

LWA0203 LWA0204

LWA0205

FOR PUSH-BUTTONS FLUSH



LWA0253

For spring return or stay-put buttons

 \bigcirc Transparent

LWA0255

For non illuminated spring return buttons

- Red opaque
- Green opaque

- LWA0251 LWA0252
- Black opaque LWA0253

DOUBLE TOUCH



LWA0223

For double touch flush-projecting and triple touch

 $\bigcirc\,\mathsf{Transparent}$

LWA0223

Accessories ø 22

► BUTTON PLATES - FOR HEADS WITHOUT BUTTON PLATE

FOR PUSH-BUTTONS PROJECTING

Cat. No.



LT05



LT21302

For use with spring return button cat. no. L21AAoo (p. 8)

Without engraving

• Red	LT01
Green	LT02
● Black	LT03
Yellow	LT04
○ White	LT05
Blue	LT06

On demand engraving

Symbol code to be added at the end of the catalogue number	
• Red	LT21
Green	LT22
● Black	LT23
Yellow	LT24 ⊥⊥⊥
○ White	LT25 ⊥⊥⊥
• Blue	LT26 ⊥⊥⊥

ILLUMINATED



LT20



LT34308

For use with spring return button cat. no. L21AHoo (p. 20)

Without engraving

• Red	LT10
Green	LT20
Yellow	LT40
○ White	LT50
Blue	LT60

On demand engraving

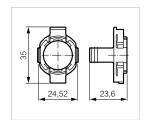
Symbol code to be added at the end of the catalogue number	
• Red	LT31
Green	LT32
Yellow	LT34 ∟⊥⊥
○ White	LT35 ⊥⊥⊥⊥
• Blue	LT36

Accessories ø 22

► CLIPS

SPRING RETURN - FLUSH Cat. No.

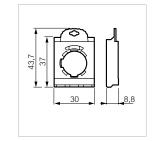




To be combined with blocks (P.33)

1 position 331E

Ó

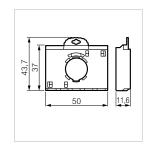


3 positions

333E

333E





5 positions (only for \emptyset 22 heads)

335E

اردر

► MISCELLANEOUS

FIXING TOOL Cat. No.



Fixing tool for locking ring

LWA0234

LWA0234

Separate units: Blocks

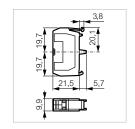
IP 20

To be combined with a 1, 3 or 5 position clip (P.32)

► CONTACT BLOCKS

SCREW TERMINALS Cat. No.





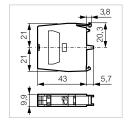
NO 33E10 NC 33E01

NO/NC 33E11

33E10

33E11





Golden contacts for low current

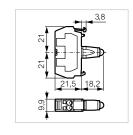
NO 33E10Y7

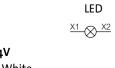
NC 33E01Y7 1 2

► LED BLOCKS

PLUG-IN TERMINALS Cat. No.











33RARM 33RAGM 33RABM 33RAYM

Yellow		
130 V		
White		
Red		
Green		
Blue		
Yellow		
230 V		
○ White		

230 V	
○ White	33RAWH
● Red	33RARH
Green	33RAGH
Blue	33RABH
Yellow	33RAYH

BACO

Technical characteristics

aracteristics	Data	Standards
► Storage temperature	- 40 °C to + 70 °C	
► Operating temperature	- 25 °C to + 70 °C	
► Climatic resistance	Constant humid heat Cyclic damp heat Resistance to sea air	IEC 60068-2-3 IEC 60068-2-30 IEC 60068-2-52
► Degree of protection	IP 66 for standard heads IP 67 for shrouded heads IP 66 for equipped control stations IP 69 and IP69K for push buttons IP69 and IP69K for selector switches IP69 and IP69K for pilot devices IP69 and IP69K for emergency stops IP 20 at the rear of the panel for contact blocks and one piece pilot lights Type 1, 2, 3, 3R, 3S, 4, 4X, 12, and 13 for heads and control stations	IEC 60529 IEC 60529 IEC 60529 - ISO 2069 IEC 60529 - ISO 2069 IEC 60529 - ISO 2069 IEC 60529 - ISO 2069
► Protection against mechanical impacts	IK 05 illuminated and non illuminated heads IK 07 empty control station	IEC 62262
► Electrical insulation	Class II - heads and control station	IEC 60947-5-1
► Terminal marking		IEC 60947-1
► Tightening torques	Locking ring: recommended 3 N.m terminals: max. 1.2 N.m	
► Approvals	UL United states and Canada BV Bureau Véritas Certification OC/CB	UL 508, CSA 22.2 Marine rules IEC 60947-5-1 IEC 60947-5-5 IEC 60947-5-4
► Vibrations	withstand vibration Fc test: 2 to 25 Hz, 1.6 mm; 25-100 Hz, 4 g	IEC 60068-2-6



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