COMITRONIC - BTI

BICOLOR TOUCH SENSITIVE CONTACTLESS BUTTON

MULTIFONCTION OPTICAL CONTACTLESS BUTTON

MULTILED PILOT LAMPS

SPOT ROAD MARKINGS

COMITRONIC - BTI

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COMITRONIC - BTI

We have looked into the future

Discover our tricolor touch switches with capacitive and optical technology

We are faithful to innovation

Lucky Conte © 2016

Features

Button B22	
Supply voltage	20 to 30 VDC
Supply voltage, 12V version	NO
Maximum supply current	30 mA at 24 V and 34 mA at 30 VDC
Connection via push-button terminal	6 x conductors up to 0.5 mm²
Connection via PUR MKT cord	8 x 0.25 mm²/AWG24 (R curvature 50 mm min)
Connection via PVC cable	7 x 0.25 mm²/AWG24 (R curvature 50 mm min)
Lighting	4 tricolor LEDs
Operating temperature	-25°C to +60°C (-13 F to +140 F)
Contact characteristics at -40 to +25°C (-40 F to +77 F)	NO: 400 mA and NF: 200 mA
Contact characteristics at +60°C (+140 F)	NO: 300 mA and NF: 150 mA
LED command inputs	2.5 V<ON<40 V and 0<OFF< 1.1 V
Sealing/Impact	Front (touch key): IP 69K/IK 08 Back: cable/MKT: IP 67, connector: IP 40
Material	TR90UV
Weight with packaging	Connector = 75 g, MKT50 = 116 g, MKT = 195 g cable = 235 g

B30 button	
Supply voltage	20 to 30 VDC
Supply voltage, 12V version	11 to 20 VDC
Maximum supply current H or Z option	32 mA at 24 V and 41 mA at 30 VDC H: + 25 mA Z: + 33 mA
Connection via push-button terminal	6 x conductors up to 1.5 mm²
Connection via PUR MKT cord	8 x 0.25 mm²/AWG24 (R curvature 50 mm min)
Connection via PVC cable	7 x 0.25 mm²/AWG24 (R curvature 50 mm min)
Lighting	6 tricolor LEDs (2 x 3 LED channels = greater relia-bility)
Operating temperature	-25°C to +60°C (-13 F to +140 F)
Contact characteristics at -40 to +25°C (-40 F to +77 F)	NO: 400 mA and NF: 200 mA
Contact characteristics at +60°C (+140 F)	NO: 300 mA and NF: 150 mA
LED command inputs	2.5 V<ON<40 V and 0<OFF< 1.1 V
Sealing	Front (touch key): IP 69K Back: cable/MKT: IP 67, connector: IP 40
Material	TR90UV
Weight with packaging	Connector = 85 g, MKT50 = 125 g, MKT220 = 200 g , cable = 240 g

Advantages of our plastic material TR90UV

The European Union has set the conditions for the use of polymers in contact with foodstuffs in Directive 90/128 / EEC and subsequent amendments such as 02/72 / EC. According to these directives, the product TR90UV meets the standards for contact with foodstuffs. The EU Directive has been transposed into the national laws of European Union countries and Switzerland. Materials can only come into contact with food if their various ingredients (additives, lubricants, etc.) are themselves permitted. The qualities of the TR90UV product meet EU directives for repeated contact with food.

TR90UV meets the requirements of the ISO 10993 (EN 30993) standard for prolonged contact with the skin.

- Excellent resistance to climatic aging
- Very good transparency
- Exceptional dynamic resistance
- Very high chemical resistance
- Very high resistance to stress cracking
- Very high impact resistance

Chemical product	Resistance
Acetic acid 10%	●●●
Hydrochloric acid 1%	●●●
Formic acid 10%	●●
Battery acid (H2SO4 36%)	●●
Pump diesel	●●●
Pump gasoline (unleaded)	●●●
Alcoholic spirit	o
Ethanol 100%	o
Ethylene glycol/water 1:1 (coolant)	●●●
Mineral oil ASTM No. 3	●●●
Potash detergent 50%	●●●
Brake fluid (DOT 4)	●●●
Lubricant, mineral oil base	●●●
Lubricant, synthetic	●●●
Methanol 100%	o
n-Hexane	●●●
Anti-limestone (aminosulphonic acid)	●●●

Sterilization	Resistance
Steam 121°C (250 F), 1 bar 30 minutes/cycle	●●
Steam 134°C (273.2 F), 2 bar 7 minutes/cycle	o
Gamma rays 8 total doses max. (30 kGy = 3 Mrad)	●●●
Gaseous ethylene oxide	●●●

Legend

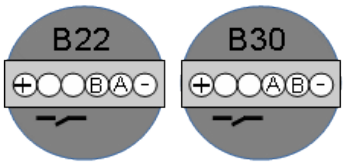
●●●	Resistant
●●	Qualified resistance. After prolonged contact changes of weights and dimensions, possibly irreversible alterations of properties
o	Non-resistant. Still partly usable in certain conditions (short-duration action, drip contact)

Presentation of the optional pictograms for B30-CC

Presentation of the optional pictograms for B22-CC

Electrical wiring

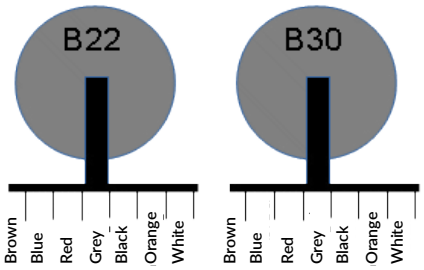
Terminal version



Version 101C, 20, 10L

1 : +24V
2&3 : NO1
4&5 : A=Red or Yellow & B= Green or Blue or 4&5 : NO2 or NF1
6 : 0V

Cable version



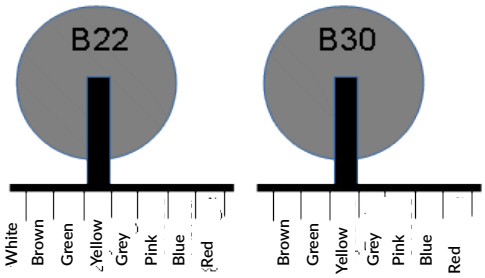
Version 101C, 20

White : NO1
Brown : +24V
Black :
Orange : NO2 or NF1
Grey : NO1
Red : NO2 ou NF1
Blue : 0V

Version 10L

White : NO1
Brown : +24V
Black :
Orange :
Grey : NO1
Red :
Blue : 0V

MKT50 or MKT220 version

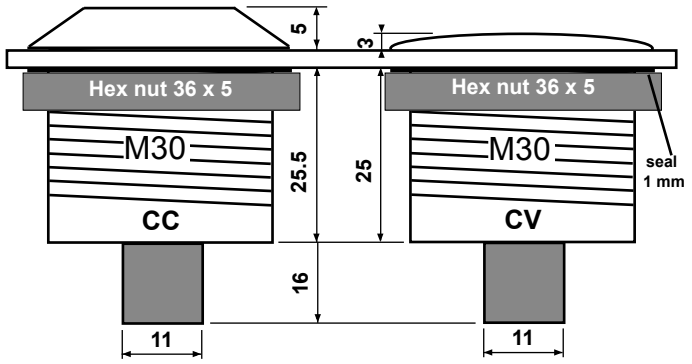


Version 10L, 101CL, 20L

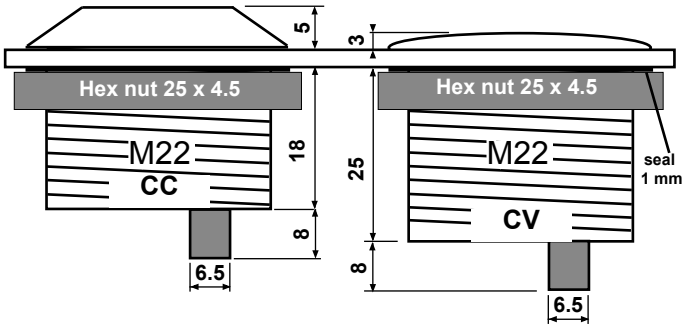
White : NO1
Brown : +24V
Green :
Yellow :
Grey : NO1
Rose :
Blue : 0V
Red :

Dimensions

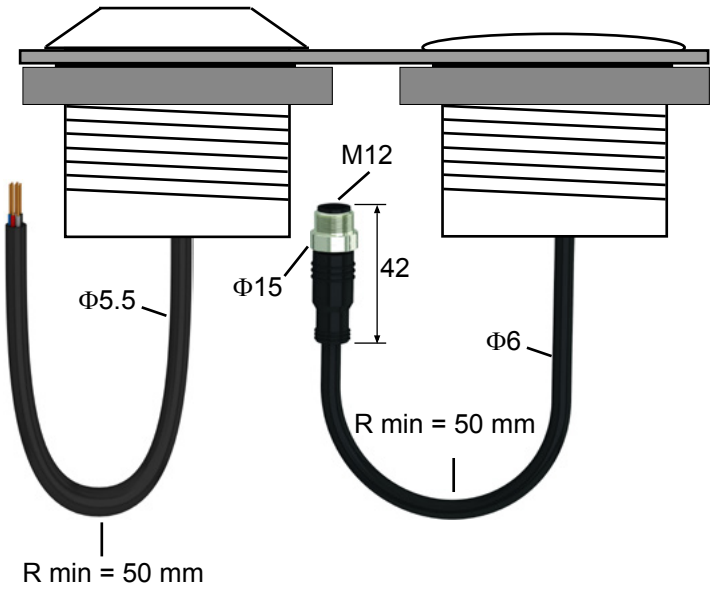
Terminal version for B30



Terminal version for B22

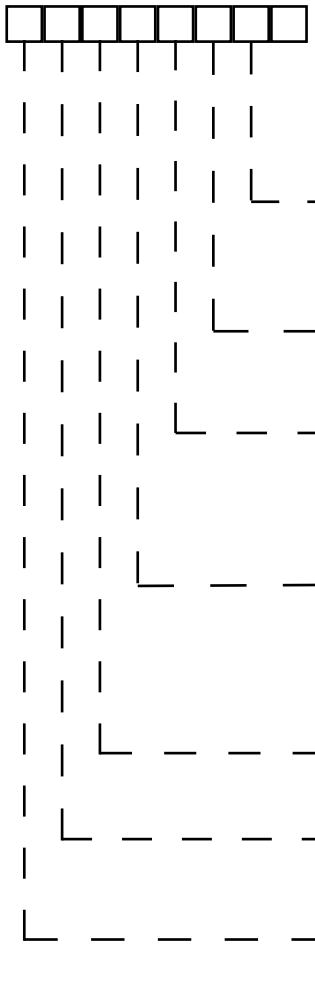


Cable version



MKT50 or MKT220 version

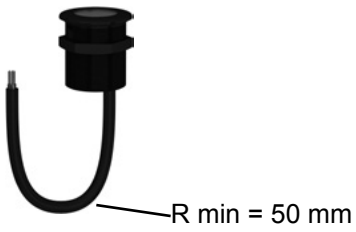
Selection of references



C	Terminal connection with push button 1.5 mm² (except 1O1CL and 2OL), IP40
xxM	Connection by 7-wire cable 0,25 mm² (except 1O1CL and 2OL), IP 67
MKT50	Connection by 50 cm cord with 8-pole connector M12, IP 67
MKT220	Connection by 220 cm cord with 8-pole connector M12, IP 67
Bk	Black body
Gn	Green body with engraved ON
Rd	Red body with engraved OFF
Gy	Body in gray metal
	Other color on request
	Other engraving on request
M	Momentary action
T	Bistable action
D	Delayed Action (maintained pressing = NO1 delayed at closing and momentary pressing = NO2 delayed at opening): times set at the command
RGO	Red, greem organge lighting
BYW	Blue, yellow, white lighting
1O1C	One NO contact and one NC contact contact
2O	Two NO contacts (only for action type D and 2S)
1OL	One NO contact with external lighting cmd
1O1CL	One NO contact and one NC contact with external lighting cmd (Only B30 in MKT connection)
2OL	Two NO contacts with external lighting cmd (Only B30 with action type D, 2S and MKT connection)
CV	Convex touch key IP 69K: hygiene and easy cleaning
CC	Concave touch key IP 69K: prevents unwanted tripping, centering of the finger
H	Buzzer option for B30: sensitive information
Z	Buzzer option for B30: auditory information
B22	Size M22 with illuminated 4-LED "diamond" crown
B30	Size M30 with illuminated 6-LED "diamond" crown (2 x 3 redundant LED channels)

Assembly instructions on 0.8 to 10 mm panel

- B30: pierce the panel at 30.5mm
- B22: pierce the panel at 22.5mm
- Position the sealing, place the button in the hole, tighten the nut.



References of most common models

KAPIX "ON"

A specially designed button for "start cycle" or "start machine" type actions.
The body color is green with ON engraved on the button. The action follows touch of the finger (momentary). The button activates an NC contact and two LED control inputs (red, green, orange).

Optional: Size: 22 (B22) or 30 (B30) and output: Terminal (C), 50cm cable + M12/8P (MKT50), 220cm cable + M12/8P Connector (MKT220), Cables (3M).

Available references:

- B22-CV-1OL-RGO-M-Gn-C-ON
- B22-CV-1OL-RGO-M-Gn-MKT50-ON
- B30-CV-1OL-RGO-M-Gn-C-ON
- B30-CV-1OL-RGO-M-Gn-MKT50-ON
- B22-CV-1OL-RGO-M-Gn-3M-ON
- B22-CV-1OL-RGO-M-Gn-MKT220-ON
- B30-CV-1OL-RGO-M-Gn-3M-ON
- B30-CV-1OL-RGO-M-Gn-MKT220-ON

KAPIX "OFF"

A specially designed button for "stop machine" type actions.
The body color is red with OFF engraved on the button. Pressing should last for 3 sec in order for contacts to tip. When the key is released, the contacts immediately return to the off position. The button activates an NC contact and an NO contact. The LEDs will illuminate red (off) and then a flashing red (active).

Optional: Size: 22 (B22) or 30 (B30) and output: Terminal (C), 50cm cable + M12/8P (MKT50), 220cm cable + M12/8P Connector (MKT220), Cables (3M).

Available references:

- B22-CV-1O1C-RRS-D3-Rd-C-OFF
- B22-CV-1O1C-RRS-D3-Rd-MKT50-OFF
- B30-CV-1O1C-RRS-D3-Rd-C-OFF
- B30-CV-1O1C-RRS-D3-Rd-MKT50-OFF
- B22-CV-1O1C-RRS-D3-Rd-3M-OFF
- B22-CV-1O1C-RRS-D3-Rd-MKT220-OFF
- B30-CV-1O1C-RRS-D3-Rd-3M-OFF
- B30-CV-1O1C-RRS-D3-Rd-MKT220-OFF

KAPIX "RESET"

A specially designed button for "reset" or cycle restarts type actions. The body is blue. It has Blue / Yellow / White LEDs, a normally open contact and two LED control inputs. An "RST" laser marking is present on the button.

Optional: Size: 22 (B22) or 30 (B30) and output: Terminal (C), 50cm cable + M12/8P (MKT50), 220cm cable + M12/8P Connector (MKT220), Cables (3M).

Available references:

- B22-CV-1OL-BYW-M-BU-C-RST
- B22-CV-1OL-BYW-M-BU-MKT50-RST
- B30-CV-1OL-BYW-M-BU -C-RST
- B30-CV-1OL-BYW-M-BU -MKT50-RST
- B22-CV-1OL-BYW-M-BU-3M-RST
- B22-CV-1OL-BYW-M-BU-MKT220-RST
- B30-CV-1OL-BYW-M-BU -3M-RST
- B30-CV-1OL-BYW-M-BU -MKT220-RST

KAPIX "ACTIONS"

A specially designed button for steering or automatic type actions.
The body is black by default, with an open contact and two LED control inputs.

Optional: Size: 22 (B22) or 30 (B30) and output: Terminal (C), 50cm cable + M12/8P (MKT50), 220cm cable + M12/8P Connector (MKT220), Cables (3M).

Available references:

- B22-CV-1OL-RGO-M-Bk-C
- B22-CV-1OL-RGO-M-Bk-MKT50
- B30-CV-1OL-RGO-M-Bk-C
- B30-CV-1OL-RGO-M-Bk-MKT50
- B22-CV-1OL-RGO-M-Bk-3M
- B22-CV-1OL-RGO-M-Bk-MKT220
- B30-CV-1OL-RGO-M-Bk-3M
- B30-CV-1OL-RGO-M-Bk-MKT220

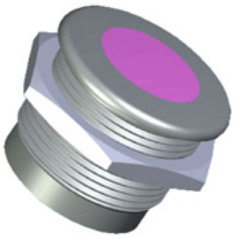
Button – Selector – Tricolor
Touch Switch Capacitive Technology

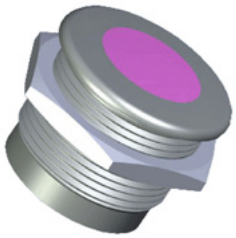
B22 CC

B22 CV

B30 CC

B30 CV





New Design

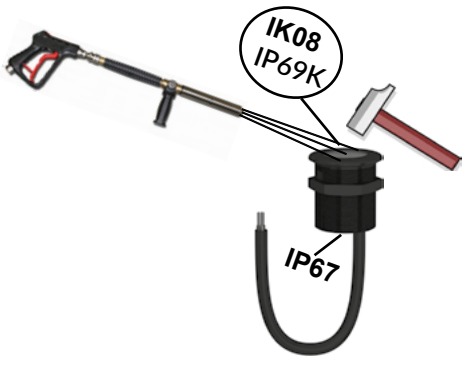
Colorette 4 LED
Tricolor

Colorette 6 LEDs
Tricolor

FORCE ZERO

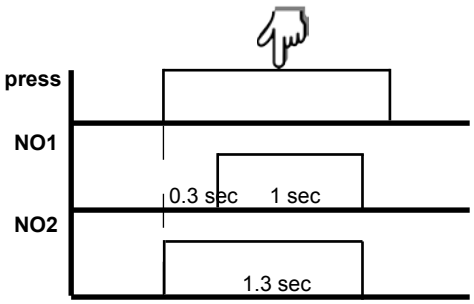
Advantages

- Capacitive touch control button for limiting TMS in hygiene-controlled environments
- The products are insensitive to splashing water and washing under pressure
- Tricolor LED lighting (red/green/orange or blue/yellow/white) with or without external control
- Button with momentary action, bistable, delayed on call or fallback, according to reference
- Connection to terminal without screw, cable or M12 / 8p male cord. Females cords M12/8p FKT-5M, FKT-10M, FKT-15M are optionally available on request
- One or two electronic contacts on closure or opening
- IP 69K touch protection and IP 67 at back for cable versions, IP 40 for connector version



Some special references

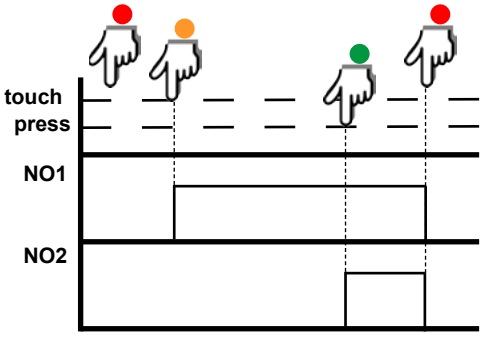
B22-CC-2OL-RGO-D0.3-0.5P/0.8-Bk-MKT or B30-CC-2OL-RGO-D0.3-0.5P/0.8-Bk-MKT



Generating a calibrated impulse:

The duration of 0.3s prevents inadvertent activation: you must press for at least 0.3 sec to trigger contact NO1
Contact NO1 creates a calibrated impulse of 1 sec
Contact NO2 creates a delay of 1.3 sec at closing
LEDs lighting is controlled according to control inputs

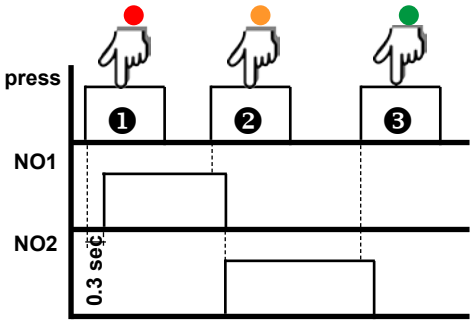
B22-CC-2O-RGO-2S-Bk-C or B30-CC-2O-RGO-2S-Bk-C



Pressing on two thresholds:

Pressing the touch button closes the NO1 Contact
Stronger pressing on the touch button closes contact NO2
LEDs lighting is tricolor according to situation

B22-CC-2O-RGO-SEL-Bk-C or B30-CC-2O-RGO-SEL-Bk-C



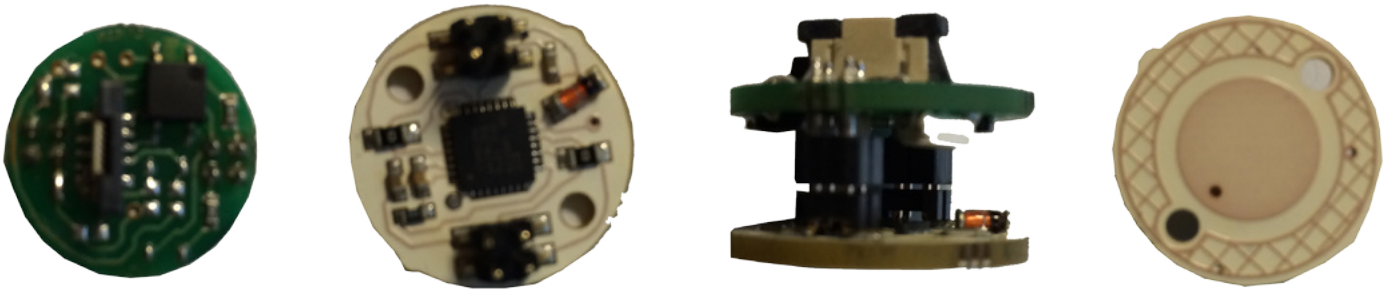
Three-positions selector:

Each pressing of the touch button activates one of the contacts according to the OFF, NO1, NO2, OFF cycle. Other combinations are possible, contact us.
The duration of 0.3 sec prevents inadvertent activation: you must press for at least 0.3 sec to trigger change of position
LEDs lighting is tricolor according to situation

Range	Standards	Approvals
B22 series B30 series	IEC 60335 (glow wire test) EN 1672-2 EN 61000-6-2 EN 61000-6-4	CE

B22 OEM

Bicolor luminous touch command button with capacitive technology for integration



- Placed behind glass or insulating material
- Momentary, bistable or timed function Up to two electrical contacts
- Max. glass thickness: 4 mm
- Maximum plastic thickness: 2 mm
- Good immunity to splashing water
- Built-in two-color or tricolor LED light
- Control of internal or external LEDs

ONLY TOUCH BUTTON

- Supply Voltage: 5V
- Logic Output: 0-5V
- Momentary action or or Bistable action or Delayed action

TOUCH + CONTACT BLOCK

- 2 bicolour LEDs
- 1 or 2 output contacts: NO or NC
- Electrical connection: soldering cable

The 4th generation

Man/Machine interface KOB308 / 508 SOFT

Multi-function programmable contactless optical button:

Advantages:

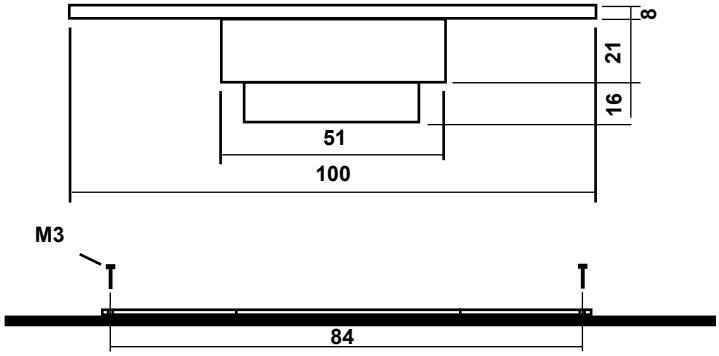
- Contactless remote control "Force zero"
- Multiple detection via three independent infrared detectors *
- Operation with or without gloves
- Operation by elbow, knee, etc.
- Programmable :
- On/off
- Impulse
- Timeout between 1and 999 sec
- Selection: Delayed Start/Delayed Off
-
- Ergonomic/Design
- Hygienics
- Funiction LEDs
- Warranty 3 years

KAPIX KOB 508/308 avoids contact with the hands. KAPIX KOB fulfills the demanding hygienic conditions of applications in hospitals, clinics, public places, clean rooms, etc ... KAPIX contributes to more flexible, more reliable uses to personnel using gloves made of leather, fabric, neoprene, wool, etc.

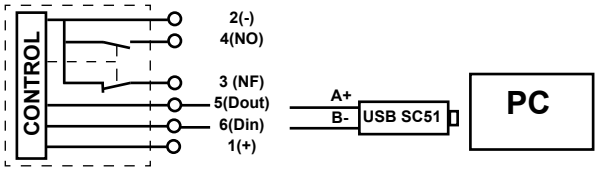
Application areas:

- Airport
- Port
- Waste treatment
- Heavy work, Construction, Forestry, etc ...
- Heavy and mechanical industry personnel
- Personnel working on truck, machine, public works, garbage truck, etc ...
- Alarm trigger system

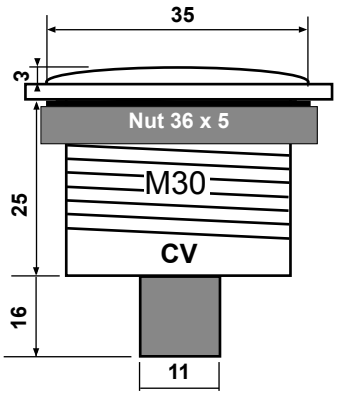
Dimensions KOB508T



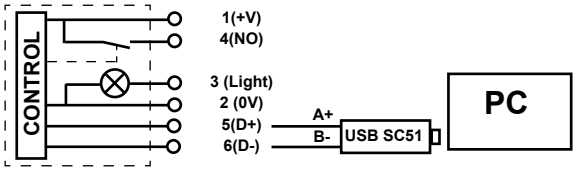
Electrical wiring KOB508T



Dimensions KOB308



Electrical wiring KOB308



Pictograms

KOB101T

Contactless button for two-hand control "COM3C" "FORCE ZERO"

- **Ergonomic concept and design:**

Studied and designed to eliminate or reduce the effects of carpal tunnel syndrome and other muscle disorders due to repetitive movements.

- **Actuation:**

The three optical sensors of the KOB101T detect dynamic movement from top to bottom. Any lateral approach, due to involuntary movements of the operator will be automatically filtered.

The capacitive panel will ensure that the operator does not try to cheat with a piece of paper or cardboard to release a hand.

Application

A KOB101T kit allows to carry out a complete two-hand control (2xKOB101T + 1xCOM3C).

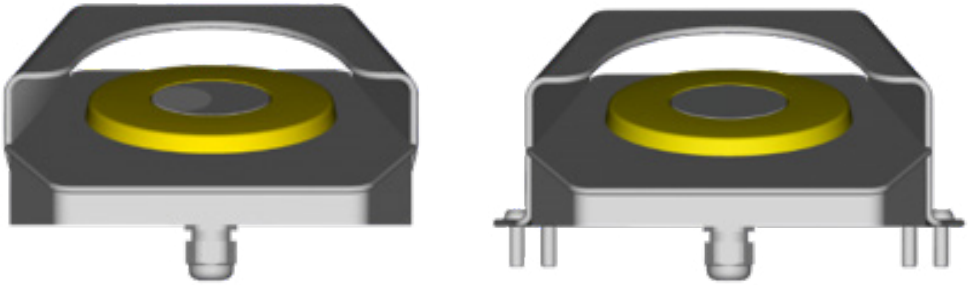
Complies with EN 574, Class IIIC

Easy to use, it will equip your presses or other machines in a safe way, while offering operators optimal comfort and minimal fatigue.

Its bright ring will intuitively give all necessary information.

An inter-button communication ensures that the activation of these has been done simultaneously (Tolerance 400ms).

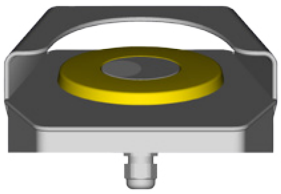
Each button will output a NO PNP and an NC NPN.



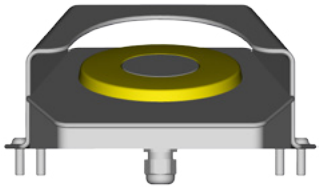
RANGE	STANDARD	APPROVAL
KOB 101Ti KOB101T+COM3C)	IEC 62061	CE
(KOB101T+COM3C)	ISO 13849-1	
COM3C (unit control only)	EN 574	

KOB101T

BX1



BX2



COM3C

Item Code

KOB 101T □□ - - - B = mounting on plastic case: L122 x W120 x H56

BX1 = mounting from below+low MSD+SS304: L164 x W161 x H60

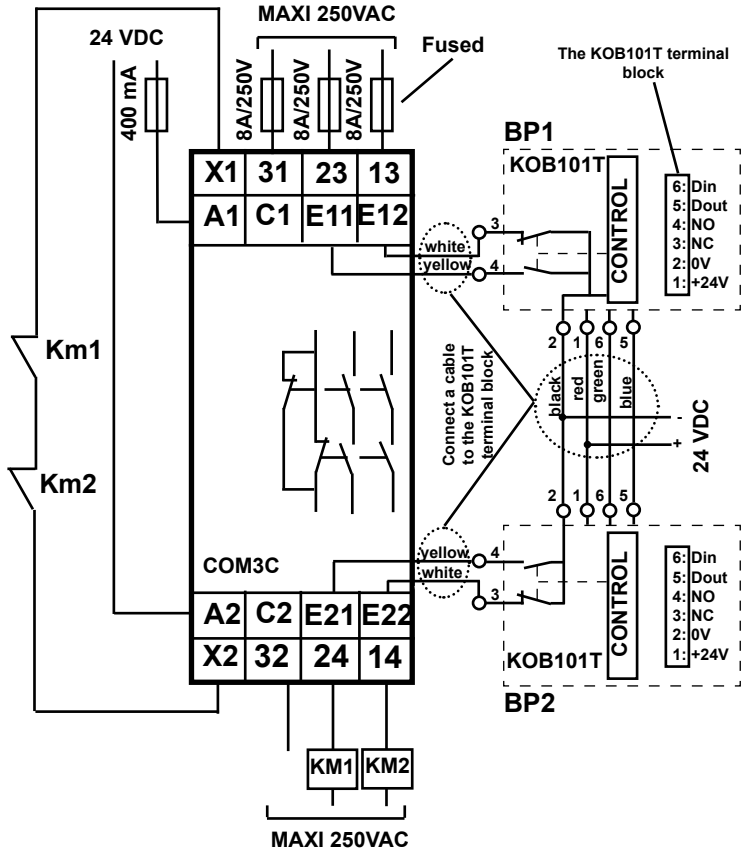
BX2 = mounting from above+low MSD+SS304: L164 x W161 x H60

I = kit 2 buttons+1 COM3C / kit 2 boutons+1 COM3C

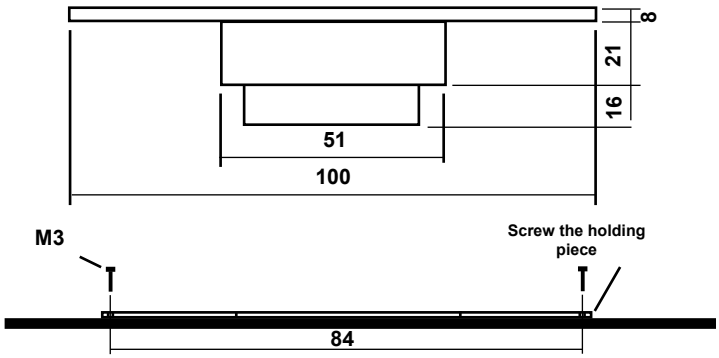
Technical specifications of KOB101T

Power	20 VDC to 30 VDC
Consumption	60 mA
Output contacts connected to COM3C	NO PNP and NC PNP
Terminal block	Screwless terminal block 1.5 mm² max
Protection index	IP 67 with silicone seal around the trim
Response time	40ms
Risk period	4 msec
Desynchronism	~ 400 msec
Size: Diam x Height	D100 x H24mm
Weight	75 g
Service life	50,000 hours
Ambient temperature	-25°C to +60°C (-13 F to +140 F)

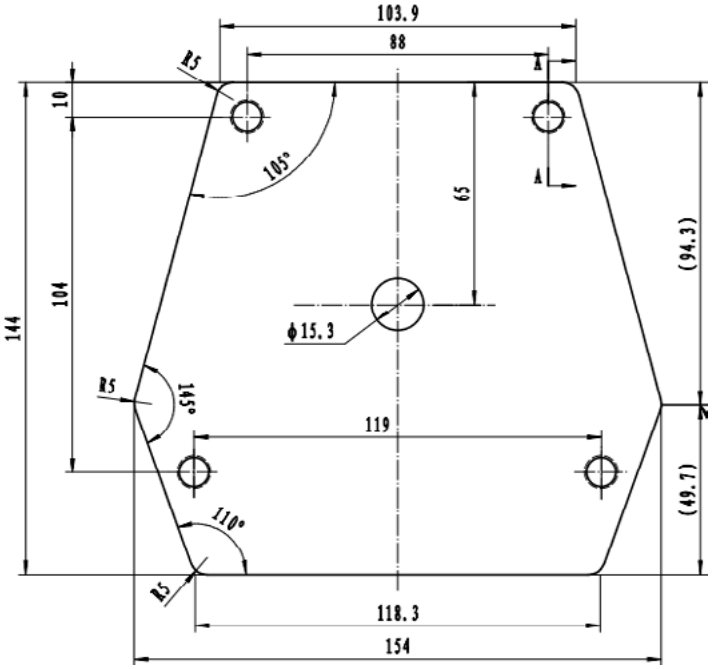
Wiring for two-hand control



Dimensions KOB101T



Dimensions BX1/2



KOB 608

Contactless optical request button with tricolor lighting

- Contactless activation
- Works with colored glove, EN 388
- Light ring with 3 states: red, green, orange
- Potential-free output contact
- Detection through a glass wall or a lexan
- Contactless detection up to 40 mm
- Light ring with red, green, orange LED switch
- System with 3 independent optics

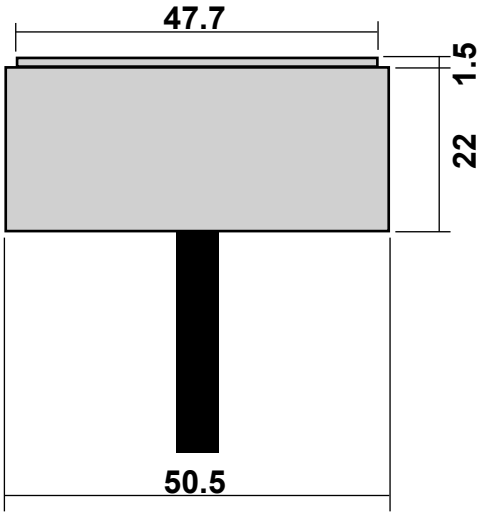
Application examples

- Access in clean room etc ...
- Clean room furniture
- Contactless activation
- Fastening behind a glass wall
- (Hygiene, chemical cleaning, aesthetics)

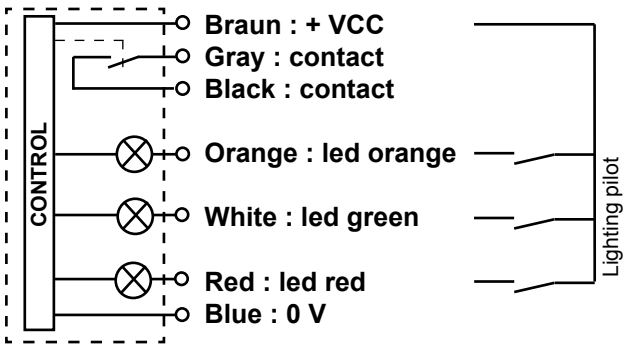
Indication

- Green = "I can enter"
- Red = "I cannot enter"
- Orange = "disinfection or other"

Dimensions

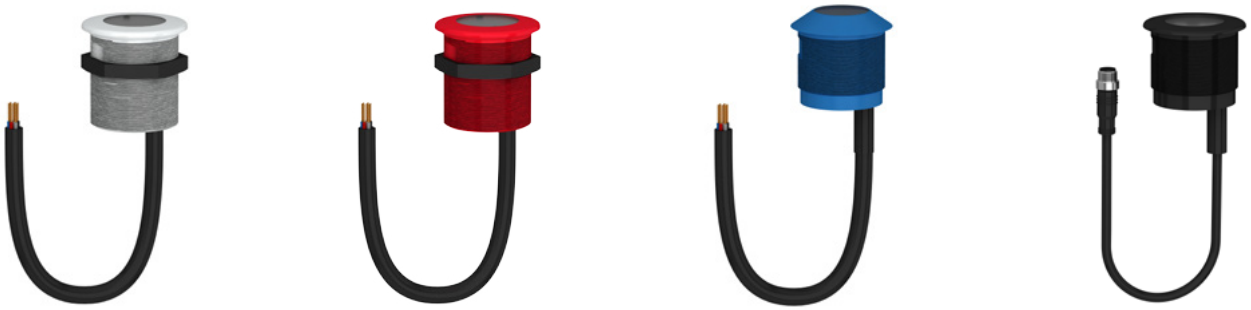


Electrical wiring



V22, V30 and V30-SPOT

Tricolor LED indicators and lights

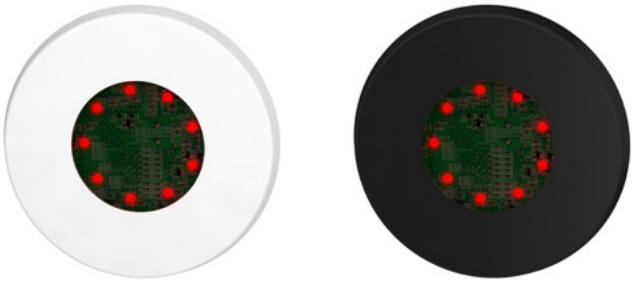


Replaces incandescent lamp indicators

- Hygiene: NC EN 1672-2
- Red, green, orange tricolor light
- Lifespan: 50,000
- Light type V22: High-brightness 360 mcd tricolor LED
- Light type V22: high-brightness 180 mcd two-color LED
- Light type V30: High-brightness 360 mcd tricolor LED
- Light type of the V30-SPOT: LED up to 34.5 lm
- Light color V30: red/green / orange or yellow/blue
- Lighting color V22: red/green or yellow/blue
- Light color V30-SPOT: white (other on request)
- Body color: black, gray, white, red, opal green
- Fixing V22: M22 bearing with nut and seal provided
- Fixing V30/V30-SPOT: M30 bearing with nut and seal provided
- Mounting position: 1
- Material: TR90UV
- Food contact: yes:
- Washing resistance: yes
- Anti-vandal: yes
- Electrical connection V30-SPOT: cable 10cm (other length on request)
- Electrical connection V22/V30: screwless connector 1,5mm2
- Sealing version CC: IP 67 and IP 69K (in 2015)
- Sealing version CV: IP 67 and IP 69K (front part only)
- Temperature: -20 °C to + 55 °C (-4 F to +131 F)

YB100A

Ceiling spot lighting with LED technology

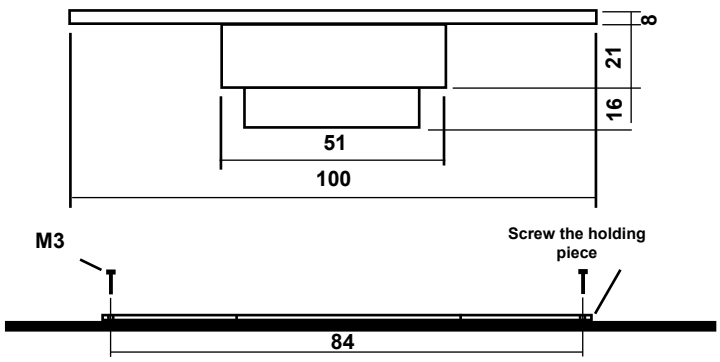


- Replaces halogen spotlights Low ceiling thickness Drilling 51mm
- Lifespan: 50,000 hours
- Light output: 200 or 400 lm
- Standard light type: neutral white UV-free 4000 ° K
- Type of light on request: warm white UV-free 3100 °K
- Type of light on request: cold white UV-free 6500 °K
- Color of the cover: black, white, opal green
- Fastening: 51mm hole and 2 to 6 invisible screws D3 not included
- Low visible thickness: 8 mm
- Mounting position: 1
- Material: TR90UV
- Electrical connection: screw terminal block for 1.5mm2 / 2.5mm2
- Power supply: 12 to 50V by voltage regulation
- Sealing: IP 67 with peripheral silicone seal:
- Temperature: -25 ° C to 40 °C (-13 F to + 104 F)
- Marking: silkscreen for reference on the back of the product

Choosing the right light

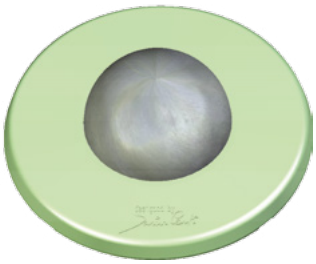
- Warm white for living rooms
- Neutral white for bathrooms and offices
- Cold white for pharmacies and laboratories

Dimensions



YB100S

Multi-effect LED technology multi-effect signaling beacon



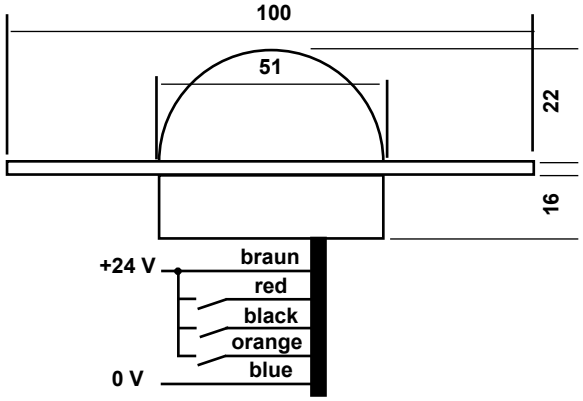
- Signaling of machines status
- Low apparent thickness

4 types of selectable indications

1. **Mode 1: flash**
2. **Mode 2: Flashing**
3. **FlashingMode 3: Fixed**
4. **Mode 4: Rotating beacon**

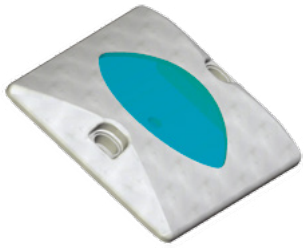
- Lifespan: 50,000 hours
- Light output: 100 lm
- Color of the cover: black, white, yellow, red
- Fastening: 51mm hole and 2 to 6 invisible screws D3 not included
- Low visible thickness: 8 mm
- Mounting position: 1
- Material: TR90UV
- Electrical connection: cable 1m 7x0,25mm2 (other length on request)
- Sealing: IP 67 with peripheral silicone seal
- Temperature: -25 °C to 40 °C (-13 F to +104 F)
- Marking: silkscreen for reference to the back of the product

Dimensions



GALLIA EYE

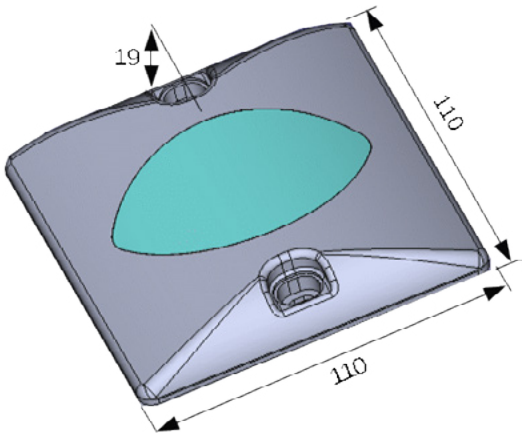
illuminating terminal with one or two colors



Lighting footpaths
Architectural lighting

- Thin curved design
- Lifespan: 50,000 hours
- Light output: 300 lm to 600 lm
- Light color: white, white+blue, white+red (others on request)
- Color of the terminal terminal: gray
- Fastening: 2 screws M6 (not supplied)
- Screw cap: 2 (supplied) in zamak to glue
- Low visible thickness: 19mm
- Mounting position: 1, distance between screws 86 mm
- Material: zamack and TR90UV
- Electrical connection: 1m cable H07RN-F 3G OD7 (other length on request)
- Sealing: IP 65 (soon IP 67)
- Temperature: -25 °C to 60 °C (-13 F to +140 F)
- Marking: laser engraving or label (on the back of the product)

Dimensions



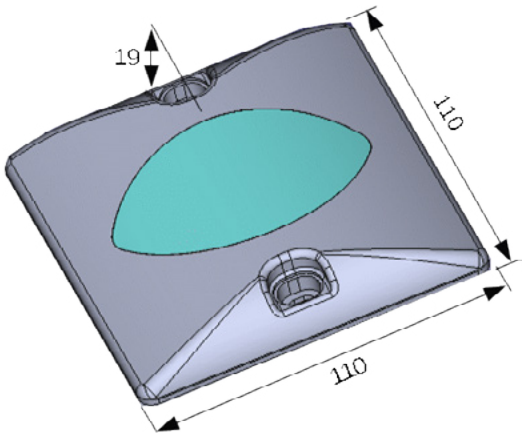
GALLIA RAY

Signaling terminal

Lighting for footpaths
Access lighting
Thin curve design

- Lifespan: 50,000 hours
- Light output: 1.6 cd
- Lighting color: white, orange, red, green, blue
- Light effect: alternating strips in sequence
- Color of the terminal: gray
- Fastening: 2 M6 screws (not supplied)
- Screw cap: 2 (supplied) in zamak to glue
- Low visible thickness: 19 mm
- Mounting position: 1, screw spacing 86 mm
- Material: zamak and TR90UV
- Electrical connection: cable 1m 2G OD7 H07RN-F (other length on request)
- Sealing: IP 65 (soon IP 67)
- Temperature: -25 °C to 60 °C (-13 F to +140 F)
- Marking: laser engraving or label (on the back of the product)

Dimensions



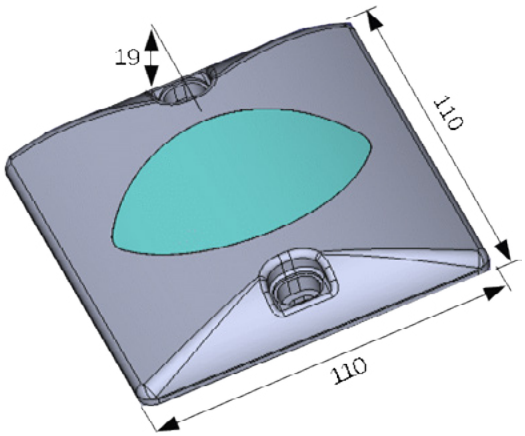
GALLIA T

Indicator terminal with patterns for transition

Direction of footpaths for underground parking
Bicolour lighting strips
thin curved design

- Lifespan: 50,000 hours
- Light output: 1.6 cd
- Lighting color: white, orange, red, green, blue
- Light effect: alternating strips in sequence
- Color of the terminal: gray
- Fastening: 2 M6 screws (not supplied)
- Screw cap: 2 (supplied) in zamak to glue
- Low visible thickness: 19 mm
- Mounting position: 1, screw spacing 86 mm
- Material: zamak and TR90UV
- Electrical connection: cable 1m 2G OD7 H07RN-F (other length on request)
- Sealing: IP 65 (soon IP 67)
- Temperature: -25 °C to 60 °C (-13 F to +140 F)
- Marking: laser engraving or label (on the back of the product)

Dimensions



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