

# LPI series

## Tactile pushbutton switches with large actuator

*Distinctive features and applications*



### ❑ Common features

- Large ergonomic actuator (Ø 35 mm)
- Tactile feedback
- Low behind-panel depth (21 mm max.)
- Stylish design
- Long life

This series has been developed on a modular base in order to fit the exact needs of technicians and end-users.



### ❑ Installation options

The LPI series has a number of features to ensure easy installation:

- **Front or rear mounting**
- With or without sealing
- 2 separate circuits for NO/NC 5A version
- Terminal block connector for 0,1A NO version
- 3 different LED voltages: 6V, 12V, 24V
- Integrated LED resistor



### ❑ Aesthetic options

- **Ring or dot illumination**
- Wide range of LED colours
- Wide range of bezel colours
- Many different actuator types and colours

### ❑ Designed to meet the requirements of EN81-70

This product meets the requirements of EN81-70 and is ideal for use in all types of indoor lifts.



### ❑ Flexibility of marking



The company reserves the right to change specifications without notice.

# LPI series

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### Specifications

#### ELECTRICAL SPECIFICATIONS

- Snap-action, momentary function
- Mechanical life : 1.000.000 cycles min. for 5A NO/NC  
5.000.000 cycles min. for 50mA NO
- Max. current/voltage rating with resistive load :

5A NO/NC version	50mA NO version
5A 12VDC - 50.000 cycles 100mA 12VDC - 1.000.000 cycles	50mA 24 VDC - 5.000.000 cycles

- Min. current with resistive load : 0,5mA at 24VDC for NO version
- Contact resistance : 100mΩ max.
- Dielectric strength : 500Vrms 50Hz between terminals  
1.000 Vrms 50 Hz between terminals and ground
- Insulation resistance : 10MΩ at 500VDC
- Integrated resistors for illuminated versions
- LED current : 20mA typical for dot or ring (30mA max.)
- LED protected from reverse polarity
- Stand-by consumption : 0,5VA max.

#### MATERIALS

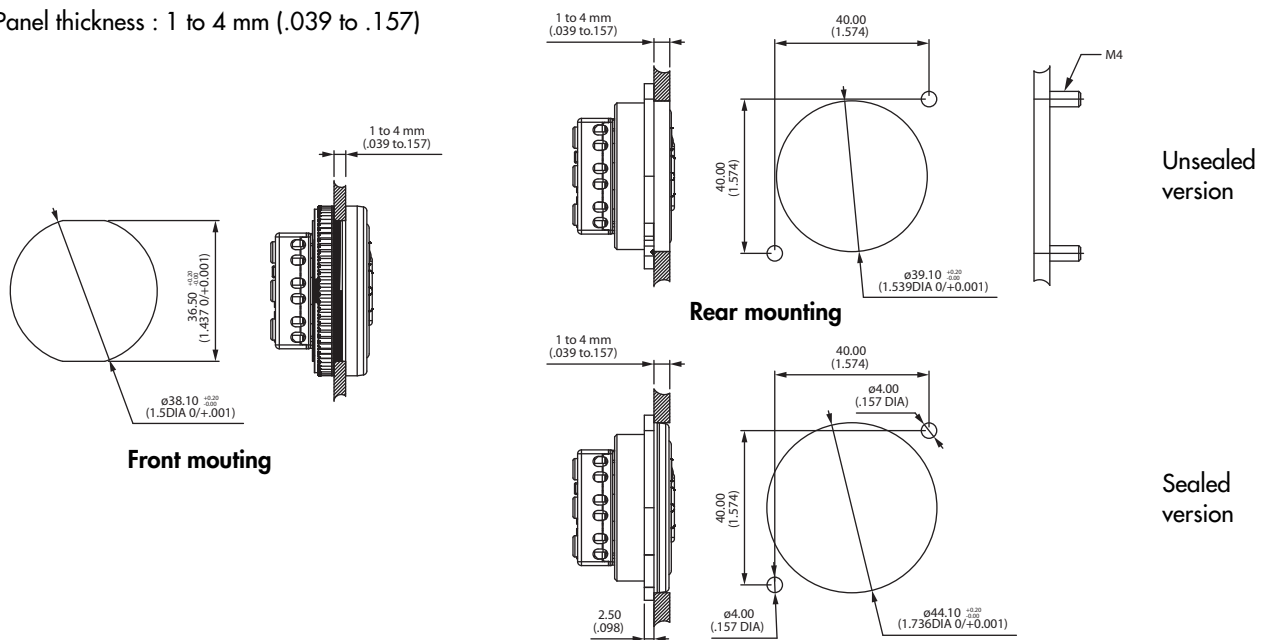
- Switch block : thermoplastic for 5A NO/NC
- Contacts :  
5A NO/NC : silver, gold plated  
50mA NO : silver
- Actuator crimped symbol : 304L stainless steel

#### MECHANICAL SPECIFICATIONS

- Environmental protection :  
- IP53 for sealed version  
- IP40 for unsealed version
- Impact resistance :  
- IK06 for NO/NC version  
- IK04 for NO version
- Operating force : 2,5 to 5N (unsealed)
- Total travel : 2 mm ±0,3 mm
- Operating temperature :  
- 20°C to +65°C
- Storage temperature :  
- 40°C to +70°C

#### PANEL CUT-OUT

Panel thickness : 1 to 4 mm (.039 to .157)

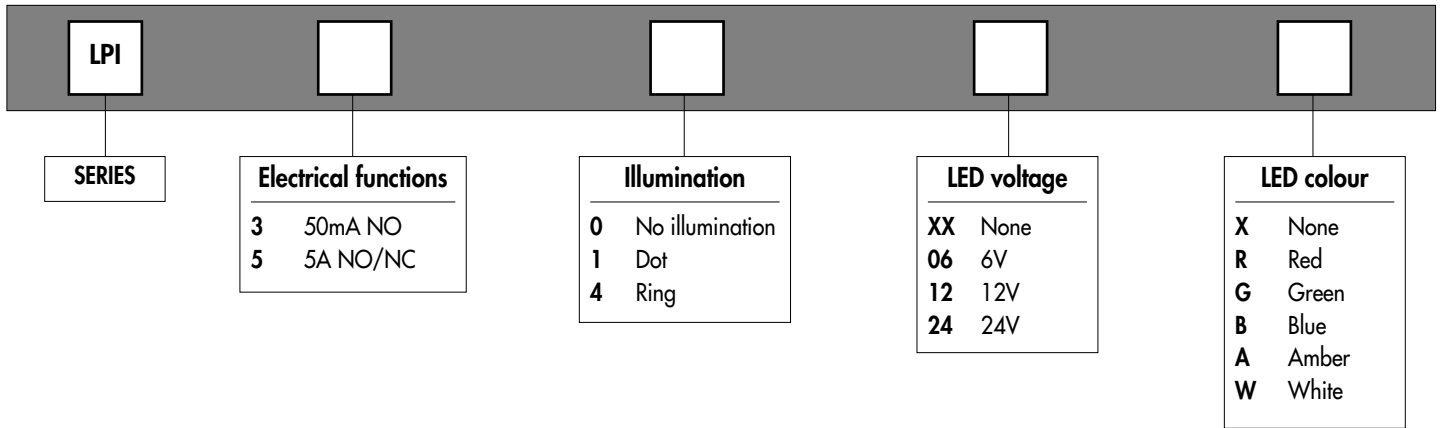


# LPI series

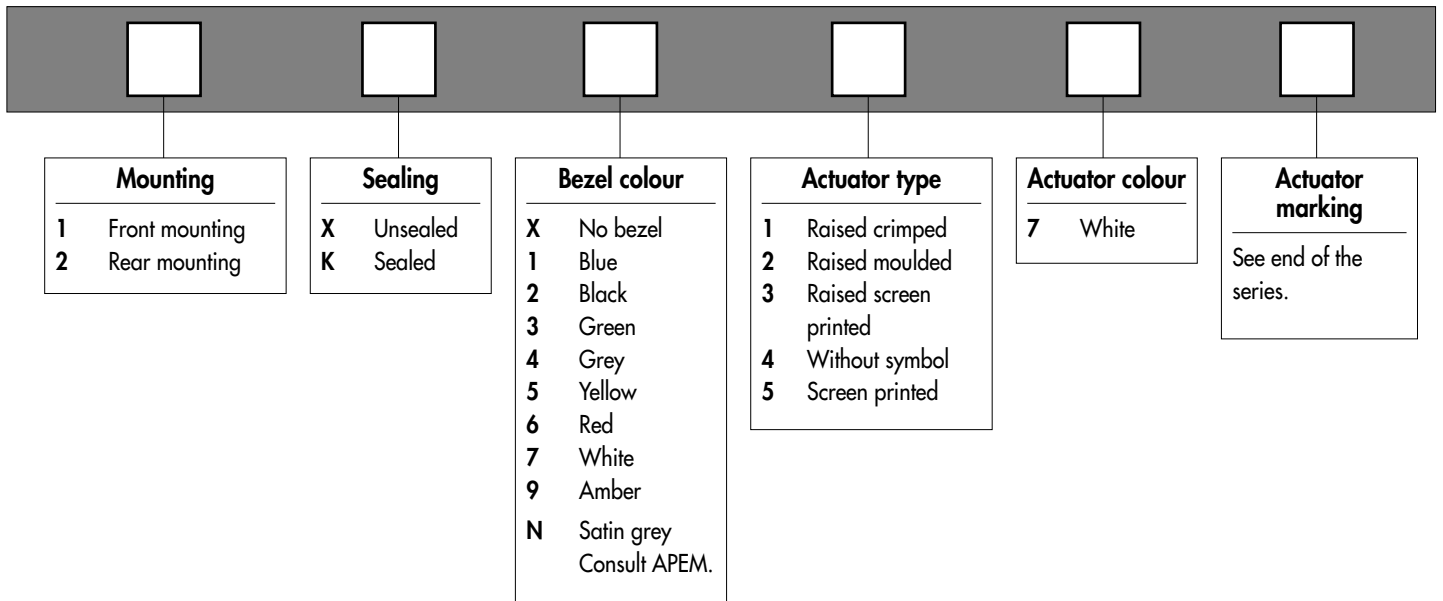
## Tactile pushbutton switches with large actuator

Overview

### SWITCH BLOCK



### OPERATOR



#### ABOUT THIS SERIES

On the following pages, you will find successively switch block order numbers and operator order numbers.

**Dimensions** : first dimensions are in m while inches are shown as bracketed numbers.



**NOTICE** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.



**Packaging unit** : 15 pieces for front mounting versions - 20 pieces for rear mounting versions.

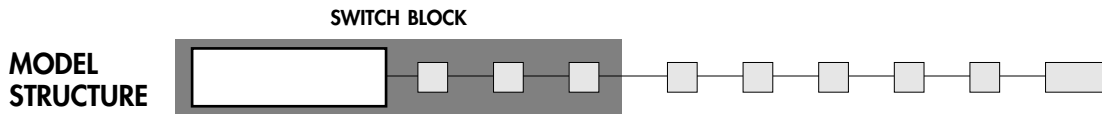


**Sealing boot** available to increase the sealing of LPI switches. See section H.

# LPI series

Tactile pushbutton switches with large actuator

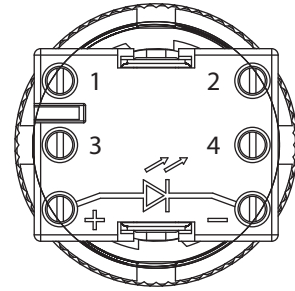
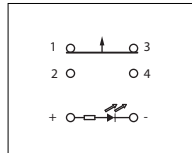
Switch block



## 5A momentary NC/NO combined



LPI5



### Terminal block

Wire size : AWG20-15 - 0,5 to 1,5 mm<sup>2</sup>

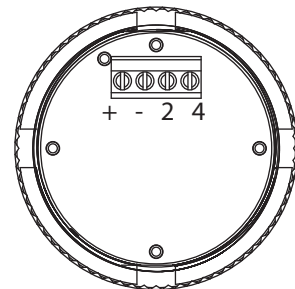
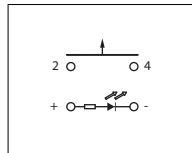
Rated torque : 0,5 Nm

Screw size : M3

## 50mA momentary NO



LPI3



### Terminal block

Wire size : AWG28-16 - 0,5 to 1 mm<sup>2</sup>

Rated torque : 0,4 Nm

Screw size : M2

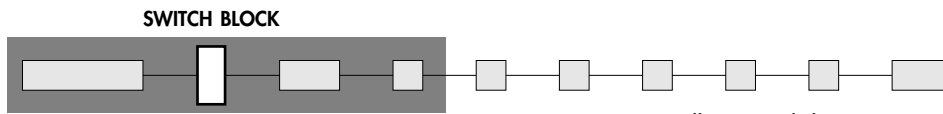
B2

# LPI series

## Tactile pushbutton switches with large actuator

### Switch block

#### ILLUMINATION



- 0 Non-illuminated
- 1 Illuminated dot (1 LED)
- 4 Illuminated ring (4 LEDs)

Option 4 available only in the case of screen-printed symbol

Illuminated dot



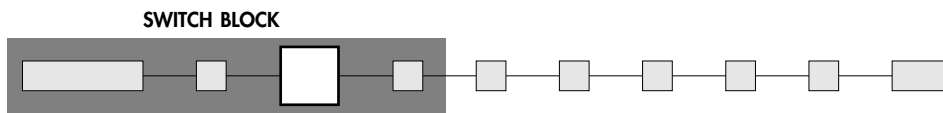
Option 1

Illuminated ring



Option 4

#### LED VOLTAGE



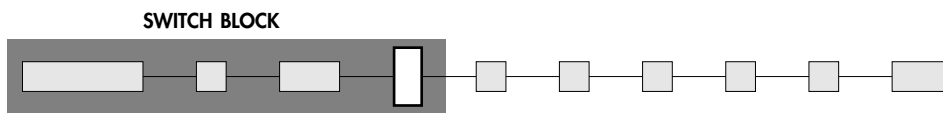
- XX Non-illuminated
- 06 6V
- 12 12V
- 24 24V



Combination with other options : see table below.

- Integrated resistors
- LED current : 20mA typical for dot or ring (30mA max.)
- LEDs protected from reverse polarity
- Stand-by consumption for illuminated product : 0,5VA max.

#### LED COLOUR



- X Non-illuminated
- R Red
- G Green
- A Amber
- B Blue
- W White

For illuminated ring, see table opposite.

#### Colours available with illuminated ring (option 4)

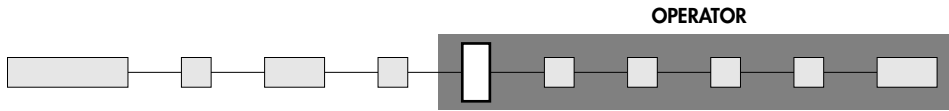
	Red	Green	Amber	Blue	White
LED voltage	<b>Version 5A</b>				
6V	No	No	No	No	No
12V	Yes	Yes	No	No	No
24V	Yes	Yes	Yes	Yes	Yes
LED voltage	<b>Version 50mA</b>				
6V	No	No	No	No	No
12V	Yes	No	Yes	No	No
24V	Yes	Yes	Yes	Yes	Yes@

# LPI series

## Tactile pushbutton switches with large actuator

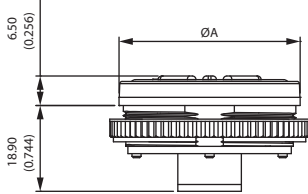
Operator

### MOUNTING

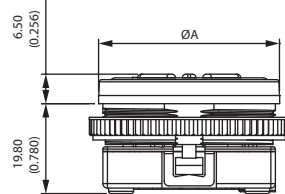


- 1 Front mounting
- 2 Rear mounting

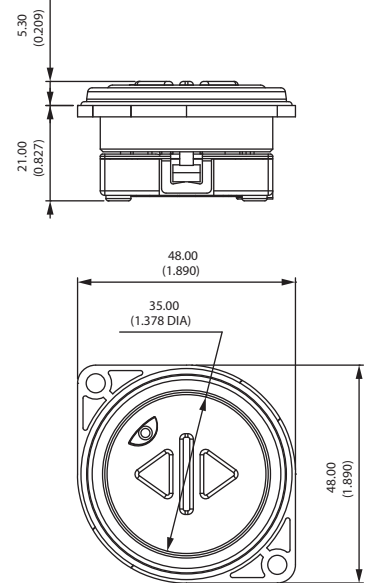
#### FRONT MOUNTING - 50mA version



#### FRONT MOUNTING - 5A version

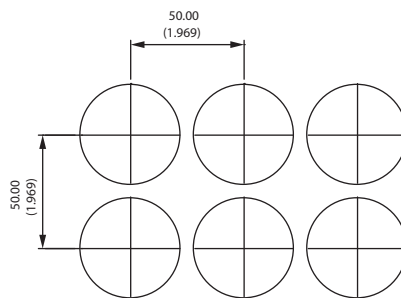


#### REAR MOUNTING - all versions



#### MATRIX MOUNTING

##### All versions

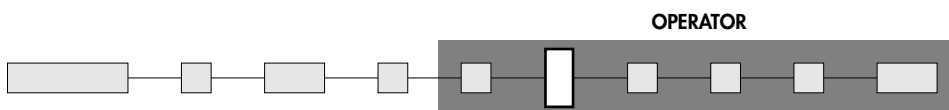


#### Dimension A

Sealed models : 44 mm (1.732)

Unsealed models : 39,9 mm (1.570)

### SEALING



- X Unsealed
- K Sealed

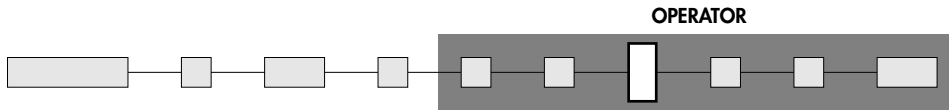
Note : bezel compulsory on sealed versions.

# LPI series

## Tactile pushbutton switches with large actuator

Operator

### BEZEL COLOUR



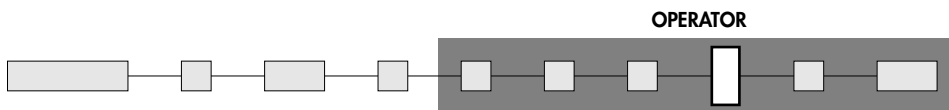
- X No bezel
- 1 Blue
- 2 Black
- 3 Green
- 4 Grey
- 5 Yellow
- 6 Red
- 7/1 White
- 9 Orange



Satin grey (option N) : consult APEM.

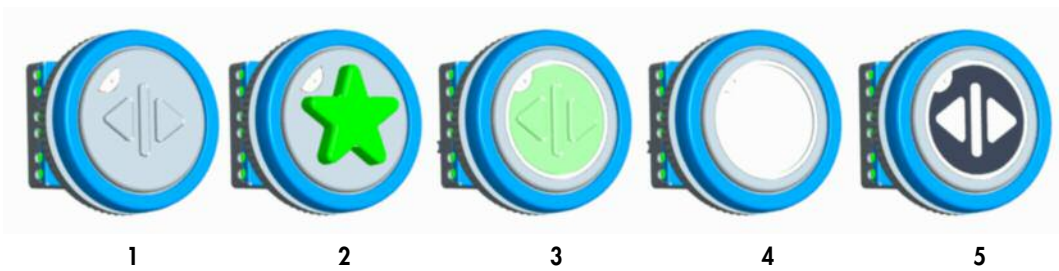
For sealed versions, the bezel is compulsory.

### ACTUATOR TYPE

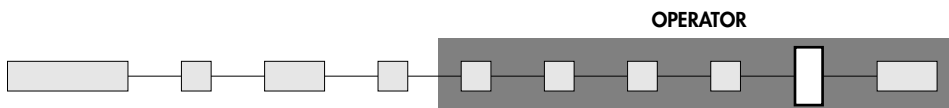


- 1 Stainless steel raised crimped symbol
- 2 Raised moulded symbol (star and bell)
- 3 Raised screen printed symbol
- 4 Without symbol
- 5 Screen printed symbol

Ring illumination available with options 3, 4 and 5 only.



### ACTUATOR COLOR



- 7 White



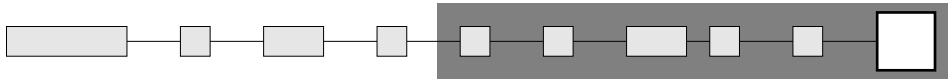
# LPI series

## Tactile pushbutton switches with large actuator

Operator

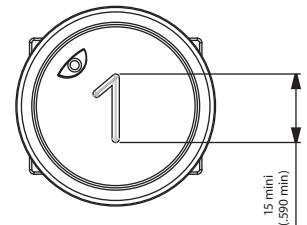
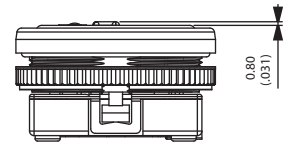
### ACTUATOR MARKING

#### OPERATOR



CODE	SYMBOL	DESCRIPTION
XX	/	No symbol
00	0	
01	1	
02	2	
03	3	
04	4	
05	5•	With single tactile point
06	6	
07	7	
08	8	
09	9	
11	-1	
12	-2	
13	-3	

CODE	SYMBOL	DESCRIPTION
14	◀▶	Open
15	▶◀	Close
16	△	Up
17	▽	Down
18	◁	Left
19	▷	Right
20	☼	Ventilation
21	🔔	Alarm (moulded, yellow)
22	★	Exit level (moulded, green)
23	☎	Phone



Actuator type 1

	Symbol height		
	Symbol 21	Symbol 22	Other symbol
Actuator type 1	x	x	0,8 mm
Actuator type 2	0,8 mm	5 mm	x
Actuator type 3	x	x	0,8 mm
Actuator type 4	x	x	x
Actuator type 5	x	x	0 mm

x = non available