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

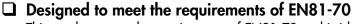
The LPI series has a number of features to ensure easy installation:

- 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



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



☐ Flexibility of marking



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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. currrent/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

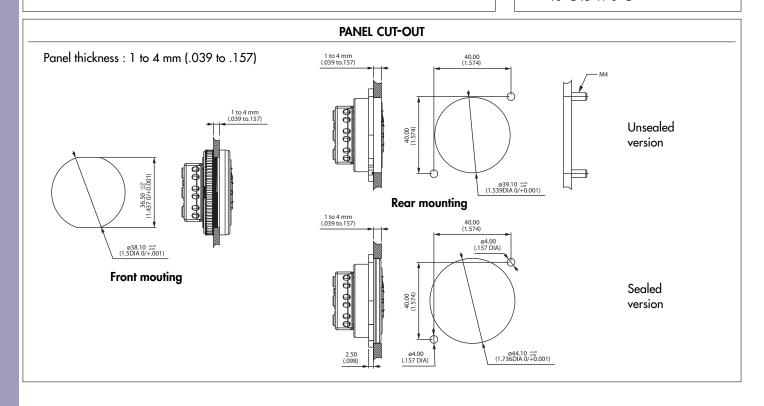
- Min. current with resistive load: 0,5mA at 24VDC for NO version
- Contact resistance : $100m\Omega$ max.
- Dielectric strength: 500Vrms 50Hz between terminals 1.000 Vrms 50 Hz between terminals and ground
- Insulation resistance : $10M\Omega$ at 500VDC
- Integrated resistors for illuminated versions
- 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

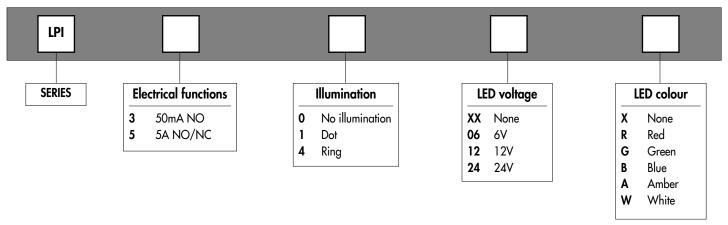




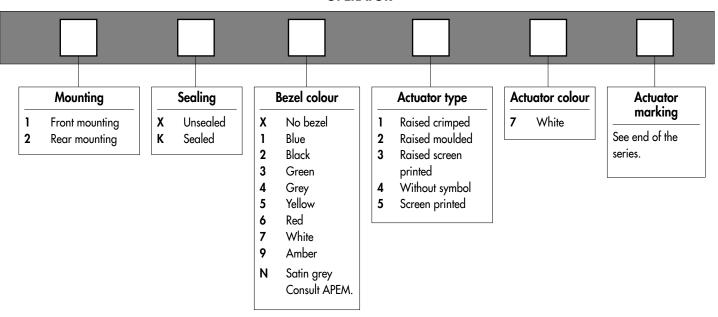
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Overview





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.

SWITCH BLOCK **MODEL STRUCTURE**

5A momentary NC/NO combined



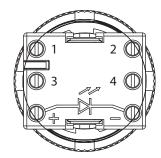
LPI5



Terminal block

Wire size: AWG20-15 - 0,5 to 1,5 mm²

Rated torque: 0,5 Nm Screw size: M3



50mA momentary NO



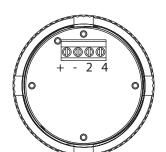
LPI3



Terminal block

Wire size : AWG28-16 - 0,5 to 1 mm² Rated torque : 0,4 Nm

Screw size : M2



Tactile pushbutton switches with large actuator

Switch block

ILLUMINATION

SWITCH BLOCK

Non-illuminated

1 Illuminated dot (1 LED)

4 Illuminated ring (4 LEDs)

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



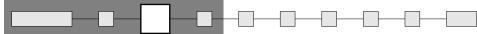


Option 1

Option 4

LED VOLTAGE

SWITCH BLOCK



XX Non-illuminated

06 6V

12 12V 24 24V

Combination with other options : see table below.

Colours available with illuminated ring (option 4)

- 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

SWITCH BLOCK



X Non-illuminated

 R
 Red

 G
 Green

 A
 Amber

 B
 Blue

 W
 White

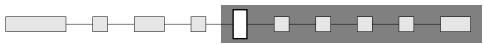
For illuminated ring, see table opposite.

	, manual				
	Red	Green	Amber	Blue	White
LED voltage	Version 5A				
6V	No	No	No	No	No
12V	Yes	Yes	No	No	No
24V	Yes	Yes	Yes	Yes	Yes
LED voltage	Version 50mA				
6V	No	No	No	No	No
12V	Yes	No	Yes	No	No
24V	Yes	Yes	Yes	Yes	Yes@

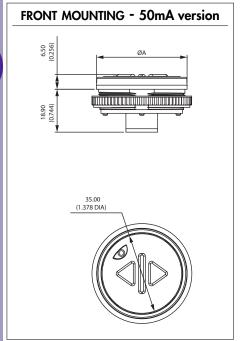
Operator

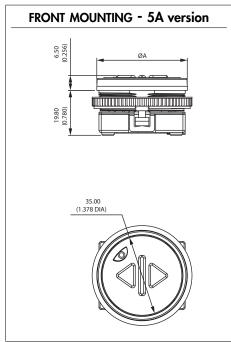
MOUNTING

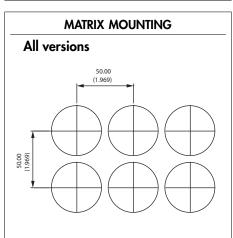
OPERATOR

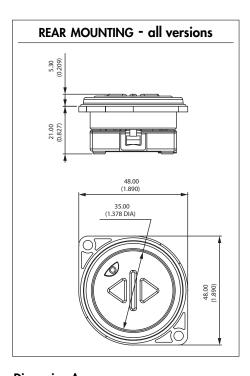


1 Front mounting2 Rear mounting



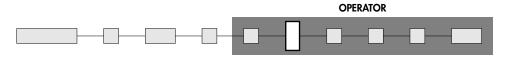






Dimension ASealed models : 44 mm (1.732)
Unsealed models : 39,9 mm (1.570)

SEALING



X UnsealedK Sealed

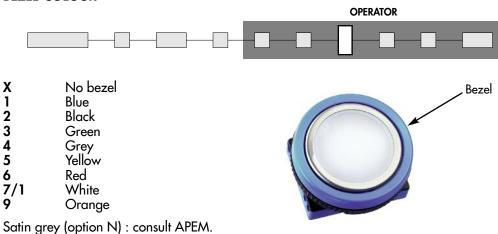
Note: bezel compulsory on sealed versions.

B2

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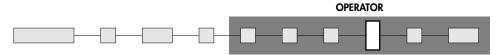
Operator





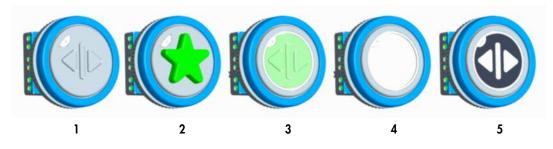
For sealed versions, the bezel is compulsory.

ACTUATOR TYPE

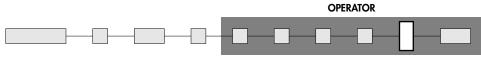


- Stainless steel raised crimped symbol Raised moulded symbol (star and bell) Raised screen printed symbol Without symbol 2
- 3 4
- 5 Screen printed symbol

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



ACTUATOR COLOR







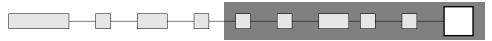


Tactile pushbutton switches with large actuator

Operator

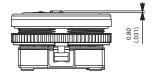
ACTUATOR MARKING

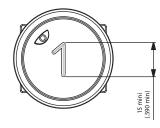
OPERATOR



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	4	Open	
15	M	Close	
16	Δ	Up	
17	∇	Down	
18	4	Left	
19	\D	Right	
20	*	Ventilation	
21	A	Alarm (moulded, yellow)	
22	*	Exit level (moulded, green)	
23	a	Phone	





Actuator type 1

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

x = non available

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