

# IB and IS series

Sealed pushbutton switches - bushing Ø 12 mm - momentary

*Distinctive features and specifications*



- Snap-in and threaded bushing models
- Compact, light in weight
  - Behind-panel depth of 13 mm (.512) only
  - 50 % reduction in weight compared to metallic models
- Tactile feedback
- Sealed to IP67 (IS series) or IP54 (IB series)

## ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing according to IEC 60529 : IP67 (IS) or IP54 (IB)
- Shock resistance : 100 g according to IEC 512-4, test 6c
- Vibration resistance : 10-500 Hz - 10 g according to IEC 512-4, test 6d
- Salt spray : IEC 512-6, test 11f
- Operating temperature : -40°C to +85°C

## MATERIALS

- Case : thermoplastic UL94-V0
- Actuator : polyamide 6/6
- Bushing/bezel : polyamide 6/6
- Contacts : silver, gold plated
- Terminal seal : epoxy

## ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :  
400mA 32VAC - 100mA 48VDC
- Initial contact resistance : 50 mΩ max.
- Insulation resistance : 1 GΩ min. at 500VDC
- Dielectric strength : 1.000 Vrms
- Electrical life at full load : 500.000 cycles

## AGENCY APPROVAL



2A 125VAC/250VAC  
File E83438

**Availability** : consult factory for details of approved models.

**Marking** : to order switches marked UL, complete appropriate box of ordering format.

## GENERAL SPECIFICATIONS

- Panel thickness :
  - IB series : 0,8 mm (.031) min. - 1,8 mm (.071) max.
  - IS series : 1,5 mm (.059) min. - 4 mm (.157) max.
- Total travel : 1,7 mm (.066) +/- 0,3 mm
- Typical operating force : 4N +/- 3N
- Low level or mechanical life : 1.000.000 cycles
- Torque : 1,5 Nm max. applied to nut
- Soldering : 300°C max. for 3 seconds

*Example of custom switch:  
see end of the series.*

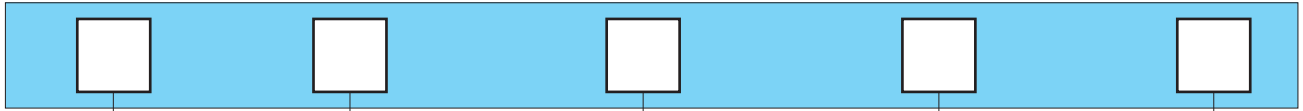
**Panel mounting** : see next pages.

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Overview

MODEL  
STRUCTURE



**SERIES**

<b>IB</b>	Snap-in
<b>IS</b>	Threaded bushing

**Actuator shapes**

<b>R</b>	Round, curved
<b>P</b>	Round, flat

**Electrical function**

<b>3</b>	Normally open (NO)
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**Terminals**

<b>S</b>	Solder lug
<b>Z1</b>	Quick-connect 2,8 x 0,5 mm
<b>P</b>	Straight PC

**Contacts**

<b>AD</b>	Silver, gold plated
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OPTIONS

**Actuator colours**

<b>1</b>	Blue
<b>B</b>	Dark blue
<b>2</b>	Black
<b>3</b>	Green
<b>5</b>	Yellow
<b>6</b>	Red
<b>7/1</b>	White
<b>8</b>	Bright chrome
<b>9</b>	Orange
<b>A</b>	Satin chrome

**Bezel finish**

<b>00</b>	Black (std)
<b>08</b>	Bright chrome (IS only)
<b>10</b>	White
<b>20</b>	Satin chrome (IS only)

**Option**

<b>104</b>	High actuator
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**Approval**

<b>UL</b>	Consult factory for detail of approved models.
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## ABOUT THIS SERIES

On the following pages, you will find successively :

- model structure of switches and options in the same order as in above chart

**Dimensions** : first dimensions are in mm 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.



**A sealing boot** is available to protect the switches against frost and sand. It is presented after the IA series and in section H.



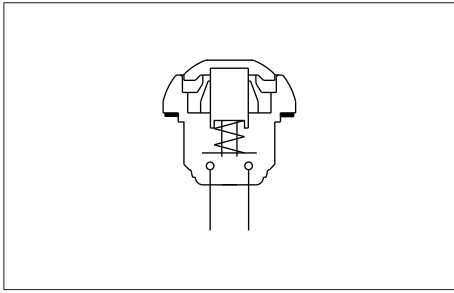
**Mounting accessories** : Standard hardware supplied : 1 flat seal (IB series)  
1 hex nut 14 mm (.551) across flats and 1 flat seal (IS series). Hex nut part number U166.



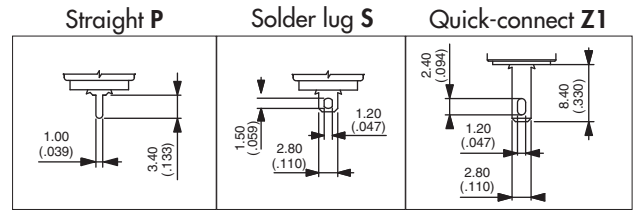
**Packaging unit** : 50 pieces

# IB and IS series

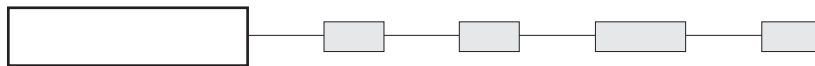
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- Ten actuator colours
- Curved or flat actuator
- Antirotation bushing



## MODEL STRUCTURE



Actuator marking available on IBP and ISP models (symbol 10 mm max.). On request.

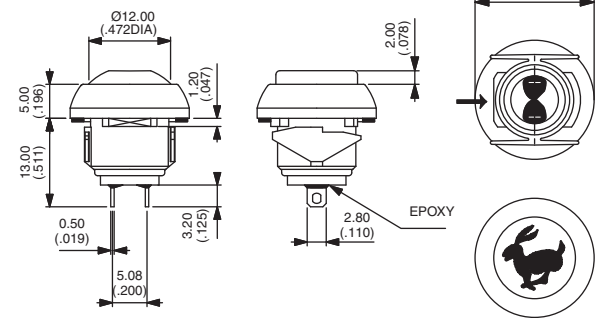
## Snap-in mounting - solder lug terminals

→ Flat

Panel thickness : 0,8 mm to 1,8 mm



- Curved actuator  
**IBR3SAD** Normally open
- Flat actuator  
**IBP3SAD** Normally open



Also available with straight PC : **IB•3PAD** or quick-connect terminals : **IB•3Z1AD**

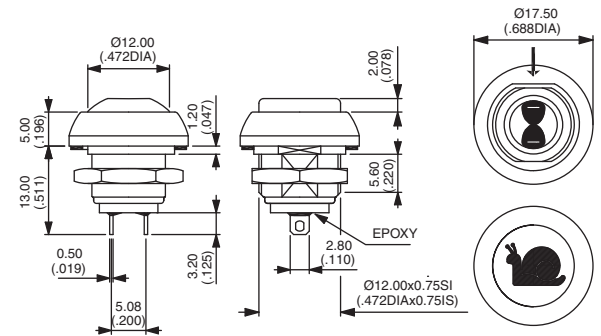
## Mounting by threaded bushing - solder lug terminals

→ Flat

Panel thickness : 1,5 mm to 4 mm



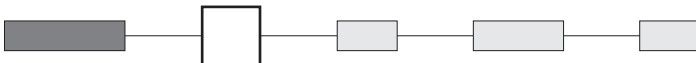
- Curved actuator  
**ISR3SAD** Normally open
- Flat actuator  
**ISP3SAD** Normally open



Also available with straight PC : **IS•3PAD** or quick-connect terminals : **IS•3Z1AD**

## ACTUATOR COLOURS

Actuator marking available on IBP and ISP models (symbol 10 mm max.). On request.



- 1 : blue - B : dark blue - 2 : black - 3 : green - 5 : yellow - 6 : red - 7/1 : white - 8 : bright chrome  
9 : orange - A : satin chrome

## BUSHING AND BEZEL FINISH

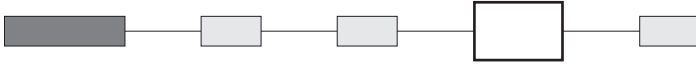


- 00 : Black (standard)  
08 : Bright chrome (IS series only)  
10 : White  
20 : Satin chrome (IS series only)

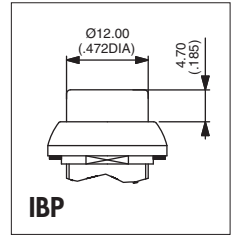
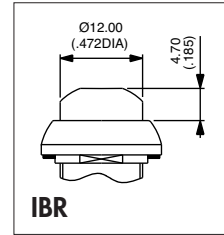
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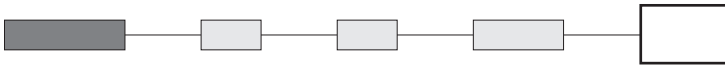
## ACTUATOR OPTION



104 : High actuator



## APPROVAL



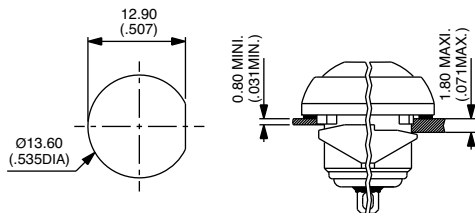
UL

**Availability** : consult factory for details of approved models.

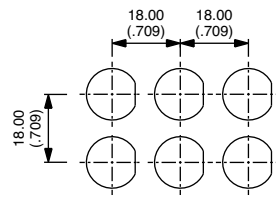
**Marking** : to order switches marked UL, complete above box with "UL".

## IB SERIES MOUNTING

### Panel cut-out

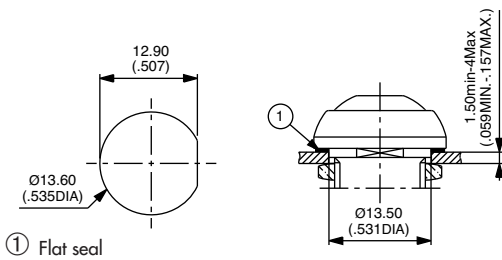


### Matrix mounting

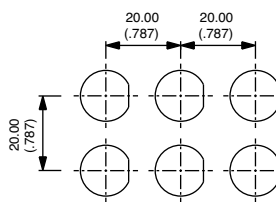


## IS SERIES MOUNTING

### Panel cut-out



### Matrix mounting



## Example of custom switch



ISR3FADB22X1248-01

- Painted bushing and actuator, soft feel
- Flying leads (55 mm) + connector
- Overmolded rear part