IB and IS series

Sealed momentary pushbutton switches

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 IP 67**

B

ENVIRONMENTAL SPECIFICATIONS

- Degree of protection : IP 67 - See details page B36.
- 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
- Plunger : polyamide 6/6
- Bushing/bezel : polyamide 6/6
- Contacts : silver, gold plated
- Terminal seal : epoxy

ELECTRICAL AND GENERAL SPECIFICATIONS

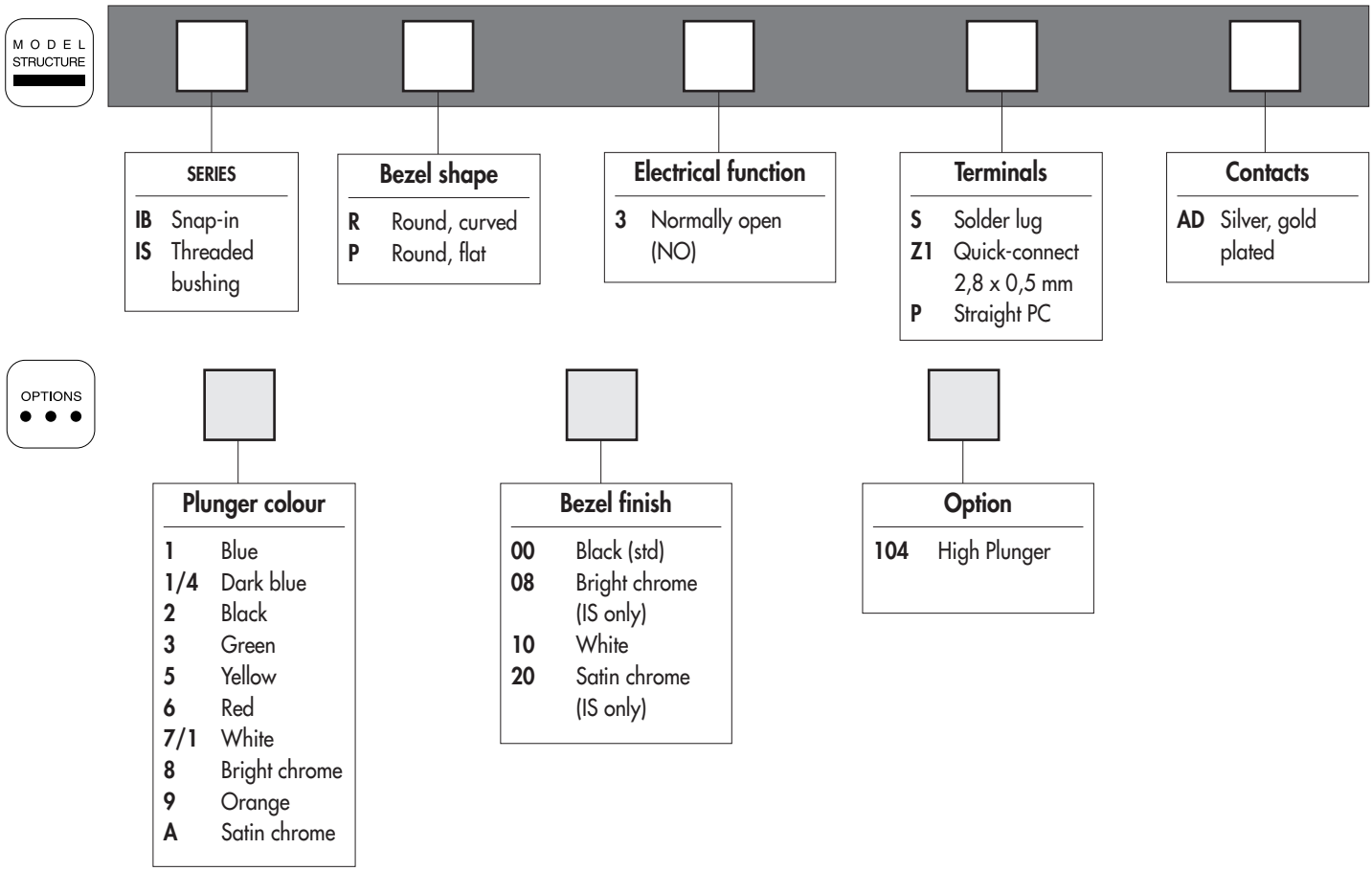
- Max. current/voltage rating with resistive load :
  400mA 32VAC - 100mA 50VDC - 125mA 125VAC
- Initial contact resistance : 50 mΩ max.
- Insulation resistance : 1 GΩ min. at 500VDC
- Dielectric strength : 1.000 VAC rms
- Electrical life at full load : 500.000 cycles
- Panel thickness :
  - IB series : 0,8 mm (.031) min. - 1,8 mm (.071) max.
  - IS series : 1,5 mm (.059) min. - 4 mm (.157) max.
- Total travel : 1,5 mm (.059)
- Operating force : 2N to 5N
- Contact bounce : 10 ms
- 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.

IB and IS series

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Overview



B

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 bracketted numbers.

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

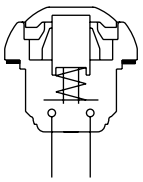
A sealing boot is available to protect the switches against frost and sand. It is presented at the end of the series and in section H.

Mounting accessories : Standard hardware supplied : 1 flat seal (IB series)
1 hex nut 14 mm (.551) across flats and 1 flat seal (IS series). The hex nut is presented in section I (part number U166).

Packaging unit : 50 pieces

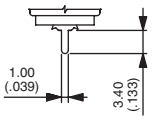
IB and IS series

Sealed momentary pushbutton switches

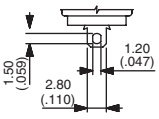


- Ten plunger colours
- Curved or flat actuator
- Antirotation bushing

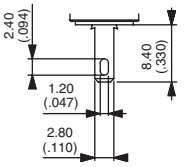
Straight **P**



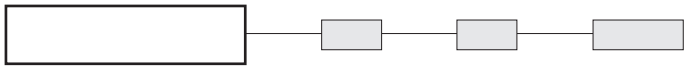
Solder lug **S**



Quick-connect **Z1**



MODEL STRUCTURE



B

Snap-in mounting - solder lugs

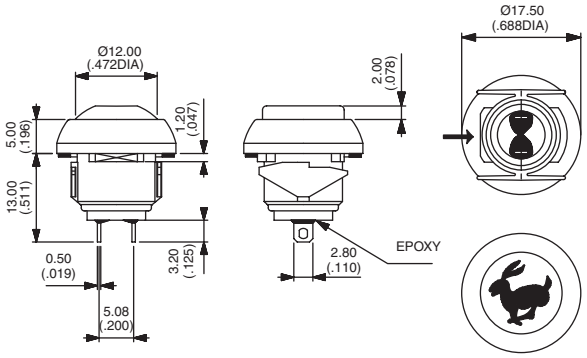
→ Flat

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**

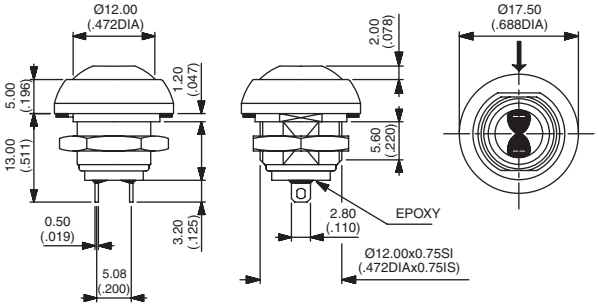
Mounting by threaded bushing - solder lugs

→ Flat

Panel thickness : 1,5 mm to 4 mm



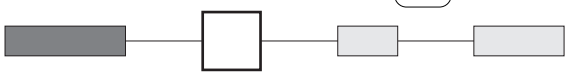
ISR3SAD  Normally open



Also available with straight PC : **ISR3PAD** or quick-connect terminals : **ISR3Z1AD**
Also available with flat actuator. On request.

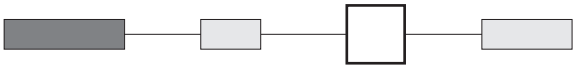
PLUNGER COLOUR

Plunger marking available on IBP models (symbol 10 mm max.). On request.



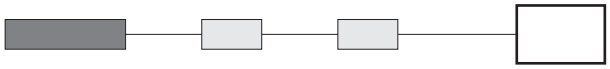
1 : blue - **1/4** : dark blue - **2** : black - **3** : green - **5** : yellow - **6** : red - **7/1** : white - **8** : bright chrome
9 : orange - **A** : satin chrome

BUSHING AND BEZEL FINISH

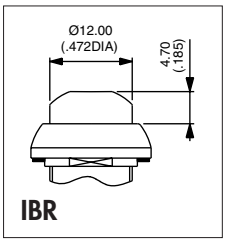


00 : Black (standard)
08 : Bright chrome (IS series only)
10 : White
20 : Satin chrome (IS series only)

PLUNGER OPTION

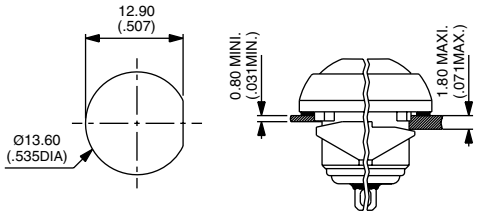


104 : High plunger

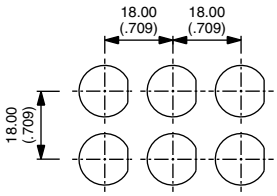


IB SERIES MOUNTING

Panel cut-out

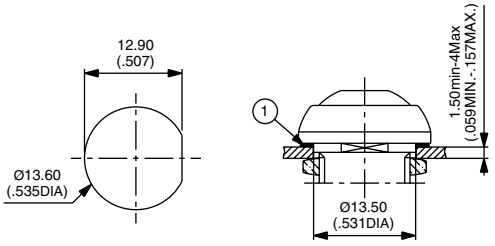


Matrix mounting

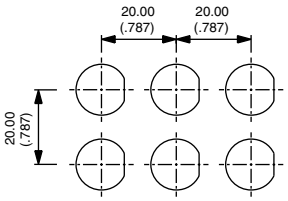


IS SERIES MOUNTING

Panel cut-out

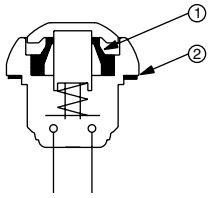


Matrix mounting



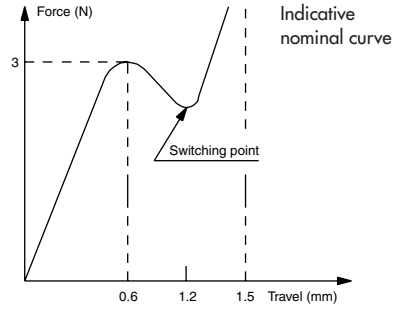
TACTILE FEEDBACK

Cross section



① Elastomeric membrane ② Flat seal

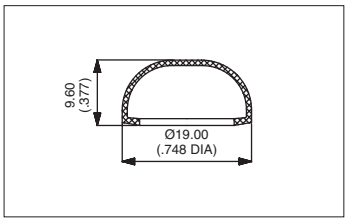
Operating force/travel

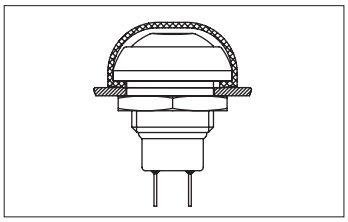


ADDITIONAL SEALING

By silicone boot for protection against frost and abrasion by sand. Order separately.
- transparent : **U5125**
- blue : **U5125-1**
- black : **U5125-2**
- red : **U5125-6**

Operating temperature : -40°C to +125°C
Life expectancy : 500.000 cycles





Example of custom switch



ISR3FADB22X1248-01

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