# APEM

# IS series

四 00 陆 -022 -002

Sealed pushbutton switches • threaded bushing Ø 12 mm • momentary



#### **DISTINCTIVE FEATURES**

Threaded bushing models Compact, lightweight Tactile feedback Sealed to IP67



#### **ENVIRONMENTAL SPECIFICATIONS**

- Front panel sealing according to IEC 60529 : IP67
- 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 (-40 °F to +185 °F)



#### **ELECTRICAL SPECIFICATIONS**

- Max. current/voltage rating with resistive load:
  400 mA 32 VAC 100 mA 48 VDC
- Initial contact resistance : 50 m $\Omega$  max.
- $\bullet$  Insulation resistance : 1 G $\Omega$  min. at 500 VDC
- Dielectric strength: 1,000 Vrms
- Electrical life at full load: 500,000 cycles



#### **GENERAL SPECIFICATIONS**

- Panel thickness : 1.5 mm (.059) min. 4 mm (.157) max.
- Total travel: 1.7 mm (.066) ± 0,3 mm
- Typical operating force : 4 N ± 3 N
- Low level or mechanical life: 1,000,000 cycles
- Torque (applied to nut): 1 Nm max. with metal nut U166
  1.5 Nm max. with plastic nut U4248
- Soldering: 300 °C (572 °F) max. for 3 seconds

The company reserves the right to change specifications without notice.





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#### **MATERIALS**

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

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

#### **AGENCY APPROVAL**



2 A 125 VAC/250 VAC File E83438

Availability: consult factory for details of

approved models.

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

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#### **TERMINALS**



Solder lug S



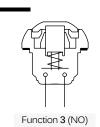
Straight P



Quick-connect Z

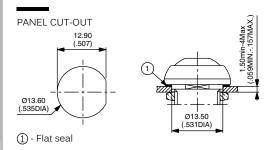
## (4)

#### **ELECTRICAL FUNCTIONS**

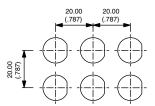




#### MOUNTING STANDARD BEZEL

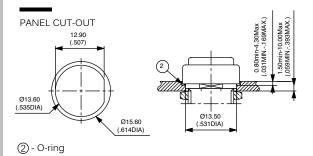




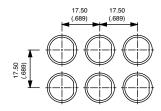




#### MOUNTING REDUCED MODEL



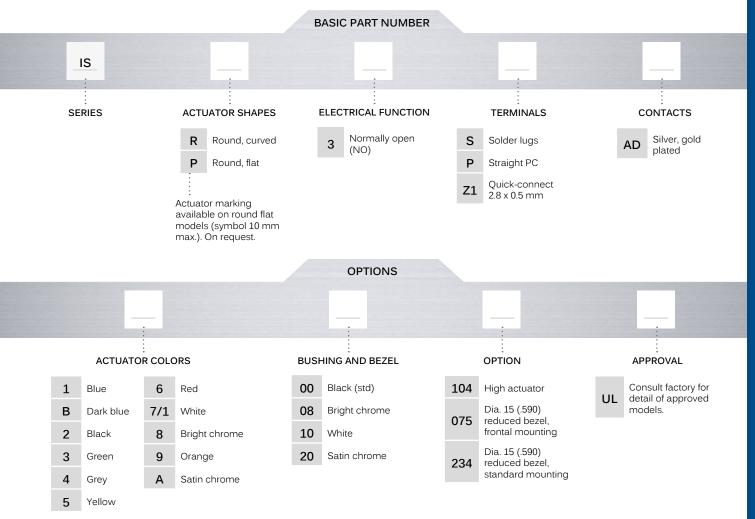
MATRIX MOUNTING



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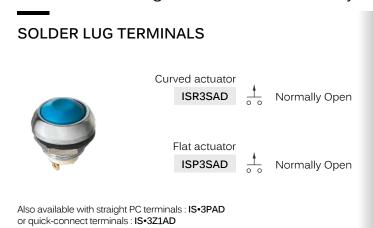
#### **ABOUT THIS SERIES**

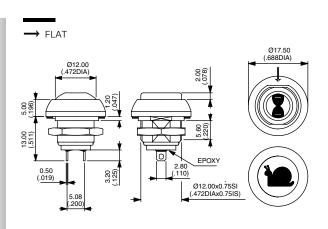
On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- 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 (P/N U5125). See "Sealing Boots" section of website.
- Mounting accessories: Standard hardware supplied: 1 flat seal. Plastic nut 17 mm (.669) across flats, thickness 4 mm (.157) available on request. Part number U4248.



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#### **ACTUATOR COLORS**

BASIC P/N

- 1 Blue
- В Dark blue
- 2 Black
- 3 Green
- 4 Grey
- 5 Yellow 6 Red
- 7/1 White
- 8 Bright chrome
- 9 Orange
- Satin chrome

#### **BUSHING AND BEZEL**

BASIC P/N



White 10

20 Satin chrome



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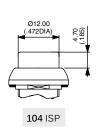


104 High actuator

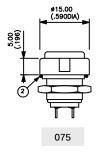
075 Dia. 15 (.590) reduced bezel, mounting of the switch

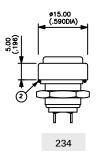
from the front into a threaded panel cut-out

234 Dia. 15 (.590) reduced bezel, standard mounting









#### AGENCY APPROVAL



UL

Availability: consult factory for details of approved models.

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

#### **EXAMPLE OF CUSTOM SWITCH**



ISR3FADB22X1248-01

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