

# IZ series

Rear mounted sealed pushbutton switches •  
bushing Ø 16 mm • metal • momentary



## DISTINCTIVE FEATURES

Rear mounting for easier installation  
Fixed or variable panel thickness  
Screw version available up to 4 A  
Sealed to IP67  
Illuminated or non-illuminated



## ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing : IP67 according to IEC 60529
- Shock resistance : 100 g according to IEC 512-4, test 6c
- Vibration resistance : 10-500Hz - 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 :
  - Gold plated silver contacts (code 4) : 200 mA 48 VDC
  - Silver contacts (code 2) - screw terminals : 4 A 48 VDC
- Electrical life at full load : 500,000 cycles
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1 GΩ min. at 500 VDC
- Dielectric strength : 1,000 Vrms 50 Hz



### LED COMPONENT SPECIFICATIONS

| LED color          | Forward current | Typ. forward voltage       | Max. forward voltage |
|--------------------|-----------------|----------------------------|----------------------|
| Super red (LOS)    | 20 mA           | 2.1 V                      | 2.3 V                |
| Yellow (LOY)       | 20 mA           | 2.1 V                      | 2.3 V                |
| Green (LOG)        | 20 mA           | 2.1 V                      | 2.3 V                |
| Blue (LOB)         | 20 mA           | 3.2 V                      | 3.8 V                |
| White (LOW)        | 20 mA           | 3.35 V                     | 4.25 V               |
| Red/green (LSG)    | 20 mA           | Red: 1.95 V / green: 2.1 V | 2.5 V                |
| Yellow/green (LYG) | 20 mA           | Yellow: 2 V / green: 2.1 V | 2.5 V                |

A resistor must be series-connected by the user.  
Resistor value =  $\frac{\text{supply voltage} - \text{LED forward voltage}}{\text{LED forward current}}$

LED forward current

On flying lead versions, the LED resistor can be integrated by APEM on request.

The company reserves the right to change specifications without notice.

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## GENERAL SPECIFICATIONS

- Panel thickness :
  - IZM : 3 mm (.118) max.
  - IZN : 4 mm (.157) max.
- Total travel : 1.8 mm (.070) ± 0.3 mm
- Typical operating force : 6 N ± 2 N
- Low level or mechanical life : 1,000,000 cycles
- Torque : IZN : 1 Nm max.  
IZM : 0.7 Nm max. applied to nut
- Soldering : 320 °C (608 °F) max. for 3 sec.



## MATERIALS

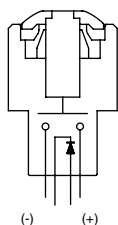
- Case : thermoplastic UL94-V0
- Plunger : polyamide
- Bushing/bezel : brass, nickel plated
- Contacts :
  - 4 : silver, gold plated
  - 2 : silver (screw terminals)
- Multi-wire leads AWG20, section 0.6 mm<sup>2</sup>
- LED wire : AWG26, section 0.12 mm<sup>2</sup>
- Lens : polycarbonate
- Terminal seal : epoxy (except screw terminals)

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



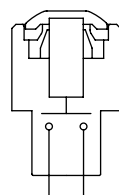
## ELECTRICAL FUNCTIONS

### ILLUMINATED MODELS



Function 3 (NO)

### NON-ILLUMINATED MODELS

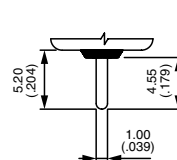


Function 3 (NO)

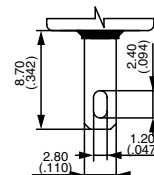


## TERMINALS

### MODELS FOR VARIABLE PANEL THICKNESS (IZM)

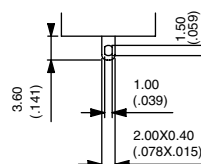


Straight P

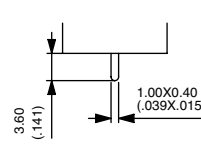


Quick-connect Z

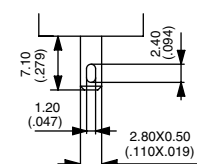
### MODELS FOR FIXED PANEL THICKNESS (IZN)



Solder lug S



Straight P

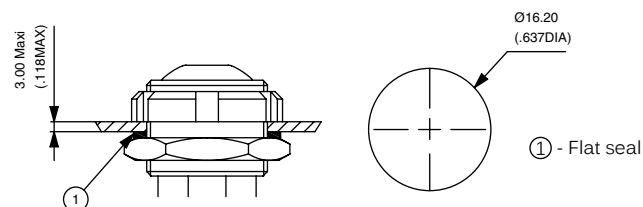


Quick-connect Z

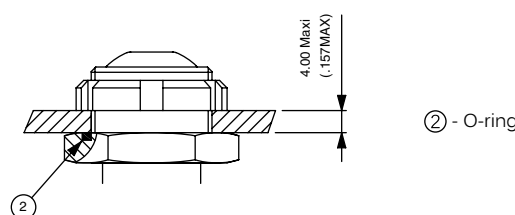


## MOUNTING

### PANEL CUT-OUT

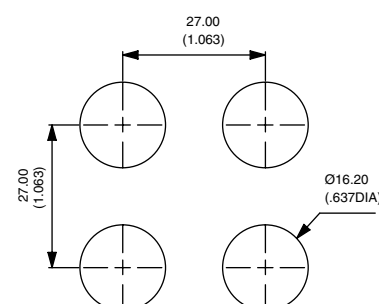


IZM (adjustable hex nut)



IZN (fixed hex nut)

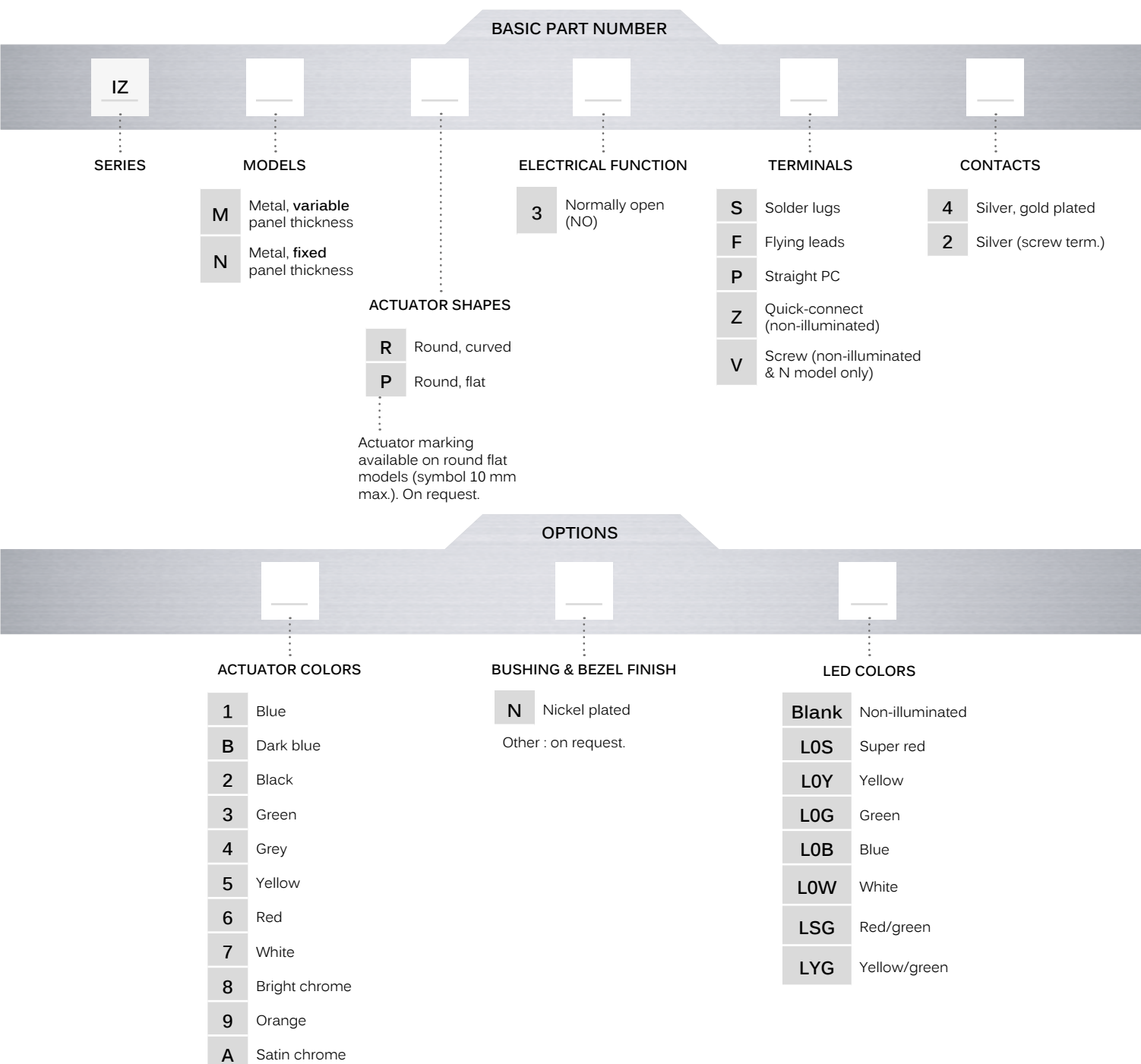
### MATRIX MOUNTING



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## BUILD YOUR PART NUMBER



## ABOUT THIS SERIES

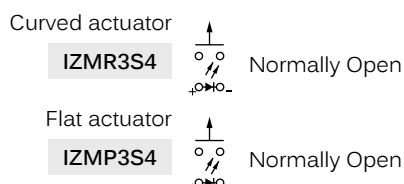
On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- ⚠ **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. See "Sealing Boots" section of website.
- 🔧 **Mounting accessories** : Standard hardware supplied :
  - IZM : 1 castellated nickel plated brass nut U6915 + 1 silicone flat seal + 1 hex nut 19 mm (.748) across flats 10-621.
  - IZN : 1 castellated nickel plated brass nut U6915 + 1 O-ring
 Wrench tool available under P/N U4028. Order separately

# IZ series

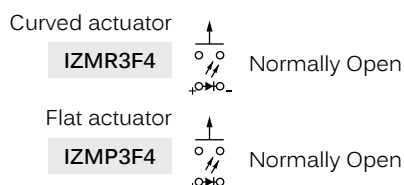
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## VARIABLE PANEL THICKNESS ILLUMINATED - SOLDER LUG TERMINALS



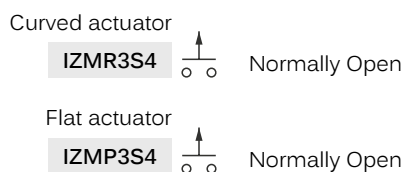
Also available with straight PC terminals : **IZM•3P4**.  
LED color is indicated by the bottom of the switch.

## VARIABLE PANEL THICKNESS ILLUMINATED - FLYING LEAD TERMINALS



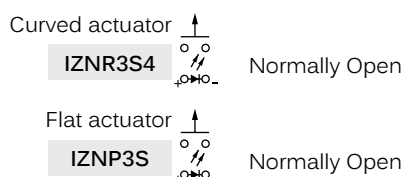
Wire colors : black : NO contact, red : LED anode (+), blue : LED cathode (-)

## VARIABLE PANEL THICKNESS NON-ILLUMINATED - SOLDER LUG TERMINALS

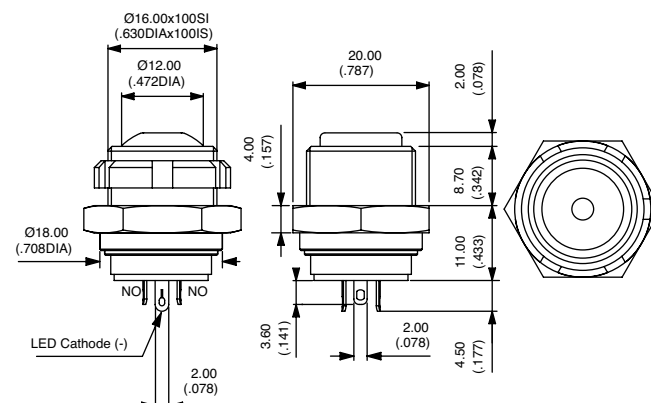
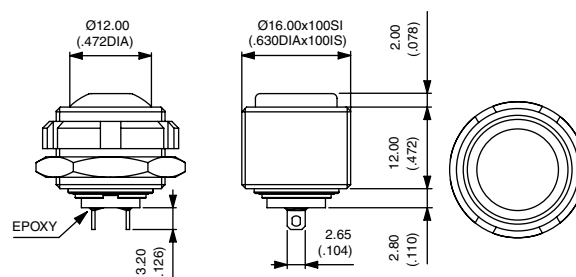
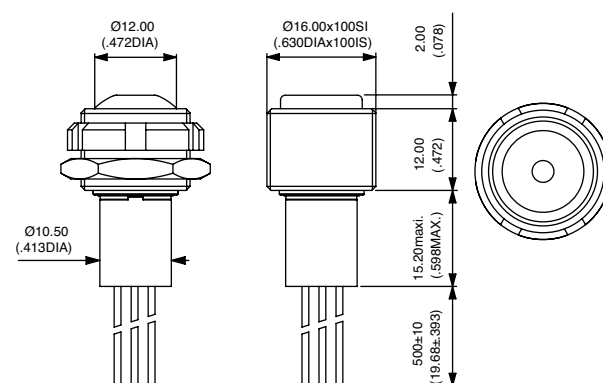
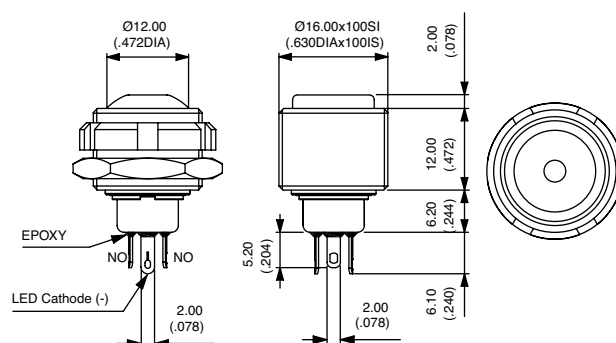


Also available with straight PC terminals : **IZM•3P4**  
and quick-connect terminals : **IZM•3Z4**.

## FIXED PANEL THICKNESS ILLUMINATED - SOLDER LUG TERMINALS



Also available with straight PC terminals : **IZN•3P4**.  
LED colour is indicated by the bottom of the switch.



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## FIXED PANEL THICKNESS ILLUMINATED - FLYING LEAD TERMINALS



|                 |  |               |
|-----------------|--|---------------|
| Curved actuator |  | Normally Open |
| Flat actuator   |  | Normally Open |

Wire colors : black : NO contact, red : LED anode (+), blue : LED cathode (-)

## FIXED PANEL THICKNESS NON-ILLUMINATED - SOLDER LUG TERMINALS



|                 |  |               |
|-----------------|--|---------------|
| Curved actuator |  | Normally Open |
| Flat actuator   |  | Normally Open |

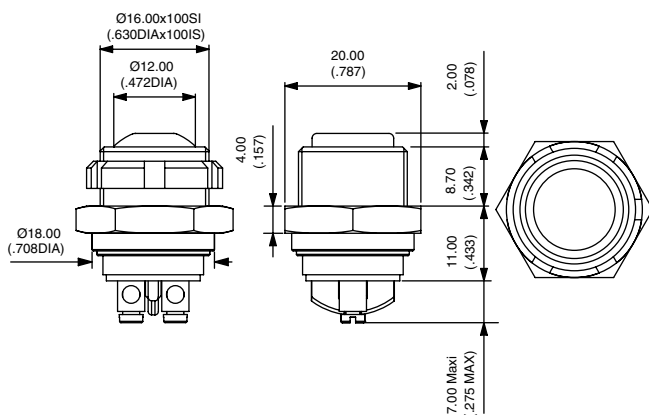
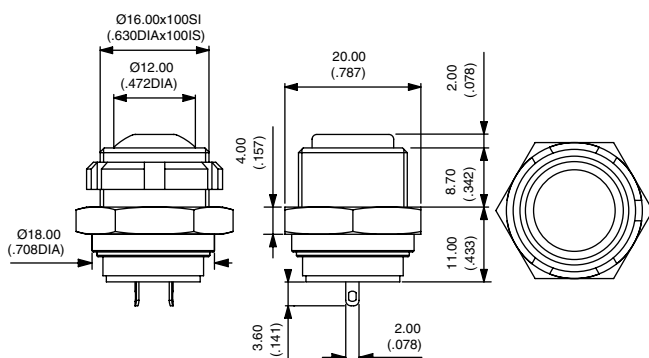
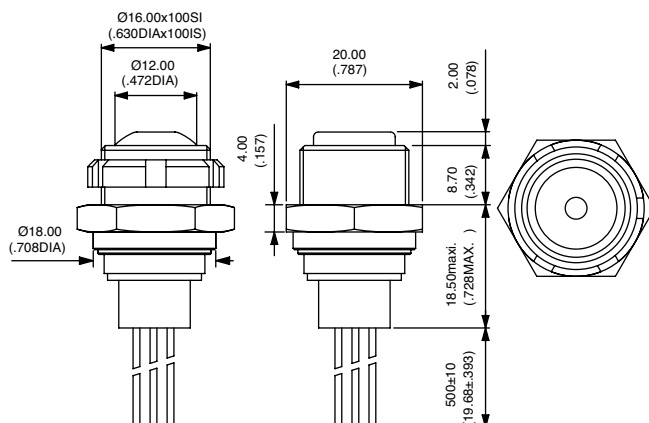
Also available with straight PC terminals : IZN•3P4  
and quick-connect terminals : IZN•3Z4.

## FIXED PANEL THICKNESS NON-ILLUMINATED - SCREW TERMINALS



|                 |  |               |
|-----------------|--|---------------|
| SILVER CONTACTS |  |               |
| Curved actuator |  | Normally Open |
| Flat actuator   |  | Normally Open |

For non-illuminated FLYING LEAD versions, refer to illuminated models  
. Non-illuminated have 2 wires only.



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## ACTUATOR COLORS



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

## BUSHING AND BEZEL



- N Nickel plated (standard)
- Other : on request.

## LED COLORS



- Blank Non-illuminated
- LOS Super Red
- LOY Yellow
- LOG Green
- LOB Blue
- LOW White
- LSG Red/green
- LYG Yellow/green

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Apem:](#)

[IZNR3P422](#) [IZMP3F42NL0Y](#)