

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 = $\frac{\text{supply voltage} - \text{LED forward voltage}}{\text{LED forward current}}$

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.

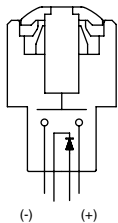
MATERIALS

- 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 mm²
- LED wire : AWG26, section 0.12 mm²
- 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.

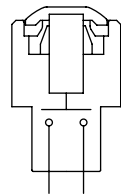
ELECTRICAL FUNCTIONS

ILLUMINATED MODELS



Function 3 (NO)

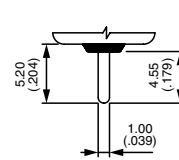
NON-ILLUMINATED MODELS



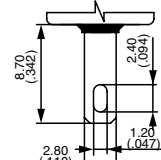
Function 3 (NO)

TERMINALS

MODELS FOR VARIABLE PANEL THICKNESS (IZM)

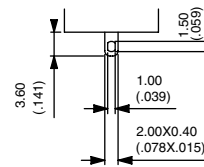


Straight P

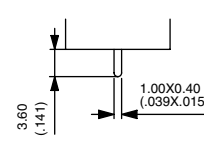


Quick-connect Z

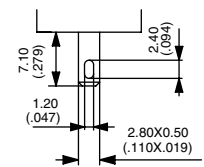
MODELS FOR FIXED PANEL THICKNESS (IZN)



Solder lug S



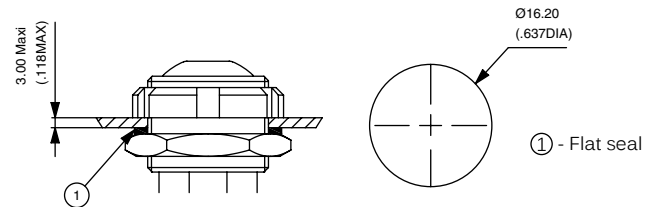
Straight P



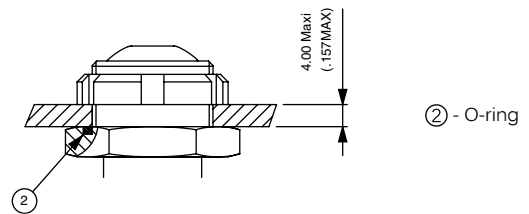
Quick-connect Z

MOUNTING

PANEL CUT-OUT

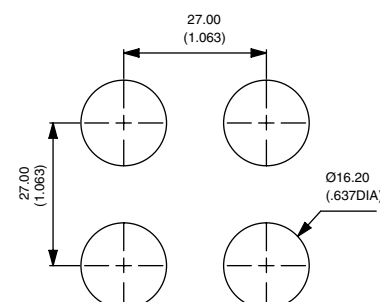


IZM (adjustable hex nut)



IZN (fixed hex nut)

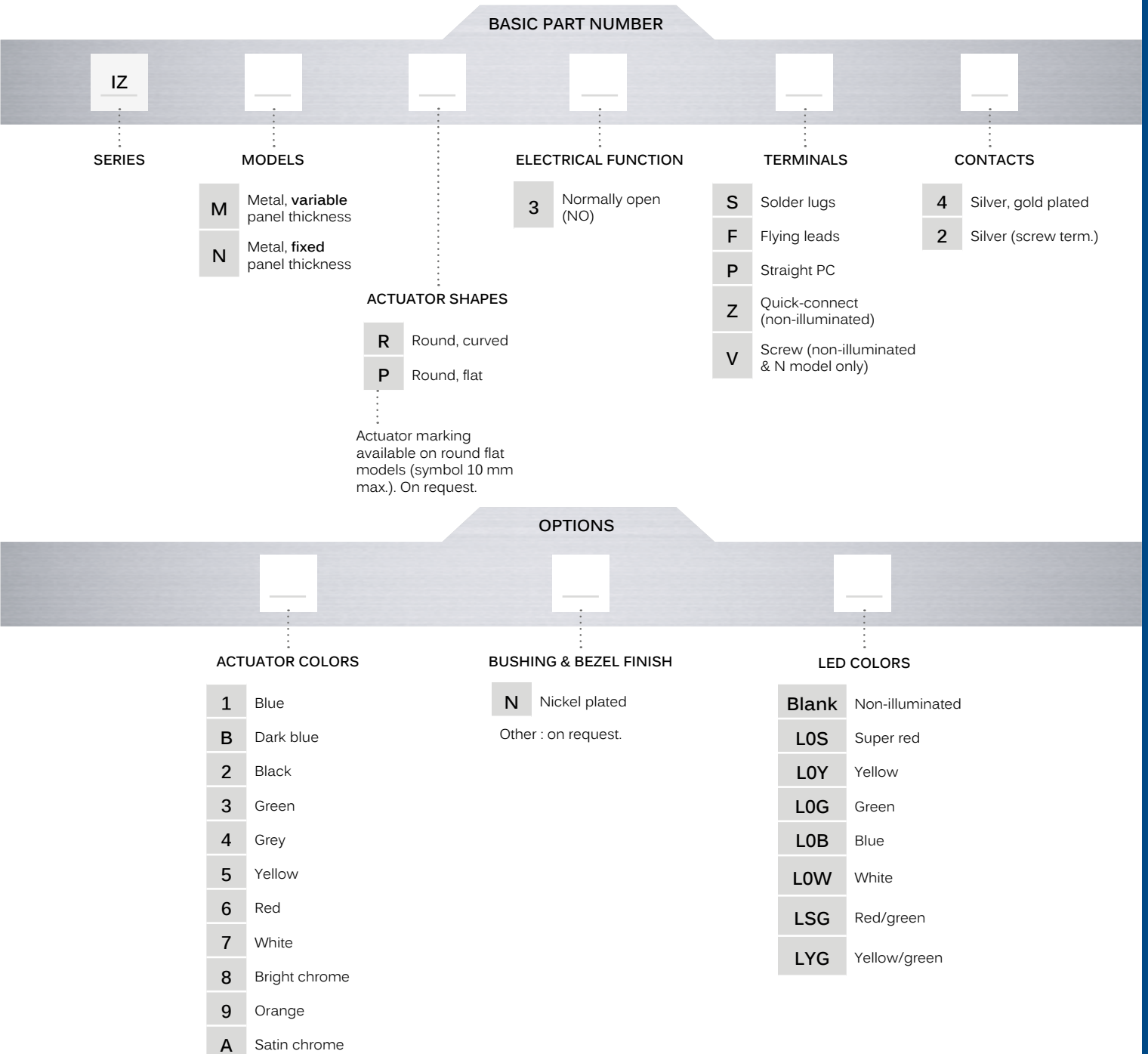
MATRIX MOUNTING



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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

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VARIABLE PANEL THICKNESS ILLUMINATED - SOLDER LUG TERMINALS



- Curved actuator
IZMR3S4 Normally Open
- Flat actuator
IZMP3S4 Normally Open

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



- Curved actuator
IZMR3F4 Normally Open
- Flat actuator
IZMP3F4 Normally Open

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

VARIABLE PANEL THICKNESS NON-ILLUMINATED - SOLDER LUG TERMINALS



- Curved actuator
IZMR3S4 Normally Open
- Flat actuator
IZMP3S4 Normally Open

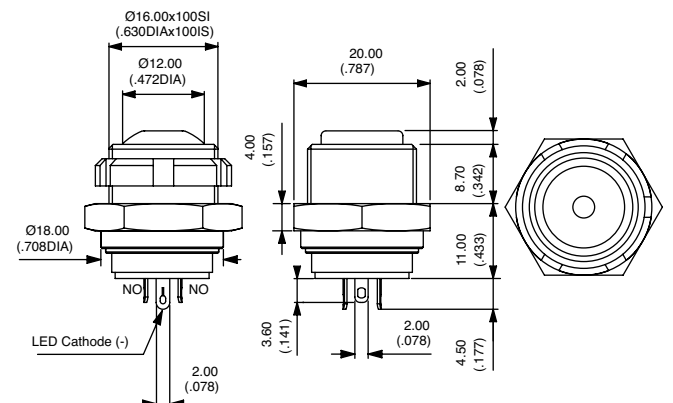
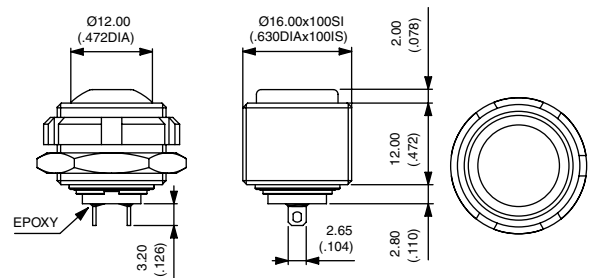
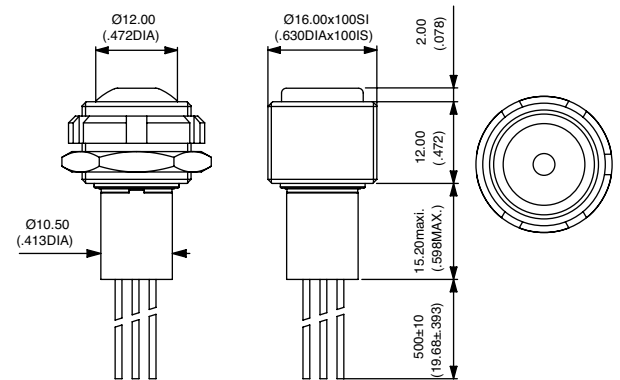
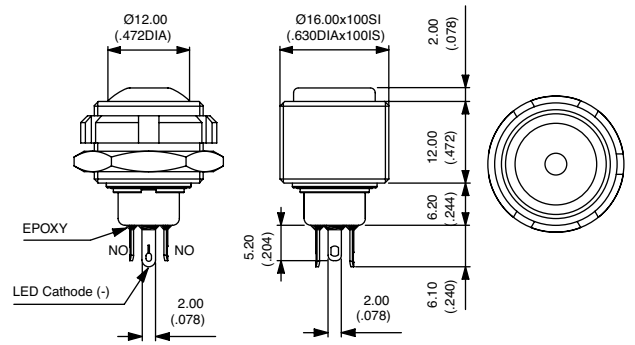
Also available with straight PC terminals : **IZM•3P4**
and quick-connect terminals : **IZM•3Z4**.

FIXED PANEL THICKNESS ILLUMINATED - SOLDER LUG TERMINALS



- Curved actuator
IZNR3S4 Normally Open
- Flat actuator
IZNP3S Normally Open

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
IZNR3F4  Normally Open
- Flat actuator
IZNP3F4  Normally Open

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

FIXED PANEL THICKNESS NON-ILLUMINATED - SOLDER LUG TERMINALS





- Curved actuator
IZNR3S4  Normally Open
- Flat actuator
IZNP3S4  Normally Open

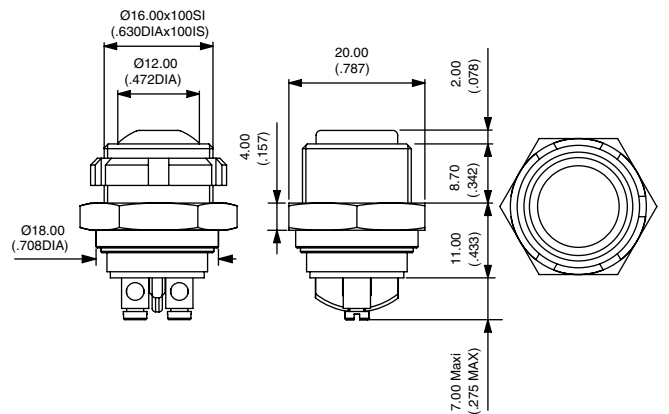
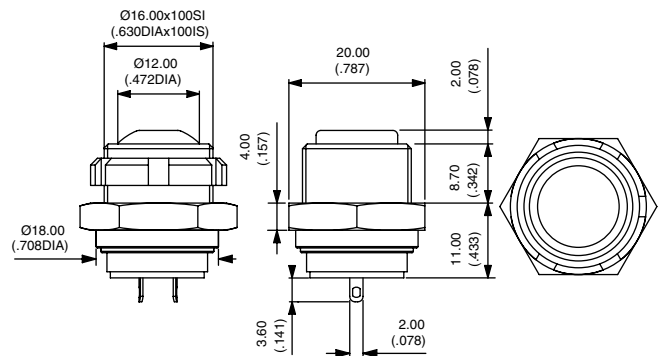
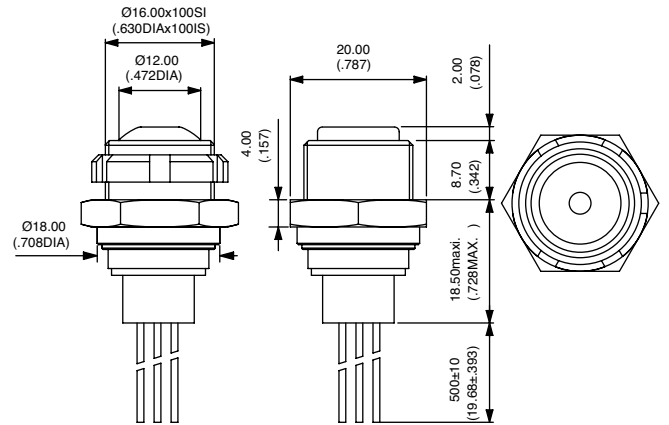
Also available with straight PC terminals : **IZN•3P4**
and quick-connect terminals : **IZN•3Z4**.

FIXED PANEL THICKNESS NON-ILLUMINATED - SCREW TERMINALS



- SILVER CONTACTS
- Curved actuator
IZNR3V2  Normally Open
 - Flat actuator
IZNP3V2  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