

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.

IZ series

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

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.

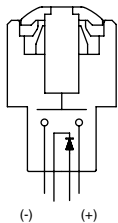
MATERIALS

- 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.

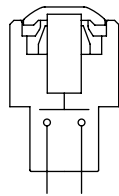
ELECTRICAL FUNCTIONS

ILLUMINATED MODELS



Function 3 (NO)

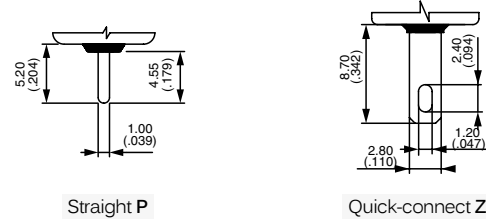
NON-ILLUMINATED MODELS



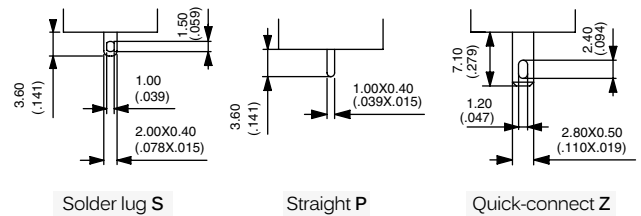
Function 3 (NO)

TERMINALS

MODELS FOR VARIABLE PANEL THICKNESS (IZM)

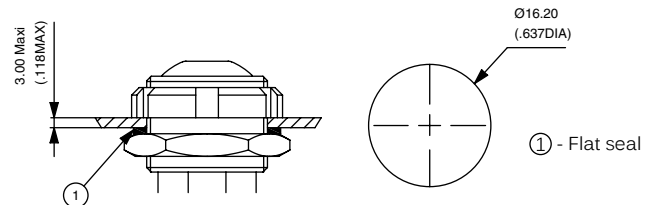


MODELS FOR FIXED PANEL THICKNESS (IZN)

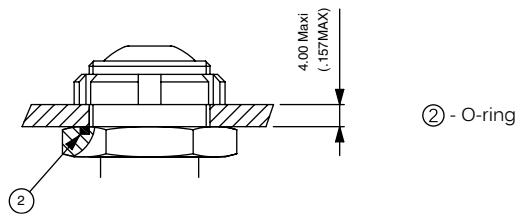


MOUNTING

PANEL CUT-OUT

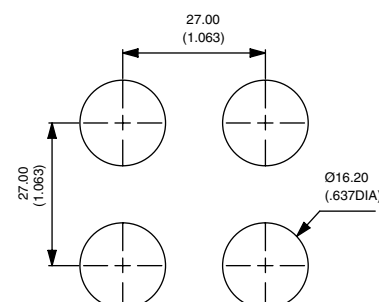


IZM (adjustable hex nut)



IZN (fixed hex nut)

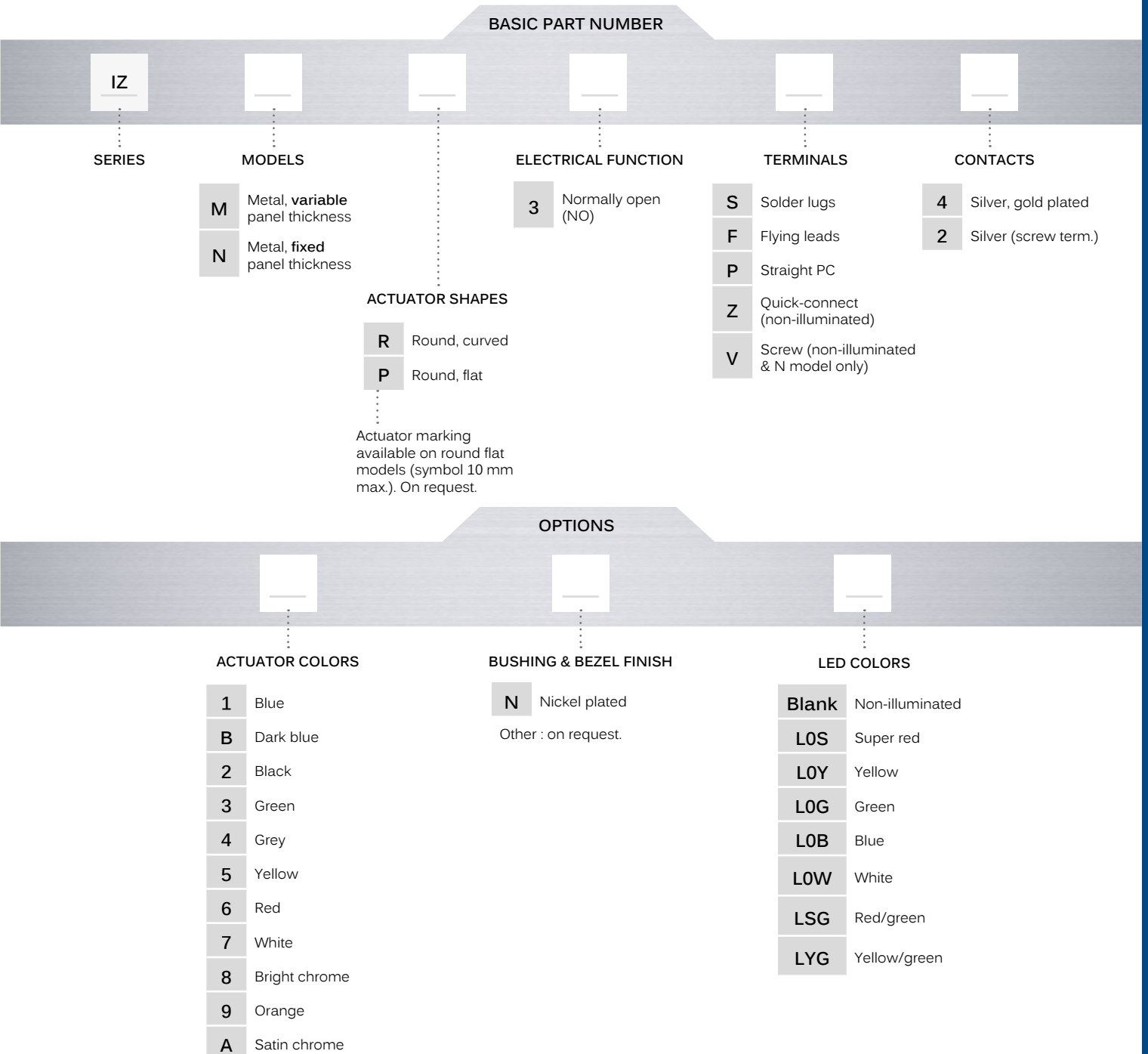
MATRIX MOUNTING



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



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

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

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

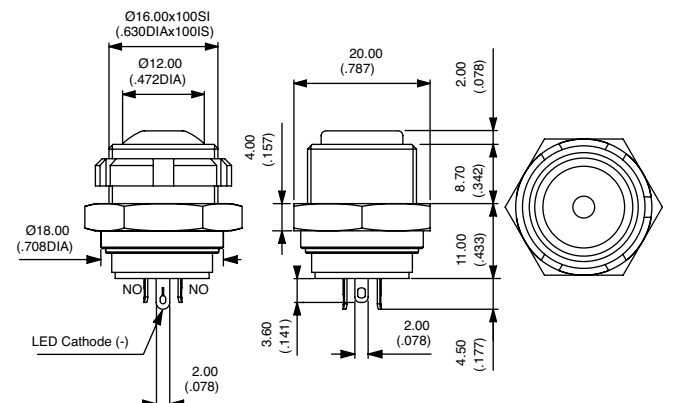
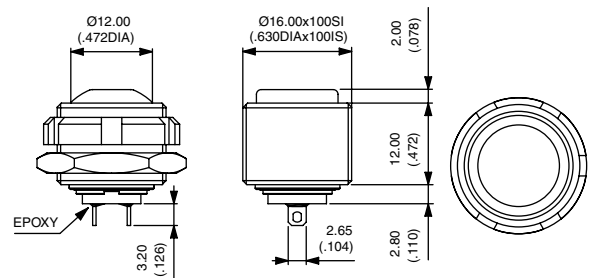
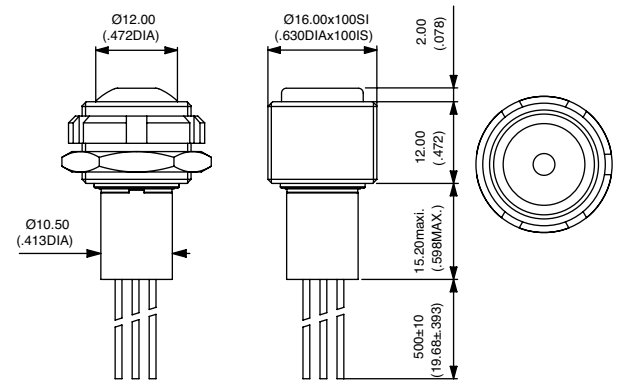
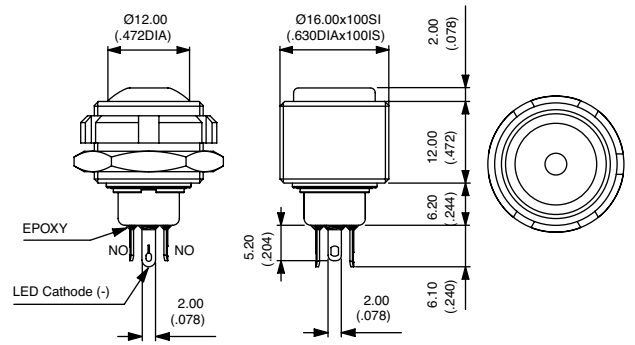
Also available with straight PC terminals : **IZM•3P4**
and quick-connect terminals : **IZM•3Z4**.

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.



Rear mounted sealed pushbutton switches •
bushing \varnothing 16 mm • metal • momentary

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

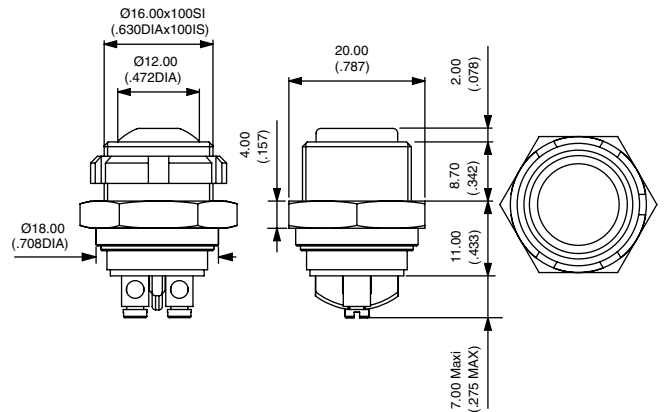
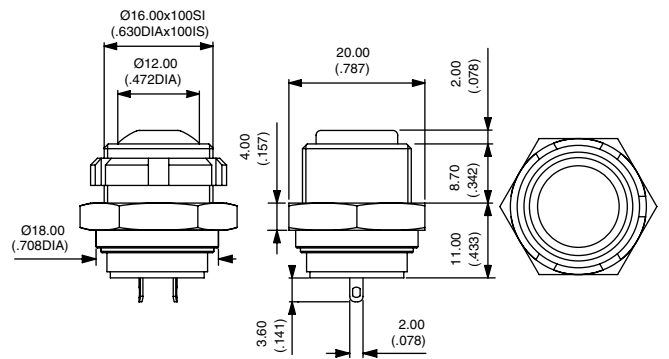
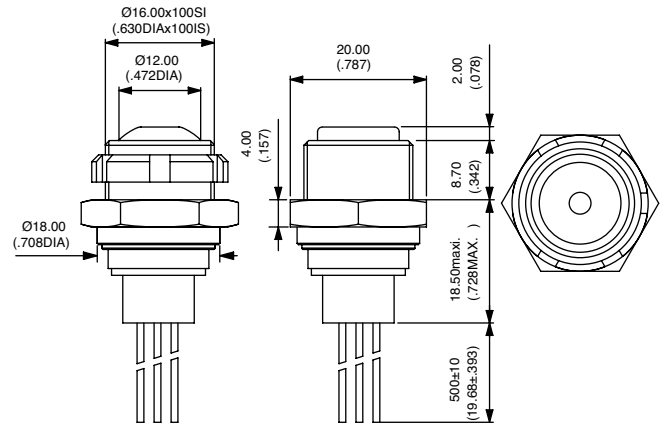
Also available with straight PC terminals : **IZN•3P4**
and quick-connect terminals : **IZN•3Z4**.

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.



IZ series

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

ACTUATOR COLORS



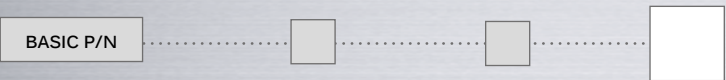
- 1 Blue
- B Dark blue
- 2 Black
- 3 Green
- 4 Grey
- 5 Yellow
- 6 Red
- 7 White
- 8 Bright chrome
- 9 Orange
- A Satin chrome

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