IZ series

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

Distinctive features and specifications

B1

❑ **Rear mounting for easier installation**

❑ **Momentary metal models**

❑ **Fixed or variable panel thickness**

❑ **Screw version available up to 4A**

❑ **Sealed to IP67**

❑ **Illuminated or non-illuminated**

❑ **Flat actuator for optional marking**

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

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - Gold plated silver contacts (code 4) : 200mA 48VDC
  - Silver contacts (code 2) - screw terminals : 4A 48VDC
- Electrical life at full load : 500.000 cycles
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1 GΩ min. at 500VDC
- Dielectric strength : 1.000 Vrms 50 Hz

LED COMPONENT SPECIFICATIONS			
LED colour	Forward current	Typ. forward voltage	Max. forward voltage
Super red (L0S)	20mA	2,1V	2,3V
Yellow (L0Y)	20mA	2,1V	2,3V
Green (L0G)	20mA	2,1V	2,3V
Blue (L0B)	20mA	3,2V	3,8V
White (L0W)	20mA	3,35V	4,25V

A resistor must be series-connected by the user.

Resistor value = $\dfrac{\text{supply voltage - LED forward voltage}}{\text{LED forward current}}$

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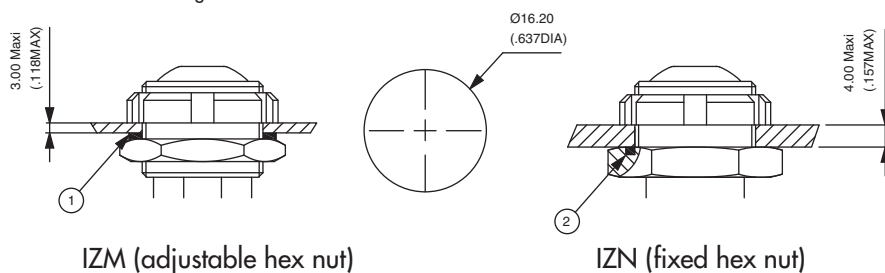
GENERAL SPECIFICATIONS

- Panel thickness :
  - IZM : 3 mm (.118) max.
  - IZN : 4 mm (.157) max.
- Total travel : 1,8 mm (.070) +/- 0,3 mm
- Typical operating force : 6N +/- 2N
- Low level or mechanical life : 1.000.000 cycles
- Torque : IZN : 1 Nm max.
  IZM : 0,7 Nm max. applied to nut
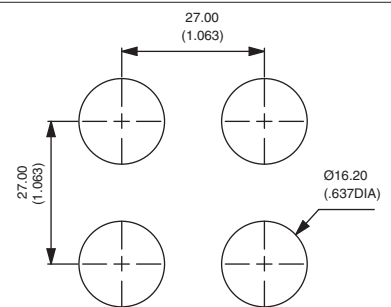- Soldering : 320°C max. for 3 sec.

MATERIALS

- Case : thermoplastic UL94-V0
- Plunger : polyamide
- Bushing/bezel : brass, nickel plated
- Contacts :
  4 : silver, gold plated
  2 : silver (screw terminals)
- Multi-wire lead AWG20, section 0,6 mm²
- LED wire : AWG26, section 0,12 mm²
- Lens : polycarbonate
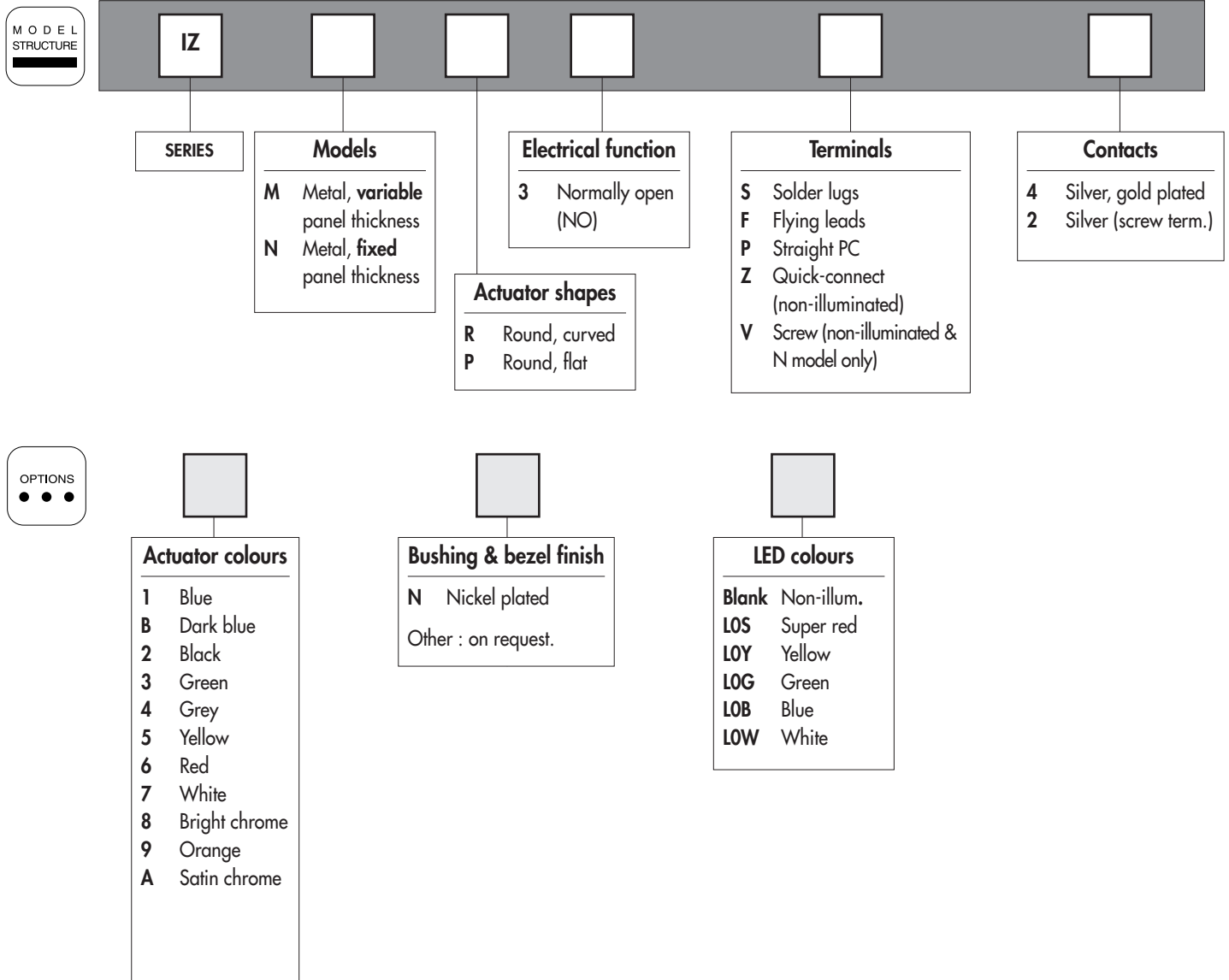- Terminal seal : epoxy (except screw terminals)

PANEL CUT-OUT

① Flat seal ② O-ring

3.00 Maxi (.118MAX)

Ø16.20 (.637DIA)

4.00 Maxi (.157MAX)

IZM (adjustable hex nut)   IZN (fixed hex nut)

MATRIX MOUNTING

27.00 (1.063)

27.00 (1.063)

Ø16.20 (.637DIA)

MODEL STRUCTURE

| IZ | | | | | | |

| SERIES | Models | Electrical function | Terminals | Contacts |

Models

M Metal, **variable** panel thickness
N Metal, **fixed** panel thickness

Actuator shapes

R Round, curved
P Round, flat

Electrical function

3 Normally open (NO)

Terminals

S Solder lugs
F Flying leads
P Straight PC
Z Quick-connect (non-illuminated)
V Screw (non-illuminated & N model only)

Contacts

4 Silver, gold plated
2 Silver (screw term.)

OPTIONS

Actuator colours

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 & bezel finish

N Nickel plated

Other : on request.

LED colours

Blank Non-illum**.**
L0S Super red
L0Y Yellow
L0G Green
L0B Blue
L0W White

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 bracketed numbers.

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

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 U4116.
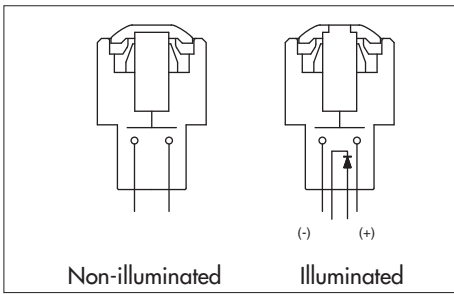- IZN : 1 castellated nickel plated brass nut U6915 + 1 O-ring

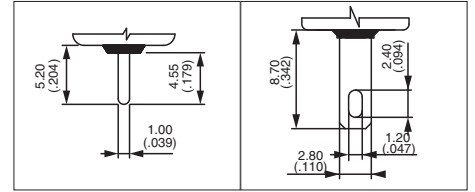**Packaging unit** : 25 pieces for flying lead models - 40 pieces for other models

IZ series

Rear mounted sealed pushbutton switches - bushing Ø 16 mm - metal - momentary
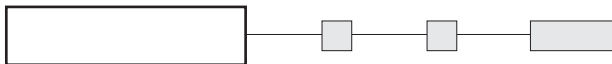
For variable panel thickness : IZM

Non-illuminated   Illuminated

(-)   (+)

- Five LED colours
- Tin plated LED terminals
- Gold plated contacts

5.20 (.204)   4.55 (.179)   1.00 (.039)

8.70 (.342)   2.40 (.094)   1.20 (.047)   2.80 (.110)

MODEL STRUCTURE

Actuator marking available on IZMP models (symbol 10 mm max.). On request.

Illuminated - solder lug terminals

Curved actuator
IZMR3S4   Normally Open

Flat actuator
IZMP3S4   Normally Open
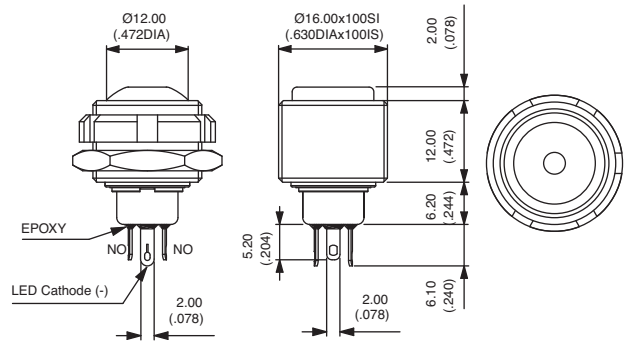
Also available with straight PC terminals : **IZM•3P4**.
LED colour is indicated by the bottom of the switch.

Ø12.00 (.472DIA)

Ø16.00x100SI (.630DIAx100IS)   2.00 (.078)   12.00 (.472)   6.20 (.244)   6.10 (.240)

EPOXY

NO   NO

LED Cathode (-)   2.00 (.078)   5.20 (.204)   2.00 (.078)
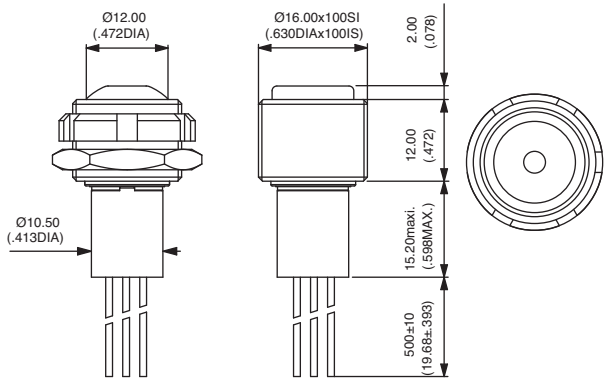

Illuminated - flying lead terminals

Curved actuator
IZMR3F4   Normally Open

Flat actuator
IZMP3F4   Normally Open

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

Ø12.00 (.472DIA)

Ø16.00x100SI (.630DIAx100IS)   2.00 (.078)   12.00 (.472)

Ø10.50 (.413DIA)

15.20maxi. (.598MAX.)   500±10 (19.68±.393)
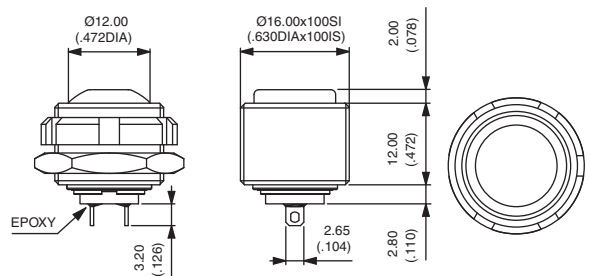

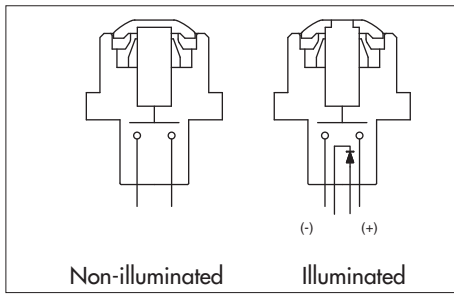### Non-illuminated - solder lug terminals

Curved actuator
IZMR3S4   Normally Open

Flat actuator
IZMP3S4   Normally Open
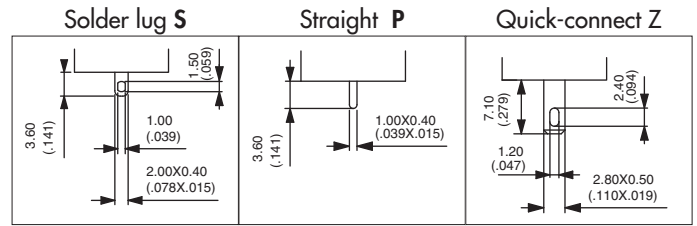
Also available with straight PC terminals :
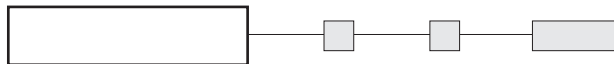**IZM•3P4** and quick-connect terminals : **IZM•3Z4**.

Ø12.00 (.472DIA)

Ø16.00x100SI (.630DIAx100IS)   2.00 (.078)   12.00 (.472)

EPOXY

3.20 (.126)   2.65 (.104)   2.80 (.110)

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

IZ series

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

For fixed panel thickness : IZN

- Five LED colours
- Tin plated LED terminals

Solder lug **S**

Straight **P**

Quick-connect **Z**

MODEL STRUCTURE

Actuator marking available on IZNP models (symbol 10 mm max.). On request.
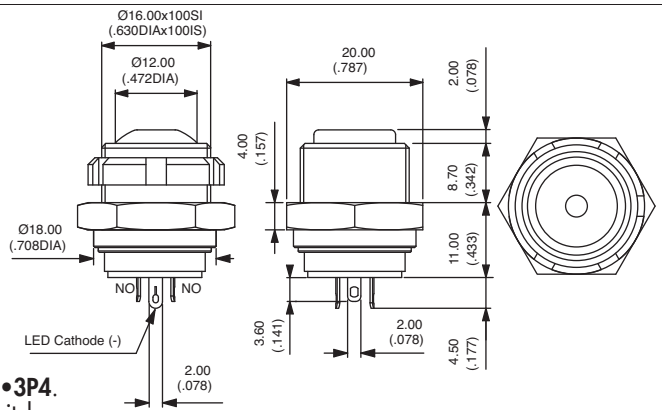

Illuminated - solder lug terminals

GOLD PLATED CONTACTS

Curved actuator
IZNR3S4 Normally Open

Flat actuator
IZNP3S4 Normally Open

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

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
20.00 (.787)
2.00 (.078)
4.00 (.157)
8.70 (.342)
Ø18.00 (.708DIA)
11.00 (.433)
NO NO
LED Cathode (-)
3.60 (.141)
2.00 (.078)
4.50 (.177)
2.00 (.078)

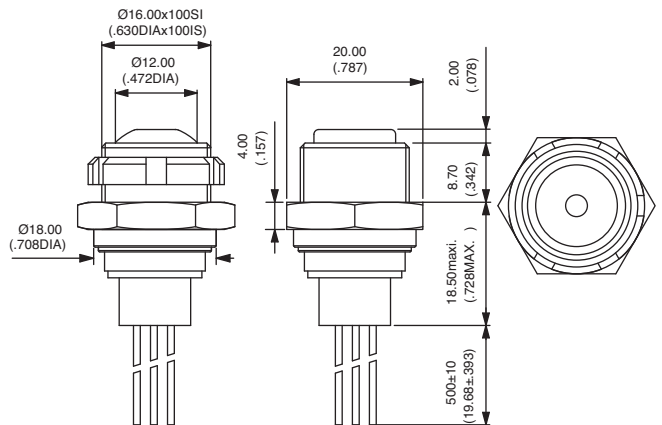## Illuminated - sealed flying lead terminals

GOLD PLATED CONTACTS

Curved actuator
IZNR3F4 Normally Open

Flat actuator
IZNP3F4 Normally Open

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

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
20.00 (.787)
2.00 (.078)
4.00 (.157)
8.70 (.342)
Ø18.00 (.708DIA)
18.50maxi. (.728MAX.)
500±10 (19.68±.393)

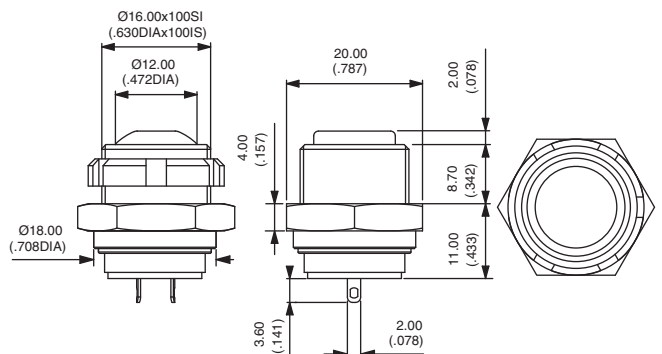## Non-illuminated - solder lug terminals

GOLD PLATED CONTACTS

Curved actuator
IZNR3S4 Normally Open

Flat actuator
IZNP3S4 Normally Open

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

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
20.00 (.787)
2.00 (.078)
4.00 (.157)
8.70 (.342)
Ø18.00 (.708DIA)
11.00 (.433)
3.60 (.141)
2.00 (.078)

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

IZ series

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

For fixed panel thickness : IZN - options

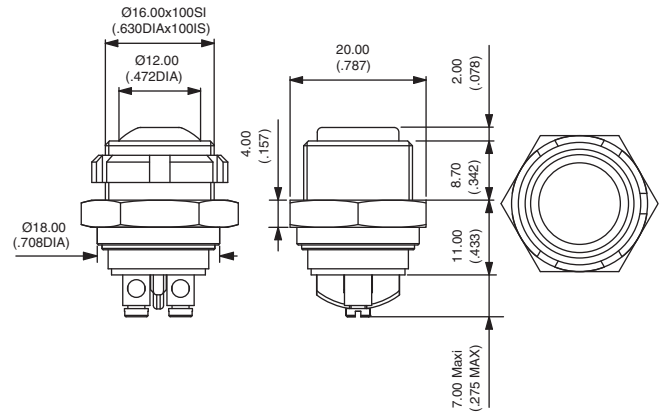### Non-illuminated - screw terminals

SILVER CONTACTS

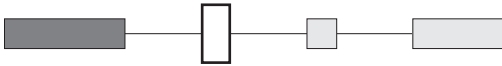Curved actuator
IZNR3V2   Normally open

Flat actuator
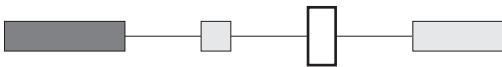**IZNP3V2**   Normally open

Ø16.00x100SI
(.630DIAx100IS)

Ø12.00
(.472DIA)

Ø18.00
(.708DIA)

20.00
(.787)

4.00
(.157)

2.00
(.078)

8.70
(.342)

11.00
(.433)

7.00 Maxi
(.275 MAX)

ACTUATOR COLOURS

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 COLOURS

N : nickel plated (standard)
Other : on request.

LED COLOURS
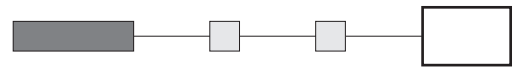
Blank : non-illuminated
LOS : super red - **LOY** : yellow - **LOG** : green
LOB : blue - **LOW** : white

IZ series

Rear mounted sealed pushbutton switches - bushing Ø 16 mm - metal - latching

Distinctive features and specifications

❑ **Rear mounting for easier installation**

❑ **Latching action metal models**

❑ **Fixed or variable panel thickness**

❑ **Sealed to IP67**

❑ **Illuminated or non-illuminated**

❑ **Flat actuator for optional marking**

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
- Robustness (non-illuminated) : IK06 according to EN 50102 (1 joule)
- Operating temperature : -40°C to +85°C

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  100mA 24VDC - 200.000 cycles
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1 GΩ min. at 500VDC
- Dielectric strength : 1.500 Vrms between terminals
  1.000 Vrms between terminals and frame

LED COMPONENT SPECIFICATIONS			
LED colour	Forward current	Typ. forward voltage	Max. forward voltage
Super red (L0S)	20mA	1,95V	1,95V
Yellow (L0Y)	20mA	2V	2,05V
Green (L0G)	20mA	2,1V	2,5V
Blue (L0B)	20mA	3,2V	4V

A resistor must be series-connected by the user.

Resistor value = $\dfrac{\text{supply voltage} - \text{LED forward voltage}}{\text{LED forward current}}$

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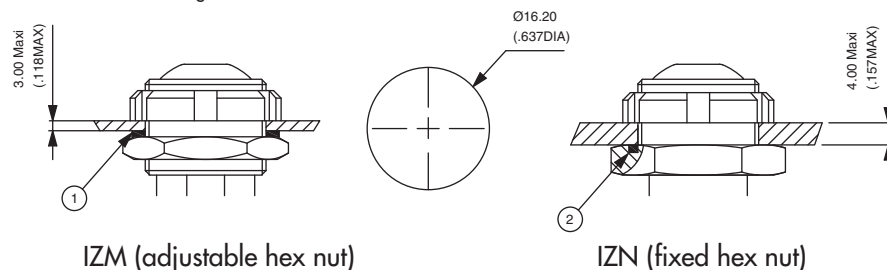
GENERAL SPECIFICATIONS

- Panel thickness :
  - IZM : 3 mm (.118) max.
  - IZN : 4 mm (.157) max.
- Total travel : 2,5 mm (.098) +/-0,3 mm
- Typical operating force : 5N +/- 2N
- Low level or mechanical life :
  200.000 cycles
- Torque : IZN : 1 Nm max.
  IZM : 0,7 Nm max. applied to nut
- Soldering : 320°C max. for 3 sec.

MATERIALS

- Case : thermoplastic UL94-V0
- Plunger : polyamide
- Bushing/bezel : brass, nickel plated
- Contacts : silver, gold plated
- Multi-wire lead AWG20, section 0,6 mm^2
- LED wire : AWG26, section 0,12 mm^2
- Lens : polycarbonate
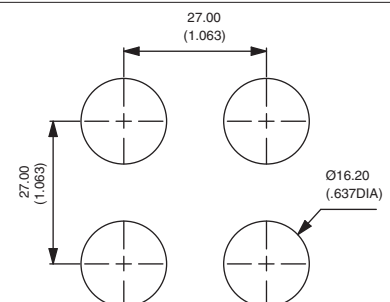- Terminal seal : epoxy

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PANEL CUT-OUT

① Flat seal   ② O-ring

3.00 Maxi (.118MAX)

Ø16.20 (.637DIA)

4.00 Maxi (.157MAX)

IZM (adjustable hex nut)

IZN (fixed hex nut)

MATRIX MOUNTING
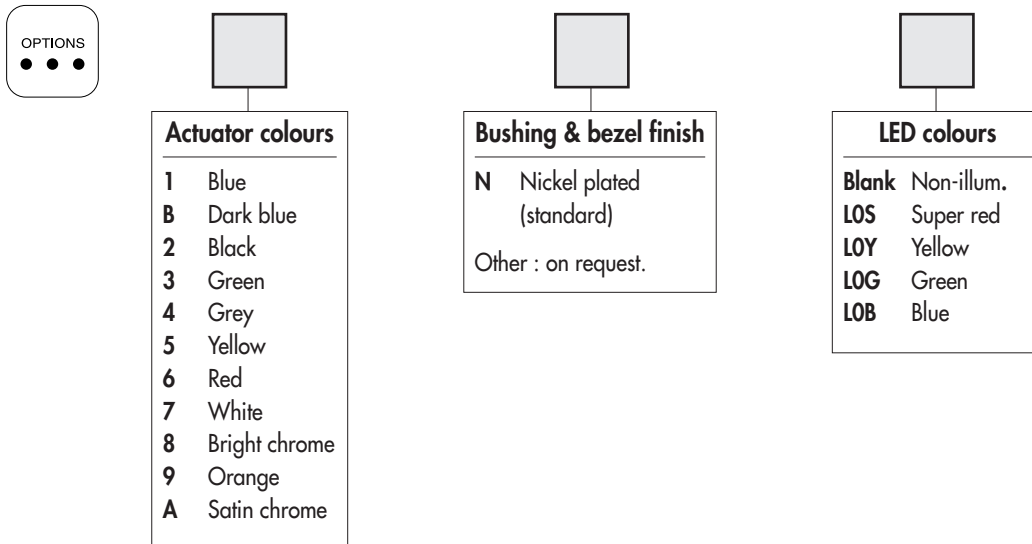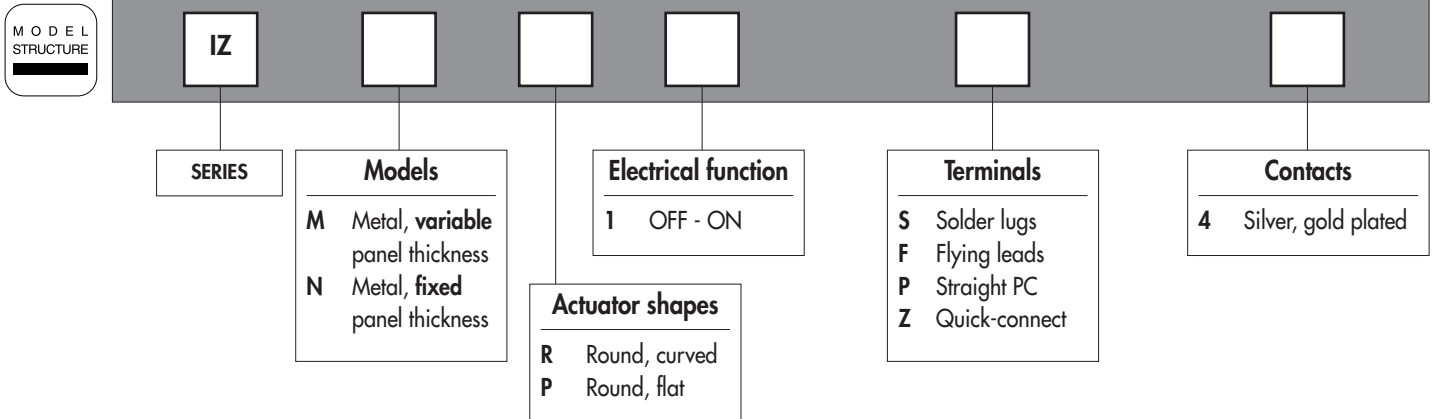
27.00 (1.063)

27.00 (1.063)

Ø16.20 (.637DIA)

The company reserves the right to change specifications without notice.

IZ series

Rear mounted sealed pushbutton switches - bushing Ø 16 mm - metal - latching

Overview

MODEL STRUCTURE

IZ						

SERIES	Models		Electrical function		Terminals	Contacts

Models

M Metal, **variable** panel thickness
N Metal, **fixed** panel thickness

Actuator shapes

R Round, curved
P Round, flat

Electrical function

1 OFF - ON

Terminals

S Solder lugs
F Flying leads
P Straight PC
Z Quick-connect

Contacts

4 Silver, gold plated

OPTIONS

Actuator colours

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 & bezel finish

N Nickel plated (standard)

Other : on request.

LED colours

Blank	Non-illum.
L0S	Super red
L0Y	Yellow
L0G	Green
L0B	Blue

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 bracketed numbers.

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

Mounting accessories : Standard hardware supplied :
- IZN : 1 castellated nickel plated brass nut U6915 + 1 O-ring
- IZM : 1 castellated nickel plated brass nut U6915 + 1 silicone flat seal + 1 hex nut 19 mm (.748) across flats U4116.
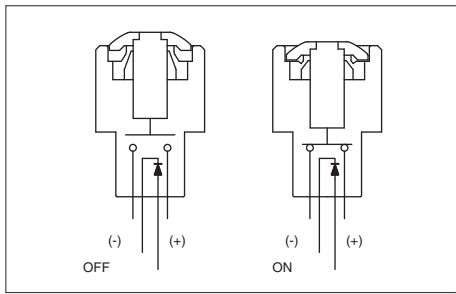
Packaging unit : 25 pieces for flying lead models - 40 pieces for other models
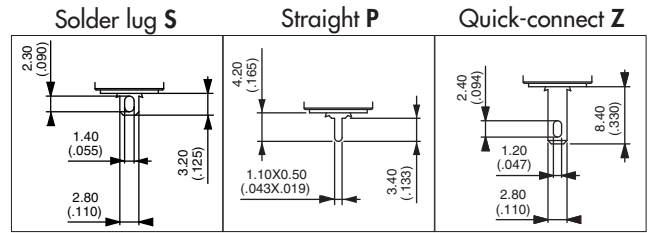
• Four LED colours
• Tin plated LED terminals
• Gold plated contacts

(-) (+)
OFF

(-) (+)
ON

Solder lug **S**

2.30 (.090)
1.40 (.055)
2.80 (.110)
3.20 (.125)

Straight **P**

4.20 (.165)
1.10X0.50 (.043X.019)
3.40 (.133)

Quick-connect **Z**

2.40 (.094)
8.40 (.330)
1.20 (.047)
2.80 (.110)

MODEL STRUCTURE

Actuator marking available on IZMP models (symbol 10 mm max.). On request.
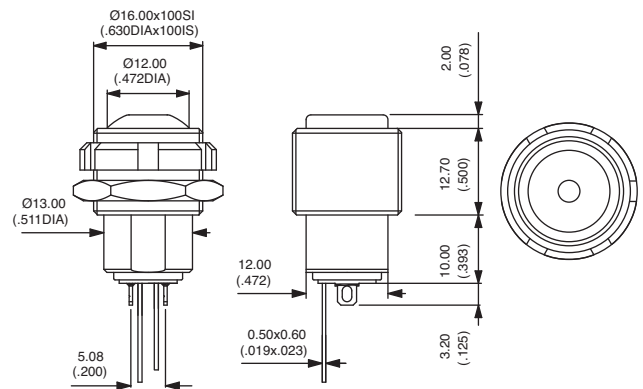
Illuminated - solder lug terminals

Curved actuator
IZMR1S4   OFF - ON

Flat actuator
IZMP1S4   OFF - ON

Also available with straight PC terminals :
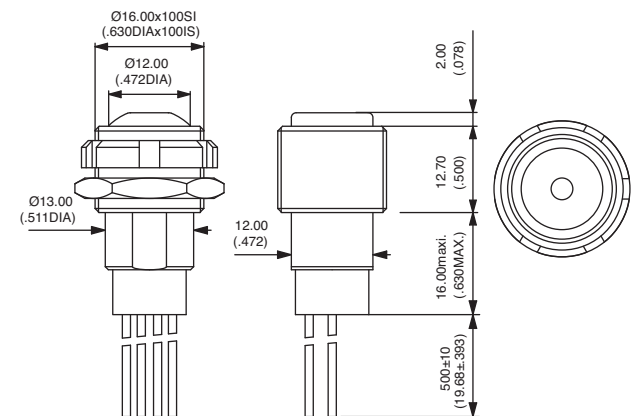**IZM•1P4** & quick-connect terminals : **IZM•1Z4**.

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø13.00 (.511DIA)
5.08 (.200)
12.00 (.472)
0.50x0.60 (.019x.023)
2.00 (.078)
12.70 (.500)
10.00 (.393)
3.20 (.125)

Illuminated - flying lead terminals
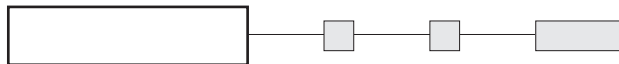
Curved actuator
IZMR1F4   OFF - ON

Flat actuator
IZMP1F4   OFF - ON

Wire colours : black : contact,
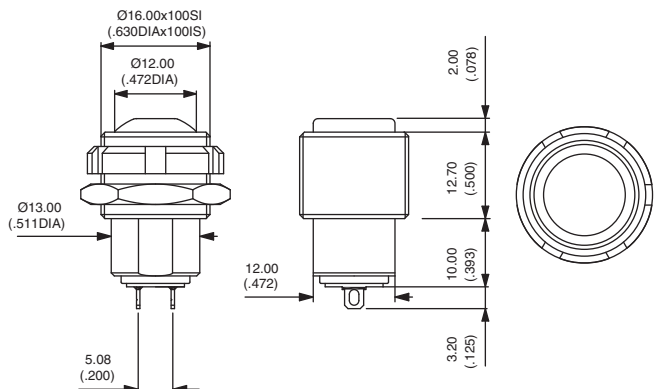red : LED anode(+), blue : LED cathode (-)

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø13.00 (.511DIA)
12.00 (.472)
2.00 (.078)
12.70 (.500)
16.00maxi. (.630MAX.)
500±10 (19.68±.393)

Non-illuminated - solder lug terminals

Curved actuator
IZMR1S4   OFF - ON

Flat actuator
IZMP1S4   OFF - ON

Also available with straight PC terminals :
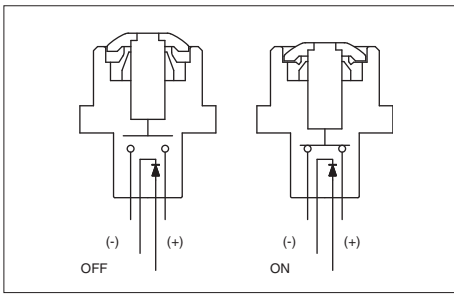**IZM•1P4** & quick-connect terminals : **IZM•1Z4**.

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø13.00 (.511DIA)
5.08 (.200)
12.00 (.472)
2.00 (.078)
12.70 (.500)
10.00 (.393)
3.20 (.125)

For non-illuminated FLYING LEAD versions, refer to illuminated models above. Non-illuminated have 2 wires only.
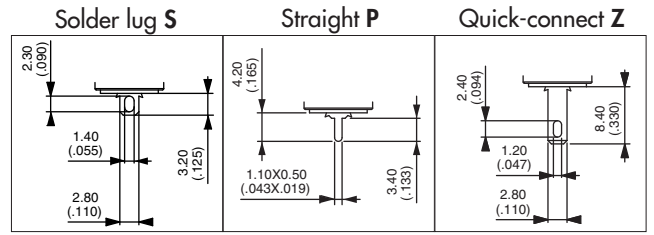
B1

IZ series

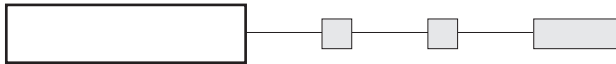## Rear mounted sealed pushbutton switches - bushing Ø 16 mm - metal - latching

For fixed panel thickness : IZN

• Four LED colours
• Tin plated LED terminals
• Gold plated contacts

OFF

ON

(-) (+)

(-) (+)

Solder lug S
2.30 (.090)
1.40 (.055)
2.80 (.110)
3.20 (.125)

Straight P
4.20 (.165)
1.10X0.50 (.043X.019)
3.40 (.133)

Quick-connect Z
2.40 (.094)
8.40 (.330)
1.20 (.047)
2.80 (.110)

MODEL STRUCTURE

Actuator marking available on IZNP models (symbol 10 mm max.). On request.
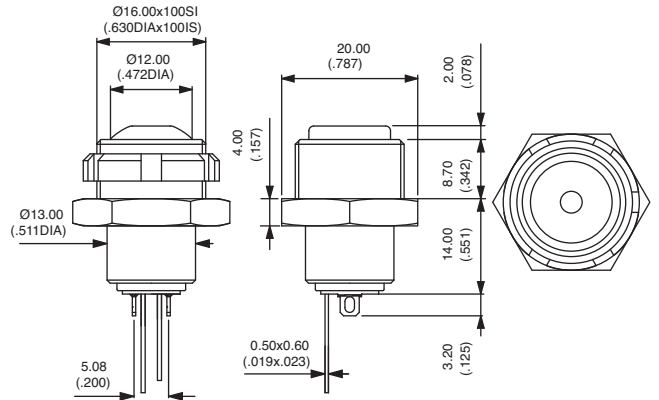

Illuminated - solder lug terminals

Curved actuator
IZNR1S4   OFF - ON

Flat actuator
IZNP1S4   OFF - ON

Also available with straight PC terminals :
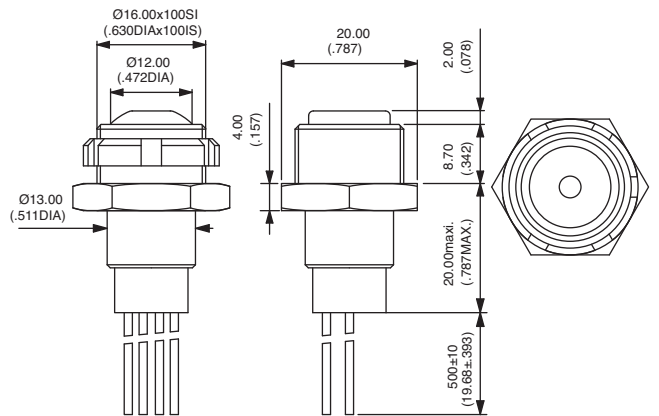**IZN•1P4** & quick-connect terminals : **IZN•1Z4**.

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
4.00 (.157)
Ø13.00 (.511DIA)
5.08 (.200)
20.00 (.787)
2.00 (.078)
8.70 (.342)
14.00 (.551)
3.20 (.125)
0.50x0.60 (.019x.023)

Illuminated - flying lead terminals

Curved actuator
IZNR1F4   OFF - ON

Flat actuator
IZNP1F4   OFF - ON

Wire colours : black : contact,
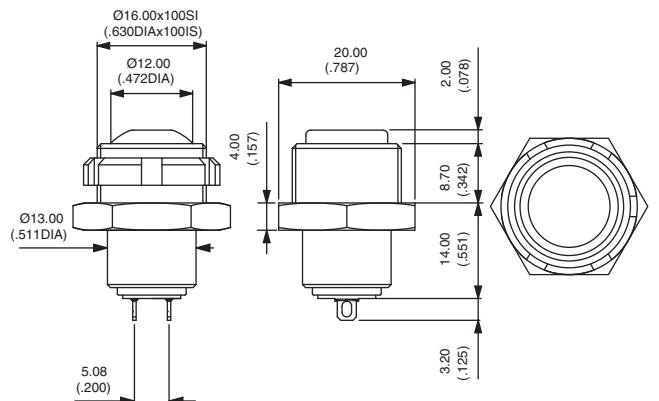red : LED anode(+), blue : LED cathode (-)

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
4.00 (.157)
Ø13.00 (.511DIA)
20.00 (.787)
2.00 (.078)
8.70 (.342)
20.00maxi. (.787MAX.)
500±10 (19.68±.393)

Non-illuminated - solder lug terminals

Curved actuator
IZNR1S4   OFF - ON
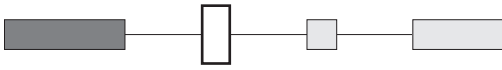
Flat actuator
IZNP1S4   OFF - ON

Also available with straight PC terminals :
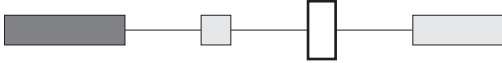**IZN•1P4** & quick-connect terminals : **IZN•1Z4**.

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
4.00 (.157)
Ø13.00 (.511DIA)
5.08 (.200)
20.00 (.787)
2.00 (.078)
8.70 (.342)
14.00 (.551)
3.20 (.125)

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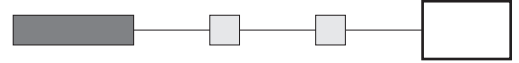
ACTUATOR COLOURS

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 COLOURS

N : nickel plated (standard)
Other : on request.

LED COLOURS

Blank : non-illuminated
L0S : super red - **L0Y** : yellow - **L0G** : green
L0B : blue

B1

IZ series

Rear mounted sealed pushbutton switches - bushing Ø 16 mm - momentary

Distinctive features and specifications

❑ **Rear mounting for easier installation**

❑ **Momentary models**

❑ **Screw version available up to 4A**

❑ **Sealed to IP67**

❑ **Illuminated or non-illuminated**

❑ **Flat actuator for optional marking**

B1

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

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - Gold plated silver contacts (code 4) : 200mA 48VDC
  - Silver contacts (code 2) - screw terminals : 4A 48VDC
- Electrical life at full load : 500.000 cycles
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1 GΩ min. at 500VDC
- Dielectric strength : 1.000 Vrms 50 Hz

LED COMPONENT SPECIFICATIONS			
LED colour	Forward current	Typ. forward voltage	Max. forward voltage
Super red (L0S)	20mA	2,1V	2,3V
Yellow (L0Y)	20mA	2,1V	2,3V
Green (L0G)	20mA	2,1V	2,3V
Blue (L0B)	20mA	3,2V	3,8V
White (L0W)	20mA	3,35V	4,25V

A resistor must be series-connected by the user.

Resistor value = $\dfrac{\text{supply voltage - LED forward voltage}}{\text{LED forward current}}$

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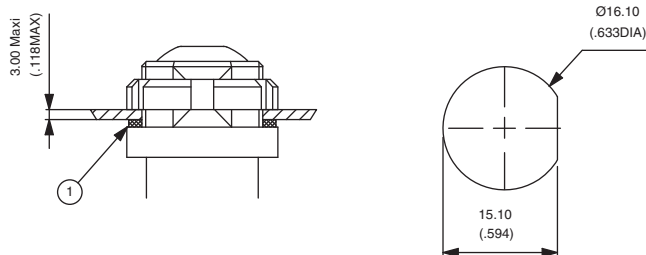
GENERAL SPECIFICATIONS

- Panel thickness : 3 mm (.118) max.
- Total travel : 1,8 mm (.070) +/- 0,3 mm
- Typical operating force : 6N +/- 2N
- Low level or mechanical life :
  1.000.000 cycles
- Torque : 0,7 Nm max. applied to nut
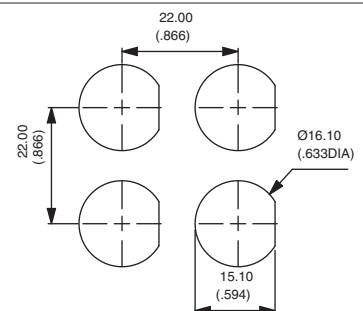- Soldering : 320°C max. for 3 sec.

MATERIALS

- Case : thermoplastic UL94-V0
- Plunger : polyamide
- Bushing/bezel : polyamide
- Contacts :
  4 : silver, gold plated
  2 : silver (screw terminals)
- Multi-wire lead AWG20,
  section 0,6 mm^2
- LED wire : AWG26,
  section 0,12 mm^2
- Lens : polycarbonate
- Terminal seal : epoxy (except
  screw terminals)
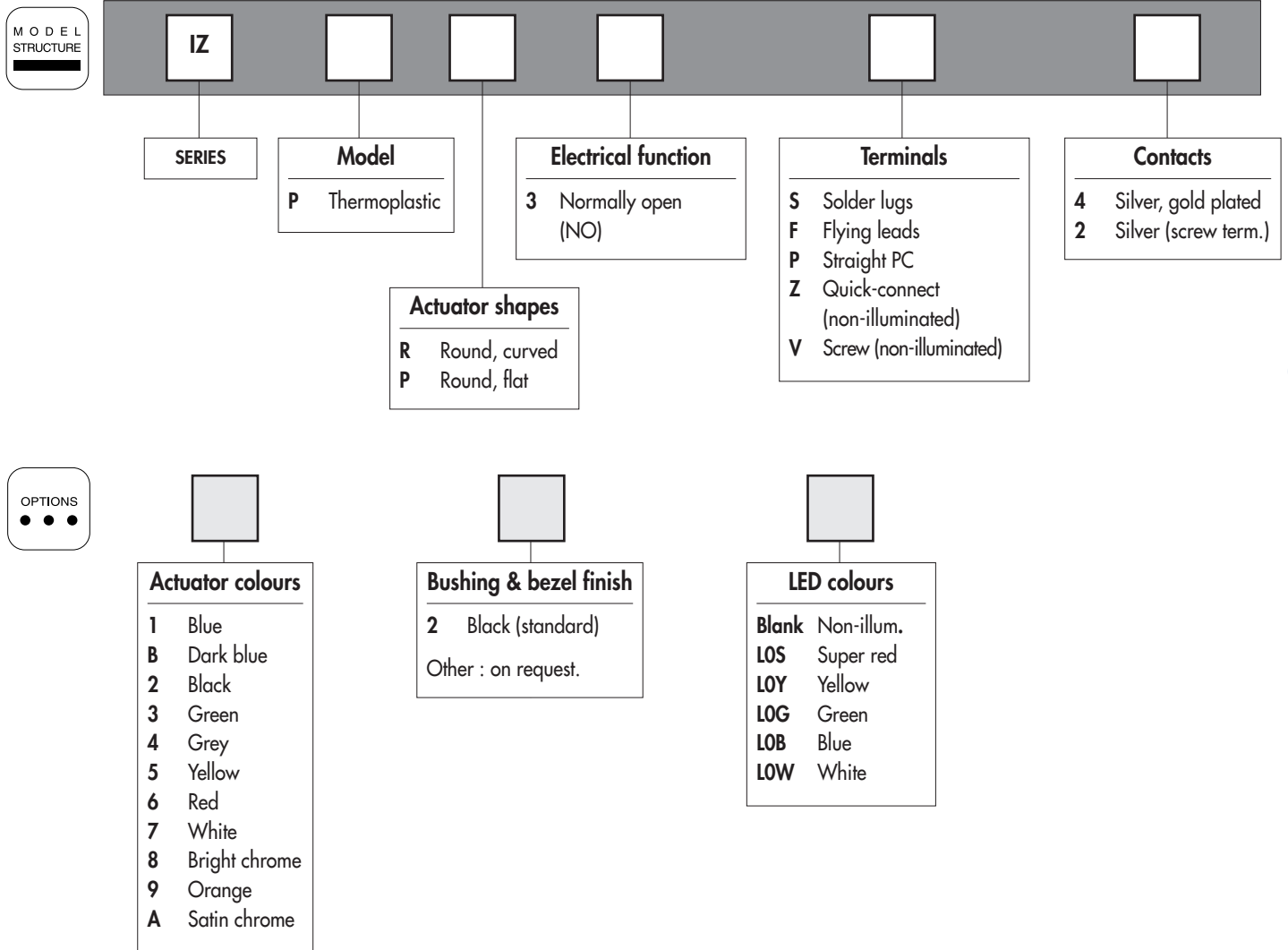
PANEL CUT-OUT

① Flat seal

3.00 Maxi (.118MAX)

①

Ø16.10
(.633DIA)

15.10
(.594)

MATRIX MOUNTING

22.00
(.866)

22.00
(.866)

Ø16.10
(.633DIA)

15.10
(.594)

The company reserves the right to change specifications without notice.

MODEL STRUCTURE

| IZ | | | | | |

SERIES

Model

| P | Thermoplastic |

Actuator shapes

| R | Round, curved |
| P | Round, flat |

Electrical function

| 3 | Normally open (NO) |

Terminals

S	Solder lugs
F	Flying leads
P	Straight PC
Z	Quick-connect (non-illuminated)
V	Screw (non-illuminated)

Contacts

| 4 | Silver, gold plated |
| 2 | Silver (screw term.) |

OPTIONS

Actuator colours

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 & bezel finish

| 2 | Black (standard) |

Other : on request.

LED colours

Blank	Non-illum.
L0S	Super red
L0Y	Yellow
L0G	Green
L0B	Blue
L0W	White

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 bracketed numbers.

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

Mounting accessories : Standard hardware supplied : 1 castellated black plastic nut U4249 and 1 silicone flat seal.
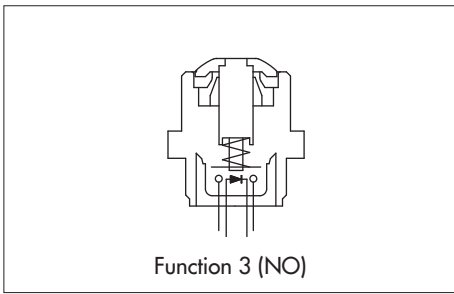
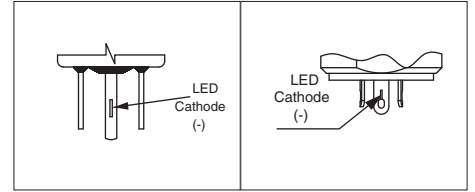**Packaging unit** : 25 pieces for flying lead models - 40 pieces for other models

B1

IZ series

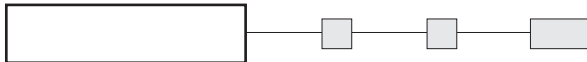## Rear mounted sealed pushbutton switches - bushing Ø 16 mm - momentary

Illuminated

Function 3 (NO)

- Five LED colours
- Tin plated LED terminals
- Gold plated contacts

LED Cathode (-)

LED Cathode (-)

MODEL STRUCTURE

Actuator marking available on IZPP models (symbol 10 mm max.). On request.
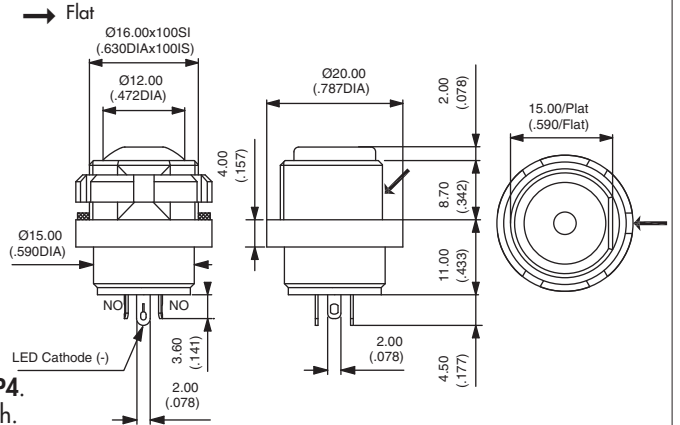
Solder lug terminals

→ Flat

Curved actuator
IZPR3S4   Normally Open

Flat actuator
IZPP3S4   Normally Open

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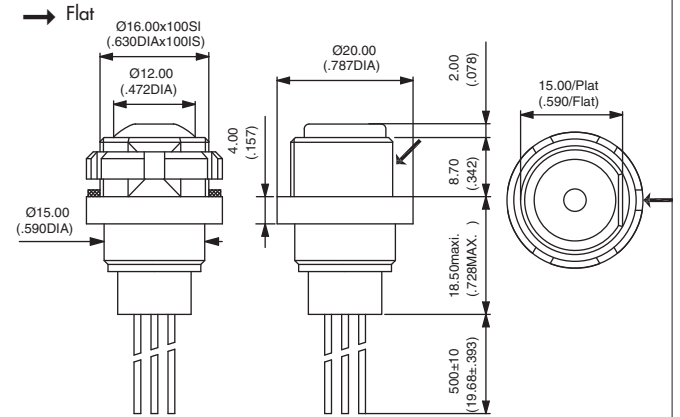LED colour is indicated by the bottom of the switch.

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø15.00 (.590DIA)
Ø20.00 (.787DIA)
4.00 (.157)
2.00 (.078)
8.70 (.342)
11.00 (.433)
15.00/Plat (.590/Flat)
2.00 (.078)
4.50 (.177)
NO   NO
LED Cathode (-)
3.60 (.141)
2.00 (.078)

Flying lead terminals - momentary

→ Flat

Curved actuator
IZPR3F4   Normally Open

Flat actuator
IZPP3F4   Normally Open

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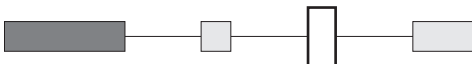red : LED anode(+), blue : LED cathode (-)

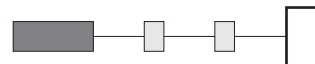Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø15.00 (.590DIA)
Ø20.00 (.787DIA)
4.00 (.157)
2.00 (.078)
8.70 (.342)
15.00/Plat (.590/Flat)
18.50maxi. (.728MAX.)
500±10 (19.68±.393)

ACTUATOR COLOURS

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 COLOURS

2 : black (standard)
Other : on request.

LED COLOURS

L0S : super red - **L0Y** : yellow - **L0G** : green
L0B : blue - **L0W** : white

Function 3 (NO)

Solder lug **S** | Straight **P** | Quick-connect Z

1.50 (.059)
3.60 (.141)
1.00 (.039)
2.00X0.40 (.078X.015)

3.60 (.141)
1.00X0.40 (.039X.015)

7.10 (.279)
1.20 (.047)
2.40 (.094)
2.80X0.50 (.110X.019)

MODEL STRUCTURE

Actuator marking available on IZPP models (symbol 10 mm max.). On request.
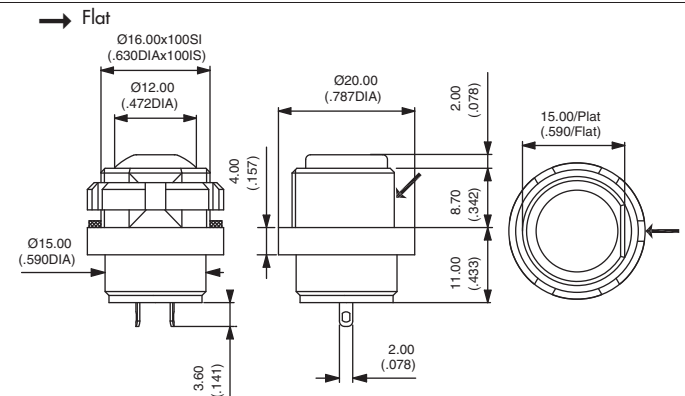
B1

Solder lug terminals - gold plated contacts

→ Flat

Curved actuator
IZPR3S4 — Normally Open

Flat actuator
IZPP3S4 — Normally Open

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø15.00 (.590DIA)
4.00 (.157)
Ø20.00 (.787DIA)
2.00 (.078)
8.70 (.342)
11.00 (.433)
3.60 (.141)
2.00 (.078)
15.00/Plat (.590/Flat)

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

Sealed flying lead terminals - gold plated contacts

→ Flat

Curved actuator
IZPR3F4 — Normally Open
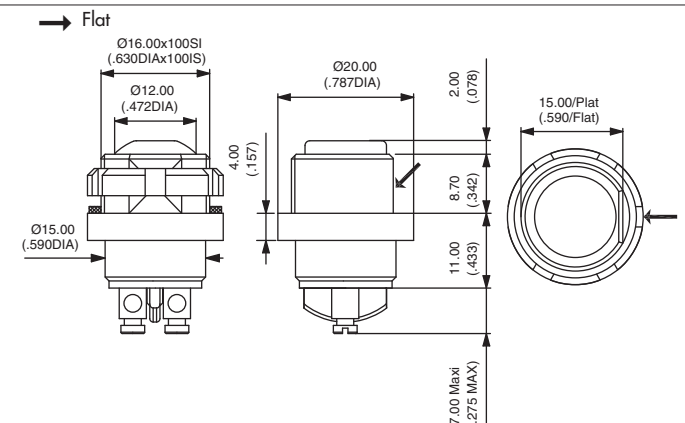
Flat actuator
IZPP3F4 — Normally Open

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø15.00 (.590DIA)
4.00 (.157)
Ø20.00 (.787DIA)
2.00 (.078)
8.70 (.342)
12.00maxi (.472MAX.)
500±10 (19.68±.393)
15.00/Plat (.590/Flat)

Screw terminals - silver contacts

→ Flat

Curved actuator
IZPR3V2 — Normally open

Flat actuator
IZPP3V2 — Normally open

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø15.00 (.590DIA)
4.00 (.157)
Ø20.00 (.787DIA)
2.00 (.078)
8.70 (.342)
11.00 (.433)
7.00 Maxi (.275 MAX)
15.00/Plat (.590/Flat)

Actuator colour and bushing/bezel colour : select the desired codes on previous page.

IZ series

Rear mounted sealed pushbutton switches - bushing Ø 16 mm - latching

Distinctive features and specifications

❑ **Rear mounting for easier installation**

❑ **Latching action models**

❑ **Sealed to IP67**

❑ **Illuminated or non-illuminated**

❑ **Flat actuator for optional marking**

B1

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

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  100mA 24VDC - 200.000 cycles
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1 GΩ min. at 500VDC
- Dielectric strength : 1.500 Vrms between terminals

LED COMPONENT SPECIFICATIONS			
LED colour	Forward current	Typ. forward voltage	Max. forward voltage
Super red (L0S)	20mA	1,95V	1,95V
Yellow (L0Y)	20mA	2V	2,05V
Green (L0G)	20mA	2,1V	2,5V
Blue (L0B)	20mA	3,2V	4V

A resistor must be series-connected by the user.

Resistor value = $\dfrac{\text{supply voltage - LED forward voltage}}{\text{LED forward current}}$

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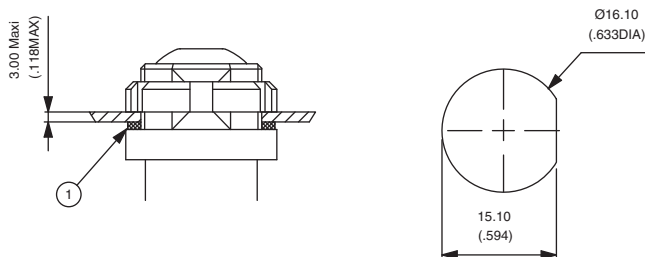
GENERAL SPECIFICATIONS

- Panel thickness : 3 mm (.118) max.
- Total travel : 2,5 mm (.098) +/- 0,3 mm
- Typical operating force : 5N +/- 2N
- Low level or mechanical life :
  200.000 cycles
- Torque : 0,7 Nm max. applied to nut
- Soldering : 320°C max. for 3 sec.
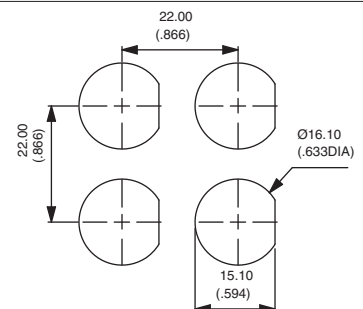
MATERIALS

- Case : thermoplastic UL94-V0
- Plunger : polyamide
- Bushing/bezel : polyamide
- Contacts : silver, gold plated
- Multi-wire lead AWG20,
  section 0,6 mm^2
- LED wire : AWG26,
  section 0,12 mm^2
- Lens : polycarbonate
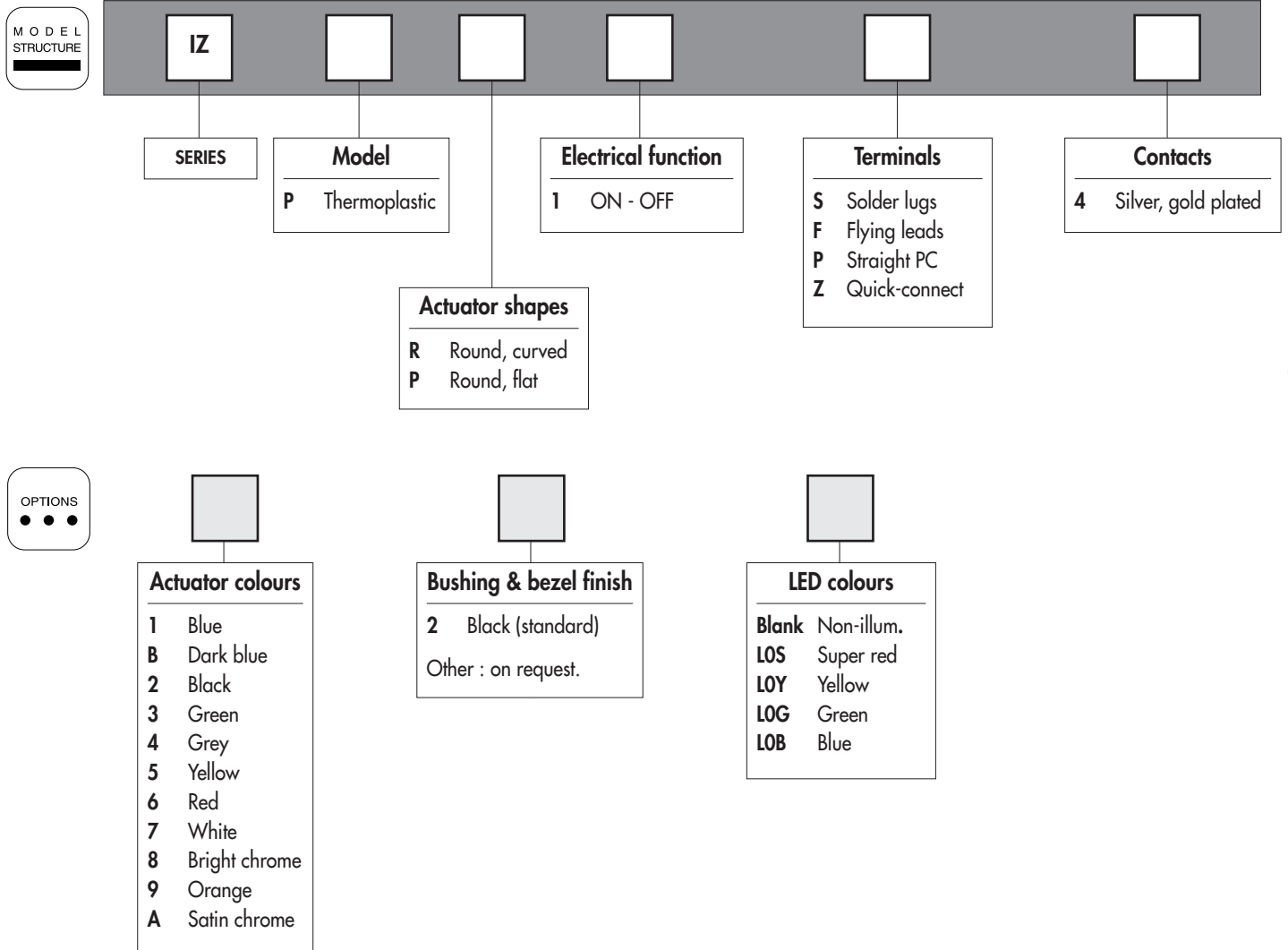- Terminal seal : epoxy

PANEL CUT-OUT

① Flat seal

3.00 Maxi (.118MAX)

Ø16.10 (.633DIA)

15.10 (.594)

MATRIX MOUNTING

22.00 (.866)

22.00 (.866)

Ø16.10 (.633DIA)

15.10 (.594)

MODEL STRUCTURE

| IZ | | | | | |

SERIES

Model

| P | Thermoplastic |

Electrical function

| 1 | ON - OFF |

Actuator shapes

| R | Round, curved |
| P | Round, flat |

Terminals

S	Solder lugs
F	Flying leads
P	Straight PC
Z	Quick-connect

Contacts

| 4 | Silver, gold plated |

OPTIONS

Actuator colours

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 & bezel finish

| 2 | Black (standard) |

Other : on request.

LED colours

Blank	Non-illum.
L0S	Super red
L0Y	Yellow
L0G	Green
L0B	Blue

B1

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 bracketed numbers.

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

Mounting accessories : Standard hardware supplied : 1 castellated black plastic nut U4249 and 1 silicone flat seal.
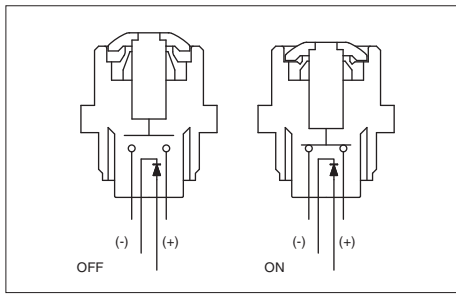
Packaging unit : 25 pieces for flying lead models - 40 pieces for other models
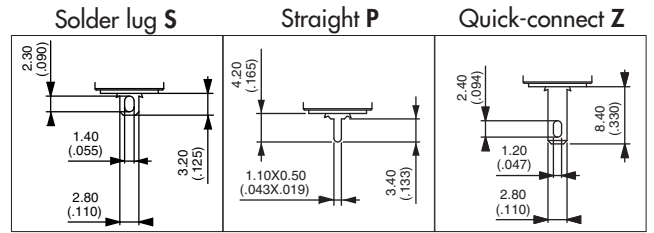
IZ series

Rear mounted sealed pushbutton switches - bushing Ø 16 mm - latching

Illuminated

- Four LED colours
- Tin plated LED terminals
- Gold plated contacts

Solder lug **S**	Straight **P**	Quick-connect **Z**

OFF   (-) (+)   ON   (-) (+)

MODEL STRUCTURE

Actuator marking available on IZPP models (symbol 10 mm max.). On request.
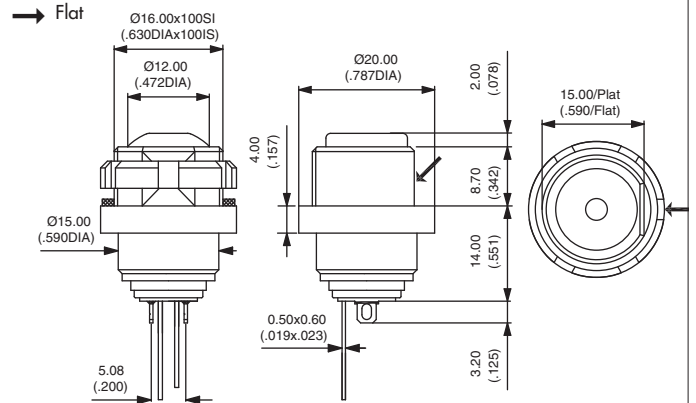
Solder lug terminals

→ Flat

Curved actuator
IZPR1S4   ON - OFF

Flat actuator
IZPP1S4   ON - OFF

Also available with straight PC terminals :
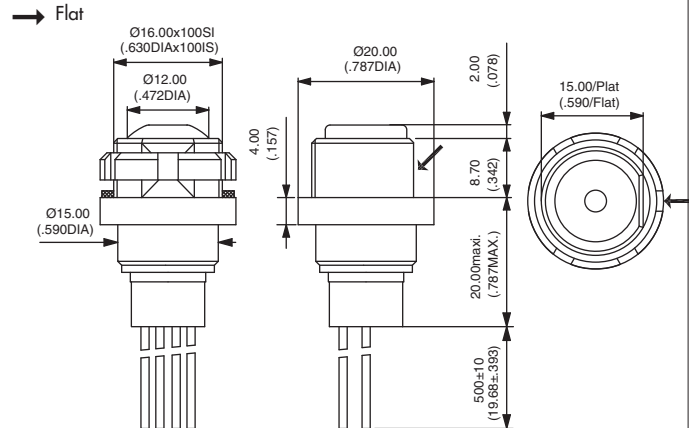**IZP•1P4** and quick-connect terminals : **IZP•1Z4**.

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø20.00 (.787DIA)
2.00 (.078)
15.00/Plat (.590/Flat)
4.00 (.157)
8.70 (.342)
Ø15.00 (.590DIA)
14.00 (.551)
0.50x0.60 (.019x.023)
5.08 (.200)
3.20 (.125)

Sealed flying lead terminals

→ Flat

Curved actuator
IZPR1F4   ON - OFF

Flat actuator
IZPP1F4   ON - OFF

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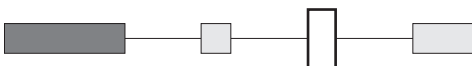red : LED anode(+), blue : LED cathode (-)

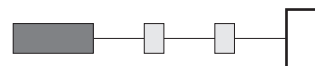Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø20.00 (.787DIA)
2.00 (.078)
15.00/Plat (.590/Flat)
4.00 (.157)
8.70 (.342)
Ø15.00 (.590DIA)
20.00maxi. (.787MAX.)
500±10 (19.68±.393)

ACTUATOR COLOURS

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 COLOURS

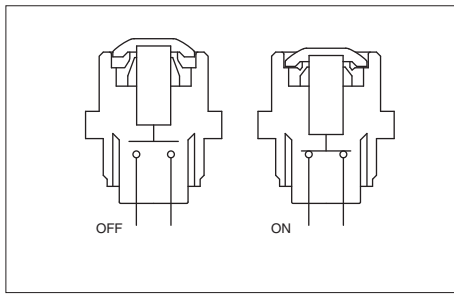**2** : black (standard)
Other : on request.

LED COLOURS

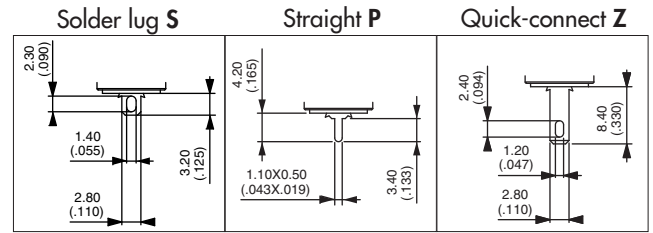**L0S** : super red - **L0Y** : yellow - **L0G** : green
L0B : blue

• Gold plated contacts

OFF   ON

Solder lug **S**   Straight **P**   Quick-connect **Z**

2.30 (.090)   4.20 (.165)   2.40 (.094)   8.40 (.330)
1.40 (.055)   3.20 (.125)   1.10X0.50 (.043X.019)   3.40 (.133)   1.20 (.047)
2.80 (.110)   2.80 (.110)

MODEL STRUCTURE

Actuator marking available on IZPP models (symbol 10 mm max.). On request.

B1

Solder lug terminals

Curved actuator
IZPR1S4   ON - OFF

Flat actuator
IZPP1S4   ON - OFF

→ Flat

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø20.00 (.787DIA)
2.00 (.078)
15.00/Flat (.590/Flat)
4.00 (.157)
8.70 (.342)
Ø15.00 (.590DIA)
14.00 (.551)
5.08 (.200)
3.20 (.125)

Also available with straight PC terminals :
IZP•1P4 and quick-connect terminals : **IZP•1Z4**.
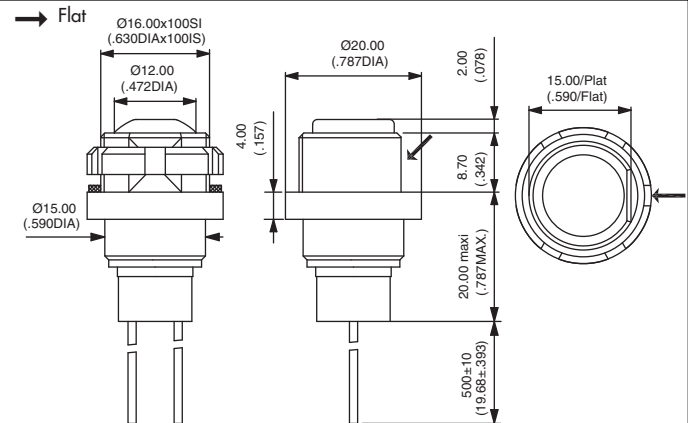
Sealed flying lead terminals

Curved actuator
IZPR1F4   ON - OFF

Flat actuator
IZPP1F4   ON - OFF

→ Flat

Ø16.00x100SI (.630DIAx100IS)
Ø12.00 (.472DIA)
Ø20.00 (.787DIA)
2.00 (.078)
15.00/Flat (.590/Flat)
4.00 (.157)
8.70 (.342)
Ø15.00 (.590DIA)
20.00 maxi (.787MAX.)
500±10 (19.68±.393)

ACTUATOR COLOURS

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 COLOURS

2 : black (standard)
Other : on request.