

IR series

Sealed pushbutton switches • bushing Ø 16 mm •
momentary • microswitch version



DISTINCTIVE FEATURES

Microswitch technology up to 5 A

Tactile feedback

Sealed to IP67

Illuminated or non-illuminated

Flat round actuator for optional marking



ENVIRONMENTAL SPECIFICATIONS

- Front panel sealing : IP67 according to IEC 60529
- Salt spray : IEC 512-6, test 11f
- Operating temperature : -20 °C to +85 °C (-4 °F to +185 °F)



GENERAL SPECIFICATIONS

- Panel thickness : 3 mm (.118) max.
- Total travel : 1.6 mm (.062) ± 0.3 mm
- Typical operating force : 4 N ± 2 N
- Mechanical life : 1,000,000 cycles
- Torque : 0.8 Nm max. applied to nut
- Soldering : 320 °C (608 °F) max. for 3 sec.



ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load (microswitch) :
5 A 250 VAC, 50,000 cycles (function 7)
5 A 250 VAC, 25,000 cycles (function 8)
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1 GΩ min. at 500 VDC
- Dielectric strength : 750 Vrms between terminals
2,000 Vrms between terminals and frame



LED COMPONENT SPECIFICATIONS

LED color	Forward current	Typ. forward voltage	Max. forward voltage
Super red (0S)	20 mA	2 V	2.5 V
Yellow (0Y)	20 mA	2 V	2.5 V
Green (0G)	10 mA	2 V	2.5 V
Blue (0B)	10 mA	3.3 V	3.8 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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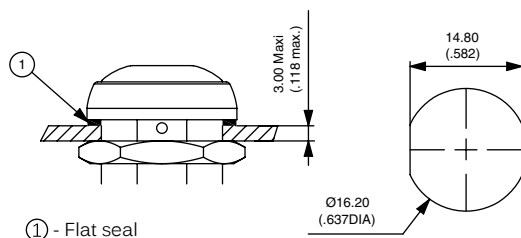
MATERIALS

- Case : thermoplastic UL94-V0
- Actuator : polyamide 6/6
- Bushing/bezel : polyamide 6/6
- Contacts : silver
- Lens : polycarbonate

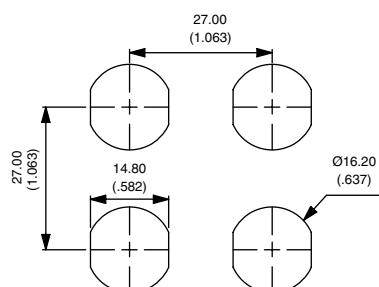


MOUNTING

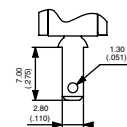
PANEL CUT-OUT



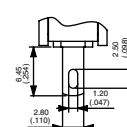
MATRIX MOUNTING



TERMINALS



Quick-connect
Function 7 (NC+NO))

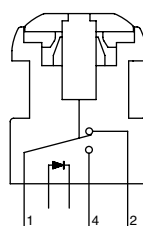


Solder lug
Function 8 (NC/NO))

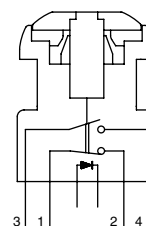


ELECTRICAL FUNCTIONS

ILLUMINATED MODELS

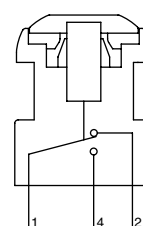


Function 7 (NC+NO))

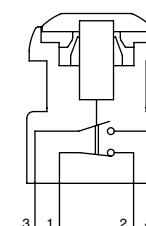


Function 8 (NC/NO))

NON-ILLUMINATED MODELS



Function 7 (NC+NO))



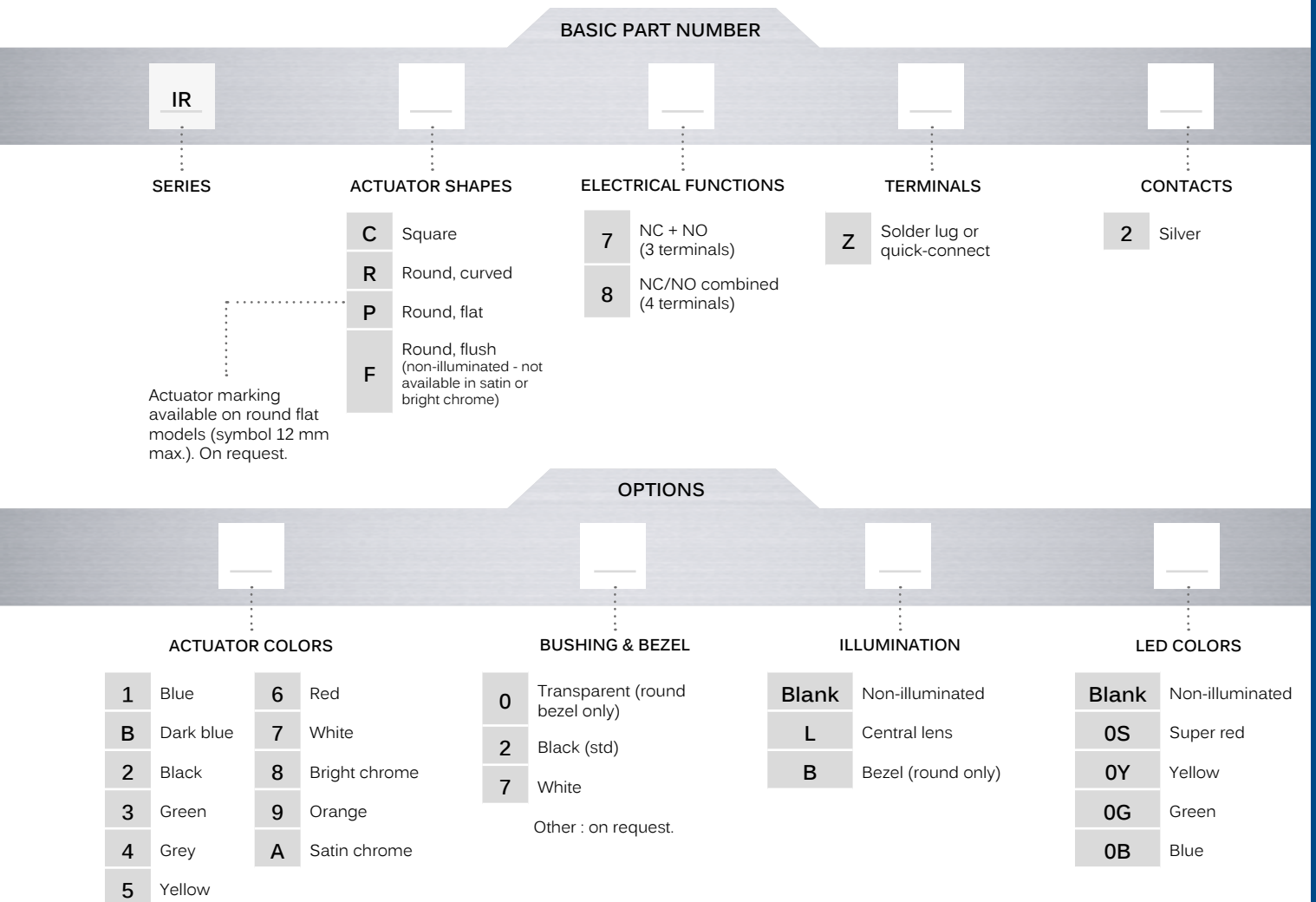
Function 8 (NC/NO))

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BUILD YOUR PART NUMBER



The IR series for high currents is based on a microswitch.
Please note that this microswitch is supplied separately.



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 U7125). Round models only.
See "Sealing Boots" section of website.
- Mounting accessories** : Standard hardware supplied : 1 hex nut 19 mm (.748) across flats and 1 flat seal. Hex nut P/N : U6715.

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ROUND - ILLUMINATED - QUICK-CONNECT TERMINALS - NC+NO - 3 TERMINALS



Curved actuator
IRR7Z2 NC+NO

Flat actuator
IRP7Z2 NC+NO

ROUND - ILLUMINATED - SOLDER LUG TERMINALS - NC/NO - 4 TERMINALS



Curved actuator
IRR8Z2 NC/NO combined

Flat actuator
IRP8Z2 NC/NO combined

Terminals should be used as solder lugs only.

ROUND - NON-ILLUMINATED - QUICK-CONNECT TERMINALS - NC+NO - 3 TERMINALS



Curved actuator
IRR7Z2 NC+NO

Flat actuator
IRP7Z2 NC+NO

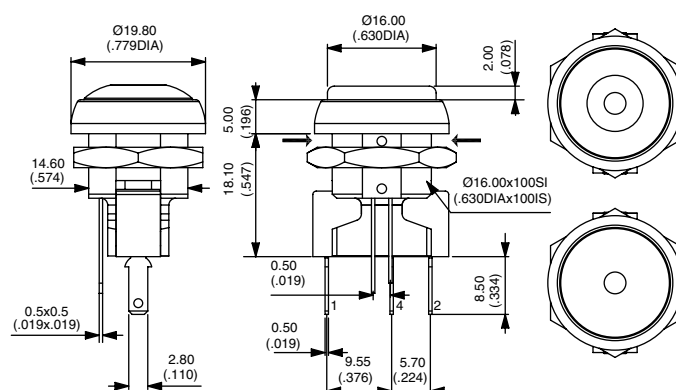
ROUND - NON-ILLUMINATED - SOLDER LUG TERMINALS - NC/NO - 4 TERMINALS



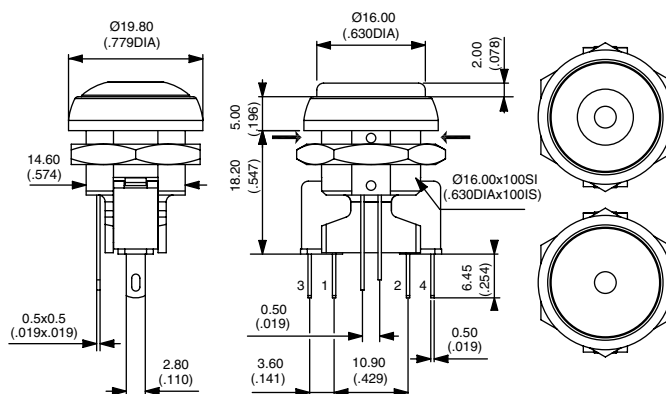
Curved actuator
IRR8Z2 NC/NO combined

Flat actuator
IRP8Z2 NC/NO combined

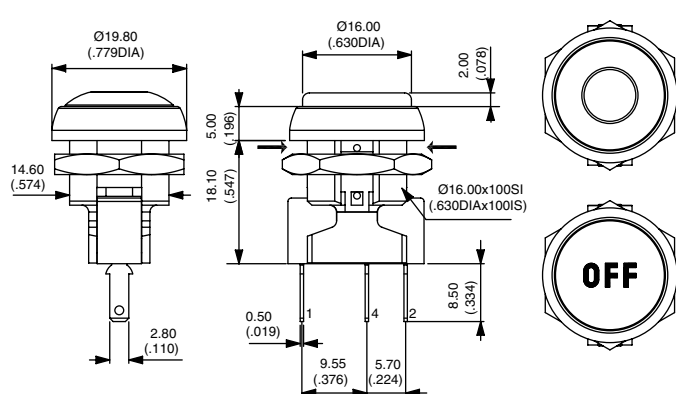
→ FLAT



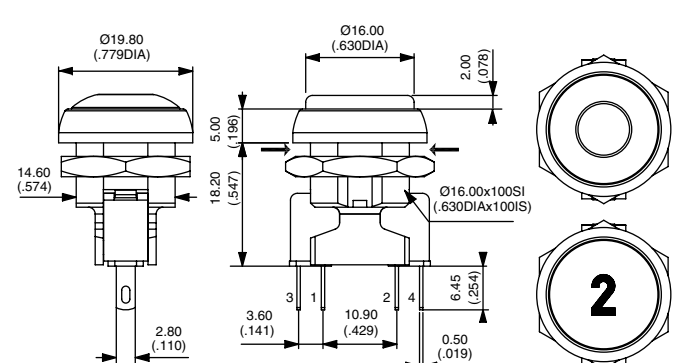
→ FLAT



→ FLAT



→ FLAT



APEN



NC+NO



A diagram of a 2D hexagonal lattice. A central site is labeled '1'. A bond connecting it to a neighbor is labeled '2'. The lattice is represented by circles (sites) and lines (bonds).

NC/NO combined

Terminals should be used as solder lugs only.

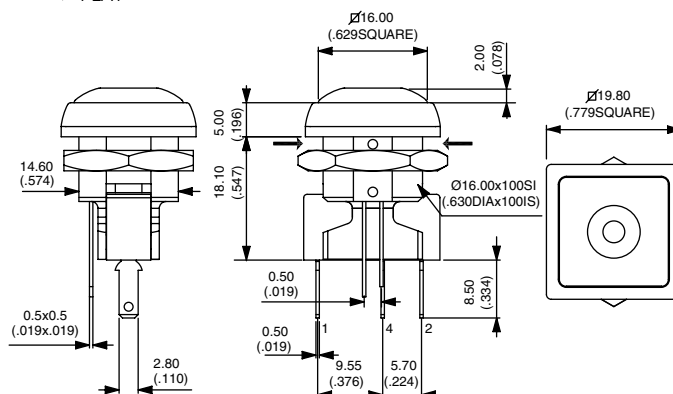
NC+NO

A 2x2 grid of circles. The top-left circle has an upward-pointing arrow above it. The other three circles are empty.

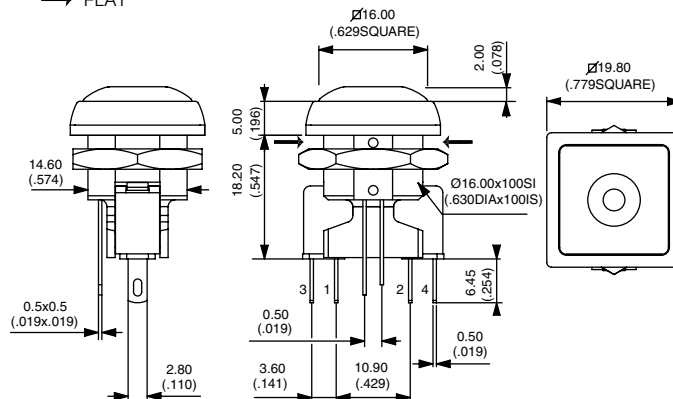
NC+NO

Terminals should be used as solder lugs only.

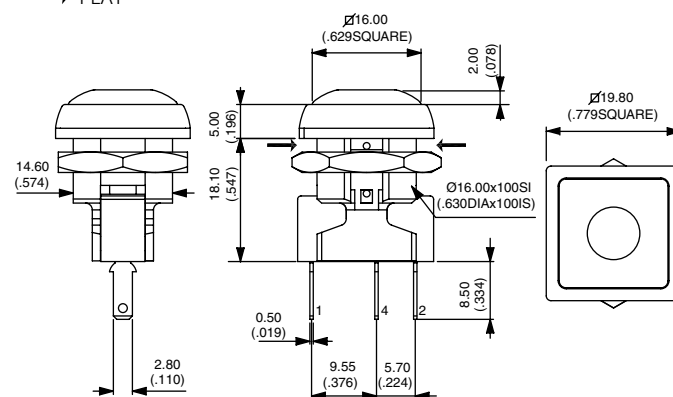
→ FLAT



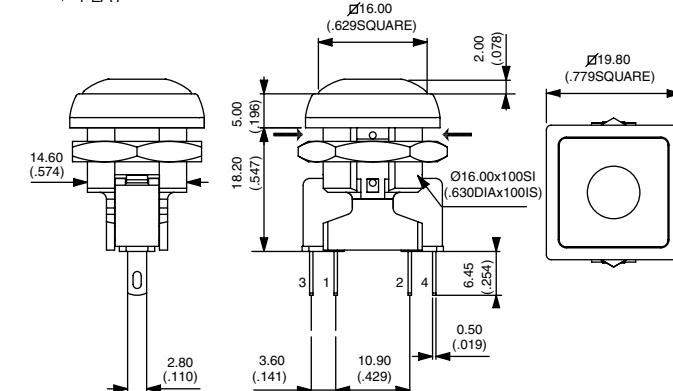
→ FLAT



→ FLAT



→ FLAT



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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



- 0 Transparent (round bezel only)
- 2 Black (standard)
- 7 White

ILLUMINATION



- Blank Non-illuminated
- L Central lens
- B Bezel (round only)

LED COLORS



- Blank Non-illuminated
- 05 Super red
- 0Y Yellow
- 0G Green
- 0B Blue

Mouser Electronics

Authorized Distributor

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

[Apem:](#)

[IRR8Z222L0G](#) [IRR8Z262](#)