

# 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.

# IR series

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

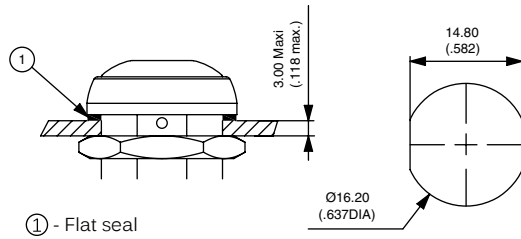
## MATERIALS

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

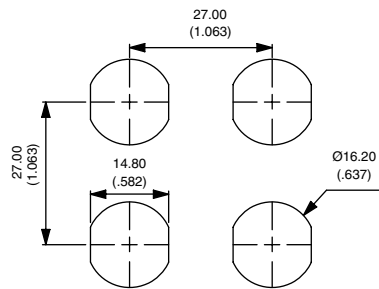
APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

## MOUNTING

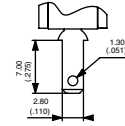
### PANEL CUT-OUT



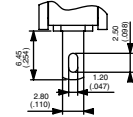
### MATRIX MOUNTING



## TERMINALS



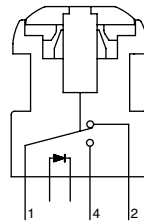
Quick-connect  
Function 7 (NC+NO))



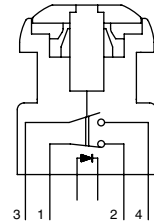
Solder lug  
Function 8 (NC/NO))

## ELECTRICAL FUNCTIONS

### ILLUMINATED MODELS

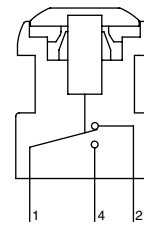


Function 7 (NC+NO))

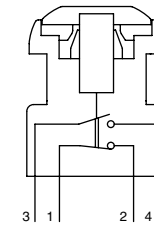


Function 8 (NC/NO))

### NON-ILLUMINATED MODELS



Function 7 (NC+NO))

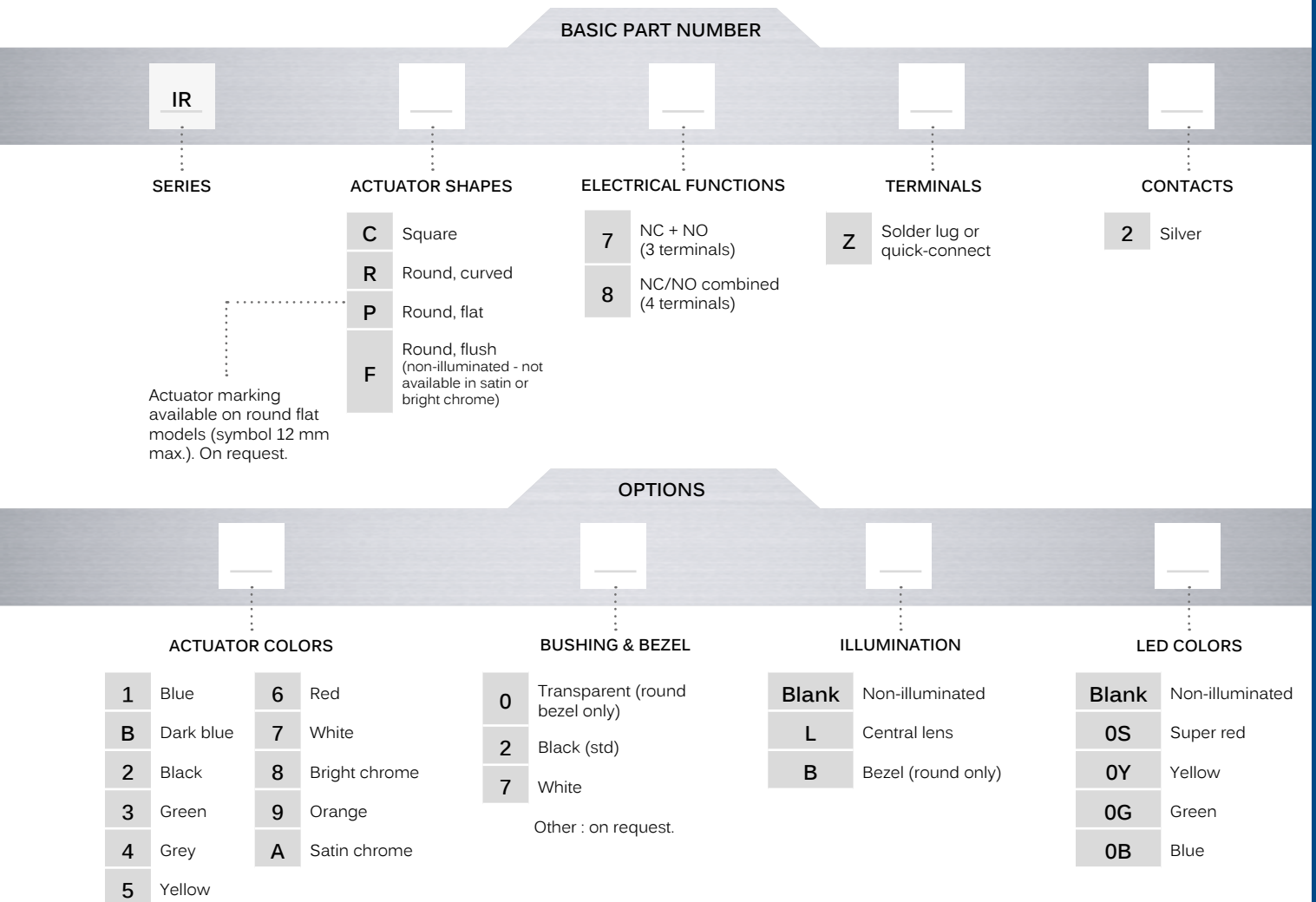


Function 8 (NC/NO))

# IR series

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

## 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

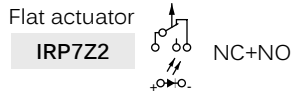
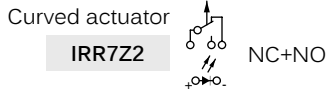
On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

- ⚠ **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.

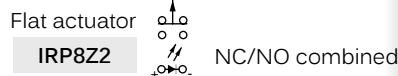
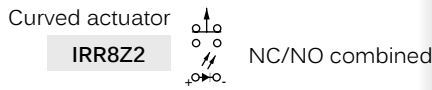
# IR series

Sealed pushbutton switches • bushing  $\varnothing$  16 mm • momentary • microswitch version

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

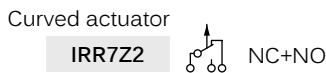


## ROUND - ILLUMINATED - SOLDER LUG TERMINALS - NC/NO - 4 TERMINALS

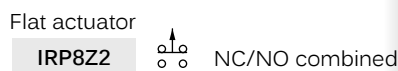
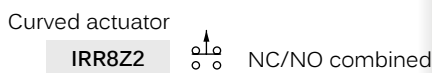


Terminals should be used as solder lugs only.

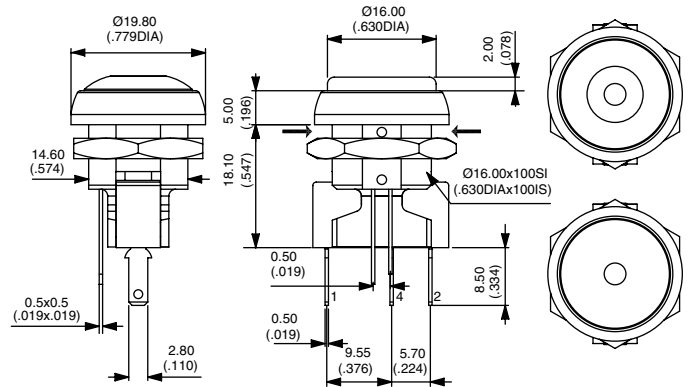
## ROUND - NON-ILLUMINATED - QUICK-CONNECT TERMINALS - NC+NO - 3 TERMINALS



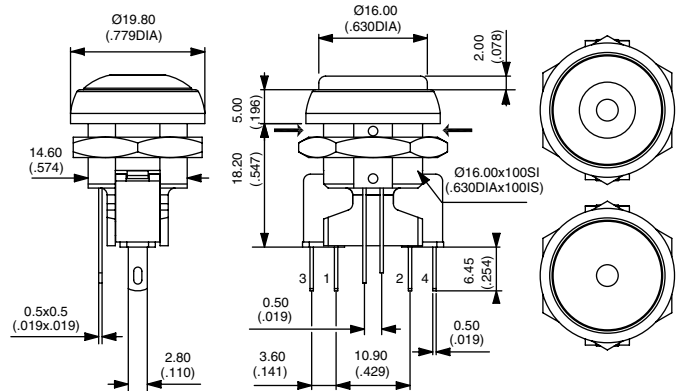
## ROUND - NON-ILLUMINATED - SOLDER LUG TERMINALS - NC/NO - 4 TERMINALS



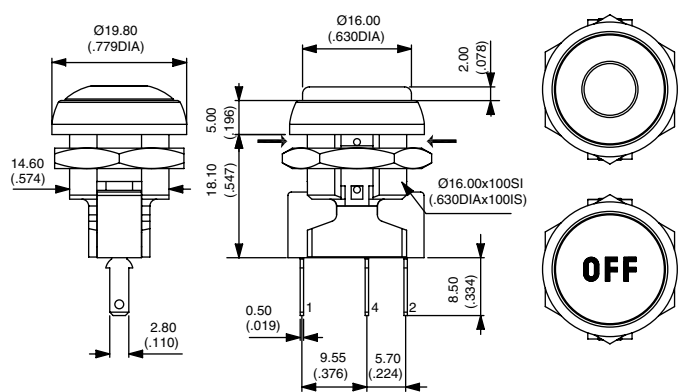
→ FLAT



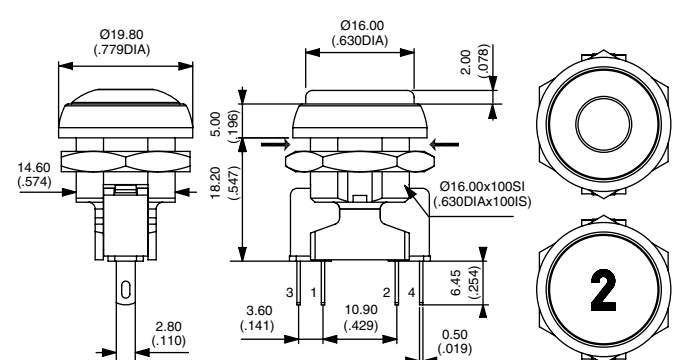
→ FLAT



→ FLAT



→ FLAT



Sealed pushbutton switches • bushing  $\varnothing$  16 mm • momentary • microswitch version

## SQUARE - ILLUMINATED - QUICK-CONNECT TERMINALS - NC+NO - 3 TERMINALS



IRC7Z2



NC+NO

## SQUARE - ILLUMINATED - SOLDER LUG TERMINALS - NC/NO - 4 TERMINALS



IRC8Z2



NC/NO combined

Terminals should be used as solder lugs only.

## SQUARE - NON-ILLUMINATED - QUICK-CONNECT TERMINALS - NC+NO - 3 TERMINALS



IRC7Z2



NC+NO

## SQUARE - NON-ILLUMINATED - SOLDER LUG TERMINALS - NC/NO - 4 TERMINALS



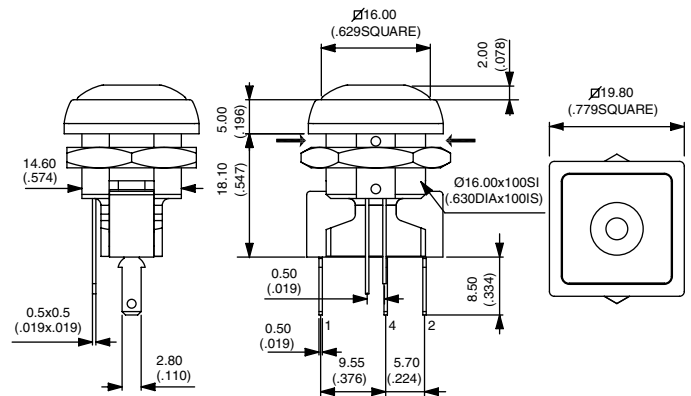
IRC8Z2



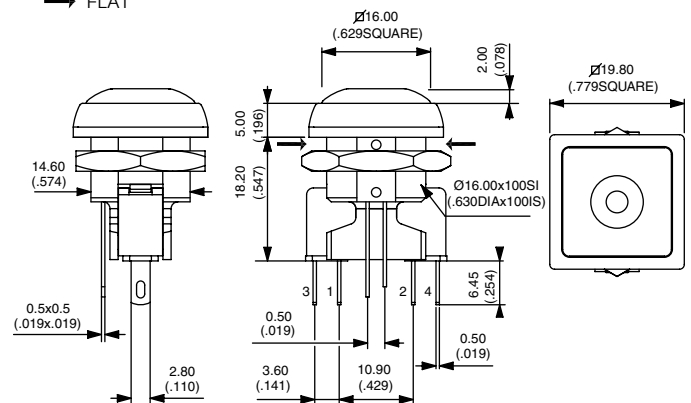
NC+NO

Terminals should be used as solder lugs only.

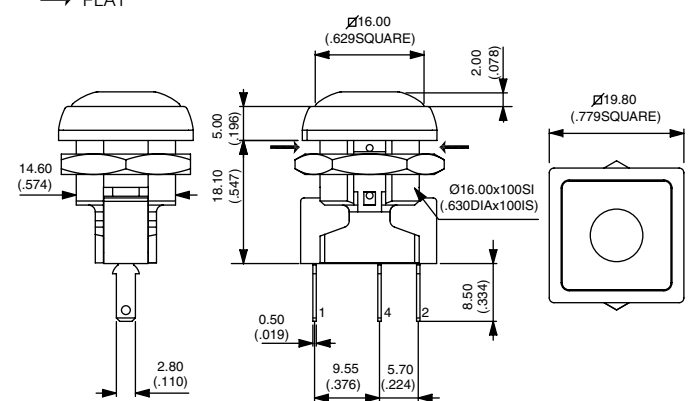
→ FLAT



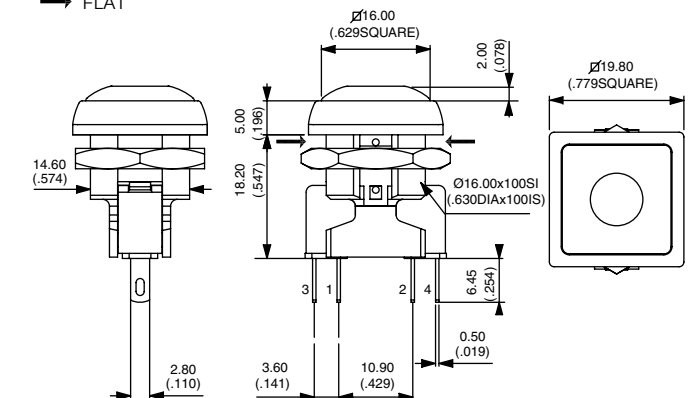
→ FLAT



→ FLAT



→ FLAT



# IR series

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

## 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