Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

A01 series

Pushbutton switches & indicators

Distinctive features and specifications

❑ **Panel Sealed to IP65**

❑ **Single pole to four pole changeover**

❑ **Custom engraving or film legends options**

❑ **Push on tab terminals**

❑ **6A 250VAC**

ELECTRICAL SPECIFICATIONS

- **Current/Voltage Rating :** 10mA 5VAC min, 6A 250VAC, 6Amp 12VDC
- **Initial Contact Resistance :** 10mΩ max at 1A 4VDC
- **Insulation Resistance :** 50MΩ min
- **Dielectric Strength :** 750V between open contacts, 5KV live to accessible
- **Electrical Life :** 50,000 cycles min
- **Contact Gap :** >1mm (0.039)
- **Insulation :** Class 2
- **Lamp Life :** LED, 60,000 hours to 75% relative luminosity filament, approx. 5000 hours neon, approx. 10,000 hours

MECHANICAL SPECIFICATIONS

- **Mechanical Life : (operator)** Momentary, 1 million cycles, maintained 100,000 cycles
- **Lamp :** Midget grove T1 ¾ filament, neon or LED
- **Terminals :** Solder/quick connect 2.8mm (0.110)

GENERAL SPECIFICATIONS

- **Operating Temperature :** -20°C to +55°C
- **Solder Heat Resistance :** 350°C for 5 seconds
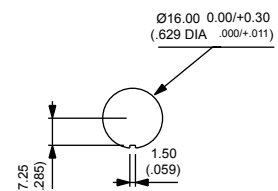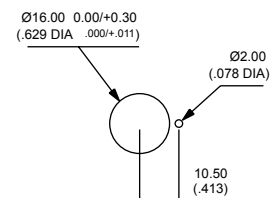- **Sealing :** Panel sealed to IP65, rear of panel IP40

AGENCY APPROVALS

MATERIALS

- **Screens :** PC
- **Reflector Assembly :** PC
- **Operator :** PBT
- **Nut :** ABS
- **Camtrack Momentary :** PPE
- **Camtrack Maintained :** PPSU
- **Switch Block 1 & 2 Pole :** PBT
- **Switch Block 3 & 4 Pole :** PEI
- **Contacts :** Gold plated silver

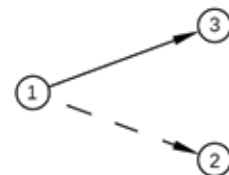## PANEL CUT OUT

Round & Square bezel operators only

Ø16.00 0.00/+0.30
(.629 DIA .000/+.011)

7.25
(.285)

1.50
(.059)

Rectangular bezel operators only

Ø16.00 0.00/+0.30
(.629 DIA .000/+.011)

Ø2.00
(.078 DIA)

10.50
(.413)

Max panel thickness 8mm (0.314)

CIRCUIT

Dimensions : first dimensions are in mm while inches are shown in brackets.
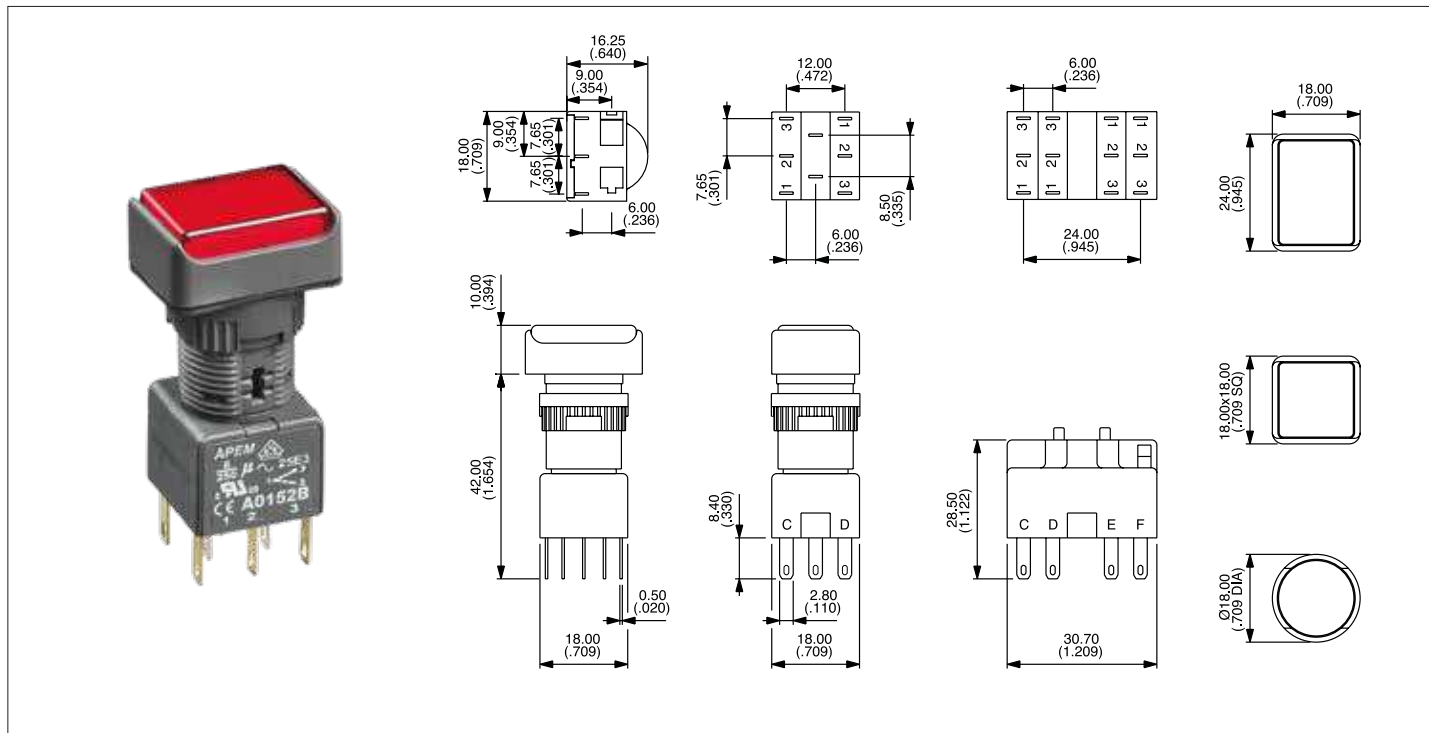Refer to the following pages for further information.

Mounting accessories : standard hardware 1 nut and 1 sealing washer.
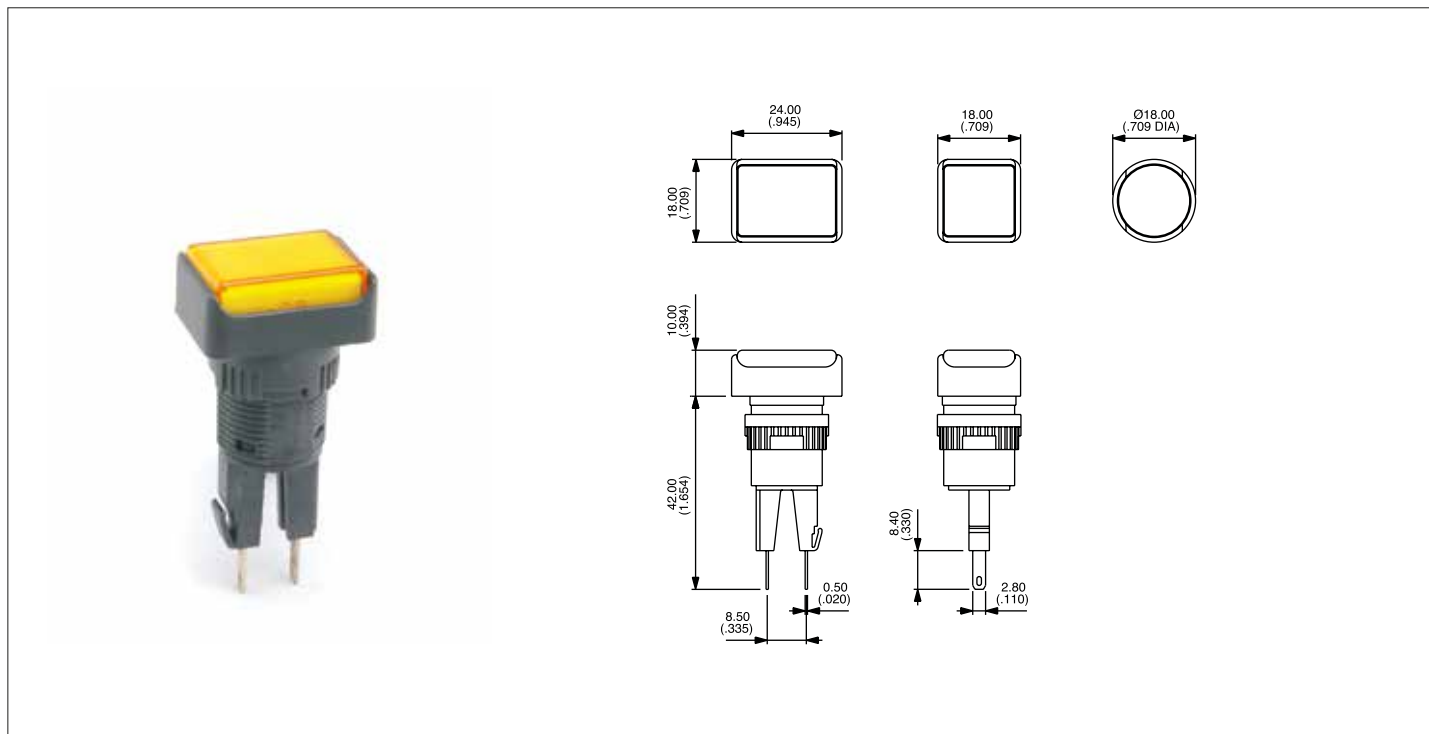
A01 series
Pushbutton switches & indicators
Panel cut-out Ø16 (0.755)

Pushbutton

Indicator

Pushbutton

Screen				Lamp (if required)				Operator		Switch block	
Bezel	Colour	Part No	Lamp	Voltage	Part No	Pole	Bezel	Description	Part No	No of poles	Part No
rectangular	black	A0161A	Filament	6.3V	A0141A	1 or 2	rectangular	Illum, momentary	A0101Y	Single pole	A0151B
rectangular	red	A0161B	Filament	14V	A0141B	1 or 2	rectangular	Illum, maintained	A0101X	Double pole	A0152B
rectangular	amber	A0161C	Filament	28V	A0141C	1 or 2	rectangular	Non-illum, momentary	A0102Y	Three pole	A0155B
rectangular	yellow	A0161D	Filament	36V	A0141D	1 or 2	rectangular	Non-illum, maintained	A0102X	Four pole	A0153B
rectangular	green	A0161E	Filament	48V	A0141E	3 or 4	rectangular	Illum, momentary	A0103Y		
rectangular	blue	A0161F	Filament	60V	A0141F	3 or 4	rectangular	Illum, maintained	A0103X		
rectangular	clear	A0161G	Neon	110V	A0143G	3 or 4	rectangular	Non-illum, momentary	A0104Y		
rectangular	white	A0161J	Neon	220V	A0143H	3 or 4	rectangular	Non-illum, maintained	A0104X		
square	black	A0162A	LED	6V red	A0142L1	1 or 2	square	Illum, momentary	A0105Y		
square	red	A0162B	LED	6V green	A0142L2	1 or 2	square	Illum, maintained	A0105X		
square	amber	A0162C	LED	6V amber	A0142L3	1 or 2	square	Non-illum, momentary	A0106Y		
square	yellow	A0162D	LED	12V red	A0142M1	1 or 2	square	Non-illum, maintained	A0106X		
square	green	A0162E	LED	12V green	A0142M2	3 or 4	square	Illum, momentary	A0107Y		
square	blue	A0162F	LED	12V amber	A0142M3	3 or 4	square	Illum, maintained	A0107X		
square	clear	A0162G	LED	12V blue	A0142M4	3 or 4	square	Non-illum, momentary	A0108Y		
square	white	A0162J	LED	12V white	A0142M5	3 or 4	square	Non-illum, maintained	A0108X		
round	black	A0163A	LED	24V red	A0142N1	1 or 2	round	Illum, momentary	A0109Y		
round	red	A0163B	LED	24V green	A0142N2	1 or 2	round	Illum, maintained	A0109X		
round	amber	A0163C	LED	24V amber	A0142N3	1 or 2	round	Non-illum, momentary	A0110Y		
round	yellow	A0163D	LED	24V blue	A0142N4	1 or 2	round	Non-illum, maintained	A0110X		
round	green	A0163E	LED	24V white	A0142N5	3 or 4	round	Illum, momentary	A0111Y		
round	blue	A0163F	LED	48V red	A0142P1	3 or 4	round	Illum, maintained	A0111X		
round	clear	A0163G	LED	48V green	A0142P2	3 or 4	round	Non-illum, momentary	A0112Y		
round	white	A0163J	LED	48V amber	A0142P3	3 or 4	round	Non-illum, maintained	A0112X		

Bezel: rectangular □ square ○ round.   'Illum' - illuminated,   'Non-illum' - non illuminated

Indicator

Screen				Lamp			Operator	
Bezel	Colour	Part No	Lamp	Voltage	Part No	Bezel	Description	Part No
rectangular	black	A0161A	Filament	6.3V	A0141A	rectangular	Indicator	A0171
rectangular	red	A0161B	Filament	14V	A0141B	square	Indicator	A0172
rectangular	amber	A0161C	Filament	28V	A0141C	round	Indicator	A0173
rectangular	yellow	A0161D	Filament	36V	A0141D			
rectangular	green	A0161E	Filament	48V	A0141E			
rectangular	blue	A0161F	Filament	60V	A0141F			
rectangular	clear	A0161G	Neon	110V	A0143G			
rectangular	white	A0161J	Neon	220V	A0143H			
square	black	A0162A	LED	6V red	A0142L1			
square	red	A0162B	LED	6V green	A0142L2			
square	amber	A0162C	LED	6V amber	A0142L3			
square	yellow	A0162D	LED	12V red	A0142M1			
square	green	A0162E	LED	12V green	A0142M2			
square	blue	A0162F	LED	12V amber	A0142M3			
square	clear	A0162G	LED	12V blue	A0142M4			
square	white	A0162J	LED	12V white	A0142M5			
round	black	A0163A	LED	24V red	A0142N1			
round	red	A0163B	LED	24V green	A0142N2			
round	amber	A0163C	LED	24V amber	A0142N3			
round	yellow	A0163D	LED	24V blue	A0142N4			
round	green	A0163E	LED	24V white	A0142N5			
round	blue	A0163F	LED	48V red	A0142P1			
round	clear	A0163G	LED	48V green	A0142P2			
round	white	A0163J	LED	48V amber	A0142P3			

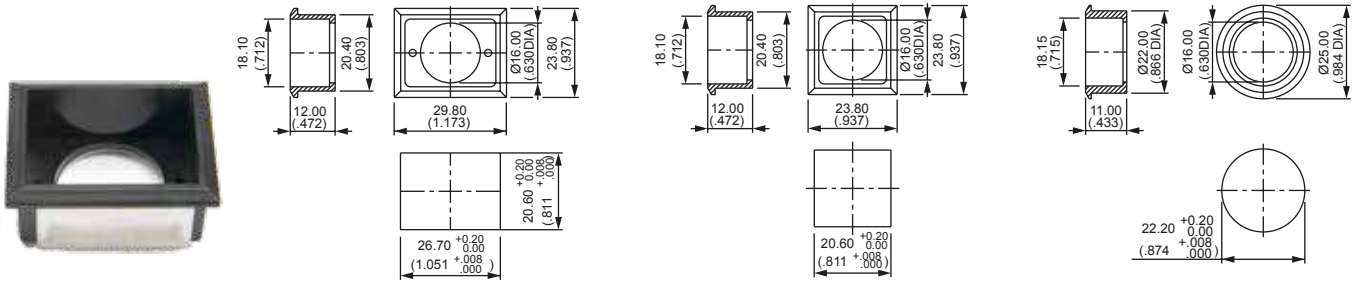Bezel: rectangular □ square ○ round.

⚠ Unsealed switches & indicators (IP40) suffix 01 to the end of the part number.
Screen engraving insertable legends, & bi-color LED's please contact APEM

Flush mount bezels

Dark grey plastic material – supplied with sealing washer
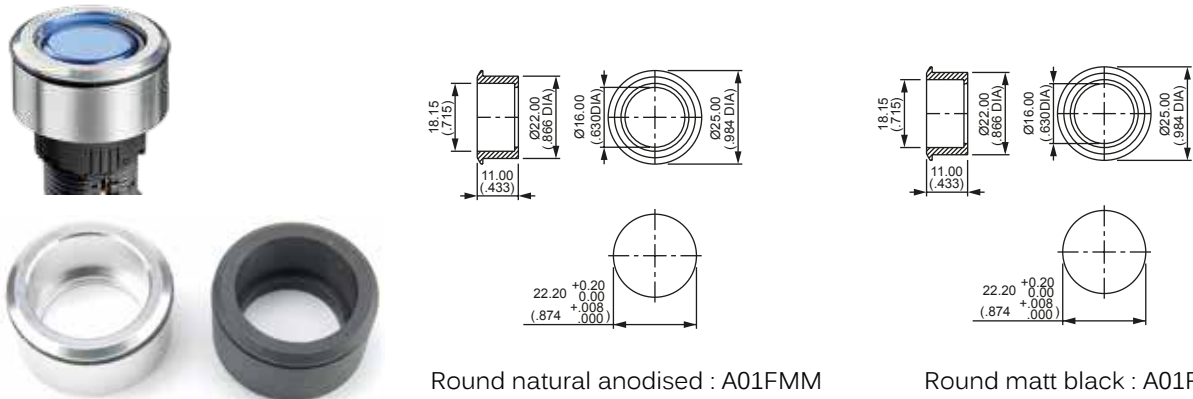
Rectangular : A01FM1   Square : A01FM   Round : A01FM2

Anodised aluminium/matt black
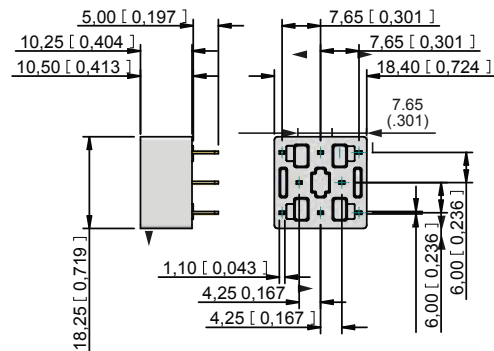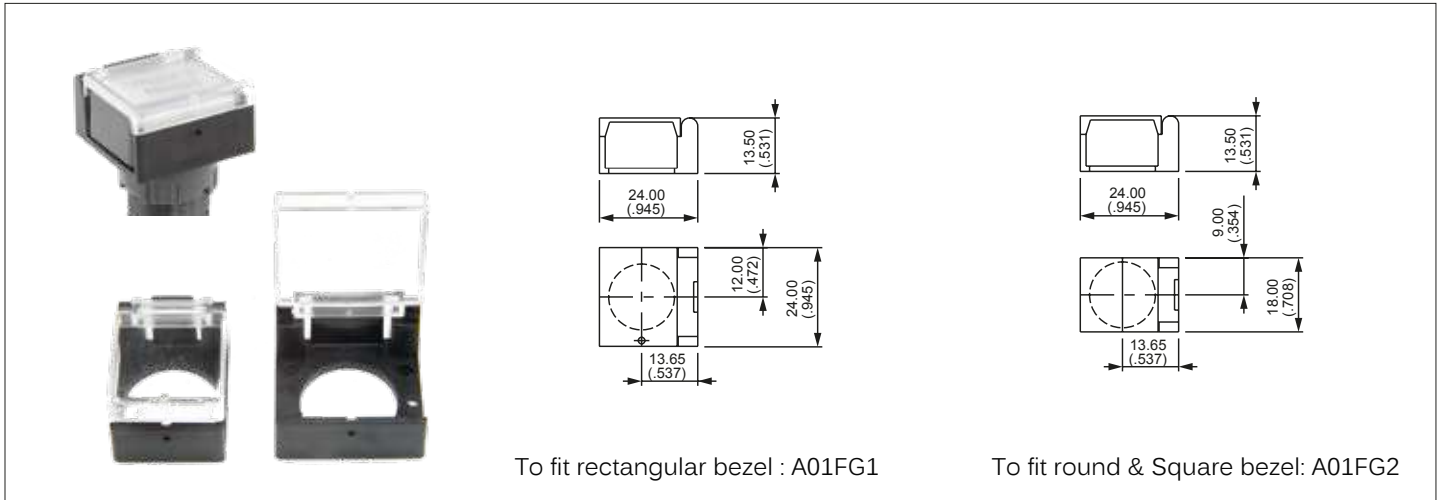
Round natural anodised : A01FMM   Round matt black : A01FMMG

PCB Sockets

Number of Poles	Part No.
Single pole, non illuminated :	A01PC1
Double pole, non illuminated :	A01PC2
Single pole, illuminated :	A01PC3
Double pole, illuminated :	A01PC4
Indicator :	A01PC5

⚠ Dimensions : first dimensions are in mm while inches are shown in brackets.
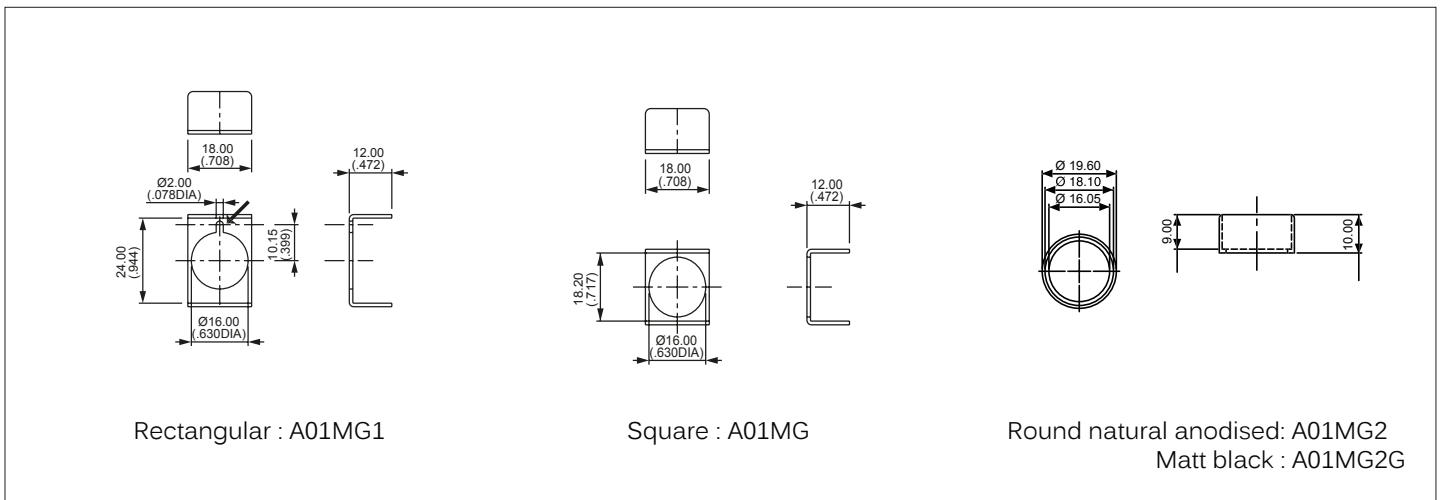Refer to the following pages for further information.

A01 series

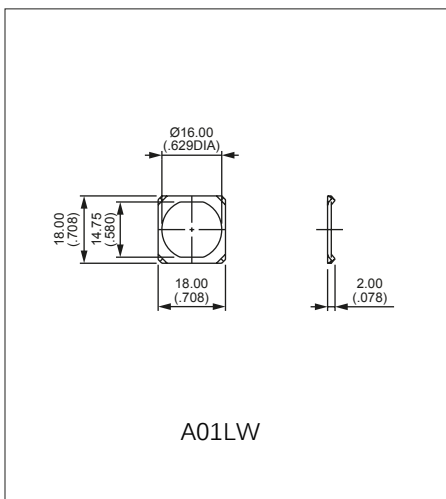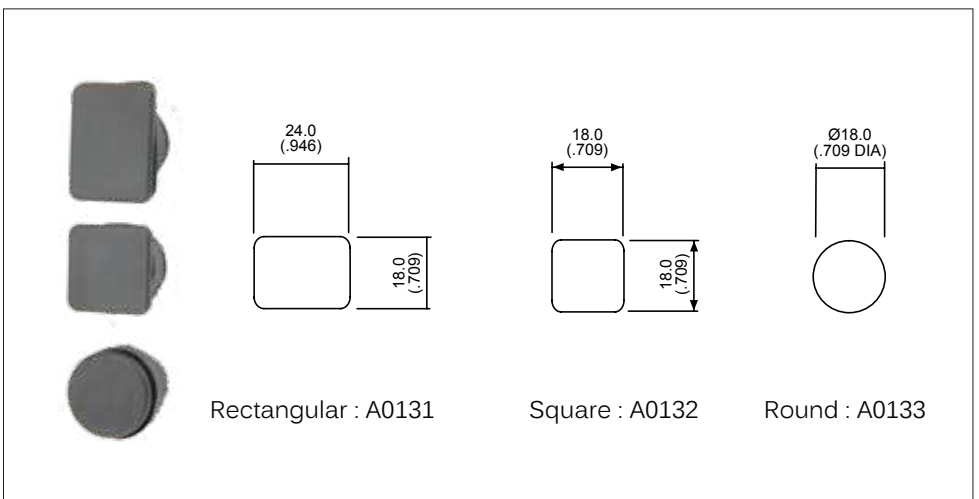## Pushbutton switches & indicators

Accessories

Flap guards

To fit rectangular bezel : A01FG1   To fit round & Square bezel: A01FG2

Aluminium bezel protection guards

Rectangular : A01MG1   Square : A01MG   Round natural anodised: A01MG2
Matt black : A01MG2G

Anti rotation ring

A01LW

Blanking plugs

Rectangular : A0131   Square : A0132   Round : A0133

Installation guide

PUSHBUTTONS
& INDICATORS

ROTARY
LEVER SWITCHES

KEYLOCK
SWITCHES

SCREEN

LEGEND

REFLECTOR

LOCATING
SLOT

BULB

POLARISING
DOT

PANEL
SEAL

FIXING
NUT

8.00 max
(.314 max)

OPERATOR

LATCH

SWITCH BLOCK

PANEL MOUNTING ASSEMBLY

- Drill/punch hole shaped as shown on page one.
- Assemble front operator through hole, fit fxing nut and tighten to a maximum torque of 0.8Nm using tool No. 30-0001.
- Wire chosen switch block as required and slide onto operator until latch engages.
- Fit bulb if required using tool No. 30-0002.
- Snap screen onto reflector assembly with legend in between if required and snap onto front operator, take care to line up the locating slot with the polarising dot and not to damage the internal seal
- To place/remove the bulb use the bulb extractor 30-0002.

SWITCH BLOCK ASSEMBLY

To assemble switch block to the operator, firstly, take care to line up the switch block with the back of the operator. Once in position slide on to the back of the operator. N.B. Ensure latch is fully engaged correctly onto the switch block. To remove switch block, depress the latch and slide the switch block off the operator.

Tools

Nut fixing key

Bulb remover

30-0001

30-0002