A01 series

Pushbutton switches & indicators

Distinctive features and specifications

A01_AX1607USR1



- ❑ 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

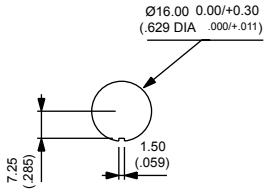
AGENCY APPROVALS

MATERIALS

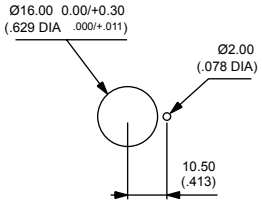
- **Screens** : PC
- **Reflector Assembly** : PC
- **Operator** : PBT
- **Nut** : ABS
- **Camtrack Momentary** : PPE
- **Camtrack Maintained** : PPSU
- **Switch Block 1 & 2 Pole** : PBT
- **Switch Block 3 & 4 Pole** : PEI
- **Contacts** : Gold plated silver

PANEL CUT OUT

Round & Square bezel operators only

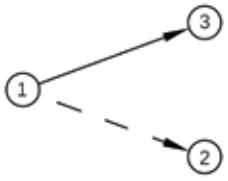


Rectangular bezel operators only



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.

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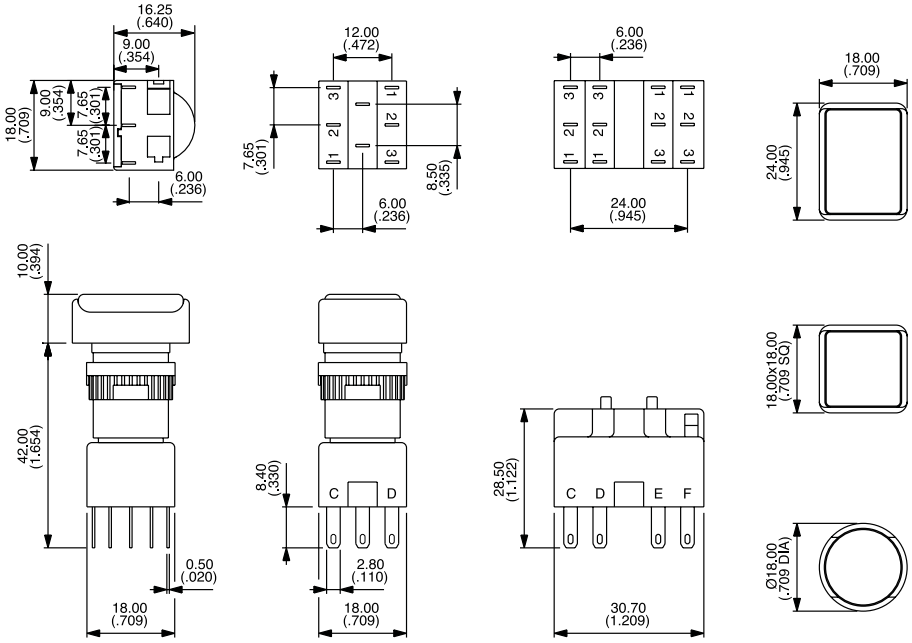
Pushbutton switches & indicators

Panel cut-out Ø16 (0.755)

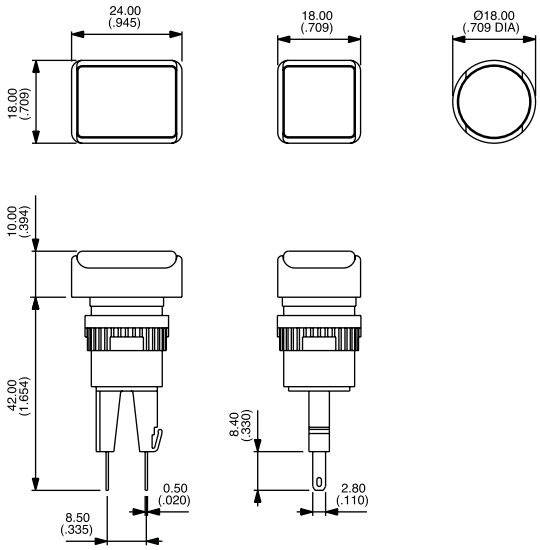
Pushbutton





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
▭	black	A0161A	Filament	6.3V	A0141A	1 or 2	▭	Illum, momentary	A0101Y	Single pole	A0151B
▭	red	A0161B	Filament	14V	A0141B	1 or 2	▭	Illum, maintained	A0101X	Double pole	A0152B
▭	amber	A0161C	Filament	28V	A0141C	1 or 2	▭	Non-illum, momentary	A0102Y	Three pole	A0155B
▭	yellow	A0161D	Filament	36V	A0141D	1 or 2	▭	Non-illum, maintained	A0102X	Four pole	A0153B
▭	green	A0161E	Filament	48V	A0141E	3 or 4	▭	Illum, momentary	A0103Y		
▭	blue	A0161F	Filament	60V	A0141F	3 or 4	▭	Illum, maintained	A0103X		
▭	clear	A0161G	Neon	110V	A0143G	3 or 4	▭	Non-illum, momentary	A0104Y		
▭	white	A0161J	Neon	220V	A0143H	3 or 4	▭	Non-illum, maintained	A0104X		
□	black	A0162A	LED	6V red	A0142L1	1 or 2	□	Illum, momentary	A0105Y		
□	red	A0162B	LED	6V green	A0142L2	1 or 2	□	Illum, maintained	A0105X		
□	amber	A0162C	LED	6V amber	A0142L3	1 or 2	□	Non-illum, momentary	A0106Y		
□	yellow	A0162D	LED	12V red	A0142M1	1 or 2	□	Non-illum, maintained	A0106X		
□	green	A0162E	LED	12V green	A0142M2	3 or 4	□	Illum, momentary	A0107Y		
□	blue	A0162F	LED	12V amber	A0142M3	3 or 4	□	Illum, maintained	A0107X		
□	clear	A0162G	LED	12V blue	A0142M4	3 or 4	□	Non-illum, momentary	A0108Y		
□	white	A0162J	LED	12V white	A0142M5	3 or 4	□	Non-illum, maintained	A0108X		
○	black	A0163A	LED	24V red	A0142N1	1 or 2	○	Illum, momentary	A0109Y		
○	red	A0163B	LED	24V green	A0142N2	1 or 2	○	Illum, maintained	A0109X		
○	amber	A0163C	LED	24V amber	A0142N3	1 or 2	○	Non-illum, momentary	A0110Y		
○	yellow	A0163D	LED	24V blue	A0142N4	1 or 2	○	Non-illum, maintained	A0110X		
○	green	A0163E	LED	24V white	A0142N5	3 or 4	○	Illum, momentary	A0111Y		
○	blue	A0163F	LED	48V red	A0142P1	3 or 4	○	Illum, maintained	A0111X		
○	clear	A0163G	LED	48V green	A0142P2	3 or 4	○	Non-illum, momentary	A0112Y		
○	white	A0163J	LED	48V amber	A0142P3	3 or 4	○	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
▭	black	A0161A	Filament	6.3V	A0141A	▭	Indicator	A0171
▭	red	A0161B	Filament	14V	A0141B	□	Indicator	A0172
▭	amber	A0161C	Filament	28V	A0141C	○	Indicator	A0173
▭	yellow	A0161D	Filament	36V	A0141D			
▭	green	A0161E	Filament	48V	A0141E			
▭	blue	A0161F	Filament	60V	A0141F			
▭	clear	A0161G	Neon	110V	A0143G			
▭	white	A0161J	Neon	220V	A0143H			
□	black	A0162A	LED	6V red	A0142L1			
□	red	A0162B	LED	6V green	A0142L2			
□	amber	A0162C	LED	6V amber	A0142L3			
□	yellow	A0162D	LED	12V red	A0142M1			
□	green	A0162E	LED	12V green	A0142M2			
□	blue	A0162F	LED	12V amber	A0142M3			
□	clear	A0162G	LED	12V blue	A0142M4			
□	white	A0162J	LED	12V white	A0142M5			
○	black	A0163A	LED	24V red	A0142N1			
○	red	A0163B	LED	24V green	A0142N2			
○	amber	A0163C	LED	24V amber	A0142N3			
○	yellow	A0163D	LED	24V blue	A0142N4			
○	green	A0163E	LED	24V white	A0142N5			
○	blue	A0163F	LED	48V red	A0142P1			
○	clear	A0163G	LED	48V green	A0142P2			
○	white	A0163J	LED	48V amber	A0142P3			

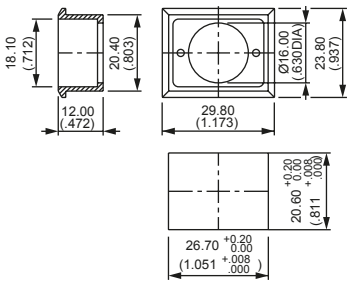
Bezel: ▭ rectangular □ square ○ round.

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

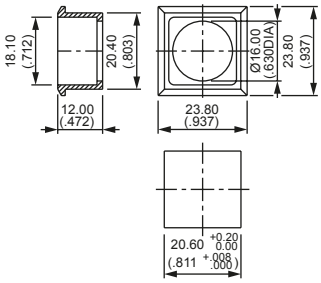
Flush mount bezels

Dark grey plastic material – supplied with sealing washer

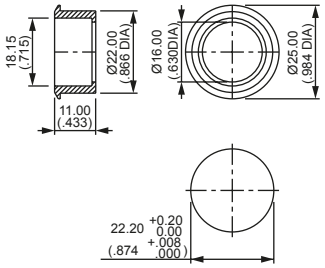




Rectangular : A01FM1



Square : A01FM

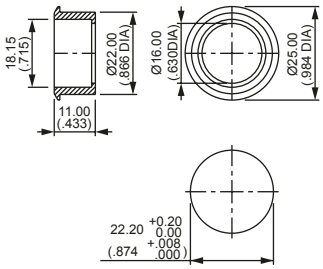


Round : A01FM2

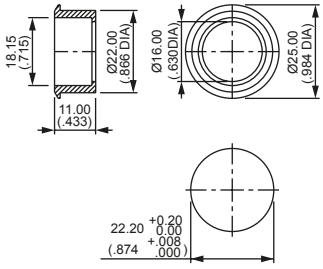
Anodised aluminium/matt black







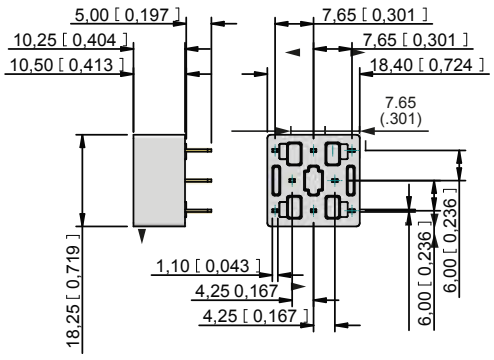
Round natural anodised : A01FMM



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.

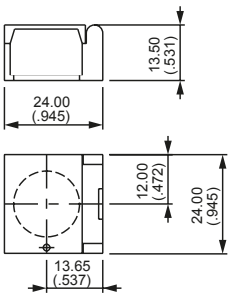
A01 series

Pushbutton switches & indicators

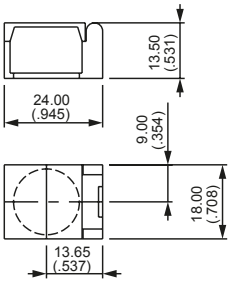
Accessories

Flap guards



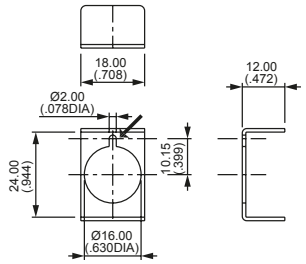


To fit rectangular bezel : A01FG1

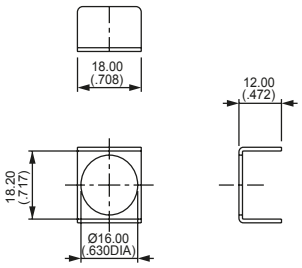


To fit round & Square bezel: A01FG2

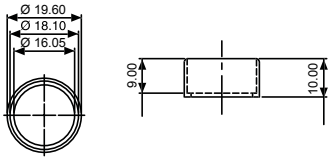
Aluminium bezel protection guards



Rectangular : A01MG1

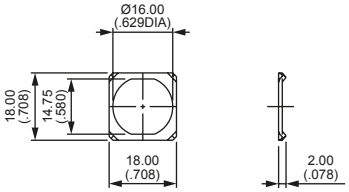


Square : A01MG



Round natural anodised: A01MG2
Matt black : A01MG2G

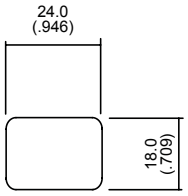
Anti rotation ring



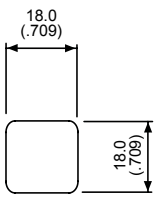
A01LW

Blanking plugs

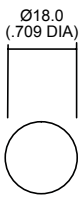




Rectangular : A0131

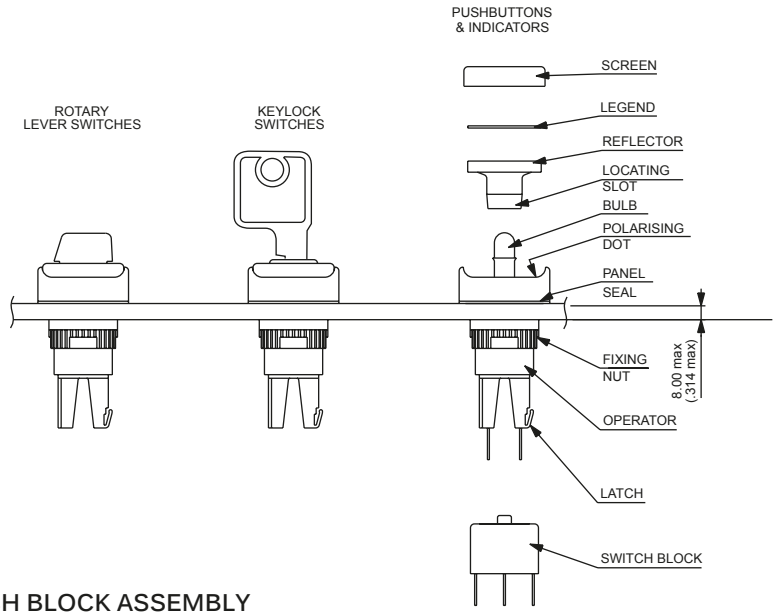


Square : A0132



Round : A0133

Installation guide



PANEL MOUNTING ASSEMBLY

- Drill/punch hole shaped as shown on page one.
- Assemble front operator through hole, fit fixing 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



30-0001

Bulb remover



30-0002