SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

A01 SERIES Panel cut-out .630" (16mm)



Description	Page
Products & features	K3
Specifications	K4
Illuminated or non-illuminated pushbutton switches	K5
Indicators	K6
Rotary lever switches	K7
Keylock switches	K8
Emergency stop and mushroom head switches	K9
Accessories	K10
Installation & tools	K11

Dimensions: first dimensions are in inches while mm are shown in brackets.
Tolerance: The general tolerance for dimensions in the A01 & A02 Series is ± .012" (0.3mm)

A02 SERIES Panel cut-out .866" (22mm)



Description	Page
Features	K3
Specifications	K4
Illuminated or non-illuminated pushbutton switches	K12
Metal bezel pushbuttons and indicators	K13
Flush mounting pushbuttons and indicators	K14
Indicators	K15
Rotary lever switches	K16
Keylock switches	K17
Emergency stop and mushroom head switches	K18
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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

A01 & A02 SERIES

INDUSTRIAL CONTROLS

PRODUCTS & FEATURES

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

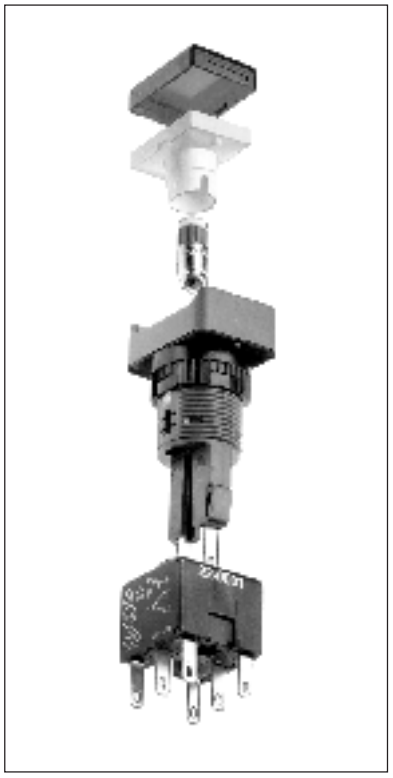
The A01 and A02 Series consist of:

- non-illuminated pushbutton switches
- illuminated pushbutton switches
- indicators
- 2 and 3 position keylock switches
- 2 and 3 position rotary lever switches
- emergency stop switches

... with rectangular, square or round operators.

Key features include:

- Environmental protection to IP65
- Totally modular construction
- 50,000 cycles min. electrical life
- Screen engraving or insertable legends on request
- Numerous agency approvals & markings -



Sub-assembly shows modular construction.

A01 Series

- Panel cut-out: .630" (16mm) dia.
- 1, 2, 3 and 4 poles
- Solder lug/quick connect terminals
- Gold plated silver contacts
- Current/voltage rating:
  6A 250 VAC max. - 10 mA 5 VAC min.
- Lamp: filament, neon or mulyi-chip LED

A02 Series

- Panel cut-outs: .866" (22mm) dia. round or square and 1.160" x .846" (29.5mm x 21.5mm) rectangular
- 1 and 2 poles
- Screw terminals
- Silver contacts
- Current/voltage rating:
  12 A 380 VAC - 16 A 250 VAC max.
  25 mA 5 VAC min.
- Lamp: filament, neon or multi-chip LED or special multi-LED assembly

For back of panel safety, this series has a unique covered cable connection guard (see accessories).

K

A01 & A02 SERIES
INDUSTRIAL CONTROLS
SPECIFICATIONS

	A01 Series	A02 Series
ELECTRICAL		
Function:	Momentary or maintained action	Momentary or maintained action
Current/voltage rating:	10 mA 5 VAC min. - 6 A 250 VAC max.	25mA 5 VAC min. - 12 A 380 VAC or 16 A 250 VAC max.
Contact gap:	.059" (1.5mm)	.059" (1.5mm)- 2 contact pairs w/ double break
Initial contact resistance:	10 mΩ max. at 1 A 4 VDC	10 mΩ max. at 1 A 4 VDC
Insulation resistance:	50 mΩ min.	50 mΩ min.
Dielectric strength:	750 V between open contacts 5,000 V live to accessible	2,000 V between open contacts 4,000 V live to accessible
Electrical life:	50,000 cycles min.	50,000 cycles min.
Insulation:	Class 2	Class 2
Lamp life:	LED: 60,000 hrs. min. to relative luminosity. Filament: approx 5,000 hrs. Neon: approx. 10,000 hrs.	LED: 60,000 hrs. min. to relative luminosity. Filament: approx 5,000 hrs. Neon: approx. 10,000 hrs.
GENERAL		
Mechanical life (min.):	Momentary: 1 million cycles Maintained action: 100,000 cycles	Momentary: 1 million cycles Maintained action: 100,000 cycles Keylock & rotary: 100,000 cycles
Operating force (approx.):	9 - 36 oz.	Keylock & rotary: 100,000 cycles 11 - 54 oz.
Operating temperature:	-20°C to +55°C	-20°C to +85°C
Solder heat resistance: (IEC 68-2-20Tb, method 2)	350°C, 5 seconds	350°C, 5 seconds
Operating humidity:	Up to 95% RH	Up to 95% RH
Degree of environmental protection (IEC 529):	IP 65 front of panel IP 40 back of panel	IP 65 front of panel IP 40 back of panel
Lamps:	Midget grooved T1 3/4, filament, multi-chip LED or neon	Midget grooved T1 3/4, filament, multi-chip LED or neon or special multi-LED assembly
Switch terminals:	Solder/quick connect .110" (2.8mm)	M3 screws - wire 2 x .030" (0.75mm) - 2 max.
Lamp terminals:	Solder/quick connect .110" (2.8mm)	M3 screws - flexible wire 2 x .098"^{2} (mm^2) max. Rigid wire .157"^{2} ($2mm^2$) max.
MATERIALS		
Operator body & parts:	Flame retardant PBT	Flame retardant polyetherimide
Switch body & cover:	Flame retardant PBT	Flame retardant PBT
Actuator:	Flame retardant PBT	Flame retardant PBT
Seals:	Silicon rubber or Nitrile	Silicon rubber or Nirtrile
Contacts:	Gold plated silver	Silver
Contact carriers:	Brass with silver plate and gold flash	Brass with silver plate
Reflector, diffuser & screen:	Flame retardant polycarbonate	Flame retardant polycarbonate
Retaining nut:	ABS	ABS
Screws and clamps:	-	Zinc plated steel w/clear passivation

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

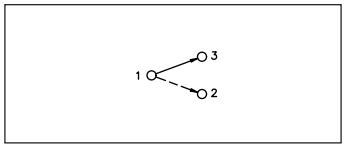
K

A01 SERIES

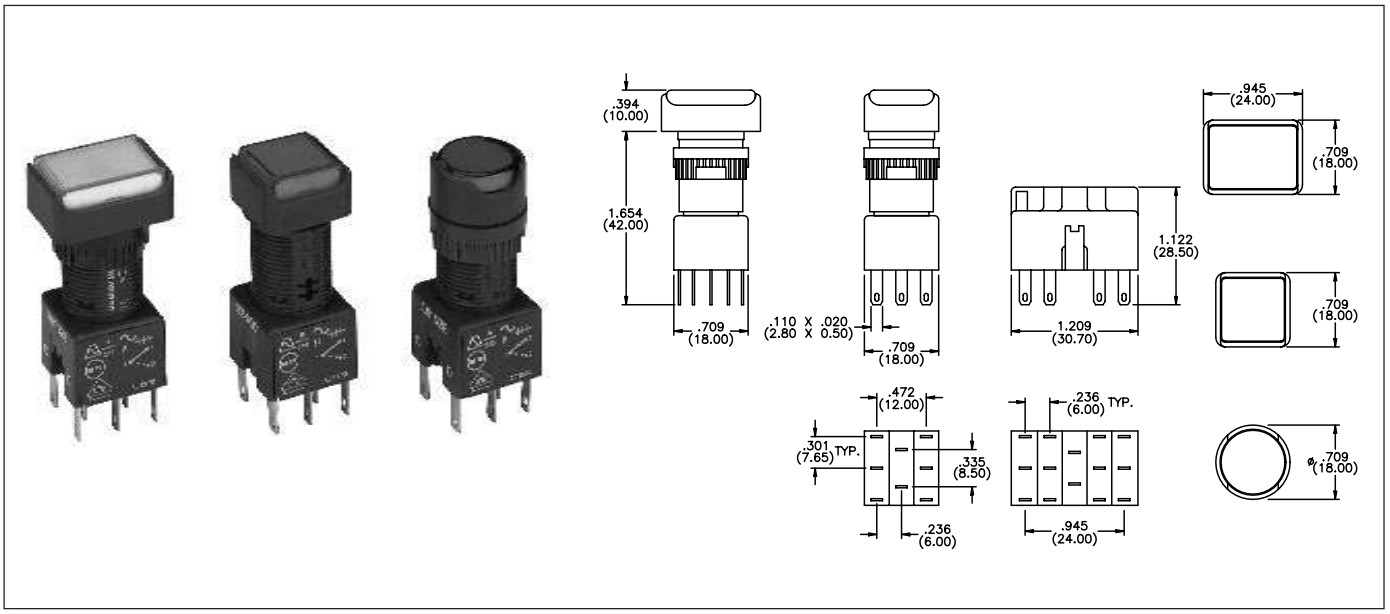
PUSHBUTTON SWITCHES, ILLUMINATED OR NON-ILLUMINATED

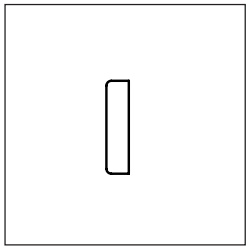
Panel cut-out .630" (16mm)

A pushbutton assembly requires:
Screen + Lamp (if illuminated) + Operator + Switchblock
To order, select desired model numbers from tables below.
Example: IP65 rectangular pushbutton, single pole, maintained, red screen and 12V red LED = **A0161B, A0142M1, A0101X and A0151B**
Switches are normally shipped unassembled. Consult factory if factory assembly is required.



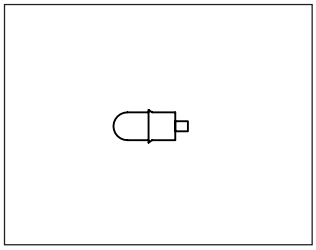
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.





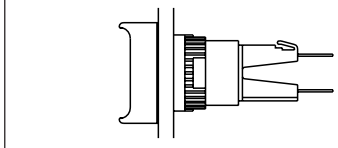
SCREEN

Bezel	Color	Part no.
▬	black	**A0161A**
▬	red	**A0161B**
▬	amber	**A0161C**
▬	yellow	**A0161D**
▬	green	**A0161E**
▬	blue	**A0161F**
▬	clear	**A0161G**
▬	white	**A0161J**
■	black	**A0162A**
■	red	**A0162B**
■	amber	**A0162C**
■	yellow	**A0162D**
■	green	**A0162E**
■	blue	**A0162F**
■	clear	**A0162G**
■	white	**A0162J**
●	black	**A0163A**
●	red	**A0163B**
●	amber	**A0163C**
●	yellow	**A0163D**
●	green	**A0163E**
●	blue	**A0163F**
●	clear	**A0163G**
●	white	**A0163J**



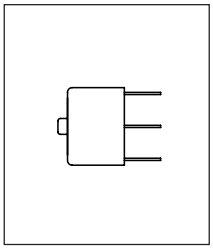
LAMP

Lamp	Voltage	Part no.
Filament	6.3V	**A0141A**
Filament	14V	**A0141B**
Filament	28V	**A0141C**
Filament	36V	**A0141D**
Filament	48V	**A0141E**
Filament	60V	**A0141F**
Neon	110V	**A0143G**
Neon	220V	**A0143H**
LED	6V red	**A0142L1**
LED	6V green	**A0142L2**
LED	6V amber	**A0142L3**
LED	12V red	**A0142M1**
LED	12V green	**A0142M2**
LED	12V amber	**A0142M3**
LED	12V blue	**A0142M4**
LED	12V white	**A0142M5**
LED	24V red	**A0142N1**
LED	24V green	**A0142N2**
LED	24V amber	**A0142N3**
LED	24V blue	**A0142N4**
LED	24V white	**A0142N5**
LED	48V red	**A0142P1**
LED	48V green	**A0142P2**
LED	48V amber	**A0142P3**



OPERATOR

Poles	Bezel	Description	Part no.
1 or 2	▬	illum, momentary	**A0101Y**
1 or 2	▬	illum, maintained	**A0101X**
1 or 2	▬	non-illum, momentary	**A0102Y**
1 or 2	▬	non-illum, maintained	**A0102X**
3 or 4	▬	illum, momentary	**A0103Y**
3 or 4	▬	illum, maintained	**A0103X**
3 or 4	▬	non-illum, momentary	**A0104Y**
3 or 4	▬	non-illum, maintained	**A0104X**
1 or 2	■	illum, momentary	**A0105Y**
1 or 2	■	illum, maintained	**A0105X**
1 or 2	■	non-illum, momentary	**A0106Y**
1 or 2	■	non-illum, maintained	**A0106X**
3 or 4	■	illum, momentary	**A0107Y**
3 or 4	■	illum, maintained	**A0107X**
3 or 4	■	non-illum, momentary	**A0108Y**
3 or 4	■	non-illum, maintained	**A0108X**
1 or 2	●	illum, momentary	**A0109Y**
1 or 2	●	illum, maintained	**A0109X**
1 or 2	●	non-illum, momentary	**A0110Y**
1 or 2	●	non-illum, maintained	**A0110X**
3 or 4	●	illum, momentary	**A0111Y**
3 or 4	●	illum, maintained	**A0111X**
3 or 4	●	non-illum, momentary	**A0112Y**
3 or 4	●	non-illum, maintained	**A0112X**



SWITCH BLOCK

No. of poles	Part no.
Single pole	**A0151B**
Double pole	**A0152B**
Three pole	**A0155B**
Four pole	**A0153B**

FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.

FOR SCREEN ENGRAVING OR INSERTABLE LEGENDS: Contact factory.

Bezel: ▬ rectangular ■ square ● round 'illum' - illuminated 'non-illum' - non-illuminated

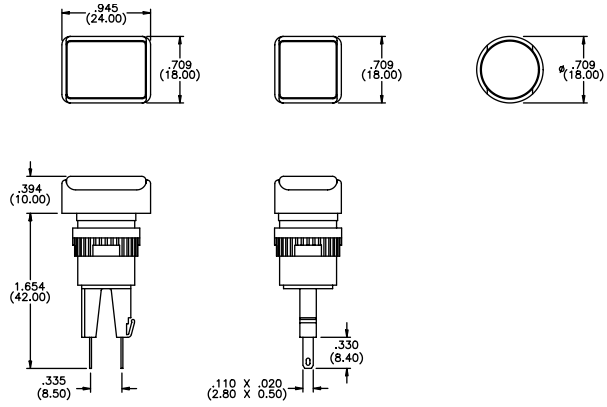
A01 SERIES

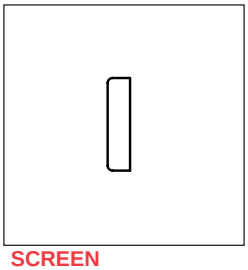
INDICATORS

Panel cut-out .630" (16mm)

An indicator assembly requires:
Screen + Lamp + Operator
To order, select desired model numbers from tables below.
Example: IP65 rectangular indicator with red screen and 12V red LED =
A0161B, A0142M1 and A0171
Indicators are normally shipped unassembled. Consult factory if factory assembly is required.

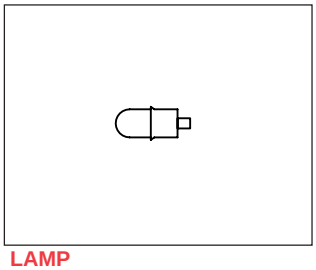






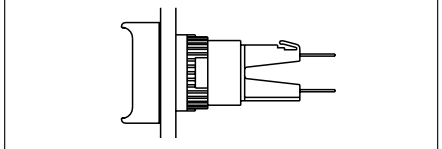
SCREEN

Bezel	Color	Part no.
▬	black	**A0161A**
▬	red	**A0161B**
▬	amber	**A0161C**
▬	yellow	**A0161D**
▬	green	**A0161E**
▬	blue	**A0161F**
▬	clear	**A0161G**
▬	white	**A0161J**
■	black	**A0162A**
■	red	**A0162B**
■	amber	**A0162C**
■	yellow	**A0162D**
■	green	**A0162E**
■	blue	**A0162F**
■	clear	**A0162G**
■	white	**A0162J**
●	black	**A0163A**
●	red	**A0163B**
●	amber	**A0163C**
●	yellow	**A0163D**
●	green	**A0163E**
●	blue	**A0163F**
●	clear	**A0163G**
●	white	**A0163J**



LAMP

Lamp	Voltage	Part no.
Filament	6.3V	**A0141A**
Filament	14V	**A0141B**
Filament	28V	**A0141C**
Filament	36V	**A0141D**
Filament	48V	**A0141E**
Filament	60V	**A0141F**
Neon	110V	**A0143G**
Neon	220V	**A0143H**
LED	6V red	**A0142L1**
LED	6V green	**A0142L2**
LED	6V amber	**A0142L3**
LED	12V red	**A0142M1**
LED	12V green	**A0142M2**
LED	12V amber	**A0142M3**
LED	12V blue	**A0142M4**
LED	12V white	**A0142M5**
LED	24V red	**A0142N1**
LED	24V green	**A0142N2**
LED	24V amber	**A0142N3**
LED	24V blue	**A0142N4**
LED	24V white	**A0142N5**
LED	48V red	**A0142P1**
LED	48V green	**A0142P2**
LED	48V amber	**A0142P3**



OPERATOR

Bezel	Description	Part no.
▬	indicator	**A0171**
■	indicator	**A0172**
●	indicator	**A0173**

Bezel: ▬ rectangular ■ square ● round

FOR UNSEALED INDICATORS (IP40): Add '01' to end of OPERATOR model number.

FOR SCREEN ENGRAVING OR INSERTABLE LEGENDS: Contact factory.

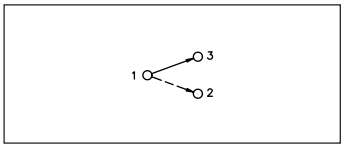
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

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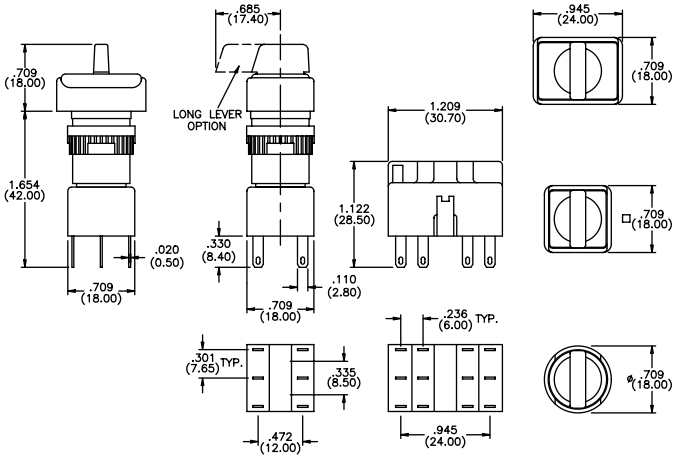
A01 SERIES
ROTARY LEVER SWITCHES
Panel cut-out .630" (16mm)

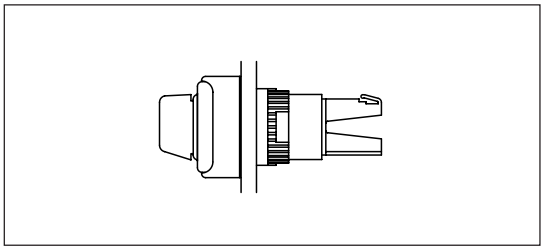
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

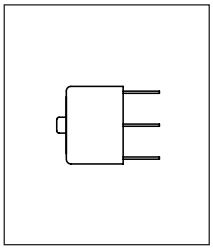
A rotary lever switch assembly requires:
Operator + Switchblock
To order, select desired model numbers from tables below.
Example: IP65 rectangular rotary switch with long lever, single pole, 2 positions maintained = **A019101 and A0151B**
Switches are normally shipped unassembled. Consult factory if factory assembly is required.











OPERATOR

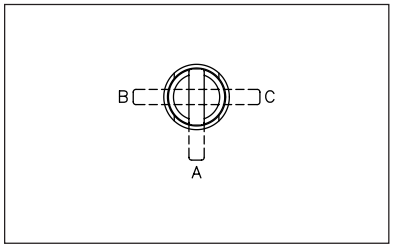
Poles	Bezel	Description	Short lever	Long lever
1 or 2	▬	2 pos, maintained	**A019201**	**A019101**
1 or 2	▬	2 pos, momentary	**A019202**	**A019102**
3 or 4	▬	2 pos, maintained	**A019203**	**A019103**
3 or 4	▬	2 pos, momentary	**A019204**	**A019104**
1 or 2	▬	3 pos, maintained	**A019205**	**A019105**
1 or 2	▬	3 pos, momentary	**A019206**	**A019106**
1 or 2	▬	3 pos, mainB, momC	**A019207**	**A019107**
1 or 2	▬	3 pos, mainC, momB	**A019208**	**A019108**
1 or 2	■	2 pos, maintained	**A019401**	**A019301**
1 or 2	■	2 pos, momentary	**A019402**	**A019302**
3 or 4	■	2 pos, maintained	**A019403**	**A019303**
3 or 4	■	2 pos, momentary	**A019404**	**A019304**
1 or 2	■	3 pos, maintained	**A019405**	**A019305**
1 or 2	■	3 pos, momentary	**A019406**	**A019306**
1 or 2	■	3 pos, mainB, momC	**A019407**	**A019307**
1 or 2	■	3 pos, mainC, momB	**A019408**	**A019308**
1 or 2	●	2 pos, maintained	**A019601**	**A019501**
1 or 2	●	2 pos, momentary	**A019602**	**A019502**
3 lor 4	●	2 pos, maintained	**A019603**	**A019503**
3 or 4	●	2 pos, momentary	**A019604**	**A019504**
1 or 2	●	3 pos, maintained	**A019605**	**A019505**
1 or 2	●	3 pos, momentary	**A019606**	**A019506**
1 or 2	●	3 pos, mainB, momC	**A019607**	**A019507**
1 or 2	●	3 pos, mainC, momB	**A019608**	**A019508**

SWITCH BLOCK

No. of poles	Part no.
Single pole	**A0151B**
Double pole	**A0152B**
Three pole	**A0155B**
Four pole	**A0153B**

FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.

LEVER POSITIONS



Lever rotation - 2 position switches
The model numbers shown are for switches with counterclockwise lever rotation. For clockwise rotation, replace:

01 with **09**
02 with **10**
03 with **11**
04 with **12**

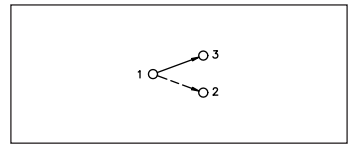
at the end of the model number.

Bezel: ▬ rectangular ■ square ● round 'pos' - position' 'mainB' - maintained position B 'momC' - momentary position C

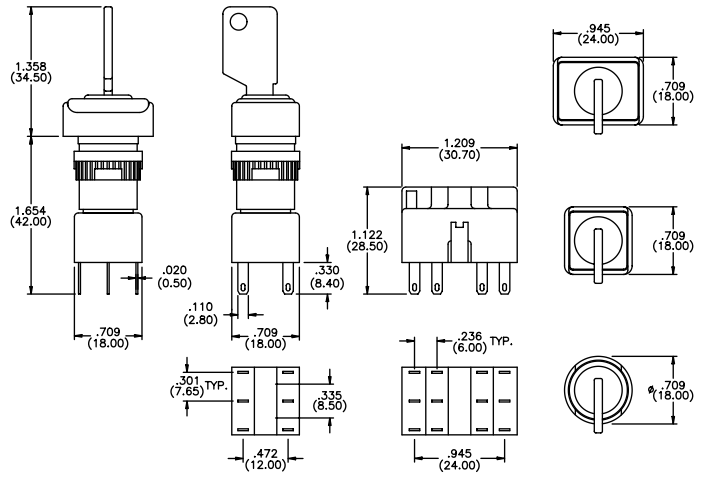
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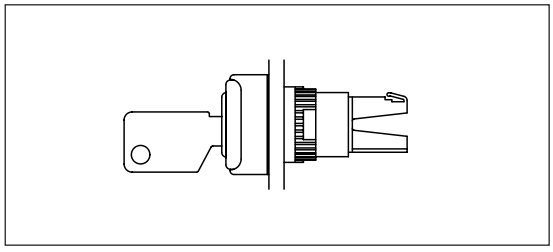
A01 SERIES
KEYLOCK SWITCHES
Panel cut-out .630" (16mm)

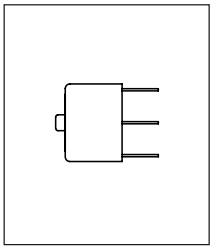
A keylock switch assembly requires:
Operator + Switchblock
To order, select desired model numbers from tables below.
Example: Rectangular keylock switch, single pole, 2 positions maintained =
A018101 and A0151B
Switches are normally shipped unassembled. Consult factory if factory assembly is required.











OPERATOR

Poles	Bezel	Description	Part no.	Key removable
1 or 2	▬	2 pos, maintained	**A018101**	**A - C**
1 or 2	▬	2 pos, momentary	**A018102**	**A**
3 or 4	▬	2 pos, maintained	**A018103**	**A - C**
3 or 4	▬	2 pos, momentary	**A018104**	**A**
1 or 2	▬	3 pos, maintained	**A018105**	**A - B - C**
1 or 2	▬	3 pos, momentary	**A018106**	**A**
1 or 2	▬	3 pos, mainB, momC	**A018107**	**A - B**
1 or 2	▬	3 pos, mainC, momB	**A018108**	**A - C**
1 or 2	■	2 pos, maintained	**A018201**	**A - C**
1 or 2	■	2 pos, momentary	**A018202**	**A**
3 or 4	■	2 pos, maintained	**A018203**	**A - C**
3 or 4	■	2 pos, momentary	**A018204**	**A**
1 or 2	■	3 pos, maintained	**A018205**	**A - B - C**
1 or 2	■	3 pos, momentary	**A018206**	**A**
1 or 2	■	3 pos, mainB, momC	**A018207**	**A - B**
1 or 2	■	3 pos, mainC, momB	**A018208**	**A - C**
1 or 2	●	2 pos, maintained	**A018301**	**A - C**
1 or 2	●	2 pos, momentary	**A018302**	**A**
3 lor 4	●	2 pos, maintained	**A018303**	**A - C**
3 or 4	●	2 pos, momentary	**A018304**	**A**
1 or 2	●	3 pos, maintained	**A018305**	**A - B - C**
1 or 2	●	3 pos, momentary	**A018306**	**A**
1 or 2	●	3 pos, mainC, momB	**A018307**	**A -**

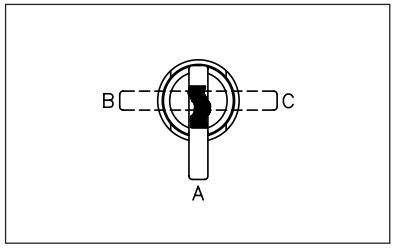
SWITCH BLOCK

No. of poles	Part no.
Single pole	**A0151B**
Double pole	**A0152B**
Three pole	**A0155B**
Four pole	**A0153B**

FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.

NON-REMOVABLE KEY POSITIONS: Contact factory.

KEY POSITIONS



Key rotation - 2 position switches
The model numbers shown are for switches with counterclockwise key rotation. For clockwise rotation, replace:

01 with **25**
02 with **24**
03 with **27**
04 with **28**

at the end of model number.

2 standard keys are supplied.
20 key barrel types available from stock.

Bezel: ▬ rectangular ■ square ● round 'pos' - position' 'mainB' - maintained position B 'momC' - momentary position C

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

K

A01 SERIES

EMERGENCY STOP SWITCHES & MUSHROOM HEAD PUSHBUTTONS

Panel cut-out .630" (16mm)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

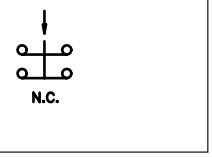
EMERGENCY STOP SWITCHES

- **Highly visible .944" (24mm) dia. red mushroom actuator**
- **Highly reliable positive break switch**
- **Push to shut switch 'off', twist to reset to 'on'**

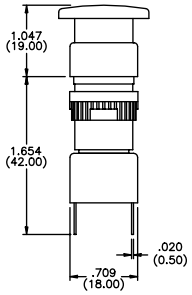
An emergency stop switch assembly requires: Operator + Switch block

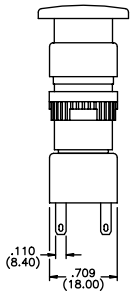
To order, specify with single pole or double pole switch block. **Approved to UL1054/EN 60947**

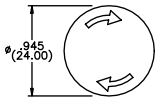
Switches are normally shipped unassembled. Consult factory if factory assembly is required.

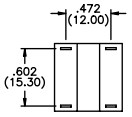


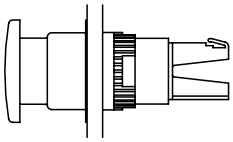






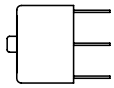






OPERATOR

Bezel	Description	Part no.
●	Emergency stop	**A01ES**



SWITCH BLOCK

No. of poles	Part no.
Single pole	**A0150B**
Double pole	**A0154B**

ACCESSORY

2.362" (60mm) dia.
Self Adhesive Label



Description	Part no.
Yellow label with text	**A01YL1**
Yellow label	**A01YL2**

MUSHROOM HEAD PUSHBUTTONS

OPERATOR

Bezel	Description	Part no.
●	Red momentary operator	**A01MMB**
●	Black momentary operator	**A01MMA**
●	Red maintained operator	**A01MXB**
●	Black maintained operator	**A01MXA**

For other colors, contact factory.

Bezel: ● round

SWITCH BLOCK

No. of poles	Part no.
Single pole	**A0151B**
Double pole	**A0152B**
Three pole	**A0155B**
Four pole	**A0153B**

Momentary and maintained function mushroom head pushbutton actuators.
Momentary version is un-marked.
Dimensions of mushroom head pushbuttons are the same as emergency stop switches (above).

Mushroom head pushbutton assembly requires: Operator + Switchblock

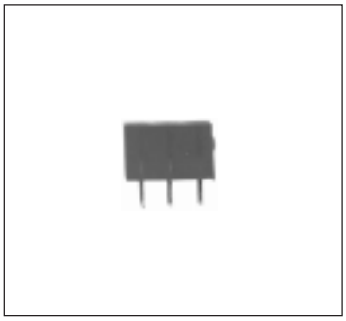
FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.

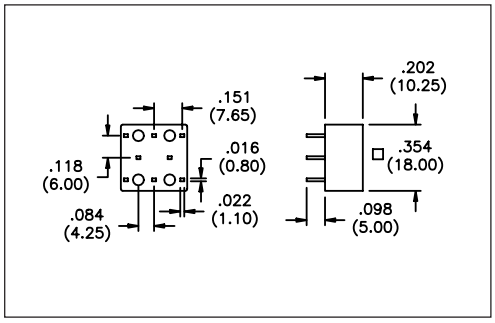
K

A01 SERIES

ACCESSORIES

PRINTED CIRCUIT BOARD SOCKET

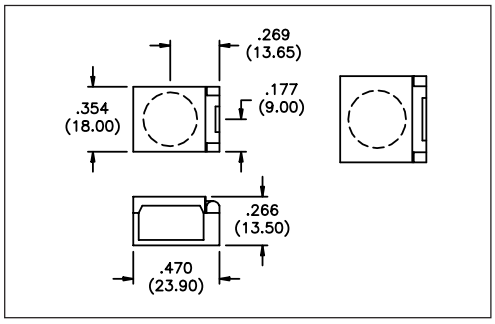




Single pole, non-illuminated	A01PC1
Double pole, non-illuminated	A01PC2
Single pole, illuminated	A01PC3
Double pole, illuminated	A01PC4
Indicator	A01PC5

FLAPGUARDS

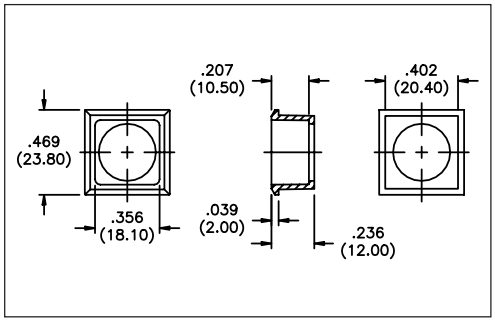




Rectangular bezel	A01FG1
Round/square bezel	A01FG2

FLUSH MOUNTING BEZELS

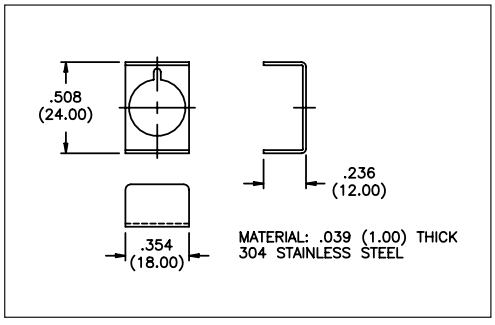




Rectangular bezel	A01FM1
Round/square bezel	A01FM
Rectangular washer	A01FM1 washer
Round/square washer	A01FM washer

METAL GUARDS

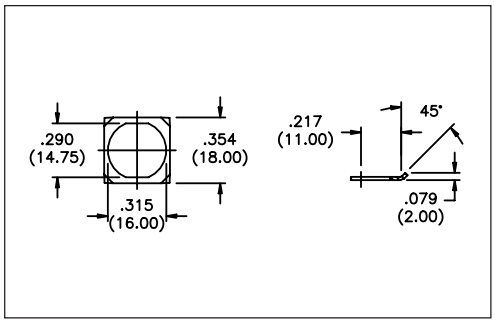




Rectangular bezel	A01MG1
Roung/square bezel	A01MG

ANTI-ROTATION RING





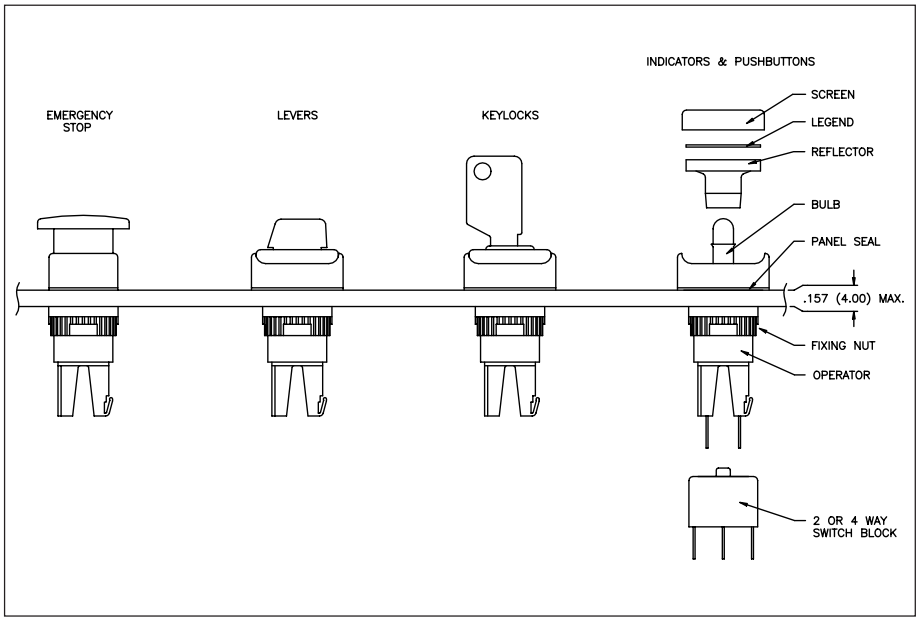
Lock washer	A01LW

K

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

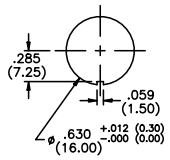
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODULAR CONSTRUCTION / PANEL MOUNTING

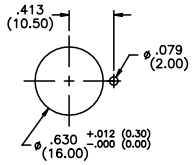


PANEL CUT-OUTS

Round & square operators



Rectangular operators



Max. panel thickness: .156" (4mm)

PANEL MOUNTING ASSEMBLY

- Drill or punch hole per panel cut-outs above.
- Assemble front operator through hole and assemble fixing nut finger tight.
- Wire switch block as required and slide onto operator until latch engages.
- Assemble bulb, if required, using tool number 30-0002.
- Snap the screen onto the reflector assembly with legend in between, if required. Then snap onto front of operator, taking care to line up the locating slot with the polarizing dot to prevent damaging the seal.

TO REMOVE BULB

Remove reflector/screen assembly by inserting tool number 30-0006 between the bezel finger guard and the screen to ingage the slot and pulling. Use the bulb extractor to remove the bulb.

SWITCH BLOCK

To assemble switch block to operator, carefully line up switch block with operator then slide onto front of operator. Insure the latch is fully engaged correctly onto the switch block.

To remove the switch block, depress the latch and slide the switch block off the operator.

FIXING NUT KEY



30-0001

BULB REMOVER



30-0002

SCREEN REMOVER



30-0006

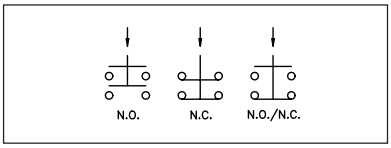
K

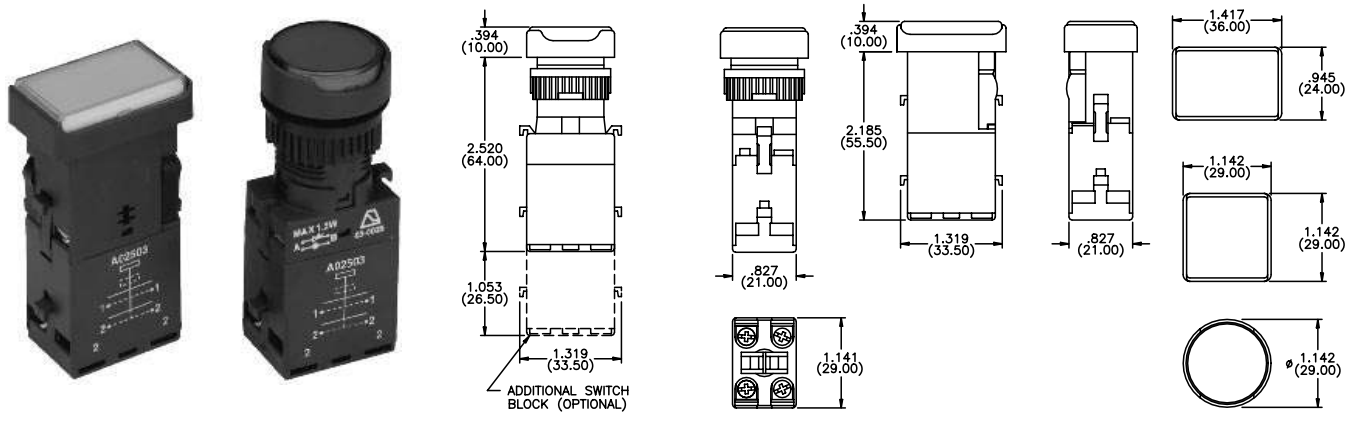
A02 SERIES

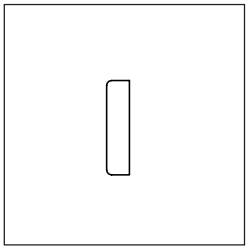
PUSHBUTTON SWITCHES, ILLUMINATED OR NON-ILLUMINATED

Panel cut-out .866" (22mm) or 1.161" x .846" (29.5mm x 21.5mm)

A pushbutton assembly requires:
Screen + Lamp (if illuminated) + Operator + one or two Switchblocks
To order, select desired model numbers from tables below.
Example: IP65 rectangular maintained pushbutton, switch blocks with 2 N.O. contacts, red screen and 12V red LED = **A0261B, A0242J1, A0201X and A02503**
Switches are normally shipped unassembled. Consult factory if factory assembly is required.

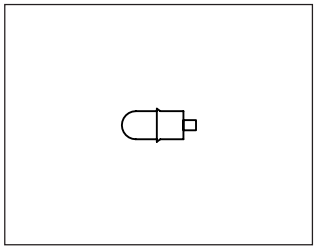






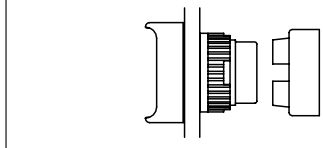
SCREEN

Bezel	Color	Part no.
▬	black	**A0261A**
▬	red	**A0261B**
▬	amber	**A0261C**
▬	yellow	**A0261D**
▬	green	**A0261E**
▬	blue	**A0261F**
▬	clear	**A0261G**
▬	white	**A0261J**
■	black	**A0262A**
■	red	**A0262B**
■	amber	**A0262C**
■	yellow	**A0262D**
■	green	**A0262E**
■	blue	**A0262F**
■	clear	**A0262G**
■	white	**A0262J**
●	black	**A0263A**
●	red	**A0263B**
●	amber	**A0263C**
●	yellow	**A0263D**
●	green	**A0263E**
●	blue	**A0263F**
●	clear	**A0263G**
●	white	**A0263J**



LAMP

Lamp	Voltage	Part no.
Filament	6.3V	**A0141A**
Filament	14V	**A0141B**
Filament	28V	**A0141C**
Filament	36V	**A0141D**
Filament	48V	**A0141E**
Filament	60V	**A0141F**
Neon	110V	**A0143G**
Neon	220V	**A0143H**
LED lamp model no's: see Pgs K5 & K6		
LED assy ▬	6V	**A0242H***
LED assy ▬	12V	**A0242J***
LED assy ▬	24V	**A0242K***
LED assy ■	6V	**A0243H***
LED assy ■	12V	**A0243J***
LED assy ■	24V	**A0243K***
LED assy ●	6V	**A0244H***
LED assy ●	12V	**A0244J***
LED assy ●	24V	**A0244K***
Replace * with color code for LED assemblies: **1**: red **2**: green **3**: amber		

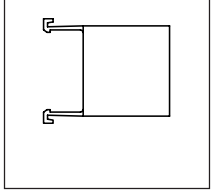


OPERATOR

Bezel	Description	Lamp type	Part no.
▬	illum, mom	lamp/LED	**A0201Y**
▬	illum, maint	lamp/LED	**A0201X**
▬	illum, mom	LED assy	**A0202Y**
▬	illum, maint	LED assy	**A0202X**
▬	non-illum, mom		**A0203Y**
▬	non-illum, maint		**A0203X**
■	illum, mom	lamp/LED	**A0204Y**
■	illum, maint	lamp/LED	**A0204X**
■	illum, mom	LED assy	**A0205Y**
■	illum, maint	LED assy	**A0205X**
■	non-illum, mom		**A0206Y**
■	non-illum, maint		**A0206X**
●	illum, mom	lamp/LED	**A0207Y**
●	illum, maint	lamp/LED	**A0207X**
●	illum, mom	LED assy	**A0208Y**
●	illum, maint	LED assy	**A0208X**
●	non-illum, mom		**A0209Y**
●	non-illum, maint		**A0209X**

White or blue LED assembly: Contact factory.

FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.



SWITCH BLOCK

Contacts	Part no.
1 N.O.	**A02501**
1 N.C.	**A02502**
2 N.O.	**A02503**
2 N.C.	**A02504**
1 N.O./1 N.C.	**A02505**

SECOND SWITCH BLOCK

Contacts	Part no.
1 N.O.	**A02506**
1 N.C.	**A02507**
2 N.O.	**A02508**
2 N.C.	**A02509**
1 N.O./1 N.C.	**A02510**

To achieve 3 or 4 pole switching, add second switch block, from above table.

FOR SCREEN ENGRAVING OR INSERTABLE LEGENDS: Contact factory.

Bezel: ▬ rectangular ■ square ● round 'illum' - illuminated 'non-illum' - non-illuminated 'mom' - momentary 'maint' - maintained

K

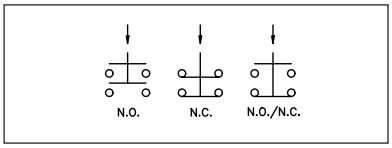
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

A02 SERIES

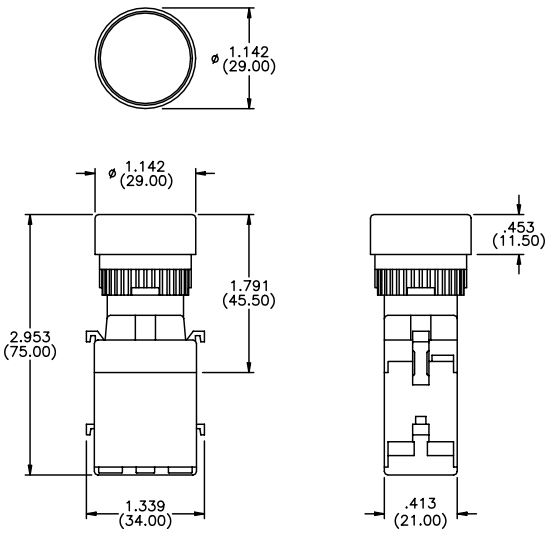
METAL BEZEL PUSHBUTTON SWITCHES & INDICATORS

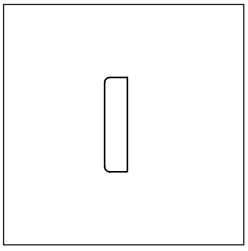
Panel cut-out .866" (22mm)

A pushbutton assembly requires: Screen + Lamp (if illuminated) + Operator + one or two Switchblocks. An indicator assembly requires: Screen + Lamp + Operator.
To order, select desired model numbers from tables below. **Example:** IP65 metal bezel maintained pushbutton, switch block with 2 N.O. contacts, red screen and 12V red LED = **A0263B, A0244J1, A0211X and A02503**
Switches are normally shipped unassembled. Consult factory if factory assembly is required.



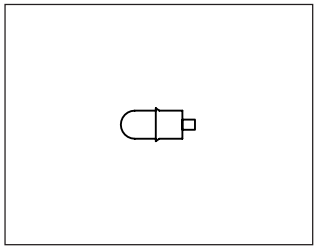






SCREEN

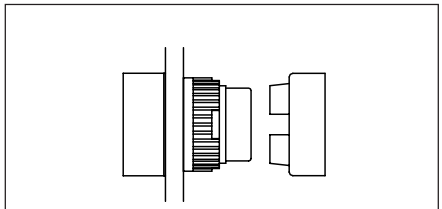
Bezel	Color	Part no.
●	black	**A0263A**
●	red	**A0263B**
●	amber	**A0263C**
●	yellow	**A0263D**
●	green	**A0263E**
●	blue	**A0263F**
●	clear	**A0263G**
●	white	**A0263J**



LAMP

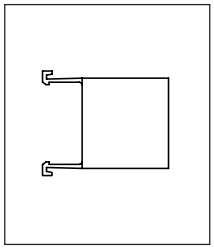
Lamp	Voltage	Part no.
Filament	6.3V	**A0141A**
Filament	14V	**A0141B**
Filament	28V	**A0141C**
Filament	36V	**A0141D**
Filament	48V	**A0141E**
Filament	60V	**A0141F**
Neon	110V	**A0143G**
Neon	220V	**A0143H**
LED lamp model no's: see Pgs K5 & K6		
LED assy ●	6V	**A0244H***
LED assy ●	12V	**A0244J***
LED assy ●	24V	**A0244K***
Replace * with color code for LED assemblies: **1**: red **2**: green **3**: amber		

White or blue LED assy: Contact factory.



OPERATOR

Bezel	Description	Lamp type	Part no.
●	illum, mom	lamp/LED	**A0210Y**
●	illum, maint	lamp/LED	**A0210X**
●	illum, mom	LED assy	**A0211Y**
●	illum, maint	LED assy	**A0211X**
●	non-illum, mom		**A0212Y**
●	non-illum, maint		**A0212X**
●	illum, indicator	lamp/LED	**A0277**
●	illum, indicator	LED assy	**A0278**



SWITCH BLOCK

Contacts	Part no.
1 N.O.	**A02501**
1 N.C.	**A02502**
2 N.O.	**A02503**
2 N.C.	**A02504**
1 N.O./1 N.C.	**A02505**

SECOND SWITCH BLOCK

Contacts	Part no.
1 N.O.	**A02506**
1 N.C.	**A02507**
2 N.O.	**A02508**
2 N.C.	**A02509**
1 N.O./1 N.C.	**A02510**

To achieve 3 or 4 pole switching, add second switch block, from above table.

FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.
FOR SCREEN ENGRAVING OR INSERT-ABLE LEGENDS: Contact factory.

Bezel: ▬ rectangular ■ square ● round 'illum' - illuminated 'non-illum' - non-illuminated 'mom' - momentary 'maint' - maintained

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

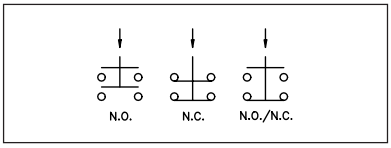
K

A02 SERIES

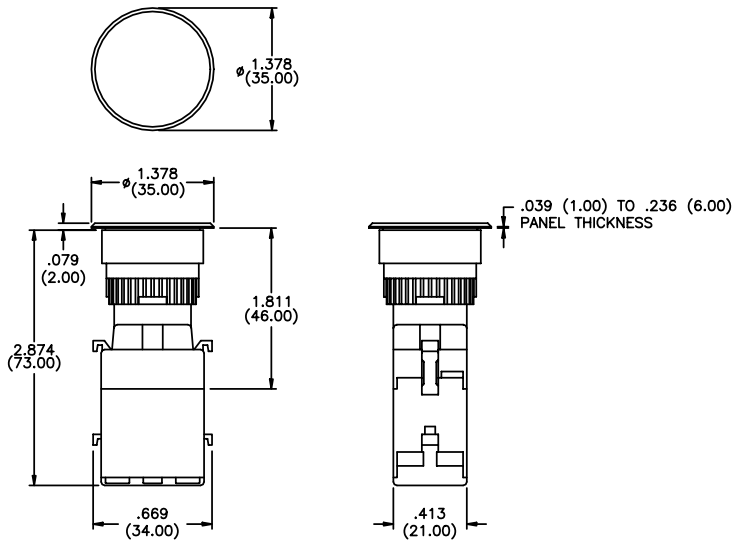
FLUSH MOUNTING PUSHBUTTON SWITCHES & INDICATORS

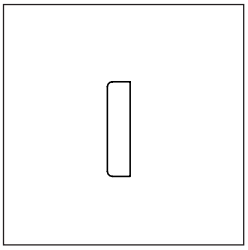
Panel cut-out 1.181" (30mm)

A pushbutton assembly requires: Screen + Lamp (if illuminated) + Operator + one or two Switchblocks. An indicator assembly requires: Screen + Lamp + Operator.
To order, select desired model numbers from tables below. **Example:** IP65 flush mounting maintained pushbutton, switch block with 2 N.O. contacts, red screen and 12V red LED = **A0263B, A0244J1, A0213X and A02503**
Switches are normally shipped unassembled. Consult factory if factory assembly is required.



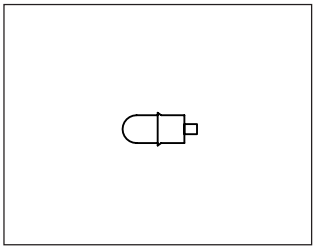






SCREEN

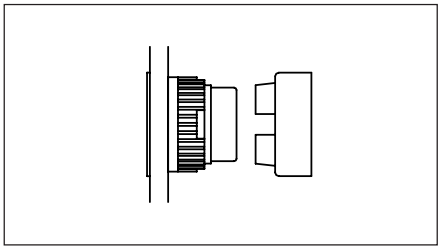
Bezel	Color	Part no.
●	black	**A0263A**
●	red	**A0263B**
●	amber	**A0263C**
●	yellow	**A0263D**
●	green	**A0263E**
●	blue	**A0263F**
●	clear	**A0263G**
●	white	**A0263J**



LAMP

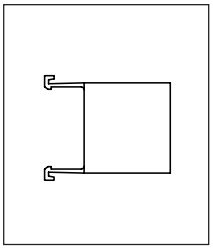
Lamp	Voltage	Part no.
Filament	6.3V	**A0141A**
Filament	14V	**A0141B**
Filament	28V	**A0141C**
Filament	36V	**A0141D**
Filament	48V	**A0141E**
Filament	60V	**A0141F**
Neon	110V	**A0143G**
Neon	220V	**A0143H**
LED lamp model no's: see Pgs K5 & K6		
LED assy ●	6V	**A0244H***
LED assy ●	12V	**A0244J***
LED assy ●	24V	**A0244K***
Replace * with color code for LED assemblies: **1**: red **2**: green **3**: amber		

White or blue LED assy: Contact factory.



OPERATOR

Bezel	Description	Lamp type	Part no.
●	illum, mom	lamp/LED	**A0214Y**
●	illum, maint	lamp/LED	**A0214X**
●	illum, mom	LED assy	**A0213Y**
●	illum, maint	LED assy	**A0213X**
●	non-illum, mom		**A0215Y**
●	non-illum, maint		**A0215X**
●	illum, indicator	lamp/LED	**A02791**
●	illum, indicator	LED assy	**A02792**



SWITCH BLOCK

Contacts	Part no.
1 N.O.	**A02501**
1 N.C.	**A02502**
2 N.O.	**A02503**
2 N.C.	**A02504**
1 N.O./1 N.C.	**A02505**

SECOND SWITCH BLOCK

Contacts	Part no.
1 N.O.	**A02506**
1 N.C.	**A02507**
2 N.O.	**A02508**
2 N.C.	**A02509**
1 N.O./1 N.C.	**A02510**

To achieve 3 or 4 pole switching, add second switch block, from above table.

FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.
FOR SCREEN ENGRAVING OR INSERT-ABLE LEGENDS: Contact factory.

Bezel: ▬ rectangular ■ square ● round 'illum' - illuminated 'non-illum' - non-illuminated 'mom' - momentary 'maint' - maintained

K

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

A02 SERIES

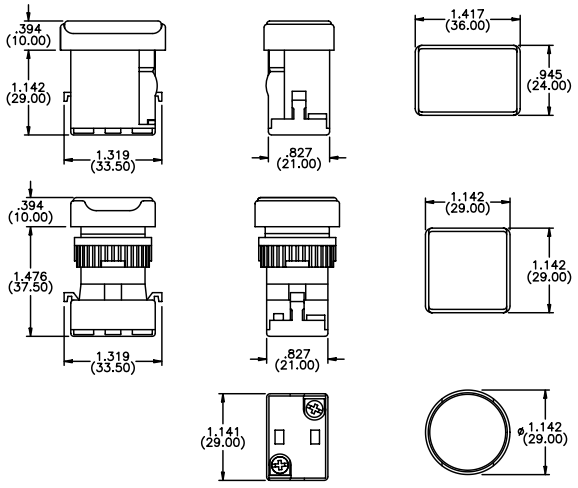
INDICATORS

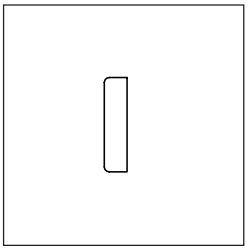
Panel cut-out .866" (22mm) or 1.161" x .846" (29.5mm x 21.5mm)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

An indicator assembly requires:
Screen + Lamp (LED or LED assembly) + Operator
To order, select desired model numbers from tables below.
Example: Rectangular indicator with red screen and 12V red LED =
A0261B, A0242J1 and A0272
Indicators are normally shipped unassembled. Consult factory if factory assembly is required.

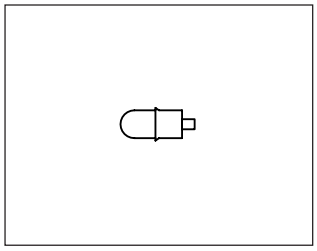






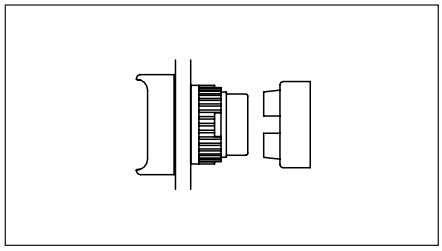
SCREEN

Bezel	Color	Part no.
▬	black	**A0261A**
▬	red	**A0261B**
▬	amber	**A0261C**
▬	yellow	**A0261D**
▬	green	**A0261E**
▬	blue	**A0261F**
▬	clear	**A0261G**
▬	white	**A0261J**
■	black	**A0262A**
■	red	**A0262B**
■	amber	**A0262C**
■	yellow	**A0262D**
■	green	**A0262E**
■	blue	**A0262F**
■	clear	**A0262G**
■	white	**A0262J**
●	black	**A0263A**
●	red	**A0263B**
●	amber	**A0263C**
●	yellow	**A0263D**
●	green	**A0263E**
●	blue	**A0263F**
●	clear	**A0263G**
●	white	**A0263J**



LAMP

Lamp	Voltage	Part no.
Filament	6.3V	**A0141A**
Filament	14V	**A0141B**
Filament	28V	**A0141C**
Filament	36V	**A0141D**
Filament	48V	**A0141E**
Filament	60V	**A0141F**
Neon	110V	**A0143G**
Neon	220V	**A0143H**
LED lamp model no's: see Pgs K5 & K6		
LED assy ▬	6V	**A0242H***
LED assy ▬	12V	**A0242J***
LED assy ▬	24V	**A0242K***
LED assy ■	6V	**A0243H***
LED assy ■	12V	**A0243J***
LED assy ■	24V	**A0243K***
LED assy ●	6V	**A0244H***
LED assy ●	12V	**A0244J***
LED assy ●	24V	**A0244K***
Replace * with color code for LED assemblies: **1**: red **2**: green **3**: amber		



OPERATOR

Bezel	Description	Lamp type	Part no.
▬	indicator	lamp/LED	**A0271**
▬	indicator	LED assy	**A0272**
■	indicator	lamp/LED	**A0273**
■	indicator	LED assy	**A0274**
●	indicator	lamp/LED	**A0275**
●	indicator	LED assy	**A0276**

Bezel: ▬ rectangular ■ square ● round

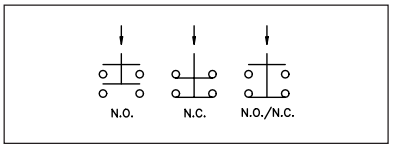
White or blue LED assembly: Contact factory.

FOR UNSEALED INDICATORS (IP40): Add '01' to end of OPERATOR model number.
FOR SCREEN ENGRAVING OR INSERTABLE LEGENDS: Contact factory.

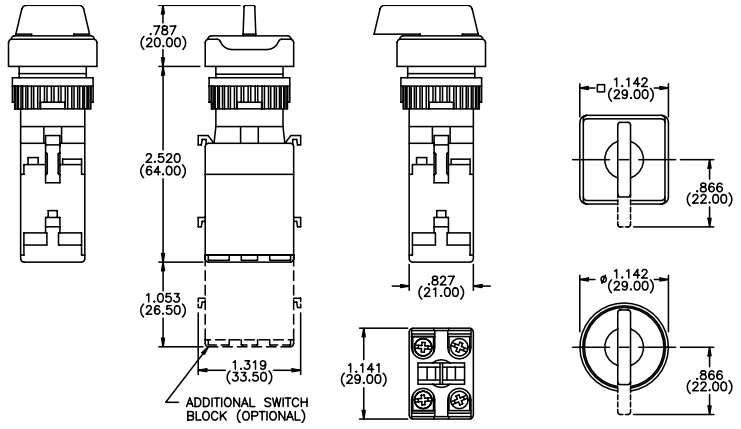
K

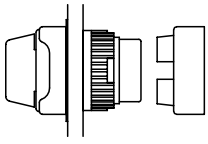
A02 SERIES
ROTARY LEVER SWITCHES
Panel cut-out .866" (22mm)

A rotary lever assembly requires:
Operator + one or two Switchblocks
To order, select desired model numbers from tables below.
Example: IP65 square 2 position maintained rotary switch with long lever and switch block with 2 N.O. contacts = **A029101 and A02503**
Switches are normally shipped unassembled. Consult factory if factory assembly is required.



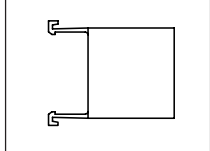






OPERATOR

Bezel	Description	Short lever	Long lever
■	2 pos. maintained	**A029201**	**A029101**
■	2 pos. momentary	**A029202**	**A029102**
■	3 pos. maintained	**A029203**	**A029103**
■	3 pos. momentary	**A029204**	**A029104**
■	3 pos. mainB, momC	**A029205**	**A029105**
■	3 pos. momB, mainC	**A029206**	**A029106**
●	2 pos. maintained	**A029401**	**A029301**
●	2 pos. momentary	**A029402**	**A029302**
●	3 pos. maintained	**A029403**	**A029303**
●	3 pos. momentary	**A029404**	**A029304**
●	3 pos. mainB, momC	**A029405**	**A029305**
●	3 pos. momB, mainC	**A029406**	**A029306**



SWITCH BLOCK

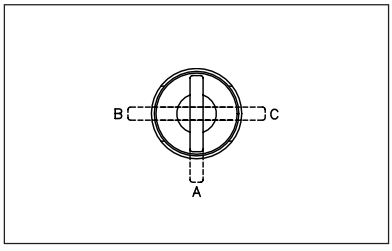
Contacts	Part no.
1 N.O.	**A02501**
1 N.C.	**A02502**
2 N.O.	**A02503**
2 N.C.	**A02504**
1 N.O./1 N.C.	**A02505**

SECOND SWITCH BLOCK

Contacts	Part no.
1 N.O.	**A02506**
1 N.C.	**A02507**
2 N.O.	**A02508**
2 N.C.	**A02509**
1 N.O./1 N.C.	**A02510**

To achieve 3 or 4 pole switching, add second switch block, from above table.

LEVER POSITIONS



Lever rotation - 2 position switches
The model numbers shown are for switches with counterclockwise lever rotation. For clockwise rotation, replace:

01 with **07**
02 with **08**

at the end of the model number.

FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.

Bezel: ▬ rectangular ■ square ● round 'momC' - momentary position C 'mainB' - maintained position B

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

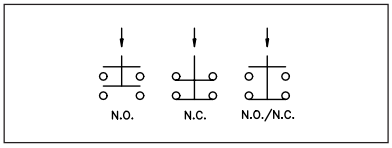
K

A02 SERIES

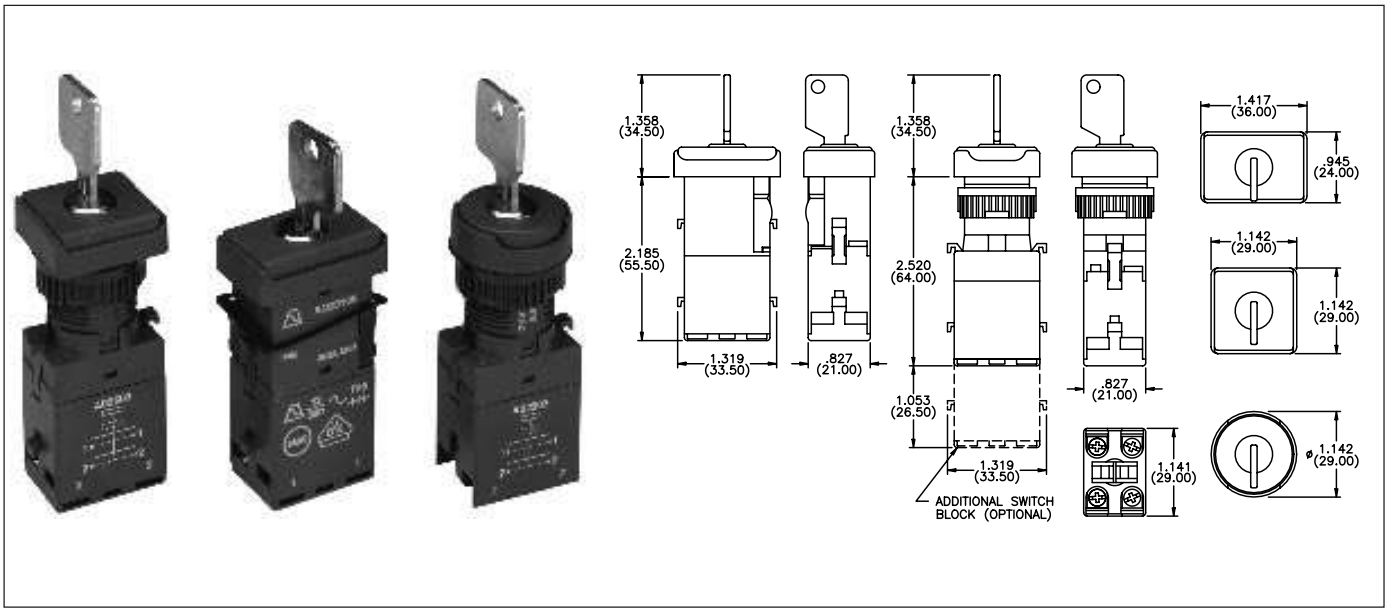
KEYLOCK SWITCHES

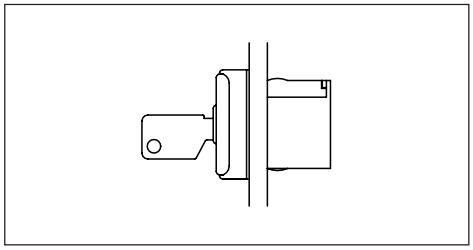
Panel cut-out .866" (22mm) or 1.161" x .846" (29.5mm x 21.5mm)

A keylock switch assembly requires:
Operator + one or two Switchblocks
To order, select desired model numbers from tables below.
Example: IP65 square 2 position maintained keylock switch with 2 N.O. contacts = **A028201 and A02503**
Switches are normally shipped unassembled. Consult factory if factory assembly is required.



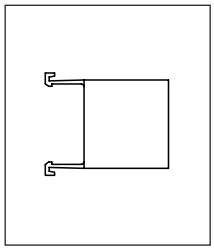
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.





OPERATOR

Bezel	Description	Part no.	Key removable
▬	2 pos. maintained	**A028101**	**A - C**
▬	2 pos. momentary	**A028102**	**A**
▬	3 pos. maintained	**A028105**	**A - B - C**
▬	3 pos. momentary	**A028106**	**A**
▬	3 pos. mainB, momC	**A028107**	**A - B**
▬	3 pos. momB, mainC	**A028108**	**A - C**
■	2 pos. maintained	**A028201**	**A - C**
■	2 pos. momentary	**A028202**	**A**
■	3 pos. maintained	**A028205**	**A - B - C**
■	3 pos. momentary	**A028206**	**A**
■	3 pos. mainB, momC	**A028207**	**A - B**
■	3 pos. momB, mainC	**A028208**	**A - C**
●	2 pos. maintained	**A028301**	**A - C**
●	2 pos. momentary	**A028302**	**A**
●	3 pos. maintained	**A028305**	**A - B - C**
●	3 pos. momentary	**A028306**	**A**
●	3 pos. mainB, momC	**A028307**	**A - B**
●	3 pos. momB, mainC	**A028309**	**A - C**



SWITCH BLOCK

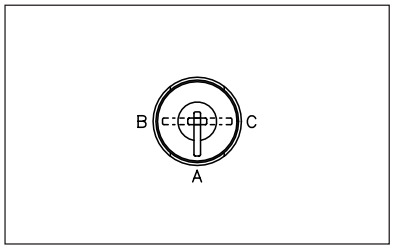
Contacts	Part no.
1 N.O.	**A02501**
1 N.C.	**A02502**
2 N.O.	**A02503**
2 N.C.	**A02504**
1 N.O./1 N.C.	**A02505**

SECOND SWITCH BLOCK

Contacts	Part no.
1 N.O.	**A02506**
1 N.C.	**A02507**
2 N.O.	**A02508**
2 N.C.	**A02509**
1 N.O./1 N.C.	**A02510**

To achieve 3 or 4 pole switching, add second switch block, from above table.

KEY POSITIONS



Key rotation - 2 position switches
The model numbers shown are for switches with counterclockwise lever rotation. For clockwise rotation, replace:

01 with **20**
02 with **19**

at the end of the model number.

2 standard keys are supplied.
20 key barrel types available from stock.

FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.
NON-REMOVABLE KEY POSITIONS: Contact factory.

Bezel: ▬ rectangular ■ square ● round 'momC' - momentary position C 'mainB' - maintained position B

K

A02 SERIES

EMERGENCY STOP SWITCHES & MUSHROOM HEAD PUSHBUTTONS

Panel cut-out .866" (22mm)

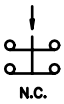
EMERGENCY STOP SWITCHES

- **Highly visible 1.575" (40mm) dia. red mushroom actuator**
- **Highly reliable positive break switch**
- **Push to shut switch 'off', twist to reset to 'on'**

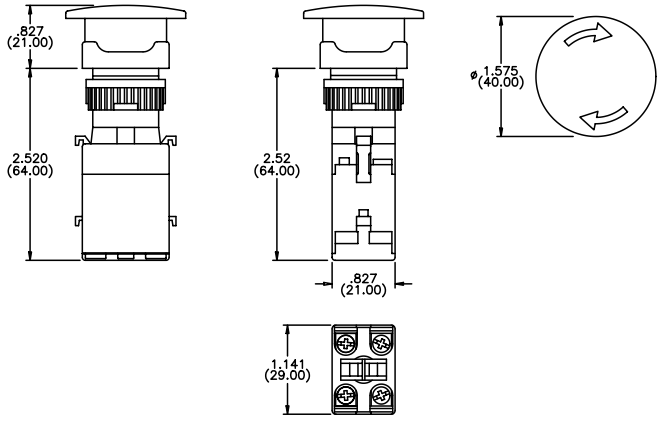
An emergency stop switch assembly requires: Operator + Switch block

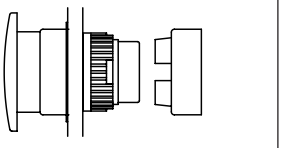
To order, specify with single pole or double pole switch block. **Approved to UL1054/EN 60947**

Switches are normally shipped unassembled. Consult factory if factory assembly is required.



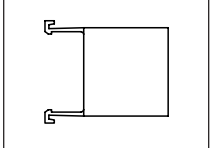






OPERATOR

Description	Part no.
Emergency stop	**A02ES**



SWITCH BLOCK

No. of poles	Part no.
Single pole	**A02512**
Double pole	**A02511**

ACCESSORY

3.543" (90mm) dia.
Self Adhesive Label



Description	Part no.
Yellow label with text	**A02YL1**
Yellow label	**A02YL2**

MUSHROOM HEAD PUSHBUTTONS

NOTE: Mushroom head models are not approved to UL1054/EN 60947

OPERATOR

Bezel	Description	Part no.
●	Red momentary	**A02MMB**
●	Black momentary	**A02MMA**
●	Red maintained	**A02MXB**
●	Black maintained	**A02MXA**

For other colors, contact factory.

Bezel: ● round

SWITCH BLOCK

No. of poles	Part no.
Single pole	**A02501**
Double pole	**A02502**
Three pole	**A02504**
Four pole	**A02505**

Momentary and maintained function mushroom head pushbutton actuators.
Momentary version is un-marked.
Dimensions of mushroom head pushbuttons are the same as emergency stop switches (above).

Mushroom head pushbutton assembly requires: Operator + Switchblock

FOR UNSEALED SWITCHES (IP40): Add '01' to end of OPERATOR model number.

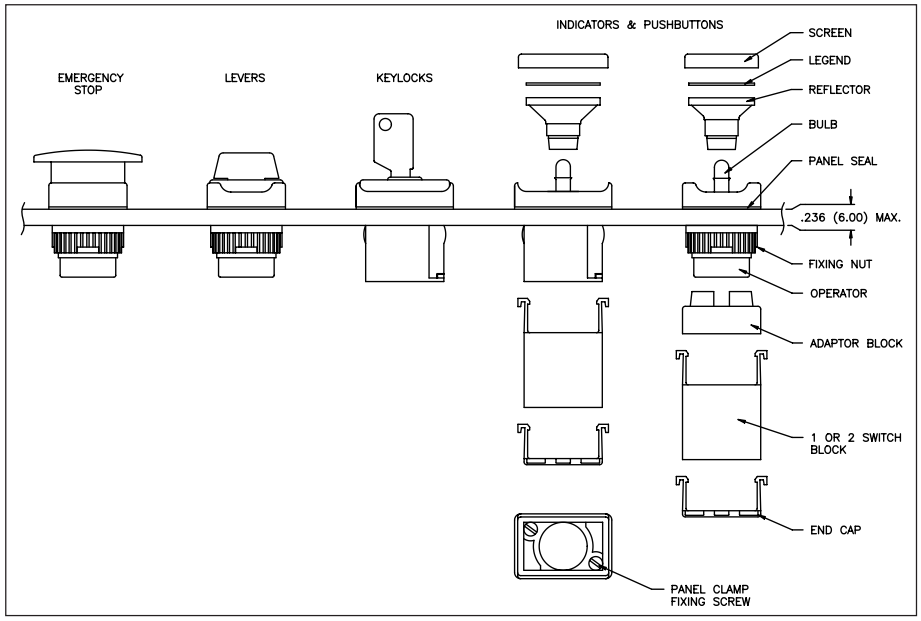
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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

A02 SERIES
INDUSTRIAL CONTROLS
INSTALLATION

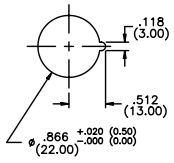
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

MODULAR CONSTRUCTION / PANEL MOUNTING

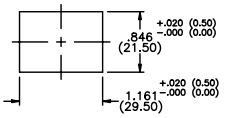


PANEL CUT-OUTS

Round & square operators



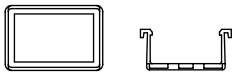
Rectangular operators



Max. panel thickness: .236" (6mm)

PANEL MOUNTING ASSEMBLY

- Drill or punch hole per panel cut-outs above.
- Assemble front operator through hole and:
  a. Round & square types: tighten fixing nut finger tight. Then, snap on adaptor block.
  b. Rectangular types: tighten two panel fixing screws in front to a maximum of 8.5 in-oz. (6 Ncm).
- Wire switch block as required and snap onto front operator.
- Snap end cap onto switch block (optional).
- Assemble bulb, if required, using tool number 30-0002.
- Snap the screen onto the reflector assembly with legend in between, if required. Then snap onto front of operator, taking care to line up the locating slot with the polarizing dot to prevent damaging the seal.



END CAP TERMINAL GUARD
(provides unique terminal protection)
Order separately -
part number **14-0005**

TO REMOVE BULB

Remove reflector/screen assembly by inserting tool number 30-0006 between the bezel finger guard and the screen to ingage the slot and pulling. Use the bulb extractor to remove the bulb.

TO REMOVE SWITCH BLOCK

Lever out latches using a small screwdriver, taking care not to overbend, and pull off the block from the front of operator.

FIXING NUT KEY



30-0001

BULB REMOVER



30-0002

SCREEN REMOVER



30-0006

K