

A02 series

Illuminated or non-illuminated pushbutton switches

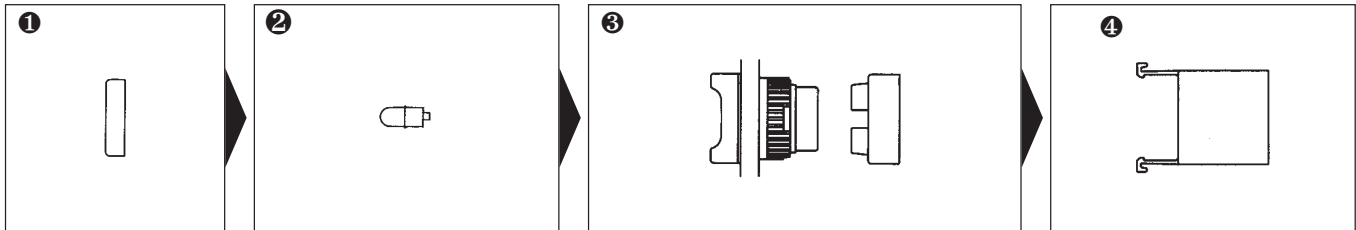
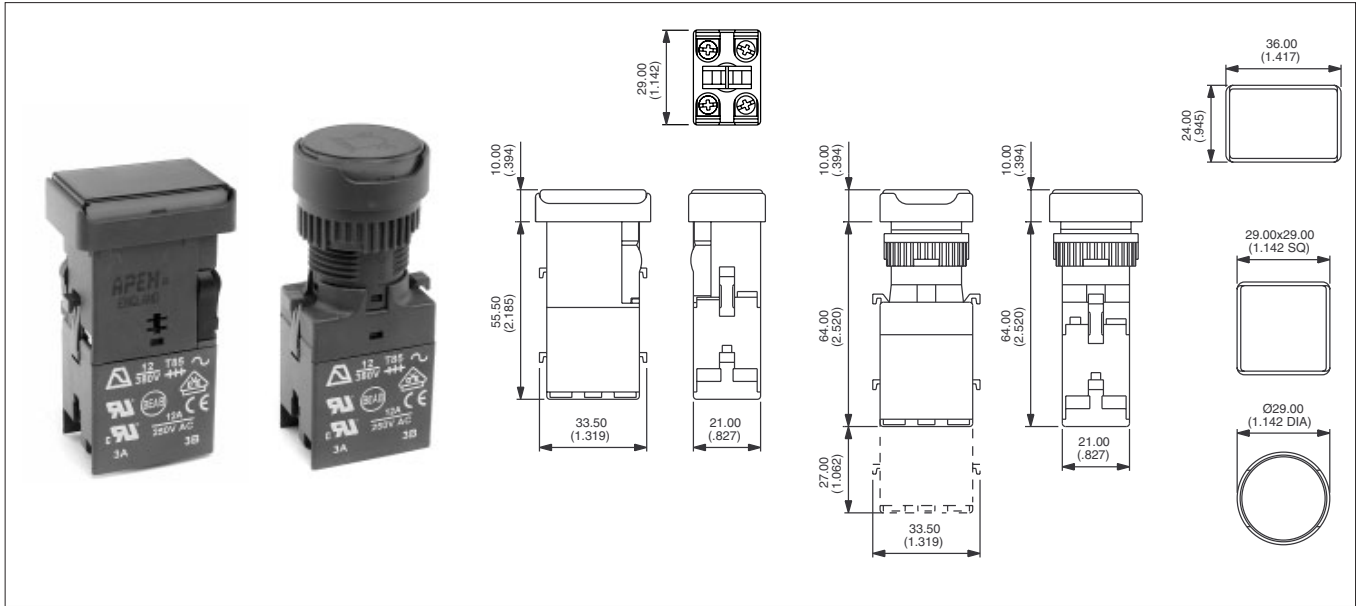
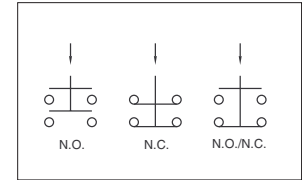
Panel cut-out Ø 22 (.866) or 29,5 x 21,5 (1.160x.846)

A pushbutton assembly requires :

screen + lamp (if illuminated) + operator + one or two switch blocks.

To order these elements, select desired model numbers from tables below.

Example : IP65 illuminated rectangular maintained pushbutton, switch block with 2 N.O. contacts, red screen and 12V red LED assembly = A0261B, A0242J1, A0201X and A02503UL.



Screen

Bezel	Colour	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	model numbers: see A01 pages G6-G7.	
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 colour code for LED assemblies:

1: red
2: green
3: amber

Operator

Bezel	Description	Lamp type	Part No
□	illum, momentary	Lamp/LED	A0201Y
□	illum, maintained	Lamp/LED	A0201X
□	illum, momentary	LED assy	A0202Y
□	illum, maintained	LED assy	A0202X
□	Non-illum, maintained		A0203X
□	Non-illum, momentary		A0203Y
□	illum, momentary	Lamp/LED	A0204Y
□	illum, maintained	Lamp/LED	A0204X
□	illum, momentary	LED assy	A0205Y
□	illum, maintained	LED assy	A0205X
□	Non-illum, momentary		A0206Y
□	Non-illum, maintained		A0206X
○	illum, momentary	Lamp/LED	A0207Y
○	illum, maintained	Lamp/LED	A0207X
○	illum, momentary	LED assy	A0208Y
○	illum, maintained	LED assy	A0208X
○	Non-illum, momentary		A0209Y
○	Non-illum, maintained		A0209X

Switch block

Contacts	Part No
1 N.O.	A02501UL
1 N.C.	A02502UL
2 N.O.	A02503UL
2 N.C.	A02504UL
1 N.O./1 N.C.	A02505UL

Contacts	Part No
1 N.O.	A02506UL
1 N.C.	A02507UL
2 N.O.	A02508UL
2 N.C.	A02509UL
1 N.O./1 N.C.	A02510UL

Second switch block

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

White or blue LED assembly : contact APEM.

UNSEALED SWITCHES (IP40) :

add "01" to end of operator model number.

SCREEN ENGRAVING / INSERTABLE LEGENDS : contact APEM.

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

A02 series

Metal bezel pushbutton switches and indicators

Panel cut-out Ø 22 (.866)

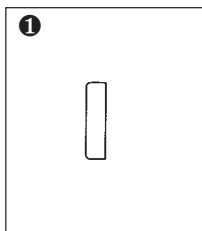
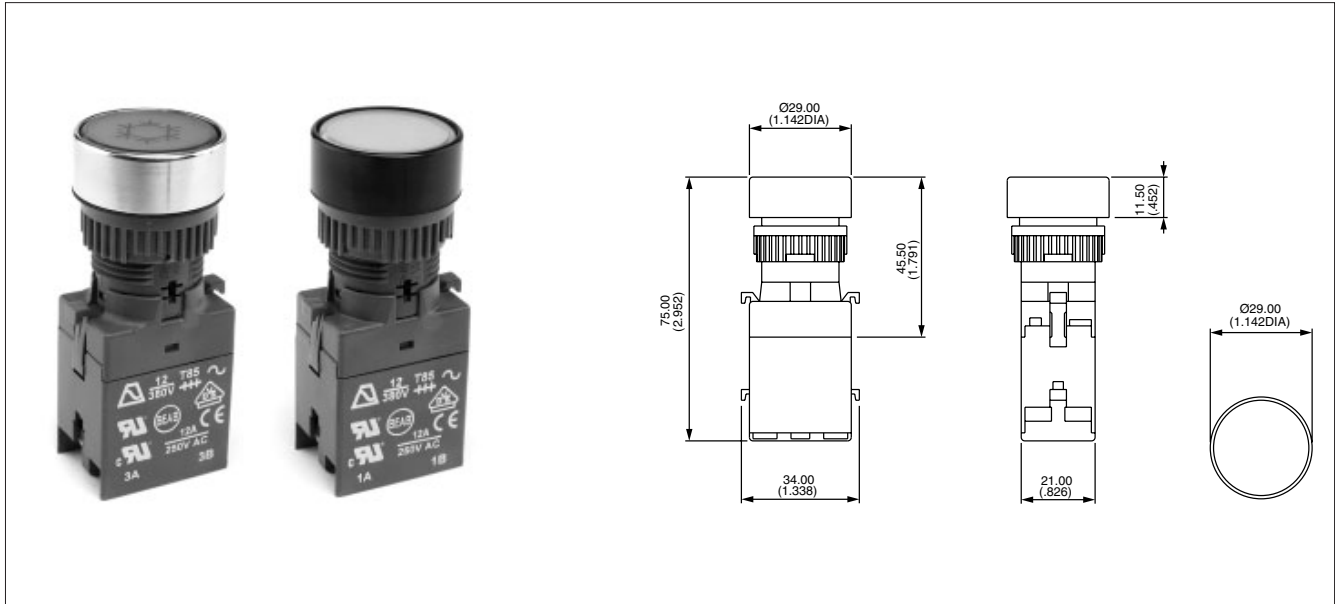
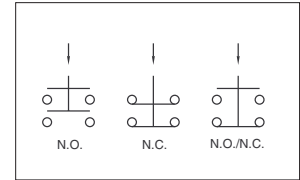
A pushbutton assembly requires :

screen + lamp (if illuminated) + operator + one or two switch blocks.

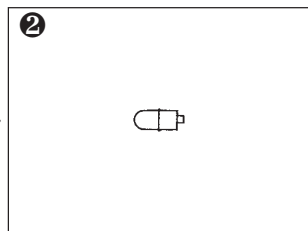
An indicator assembly requires : screen + lamp + operator

To order these elements, select desired model numbers from tables below.

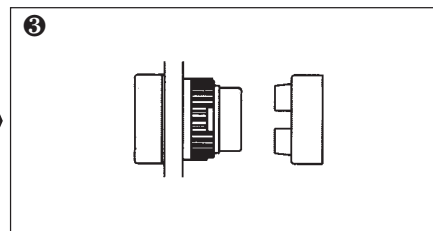
Example : IP65 illuminated metal bezel maintained pushbutton, switch block with 2 N.O. contacts, red screen and 12V red LED assembly = A0263B, A0244J1, A0211X and A02503UL.



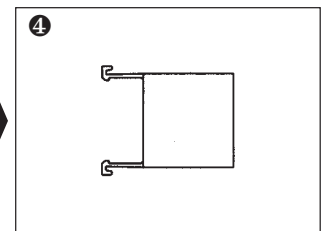
Screen



Lamp



Operator



Switch block

Bezel	Colour	Part No.
○	black	A0263A
○	red	A0263B
○	amber	A0263C
○	yellow	A0263D
○	green	A0263E
○	blue	A0263F
○	clear	A0263G
○	white	A0263J

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 model numbers: see A01 pages G6-G7.
 LED assy ○ 6V A0244H*
 LED assy ○ 12V A0244J*
 LED assy ○ 24V A0244K*

Replace * with colour code
 for LED assemblies:
 1: red
 2: green
 3: amber

White or blue LED assembly :
 contact APEM.

Bezel	Description	Lamp type	Part No.
○	illum, momentary	Lamp/LED	A0210Y
○	illum, maintained	Lamp/LED	A0210X
○	illum, momentary	LED assy	A0211Y
○	illum, maintained	LED assy	A0211X
○	Non-illum, momentary		A0212Y
○	Non-illum, maintained		A0212X
○	illum, indicator	Lamp/LED	A0277
○	illum, indicator	LED assy	A0278

Std bezel material : nickel plated brass.
 For optional black finish, add "G" to the end of operator model number.

UNSEALED SWITCHES (IP40) :
 add "01" to end of operator model number.

Contacts	Part No.
1 N.O.	A02501UL
1 N.C.	A02502UL
2 N.O.	A02503UL
2 N.C.	A02504UL
1 N.O./1 N.C.	A02505UL

Second switch block

Contacts	Part No.
1 N.O.	A02506UL
1 N.C.	A02507UL
2 N.O.	A02508UL
2 N.C.	A02509UL
1 N.O./1 N.C.	A02510UL

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

SCREEN ENGRAVING / INSERTABLE LEGENDS : contact APEM.

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



A02 series

Flush mounting pushbutton switches and indicators

Panel cut-out Ø 30 (1.181)

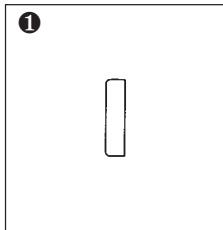
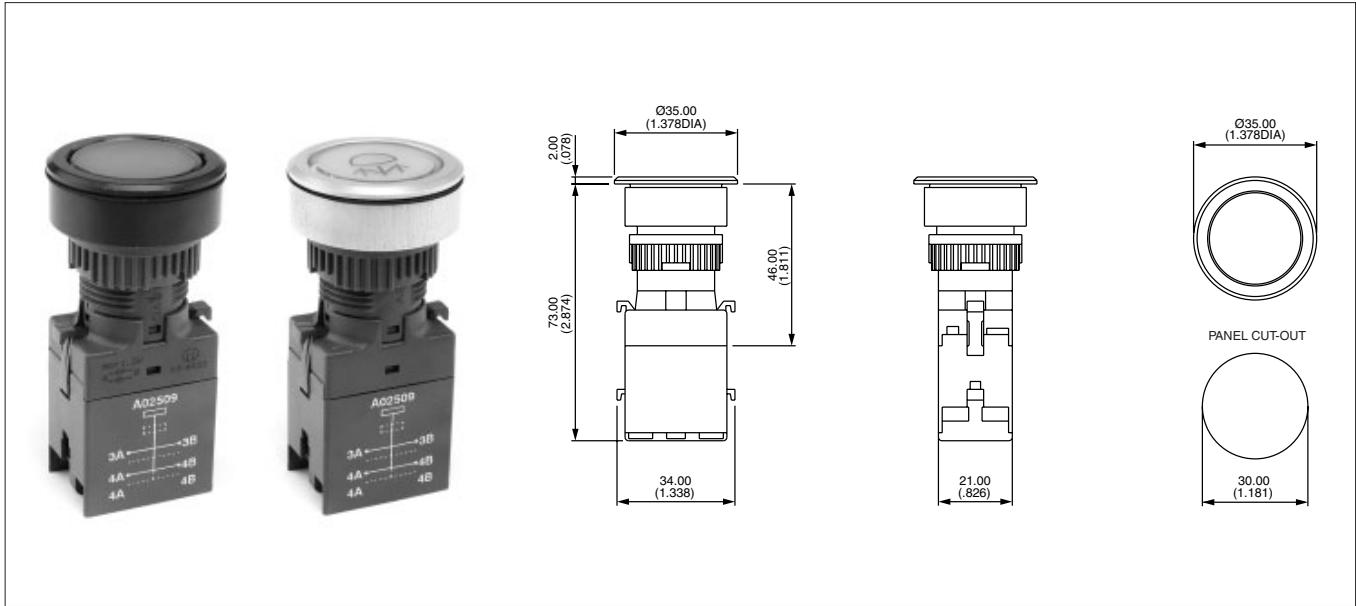
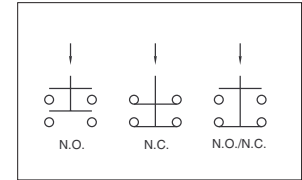
A pushbutton assembly requires :

screen + lamp (if illuminated) + operator + one or two switch blocks.

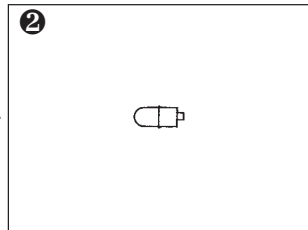
An indicator assembly requires : screen + lamp + operator

To order these elements, select desired model numbers from tables below.

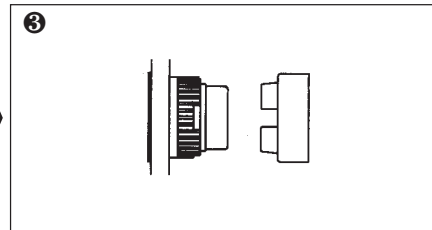
Example : IP65 illum. flush mounting maintained pushbutton, switch block with 2 N.O. contacts, red screen and 12V red LED assembly = A0263B, A0244J1, A0213X and A02503UL.



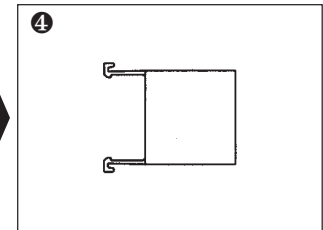
Screen



Lamp



Operator



Switch block

Bezel	Colour	Part No
○	black	A0263A
○	red	A0263B
○	amber	A0263C
○	yellow	A0263D
○	green	A0263E
○	blue	A0263F
○	clear	A0263G
○	white	A0263J

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	LED type	Part No
LED	6V	A0244H*
LED	12V	A0244J*
LED	24V	A0244K*

Replace * with colour code for LED assemblies:

1: red
2: green
3: amber

White or blue LED assembly : contact APEM.

Bezel	Description	Lamp type	Part No
○	illum, momentary	Lamp/LED	A0214Y
○	illum, maintained	Lamp/LED	A0214X
○	illum, momentary	LED assy	A0213Y
○	illum, maintained	LED assy	A0213X
○	Non-illum, momentary		A0215Y
○	Non-illum, maintained		A0215X
○	illum, indicator	Lamp/LED	A02791
○	illum, indicator	LED assy	A02792

Std bezel material : silver anodised aluminium.
For optional black anodised aluminium, add "G" to end of operator model number.

UNSEALED SWITCHES (IP40) :
add "01" to end of operator model number.

Contacts	Part No
1 N.O.	A02501UL
1 N.C.	A02502UL
2 N.O.	A02503UL
2 N.C.	A02504UL
1 N.O./1 N.C.	A02505UL

Second switch block

Contacts	Part No
1 N.O.	A02506UL
1 N.C.	A02507UL
2 N.O.	A02508UL
2 N.C.	A02509UL
1 N.O./1 N.C.	A02510UL

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

SCREEN ENGRAVING / INSERTABLE LEGENDS : contact APEM.

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

G

A02 series

Indicators

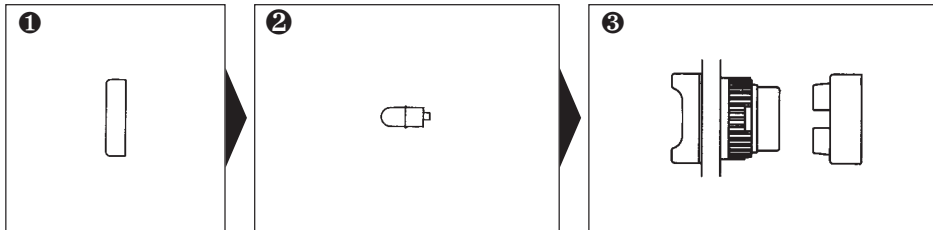
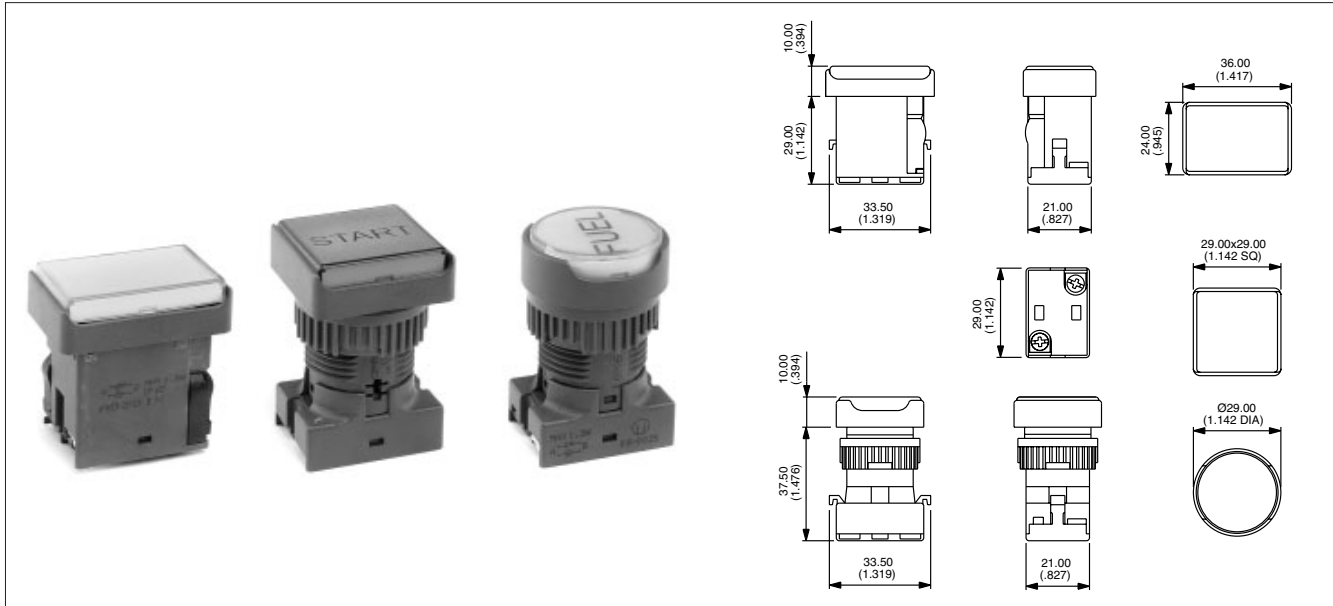
Panel cut-out \varnothing 22 (.866) or 29,5 x 21,5 (1.160x.846)

An indicator assembly requires :

Screen + lamp, LED or LED assembly + operator.

To order these elements, select desired model numbers from tables below.

Example : IP65 rectangular indicator with red screen and 12V red LED assembly = A0261B, A0242J1 and A0272.



Screen

Lamp

Operator

Bezel	Colour	Part No	Lamp	Voltage	Part No	Bezel	Description	Lamp type	Part No
<input type="checkbox"/>	black	A0261A	Filament	6.3V	A0141A	<input type="checkbox"/>	Indicator	Lamp/LED	A0271
<input type="checkbox"/>	red	A0261B	Filament	14V	A0141B	<input type="checkbox"/>	Indicator	LED assy	A0272
<input type="checkbox"/>	amber	A0261C	Filament	28V	A0141C	<input type="checkbox"/>	Indicator	Lamp/LED	A0273
<input type="checkbox"/>	yellow	A0261D	Filament	36V	A0141D	<input type="checkbox"/>	Indicator	LED assy	A0274
<input type="checkbox"/>	green	A0261E	Filament	48V	A0141E	<input type="checkbox"/>	Indicator	Lamp/LED	A0275
<input type="checkbox"/>	blue	A0261F	Filament	60V	A0141F	<input type="checkbox"/>	Indicator	LED assy	A0276
<input type="checkbox"/>	clear	A0261G	Neon	110V	A0143G				
<input type="checkbox"/>	white	A0261J	Neon	220V	A0143H				
<input type="checkbox"/>	black	A0262A	LED	model numbers: see A01 pages G6-G7.					
<input type="checkbox"/>	red	A0262B	LED assy	6V	A0242H*				
<input type="checkbox"/>	amber	A0262C	LED assy	12V	A0242J*				
<input type="checkbox"/>	yellow	A0262D	LED assy	24V	A0242K*				
<input type="checkbox"/>	green	A0262E	LED assy	6V	A0243H*				
<input type="checkbox"/>	blue	A0262F	LED assy	12V	A0243J*				
<input type="checkbox"/>	clear	A0262G	LED assy	24V	A0243K*				
<input type="checkbox"/>	white	A0262J	LED assy	6V	A0244H*				
<input type="checkbox"/>	black	A0263A	LED assy	12V	A0244J*				
<input type="checkbox"/>	red	A0263B	LED assy	24V	A0244K*				
<input type="checkbox"/>	amber	A0263C	Replace * with colour code		1: red				
<input type="checkbox"/>	yellow	A0263D	for LED assemblies:		2: green				
<input type="checkbox"/>	green	A0263E			3: amber				
<input type="checkbox"/>	blue	A0263F							
<input type="checkbox"/>	clear	A0263G							
<input type="checkbox"/>	white	A0263J							

UNSEALED INDICATORS (IP40) :
add "01" to end of operator model number.

White or blue LED assembly :
contact APEM.

SCREEN ENGRAVING / INSERTABLE LEGENDS : contact APEM.

Bezel: rectangular, square, round,

A02 series

Rotary switches

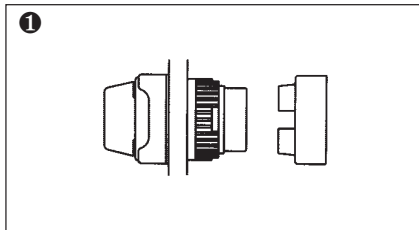
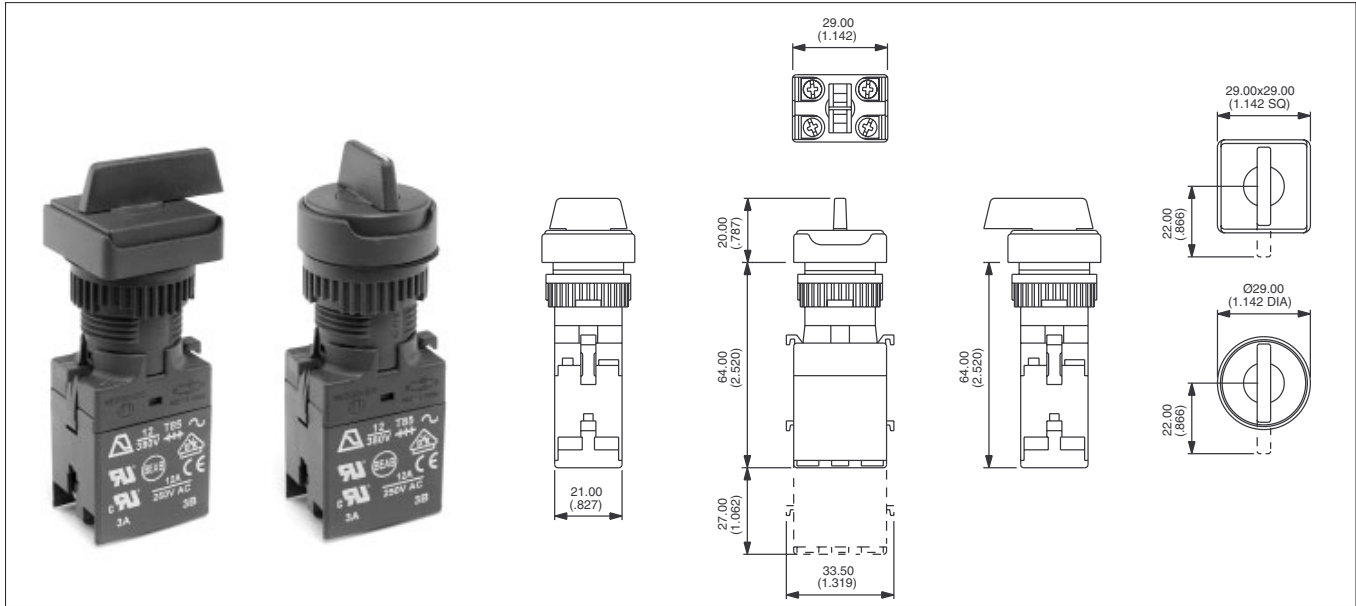
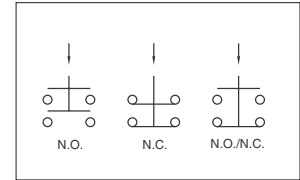
Panel cut-out $\varnothing 22 (.866)$

A rotary lever assembly requires :

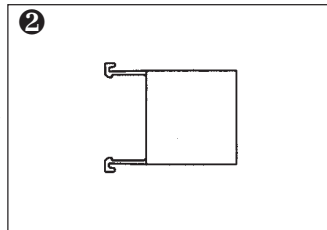
operator + one or two switch blocks.

To order these elements, select desired model numbers from tables below.

Example : IP65 square 2 position maintained rotary switch with long lever, clockwise rotation, switch block with 2 N.O. contacts = A029107 and A02503UL.

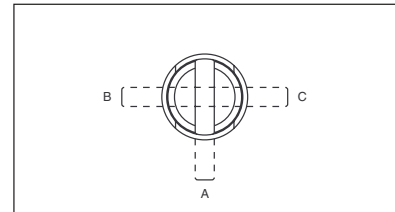


Operator



Switch block

Lever positions



• Lever Rotation - 2 position switches

The model numbers shown are for switches with clockwise lever rotation.

For anticlockwise rotation, replace :

07 with 01
08 with 02

at the end of the model number.

Optional engraving on lever end



To order, add "WL" to the end of the part No.
Example : A029407WL.

Bezel	Description	Short lever	Long lever	Contacts	Part No
<input type="checkbox"/>	2 pos. maintained	A029207	A029107•	1 N.O.	A02501UL
<input type="checkbox"/>	2 pos. momentary	A029208	A029108•	1 N.C.	A02502UL
<input type="checkbox"/>	3 pos. maintained	A029203	A029103	2 N.O.	A02503UL
<input type="checkbox"/>	3 pos. momentary	A029204	A029104	2 N.C.	A02504UL
<input type="checkbox"/>	3 pos. mainL, momR	A029205	A029105	1 N.O./1 N.C.	A02505UL
<input type="checkbox"/>	3 pos. momL, mainR	A029206	A029106		
<input type="checkbox"/>	2 pos. maintained	A029407	A029307•		
<input type="checkbox"/>	2 pos. momentary	A029408	A029308•		
<input type="checkbox"/>	3 pos. maintained	A029403	A029303		
<input type="checkbox"/>	3 pos. momentary	A029404	A029304		
<input type="checkbox"/>	3 pos. mainL, momR	A029405	A029305		
<input type="checkbox"/>	3 pos. momL, mainR	A029406	A029306		

Second switch block

Contacts	Part No
1 N.O.	A02506UL
1 N.C.	A02507UL
2 N.O.	A02508UL
2 N.C.	A02509UL
1 N.O./1 N.C.	A02510UL

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

OPTION

To specify flush mounting (30 mm \varnothing) option, add "FM" to the end of the part number (for round operators only).

Example : A029407FM.

Bezel: square, round,

A02 series

Keylock switches

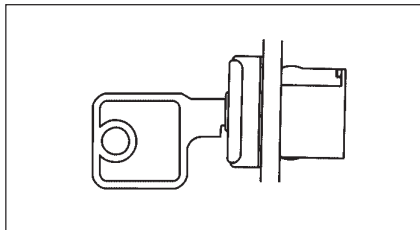
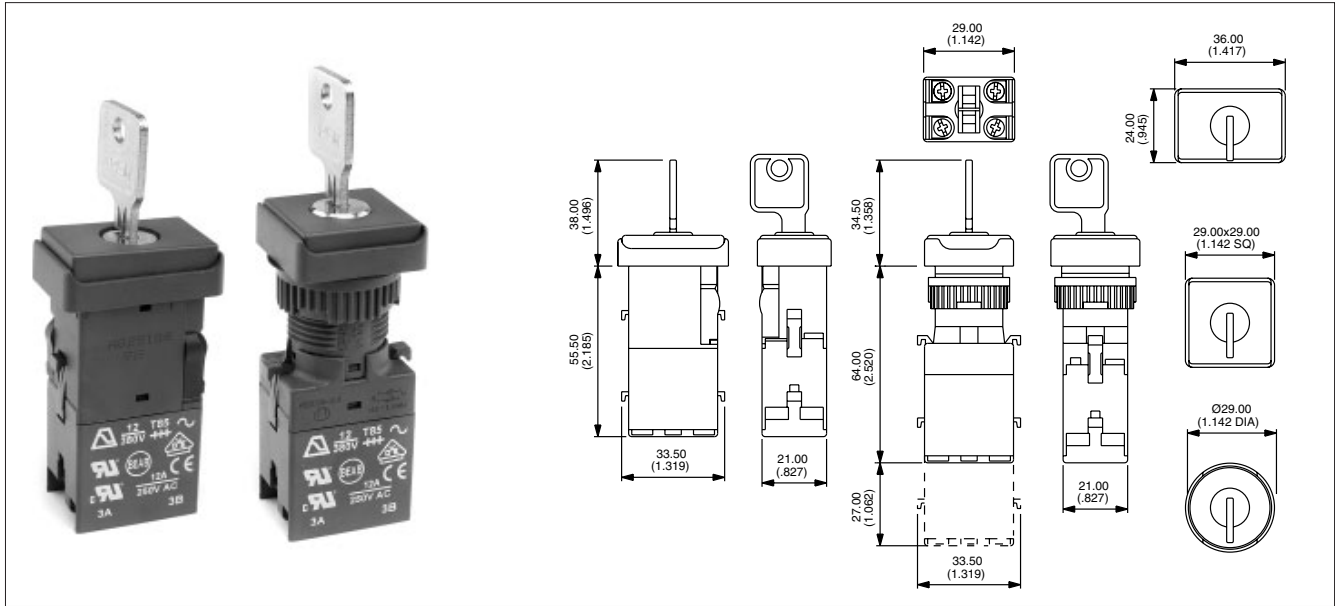
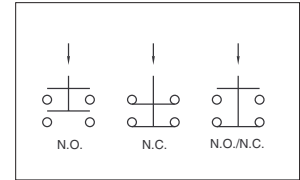
Panel cut-out \varnothing 22 or 29,5 x 21,5

A keyswitch assembly requires :

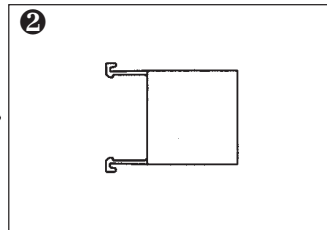
operator + one or two switch blocks.

To order these elements, select desired model numbers from tables below.

Example : IP65 square 2 position keyswitch, clockwise rotation, switch block with 2 N.O. contacts = A028220 and A02503UL.

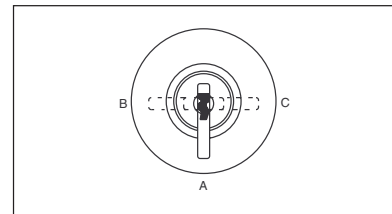


Operator



Switch block

Key positions



Bezel	Description	Part No	Key removable in positions
□	2 pos. maintained	A028120•	A-B
□	2 pos. momentary	A028119•	A
□	3 pos. maintained	A028105	A-B-C
□	3 pos. momentary	A028106	A
□	3 pos. mainL, momR	A028107	A-B
□	3 pos. momL, mainR	A028108	A-C
□	2 pos. maintained	A028220•	A-B
□	2 pos. momentary	A028219•	A
□	3 pos. maintained	A028205	A-B-C
□	3 pos. momentary	A028206	A
□	3 pos. mainL, momR	A028207	A-B
□	3 pos. momL, mainR	A028208	A-C
○	2 pos. maintained	A028320•	A-B
○	2 pos. momentary	A028319•	A
○	3 pos. maintained	A028305	A-B-C
○	3 pos. momentary	A028306	A
○	3 pos. mainL, momR	A028307	A-B
○	3 pos. momL, mainR	A028308	A-C

OPTION

To specify **flush mounting (30 mm \varnothing) option**, add "FM" to the end of the part number (for round operators only). Example : A028320FM.

Bezel: □ rectangular, □ square, ○ round,

Contacts	Part No
1 N.O.	A02501UL
1 N.C.	A02502UL
2 N.O.	A02503UL
2 N.C.	A02504UL
1 N.O./1 N.C.	A02505UL

Second switch block

Contacts	Part No
1 N.O.	A02506UL
1 N.C.	A02507UL
2 N.O.	A02508UL
2 N.C.	A02509UL
1 N.O./1 N.C.	A02510UL

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

• Key Rotation - 2 position switches

The model numbers shown are for switches with clockwise key rotation. For anticlockwise rotation, replace:

20 with 01
19 with 02

at the end of the model number

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

Non-removable key positions : contact APEM.



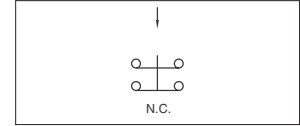
A02 series

Emergency stop switches

Panel cut-out Ø 22 (.866)

- Prominent 40 mm (1.575) dia. red mushroom actuator
- Highly reliable positive break switch
- Push to shut off switch, twist to reset to ON
- Approved to UL 1054 / EN 60947-5-5

An emergency stop switch assembly requires : operator + switch block.
To order, specify with single pole or double pole positive break switch block.

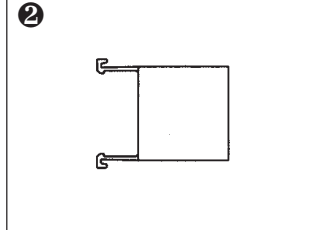
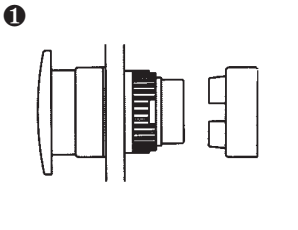
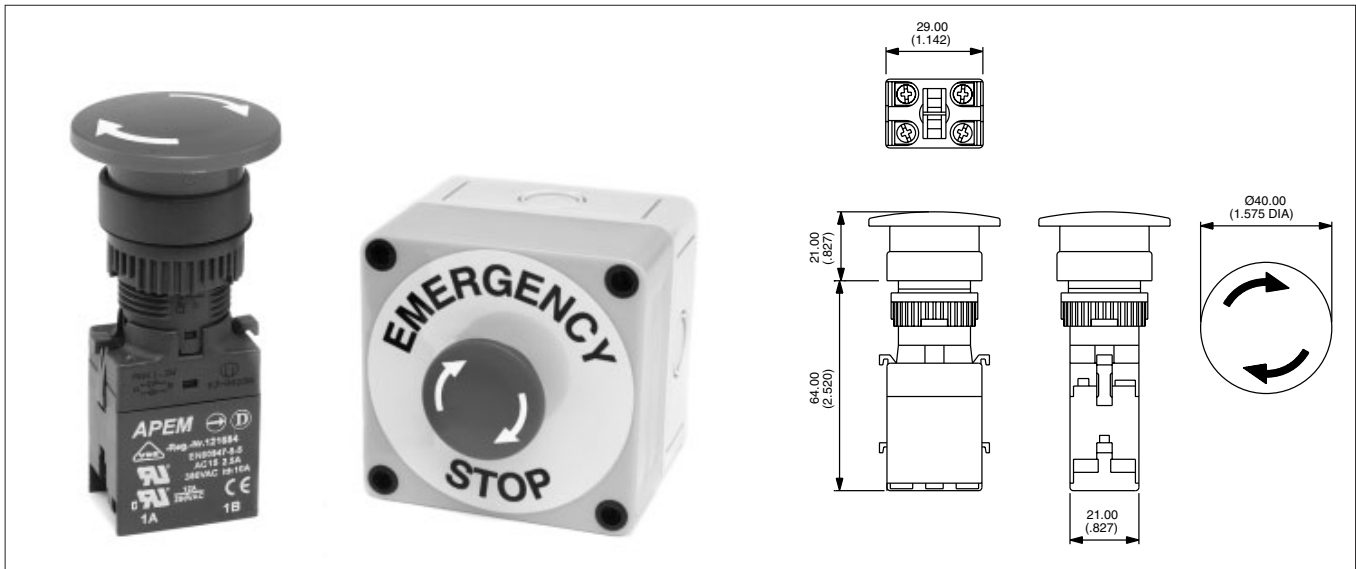


General specifications

- Mechanical life : 6.050 cycles (6 cycles per minute)
- Operating force : 20 N
- Operating temperature : -20°C to +85°C
- Degree of environ. protection (IEC529) : IP65 front of panel, IP40 back of panel
- Switch terminals : M3 screws - wire 2x0.75mm² max.

Electrical specifications

- Current/voltage rating : 2,5A 380VAC AC-15
- Contact gap : > 3 mm (.118)
- Dielectric strength : 2.500V
- Electrical life : 6.050 cycles



Accessory



90 mm Ø Self Adhesive Label

Description	Part No
Yellow label with text	A02YL1
Yellow label	A02YL2

Operator

Bezel	Description	Part No
	Emergency stop	A02ES

Switch block

No of poles	Part No
Double pole	A02511
Single pole	A02512

EMERGENCY STOP SWITCH ENCLOSURE

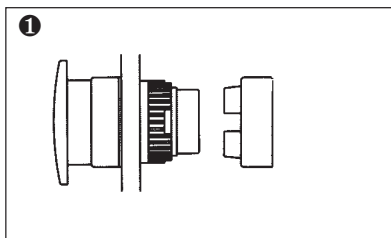
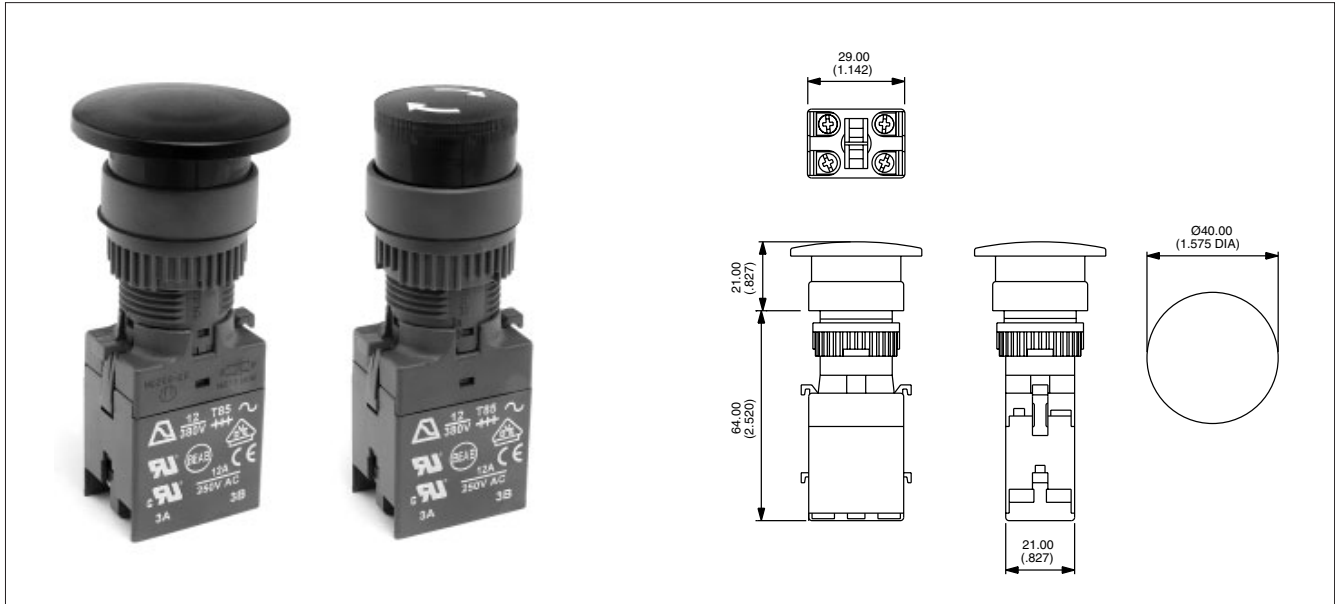
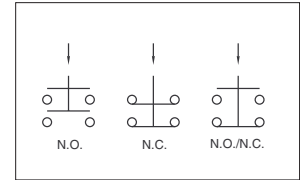
To order the Emergency Stop Switch in the Plastic Enclosure (94 x 94 x 81 mm) with a 2 pole Positive Break Switch Block and Emergency Stop label, use Part number : A02PE2L.

A02 series

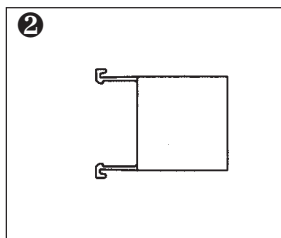
Mushroom head pushbutton switches

Panel cut-out Ø 22 (.866)

- Prominent 40 mm (1.575) dia. mushroom actuator or optional 26 mm (1.024) actuator
- Momentary and maintained functions
Momentary function versions are unmarked
- Maintained function versions are twist to release (arrows indicate direction of twist)
- Various coloured mushroom actuators are available



Operator



Switch block

Bezel	Description	Part No
○	Black momentary	A02MMA
○	Red momentary	A02MMB
○	Yellow momentary	A02MMD
○	Green momentary	A02MME
○	Blue momentary	A02MMF
○	Black maintained	A02MXA
○	Red maintained	A02MXB
○	Yellow maintained	A02MXD
○	Green maintained	A02MXE
○	Blue maintained	A02MXF

Contacts	Part No
1 N.O.	A02501UL
1 N.C.	A02502UL
2 N.O.	A02503UL
2 N.C.	A02504UL
1 N.O./1 N.C.	A02505UL

Second switch block

Contacts	Part No
1 N.O.	A02506UL
1 N.C.	A02507UL
2 N.O.	A02508UL
2 N.C.	A02509UL
1 N.O./1 N.C.	A02510UL

OPTION

For optional reduced (Ø 26 mm) mushroom head operators : contact APEM.

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

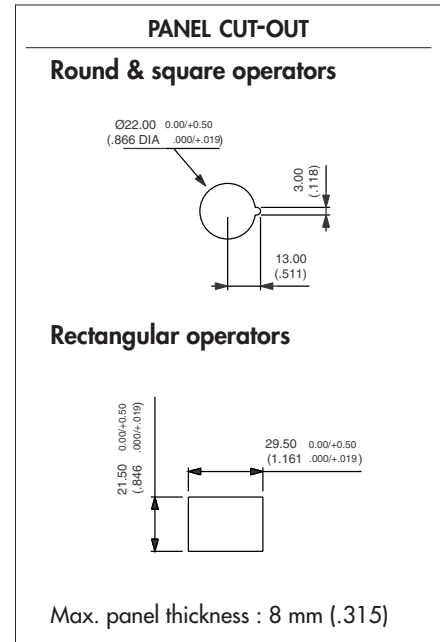
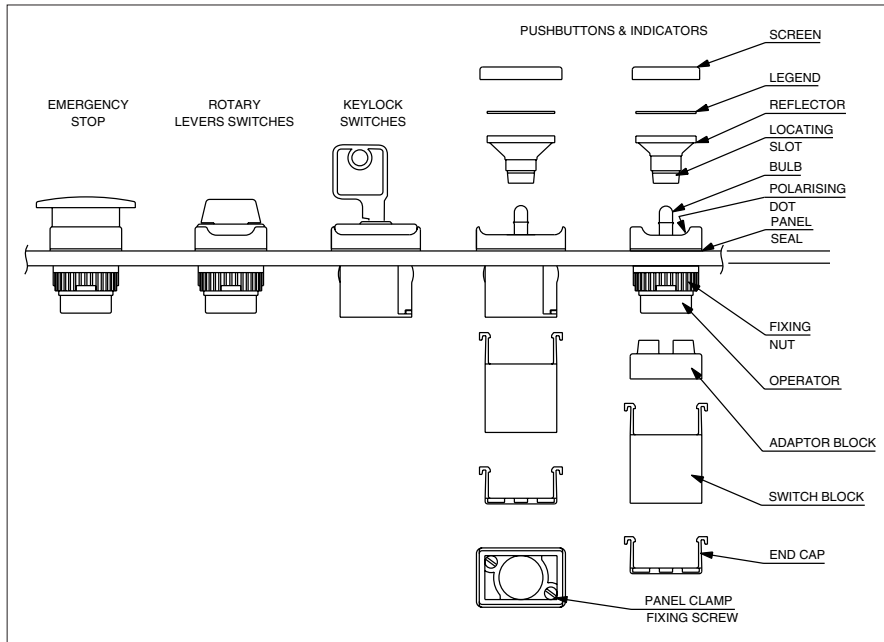
Bezel: ○ round

A02 series

Industrial controls

Installation

Modular construction / panel mounting



PANEL MOUNTING ASSEMBLY

- Drill/punch hole in panel as shaped above.
- Assemble front operator through hole and :
 - a/ *Round & square types* : tighten nut to a maximum torque of 0,8Nm using tool No 30-0001. Snap on adaptor block
 - b/ *Rectangular types* : tighten two panel fixing screws in front to a maximum torque of 6cNm.
- Wire chosen switch block as required and snap onto front operator.
- Snap end cap onto switch block.
- Fit bulb if required using tool No 30-0002.
- Snap screen onto reflector assembly with legend in between if required and snap into front operator **TAKING CARE TO LINE UP THE LOCATING SLOT WITH THE POLARISING DOT**, and not to damage the seal.

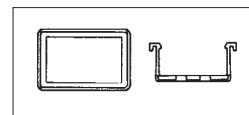
TO REMOVE BULB

Remove reflector/screen assembly. Use the bulb extractor 30-0002 to remove the bulb.

TO REMOVE SWITCH BLOCK

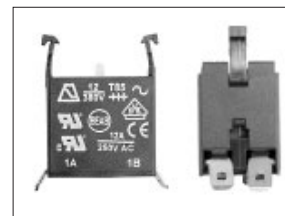
Lever out latches using small screwdriver taking care not to overbend, and pull off the block from the front operator.

A02 Accessories



Part No : 14-0005

End cap terminal guard offering unique terminal protection.



6.35 mm push on tab terminals.
Specify "SP" to the end of the switchblock and operator P/N.
Example : A02503SP.

G

A03 series

Illuminated or non-illuminated pushbutton switches and indicators

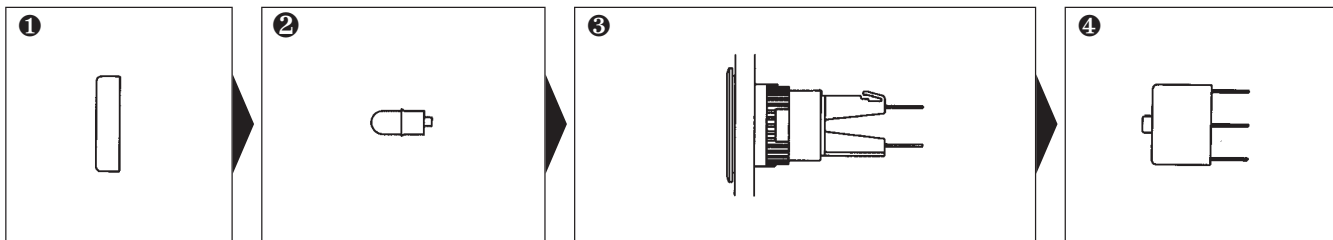
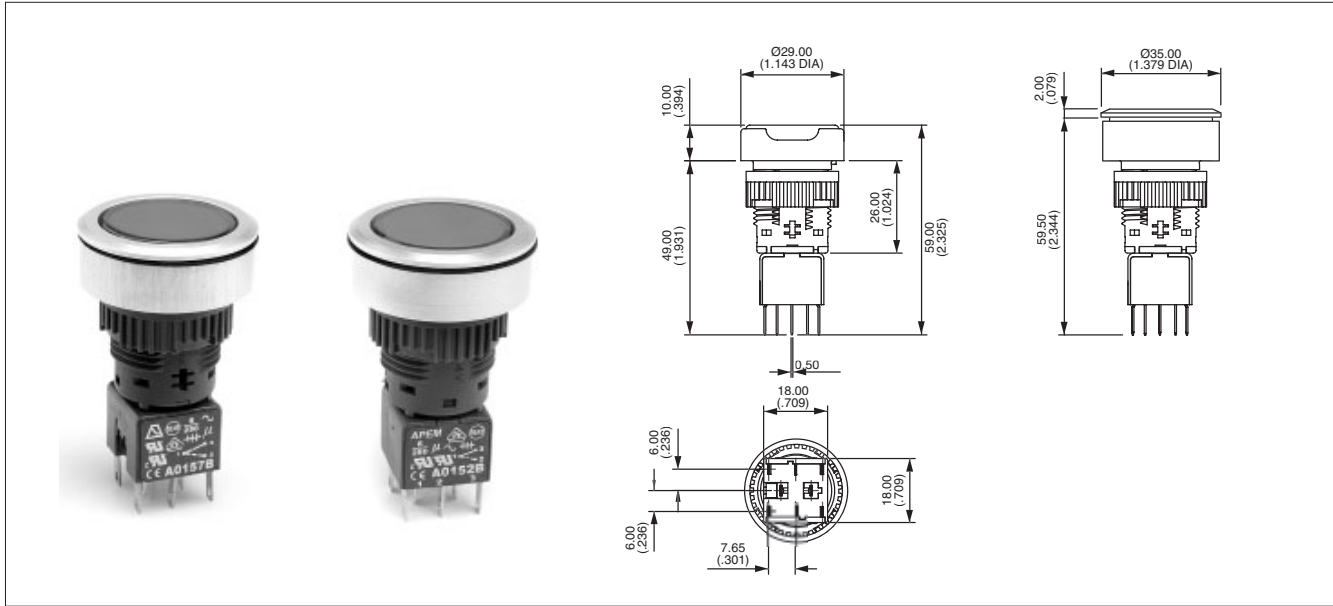
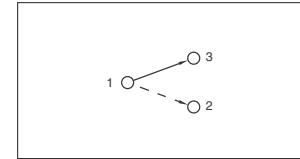
Panel cut-out Ø 22 (.866) or 30 (1.181) - Plastic or metal flush mounting bezel

A pushbutton assembly requires :

screen + lamp (if illuminated) + operator + switch block.

To order these elements, select desired model numbers from tables below.

Example : IP65 flush mounting round pushbutton, maintained function, red screen, 12V red LED and single pole switch block = A0314X, A0263B, A0142M1 and A0151BUL.



Screen

Bezel	Colour	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	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	Lamp type	Part No
○	Plastic illum, momentary	Lamp/LED bulb	A0307Y
○	Plastic illum, maintained	Lamp/LED bulb	A0307X
○	Plastic non-illum, momentary		A0309Y
○	Plastic non-illum, maintained		A0309X
○	Metal illum, momentary	Lamp/LED bulb	A0310Y
○	Metal illum, maintained	Lamp/LED bulb	A0310X
○	Metal non-illum, momentary		A0312Y
○	Metal non-illum, maintained		A0312X
○	F/mount illum, momentary	Lamp/LED bulb	A0314Y
○	F/mount illum, maintained	Lamp/LED bulb	A0314X
○	F/mount non-illum, momentary		A0315Y
○	F/mount non-illum, maintained		A0315X
○	Plastic indicator		A0375
○	Metal indicator		A0377
○	F/mount indicator		A03791

Switch block

No of poles	Part No
Single pole	A0151BUL
Double pole	A0152BUL
Three pole	A0155BUL
Four pole	A0153BUL

UNSEALED SWITCHES (IP40) :

add "01" to end of operator model number.

SCREEN ENGRAVING / INSERTABLE LEGENDS : contact APEM.

Bezel: ○ round. 'illum' - illuminated, 'Non-illum' - non illuminated