# Altech Corporation

Since 1984, Altech Corporation has grown to become a leading supplier of automation and industrial control components. Headquartered in Flemington, NJ, Altech has an experienced staff of engineering, manufacturing and sales personnel to provide the highest quality products with superior service. This is the Altech Commitment!

Altech 22 and 30mm Push Buttons offer ideal cost-effective solutions for control circuits utilizing both direct and remote management applications. Ease of assembly has been engineered into the design; the only tool necessary for installation is a screwdriver.

- LED Indicating Devices
- Pilot Lights
- Push Button Stations
- Push Button Enclosures
- UL Recognized
- Custom Push Button Assemblies
- All Very Competitively Priced

Our well trained technical experts welcome the opportunity to answer your technical questions and provide solutions to your automation and control needs. Give us a call or visit www.altechcorp.com.
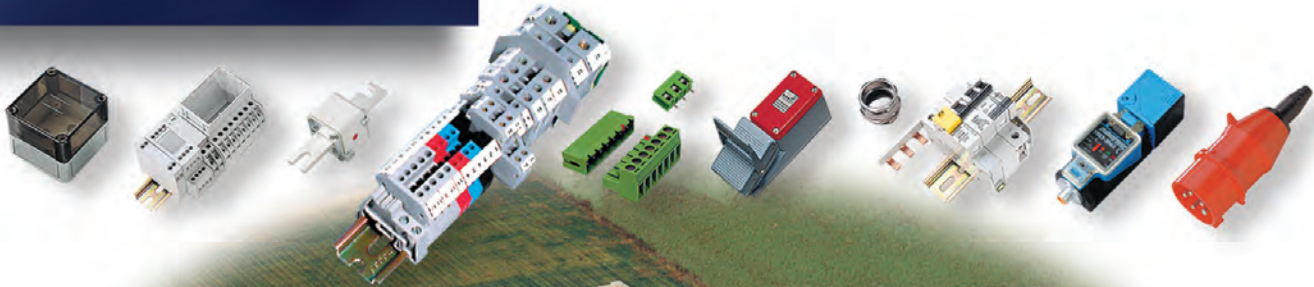
Quality Commitment

Altech's control components meet diverse national and international standards such as UL, NEC, CSA, IEC, VDE and more. Altech provides superior customer service and delivery through Total Quality Management and Continuous Process Improvement. Altech is ISO 9001 approved. We perform these services with honesty and integrity and are committed to achieve these goals.

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Altech

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Part No. PBD

Quality at a Competitive Price!

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Pre-assembled or Ready to Assemble Control Stations

Solutions for your applications

Backed by technical and industrial experience, we offer preassembled ready to install or assembled to order control stations. Altech offers several ranges of control stations. From a cost effective plastic enclosure assembled with 22 mm push buttons to a heavy duty cast aluminum enclosure assembled with 22 or 30mm push buttons, you will find the one that fits your application.


Sample Part No. 44.2R.-156

High performance and Extensive range

Our basic plastic or Pressure Die Cast aluminum (PDC) enclosures are available with contact blocks mounted on the bracket behind the 22 mm operator or in the rear (base) of the enclosure (*see page 41*). Altech can assemble the control station to the customer specifications or it can be ordered unassembled. These enclosures are easy to assemble by using any Non-Illuminated operator with a maximum of 2 contacts per operator.

Our plastic enclosures on pages 34-35 can be customized to meet the customer's most demanding applications. These enclosures can be equipped with any 22 mm illuminated or Non-Illuminated operators. Use up to 2 contact blocks with the illuminated operators or up to 4 contact blocks with the Non-illuminated operators.

Our Gravity Die Cast aluminum (GDC) enclosures have an excellent resistance to mechanical shock and vibration. They can be equipped with any illuminated or Non-Illuminated operators. Use up to 2 contact blocks with the illuminated 22mm operators or up to 4 contact blocks with the Non-illuminated 22mm operators. This enclosure can be modified to accept any Non-illuminated 30mm operator or pilot light as well.
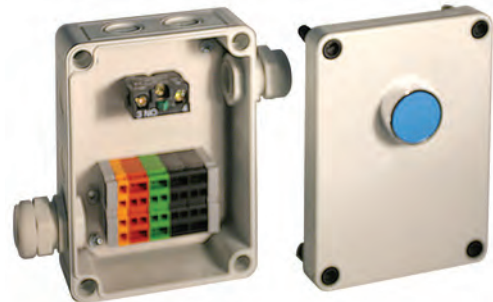
Pre-assembled or Ready to Assemble Control Stations

Application specific solutions

These products are suitable for a wide variety of applications. They have an excellent resistance to corrosion and cleaning agents. They are tolerant of high pressure cleaning without leakage. These enclosures combined with our push buttons offer an excellent price/performance ratio.

Our staff has the ability to take your requirements and rapidly turn them into a solution. We use the latest CAD system in our process. Prototypes are available for most application specific requirements.

Sample Part No. 44-200T

Safety and reliability

The majority of the enclosures meet all industrial application requirements from the most common to the most extreme.

They have international certifications such as UL, CE, etc. They conform to IEC standards, have a IP65 rating and NEMA Type 4X protection.

Metal legend plates are engraved on both sides, one side in horizontal and the other side in a vertical orientation.

Save Time

Our control stations save you time, simplify and speed up your installation while maintaining the high quality and appearance of your equipment.

Mounting is easy, the only tool you need is a screwdriver.

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30mm Metal Push Buttons

The Altech.® 30mm Push Button line include a complete selection of push buttons, pilot lights and selector switches and accessories. All properly assembled devices are UL and CE Recognized and they certified for NEMA type 4X applications. An internal seal provides watertight integrity and all components are corrosion resistant materials.

Our contact blocks are color coded for an easy assembly and identification (Red=S11, Yellow=S12). Illuminated or Non-Illuminated push buttons in various colors are available for quick delivery.

Selector Switches are available in a 2 or 3 position styles with and option for momentary or maintained function. The pilot lights are full voltage and LED and filament bubs are interchangeable.

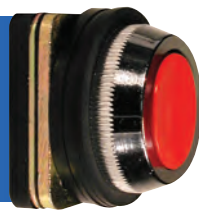Cast aluminum control stations are available to your specifications.

These Ø 30 control devices can be mounted in any position in panels of 1 to 6 mm (.039 - .236 in.) thickness.

30mm Non-Illuminated Metal Operators

Certified for
NEMA Type 4X
12 environment.

E225660

Flush Non-Illuminated Momentary

Color	Function	Cat No.
☐ White	Momentary	AF1
■ Black	Momentary	AF2
☐ Green	Momentary	AF3
☐ Red	Momentary	AF4
☐ Blue	Momentary	AF6
☐ Yelllow	Momentary	AF8

Booted Momentary

Color	Function	Cat No.
☐ White	Momentary	AB1
■ Black	Momentary	AB2
☐ Green	Momentary	AB3
☐ Red	Momentary	AB4
☐ Blue	Momentary	AB6
☐ Yelllow	Momentary	AB8

Projecting Momentary

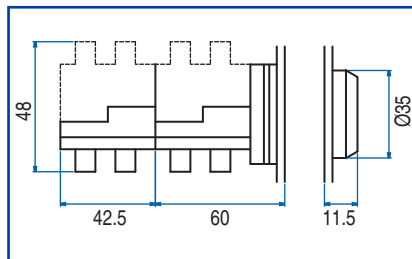| Color	Function	Cat No.
☐ White	Momentary	AP1
■ Black	Momentary	AP2
☐ Green	Momentary	AP3
☐ Red	Momentary	AP4
☐ Blue	Momentary	AP6
☐ Yelllow	Momentary	AP8

Dimensional Drawings

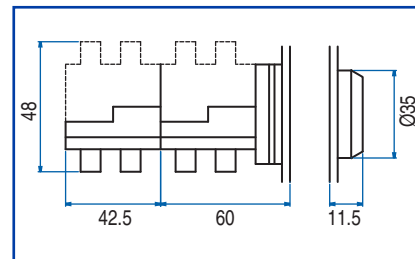All dimensions shown in millimeters.
To convert to inches multiply by 0.03937

Flush Momentary

48   42.5   60   11.5   Ø35

Booted Momentary

48   42.5   60   11.5   Ø35

Projecting Momentary

48   42.5   60   11.5   Ø35

Contact Elements

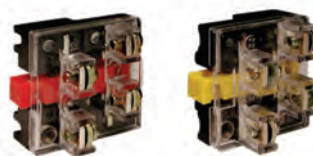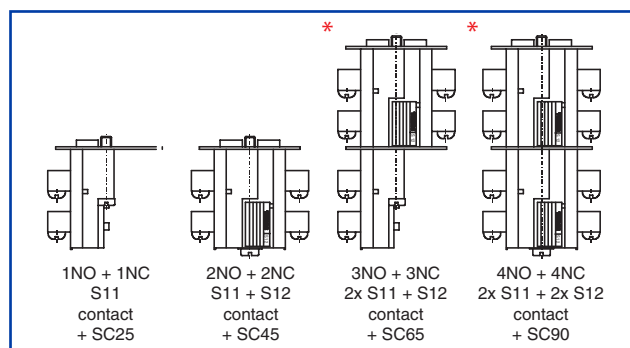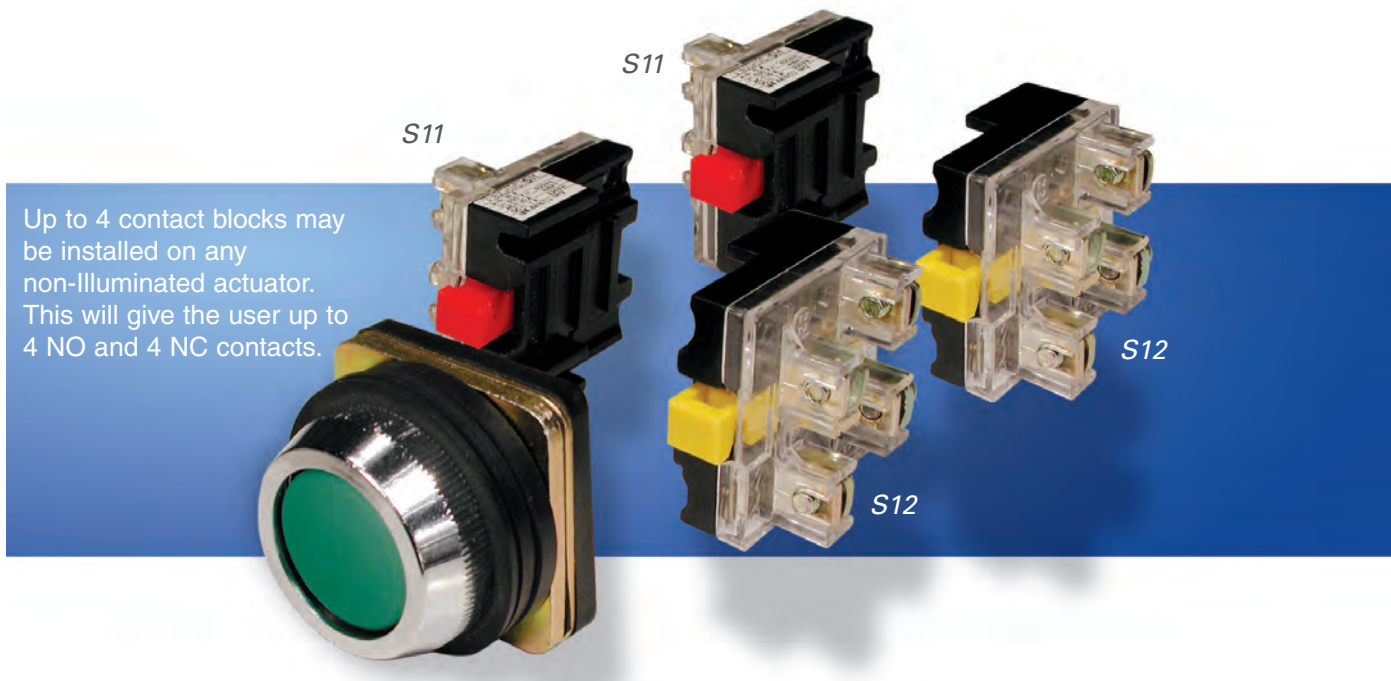| Description	Cat. No.
1 Normally Open + 1 Normally Closed Silver Contacts	S11
2 Normally Open + 2 Normally Closed Silver Contacts	S11 + S12
For additional contacts, see diagram at right.	

Contact Installation Screws

Type	Dimensions	Used with
SC25	M4 x 25 mm	S11
SC45	M4 x 45 mm	S11 + S12
SC65	M4 x 65 mm	2x S11 + S12
SC90	M4 x 90 mm	2x S11 + 2x S12

* When using more than two contact blocks, additonal
screws must be purchased separately (SC65 and SC90).

		*	*
1NO + 1NC S11 contact + SC25	2NO + 2NC S11 + S12 contact + SC45	3NO + 3NC 2x S11 + S12 contact + SC65	4NO + 4NC 2x S11 + 2x S12 contact + SC90

Exploded Assembly View

S11

S11

S12

S12
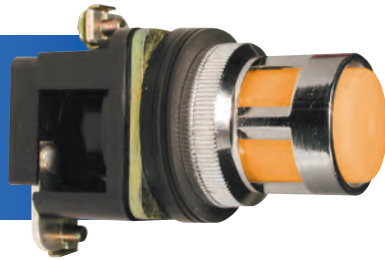
Up to 4 contact blocks may be installed on any non-Illuminated actuator. This will give the user up to 4 NO and 4 NC contacts.

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30mm Illuminated Metal Operators

U (C UL US)
E225660

CE

Certified for
NEMA Type 4X
12 environment.

Flush Illuminated Momentary

Note:
All LED illuminated actuators and pilot lights at a specified voltage will operate on AC and DC. Except for 110V and 230V specify AC or DC type.

Replacement bulbs available.
See page 54.

Color	Voltage	Cat No.
24V AC/DC *(filament bulb)*		
☐ White	24V AC/DC	ALF1-024
■ Green	24V AC/DC	ALF3-024
■ Red	24V AC/DC	ALF4-024
■ Amber	24V AC/DC	ALF5-024
■ Blue	24V AC/DC	ALF6-024
☐ Clear	24V AC/DC	ALF7-024
■ Yelllow	24V AC/DC	ALF8-024
48V AC/DC *(filament bulb)*		
☐ White	48V AC/DC	ALF1-048
■ Green	48V AC/DC	ALF3-048
■ Red	48V AC/DC	ALF4-048
■ Amber	48V AC/DC	ALF5-048
■ Blue	48V AC/DC	ALF6-048
☐ Clear	48V AC/DC	ALF7-048
■ Yelllow	48V AC/DC	ALF8-048
110V AC/DC *(filament bulb)*		
☐ White	110V AC/DC	ALF1-110
■ Green	110V AC/DC	ALF3-110
■ Red	110V AC/DC	ALF4-110
■ Amber	110V AC/DC	ALF5-110
■ Blue	110V AC/DC	ALF6-110
☐ Clear	110V AC/DC	ALF7-110
■ Yelllow	110V AC/DC	ALF8-110
230V AC *(filament bulb)*		
☐ White	230V AC	ALF1-230
■ Green	230V AC	ALF3-230
■ Red	230V AC	ALF4-230
■ Amber	230V AC	ALF5-230
■ Blue	230V AC	ALF6-230
☐ Clear	230V AC	ALF7-230
■ Yelllow	230V AC	ALF8-230

230V DC version is available on request.

Color	Voltage	Cat No.
24V AC/DC *(LED bulb)*		
☐ White	24V AC/DC	ALF1LB-024
■ Green	24V AC/DC	ALF3LB-024
■ Red	24V AC/DC	ALF4LB-024
■ Amber	24V AC/DC	ALF5LB-024
■ Blue	24V AC/DC	ALF6LB-024
☐ Clear	24V AC/DC	ALF7LB-024
■ Yelllow	24V AC/DC	ALF8LB-024
48V AC/DC *(LED bulb)*		
☐ White	48V AC/DC	ALF1LB-048
■ Green	48V AC/DC	ALF3LB-048
■ Red	48V AC/DC	ALF4LB-048
■ Amber	48V AC/DC	ALF5LB-048
■ Blue	48V AC/DC	ALF6LB-048
☐ Clear	48V AC/DC	ALF7LB-048
■ Yelllow	48V AC/DC	ALF8LB-048
110V AC/DC *(LED bulb)*		
☐ White	110V AC	ALF1LB-110
■ Green	110V AC	ALF3LB-110
■ Red	110V AC	ALF4LB-110
■ Amber	110V AC	ALF5LB-110
■ Blue	110V AC	ALF6LB-110
☐ Clear	110V AC	ALF7LB-110
■ Yelllow	110V AC	ALF8LB-110
230V AC* *(LED bulb)*		
☐ White	230V AC*	ALF1LB-230
■ Green	230V AC*	ALF3LB-230
■ Red	230V AC*	ALF4LB-230
■ Amber	230V AC*	ALF5LB-230
■ Blue	230V AC*	ALF6LB-230
☐ Clear	230V AC*	ALF7LB-230
■ Yelllow	230V AC*	ALF8LB-230

*230V DC version is available on request.

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Dimensional Drawings

All dimensions shown in millimeters.
To convert to inches multiply by 0.03937

Flush Illuminated Momentary
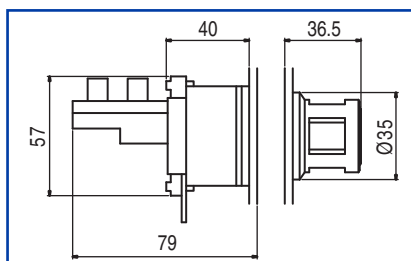
Contact Elements

Description	Cat. No.
1 Normally Open + 1 Normally Closed Silver Contacts	S11
2 Normally Open + 2 Normally Closed Silver Contacts	S11 + S12
For additional contacts, see diagram at right.	

Contact Installation Screws

Type	Dimensions	Used with
SC25	M4 x 25 mm	S11
SC45	M4 x 45 mm	S11 + S12
SC65	M4 x 65 mm	2x S11 + S12
SC90	M4 x 90 mm	2x S11 + 2x S12

* When using more than two contact blocks, additonal screws must be purchased separately (SC65 and SC90).

| 1NO + 1NC S11 contact + SC25 | 2NO + 2NC S11 + S12 contact + SC45 | 3NO + 3NC 2x S11 + S12 contact + SC65 | 4NO + 4NC 2x S11 + 2x S12 contact + SC90 |

Exploded Assembly View

Up to 4 contact blocks may be installed on any Illuminated actuator. This will give the user up to 2 NO and 2 NC contacts.

S11
S11
S12
S12

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30mm Selector Switch Metal Operators

Selector Maintained & Momentary

Other colors available upon request. Please contact Altech for further information and part numbers.

Color	Cat No.
2 Position Maintained	
■ Black	AS2-2P
3 Position Maintained	
■ Black	AS2-3P
2 Position Momentary	
■ Black	AS2-2PSR

Key Selector Switch

Keyed Alike

To be used for applications where single or multiple operators are used, but the same key configurations are required. Standard key selector switches have the same key configuration (Cat. No. KY30).

Function	Key Removal		Cat No.
2 Position			
Maintained		Left/Right	AK2-2PB
Momentary		Left	AK2-2POSR
Maintained		Right	AK2-2PI
Maintained		Left	AK2-2PO
3 Position			
Maintained		Left/Right	AK2-3PB
Maintained		Center	AK2-3PC

Replacement Key   **KY30**

Key Selector Switch

Keyed Differently

To be used for applications where multiple operators are used, but different key configurations are required. Each cat. no. have different key configurations.

Function	Key Removal		Cat No.
2 Position			
Maintained		Left	AK2-2PO-KD
Momentary		Left	AK2-2PO-KD1
Maintained		Left	AK2-2PO-KD2
Maintained		Left	AK2-2PO-KD4
Maintained		Left	AK2-2PO-KD5
3 Position			
Maintained		Center	AK2-3PC-KD
Maintained		Center	AK2-3PC-KD1
Maintained		Center	AK2-3PC-KD2
Maintained		Center	AK2-3PC-KD3

30mm Selector Switch Metal Operators

Dimensional Drawings
All dimensions shown in millimeters.
To convert to inches multiply by 0.03937

Flush Maintained and Momentary
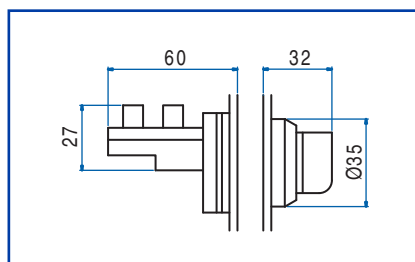
Key Selector

Contact Elements

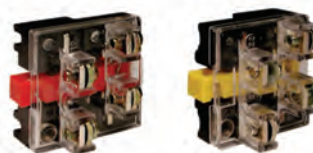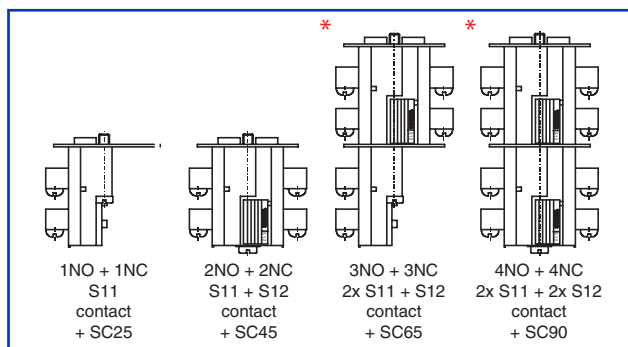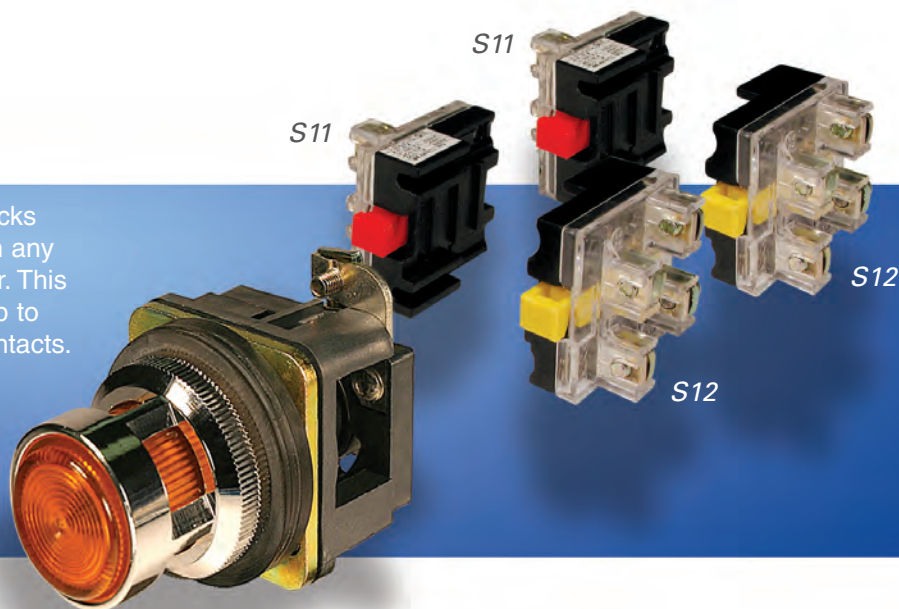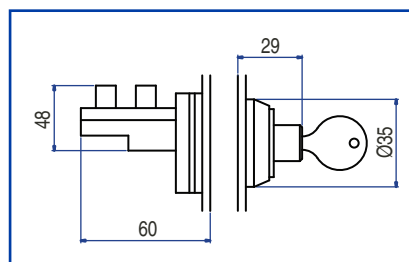| Description	Cat. No.
1 Normally Open + 1 Normally Closed Silver Contacts	S11
2 Normally Open + 2 Normally Closed Silver Contacts	S11 + S12
For additional contacts, see diagram at right.	

Contact Installation Screws

Type	Dimensions	Used with
SC25	M4 x 25 mm	S11
SC45	M4 x 45 mm	S11 + S12
SC65	M4 x 65 mm	2x S11 + S12
SC90	M4 x 90 mm	2x S11 + 2x S12

When using more than two contact blocks, additonal screws must be purchased separately (SC65 and SC90).

1NO + 1NC
S11
contact
+ SC25

2NO + 2NC
S11 + S12
contact
+ SC45

3NO + 3NC
2x S11 + S12
contact
+ SC65

4NO + 4NC
2x S11 + 2x S12
contact
+ SC90

Exploded Assembly View

Up to 4 contact blocks may be installed on any non-Illuminated actuator. This will give the user up to 4 NO and 4 NC contacts.

S11

S11

S12

S12

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30mm Non-Illuminated Metal Operators

Certified for
NEMA Type 4X
12 environment.

C ⓤ US
E225660

CE

Mushroom
with Key

All keys are "keyed alike". Different keys are available on request. Other colors are available on request.

Color	Function	Cat No.
Press to Lock, Key to Release		
■ Black	Maintained	AMLKB2
■ Red	Maintained	AMLKB4
Key to Lock, Key to Release		
■ Black	Maintained	AMKB2
■ Red	Maintained	AMKB4

Mushroom with
Indicating Arrows
(Press to lock, turn to release.)
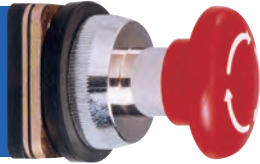
Other colors are available on request.

Color	Function	Cat No.
Press to Lock, Turn to Release		
■ Black	Maintained	AML2
■ Red	Maintained	AML4

Mushroom
Momentary
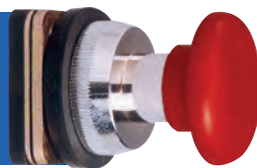
Color	Function	Cat No.
☐ White	Momentary	AM1
■ Black	Momentary	AM2
■ Green	Momentary	AM3
■ Red	Momentary	AM4
■ Blue	Momentary	AM6
■ Yellow	Momentary	AM8

30mm Non-Illuminated Metal Operators

![Altech logo]

Dimensional Drawings
All dimensions shown in millimeters.
To convert to inches multiply by 0.03937

Mushroom with Key
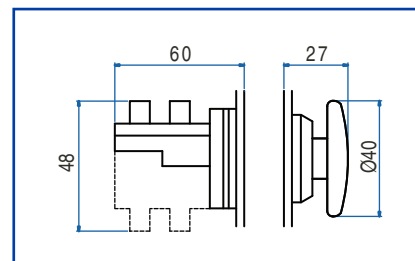
60   29

48   Ø40

Mushroom with Indicating Arrows

60   42

27   Ø40

Mushroom Momentary

60   27

48   Ø40

Contact Elements

Description	Cat. No.
1 Normally Open + 1 Normally Closed Silver Contacts	S11
2 Normally Open + 2 Normally Closed Silver Contacts	S11 + S12
For additional contacts, see diagram at right.	

Contact Installation Screws

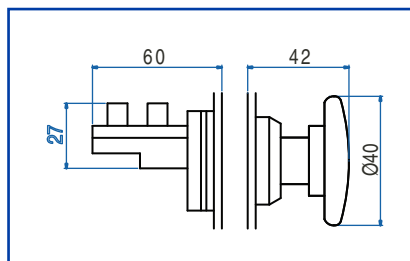| Type	Dimensions	Used with
SC25	M4 x 25 mm	S11
SC45	M4 x 45 mm	S11 + S12
SC65	M4 x 65 mm	2x S11 + S12
SC90	M4 x 90 mm	2x S11 + 2x S12

* When using more than two contact blocks, additonal screws must be purchased separately (SC65 and SC90).

1NO + 1NC S11 contact + SC25	2NO + 2NC S11 + S12 contact + SC45	3NO + 3NC 2x S11 + S12 contact + SC65	4NO + 4NC 2x S11 + 2x S12 contact + SC90

Exploded Assembly View

S11

S11

Up to 4 contact blocks may be installed on any non-Illuminated actuator. This will give the user up to 4 NO and 4 NC contacts.

S12

S12

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30mm Metal Pilot Lights

c U L us
E225660

CE

Certified for
NEMA Type 4X
12 environment.

Pilot Light

Note:
All LED pilot lights and illuminated actuators at a specified voltage will operate on AC and DC. Except for 110 and 230V specify AC or DC type.

Dimensional Drawings

Pilot Light

55.3

Ø35

57   26

Replacement bulbs available.
See page 54.

Filament Bulb

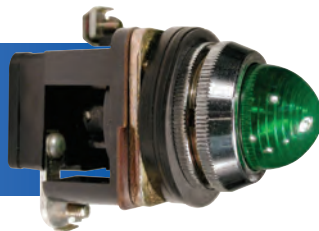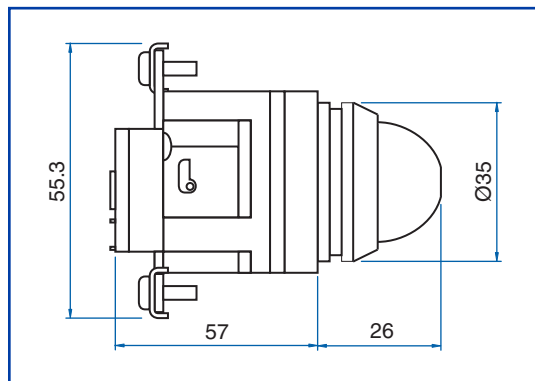| Color	Voltage	Cat No.
24V AC/DC (filament bulb)		
☐ White	24V AC/DC	PLB1-024
▮ Green	24V AC/DC	PLB3-024
▮ Red	24V AC/DC	PLB4-024
▮ Amber	24V AC/DC	PLB5-024
▮ Blue	24V AC/DC	PLB6-024
☐ Clear	24V AC/DC	PLB7-024
▮ Yelllow	24V AC/DC	PLB8-024
48V AC/DC (filament bulb)		
☐ White	48V AC/DC	PLB1-048
▮ Green	48V AC/DC	PLB3-048
▮ Red	48V AC/DC	PLB4-048
▮ Amber	48V AC/DC	PLB5-048
▮ Blue	48V AC/DC	PLB6-048
☐ Clear	48V AC/DC	PLB7-048
▮ Yelllow	48V AC/DC	PLB8-048
110V AC/DC (filament bulb)		
☐ White	110V AC/DC	PLB1-110
▮ Green	110V AC/DC	PLB3-110
▮ Red	110V AC/DC	PLB4-110
▮ Amber	110V AC/DC	PLB5-110
▮ Blue	110V AC/DC	PLB6-110
☐ Clear	110V AC/DC	PLB7-110
▮ Yelllow	110V AC/DC	PLB8-110
230V AC/DC (filament bulb)		
☐ White	230V AC/DC	PLB1-230
▮ Green	230V AC/DC	PLB3-230
▮ Red	230V AC/DC	PLB4-230
▮ Amber	230V AC/DC	PLB5-230
▮ Blue	230V AC/DC	PLB6-230
☐ Clear	230V AC/DC	PLB7-230
▮ Yelllow	230V AC/DC	PLB8-230

LED Bulb

Color	Voltage	Cat No.
24V AC/DC (LED bulb)		
☐ White	24V AC/DC	PLB1LB-024
▮ Green	24V AC/DC	PLB3LB-024
▮ Red	24V AC/DC	PLB4LB-024
▮ Amber	24V AC/DC	PLB5LB-024
▮ Blue	24V AC/DC	PLB6LB-024
☐ Clear	24V AC/DC	PLB7LB-024
▮ Yelllow	24V AC/DC	PLB8LB-024
48V AC/DC (LED bulb)		
☐ White	48V AC/DC	PLB1LB-048
▮ Green	48V AC/DC	PLB3LB-048
▮ Red	48V AC/DC	PLB4LB-048
▮ Amber	48V AC/DC	PLB5LB-048
▮ Blue	48V AC/DC	PLB6LB-048
☐ Clear	48V AC/DC	PLB7LB-048
▮ Yelllow	48V AC/DC	PLB8LB-048
110V AC/DC (LED bulb)		
☐ White	110V AC	PLB1LB-110
▮ Green	110V AC	PLB3LB-110
▮ Red	110V AC	PLB4LB-110
▮ Amber	110V AC	PLB5LB-110
▮ Blue	110V AC	PLB6LB-110
☐ Clear	110V AC	PLB7LB-110
▮ Yelllow	110V AC	PLB8LB-110
230V AC* (LED bulb)		
☐ White	230V AC*	PLB1LB-230
▮ Green	230V AC*	PLB3LB-230
▮ Red	230V AC*	PLB4LB-230
▮ Amber	230V AC*	PLB5LB-230
▮ Blue	230V AC*	PLB6LB-230
☐ Clear	230V AC*	PLB7LB-230
▮ Yelllow	230V AC*	PLB8LB-230

230V DC version is available on request.

Aluminum Enclosures for 30mm Operators

Altech

Certified for
NEMA Type 4X
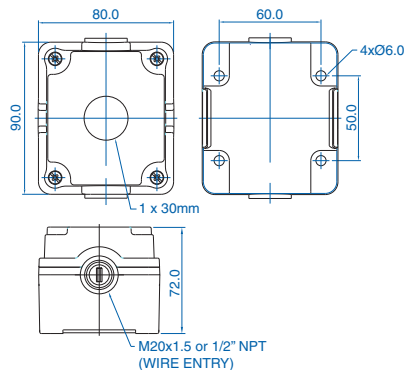12 environment.

U L
c US
E225660

CE

Aluminum (72mm Height)
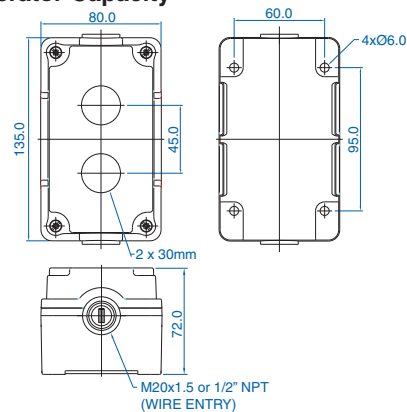## Pressure Die Cast

Operator Capacity	Cat. No. Black base/ Grey Cover*	Color Black base/ Yellow Cover	Material Construction	Dimensions LxWxH mm (in.)	Cable Entry Thread Size	Mounting Hole Dia.
1	7011A13	7023A10	PDC Aluminum, EH	80x90x72 (3.15x3.54x2.83)	2xM20	4 X 6mm
2	7008C13	7017C10	PDC Aluminum, EH	80x135x72 (3.15x5.32x2.83)	2xM20	4 X 6mm
3	7006E13	7018E10	PDC Aluminum, EH	80x180x72 (3.15x7.09x2.83)	2xM20	4 X 6mm
4	7006G13	7010G10	PDC Aluminum, EH	80x225x72 (3.15x8.86x2.83)	2xM20	4 X 6mm
1	7012A13	7024A10	PDC Aluminum, EH	80x90x72 (3.15x3.54x2.83)	2x1/2"-14 NPT	4 X 6mm
2	7009C13	7018C10	PDC Aluminum, EH	80x135x72 (3.15x5.32x2.83)	2x1/2"-14 NPT	4 X 6mm
3	7007E13	7019E10	PDC Aluminum, EH	80x180x72 (3.15x7.09x2.83)	2x1/2"-14 NPT	4 X 6mm
4	7007G13	7011G10	PDC Aluminum, EH	80x225x72 (3.15x8.86x2.83)	2x1/2"-14 NPT	4 X 6mm

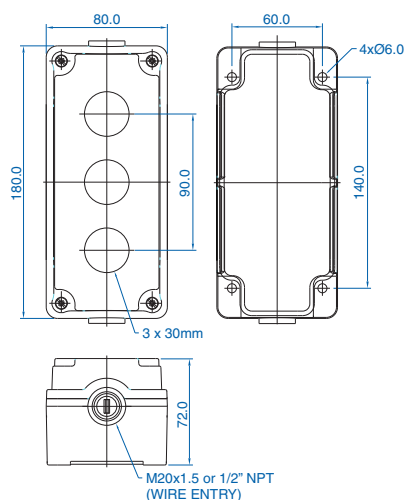*Color code RAL 7032, Pebble Gray. Other colors available upon request.
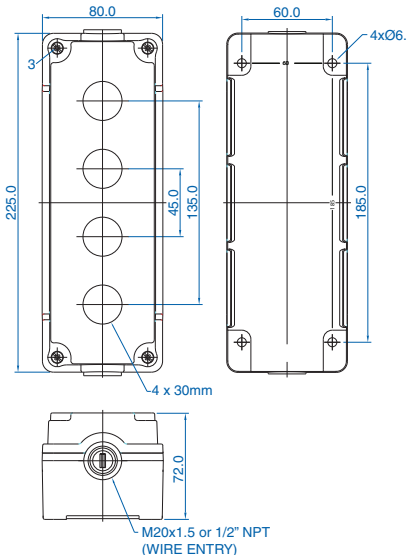
1 - Operator Capacity

80.0
60.0
4xØ6.0
90.0
50.0
1 x 30mm
72.0
M20x1.5 or 1/2" NPT
(WIRE ENTRY)

2 - Operator Capacity

80.0
60.0
4xØ6.0
135.0
45.0
95.0
2 x 30mm
72.0
M20x1.5 or 1/2" NPT
(WIRE ENTRY)

3 - Operator Capacity

80.0
60.0
4xØ6.0
180.0
90.0
140.0
3 x 30mm
72.0
M20x1.5 or 1/2" NPT
(WIRE ENTRY)

4 - Operator Capacity

80.0
60.0
4xØ6.0
3
225.0
45.0
135.0
185.0
4 x 30mm
72.0
M20x1.5 or 1/2" NPT
(WIRE ENTRY)

All dimensions shown in millimeters. To convert to inches multiply by 0.03937

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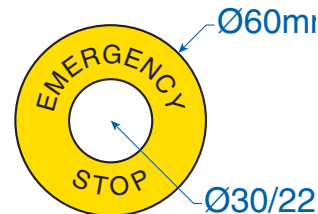
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30mm Push Button Accessories

Metal legend plates are engraved in horizontal and vertical orientations, one per side.

EMERGENCY STOP
LP41
Legend plate Ø 60mm yellow with black text.

Ø60mm

Ø30/22

Title	Cat No.	Title	Cat No.
AUTO	LP09	OVER	LP74
CLOSE	LP08	POWER ON	LP20
DOWN	LP07	RESET	LP13
EMERGENCY STOP	LP41	REVERSE	LP04
FAST	LP12	RIGHT	LP17
HAND	LP10	RUN	LP24
HAND, O, AUTO	LP36	SLOW	LP11
INCH	LP14	START	LP01
LEFT	LP18	STOP (red)	LP02
OFF	LP16	TRIP	LP19
ON	LP15	UNDER LOAD	LP108
OPEN	LP07		

Replacement Bulbs

Filament Bulbs

Color	Voltage	Cat No.
Clear	12V AC/DC	BA15D12
Clear	24V AC/DC	BA15D24
Clear	48V AC/DC	BA15D48
Clear	110V AC/DC	BA15D110
Clear	230V AC/DC	BA15D220

LED Bulbs

12V AC/DC

Color	Voltage	Cat No.
White	12V AC/DC	MCB15112
Green	12V AC/DC	MCB15312
Red	12V AC/DC	MCB15412
Amber	12V AC/DC	MCB15512
Blue	12V AC/DC	MCB15612
Yellow	12V AC/DC	MCB15812

LED Bulbs

110V AC

Color	Voltage	Cat No.
White	110V AC	MCB151110
Green	110V AC	MCB153110
Red	110V AC	MCB154110
Amber	110V AC	MCB155110
Blue	110V AC	MCB156110
Yellow	110V AC	MCB158110

110V DC

Color	Voltage	Cat No.
White	110V DC	MCB151110D
Green	110V DC	MCB153110D
Red	110V DC	MCB154110D
Amber	110V DC	MCB155110D
Blue	110V DC	MCB156110D
Yellow	110V DC	MCB158110D

24V AC/DC

Color	Voltage	Cat No.
White	24V AC/DC	MCB15124
Green	24V AC/DC	MCB15324
Red	24V AC/DC	MCB15424
Amber	24V AC/DC	MCB15524
Blue	24V AC/DC	MCB15624
Yellow	24V AC/DC	MCB15824

230V AC

Color	Voltage	Cat No.
White	230V AC	MCB151230
Green	230V AC	MCB153230
Red	230V AC	MCB154230
Amber	230V AC	MCB155230
Blue	230V AC	MCB156230
Yellow	230V AC	MCB158230

230V DC

Color	Voltage	Cat No.
White	230V DC	MCB151230D
Green	230V DC	MCB153230D
Red	230V DC	MCB154230D
Amber	230V DC	MCB155230D
Blue	230V DC	MCB156230D
Yellow	230V DC	MCB158230D

48V AC/DC

Color	Voltage	Cat No.
White	48V AC/DC	MCB15148
Green	48V AC/DC	MCB15348
Red	48V AC/DC	MCB15448
Amber	48V AC/DC	MCB15548
Blue	48V AC/DC	MCB15648
Yellow	48V AC/DC	MCB15848

Maximum Power Consumption:

Supply Voltage	LED		FILAMENT BULBS	
	Power (max) in Watts	Current	Power (max) in Watts	Current
12V	0.5W	max 20mA	2W	max 166mA
24V	0.5W	max 20mA	2W	max 85mA
48V	0.5W	max 20mA	5W	max 105mA
110V	0.5W	max 20mA	5W	max 45mA
240V	1W	max 20mA	6W	max 25mA

These bulbs are available in various colors and voltages. LED based bulbs are a direct replacement for filament bulbs and do not require having to change any other components in your existing operator or pilot light.

These bulbs use high brightness LED chips which last for more than 100,000 hours and consume very little power. Heat generated by LED based bulbs is negligible, therefore no damage to the body of the lamp or any operator in case of Illuminated push buttons occurs.

These bulbs can be used to replace 12V AC/DC, 24V AC/DC, 48V AC/DC, 110V AC or DC and 240V AC or DC circuits directly. LED color indication is given on the bulb for easy identification.

Please visit altechcorp.com/pb for other available legend plates.

Lenses and Replacement Boots

Lenses for pilot lights

Lenses for illuminated actuators

	Color	Cat No.	Cat No. w/ bushing
☐	White	PLL1	–
☐	Green	PLL3	PLLA3
☐	Red	PLL4	PLLA4
☐	Amber	PLL5	–
☐	Blue	PLL6	–
☐	Clear	PLL7	–
☐	Yellow	PLL8	–

	Color	Cat No.
☐	White	ALL1
☐	Green	ALL3
☐	Red	ALL4
☐	Amber	ALL5
☐	Blue	ALL6
☐	Clear	ALL7
☐	Yellow	ALL8

Padlock

For mushroom actuator: Cat. No. PAM
For projecting actuator: Cat. No. PAP
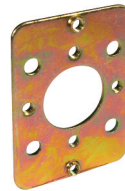
Actuator Lock Plate
Cat. No.:   ALP101

Rubber Boots for Booted Actuators

	Color	Cat No.
☐	White	BT1
☐	Black	BT2
☐	Green	BT3
☐	Red	BT4
☐	Blue	BT6
☐	Yellow	BT8

1.2mm Actuator Rubber Washer
Cat. No.:   ARW1.2

3.2mm Actuator Rubber Washer
Cat. No.:   ARW3.2

Replacement Key
Cat. No.:   KY30

Bulb Extractor
Cat. No.:   2BA9SE

Contact Block Installation Screws

Cat #.	Dimensions	Used With
SC25	M4 x 25 mm	S11 only
SC45	M4 x 45 mm	S11 + S12 (2NO + 2NC)
SC65	M4 x 65 mm	2 x S11 + S12 (3NO +3NC)
SC90	M4 x 90 mm	2 x S11 + 2 x S12 (4NO+4NC)

Contact Elements

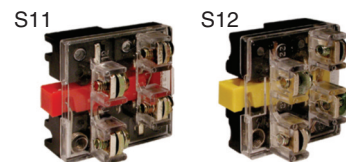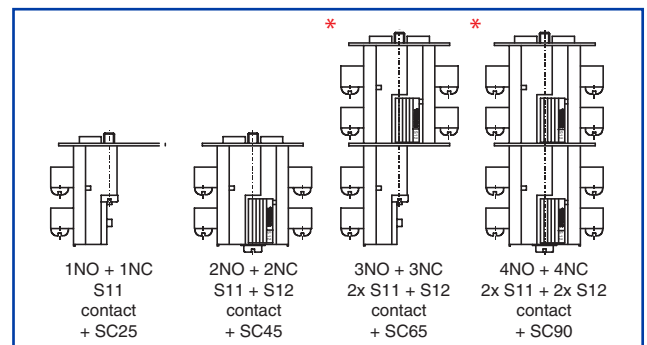| Description	Cat. No.
1 Normally Open + 1 Normally Closed Silver Contacts	S11
2 Normally Open + 2 Normally Closed Silver Contacts	S11 + S12
For additional contacts, see diagram at right.	

S11   S12

Contact Installation Screws

Type	Dimensions	Used with
SC25	M4 x 25 mm	S11
SC45	M4 x 45 mm	S11 + S12
SC65	M4 x 65 mm	2x S11 + S12
SC90	M4 x 90 mm	2x S11 + 2x S12

* When using more than two contact blocks, additonal screws must be purchased separately (SC45 and SC90).

1NO + 1NC
S11
contact
+ SC25

2NO + 2NC
S11 + S12
contact
+ SC45

3NO + 3NC
2x S11 + S12
contact
+ SC65

4NO + 4NC
2x S11 + 2x S12
contact
+ SC90

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30mm Technical Notes

Characteristics
Environment

Temperature Range		-25°C to +70°C (-13°F to +158°F)
Degree of protection:	IEC 529	IP65
	UL50	NEMA Type 4X, 12
Mechanical Life	All push buttons except maintained mushroom	1 million of cycles
	maintained mushroom	0.3 million of cycles

Mechanical Characteristics of contact elements

Contact Operation	NO+NC	Double break, self-wiping
Rated Insulation Voltage		500 V AC
Operating Travel	Push buttons	Changing NC state 2.4mm
		Changing NO state 4.3mm
		Travel 8.7mm
Terminal Capacity	Wiring	2x1.5 sq.mm (2x16 AWG) or 1x2.5 sq.mm (14 AWG)
Contact Material	Bimetal (Cu/Ag)	Standard single element
Short Circuit Protection		10A HRC fuse
Rated Make Break	UL508, AC: A600; 600V, 1.2A DC: Q600; 600V, 0.1A	standard block with screw clamp terminals 415V AC, 4A standard block with screw clamp terminals 220V AC, 0.5A
Dielectric Strength	Push Buttons, Pilot Lights	2500V for 1 minute

Torque Specifications

Contact block to operator screws	0.5 Nm (4.5 lbs. in.)
Terminal screws (wiring)	0.8 Nm (7.2 lbs. in.)