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General Data


Joslyn Clark Type 100T Heavy Duty Push
Buttons are available in Standard, Mushroom Head, Push Pull, and Key-Operated

All units are suitable for use in NEMA Type $1,3,3 R, 4,4 X, 12$, and 13 applications when mounted in enclosures rated for those same applications. Although not needed on all Type 4X applications, protective caps provide improved resistance to some corrosive materials. They are not required by UL.

NEMA 13 Oiltight and NEMA 4 Watertight integrity is assured by a unique collapsing neoprene diaphragm. Three neoprene gaskets in back of the panel insure a tight fit and flexibility for different thickness enclosures. The die cast housing fits both standard Oiltight mounting holes with a $1-13 / 64$ " or 30.56 mm diameter.

Single circuit double break contact blocks are made of tough clear plastic for easy contact inspection. Blocks are attached to the operator by a single captive screw and positioning pin to make installation quick and easy. Up to 8 blocks may be stacked on each push button operator (2 wide, 4 deep). Up to 6 blocks on each selector switch.

Brushed aluminum legend plates are held in place by a locking thrust washer which extends through the plate into the panel for easy alignment. Standard legend plates are $1-7 / 8$ square with black etched in letters. Jumbo automotive size 2-1/2" square legends are also available.

## Standard Operators

Interchangeable snap-on, reusable tough molded-in-plastic cups, are available in black, red, green, yellow, amber, blue, white, and brown. Your choice of three octagonal, brushed aluminum guard rings comes in:
Unguarded - Button extends beyond ring for easy access.
Guarded - Ring is flush with button to prevent accidental operation.

Extended - Ring extends beyond button Guard making accidental operation unlikely.

## Standard and Jumbo Mushroom Head

Both mushroom heads fit the same operator and come in black, red, green, and yellow. The diameter of the standard head is $1-3 / 8^{\prime \prime}-$ jumbo head is $2-1 / 4^{\prime \prime}$ in diameter.

## Illuminated Push Button

Plastic Lens are available in seven colors and in standard and mushroom head ( $13 / 8^{\prime \prime}$ ) variety. The operator combines a momentary push button and pilot light in one unit.

## Push-Pull

Both Illuminated and Non-Illuminated standard mushroom heads are available in 2 position maintained operators.

## Key-Operated

When the key-type cylinder lock is depressed with or without key inserted - the operator is locked down and can only be released by the key. A red jumbo mushroom head can be field or factory installed for emergency stop applications. Other types of key operations are obtainable.


Joslyn Clark Type 100T Heavy Duty Selector Switches are available in Standard Knob, Chrome Lever, Key-Operated, Joy Stick and Selector-Push.

The standard knob and chrome lever switches are obtainable with two, three and four position operators. They come in: 2 position maintained and spring return; 3 position maintained, spring return from right to center, left to center, right and left to center; and 4 position maintained.
Key operated switches come in two or three position maintained and spring return and all 4 position switches are maintained.

There are several cams for all selector switches in order to accomplish numerous types of circuits. Positive indexing assures operating reliability.

Up to eight single circuit contact blocks four on either side - may be attached to any operator with a single captive screw and positioning pin on each block.

A tip on the locking thrust washer extends through the legend plate to the panel, locking both plate and operator in position.

Legend plates are of brushed aluminum with etched black lettering. An octagonal aluminum guard ring locks operator on the panel adding to the look of quality.

## Standard Knob

Interchangeable knobs are of high-impact plastic in black, red, green, yellow and blue. They fit tightly to an inner white knob which provides an easy-to-see white index mark for the cap.

## Standard Knob Illuminated Selector Switch

Available with seven interchangeable colored lenses in both two position maintained and three position maintained and spring return.

## Selector Switches

## Chrome Lever

These selector switches have the same operating characteristics as the Standard Knob model. An extended chrome lever, $1-3 / 4$ " long, provides quick and positive operation with or without gloves.

## Key-Operated

Key-operated switches have the same positive action as the Standard Knob and Chrome Lever types. Operators are obtainable with many key removal positions. There are special keys available for added security.

## Joy Stick

All 3 position and 5 position maintained and spring return joy sticks have the same positive action as the other selector switches. A special joy stick model can be supplied with a release button on top. This prevents movement of the joy stick until the button is depressed - an excellent safety feature.

## Selector-Push

Selector-Push operators combine the actions of a selector switch and momentary push button. A rotating collar provides the selectivity needed to provide for several functions in one operator.


## Pilot Lights



Joslyn Clark Type 100T Heavy Duty Pilot Lights are available in Standard and Press-To-Test. A choice of power configurations to match various shock and vibration levels insure longer lamp life. Plastic lenses come in red, green, yellow, amber, blue, white and clear. All lamps have bayonet type bases.

There are four basic power configurations.

1. Transformer Type ( $\mathbf{1 2 0}, \mathbf{2 4 0}$ or $\mathbf{4 8 0}$ Volts) uses a modular heavy-duty transformer-50 or 60 Hertz - to step line voltage down to 6 volts for longer lamp life under high shock and vibration conditions.
2. Resistor Type ( $\mathbf{1 2 0}$ or $\mathbf{2 4 0}$ Volts) drops voltage to 60 and 120 volts respectively to lengthen lamp life in less severe applications.
3. Full-Voltage Types (6, 12, $\mathbf{2 4}$ or $\mathbf{1 2 0}$ Volts) are used in applications with little shock or vibration. $A C$ and $D C$ rated.
4. Neon Type ( $\mathbf{1 2 0}$ Volts) will withstand extremely heavy shock and vibration conditions - use of clear and yellow lens is recommended. AC and DC rated.

## Standard

Dome Lenses are made of thick plastic, fluted to give wide visibility. They come in red, green, yellow, amber, blue, white and clear.

## Press-To-Test

Features and colors are the same as Standard Pilot Lights except the lenses are tubular. A N.O. and a N.C. contact block comes with unit.

## Contact Blocks ( 600 Volt)

## Features

- Contacts enclosed in a clear plastic housing
- Fine silver contact tips
- Long life steel springs
- Same contact block for all operators
- "Quick-Stack" assembly
- "Easy-Access" terminals
- "One-Block-At-A-Time" removal
- Easy contact mode identification
- UL listed

Joslyn Clark Type 100T Heavy Duty Contact Blocks are designed to simplify installation and assure trouble-free operation.

Contacts are enclosed in sturdy plastic to prevent foreign material from entering the block. The clear plastic allows easy contact inspection. Contact tips are made of fine silver for high conductivity. Strong resilient springs reduce contact bounce and assure long reliable operation. The $3 / 4$ " blocks may be used on all operators installed side by side and four in tandem.

The single No. 8 tapped-head captive screw and positioning pin on each block make stacking fast and easy. Terminals are inclined for direct access and speedy wiring also angled to provide extra wiring room. A self-rising saddle assures a solid vibration resistant connection at each terminal for two No. 12 copper wires. Individual block removal is automatic without possibility of the entire stack coming off when the top block is removed.

Contact mode is readily identified. NormallyOpen contact blocks have green operators marked with both N.O. and $-1 \vdash$ symbol. The normally-closed blocks have red operators and are marked with N.C. and $\nVdash$ symbol.


## Push Buttons



Extended Pushbutton


Flush Pushbutton


1-3/8 inch Mushroom Head

Pushbuttons
Momentary Operation

| NEMA Type 1, 4, 12, 13 |  |  |
| :---: | :---: | :---: |
| Operator | Color | Catalog Number |
| Extended | Black | 100T-PB1B |
|  | Red | 100T-PB1R |
|  | Green | 100T-PB1G |
|  | Yellow | 100T-PB1Y |
|  | Amber | 100T-PB1A |
|  | Blue | 100T-PB1E |
|  | White | 100T-PB1W |
|  | Brown | 100T-PB1N |
|  | None | 100T-PB10 |
| Flush | Black | 100T-PB2B |
|  | Red | 100T-PB2R |
|  | Green | 100T-PB2G |
|  | Yellow | 100T-PB2Y |
|  | Amber | 100T-PB2A |
|  | Blue | 100T-PB2E |
|  | White | 100T-PB2W |
|  | Brown | 100T-PB2N |
|  | None | 100T-PB20 |
| 1-3/8 inch Mushroom | Black | 100T-PB4B |
|  | Red | 100T-PB4R |
|  | Green | 100T-PB4G |
|  | Yellow | 100T-PB4Y |
|  | None | 100T-PB40 |
| 2-1/4 inch | Black | 100T-PB5B |
| Mushroom | Red | 100T-PB5R |
|  | Green | 100T-PB5G |
|  | Yellow | 100T-PB5Y |

## Selection Guide

Select push button operators from table above and contact blocks from table on the right. Select legend plates from page D16.

For complete units see page D13. All units on this page will accept a total of eight contact blocks.

| Item | Page | Item | Page |
| :--- | :--- | :--- | :--- |
| Accessories | D17 | Pilot Lights | D7 |
| Legend Plates | D16 | Selector Switches | D8 |
| Ratings and Dimensions | D18 | Special Devices | D4 |
| Assembled Units | D13 | Assembled Stations | D13 |

## Standard Contact Blocks

|  | Type | Symbol | Rod Color | Catalog Number |
| :---: | :---: | :---: | :---: | :---: |
|  | 1-N.O. | ㅇ, 0 | Green | 100T-CB10 |
|  | 1-N.C. | 잉ㅇ | Red | $\begin{aligned} & \text { 100T-CB01 } \\ & \text { 100T-CBH01² } \end{aligned}$ |
| Standard <br> Contact Block | 1-N.O. \& 1-N.C. | $\begin{aligned} & 0.0 \\ & \hline \text { 오 } 0 \end{aligned}$ | 1-Green <br> \& 1-Red | 100T-CB11 ${ }^{1}$ |

1. Consists of one 100T-CB10 and one 100T-CB01 packaged together.
2. Additional spring pressure for resistance to vibration.

## Contact Ratings



Pushbutton Color Caps and Mushroom Head

|  | Color Caps for Flush Unguarded or Guarded Push Buttons | 1-3/8 inch <br> Mushroom Head for Mushroom Buttons and Push Pull Units | 2-1/4 inch Mushroom Head for Mushroom Buttons and Push Pull Units |
| :---: | :---: | :---: | :---: |
| Color | Catalog Number | Catalog <br> Number | Catalog <br> Number |
| Black | 100T-BB | 100T-BM4B | 100T-BM5B |
| Red | 100T-BR | 100T-BM4R | 100T-BM5R |
| Green | 100T-BG | 100T-BM4G | 100T-BM5G |
| Yellow | 100T-BY | 100T-BM4Y | 100T-BM5Y |
| Amber | 100T-BA |  |  |
| Blue | 100T-BE |  |  |
| White | 100T-BW |  |  |
| Brown | 100T-BN |  |  |
| Mixed | 100T-BM | 100T-BM4M |  |



## Special Purpose Push Button Units

## Key Operated Push Button

This key operated push button is a chrome, unguarded unit that locks in the depressed position. It must be unlocked with a key to release it. Two keys are provided with each unit.


Key Operated
Push Button

| Description ${ }^{1}$ | Catalog No. |
| :--- | :--- |
| Unit Locks in |  |
| Depressed |  |
| Position Key | 100T-PB61 |
| Required to |  |
| Release | Contact Blocks |
| Chrome Unit | Not Included |

1. 100T-BM6R $2 \frac{1}{4}$ inch Red Mushroom Head available for this unit.

## Standard Contact Blocks

|  |  |  | Rod | Catalog |
| :---: | :---: | :---: | :---: | :---: |
|  | Type | Symbol | Color | Number |
|  | 1-N.O. | 으, 0 | Green | 100T-CB10 |
|  | 1-N.C. | 이응 | Red | $\begin{aligned} & \text { 100T-CB01 } \\ & \text { 100T-CBH01³ } \end{aligned}$ |
| Standard Contact Block | 1-N.O. \& 1-N.C. | $\begin{array}{ll} 0.0 \\ \hline 0,0 & 0 \end{array}$ | 1-Green \& 1-Red | 100T-CB11 ${ }^{2}$ |

2. Consists of one 100T-CB10 and one 100T-CB01 packaged together.
3. Additional spring pressure for resistance to vibration.

## Push-Pull Units

Push-Pull units are available as two position, maintained (buttons remain in the depressed position until manually released). Standard units have $1^{3 / 8}$ inch mushroom head operator.


## Push-Pull Units

Comes with $13 / 8$ inch Standard Mushroom Head. Legend Plate and Contact Blocks not included.

| Description | Color $^{4}$ | Catalog Number |
| :--- | :--- | :--- |
| Maintained | Black | 100T-PP4B |
|  | Red | 100T-PP4R |
|  | None | 100T-PP40 |

1. For colors not listed, or for units with $2 \frac{1}{4}$ inch diameter Mushroom Heads, order with "none" and select desired Mushroom Head from below.

Mushroom Head Color Caps

| - | $1-3 / 8$ inch <br> Mushroom Head <br> for Mushroom <br> Buttons and Push <br> Pull Units | $2-1 / 4$ inch Mushroom Head for Mushroom Buttons and Push Pull Units |
| :---: | :---: | :---: |
| Color | Catalog Number ${ }^{5}$ | Catalog Number ${ }^{6}$ |
| Black | 100T-BM4B | 100T-BM5B |
| Red | 100T-BM4R | 100T-BM5R |
| Green | 100T-BM4G | 100T-BM5G |
| Yellow | 100T-BM4Y | 100T-BM5Y |
| Mixed | 100T-BM4M | 100T-BM5M |

5. Packaged 1 per carton except 100T-BM4M contains one of each color.
6. Packaged 1 per carton except 100T-BM5M contains one of each color.


## Push Buttons

## (14) ©

## Illuminated Push Buttons

Illuminated Momentary Push Buttons comes with Standard Lens. Legend Plate and Contact Blocks Not Included.


1. Catalog number with lens are for standard lens. For colors not listed, or for $13 / 8$ inch mushroom lens, order with "none" and select desired standard or mushroom lens from table at right.
2. Yellow or clear lens only recommended for neon unit.

| Item | Page |
| :--- | :--- |
| Accessories | D17 |
| Legend Plates | D16 |
| Ratings and Dimensions | D18 |
| Assembled Units | D13 |


| Replacement Lamps |  |
| :--- | :---: |
| Voltage | Catalog \# |
| 6 V | $080 \mathrm{MB1}$ |
| 12 V | $080 \mathrm{MB2}$ |
| 24 V | $080 \mathrm{MB3}$ |
| 48 V | $080 \mathrm{MB5}$ |
| 120 V | $080 \mathrm{MB7}$ |

Operator \& Lenses 100T-PBLT1R

## Selection Guide

Select Illuminated push button operators from table at left and contact blocks from below. Units without lenses will accept either standard lens or mushroom lens. All units are provided with "unguarded" guard ring. Clear plastic guard 100T-PGR is available.

Select legend plates from pageD16
For complete units, see pageD13
All units on this page will accept a total of eight contact blocks.

## Standard Contact Blocks

|  | Type | Symbol | Rod Color | Catalog Number |
| :---: | :---: | :---: | :---: | :---: |
|  | 1-N.O. | O, 0 | Green | 100T-CB10 |
|  | 1-N.C. | 이응 | Red | $\begin{aligned} & \text { 100T-CBO1 } \\ & \text { 100T-CBHO14 } \end{aligned}$ |
| Standard Contact Block | 1-N.O. <br> \& 1-N.C. | $\begin{aligned} & 0.0 \\ & \hline \text { 아 } 0 \end{aligned}$ | 1-Green <br> \& 1-Red |  |

3. Consists of one 100T-CB10 and one 100T-CB01 packaged together.
4. Additional spring pressure for resistance to vibration.

## Standard Lenses and Mushroom Lenses

|  | Standard Lenses <br> for Guarded or <br> Unguarded Push <br> Buttons or Press- <br> to-Test Pilot Lights | 1-3/8 inch <br> Mushroom Lenses <br> for Illuminated Push <br> Buttons and Illuminated <br> Push-Pull Units |
| :--- | :--- | :--- |
| Color | Catalog <br> Number | Catalog <br> Number |
| Red | 100T-LBR | 100T-LBMR |
| Green | 100T-LBG | 100T-LBMG |
| Yellow | 100T-LBY | 100T-LBMY |
| Amber | 100T-LBA | 100T-LBMA |
| Blue | 100T-LBE | 100T-LBME |
| White | 100T-LBW | 100T-LBMW |
| Clear | 100T-LBC | 100T-LBMC |
| Mixed | 100T-LBM |  |
| 5. Packaged one per carton except 100T-LBM contains |  |  |
| seven lenses, one of each color. |  |  |
| 6. Packaged one per carton except 100T-LBMM |  |  |
| contains seven lenses, one of each color. |  |  |

## Ordering Information

Complete Control Unit Consists Of:


Operator 100T-PBLT1R


Contact Blocks 100T-CB01

Operator \& Lenses 100T-PPLT1R
Without $13 / 8$ inch Mushroom Head.
Legend Plate and Contact Blocks Not Included.

| Type | Voltage | Lamp Number | Lens Color | Catalog Number ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| Transformer | 120 <br> AC only <br> $50 / 60 \mathrm{~Hz}$ | 755 | Red <br> Green <br> None | $\begin{aligned} & \text { 100T-PPLT1R } \\ & \text { 100T-PPLT1G } \\ & \text { 100T-PPLT10 } \end{aligned}$ |
|  | 240 AC only $50 / 60 \mathrm{~Hz}$ | 755 | Red Green None | $\begin{aligned} & \text { 100T-PPLT2R } \\ & \text { 100T-PPLT2G } \\ & \text { 100T-PPLT20 } \\ & \hline \end{aligned}$ |
|  |  | 755 | Red Green None | $\begin{aligned} & \text { 100T-PPLT4R } \\ & \text { 100T-PPLT4G } \\ & \text { 100T-PPLT40 } \\ & \hline \end{aligned}$ |
| Resistor | $\begin{aligned} & 120 \\ & \text { AC DC } \end{aligned}$ | 60MB | Red <br> Green <br> None | $\begin{aligned} & \text { 100T-PPLR1R } \\ & \text { 100T-PPLR1G } \\ & \text { 100T-PPLR10 } \end{aligned}$ |
|  | $\begin{aligned} & 240 \\ & \text { AC DC } \end{aligned}$ | 120MB | Red <br> Green <br> None | $\begin{aligned} & \text { 100T-PPLR2R } \\ & \text { 100T-PPLR2G } \\ & \text { 100T-PPLR20 } \end{aligned}$ |
| Full Voltage | $\begin{array}{\|l} 120 \\ \text { AC DC } \end{array}$ | 120MB | Red Green None | $\begin{aligned} & \text { 100T-PPLF1R } \\ & \text { 100T-PPLF1G } \\ & \text { 100T-PPLF10 } \\ & \hline \end{aligned}$ |
|  | $\begin{aligned} & 6 \\ & \text { AC DC } \end{aligned}$ | 6MB | Red Green None | $\begin{aligned} & \text { 100T-PPLF6R } \\ & \text { 100T-PPLF6G } \\ & \text { 100T-PPLF60 } \\ & \hline \end{aligned}$ |
|  | $12$ | 12MB | Red <br> Green <br> None | $\begin{aligned} & \text { 100T-PPLF7R } \\ & \text { 100T-PPLF7G } \\ & \text { 100T-PPLF70 } \end{aligned}$ |
|  | $24$ | 24MB | Red <br> Green <br> None | $\begin{aligned} & \text { 100T-PPLF8R } \\ & \text { 100T-PPLF8G } \\ & \text { 100T-PPLF80 } \end{aligned}$ |
| Neon ${ }^{2}$ | $\begin{aligned} & 120 \\ & \text { AC DC } \end{aligned}$ | NE51 | Yellow <br> Clear <br> None | 100T-PPLN1Y 100T-PPLN1C 100T-PPLN10 |

1. For colors not listed, order with "none" and select desired mushroom
lens form table at right.
2. Yellow or clear lens only recommended for neon unit.

## Selection Guide

 legend plate from page D16.| Item | Page |
| :--- | :--- |
| Accessories | D17 |
| Legend Plates | D16 |
| Ratings and Dimensions | D18 |

Illuminated push-pull units are two position illuminated mushroom buttons which remain in the depressed position until manually released. Select the operator from table at left and contacts from below. Select

All units on this page will accept a total of eight contact blocks.

## Standard Contact Blocks

|  |  |  | Rod | Catalog |
| :---: | :---: | :---: | :---: | :---: |
|  | Type | Symbol | Color | Number |
|  | 1-N.O. | 0 | Green | 100T-CB10 |
|  | 1-N.C. | 이응 | Red | $\begin{aligned} & \text { 100T-CBO1 } \\ & \text { 100T-CBHO1 } \end{aligned}$ |
| Standard Contact Block | $\begin{aligned} & \text { 1-N.O. } \\ & \text { \& 1-N.C. } \end{aligned}$ | $\begin{aligned} & 0.0 \\ & \hline 0,0 \end{aligned}$ | 1-Green <br> \& 1-Red | 100T-CB11 ${ }^{3}$ |

3. Consists of one 100T-CB10 and one 100T-CB01 packaged together.
4. Additional spring pressure for resistance to vibration.

## Mushroom Lenses for Illuminated Push-Pull Units

| Color | $13 / 8$ inch Mushroom <br> Lenses for Illuminate <br> Push-Pull Units |
| :--- | :--- |
|  | 100T-LBMR <br> 100T-LBMG <br> 100T-LBMY <br> White <br> 100T-LBMA <br> Clear |
|  |  |
| 100T-LBMW |  |
| Mixed | 100T-LBMC |

5. Packaged one per carton except 100T-LBMM contains seven lenses, one of each color.


## Push Buttons

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Pilot Lights and Press-To-Test Pilot Lights

|  |  |  |  | Pilot Lights ${ }^{4}$ <br> Catalog <br> Number | Press-To-Test ${ }^{4}$ <br> Catalog <br> Number ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Voltage | $\begin{array}{\|l\|} \hline \text { Lamp } \\ \text { Number } \end{array}$ | $\begin{array}{\|l} \hline \text { Lens } \\ \text { Color } \\ \hline \end{array}$ |  |  |
| Transformer | 120 AC only $50 / 60 \mathrm{~Hz}$ | 755 | $\begin{array}{\|l} \hline \begin{array}{l} \text { Red } \\ \text { Green } \\ \text { None } \end{array} \\ \hline \end{array}$ | 100T-PLT1R 100T-PLT1G 100T-PLT10 | 100T-PTT1R 100T-PTT1G 100T-PTT10 |
|  | 240 AC only 50060 Hz | 755 | $\begin{aligned} & \hline \text { Red } \\ & \text { Green } \\ & \text { None } \end{aligned}$ | 100T-PLT2R 100T-PLT2G 100T-PLT20 | 100T-PTT2R 100T-PTT2G 100T-PTT20 |
|  | 480 <br> AC only <br> 50/60 Hz | 755 | Red <br> Green <br> None | 100T-PLT4R 100T-PLT4G 100T-PLT40 | 100T-PTT4R 100T-PTT4G 100T-PTT40 |
| Resistor | $\begin{aligned} & 120 \\ & \text { AC DC } \end{aligned}$ | 60MB | $\begin{array}{\|l} \hline \text { Red } \\ \text { Green } \\ \text { None } \end{array}$ | 100T-PLR1R 100T-PLR1G 100T-PLR10 | 100T-PTR1R 100T-PTR1G 100T-PTR10 |
|  | $\begin{aligned} & 240 \\ & \text { AC DC } \end{aligned}$ | 120MB | Red Green None | 100T-PLR2R 100T-PLR2G 100T-PLR20 | 100T-PTR2R <br> 100T-PTR2G <br> 100T-PTR20 |
| Full Voltage | $\begin{array}{\|l\|} 120 \\ \text { AC DC } \end{array}$ | 120MB | $\begin{aligned} & \hline \text { Red } \\ & \text { Green } \\ & \text { None } \end{aligned}$ | 100T-PLF1R 100T-PLF1G 100T-PLF10 | 100T-PTF1R 100T-PTF1G 100T-PTF10 |
|  | $\begin{aligned} & 6 \\ & \text { AC DC } \\ & \hline \end{aligned}$ | 6MB | Red <br> Green <br> None | $\begin{aligned} & \text { 100T-PLF6R } \\ & \text { 100T-PLF6G } \\ & \text { 100T-PLF60 } \end{aligned}$ | $\begin{array}{\|l\|} \hline 100 T-P T F 6 R \\ 100 T-P T F 6 G \\ 100 T-P T F 60 \\ \hline \end{array}$ |
|  | $\begin{array}{\|l\|} 12 \\ \text { AC DC } \\ \hline \end{array}$ | 12MB | $\begin{aligned} & \hline \begin{array}{l} \text { Red } \\ \text { Green } \end{array} \\ & \text { None } \end{aligned}$ | 100T-PLF7R 100T-PLF7G 100T-PLF70 | 100T-PTF7R 100T-PTF7G 100T-PTF70 |
|  | $\begin{aligned} & 24 \\ & A C D C \end{aligned}$ | 24MB | $\begin{aligned} & \hline \text { Red } \\ & \text { Green } \\ & \text { None } \end{aligned}$ | 100T-PLF8R 100T-PLF8G 100T-PLF80 | 100T-PTF8R 100T-PTF8G 100T-PTF80 |
| Neon ${ }^{2}$ | 120 <br> AC DC | NE51 | $\begin{aligned} & \hline \text { Yellow } \\ & \text { Clear } \\ & \text { None } \end{aligned}$ | 100T-PLN1Y 100T-PLN1C 100T-PLN10 | 100T-PTN1Y 100T-PTN1C 100T-PTN10 |

1. For colors not listed, order with "none" and select desired lens from table below.
2. Yellow or clear lens only recommended for neon unit.
3. Catalog number with lens are for standard lens. For colors not listed or for $13 / 8$ inch mushroom lens order with "none" and select desired standard or mushroom lens from table below.

Standard Lens
Pilot Light Operator \& Lens 100T-PLT1R


Pilot Light
Pilot Lights are available in four different power configurations- transformer, resistor, full voltage and neon types. Transformer types are available with 480,240 , and 120 volt primary voltages and all have a 6.3 volt secondary for long lamp life. They will withstand a considerable amount of shock and vibration. The resistor type is available in 240 and 120 volt varieties with the resistor dropping the voltage to 120 and 60 volts respectively. Full voltage units are available with $6,12,24$, and 120 volt lamps. The neon bulbs burn less brightly therefore it is recommended that only yellow and clear lens be used for these units.

## Press-To-Test Lights

Press-To-Test Lights are available in the same four power configurations as the standard pilot lights Transformer, resistor, full voltage, and neon. They are furnished pre-wired with a normally open and a normally closed contact. As shown in the diagram below it will allow you to test the lamp without interfering with the normal operation of the pilot light.

4. Legend Plate Not Included.
5. For Replacement Lamps see page D6.


Press-To-Test Pilot Light Operator \& Lens 100T-PTT1R

Standard Lenses and Mushroom Lenses

|  | Standard Lenses for Pilot Lights (Purchased after Jan. 1997) | Standard Lenses for Guarded or Unguarded Buttons or Press-ToTest Pilot Lights | $13 / 8$ inch Mushroom Lenses for Illuminated Press-To-Test Pilot Lights |
| :---: | :---: | :---: | :---: |
| Color | Catalog Number | Catalog Number | Catalog Number |
| Red | 100T-LR | 100T-LBR | 100T-LBMR |
| Green | 100T-LG | 100T-LBG | 100T-LBMG |
| Yellow | 100T-LY | 100T-LBY | 100T-LBMY |
| Amber | 100T-LA | 100T-LBA | 100T-LBMA |
| Blue | 100T-LE | 100T-LBE | 100T-LBME |
| White | 100T-LW | 100T-LBW | 100T-LBMW |
| Clear | 100T-LC | 100T-LBC | 100T-LBMC |
| Mixed | 100T-LM | 100T-LBM | 100T-LBMM |

5. Packaged 1 per carton except 100T-LM contains seven lenses one of each color.
6. Packaged 1 per carton except 100T-LBM contains seven lenses one of each color.
7. Packaged 1 per carton except 100T-LBMM contains seven lenses one of each color.

Selector Switches


Chrome Lever 100T-SL2MC1

Key Operated 100T-SK3M

Legend Plate and Contact Blocks not included

| Type | Black Knob Operator ${ }^{12}$ |  | Crome Lever Operator |  | Key Operator |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Catalog <br> Number | $\begin{aligned} & \text { Cam }^{3} \\ & \text { Code } \end{aligned}$ | Catalog Number | $\begin{aligned} & \text { Cam }^{3} \\ & \text { Code } \end{aligned}$ | Catalog Number | $\begin{aligned} & \text { Cam }^{3} \\ & \text { Code } \end{aligned}$ | $\mathrm{Key}^{4}$ <br> Removal |
| 2 Positioned Maintained | 100T-SS2MB | 1 | 100T-SL2MC | 1 | 100T-SK2M | 1 | A |
| 2 Position Spring Return Right To Center | 100T-SS2RB | 1 | 100T-SL2RC | 1 | 100T-SK2R | 1 | C |
| 3 Positioned Maintained | 100T-SS3MB | $\begin{aligned} & 3,4,5 \\ & 6, \text { or } 7 \end{aligned}$ | 100T-SL3MC | $\begin{aligned} & 3,4,5 \\ & 6, \text { or } 7 \end{aligned}$ | 100T-SK3M | $\begin{aligned} & 3,4,5 \\ & 6, \text { or } 7 \end{aligned}$ | A |
| 3 Position Spring Return Right To Center | 100T-SS3RB | $\begin{aligned} & 3,4,5 \\ & 6, \text { or } 7 \end{aligned}$ | 100T-SL3RC | $\begin{gathered} 3,4,5 \\ 6, \text { or } 7 \end{gathered}$ | 100T-SK3R | $\begin{gathered} 3,4,5 \\ 6, \text { or } 7 \end{gathered}$ | C |
| 3 Position Spring Return Left To Center | 100T-SS3LB | $\begin{gathered} 3,4,5 \\ 6, \text { or } 7 \end{gathered}$ | 100T-SL3LC | $\begin{aligned} & 3,4,5 \\ & 6, \text { or } 7 \end{aligned}$ | 100T-SK3L | $\begin{aligned} & 3,4,5 \\ & 6, \text { or } 7 \end{aligned}$ | C |
| 3 Position Spring Return Rt. \& Lt. to Ctr. | 100T-SS3BB | $\begin{gathered} 3,4,5 \\ 6, \text { or } 7 \end{gathered}$ | 100T-SL3BC | $\begin{aligned} & 3,4,5 \\ & 6, \text { or } 7 \end{aligned}$ | 100T-SK3B | $\begin{aligned} & 3,4,5 \\ & 6, \text { or } 7 \end{aligned}$ | C |
| 4 Position Maintained | 100T-SS4MB | 8 | 100T-SL4MC | 8 | 100T-SK4M | 8 | A |

1. Available in other colors Change "B" in operator catalog number to "R" for Red, "G" for Green, "Y" for Yellow, or "E" for Blue.
2. Available without Knob Change " B " in operator Catalog number to " 0 " and select knob from table below.
3. Cam code is a part of catalog number: Example 100T-SS3MB3 See table of cam developments.
4. Key Removal code is part of catalog number. Example: 100T-SK3B3C See Key Removal table below.

## Key Spare Parts

- For Standard Key Operator use 100T-3095
- For 501 Key Operator use 100T-CH501

Key Removal Codes

|  | Two Position |  |  |  | Three Position |  |  | Four Position |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maintained |  | Spring Return |  | Left | Center | Right |  |  |  |  |
| Key <br> Removal Code | Left | Right | Center 1 | Right |  | Center |  | Left | Center | Center $/$ | Right |
| L (Left) | Yes | No | -- | ----- | Yes | No | No | Yes | No | No | No |
| R (Right) | No | Yes | No | Yes | No | No | Yes | No | No | No | Yes |
| C (Center) | ----- | ----- | Yes | No | No | Yes | No | ----- | ----- | ----- | ----- |
| A (All) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

Notes: No 501 Key is available for above Key Operators Selector Switches. To order add " 5 " for 501 Key to the end of the catalog number. Example: 100T-SK2M1A5.

## Color Plastic Knobs

| $\begin{array}{l}\text { Color }\end{array}$ | $\begin{array}{l}\text { Standard Plastic } \\ \text { Knob for Knob } \\ \text { Operated Selector } \\ \text { Switches }\end{array}$ |
| :--- | :--- |
|  | $\begin{array}{l}\text { Catalog } \\ \text { Number }\end{array}$ |
|  | 100T-SB |
|  |  |
| Green |  |
| Yellow |  |
| Blue | 100T-SR |
| 100T-SG |  |
| 100T-SY |  |
| 100T-SE |  |

Packaged one per carton except
100T-SM contains one of each 100T-SM contains one of each color knob.

## Ordering Information

Complete Control Unit Consists Of:
 100T-SS2MB1


Contact Blocks 100T-CB01


Legend Plate 100T-L52

Complete
$=\quad$ Push Button
Unit

## Push Buttons



## Selector Switches Contact Block Switching Sequence and Selection

2 Position Selector Switch


3 Position Selector Switch

| Location of <br> Contact <br> Block <br> (Front View) | Contact Block |  |  | Selector Position Cam Code 3 |  |  | Selector Position Cam Code 4 |  |  | Selector Position Cam Code 5 |  |  | Selector Position Cam Code 6 |  |  | Selector Position Cam Code 7 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Catalog Number 100T- | Symbol | $\begin{array}{\|l\|l} \text { Rod } \\ \text { Color } \end{array}$ | Left | Center 1 | $\begin{gathered} \hline \text { Right } \\ \hline \end{gathered}$ | Left | Center <br> 1 | $\begin{gathered} \hline \text { Right } \\ \hline \end{gathered}$ | Left | Center 1 | $\begin{aligned} & \text { Right } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Left } \\ & \hline \end{aligned}$ | Center <br> 1 | $\begin{aligned} & \hline \text { Right } \\ & \hline \end{aligned}$ | Left | Center | Right |
| Left N.O. | CB10 | $\bigcirc$ | Green | $\bigcirc$ | 0 | X | $\bigcirc$ | $\bigcirc$ | X | X | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | X | $\bigcirc$ | 0 | X |
| N.C. | CB01 | 010 | Red | X | 0 | $\bigcirc$ | 0 | X | 0 | 0 | X | 0 | X | X | 0 | X | $\bigcirc$ | 0 |
| Right N.O. | CB10 | $\bigcirc$ | Gree | $\bigcirc$ | $\bigcirc$ | X | $\bigcirc$ | $\bigcirc$ | X | X | $\bigcirc$ | 0 | X | $\bigcirc$ | $\bigcirc$ | O | $\bigcirc$ | X |
| N.C. | CB01 | 앙 | Red | X | $\bigcirc$ | 0 | 0 | X | 0 | 0 | X | $\bigcirc$ | 0 | X | X | $\bigcirc$ | X | 0 |

Cam Codes are the same for maintained or spring return operation.
$X=$ Contact Closed
O = Contact Open

Standard Contact Blocks

|  | Type | Symbol | Rod Color | Catalog Number |
| :---: | :---: | :---: | :---: | :---: |
|  | 1-N.O. | ㅇ, 0 | Green | 100T-CB10 |
|  | 1-N.C. | 이응 | Red | $\begin{aligned} & \text { 100T-CBO1 } \\ & \text { 100T-CBHO1² } \end{aligned}$ |
| Standard Contact Block | $\begin{aligned} & \text { 1-N.O. } \\ & \text { \& 1-N.C. } \end{aligned}$ | $\begin{aligned} & 0,0 \\ & \hline 0,0 \\ & \hline \end{aligned}$ | 1-Green \& 1-Red | 100T-CB11 ${ }^{1}$ |

1. Consists of one 100T-CB10 and one 100T-CB01 packaged together.
2. Additional spring pressure for resistance to vibration.

## 4 Position Selector Switch

| Location of Contact Block (Front View) |  | Contact Block |  |  | Selector Position Cam Code 8 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Left | Left | Right | Right |
| Left | N.O. | CB10 | ㅇ, 0 | Green | 0 | $\bigcirc$ | X | 0 |
|  | N.C. | CB01 | 이응 | Red | X | 0 | 0 | 0 |
|  | N.O. | CB10 | - 0 | Green | 0 | X | 0 | $\bigcirc$ |
| Right |  | CB01 | 잉 | Red | 0 | 0 | $\bigcirc$ |  |

Cam codes are same for maintained or
spring return operation.

[^0]Assembled Push Buttons


| Assembled Push Buttons, including Contact Blocks as shown. (Does not include Legend Plate) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Operator | Type | Symbol | Red Color | Catalog Number |
| Unguarded | 1-N.O. | 응 | Black | 100T-PB1B-10X |
|  | 1-N.C. | -10 | Red | 100T-PB1R-01X |
|  | $\begin{aligned} & \hline \text { 1-N.C. } \\ & \text { 1-N.O. } \end{aligned}$ | $\begin{aligned} & 0.0 \\ & 0,0 \end{aligned}$ | Black <br> Red | 100T-PB1B-11X 100T-PB1R-11X |
| Guarded | 1-N.O. | ㅇ, 0 | Black | 100T-PB2B-10X |
|  | 1-N.C. | 이응 | Black | 100T-PB2B-11X |
|  |  |  | Red | 100T-PB2R-11X |
|  | 1-N.O. | 응 | Green | 100T-PB2G-11X |
| $\begin{aligned} & 13 / 8^{\prime \prime} \\ & \text { Mushroom } \end{aligned}$ | 1-N.C. | 0 | Black | 100T-PB4B-11X |
|  | 1-N.0. | 으, 0 | Red | 100T-PB4R-11X |
| $21 / 4^{\prime \prime}$ <br> Mushroom | $\begin{aligned} & \hline \text { 1-N.C. } \\ & \text { 1N.O. } \end{aligned}$ | $\begin{aligned} & \text { 요 } 0 \\ & 0,0 \end{aligned}$ | Black | 100T-PB5B-11X |
|  |  |  | Red | 100T-PB5R-11X |
| Illuminated Push Button 120 V Transformer Type | $\begin{aligned} & \text { 1-N.C. } \\ & \text { 1-N.O. } \end{aligned}$ | $\begin{aligned} & \text { 잉 } \\ & 0,0 \end{aligned}$ | Red | 100T-PBLT1R-11X |
| Illumated Push Button 120V Resistor Type | $\begin{aligned} & \hline \text { 1-N.C. } \\ & \text { 1-N.O. } \end{aligned}$ | $\begin{aligned} & 0.010 \\ & 0,0 \end{aligned}$ | Red | 100T-PBLR1R-11X |



## Assembled 100T Push Button Stations

The most commonly used push button stations are available assembled in NEMA Type 13 (oiltight and dustight) sheet steel and in NEMA 4 (watertight) stainless steel enclosures.

For custom control stations not listed, order operators, contactblocks, nameplates, and enclosures as separate items.

Assembled Push Buttons Stations


1. Use NEMA 13 enclosures for applications requiring NEMA1.
2. Protective watertight boots are not required for indoor (nonfreezing) applications. If for outdoor (freezing) use, order boots as separate items, from page D17.

## Push Buttons



## Assembled Selector Switches

## Assembled Selector Switches, Including Contact Blocks as shown



## 2 Position Selector Switch (Does not include Legend Plate)



3 Position Selector Switch (Does not include Legend Plate)


4 Position Selector Switch (Does not include Legend Plate)

| Type | Contacts |  |  | Selector Position (Front View) |  |  |  | Complete Catalog No. and for Assembled Unit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Location <br> (Front <br> View) | Type and Symbol | Rod Color |  |  |  |  | Black Knob Operator | Chrome Lever Operator |
|  |  |  |  | Left | Left Center | Right Center | Right | Catalog | Catalog |
|  |  |  |  | - | 人 | $\prime$ | - |  |  |
| 4 Position Maintained | Left | N.O. | Green | 0 | 0 | X | $\bigcirc$ | 100T- <br> SS4MB8-22X | 1007- <br> SL4MC8-22X |
|  |  | $\begin{aligned} & \hline \text { N.C. } \\ & \text { O. } \\ & \hline \end{aligned}$ | Red | X | O | 0 | O |  |  |
|  | Left | N. ${ }^{\text {N, }}$ | Green | O | X | 0 | O |  |  |
|  |  | $\begin{aligned} & \hline \text { N.C. } \\ & \text { فـــم } \end{aligned}$ | Red | O | 0 | 0 | X |  |  |

## Separate Enclosures

NEMA Type 13, and NEMA Type 4 Stainless Steel surface mounting enclosures are available with from one through sixteen element openings. All enclosures will accommodate non-illuminated operators with up to two contact blocks ( 1 per side). Consult factory for stations with 7 through 16 elements.


## Ordering Information

- Select enclosure desired by catalog number.
- Select Pilot Devices from 100T section.


## Push Buttons

## Legend Plates

Standard Legend Plates - Available with markings listed below.
Non-Standard Legend Plates - Can be provided with special markings.


Accessories

| Description |  | Catalog Number |
| :---: | :---: | :---: |
|  | Guard Rings for Push Buttons <br> Unguarded <br> Guarded <br> Extended Guard <br> Standard Mushroom Head Guard <br> Jumbo Head Guard <br> Half Guarded | $\begin{aligned} & 100 \mathrm{~T}-1 \mathrm{GR} \\ & 100 \mathrm{~T}-2 \mathrm{GR} \\ & 100 \mathrm{~T}-3 \mathrm{GR} \\ & 100 \mathrm{~T}-4 \mathrm{GR} \\ & 100 \mathrm{~T}-5 \mathrm{GR} \\ & 100 \mathrm{~T}-7 \mathrm{GR} \end{aligned}$ |
|  | Lens Guard for Press-To-Test Pilot Lights <br> Plastic <br> Metal | 100T-PGR <br> 100T-MGR |
|  | Water Resistant Boots for Push Buttons <br> Black <br> Red <br> Green <br> Yellow <br> Translucent | $\begin{aligned} & \text { 100T-PBB } \\ & \text { 100T-PBR } \\ & \text { 100T-PBG } \\ & \text { 100T-PBY } \\ & \text { 100T-PBT } \end{aligned}$ |
|  | Translucent Water Resistant Boots for Illuminated Push Buttons, Pilot Lights, and Press-To-Test Pilot Lights | 100T-PLTB |

## Push Buttons

## (4L) (6)

## Dimensions and Ratings



Minimum Centerline Clearance


Enclosure or grounded metal part

| Depth <br> Behind <br> Panel | Push Buttons <br> \& Selector <br> Switches | Push-Pull <br> Units (Non- <br> Illuminated) | Illuminated <br> Units (all) |
| :---: | :---: | :---: | :---: |
| A $^{5}$ | $21 / 32$ | $1-11 / 32$ | $11 / 16$ |
| B | --- | -- | $1-3 / 32$ |
| $C^{6}$ | $3 / 4$ | $3 / 4$ | $3 / 4$ |

## Notes:

1. Use the trim washer if no legend plate is used. Discard the trim washer when using a legend plate.
2. Must be $1-5 / 8^{\prime \prime}$ for $100-\mathrm{HF}$ Legend Plate
3. Must be $1-1 / 8^{\prime \prime}$ for $2-1 / 4^{" ~ M u s h r o o m ~ H e a d ~}$
4. When using $100-\mathrm{HF}$ Legend Plate, both horizontal and vertical centerlines between operators must be $2-1 / 2^{\prime \prime} \mathrm{min}$.
5. When using either 2-1/4" mushroom head or lever selector switch, both horizontal and vertical centerlines between operators must be $2-1 / 4^{\prime \prime}$ min.
6. Depth when three neoprene spacers are used. Reduce depth by $1 / 16$ inch for each spacer omitted.
7. Depth per contact block. Maximum contact stack depth is three (3) inches.

Contact Ratings

| NEMA <br> Rating | Max. <br> Volts | Amp. Rating |  |  | VA. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Make | Break | Continuous | Make | Break |
| Maximum A-C Contact Rating Per Pole, 50 or 60 Hertz |  |  |  |  |  |  |
| A600 | 120 | 60 | 6 | 10 | 7200 | 720 |
|  | 240 | 30 | 3 |  |  |  |
|  | 480 | 15 | 1.5 |  |  |  |
|  | 600 | 12 | 1.2 |  |  |  |
| Maximum D-C Contact Rating Per Pole |  |  |  |  |  |  |
| P600 | 125 | 1.1 |  | 5 |  |  |
|  | 250 | 0.55 |  |  |  |  |
|  | 301-600 | 0.2 |  |  |  |  |


| Max. Panel | Spacers <br> Thickness, In. |
| :---: | :---: |
| $1 / 16$ | 3 |
| $1 / 8$ | 2 |
| $3 / 16$ | 1 |

Panels thicker than $3 / 16^{\prime \prime}$ must be Counter Bored

Rear of Mounting Panel


## Catalog Numbering System



## Selector Switch



Pilot Lights \& Press To Test Lights


## Push Buttons

Catalog Numbering System

Illuminated Push Button \& Push-Pull


Illuminated Selector Switch



[^0]:    X = Contact Closed
    O = Contact Open

