Pilot Light Devices

Transformer Type Pilot Light
Cat. No. 800T-P16R

Push-to-Test Pilot Light
Cat. No. 800T-PT16R


| $g$ |  |  |
| :---: | :---: | :---: |
| Code | Color | Glass <br> Code <br> $\#$ |
| Blank | No lens | Blank |
| A | Amber | D |
| B | Blue | E |
| C | Clear | F |
| G | Green | H |
| R | Red | J |
| W | White | K |


| Contact Blocks <br> (Push-to-test units only) |  |
| :--- | :---: |
| Code | Description |
| Standard |  |
| Blank | 1 N.O. - 1 N.C. |
| PenTUFF (Low Voltage) |  |
| AV | 1 N.O. - 1 N.C. |
| Class 1, Div. 2 |  |
| Logic Reed |  |
| AR | 1 N.O. - 1 N.C. |
| Sealed Switch |  |
| AP | 1 N.O. - 1 N.C. |
| Stackable Sealed Switch |  |
| AY | 1 N.O. - 1 N.C. |

$\nabla$ Non-push-to-test pilot lights using the universal LED option cannot be ordered as Bul. 800HC or 800TC. The terminals are finger-safe as standard.
$\Delta$ Diode type dual input provides circuit isolation via opposing diodes. Not recommended for use with solid-state outputs.

* Dual input devices (diode or transformer type) cannot be ordered as Bul. 800 HC or 800 TC . Finger-safe terminal guards are not available.
* LED illumination option is not available with diode type dual input.
\# Glass lens available on 800T pilot lights only. Not available on push-to-test units.

Dimensions in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.
Push-to-Test Pilot Light and Illuminated Devices (Bul. 800H Only)


Transformer Type Pilot Light
(Incandescent and LED)
Shipping Weight. $12 \mathrm{oz}(0.34 \mathrm{~kg})$


Full Voltage and Dual Input Diode Type
Pilot Light (Incandescent, Neon, LED) Shipping Weight. $5 \mathrm{oz}(0.14 \mathrm{~kg})$


Momentary Mushroom, Push-Pull and Twist or Pull Release Units
(Full Voltage: Incandescent, LED, Neon; and Dual Input Illuminated)

| Push-to-Test Pilot LightsIlluminated Push Buttons, Illuminated Push-Pull and Twist or Pull Release Push Buttons |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cat. No. Suffix $\ddagger$ | Description | Transformer Type |  |  | Full Voltage or Neon Type |  |  |
|  |  | Dimension |  | Shipping Weight | Dimension |  | Shipping Weight |
| D4 | Transformer or Terminal Module and One Shallow Contact Block | A | $\begin{aligned} & \hline 2-5 / 32 \\ & (54.8) \S \end{aligned}$ | $\begin{gathered} 9 \mathrm{oz} . \\ (0.25 \mathrm{~kg}) \end{gathered}$ | A | $\begin{aligned} & 2-1 / 32 \\ & (51.6) * \end{aligned}$ | $\begin{gathered} 7 \mathrm{oz} . \\ (0.20 \mathrm{~kg}) \end{gathered}$ |
| A1 and A7 | Transformer or Terminal Module, One Shallow Block and One Mini Contact Block | B | $\begin{gathered} 2-7 / 8 \\ (73) \end{gathered}$ | $\begin{gathered} 10 \mathrm{oz} . \\ (0.28 \mathrm{~kg}) \end{gathered}$ | B | $\begin{gathered} 2-7 / 8 \\ (73) \end{gathered}$ | $\begin{gathered} 8 \mathrm{oz} . \\ (0.22 \mathrm{~kg}) \end{gathered}$ |
| AP | Transformer or Terminal Module and One Sealed Switch Contact Block | B | $\begin{gathered} 2-29 / 32 \\ (73.8) \end{gathered}$ | $\begin{gathered} 10 \mathrm{oz} . \\ (0.28 \mathrm{~kg}) \end{gathered}$ | B | $\begin{gathered} 2-29 / 32 \\ (73.8) \end{gathered}$ | $\begin{gathered} 8 \mathrm{oz} . \\ (0.22 \mathrm{~kg}) \end{gathered}$ |

$\star$ Jumbo mushroom versions are 2-1/4 in. ( 57.2 mm ) diameter.
$\ddagger$ Applies to illuminated push-pull push buttons only.
§ Dual input type pilot light dimension is $2-13 / 32 \mathrm{in}$. ( 61.1 mm ).

* Dual input type pilot light dimension is 2-9/32 in. ( 57.9 mm ).


## Specifications $\star$

|  | Electrical Ratings |
| :---: | :---: |
| Contact ratings | Refer to the contact ratings tables on page 10-4. |
| Dielectric strength | 2200 V for one minute, 1300 V for one minute (Logic Reed) |
| Electrical design life cycles | 1,000,000 at max. rated load, 200,000 at max. rated load (Logic Reed) |
| Mechanical Ratings |  |
| Vibration | $10 . . .2000 \mathrm{~Hz}, 1.52 \mathrm{~mm}$ displacement (peak-to-peak) max./ 10 G max. (except Logic Reed) |
| Shock | $1 / 2$ cycle sine wave for $11 \mathrm{~ms} \geq 25 \mathrm{G}$ (contact fragility) and no damage at 100 G |
| Degree of protection | Type 1/4/12/13 (800T); Type 1/4/4X/12/13 (800H); EN/IEC 60529 IP66/65 |
| Mechanical design life cycles |  |
| Push buttons | 10,000,000 min. |
|  | 250,000 min. |
|  | 250,000 min. $\ddagger$ |
| Selector switches | 1,000,000 min. |
|  | 200,000 min. |
| Potentiometers | 25,000 min. |
| All other devices | 200,000 min. |
| Contact operation | Shallow, mini, and low-voltage contact blocks: Slow, double make and break Logic Reed and sealed switch contact blocks: Single break magnetic |
| Wire gauge/Terminal screw torque | \#18..14 AWG (\#18... 10 Max Duty) / 6... $8 \mathrm{lb} \cdot \mathrm{in}$ |
| Typical operating forces |  |
| Operators without contact blocks | Flush, extended button, standard mushroom, jumbo plastic mushroom: 2 lbs max. Jumbo and extended aluminum mushroom head: 3.95 lbs max. <br> Maintained selector switch: $3.6 \mathrm{in} \bullet \mathrm{lb}$ max. |
| Spring return selector switches | $3.6 \mathrm{in} \cdot \mathrm{lb}$ to stop, $0.2 \mathrm{in} \bullet \mathrm{lb}$ to return |
| Illuminated push buttons and push-to-test pilot lights | 5 lb max. |
| 2-position push-pull | 8.0 lb max. push or pull |
| 3-position push-pull | 8 lb max. push to in position or pull to center position ( 15 lb max. pull to out position) |
| Twist-to-release or push-pull | 9 lbs max. push or pull $30 \mathrm{in} \bullet 0 \mathrm{z}$ max. twist, $6 \mathrm{in} \bullet \mathrm{oz}$ minimum return |
| Potentiometer | Rotational torque 3... 12 in•oz; stopping torque $12 \mathrm{in} \bullet 1 \mathrm{~b}$ (minimum) |
| Contact blocks | 1 lb |
|  | 1 lb max. |
|  | 3 lb max. at 0.205 in . plunger travel |
|  | 1 lb max. |
|  | 1.4 lb max. |
|  | 1.4 lb max. |
|  | 1.6 lb |
| Environment |  |
| Temperature range | $-40 \ldots+131{ }^{\circ} \mathrm{F}\left(-40 \ldots+55^{\circ} \mathrm{C}\right)$ |
|  | $-40 \ldots+185{ }^{\circ} \mathrm{F}\left(-40 \ldots+85^{\circ} \mathrm{C}\right)$ |
| Note: Operating temperatures below freezing are based on the absence of moisture and liquids. Consult your local Rockwell Automation sales office or Allen-Bradley distributor for use in lower temperature applications. |  |
| Humidity | $50 \ldots 95 \%$ RH from $77 \ldots 140^{\circ} \mathrm{F}\left(25 \ldots 60^{\circ} \mathrm{C}\right)$ per Procedure IV of MIL-STD-810C, Method 507.1 cycling test |

* Performance Data - Performance data given in this publication is provided only as a guide for the user in determining suitability and do not constitute a performance warranty of any kind. Such data may represent the results of accelerated testing at elevated stress levels, and the user is responsible for correlating the data to actual application requirements. ALL WARRANTIES AS TO ACTUAL PERFORMANCE, WHETHER EXPRESS OR IMPLIED, ARE EXPRESSLY DISCLAIMED.
$\ddagger$ Illuminated Trigger Action E-stops are rated for $150,000 \mathrm{~min}$. mechanical operations when using Cat. No. 800TC-XD4S Self-Monitoring Contact Blocks (SMCBs).

