

Pilot Light Units



Transformer Type Pilot Light
 Cat. No. 800H-PP16M



Push-to-Test Pilot Light
 Cat. No. 800H-PPT16M



Pigtail Pilot Light
 Cat. No. 800H-LP24M

| Type | Lamp Type | Supply Voltage | Lens Color* | Pilot Light | Push-to-Test | Pigtail |
|----------------|--------------|-------------------|-----------------|-------------------|--------------------|-------------------|
| | | | | Cat. No.*❄ | Cat. No.*❄‡ | Cat. No.*❄§ |
| Operator only❄ | | | | 800H-QPN00 | 800H-QPB00XX | — |
| Full voltage | Incandescent | 24V AC/DC | Multi-color kit | 800H-QP24M | 800H-QPT24M | 800H-LP24M |
| | | 120V AC/DC | | 800H-QP10M | 800H-QPT10M | 800H-LP10M |
| | No lamp | 0...250V AC/DC | No lens | 800H-QPN25 | 800H-QPTN25 | 800H-LPN25 |
| | LED | 24V AC/DC | Multi-color kit | — | — | 800H-LPH24M |
| | | 120V AC | | — | — | 800H-LPH10M |
| | Universal | LED | 12...130V AC/DC | Multi-color kit | 800H-QPH2M | 800H-QPTH2M |
| Transformer | Incandescent | 120V AC, 50/60 Hz | Multi-color kit | 800H-PP16M | 800H-PPT16M | — |
| | LED | | | 800H-PPH16M | 800H-PPTH16M | — |

* Units ship with multi-color insert packet including amber, blue, green, red, and white.

* For long barrel versions, add an **L** to the cat. no. **Example:** Cat. No. 800HL-QPH2M

† Includes one standard Cat. No. 800T-XA (1 N.O./1 N.C.) contact block.

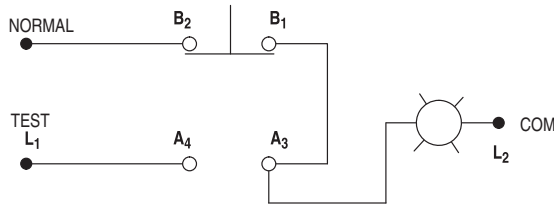
§ Pigtail length is 7 in.

* Operator only supplied without power module, lamp, lens cap, or contact blocks.

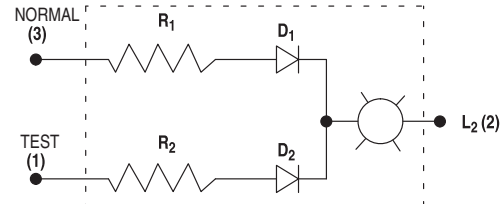
Typical Pilot Light Wiring Diagrams

See applicable Codes and Laws.

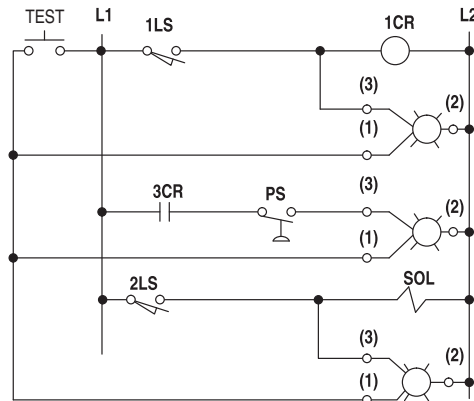
Push-to-Test Pilot Light Device Schematic



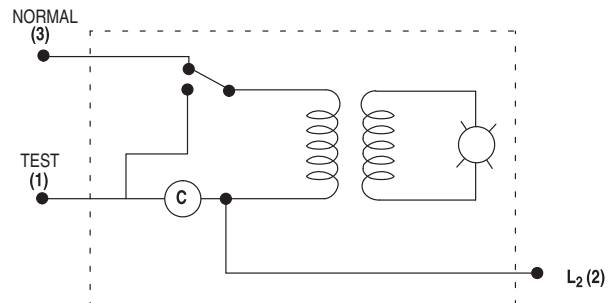
Dual Input Diode Pilot Device Schematic



Dual Input Pilot Light Typical Application Wiring Diagram



Dual Input Pilot Light Transformer Type Device Schematic



Specifications*

| Electrical Ratings | |
|---|--|
| Contact Ratings | Refer to the contact ratings tables below. |
| Dielectric Strength | 2200V for one minute, 1300V 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 Hz 1.52 mm displacement (peak-to-peak) Max./10 G Max. (except Logic Reed) |
| Shock | 1/2 cycle sine wave for 11 ms ≥ 25 G (contact fragility) and no damage at 100 G |
| Degree of Protection | Type 7 & 9 Explosion Proof (Type 3 and Type 4 ratings available with accessories) |
| Mechanical Design Life Cycles | |
| Push Buttons | 250 000 minimum |
| Potentiometers | 100 000 minimum |
| All other devices | 200 000 minimum |
| Contact Operation | Shallow and mini contact blocks: slow double make and break Logic Reed & sealed switch contact blocks: snap-action |
| Wire Gauge/Terminal Screw Torque | # 18...12 AWG/6...8 lb•in |
| Typical Operating Forces | |
| Operators without contact blocks: | Flush, extended, standard mushroom, jumbo mushroom: 2.9 lb max. Jumbo and extended aluminum mushroom head: 3.95 lb maximum Maintained selector switch: 4.0 in•lb maximum |
| Spring Return Selector Switches: | 5 in•lb to stop, 0.2 in•lb to return |
| Illuminated Push Buttons and Push-to-Test Pilot Lights | 5.6 lb maximum |
| 2-Position Push-Pull | 9 lb maximum push or pull |
| 3-Position Push-Pull | 12 lb maximum push to in position or pull to center position (15 lb maximum pull to out position) |
| Contact Blocks: | |
| 800T-XA | 1 lb |
| Logic Reed | 1 lb maximum |
| Sealed Switch | 3 lb maximum at 0.205 in. plunger travel |
| Stackable Sealed Switch | 1 lb maximum |
| Environment | |
| Temperature Range | Operating: -4...+13 °F (-20...+55 °C) Storage: -40...+185 °F (-40...+85 °C) |
| Note: Operating temperatures below freezing are based on the absence of freezing moisture and liquids. | |
| Humidity | 50% at +104 °F (+40 °C) |

* Performance Data — See page Important-3.

* External thread major diameter: 1.034 in. max., 1.024 in. min. Internal thread minor diameter: 0.958 in. min., 0.970 in. max.

Standard Contact Ratings

Maximum thermal continuous current I_{th} 10 A AC/2.5 A DC.
 Bulletin 800H Type 7 & 9 units with 800T-XA contacts have ratings as follows:

| Max. Oprtnl. Volts U_e | Utilization Category | | Rated Operational Currents | | |
|-----------------------------|----------------------|------|----------------------------|--------|-------|
| | IEC | NEMA | Volts U_e | Make | Break |
| AC 600 | AC-15 | A600 | 120...600 | 7200VA | 720VA |
| | | | 72...120 | 60 A | 720VA |
| | | | 24...28* | 60 A | 10 A |
| DC 600 | DC-13 | Q600 | 28...600 | 69VA | |
| | | | 24...28* | 2.5 A | |

* For applications below 24V and 24 mA, PenTUFF™, Logic Reed or stackable sealed switch contacts are recommended.

Sealed Switch Contact Ratings

Maximum continuous current I_{th} 5 A.

| Max. Oprtnl. Volts U_e | Utilization Category | | Rated Operational Currents | | |
|-----------------------------|----------------------|------|----------------------------|--------|-------|
| | IEC | NEMA | Volts U_e | Make | Break |
| AC 600 | AC-15 | B600 | 120...600 | 3600VA | 360VA |
| | | | 0...120 | 30 A | 3 A |
| DC 300 | DC-13 | P300 | 24...300 | 138VA | |
| | | | 0...24 | 5.0 A | |

Stackable Sealed Switch Contact Ratings

Maximum continuous current I_{th} 3 A. Bulletin 800T units have control circuit ratings with sealed switch contact blocks as follows:

| Max. Oprtnl. Volts U_e | Utilization Category | | Rated Operational Currents | | |
|-----------------------------|----------------------|------|----------------------------|--------|-------|
| | IEC | NEMA | Volts U_e | Make | Break |
| AC 300 | AC-15 | C300 | 120...300 | 1800VA | 180VA |
| | | | 0...120 | 15 A | 1.5 A |
| DC 150 | DC-13 | Q150 | 24...150 | 69VA | |
| | | | 0...24 | 2.5 A | |

Logic Reed Contact Ratings

Maximum: 150V AC, 0.15 A, 8 VA and 30V DC, 0.06 A, 1.8 VA.

Should only be used with resistive loads.

PenTUFF™ (Low Voltage) Contact Ratings

Minimum DC: 5V, 1 mA

Maximum thermal continuous current I_{th} 2.5 A AC/1.0 A DC.

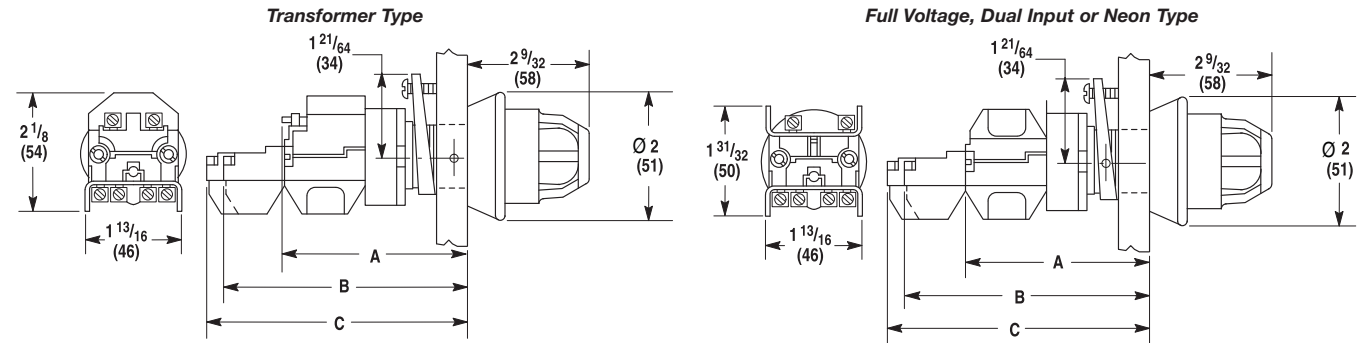
Bulletin 800H units with 800T-XAV contacts have ratings as follows:

| Max. Oprtnl. Volts U_e | Utilization Category | | Rated Operational Currents | | |
|-----------------------------|----------------------|------|----------------------------|--------|-------|
| | IEC | NEMA | Volts U_e | Make | Break |
| AC 300 | AC-15 | C300 | 120...300 | 1800VA | 180VA |
| | | | 0...120 | 15 A | 1.5 A |
| DC 150 | DC-13 | R150 | 24...150 | 28VA | |
| | | | 0...24 | 1.0 A | |

Approximate Dimensions and Shipping Weights, Continued

Dimensions in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.

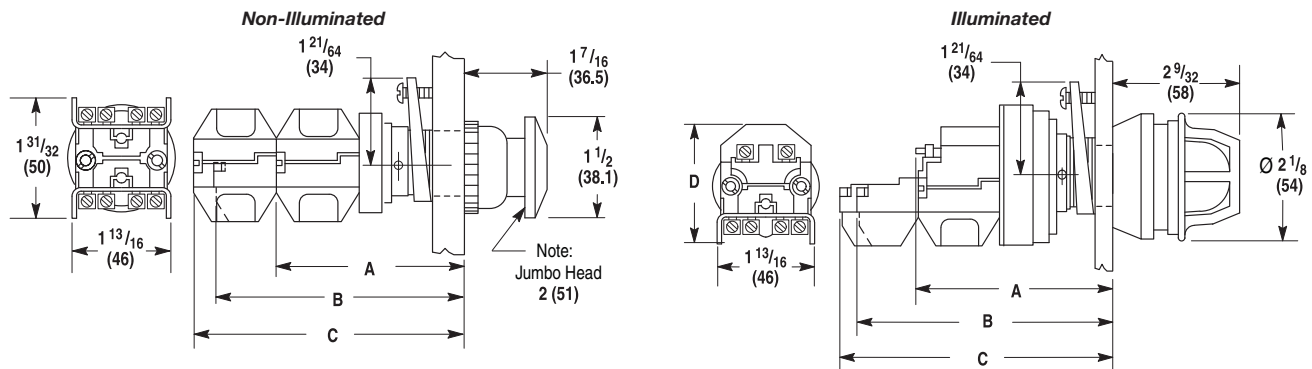
Illuminated Push Buttons or Push-to-Test Pilot Lights



Illuminated Push Buttons, Push-to-Test Pilot Lights

| Description | Style | A * | B | C | Ship. Wt. [oz (kg)] |
|--------------------------------------|-----------------|-----------------|-----------------|--------------|------------------------|
| Transformer Type | Standard Barrel | 3-5/32 (80.2) | 3-29/32 (99) | 4-1/8 (105) | 14 (0.40) |
| | Long Barrel | 5-1/16 (128.6) | 5-13/16 (147.6) | 6-1/16 (154) | 16-3/16 (0.45) |
| Full Voltage Dual Input or Neon Type | Standard Barrel | 3-1/32 (77) | 3-29/32 (99) | 4-1/8 (105) | 11-5/8 (0.33) |
| | Long Barrel | 4-15/16 (125.4) | 5-13/16 (147.6) | 6-1/16 (154) | 13-7/16 (0.38) |

Push-Pull Units



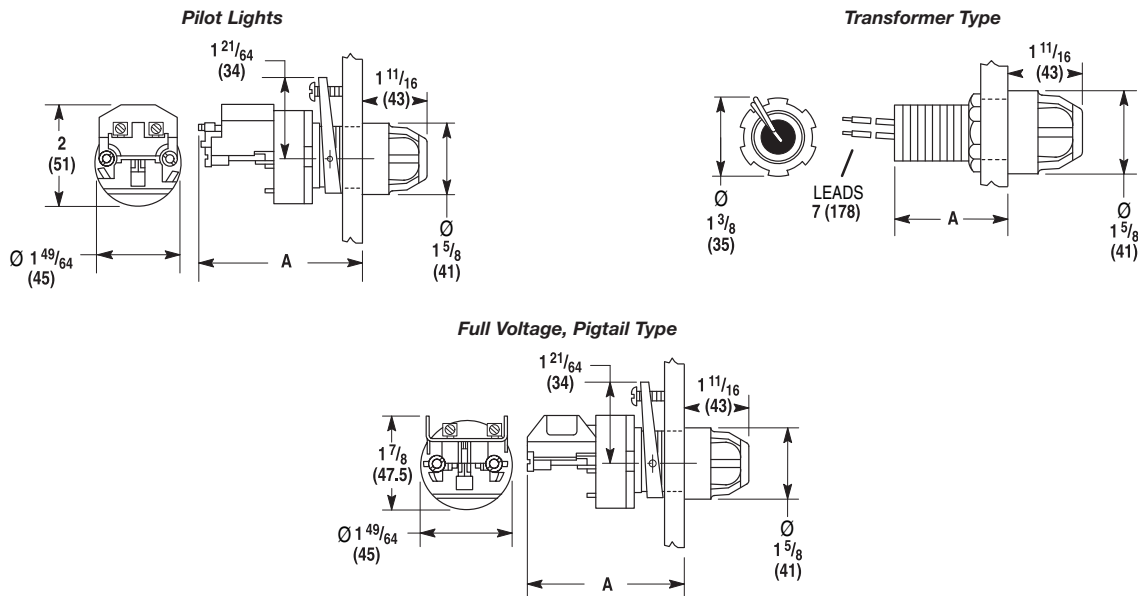
Push-Pull Units

| Description | Style | A * | B | C | D | Ship. Wt. [oz (kg)] |
|---------------------------------|-----------------|-----------------|----------------|-----------------|--------------|------------------------|
| Illuminated Transformer Type | Standard Barrel | 3-9/16 (90.5) | 4-9/16 (115.9) | 4-5/8 (117.5) | 2-1/8 (54) | 15-1/2 (0.44) |
| | Long Barrel | 4-21/32 (118.3) | 5-13/32 (137) | 5-21/32 (143.7) | 2-1/8 (54) | 17-7/16 (0.49) |
| Illuminated Full Voltage Type | Standard Barrel | 3-7/16 (87.3) | 4-9/16 (115.9) | 4-5/8 (117.5) | 1-31/32 (50) | 12-13/16 (0.33) |
| | Long Barrel | 4-17/32 (115.1) | 5-13/32 (137) | 5-21/32 (143.7) | 1-31/32 (50) | 14-3/4 (0.41) |
| Non-Illuminated Push-Pull Units | Standard Barrel | 3-1/2 (88.9) | 4-3/8 (111.1) | 4-5/8 (117.5) | — | 11-1/8 (0.32) |
| | Long Barrel | 4-17/32 (115.1) | 5-13/32 (137) | 5-21/32 (143.7) | — | 12-5/16 (0.34) |

* When using sealed switch contact block add 7/8 in. (22.2 mm) to the listed dimension.

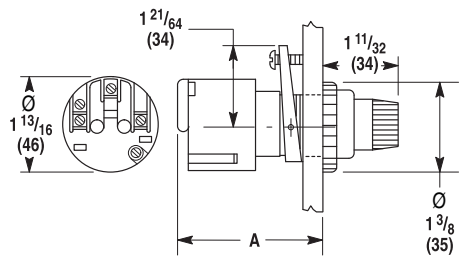
Approximate Dimensions and Shipping Weights, Continued

Dimensions in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.



| Description | Style | A | Ship. Wt. [oz (kg)] |
|---|-----------------|----------------|---------------------|
| Transformer type and dual input transformer type pilot lights | Standard Barrel | 3-5/32 (80) | 8-9/16 (0.24) |
| | Long Barrel | 4-9/16 (115.9) | 30-1/4 (0.85) |
| Full voltage, neon or dual input diode and resistor type pilot lights | Standard Barrel | 3-1/32 (77) | 5-13/16 (0.17) |
| | Long Barrel | 4-7/16 (112.7) | 27-1/2 (0.77) |
| Full voltage pigtail type pilot lights | Standard Barrel | 2-3/16 (55.5) | 5-5/8 (0.16) |
| | Long Barrel | 3-43/64 (94) | 8-5/16 (0.24) |

Potentiometer Units



| Style | A | Ship. Wt. [oz (kg)] |
|-----------------|---------------|---------------------|
| Standard barrel | 3-1/8 (79.5) | 5-3/8 (0.16) |
| Long barrel | 4-1/2 (114.3) | 8 (0.23) |