

Series Slimswitch®

10 Standard Dial Positions
Switch O.D. sizes 8.00 (.315) wide
x 30.40 (1.97) high
Rear mounted
Distributor or factory direct

DESCRIPTION

Series 45000 Slimswitch® is engineered for high reliability, compact size and at a very economical price. Like the Series 43000/44000, these thumbwheels are the first to offer optional LED lighting, maintenance free dependability and exceptional visibility. Along with their compact size they also offer the ease and convenience of assemblies that snap-together.

FEATURES

- Dial stops field installable
 - *Special marking on spacers
 - *Special dial characters
 - Red or clear replaceable LED lighting
 - 8.00 (.315) Spacers
 - *Provisions for mounting components
 - Available in most popular codes, off the shelf through distribution
 - Field assembly or factory assembled to customer specifications
- *See switch parameters for details or consult factory.

SPECIFICATIONS

MECHANICAL

Operating force: 4 to 10 ounces.
Life: Over 500,000 detent operations at 25 °C.
Weight: .25 ounce per module (approx.).
Standard finish and color: Molded matte black.

ELECTRICAL:

Rated electrical loads: 0.125 amps at 28 VAC or 28 VDC. Non-switching current: 3 amps max.
Contact resistance: 100 milliohms max. initial.
Insulation resistance: 1000 megohms min.
Dielectric strength: 500 VRMS.
Terminations: Printed circuit board for solder termination is standard; pin terminals are optional.
Mounting hardware torque: 2 inch-pounds (2.3 kilogram-centimeters) max. on mounting screws.

LIGHTING (OPTIONAL)

Internal LED standard colors: Clear and Red. 20 milliamps recommended current (30 milliamps max.). Voltage drop across LED: 2.2V.

ENVIRONMENTAL:

Operating temperature range: -20 °C to +65 °C.
Storage temperature range: -40 °C to +85 °C.
Moisture resistance: 1 megohm minimum insulation resistance after 10 days at 95% relative humidity.
Shock: 100 G's, 6 milliseconds duration, sawtooth.
Vibration: 15 G's at 70-2000 Hz; .06" double amplitude at 10-70 Hz.

MATERIALS:

Printed circuit board: Epoxy fiberglass.
Contact material: Precious metal alloy.
Structural parts: Polycarbonate and acetal thermoplastics.
Detent spring: Stainless steel.

IMPORTANT NOTICE

Do not allow flux or cleaning agent to enter switch. Use only solution of 40% isopropyl alcohol in distilled water for cleaning agent. For additional information about recommended cleaning method, contact Digitran.

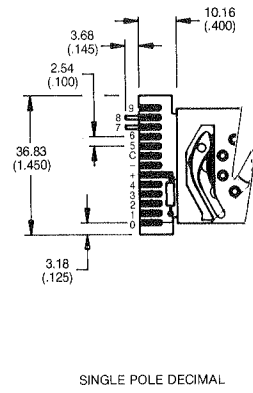
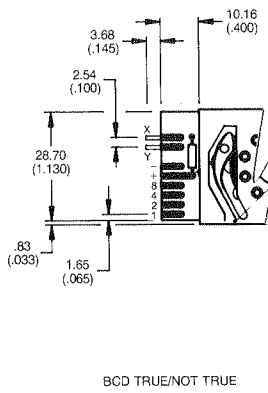
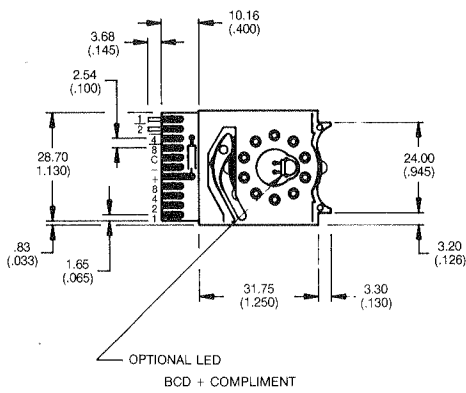
TRUTH TABLE CODES SERIES 45000

| Truth Tables Positions | 001 2 | 002 8 | 003 8 | 004 8 | 006 8 | 007 8 | 008 10 | 011 10 | 013 10 | 014 10 | 016 10 | 017 10 | 021 10 | 022 10 | 023 10 | 024 10 | 025 10 | 038 10 | 039 10 | 041 12 | 043 12 | 047 16 | 048 16 | 049 16 | 050 16 |
|--------------------------------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|
| Code Series | | | | | | | | | | | | | | | | | | | | | | | | | |
| • 45 = 45000 | • | * | — | ** | — | * | • | — | ** | • | ** | • | — | **** | — | • | **** | — | — | — | — | — | — | — | — |
| PC Terminations per Truth Table Code | S P W | S P W | — — — | S P W L | — — — | S P W | S P W | — — — | S P W L | S P W | S P W | S P W | — — — | S P W | — — — | S P W | S P W | — — — | — — — | — — — | — — — | — — — | — — — | — — — | |

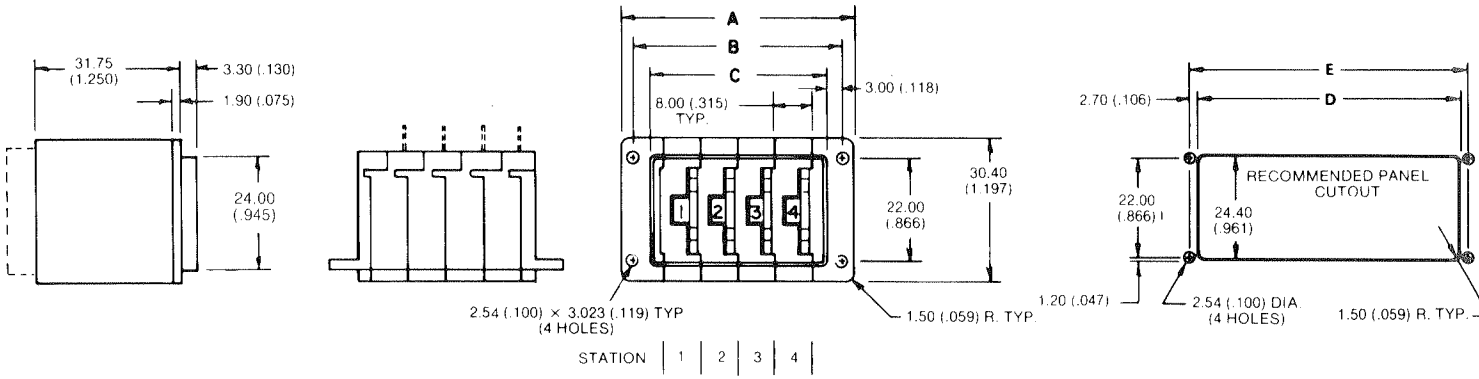
*Octal code achieved by dial stops.

**Printed circuit board code is BCD plus complement.

****Printed circuit board code is 9's complement plus complement.



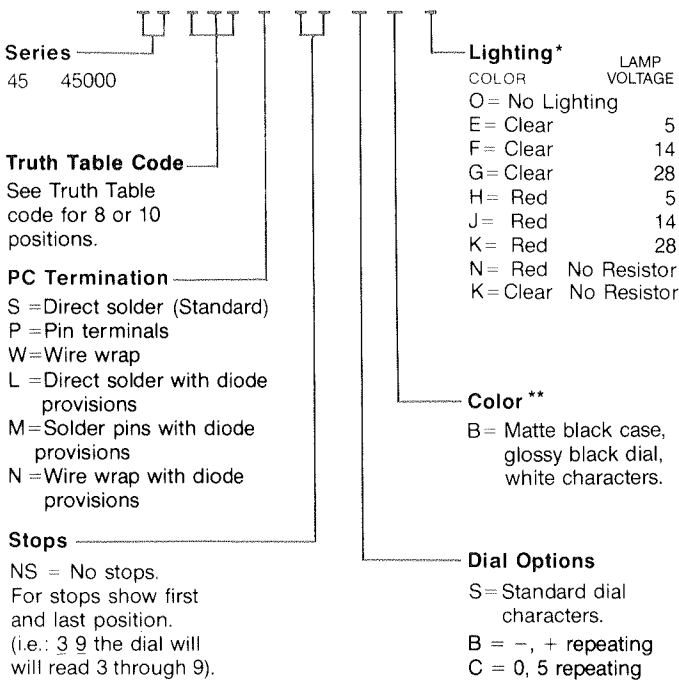
TYPICAL TERMINAL AND ELECTRICAL OUTPUT DETAILS SERIES 45000 SLIMSWITCH®



How to order standard switch modules

See page 79 for Assembly Ordering Instructions
All spaces must be filled for a complete part (switch) number

Example: 45/008/S/06/S/B/E



RECOMMENDED ASSEMBLY PANEL CUTOUT DIMENSIONS

| NO. OF MODULES | A | B | C | D | E |
|----------------|-------------|--------------|--------------|--------------|--------------|
| 1 | 26.0 (.102) | 21.0 (.827) | 15.0 (.591) | 15.6 (.614) | 21.0 (.827) |
| 2 | 34.0 (1.34) | 29.0 (1.142) | 23.0 (.906) | 23.6 (.929) | 29.0 (1.142) |
| 3 | 42.0 (1.65) | 37.0 (1.457) | 31.0 (1.220) | 31.6 (1.244) | 37.0 (1.457) |
| 4 | 50.0 (1.97) | 45.0 (1.772) | 39.0 (1.535) | 39.6 (1.559) | 45.0 (1.772) |
| 5 | 58.0 (2.28) | 53.0 (2.087) | 47.0 (1.850) | 47.6 (1.874) | 53.0 (2.087) |
| 6 | 66.0 (2.60) | 61.0 (2.402) | 55.0 (2.165) | 55.6 (2.189) | 61.0 (2.402) |
| 7 | 74.0 (2.91) | 69.0 (2.717) | 63.0 (2.480) | 63.6 (2.504) | 69.0 (2.717) |
| 8 | 82.0 (3.23) | 77.0 (3.031) | 71.0 (2.795) | 71.6 (2.819) | 77.0 (3.031) |
| 9 | 90.0 (3.54) | 85.0 (3.346) | 79.0 (3.110) | 79.6 (3.134) | 85.0 (3.346) |
| 10 | 98.0 (3.86) | 93.0 (3.661) | 87.0 (3.425) | 87.6 (3.449) | 93.0 (3.661) |

NOTES:

1. Drawing tolerances: .X = ±.8 (.03), .XX = ±.25 (.010).
2. Prime dimensions are metric.

WINDOW AND CHARACTER DIMENSIONS

| Positions | Window Dimensions | | Max. character Height | Visual Comparisons |
|-----------|-------------------|-------------|-----------------------|--------------------|
| | H | W | | |
| 8 | 6.90 (.272) | 3.04 (.120) | 5.08(.200) | |
| 10 | 6.90 (.272) | 3.04 (.120) | 5.08(.200) | |

Character heights cannot be increased from those shown. For maximum usable window width, consult factory.

Not all options are available in all series or codes.
Some tooling charges may be required.

*When ordering a lighted switch from this series the lighting is internal.
**For nonstandard colors and combinations consult factory.

Notes 1 — For nonstandard switch options and features not covered in the how to order chart, see modified ordering instruction section, page 78, or consult factory.