

Series Miniswitch®

10, 12 or 16 standard dial positions
 Rear mounted
 Switch O.D. size 8.89 (.350) wide x
 30.73 (1.21) high
 Distributor or factory direct

DESCRIPTION

The Series 29000 Miniswitch® is economically priced and has been engineered with the same basic features of our higher priced thumbwheel switches. They are ideal for maximum panel density, reliability, error proof setting action with large easy to read character height. Assemblies are held together by Digitran's presized, stainless steel, self-locking assembly straps that eliminate the need of any assembly tools.

FEATURES

- *Special dial characters
- Field installable dial stops
- *Optional marking on spacers or switch case
- *Lighted decimal on spacer
- 8.89 (.350) spacer
- *26.67 (1.050) message units
- *Provisions for mounting components
- Dust protected switch chamber
- Special switch modules for Digivider™ and Digidecade™
- Field or factory assembled to customer specifications

*See switch parameters for details or consult factory.

SPECIFICATIONS

MECHANICAL

Operating force: 4 to 8 ounces.
Life: Over 1,000,000 detent operations at 25 °C (77 °F).
Standard color: Glossy black case and end brackets with white dial characters.

Special colors: Matte black, beige or solvent-resistant grey.

Weight: .25 ounce per module (approximately).

ELECTRICAL:

Rated electrical loads: 28 VAC or 28 VDC at 50 milliamps at 25 °C (77 °F). Non-switching load 2 amps maximum.

Contact resistance: 100 milliohms initial.

Insulation resistance: 1000 megohms.

Dielectric strength: 500 VRMS.

ENVIRONMENTAL:

Storage temperature: —40 °C to +71 °C.

Operating temperature: —20 °C to +70 °C.

Shock: 100 G's, 6 milliseconds duration, sawtooth.

Vibration: 15 G's at 70-2000Hz; .06" double amplitude at 10-70Hz.

MATERIALS:

Printed circuit board: Epoxy fiberglass.

Contacts: Precious metal alloy.

Structural parts: ABS thermoplastic.

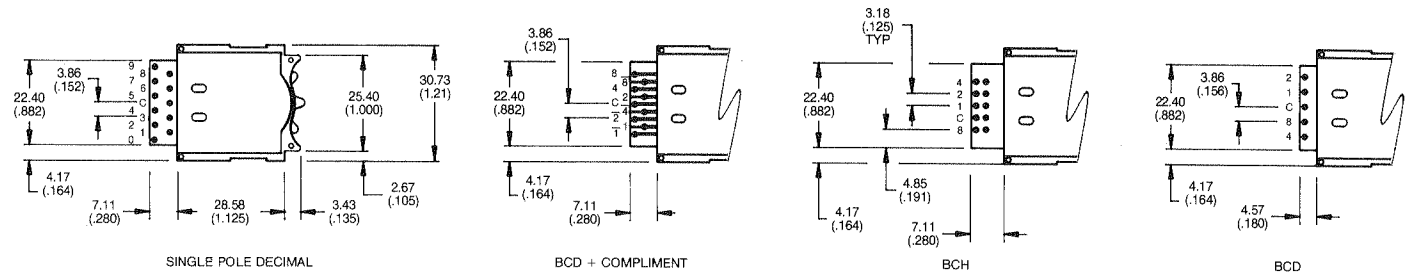
IMPORTANT NOTICE:

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

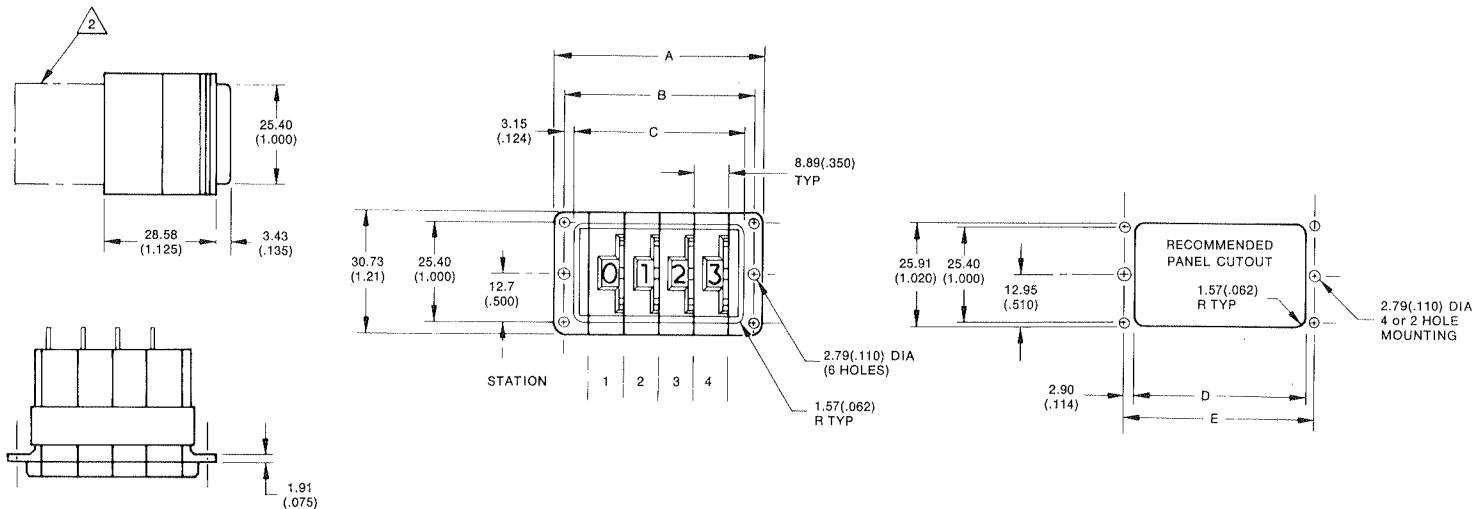
TRUTH TABLE CODES SERIES 29000

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																									
• 29 = 29000	•	*	—	*	—	*	•	—	•	•	•	•	—	•	—	—	•	•	•	•	•	•	•	—	•
PC Terminations per Truth Table Code	S P W L	S P W —	— — — —	S P W L	— — — —	S P W —	S P W —	— — — —	S P W L	S P W L	S P W L	S P W —	— — — —	S P W —	— — — —	— — — —	S — — —	S — — —	S — — —	S P W —	S P W —	S P W —	S P W —	— — — —	S P W —

*Octal code achieved by dial stops.



TYPICAL TERMINAL AND ELECTRICAL OUTPUT DETAILS SERIES 29000 MINISWITCH®



RECOMMENDED ASSEMBLY PANEL CUTOUT DIMENSIONS

NUMBER OF 8.9(.35") STATIONS	A \triangle	B \triangle	C \triangle	D \triangle	E \triangle
1	27.9(1.10)	23.1(.91)	16.8(.66)	17.3(.68)	23.1(.91)
2	36.8(1.45)	32.0(1.26)	25.7(1.01)	26.2(1.03)	32.0(1.26)
3	45.7(1.80)	40.9(1.61)	34.5(1.36)	35.1(1.38)	40.9(1.61)
4	54.6(2.15)	49.8(1.96)	43.4(1.71)	43.9(1.73)	49.8(1.96)
5	63.5(2.50)	58.7(2.31)	52.3(2.06)	52.8(2.08)	58.7(2.31)
6	72.4(2.85)	67.6(2.66)	61.2(2.41)	61.7(2.43)	67.6(2.66)
7	81.3(3.20)	76.5(3.01)	70.1(2.76)	70.6(2.78)	76.5(3.01)
8	90.2(3.55)	85.3(3.36)	79.0(3.11)	79.5(3.13)	85.3(3.36)
9	99.1(3.90)	94.2(3.71)	87.9(3.46)	88.4(3.48)	94.2(3.71)
10	108.0(4.25)	103.1(4.06)	96.8(3.81)	97.3(3.83)	103.1(4.06)

Notes:

1. Installation data shown for typical Series 29000 miniature switch assembly.
2. For details of circuit board terminals and electrical output, see individual module drawings.
3. For assembly and cutout dimensions with spacer(s) included, add 8.89(.350), for each spacer, to dimensions "A" through "E".
4. Either two or four hole mounting may be used.
5. Stops are optional and field installable. Stop strength 5 lbs. min.
6. Prime dimensions are metric.

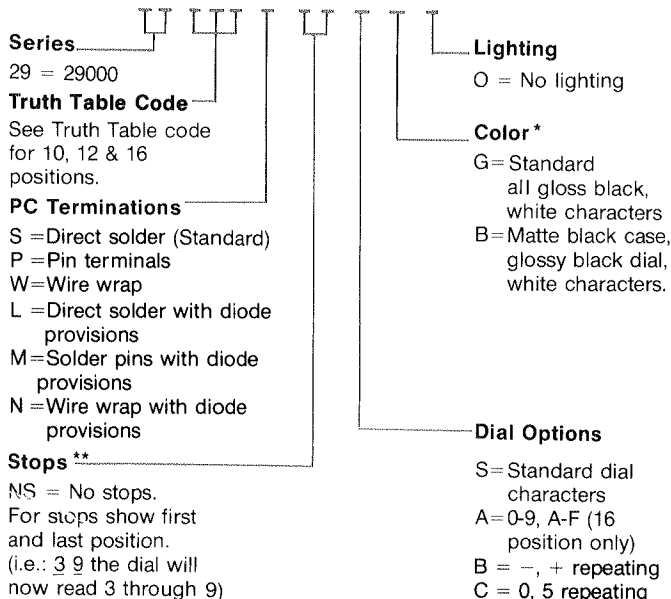
WINDOW AND CHARACTER DIMENSIONS

Positions	Window Dimensions		Max. character Height	Visual Comparison
	H	W		
10	6.60 (.260)	4.01 (.158)	5.08 (.200)	
12	6.60 (.260)	4.01 (.158)	4.06 (.160)	
16	4.19 (.165)	4.01 (.158)	3.17 (.125)	

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

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: 29047/S/NS/A/G/O



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

*For nonstandard colors and combinations consult factory.
 *For stops on 12 or 16 position switches see modified standard ordering instructions, page 78, or 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.