

# D3 - SERIES

## SPECIFICATIONS AND ORDERING INFORMATION

1 5/16" DIAMETER 1.5 AMPS @ 28 VDC

The D3 Series was originally designed as a high quality military switch, but is ideal for use in both military and commercial equipment applications. The standard features of this hill and valley design are glass epoxy insulation and a 30° index, with options of ceramic and diallyl insulation and a 60° index.



### SPECIFICATIONS

#### ELECTRICAL

**Current and Voltage Rating:** Make and break resistive load  
1.5 amps @ 28 VDC; 0.5 amp @ 115 VAC.  
**Current Carrying Capacity:** 9 amps.  
**Dielectric Strength:** 1,000 VAC between current carrying parts and ground.  
**Contact Resistance:** Average initial 3.5 milliohms.  
**Insulation Resistance:** Glass in excess of 750,000 megohms.  
Ceramic in excess of 1,000,000 megohms.  
Diallyl in excess of 900,000 megohms.  
**Hardware:** Mounting nut and lockwasher are shipped assembled.

#### MECHANICAL

**Materials and Finishes:** All parts utilize non-corrosive materials.  
**Clips and Rotors:** Silver alloy standard on ceramic.  
Brass with silver plate standard on glass.  
**Insulation:** Glass epoxy, ceramic, or diallyl phthalate.  
**Index:** Single-ball, hill and valley.  
**Index Life:** 25,000 cycles minimum.  
**Index Torque:** Switches have lowest practical torque consistent with crisp detenting and smooth, reliable operation.  
**Index Angles:** Positive 30° standard, 60° available.  
**Index Stops:** Adjustable standard, fixed or continuous.  
**Stop Strength:** 25 in. lbs. minimum.

### STANDARD PART NUMBER

#### EPOXY GLASS INSULATION - BRASS SILVER PLATE

SWITCHES - SOLDER LUG TERMINALS - 30° INDEX - ADJUSTABLE STOPS SET @ 2 POS.

| POLES | ACTIVE POSITIONS | POLES/SECTION | NO. OF SECTIONS | SHORTING | NON-SHORTING | FIG. * |
|-------|------------------|---------------|-----------------|----------|--------------|--------|
| 01    | 02-11            | 1             | 1               | D3G0111S | D3G0111N     | DA     |
| 02    | 02-11            | 1             | 2               | D3G0211S | D3G0211N     | DA     |
| 02    | 02-05            | 2             | 1               | D3G0205S | D3G0205N     | DH     |
| 03    | 02-11            | 1             | 3               | D3G0311S | D3G0311N     | DA     |
| 03    | 02-03            | 3             | 1               | D3G0303S | D3G0303N     | DM     |
| 04    | 02-05            | 2             | 2               | D3G0405S | D3G0405N     | DH     |
| 06    | 02-03            | 3             | 2               | D3G0603S | D3G0603N     | DM     |
| 06    | 02-05            | 2             | 3               | D3G0605S | D3G0605N     | DH     |

#### CERAMIC INSULATION - SILVER ALLOY - 2.6 AMPS @ 28 VDC

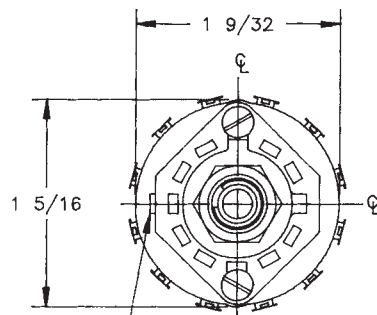
SWITCHES - SOLDER LUG TERMINALS - 30° INDEX - ADJUSTABLE STOPS SET @ 2 POS.

| POLES | ACTIVE POSITIONS | POLES/SECTION | NO. OF SECTIONS | SHORTING | NON-SHORTING | FIG. * |
|-------|------------------|---------------|-----------------|----------|--------------|--------|
| 01    | 02-11            | 1             | 1               | D3C0111S | D3C0111N     | DA     |
| 02    | 02-11            | 1             | 2               | D3C0211S | D3C0211N     | DA     |
| 02    | 02-05            | 2             | 1               | D3C0205S | D3C0205N     | DH     |
| 03    | 02-11            | 1             | 3               | D3C0311S | D3C0311N     | DA     |
| 03    | 02-03            | 3             | 1               | D3C0303S | D3C0303N     | DM     |
| 04    | 02-05            | 2             | 2               | D3C0405S | D3C0405N     | DH     |
| 06    | 02-03            | 3             | 2               | D3C0603S | D3C0603N     | DM     |
| 06    | 02-05            | 2             | 3               | D3C0605S | D3C0605N     | DH     |

\* FIGURES ARE SHOWN ON PAGES 55 AND 56.

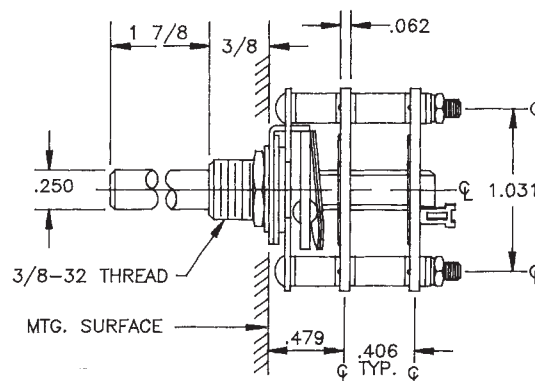
### DIMENSIONS

#### STANDARD CONSTRUCTION



NON-TURN LUG  
.125W X .035 THK.  
.531 FROM C-LINE  
.117 ENGAGEMENT

#### D3G - GLASS EPOXY CONSTRUCTION



## How to Order Additional Options:

| 2 DIGIT SERIES | INSULATION TYPE   | TOTAL POLES | ACTIVE POSITIONS                 | CONTACT TYPE                     | TERMINAL TYPE                   | INDEX ANGLE | STOP TYPE                          | SHAFT/ BUSHING | SHAFT FLAT    |
|----------------|---|-------------|----------------------------------|----------------------------------|---------------------------------|-------------|------------------------------------|----------------|---------------|
| D3             | G - GLASS<br>C - CERAMIC<br>(SILVER ALLOY)<br>D - DIALLYL | 01 - MIN.   | 12 - MAX @ 30°<br>06 - MAX @ 60° | N - NON SHORTING<br>S - SHORTING | L - SOLDER LUG<br>R - REAR P.C. | 30°<br>60°  | A - ADJ.<br>F - FIXED<br>C - CONT. | SEE CHART "A"  | SEE CHART "B" |

CUSTOMERS SPECIFIED ORDER NUMBER FOR STANDARD OPTIONS

|          |          |                          |                          |                          |                          |                          |                          |                          |                          |
|----------|----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <b>D</b> | <b>3</b> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|          |          | (SPECIFY)                | (SPECIFY)                | (SPECIFY)                | (SPECIFY)                | (SPECIFY)                | (SPECIFY)                | (SPECIFY)                | (SPECIFY)                |

ADDITIONAL OPTIONS

### SHAFT, BUSHING, AND FLAT OPTIONS

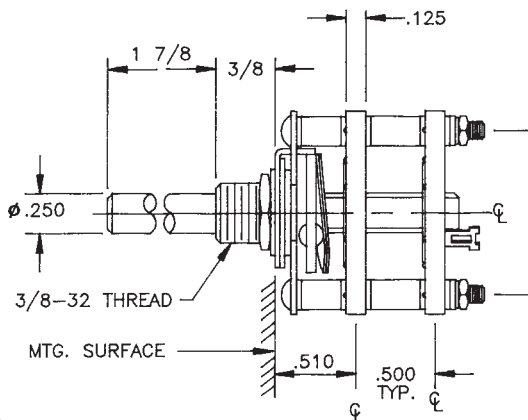
| P/N OPT. | SHAFT LGTH. "A" | BUSH. LGTH. "B" |
|----------|-----------------|-----------------|
| 01       | 3/8             | 1/4             |
| 02       | 3/8             | 3/8             |
| 03       | 1/2             | 1/4             |
| 04       | 1/2             | 3/8             |
| 05       | 9/16            | 1/4             |
| 06       | 9/16            | 3/8             |
| 07       | 3/4             | 1/4             |
| 08       | 3/4             | 3/8             |
| 09       | 1               | 1/4             |
| 10       | 1               | 3/8             |
| 11       | 1 1/2           | 1/4             |
| 12       | 1 1/2           | 3/8             |
| 13       | 1 7/8           | 1/4             |
| 14       | 1 7/8           | 3/8             |

| P/N OPT. | FLAT ANGLE |
|----------|------------|
| B        | ROUND      |
| U        | 15°        |
| W        | 165°       |
| Y        | 195°       |
| Z        | 345°       |

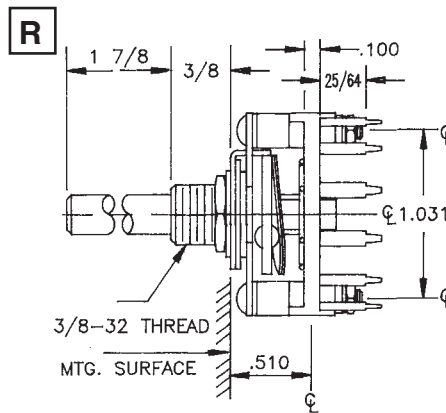
SHAFT AS VIEWED WITH NON-TURN LUG AT 9 O'CLOCK AND SHAFT IN EXTREME CCW POSITION AND STRUT BOLTS ORIENTED VERTICALLY.

### INSULATION AND PRINTED CIRCUIT BOARD TERMINAL OPTIONS

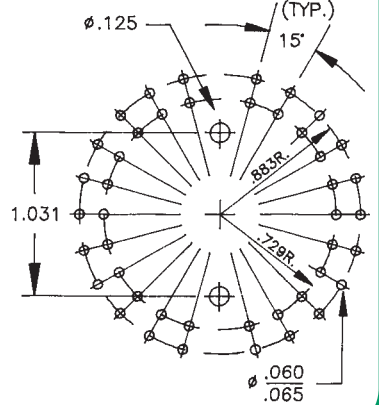
D3C - CERAMIC CONSTRUCTION



D3D - DIALLYL PHTHALATE CONSTRUCTION



P.C. BOARD MOUNTING PATTERN (TYP.)



CUSTOM SWITCHES ARE AVAILABLE. CONTACT THE FACTORY WITH YOUR COMPLETE SPECIFICATIONS.