Basic Switches

Door

Features
- Automatically cut power when service door or drawer is opened, helping protect personnel and equipment.
- Enables circuit testing with power On by manually pulling rod actuator to maintained-On position. (Closing door or drawer resets switch.)
- Basic switches are component recognized by UL to UL1054 special use switches.
- UL recognized AC are available

Electrical Ratings
A 15 amps, 125, 250 or 480 VAC; 1/2 amp, 125 VDC; 1/4 amp, 250 VDC.
B 5 amps, 125 or 250 VAC; 30 VDC ind., 3 amps (sea level) and 2.5 amps (50,000 ft.); res., 5 amps (sea level and 50,000 ft.); max. inrush 25 amps.
C 15 amps, 125 or 250 VAC; 1/2 amp, 125 VDC; 1/4 amp, 250 VDC; 1/3 hp, 125 or 250 VAC.

Order Guides with Steel Rod Actuators

<table>
<thead>
<tr>
<th>Style No.</th>
<th>Description</th>
<th>Basic Switch</th>
<th>Elec. Rating</th>
<th>Catalog Listing</th>
<th>F.P. max. mm</th>
<th>O.P. min. mm</th>
<th>D.P. max. mm</th>
<th>Temp. Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15 amps, SPDT.</td>
<td>BZ</td>
<td>A</td>
<td>1AC2</td>
<td>11.1</td>
<td>6.35</td>
<td>3.18</td>
<td>-65°F to +180°F</td>
</tr>
<tr>
<td>2</td>
<td>5 amps, Four SPDT ckts.</td>
<td>SM(4)</td>
<td>B</td>
<td>8AC1</td>
<td>9.53</td>
<td>5.16</td>
<td>.203</td>
<td>-65°F to +250°F</td>
</tr>
<tr>
<td>3</td>
<td>Three 6-foot leads. Sealed basic switches 5 amps, SPDT</td>
<td>SE</td>
<td>B</td>
<td>9AC4</td>
<td>9.53</td>
<td>5.16</td>
<td>.203</td>
<td>-65°F to +221°F</td>
</tr>
<tr>
<td>4</td>
<td>Two 3-foot leads. Sealed basic switches, 5 amps, SPST-N.O.</td>
<td>SE</td>
<td>B</td>
<td>9AC12-3</td>
<td>9.53</td>
<td>5.16</td>
<td>.203</td>
<td>-65°F to +221°F</td>
</tr>
<tr>
<td>5</td>
<td>Can be reset without momentary ckt. break. 15 amps, SPDT.</td>
<td>V3</td>
<td>C</td>
<td>13AC1</td>
<td>15.9</td>
<td>12.3</td>
<td>.485</td>
<td>-67°F to +300°F</td>
</tr>
<tr>
<td>6</td>
<td>Miniature size. 5 amps, SPDT</td>
<td>SM</td>
<td>B</td>
<td>17AC1-T17AC18-T† (MS16106-4)</td>
<td>9.53</td>
<td>5.59</td>
<td>.220</td>
<td>-65°F to +250°F</td>
</tr>
<tr>
<td>7</td>
<td>Tapped hole in end of actuator rod. 15 amps, SPDT.</td>
<td>V3</td>
<td>C</td>
<td>22AC1</td>
<td>9.53</td>
<td>5.16</td>
<td>.203</td>
<td>-65°F to +185°F</td>
</tr>
<tr>
<td>8</td>
<td>15 amps, Two SPDT ckts.</td>
<td>V3(2)</td>
<td>C</td>
<td>24AC1</td>
<td>9.53</td>
<td>4.75</td>
<td>.187</td>
<td>-318°F</td>
</tr>
</tbody>
</table>

- These are military approved listings and the temperature range shown is for the finished product. All other listings are not military approved and the temperature range shown is the range for the basic switch only.

With High Strength Thermoplastic Rod Actuators*

<table>
<thead>
<tr>
<th>Style No.</th>
<th>Description</th>
<th>Basic Switch</th>
<th>Elec. Rating</th>
<th>Catalog Listing</th>
<th>F.P. max. mm</th>
<th>O.P. min. mm</th>
<th>D.P. max. mm</th>
<th>Temp. Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15 amps, SPDT.</td>
<td>V3</td>
<td>C</td>
<td>22AC2</td>
<td>9.53</td>
<td>5.16</td>
<td>.203</td>
<td>-65°F to +185°F</td>
</tr>
<tr>
<td>7</td>
<td>15 amps. SPDT.</td>
<td>V3</td>
<td>C</td>
<td>23AC1</td>
<td>9.53</td>
<td>5.16</td>
<td>.203</td>
<td>-318°F</td>
</tr>
<tr>
<td>7</td>
<td>15 amps. SPDT.</td>
<td>V3</td>
<td>C</td>
<td>23AC2</td>
<td>9.53</td>
<td>5.16</td>
<td>.203</td>
<td>-318°F</td>
</tr>
<tr>
<td>8</td>
<td>15 amps. Two SPDT ckts.</td>
<td>V3(2)</td>
<td>C</td>
<td>24AC2</td>
<td>9.53</td>
<td>4.75</td>
<td>.187</td>
<td>-318°F</td>
</tr>
</tbody>
</table>

- Not for use above 85°C (+185°F). Use steel actuators at higher temperatures. For additional catalog listings, contact the 800 number.

*Both switches operate on pull stroke, only one switch operates on push (reset) stroke.

For application help: call 1-800-537-6945.
Basic Switches
Snap-in Panel Mount

DM/DP Series

Momentary Action
Alternate Action
Push-Pull
Pull-to-Cheat

Bullet nose plunger
(SPDT shown)
Bullet nose plunger
(DPDT shown)
Finger grip plunger
(Finger grip plunger
with flat tip (SPDT shown)
with spherical tip (DPDT shown)

FEATURES
- Attractive, rugged snap-in panel mount
design — easy installation
- Choice of momentary, alternate push-
pull and pull-to-cheat operation
- Quick-connect terminals
- Expected mechanical life: 1 million op-
erations, 95% survival
- Temperature range: −35° to +180°F
(−37° to 82°C)
- UL recognized file #E22779, CSA certified
file #LR4442

MOMENTARY ACTION
Momentary action switches are available
in a choice of concave, convex, or bullet
nose plunger styles.

ALTERNATE ACTION
These switches have push-on, push-off
operation. The alternate action is at two
levels, with the maintained On position of
the plunger at a lower level than the nor-
mal Off.

PUSH-PULL
When plunger is depressed, it remains
down and maintains circuit transfer.
Switch contacts return to the previous po-
sition when the plunger is pulled to the ex-
tended position.

PULL-TO-CHEAT
Pull-to-cheat operates normally as a mo-
mentary action switch. However, by pull-
ing the plunger beyond the normal free
position, a maintained On position is
achieved.

POSSIBLE VARIATIONS
In addition to the standard quick-connect
.188 x .020" (4.78 x 0.51 mm) terminals,
angled forms and .250 x .032" (6.35 x 0.81
mm) terminals can be provided. DM plun-
gers and faceplates are available in any
combination of white, black, gray, or red.

NOTE: Refer to MICRO SWITCH Cata-
log 30 for DM switches with snap-on
pushbuttons.

MOUNTING DIMENSIONS
Dimensions shown are for reference only.

DM/1DP
Panel Hole Detail
## ORDER GUIDE - DM

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1DM1</td>
<td>Momentary</td>
<td>SPDT</td>
<td>Bullet nose/White</td>
<td>White</td>
<td>22.4 .880</td>
<td>19.1±1.5 .750±.060</td>
<td>9.53 .375</td>
<td>4.17 15</td>
<td>0.83 3</td>
</tr>
<tr>
<td>1DM2</td>
<td>Momentary</td>
<td>SPNC</td>
<td>Bullet nose/White</td>
<td>White</td>
<td>22.4 .880</td>
<td>19.1±1.5 .750±.060</td>
<td>9.53 .375</td>
<td>4.17 15</td>
<td>0.83 3</td>
</tr>
<tr>
<td>1DM3</td>
<td>Momentary</td>
<td>SPNO</td>
<td>Bullet nose/White</td>
<td>White</td>
<td>22.4 .880</td>
<td>19.1±1.5 .750±.060</td>
<td>9.53 .375</td>
<td>4.17 15</td>
<td>0.83 3</td>
</tr>
<tr>
<td>1DM18</td>
<td>Momentary</td>
<td>SPDT</td>
<td>Concave/Black</td>
<td>Gray</td>
<td>11.4 .450</td>
<td>—</td>
<td>3.05 .120</td>
<td>4.17 15</td>
<td>0.83 3</td>
</tr>
<tr>
<td>1DM19</td>
<td>Momentary</td>
<td>SPDT</td>
<td>Concave/Red</td>
<td>Gray</td>
<td>11.4 .450</td>
<td>—</td>
<td>3.05 .120</td>
<td>4.17 15</td>
<td>0.83 3</td>
</tr>
<tr>
<td>1DM21</td>
<td>Momentary</td>
<td>SPDT</td>
<td>Convex/White</td>
<td>White</td>
<td>11.4 .450</td>
<td>9.02±1.5 .355±.060</td>
<td>3.05 .120</td>
<td>4.17 15</td>
<td>0.83 3</td>
</tr>
<tr>
<td>1DM38</td>
<td>Momentary</td>
<td>SPNO</td>
<td>Convex/White</td>
<td>White</td>
<td>11.4 .450</td>
<td>9.02±1.5 .355±.060</td>
<td>3.05 .120</td>
<td>4.17 15</td>
<td>0.83 3</td>
</tr>
<tr>
<td>1DM301</td>
<td>Push-Pull</td>
<td>SPDT</td>
<td>Finger grip/Black</td>
<td>Gray</td>
<td>24.1 .950</td>
<td>—</td>
<td>15.9 .625</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1DM401**</td>
<td>Pull-to-Cheat</td>
<td>SPDT</td>
<td>Finger grip/White</td>
<td>White</td>
<td>17.8 .700</td>
<td>—</td>
<td>13.2 .520</td>
<td>4.17 15</td>
<td>0.83 3</td>
</tr>
<tr>
<td>2DM1</td>
<td>Momentary</td>
<td>DPDT</td>
<td>Bullet nose/Black</td>
<td>Black</td>
<td>22.4 .880</td>
<td>19.6±1.0 .770±.040</td>
<td>10.2 .400</td>
<td>6.67 24</td>
<td>1.67 6</td>
</tr>
<tr>
<td>2DM5</td>
<td>Momentary</td>
<td>DPDT</td>
<td>Concave/Black</td>
<td>Gray</td>
<td>11.4 .450</td>
<td>—</td>
<td>3.05 .120</td>
<td>6.67 24</td>
<td>1.67 6</td>
</tr>
<tr>
<td>2DM6</td>
<td>Momentary</td>
<td>DPDT</td>
<td>Concave/Red</td>
<td>Gray</td>
<td>11.4 .450</td>
<td>—</td>
<td>3.05 .120</td>
<td>6.67 24</td>
<td>1.67 6</td>
</tr>
<tr>
<td>2DM301</td>
<td>Push-Pull</td>
<td>DPDT</td>
<td>Finger grip/Black</td>
<td>Gray</td>
<td>24.1 .950</td>
<td>—</td>
<td>15.9 .625</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2DM409</td>
<td>Pull-to-Cheat</td>
<td>DPDT</td>
<td>Finger grip/Black</td>
<td>Black</td>
<td>21.6 .850</td>
<td>18.9±1.3 .745±.050</td>
<td>15.0 .590</td>
<td>6.67 24</td>
<td>—</td>
</tr>
<tr>
<td>2001DM1*</td>
<td>Alternate</td>
<td>SPDT</td>
<td>Bullet nose/White</td>
<td>White</td>
<td>22.4 .880</td>
<td>—</td>
<td>15.4 .605</td>
<td>5.56 20</td>
<td>—</td>
</tr>
</tbody>
</table>

* Latch position 16.9 mm ± 0.76 mm (.665 in. ± .030 in.)
** Extended position 23.6 mm (.930 in. max.)

## ORDER GUIDE - DP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1DP5</td>
<td>Momentary</td>
<td>SPNO</td>
<td>Bullet nose/White</td>
<td>White</td>
<td>22.4 .880</td>
<td>15.1±1.5 .595±.060</td>
<td>9.53 .375</td>
<td>4.45 16</td>
<td>0.83 3</td>
</tr>
<tr>
<td>1DP801</td>
<td>Momentary</td>
<td>SPDT</td>
<td>Concave/White</td>
<td>White</td>
<td>11.4 .450</td>
<td>9.0±1.5 .355±.060</td>
<td>3.0 .120</td>
<td>6.67 24</td>
<td>0.83 3</td>
</tr>
</tbody>
</table>
Basic Switches  

**WW Series**

**Door**

---

**GENERAL INFORMATION**

The WW Series switching mechanism is a non-snap double break shorting bar type construction. One, two or three circuit versions are available.

The three-circuit unit has two poles. The term “pole” denotes the number of completely separate circuits that can pass through the switch at one time. On a three-circuit switch in the unoperated condition (see drawing) circuit #2 is closed and circuit #1 and #3 are open. As the plunger is depressed, circuit #2 opens and circuit #1 and #3 are closed. The switch is two-pole since it makes and breaks two separate circuits (#1 and #3). When the plunger is released, circuit #1 and #3 are broken and circuit #2 is closed.

---

**FEATURES**

- Snap-in panel mounting
- Variety of terminal sizes
- Accepts quick-connect insulated terminals
- 10-16 amps electrical rating at 125 or 250 VAC depending on number of circuits and termination
- Same panel cutout as double-pole DM switch
- Quick-connect D7 and D9 termination complies with VDE requirements for 3mm air gap
- Switches with plunger guards and D7, D9 terminations are VDE approved
- UL recognized, CSA certified
- Meets UL's 100,000 operations requirement for operator-accessible interlock switches
- Covered under UL standard 508 Industrial Motor Controls

---

**MOUNTING DIMENSIONS** (For reference only)

---

**NOTE:** Terminals will accept quick-connect receptacles available from AMP, Hollingsworth and others.
### ELECTRICAL RATINGS

**UL and CSA** * Asterisked loads tested for 100,000 cycles

<table>
<thead>
<tr>
<th>Electrical Rating</th>
<th>3-Pole</th>
<th>Electrical Rating</th>
<th>2-Pole</th>
<th>Electrical Rating</th>
<th>1-Pole</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Contacts 1-1, 3-3: †15A, 125VAC, *10A, 250VAC; ½ hp @ 125, 250VAC; 3A “L”, 125VAC; 150VA pilot duty @ 125/250VAC</td>
<td>A</td>
<td>Contacts 1-1, 3-3: †16A, 125/250VAC; ½ hp, 125/250VAC; 3A “L”, 125VAC; 150VA pilot duty 125/250 VAC; *2A, 24VDC</td>
<td>B</td>
<td>Contacts 1-1: *16A, 125/250VAC; ½ hp, 125/250VAC; 150VA pilot duty 125/250 VAC; 3A, “L”, 125VAC</td>
</tr>
<tr>
<td>D</td>
<td>Same as C with 0.1A, 125 VAC; *2A, 24VDC</td>
<td>F</td>
<td>Same as A with 0.1A, 125VAC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>†Contacts 2-2: 0.1A, 125VAC/VDC</td>
<td>G</td>
<td>*5A, 125VAC, 2A, *24VDC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**VDE †**
Flagged loads tested for 10,000 cycles

- Circuits #1 and #3
  †16 (4)A, 250VAC
- Circuit #2
  †0.1 (0.05) A, 250VAC

### ORDER GUIDE

<table>
<thead>
<tr>
<th>Catalog Listings*</th>
<th>Circuity</th>
<th>Electrical Rating</th>
<th>Plunger Guard</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW1A04A-D7</td>
<td>#1 - N.O. A</td>
<td>A</td>
<td>No</td>
</tr>
<tr>
<td>WW1G03A-D7</td>
<td>#1 &amp; #3 - N.O. A</td>
<td>A</td>
<td>No</td>
</tr>
<tr>
<td>WW1K06D-D7</td>
<td>#1 &amp; #3 - N.O. C</td>
<td>C</td>
<td>No</td>
</tr>
<tr>
<td>WW1G02A-D9</td>
<td>#1 &amp; #3 - N.O. E</td>
<td>A</td>
<td>Yes</td>
</tr>
<tr>
<td>WW1K05D-D9</td>
<td>#1 &amp; #3 - N.O. C</td>
<td>C</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Cheat-key: Catalog Listing **15PA256-WW**

### Termination Options

To order other termination options, substitute the option letter and number at the end of the catalog listing.

- **D7**: .187 x .032 in. (4.75 x 0.8 mm).
- **D8**: .187 x .020 in. (4.75 x 0.5 mm).
- **D9**: .250 x .032 in. (6.35 x 0.8 mm).

**D7** and **D9** terminals are VDE certified. VDE limits **D7** terminals to 12A.

### CATALOG LISTING CODE

```
WWW 1 K 00 D D8
```

- **WWW**: Type
- **1**: Action
- **K**: Circuity
- **00**: Variations
- **D**: Elec. Rating
- **D8**: Termination

For application help: call 1-800-537-6945.

Honeywell Sensing and Control 93