MAGIC SWITCH: MS11
ADJUSTABLE RANGE, STAINLESS STEEL TOUCHLESS ACTUATOR

DESCRIPTION

BEA’s MS11 is an aesthetically pleasing, touchless activation device designed to reduce the spread of germs and improve accessibility in healthcare, retail, industrial and commercial settings. The MS11 has been purpose-built to withstand the extreme rigors of fast-paced and sanitary environments.

The flush-mount MS11 is a durable stainless steel device utilizing adjustable-range microwave technology. The MS11’s illuminated center and audible signaling confirms activation and encourages proper touchless use.

The MS11 detects moving objects such as a hand, cart or wheelchair and is designed for use in hospitals, pharmacies, clean rooms, food service and other areas needing highly accessible and germ-free activation.

FEATURES & BENEFITS

- NEMA 4 (IP65) enclosure capable of use in industrial and extreme washdown environments
- Illuminated blue center changes to green upon signal reception/activation
- Adjustable sensing zone from 2 to 24 inches (pulse or toggle)
- Adjustable audible alert setting, including silent-mode required for hospitals and other noise-sensitive environments
- Configurable output hold time of 1 to 30 seconds allowing unique, user-defined device placement
- Inter-operators with all automatic door control makes and models
APPLICATIONS

HEALTHCARE ENVIRONMENTS
CLEAN ROOMS AND STERILE FACILITIES
WASHDOWN RESISTANT

TECHNICAL SPECIFICATIONS

Technology: Microwave Doppler Radar
Detection Mode: Motion (bidirectional), Toggle or Timed Mode
Sensing Zone **: 2 to 24 inches (adjustable)
Hold Time: 1 to 30 s
Alert Settings
  - Audible Alert: Silent Mode or Signal Mode
  - Visual Alert: Blue (Standby) / Green (Activation)
Supply Voltage: 12-24 V AC/DC or +5 VDC
Current Consumption: < 2.8W
Temperature Range: -22°F to 158°F
Enclosure Rating: NEMA 4 / IP65
Relay
  - 1 Form C Solid State Relay
  - 1A 30VAC/30VDC (max)
Dimensions (Overall)
  - Single Gang: 4.5 in x 2.75 in x 0.98 in
  - Double Gang: 4.5 in x 4.5 in x 0.98 in
  - Jamb: 4.5 in x 1.68 in x 0.98 in
Wire Harness Length: 12 inches
Material: Stainless Steel (faceplate) / ABS (center)

** See User’s Guide

DIMENSIONAL DRAWINGS

Single Gang
Jamb Gang
Double Gang

RELATED PRODUCTS

10MS11S
STAINLESS STEEL SINGLE GANG

10MS11J
STAINLESS STEEL JAMB STYLE

10MS11D
STAINLESS STEEL DOUBLE GANG

10RD900
900 MHZ RECEIVER

10TD900RT
900 MHZ RETROFIT TRANSMITTER

MAGIC SWITCH: MS11
ADJUSTABLE RANGE, STAINLESS STEEL TOUCHLESS ACTUATOR

www.BEAinc.com
© 2017 BEA, Inc. All rights reserved.

79.0200.15  20170501
MAGIC SWITCH: MS11
Hardwired | Stainless Steel | Touchless | Activation Sensor

Single Gang (shown) Double Gang Jamb Style
10MS11S 10MS11D 10MS11J

DESCRIPTION

1. faceplate
2. mounting holes
3. sensor window

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>Microwave - Doppler Radar (24.125 GHz)</td>
</tr>
<tr>
<td>Detection Mode</td>
<td>Motion (bidirectional)</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>12-24 VAC/DC</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>&lt; 2.8W</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>-22° F to 158° F</td>
</tr>
<tr>
<td>Enclosure Rating</td>
<td>NEMA 4</td>
</tr>
<tr>
<td>Sensing Zone *</td>
<td>2 - 24 inches (adjustable)</td>
</tr>
<tr>
<td>Relay</td>
<td>1-Form C Solid State Relay</td>
</tr>
<tr>
<td></td>
<td>1A 30 VAC/VDC (max)</td>
</tr>
<tr>
<td>Dimensions (Overall)</td>
<td>Single Gang - 4.5” (H) x 2.75” (W) x 0.98” (T)</td>
</tr>
<tr>
<td></td>
<td>Double Gang - 4.5” (H) x 4.5” (W) x 0.98” (T)</td>
</tr>
<tr>
<td></td>
<td>Jamb - 4.5” (H) x 1.68” (W) x 0.98” (T)</td>
</tr>
<tr>
<td>Wire Harness Length</td>
<td>12 inches</td>
</tr>
<tr>
<td>Material</td>
<td>Stainless Steel (faceplate)</td>
</tr>
</tbody>
</table>

*S Sensing Zone is dependent upon
• Size (area) of object
• Orientation of object
• Speed of object
• Environmental conditions

Specifications are subject to change without prior notice.

* Use of the device outside the intended application cannot be guaranteed by the manufacturer.
1 INSTALLATION

**TIPS**

single gang, double gang, or jamb style electrical box may be used (non-metallic ideal)

**APPLICATIONS**

- Single Swing Doors
- Sim Pair Swing Doors
- Dual Egress Swing Doors
- Sliding Doors

*NOTE: Do not install the sensor within the swingpath of the door.*

2 WIRING

<table>
<thead>
<tr>
<th>Description</th>
<th>Wire Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-24 VAC/DC</td>
<td>Black</td>
</tr>
<tr>
<td>12-24 VAC/DC</td>
<td>Red</td>
</tr>
<tr>
<td>COM</td>
<td>White</td>
</tr>
<tr>
<td>NO</td>
<td>Green</td>
</tr>
<tr>
<td>NC</td>
<td>Yellow</td>
</tr>
</tbody>
</table>
3 SETTINGS & ADJUSTMENTS

DETECTION ZONE - potentiometer
COUNTERCLOCKWISE - decrease (2” minimum)
CLOCKWISE - increase (24” maximum *)

OUTPUT TIME - potentiometer
COUNTERCLOCKWISE - decrease (1 s minimum)
CLOCKWISE - increase (30 s maximum)

AUDIBLE CONTROL - 2-pin jumper
ON - jumper removed (or on 1 pin)
OFF - jumper over both pins

OUTPUT MODE - 2-pin jumper
TIMED - jumper removed (or on 1 pin)
TOGGLE - jumper over both pins

* Maximum Detection Zone will vary depending on size (area), orientation, and speed of object as well as environmental conditions.

FUNCTIONALITY

AUDIBLE ALERT - When Audible Alert is ON, it sounds for 0.5 seconds when detection occurs.

TIMED MODE - Recommended for automatic door applications. In Timed Mode, a detection activates the relay and the relay holds for a predetermined amount of time adjusted by the Output Time potentiometer (1 to 30 seconds, counterclockwise - decrease, clockwise - increase).

TOGGLE MODE - Recommended for switch applications. In Toggle Mode, a detection activates the relay and a second detection deactivates the relay. The relay will hold indefinitely until a second detection occurs.

4 SETUP & OPERATION

When first powered, the backlit hand symbol will alternate between blue and green for approximately 5 seconds. Allow at least 15 seconds for the sensor to complete start up.

During normal operation, when a detection occurs, the hand symbol will momentarily change from blue to green and the audible alert will sound (if enabled).