



## MS31

MICROWAVE TOUCHLESS ACTUATOR WITH ADJUSTABLE RANGE AND RELAY HOLD TIME



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### TECHNOLOGY



### CERTIFICATIONS



### DESCRIPTION

BEA's **MAGIC SWITCH® Family** utilizes proven microwave motion technology to ensure consistent, dependable touchless activation and can be adjusted to comply with the ANSI 156.10 knowing act standard.

The **MS31** detects moving objects such as a hand, cart or wheelchair and reduces touchpoints in high traffic areas commonly found in shopping and transportation centers. Applications requiring hygienic activation include hospitals, pharmacies, clean rooms and foodservice facilities.



### Adjustable Detection Zone

Detection zone from 4 to 24 inches (timed or toggle)

### Adjustable LED Setting

Dipswitch position determines if LED illuminated when in detection or when not in detection

### Silent Activation

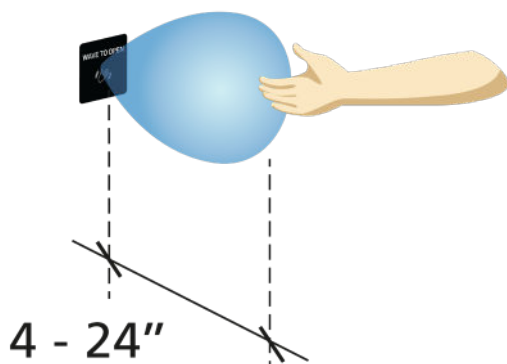
Silent activation for hospitals and other noise-sensitive environments

### Durable Design

IP54 rated enclosure for protection against outdoor weathering and daily cleaning

### Various Faceplates Available

Available in black, gray and white faceplate; options include jamb style, single-gang, double-gang and 6 inch round



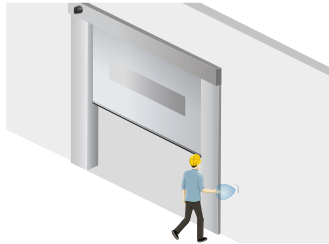
## APPLICATIONS



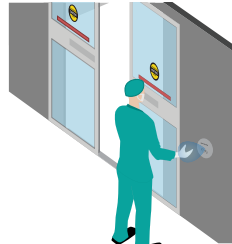
Full Energy Swing Doors



Low Energy Swing Doors



Industrial Doors



Healthcare Environments

## TECHNICAL SPECIFICATIONS

<b>Technology</b>	Microwave Doppler Radar
Radiated Frequency	24.125 GHz
Radiated Power Density	< 5 mW / cm <sup>2</sup>
<b>Detection Mode</b>	Motion (bidirectional)
<b>Detection Range</b>	4 – 24" (adjustable)
<b>Output</b>	Relay with switch-over contact (voltage-free)
Max. Contact Voltage	60 VDC / 125 VAC
Max. Contact Current	1 A (resistive)
Max. Switching Power	30 W (DC) / 60 VA (AC)
<b>Output Hold Time</b>	0.5 – 30 s
<b>Supply Frequency</b>	50 – 60 Hz
<b>Supply Voltage</b>	12 – 24 VAC ±10%, 12 – 24 VDC +30% / -10%
<b>Power Consumption</b>	< 1.5 W
<b>Weight</b>	0.34 lbs
<b>Material</b>	PC, PE
<b>Temperature Range</b>	-4 – 131 °F (-20 – 55 °C)
<b>IP Rating</b>	IP54
<b>Dimensions</b>	
Single Gang	4 ½" (H) × 2 ¾" (W) × ¼" (T)
Jamb Plate	4 ½" (H) × 1 ¾" (W) × ¼" (T)
Double Gang	4 ½" (H) × 4 ½" (W) × ¼" (T)
Round Plate	6" (D) × ¼" (T)
<b>Certification</b>	
	EMC: 2004 / 108 / EC
	FCC: G9B-210161
	IC: 4680A-210161

## RELATED PRODUCTS

<b>10RD900</b>	900 MHz receiver module
<b>10TD900TR</b>	900 MHz retrofit transmitter
<b>10BR2-900</b>	2-relay logic module

## PRODUCT SERIES



**10MS31U - B/G/W**  
Black, gray or white, kit w/  
single and double gang



**10MS31J - B/G/W**  
Black, gray or white, kit  
with jamb



**10MS31R - B/G/W**  
Black, gray or white, kit  
with 6" round

<b>MS31 CUSTOM</b>	Choice of accessibility logo or plain in all size options
<b>70.5869</b>	Single gang - black, plain
<b>70.5833</b>	Single gang - black, text + hand logo
<b>70.5834</b>	Single gang - black, text + accessibility logo
<b>70.5872</b>	Jamb plate - black, plain
<b>70.5825</b>	Jamb plate - black, text + hand logo
<b>70.5826</b>	Jamb plate - black, text + accessibility logo
<b>70.5887</b>	Double gang - black, plain
<b>70.5841</b>	Double gang - black, text + hand logo
<b>70.5842</b>	Double gang - black, text + accessibility logo
<b>70.5871</b>	Round plate - black, plain
<b>70.5849</b>	Round plate - black, text + hand logo
<b>70.5850</b>	Round plate - black, text + accessibility logo
<b>70.5835</b>	Single gang - gray, plain
<b>70.5836</b>	Single gang - gray, text + hand logo
<b>70.5837</b>	Single gang - gray, text + accessibility logo
<b>70.5827</b>	Jamb plate - gray, plain
<b>70.5828</b>	Jamb plate - gray, text + hand logo
<b>70.5829</b>	Jamb plate - gray, text + accessibility logo
<b>70.5843</b>	Double gang - gray, plain
<b>70.5844</b>	Double gang - gray, text + hand logo
<b>70.5845</b>	Double gang - gray, text + accessibility logo
<b>70.5851</b>	Round plate - gray, plain
<b>70.5852</b>	Round plate - gray, text + hand logo
<b>70.5853</b>	Round plate - gray, text + accessibility logo
<b>70.5838</b>	Single gang - white, plain
<b>70.5839</b>	Single gang - white, text + hand logo
<b>70.5840</b>	Single gang - white, text + accessibility logo
<b>70.5830</b>	Jamb plate - white, plain
<b>70.5831</b>	Jamb plate - white, text + hand logo
<b>70.5832</b>	Jamb plate - white, text + accessibility logo
<b>70.5846</b>	Double gang - white, plain
<b>70.5847</b>	Double gang - white, text + hand logo
<b>70.5848</b>	Double gang - white, text + accessibility logo
<b>70.5854</b>	Round plate - white, plain
<b>70.5855</b>	Round plate - white, text + hand logo
<b>70.5856</b>	Round plate - white, text + accessibility logo

## MOUNTING OPTIONS



**10MSBOXSGSM**  
Box, MAGIC SWITCH,  
single gang, surface-mount



**10MSBOXDGSM**  
Box, MAGIC SWITCH,  
double gang, surface-mount



**10MSBOXRNDSM**  
Box, MAGIC SWITCH,  
6" round, surface-mount



**10MSBOXJAMBSM**  
Box, MAGIC SWITCH,  
jamb, surface-mount

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