



# MAGIC SWITCH

## TOUCHLESS ACTIVATION COMPARISON



**MS08**  
Adjustable range,  
4 – 24"



**MS09**  
Adjustable range,  
NEMA 4 rated



**MS11**  
Adjustable range,  
stainless steel



**MS21**  
Short range,  
capacitive

### SOLUTION COMPARISON

	MS08	MS09	MS11	MS21
<b>TECHNICAL</b>				
Technology	Microwave - Doppler Radar	Microwave - Doppler Radar	Microwave - Doppler Radar	Capacitance
Detection Mode	Motion (Bi-directional)	Motion (Bi-directional)	Motion (Bi-directional)	Proximity
Radiated Frequency	24.125 GHz	24.125 GHz	24.125 GHz	N/A
Radiated Power Density	< 5 mW/cm <sup>2</sup>	< 5 mW/cm <sup>2</sup>	< 5 mW/cm <sup>2</sup>	N/A
Supply Voltage*	12 – 24 VAC ±10% 12 – 24 VDC, +30% / -10%	12 – 24 VAC ±10% 12 – 24 VDC, +30% / -10%	12 – 24 VAC / VDC	12 – 24 VAC / VDC
Supply Frequency	50 – 60 Hz	50 – 60 Hz	50 – 60 Hz	50 – 60 Hz
Power Consumption	< 1.5 W	< 1.2 W	< 2.8 W	37 mA
Relay	Switch-over Contact (voltage free)	Switch-over Contact (voltage free)	1-Form C Solid State Relay	1-Form C Solid State Relay
Output - relay contact rating (max. voltage)	60 VDC / 125 VAC	60 VDC / 125 VAC	30 VAC / VDC	60 VAC / VDC
Output - relay contact rating (max. current)	1 A (resistive)	1 A (resistive)	1 A	0.4 A
Output - max switching power	30 W (DC) / 60 V (AC)	30 W (DC) / 60 V (AC)	30 W (DC) / 60 V (AC)	30 W (DC) / 60 V (AC)
Output Hold Time	0.5 s	0.5 s	1 – 30 s	0.5 s
Temperature Range	-4 – 131° F (-20 – 55° C)	-4 – 131° F (-20 – 55° C)	-22 – 158° F	-20 – 120° F
Enclosure Rating	IP54	NEMA 4	NEMA 4	NEMA 4
Sensing Zone	4 – 24"	4 – 24"	2 – 24"	0 – 4"
Material	Polycarbonate	ABS, PC	Stainless Steel, Acrylic	Stainless Steel, Polycarbonate
Certification	FCC / IC	FCC / IC	FCC	FCC
Wire Harness Length	6'	6'	12"	6"
Color	White, Black, Cream	White	Stainless Steel	Stainless Steel
Dimensions	Single Gang, Double Gang	Square Surface Mount Box	Jamb, Single Gang, Double Gang	6" Round, 4.75" Square
Mounting Options	Single Gang, Surface Mount Box ( <b>10BOX24SGSM</b> ); Double Gang, Surface Mount Box ( <b>10BOXDGSM</b> )	Bollard ( <b>10BOLLARD series - without hole</b> )	Single Gang, Surface Mount Box ( <b>10BOX24SGSM</b> ); Angled Single Gang, Surface Mount Box ( <b>10BOXSGSMS</b> ); Double Gang, Surface Mount Box ( <b>10BOXDGSM</b> ); Bollard ( <b>10BOLLARD series</b> ); Jamb Box ( <b>10BOXJAMBST</b> )	Bollard ( <b>10BOLLARD series</b> )
<b>FUNCTIONALITY</b>				
Sensitivity (Adjustable)	YES	YES	YES	YES
Relay	NO	Pulse / Toggle	Timed / Toggle	Pulse
Output Hold Time	NO	NO	YES	NO
Audible Alert	NO	NO	YES	YES
LED	LED [dot] (Blue)	LED [dot] (Blue)	LED [window] (Blue / Green Toggle)	LED [ring] (Blue w/ Logic)
<b>USER INTERFACE</b>				
Sensitivity	POT	POT	POT	POT
Relay	Slide Switch	Slide Switch	Jumper	N/A
Output Hold Time	N/A	N/A	POT	N/A
Audible Alert	N/A	N/A	Jumper	DIP Switch
LED	N/A	N/A	N/A	DIP Switch

\* To be operated from SELV-compatible power supplies only

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