



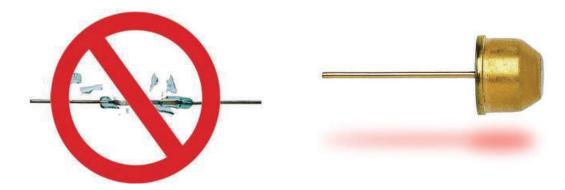
# Security Contacts Product Catalog

INVENTED and DESIGNED to address the undetected breaches of security that could occur when using easily exploitable and fragile reed switch sensors, MAGNASPHERE'S award-winning and patented technology is virtually unbeatable and unbreakable.

For more product information, visit magnasphere.com or call 262-347-0711

# Contacts made with Magnasphere Technology are Superior to reed switch contacts

"Most people don't realize how easy it is for an intruder to defeat a reed switch security system contact and evade detection," said Rick Kirschman, President of MAGNASPHERE Corp. "Magnets are the kryptonite to the common reed switch. If a rogue magnet was placed within range of a reed switch contact, an intruder could enter almost any home undetected without triggering an alarm. How safe are you really if your home security system can be defeated with a simple magnet?"



Invented by Dr. Randall Woods, the MAGNASPHERE® high security switch was designed to address the undetected breaches of security that could occur while using reed switch based home security system contacts. "When my neighbor's home got robbed and the alarm didn't go off, I wanted to know why," said Dr. Woods. "I soon discovered the reed switch security flaw and set out to design a more secure switch technology that would do the job that I thought the reed switch contact was supposed to do."

The US Government demanded a more effective countermeasure to protect its highest classified areas. While these Magnasphere defeat resistant HSS devices are now commonly used to detect breaches in high security facilities, their higher cost and large size made them an impractical security solution for most residential applications. Resistant to external magnetic defeat tampering, virtually unbreakable, and contact-weld resistant, MAGNASPHERE's patented "reed switch free" technology provides the absolute highest level of intrusion detection available to any security system owner today. In fact, MAGNASPHERE's MSS series provides the same level of external magnetic defeat protection found in the Federal Government's most secure installations, but at a fraction of the cost and size.

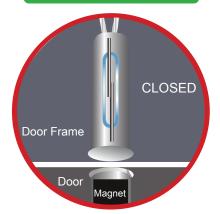
# Reed vs.MAGNASPHERE®



# Security contacts are made with a decades-old technology called the Reed switch.

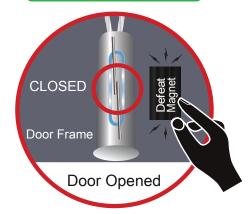
Reed switches have three inherent weaknesses when used in security contacts: (1) Easily defeated with magnets, (2)Prone to permanent contact weld failure (from lightning and power surges), and (3)fragile (made mostly of glass, they are subject to damage even when packaged as security contacts).

# SECURE: NO ALARM



Reed contacts operate on magnetic fields. Most contacts are Closed in the secure position (Closed Loop) when the door is closed and the magnet is near the switch.

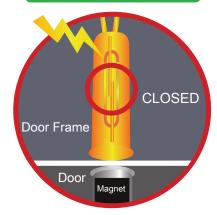
# FAILED: NO ALARM



Introducing a defeat magnet OUTSIDE the door will keep the reed contacts closed, allowing an intruder to enter without alerting the security system. They FAIL SECURE.

Reed switch contacts are globally magnetic: they will respond to the strongest magnetic field anywhere around the contact — not solely to the door magnet. When compromised, reed contacts will still send secure signals.

### NO ALARM



When closed reed contacts are exposed to power surges such as lightning strikes, they are prone to permanent contact welding.

# FAILED: NO ALARM



Once contacts have welded closed, they remain in that state though the door is open. They FAIL SECURE.

Reed contacts operate by magnetic induction, so they are not attracted to the door magnet.

# Reed vs. MAGNASPHERE®



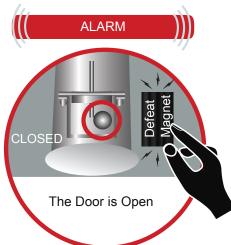
The patented, award-winning MAGNASPHERE switch technology was designed as a security device which over comes the deficiencies of reed contacts. The MAGNASPHERE

switch is (1) Resistant to magnetic defeat and tamper,(2) Resistant to permanent contact welding from lightning and power surges, and (3) Robust, all metal welded construction is virtually unbreakable.

# SECURE: NO ALARM



MAGNASPHERE security sensors' magnet ball contact is open in the secure position (Open Loop) when the door is closed and the door magnet is near the switch.



WILL ALARM.

MAGNASPHERE's contact is a spherical magnet and operates in a defined activation zone directed toward the door magnet.



A defeat magnet introduced OUTSIDE the door will have no effect on the ball contact. When the

door is opened, the contact will close. and the SYSTEM

# **NO ALARM**



MAGNASPHERE Security Sensors are highly resistant to contact welding from power surges and lightning strikes.



The Door is Open

Because the magnet ball contact will not weld, when the door is opened the contact will close and the SYSTEM WILL ALARM.



# Underwriters Laboratories Testing Criteria UL-634 Connectors and Switches for Use with Burgular-Alarm Systems

There are 40 standards that must be met to achieve listing to UL-634, which covers basic contacts, including Balanced Magnetic Switches, defined by UL-634 Section 3, Glossary, as: 3.2 BALANCED MAGNETIC SWITCH (BMS) - A switch that is constructed in such a manner or that includes additional components that increase resistance to magnetic, electrical and mechanical tampering or defeat.

It should be noted that while devices made with BMS provide "higher security" than standard contacts, they are not considered HIGH SECURITY CONTACTS until criteria listed below is met.

In addition, there are 8 testing criteria that must be met to achieve UL-634 Level 1 HIGH SECURITY. They are included in these categories:

- Mechanical Protection Against Tampering
- Electrical Protection Against Tampering
- Compromise Test Mechanical and Mercury Switches
- Compromise Test Magnetic Switches
- Compromise Test Enclosures
- Detection Test Measures Activation Distances

Beyond the UL-634 Level 1 listing, there are 8 additional requirements that must be met to achieve UL-634 Level 2 HIGH SECURITY:

- Made with Balanced Magnetic Switches (BMS)
- Nuisance Alarm Test
- Cover or Enclosure Tamper Test (When Applicable)
- Magnet Assembly Cover Removal Alarm Test (When Applicable)
- Switch Assembly Removal Tamper Test (When Applicable)
- Foreign Magnetic Field Tamper Alarm Test
- Foreign Magnetic Field Compromise Tests
- Extended Endurance Test



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# CUL) US CE

# **Magnasphere MSS Contacts**

Available Part Numbers

# MSS-09CL Recessed Contact



Switch not to be used in steel *frames* 

# Specifications

Max Current: **0.25A** Resistive Max Voltage: **30 VDC**Max Power: **.25 W** Resistive Configuration: "**Open Loop**" w/ Target Magnet in Place MAX Gap: **1/2"** [12.7mm]
Conductor: **#22 AWG** -

12" [30.5cm]

Color(s): Brown, and White

# MSS-10CL Recessed Contact



# **Specifications**

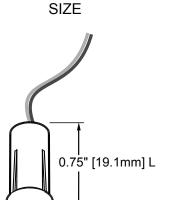
Max Current: **0.25A** Resistive Max Voltage: **30 VDC**Max Power: **.25 W** Resistive Configuration: "Closed Loop" w/ Target Magnet in

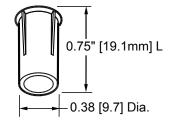
Place

MAX Gap: 3/8" [9.7mm] Conductor: #22 AWG -

12" [30.5cm]

Color(s): Brown, and White





# MSS-09CT Recessed Contact



Switch not to be

# Specifications

Max Current: **0.25A** Resistive Max Voltage: **30 VDC** 

Max Power: .25 W Resistive Configuration: "Open Loop" w/ Target Magnet in Place MAX Gap: 1/2" [12.7mm]

Conductor: Screw

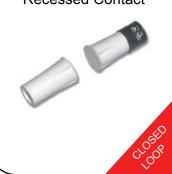
**Terminals** 

Color(s): Brown, Grey and

White

# used in steel frames

# MSS-10CT Recessed Contact



# **Specifications**

Max Current: **0.25A** Resistive Max Voltage: **30 VDC** Max Power: **.25 W** Resistive Configuration: "Closed Loop" w/ Target Magnet in

Place

MAX Gap: 3/8" [9.7mm]

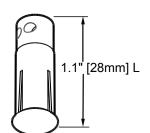
Conductor: Screw

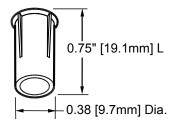
**Terminals** 

Color(s): Brown, Grey and

White

# SIZE





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# CUL US CE

# **Magnasphere MSS Contacts**

**Available Part Numbers** 

# MSS-19CL Recessed Contact



**Specifications** 

Max Current: **0.25A** Resistive Max Voltage: **30 VDC**Max Power: **.25 W** Resistive Configuration: "**Open Loop**" w/ Target Magnet in Place MAX Gap: **1/2"** [**12.7mm**] Conductor: **#22 AWG** -

12" [30.5cm]

Color(s): Brown, Grey and

White

# MSS-20CL Recessed Contact



**Specifications** 

Max Current: **0.25A** Resistive Max Voltage: **30 VDC** Max Power: **.25 W** Resistive

Configuration: "Closed Loop" w/ Target Magnet in

Place

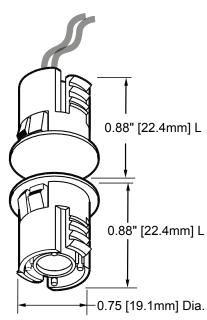
MAX Gap: 3/8" [9.7mm] Conductor: #22 AWG -

12" [30.5cm]

Color(s): Brown, Grey and

White

# SIZE



# MSS-19CT Recessed Contact



Specifications

Max Current: **0.25A** Resistive Max Voltage: **30 VDC** Max Power: **.25 W** Resistive Configuration: "**Open Loop**" w/ Target Magnet in Place MAX Gap: **1/2"** [**12.7mm**]

Conductor: Screw

**Terminals** 

Color(s): **Brown, Grey and** 

White

# MSS-20CT Recessed Contact



**Specifications** 

Max Current: **0.25A** Resistive Max Voltage: **30 VDC**Max Power: **.25 W** Resistive Configuration: "Closed Loop" w/ Target Magnet in

Place

MAX Gap: 3/8" [9.7mm]

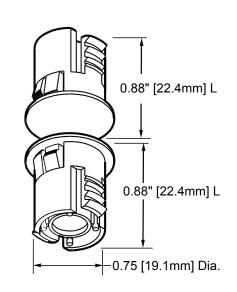
Conductor: **Screw** 

**Terminals** 

Color(s): Brown, Grey and

White

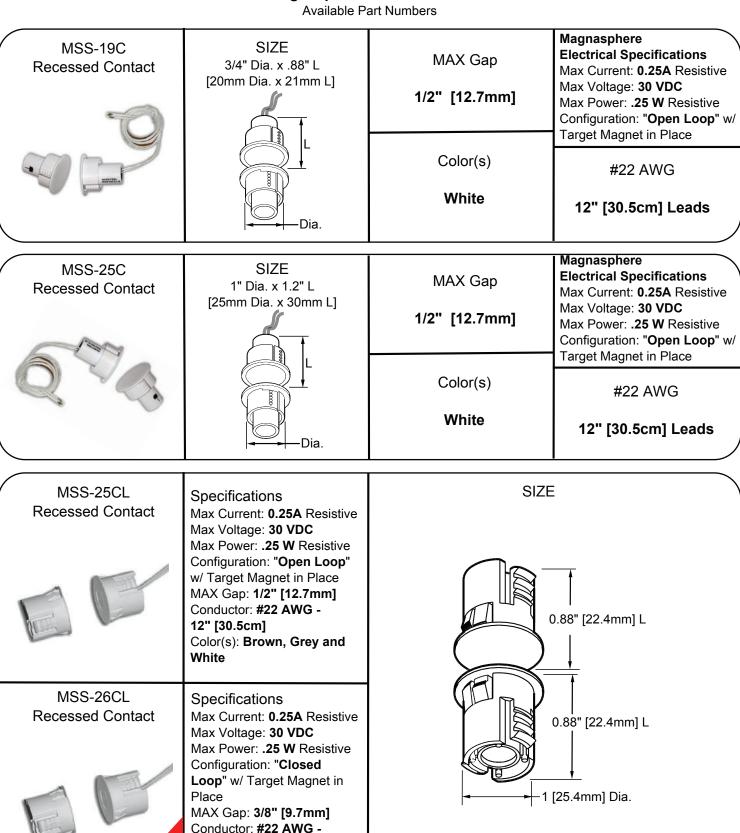
# SIZE



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# CUL US CE

# **Magnasphere MSS Contacts**



© MAGNASPHERE CORP. www.MAGNASPHERE.com

12" [30.5cm]

White

Color(s): Brown, Grey and

# CUL) US CE

# **Magnasphere MSS Contacts**

**Available Part Numbers** 

# MSS-K22 Surface Mount Contact



# **Specifications**

Max Current: **0.25A** Resistive Max Voltage: **30 VDC**Max Power: **.25 W** Resistive Configuration: "**Open Loop**" w/ Target Magnet in Place MAX Gap: **1/2"** [**12.7mm**] Conductor: **Screw** 

**Terminals** 

Color(s): Brown, Grey and

White

# MSS-K24 Surface Mount Contact



# Specifications

Max Current: **0.25A** Resistive Max Voltage: **30 VDC** Max Power: **.25 W** Resistive Configuration: "Closed Loop" w/ Target Magnet in

Place

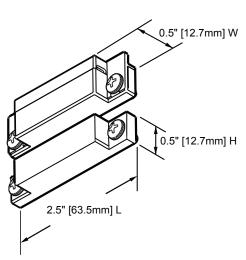
MAX Gap: 3/8" [9.7mm] Conductor: Screw

**Terminals** 

Color(s): Brown, Grey and

White

SIZE



# MSS-K22S Surface Mount Contact



# Specifications

Max Current: 0.25A Resistive
Max Voltage: 30 VDC
Max Power: .25 W Resistive
Configuration: "Open Loop"
w/ Target Magnet in Place
MAX Gap: 1/2" [12.7mm]
Conductor: #22 AWG -

12" [30.5cm] Leads Color(s): Brown, Grey and

White

# MSS-K24S Surface Mount Contact



# **Specifications**

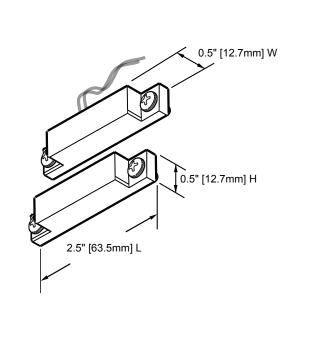
Max Current: **0.25A** Resistive Max Voltage: **30 VDC** Max Power: **.25 W** Resistive Configuration: "Closed Loop" w/ Target Magnet in

Place

MAX Gap: 3/8" [9.7mm] Conductor: #22 AWG -12" [30.5cm] Leads Color(s): Brown, Grey and

White







# **Magnasphere MSS Contacts**

Available Part Numbers

# MSS-53SL Surface Mount Contact



# **Specifications**

Max Current: 0.25A Resistive Max Voltage: 30 VDC Max Power: .25 W Resistive Configuration: "Open Loop" w/ Target Magnet in Place MAX Gap: 1/2" [12.7mm] Conductor: 12" Jacketed

Leads

Color(s): Brown, Grey and

White

# MSS-54SL **Surface Mount Contact**



# Specifications

Max Current: 0.25A Resistive Max Voltage: 30 VDC Max Power: .25 W Resistive Configuration: "Closed Loop" w/ Target Magnet in

Place

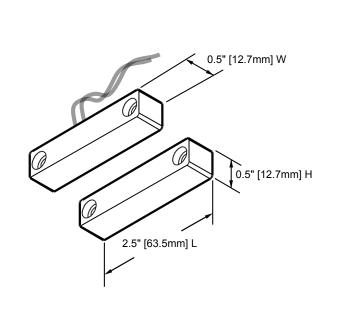
MAX Gap: 3/8" [9.7mm] Conductor: 12" Jacketed

Leads

Color(s): Brown, Grey and

White



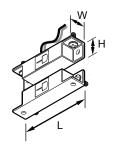


# MSS-63S **Surface Mount Contact**



# SIZE

2.5"L x .55"W x .55"H [64mm L x 14mm W x 14mm H]



# MAX Gap

1/2" [12.7mm]

Color(s)

**Brown and White** 

# Magnasphere

**Electrical Specifications** Max Current: 0.25A Resistive Max Voltage: 30 VDC Max Power: .25 W Resistive Configuration: "Open Loop" w/

Target Magnet in Place

#22 AWG

12" [30.5cm] Leads

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# Magnasphere MSS Contacts

Available Part Numbers



# MSS-89SL Surface Mount Contact



Specifications

Max Current: 0.25A Resistive

Max Voltage: 30 VDC
Max Power: .25 W Resistive
Configuration: "Open Loop"
w/ Target Magnet in Place
MAX Gap: 1/2" [12.7mm]
Conductor: 12" Jacketed

Leads

Color(s): Brown, Grey and

White

# MSS-88SL Surface Mount Contact



Specifications

Max Current: 0.25A Resistive Max Voltage: 30 VDC Max Power: .25 W Resistive Configuration: "Closed Loop" w/ Target Magnet in

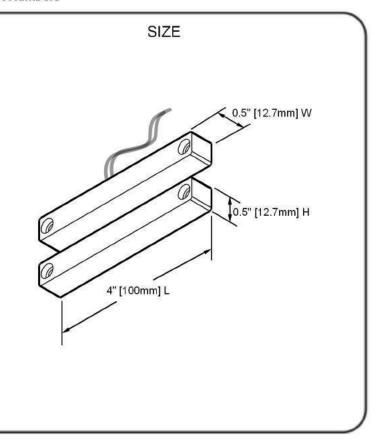
Place

MAX Gap: 3/8" [9.7mm] Conductor: 12" Jacketed

Leads

Color(s): Brown, Grey and

White



# 4" Overhead Door Contacts Available in Jacketed and Armored Leads

# OPEN LOOP

MSS-105S (60" Jacketed Leads)

MSS-105S-C18-L2 (18" Armored Cable)

MSS-105S-C36-L3.5 (36" Armored Cable)

### Specifications

Max Current: 0.25A Resistive Max Voltage: 30 VDC Max Power: .25 W Resistive Configuration: "Open Loop" w/ Target Magnet in Place MAX Gap: 1/2" [12.7mm]

Conductor: 22 AWG Color(s): Grey

# CLOSED LOOP

MSS-106S (60" Jacketed Leads)

MSS-106S-C18-L2 (18" Armored Cable)

MSS-106S-C36-L3.5 (36" Armored Cable)

# Specifications

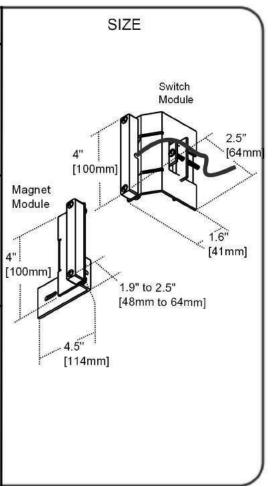
Max Current: 0.25A Resistive
Max Voltage: 30 VDC
Max Power: .25 W Resistive
Configuration: "Closed Loop" w/
Target Magnet in Place
MAX Gap: 3/8" [9.7mm]
Conductor: 22 AWG
Color(s): Grey

# Jacketed Leads Model



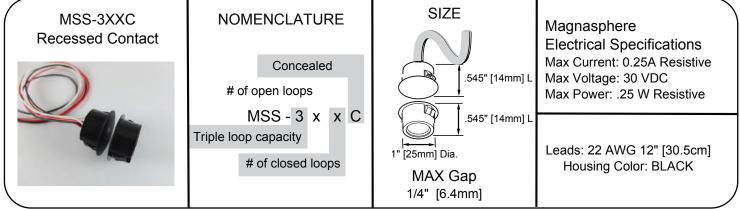
# Armored Cable Model

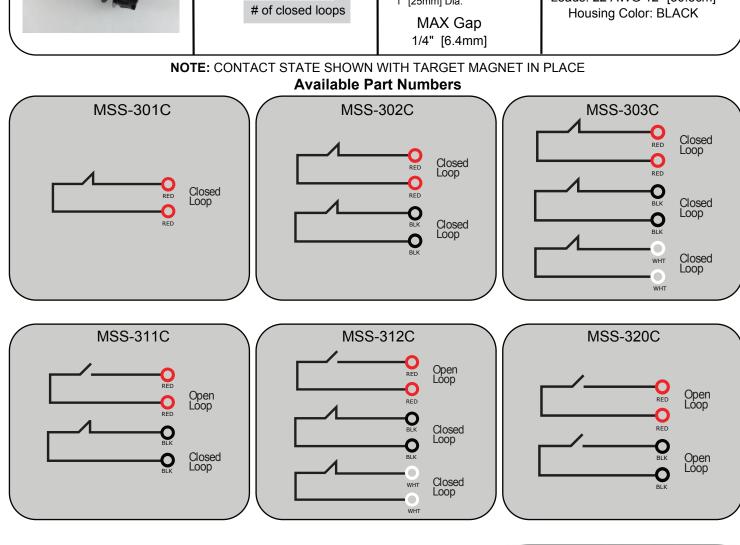


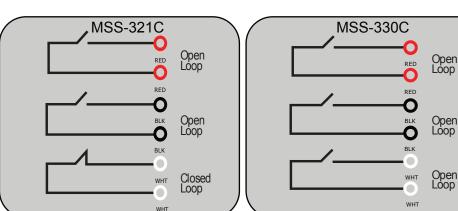


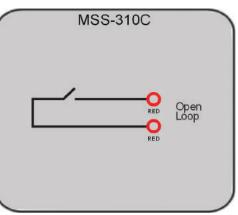
# CUL US CE

# Magnasphere MSS-300C Series (Recessed)



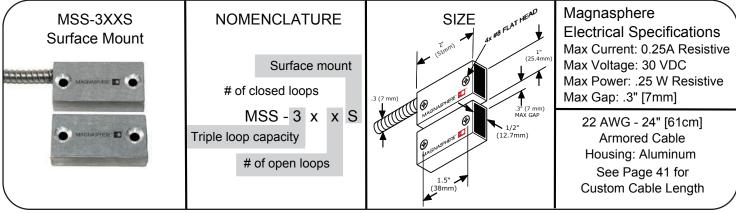


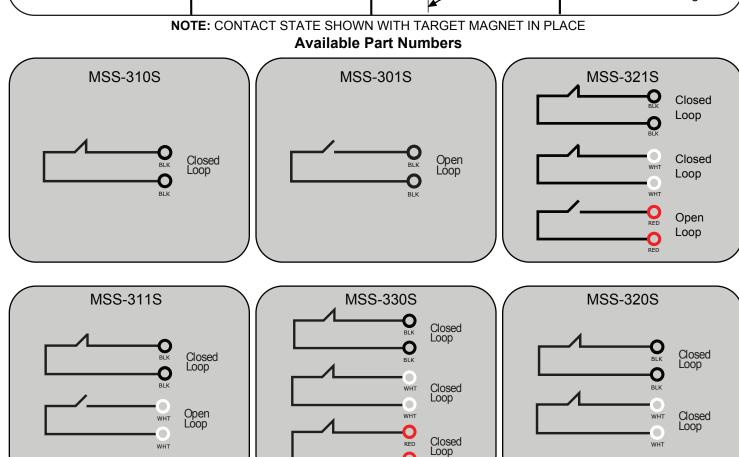


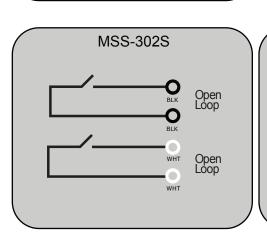


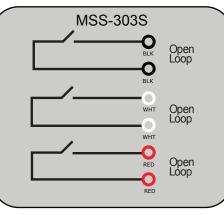
# CUL US CE

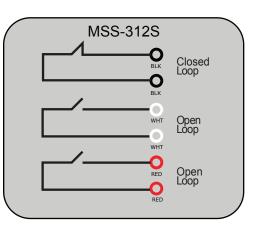
# Magnasphere MSS-300S Series (Surface Mount)



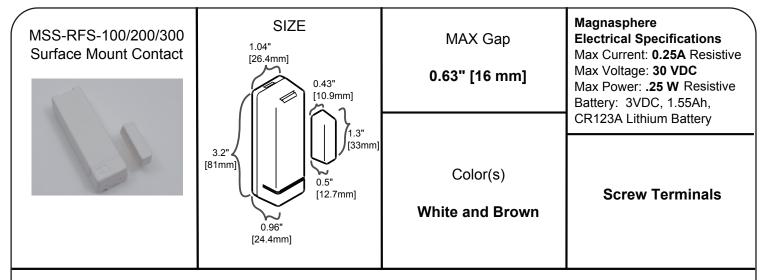








# **Magnasphere MSS-RFS Series Wireless Surface Mount Contact**



### **COMPATIBLE WITH THESE OEM\* FORMATS:**

MSS-RFS-100 = UTC - INTERLOGIX / ITI / ELK

MSS-RFS-200 = HONEYWELL

MSS-RFS-300 = 2 GIG

\*UTC, Interlogix and ITI are registered trademarks of United Technologies Corporation, Elk is a registered trademark of Elk Products, Inc., Honeywell is a registered trademark of Honeywell International, Inc., 2 GIG is a registered trademark of Nortek, Inc.

# RFS-158# SPACER KIT FOR THE MSS-RFS WIRELESS SERIES 25pc Spacer Kit WHITE **BROWN** CONTACT STATE SHOWN WITH MAGNET IN SECURE POSITION **RFS-1587** TRANSMITTER 2mm **RFS-1586** .079" 3<sub>mm</sub> **RFS-1588 RFS-1589** ONBOARD .118" CONTACT WIRE SAME AS AUX A **UP TO 100 ft** (30m)AUX AUX **BOTTOM VIEW** CLOSED LOOP OPEN\*

# Accessories

# **Available Part Numbers**

# **MSS Series**

P/N: 1605

**DESCRIPTION: Channel Magnet for Aluminum Doors** 

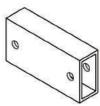
QTY: 1



P/N: 1595

DESCRIPTION: 1/2" Thick, Spacer for MSS-300S

QTY: 1

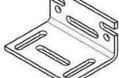


P/N: 1643

DESCRIPTION: MSS300S 1"x1.5"L Bracket (.093" thk) w/ Threaded Holes

QTY: 1





P/N: 1694

DESCRIPTION: MSS-300C Extended Reach / Gap Magnet Module

Increases the switch operation gap to 5/8" (.63")

QTY: 1





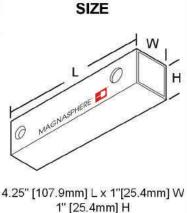
Note: Images are NOT to scale.





# Magnasphere UL-634 Level 1





# Magnasphere General Information

# Each Circuit/Contact

Housing: Aluminum Wire Lead Type: Solid Color-Coded Lead Wires,

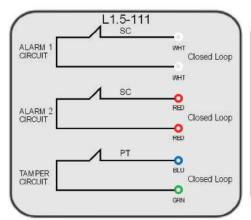
22 AWG

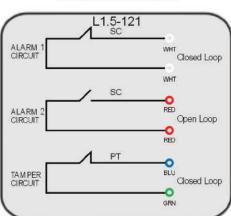
Max Current: 0.25 A Resistive

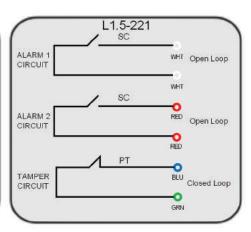
Max Voltage: 30 VDC Max Power: 0.250 W

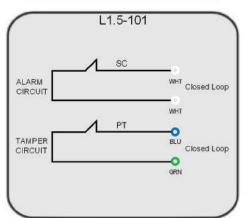
Max Gap: .25"

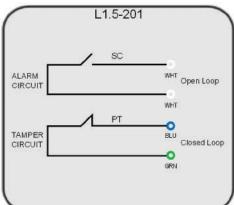
NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE
Available Part Numbers











SC = Secure Contact
PT = Pry Tamper

Wire Lead Type: 22Gauge (AWG),
18" [46cm] Armored Cable (Std.),
(See Page 41 for Custom

Cable Length)

Legend / Notes

# Accessories **Available Part Numbers** HSL-1.5 P/N: 1250 P/N: 1251 KIT: Removal Tamper Magnet KIT: Removal Tamper Cap QTY: 3pcs QTY: 5pcs P/N: 1270 P/N: 1524 KIT: 1/16" Spacers for HSL-1.5 KIT: 1/8" Out-Swing Spacer for HS-L1.5 QTY: 4pcs (For use with narrow door stops.) QTY: 1pc P/N: 1612 P/N: 1618 KIT: L1.5 L-Bracket KIT: Z Bracket QTY: 1 QTY: 1 P/N: 1615 P/N: 1616 KIT: 1" x 1" Aluminum Spacer KIT: L1.5 Extended L-Bracket Kit QTY: 1 QTY: 1 Orthographic Front View Orthographic Back View P/N: 1600 KIT: Bracket for HSL1.5 Direct Replacment to 2700 Series QTY: 1 Note: Images are **NOT** to scale.

# INSTALLER COMPONENTS FOR HSL-1.5 SERIES REPLACEMENT KIT P/N: 1542 Description (Note: Images are NOT to scale) Pry-tamper Plugs (Plastic) / Qty: 2 Pry-tamper Magnet ( Dia. 3/8" x 1/2" Length) / Qty: 1 Plastic Spacers (1/16" Thk.) / Qty: 2 Poly Bag / Qty:1



# CUL US CE

# Magnasphere UL 634 Level 2 High Security Contacts (Surface Mount)

# HSS-L2S (Single Alarm Contact) UL634 Level 2



Magnasphere General Information
Aluminum Case: Silver-Gray Anodized

Wire Lead Type: Solid Color-Coded Lead Wires, 22 AWG

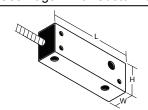
Max Current: 0.25 A Resistive

Max Voltage: 30 VDC Max Power: 0.250 W

Operating Temperature: -40° C to +80°C

Max Gap: 3/16" (Note: .125" Gap for UL634 Level 2 Installation)

See Page 41 for Custom Cable Length



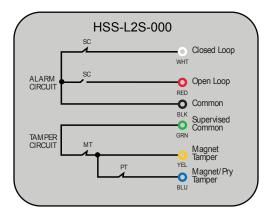
# **SIZE**

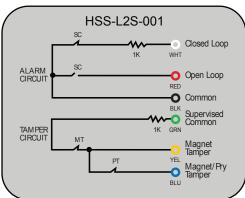
4.25"L x 1"W x 1.5"H

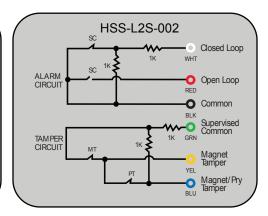
[107.9mm L x 25.4mm W x 38.1mm H]

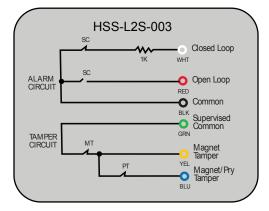
# NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

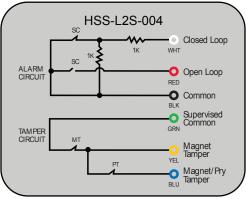
# **Available Part Numbers**

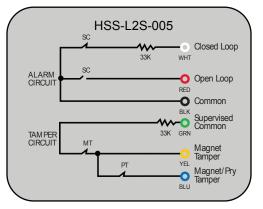


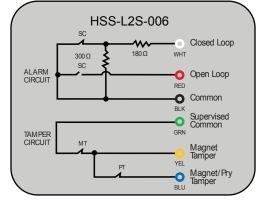


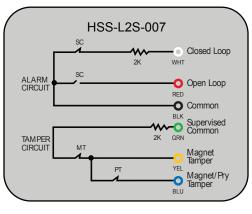












# Legend / Notes

SC = Secure Contact

MT = Magnet Tamper

PT = Pry Tamper ##K = Resistor

36" [91cm] Armored Cable (Std.), (See Page 41 for Custom

Cable Length)

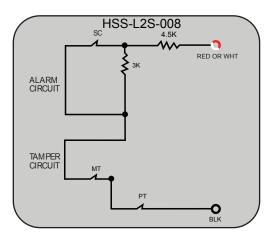


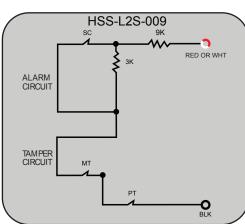
# Magnasphere HSS-L2S (Single Alarm Contact) Continued

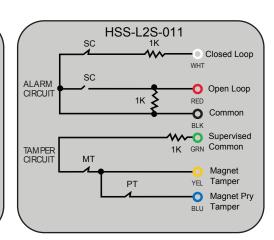
UL 634 Level 2 High Security Contacts (Surface Mount)

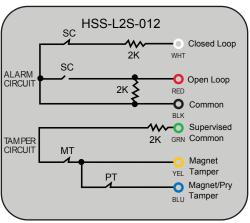
# NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

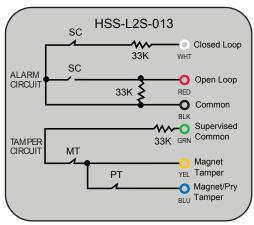
# Available Part Numbers

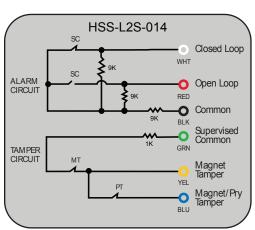




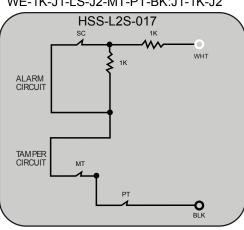




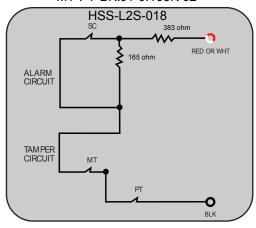




# L2S-017 WE-1K-J1-LS-J2-MT-PT-BK:J1-1K-J2



# L2S-018-RD/WE-0.383K-J1-LS-J2-MT-PT-BK:J1-0.165K-J2



# Legend

SC = Secure Contact MT = Magnet Tamper PT = Pry Tamper ##K= Resistor

36" [91cm] armored cable (Std.), (See Page 41 for Custom Cable Length)



# Magnasphere UL 634 Level 2 High Security Contacts (Surface Mount)

# HSS-L2D (Dual Alarm Contacts) UL634 Level 2



Magnasphere General Information
Aluminum Case: Silver-Gray Anodized

Wire Lead Type: Solid Color-Coded Lead Wires, 22 AWG/AC 36" STD

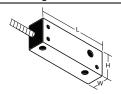
Max Current: 0.25 A Resistive

Max Voltage: 30 VDC Max Power: 0.250 W

Operating Temperature: -40° C to +80°C

Max Gap: 3/16" (Note: .125" Gap for UL634 Level 2 Installation)

See Page 41 for Custom Cable Length



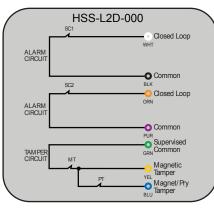
# **SIZE**

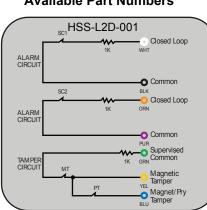
4.25"L x 1"W x 1.5"H

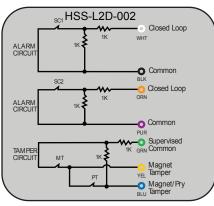
[107.9mm L x 25.4mm W x 38.1mm H]

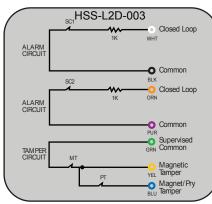
# NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

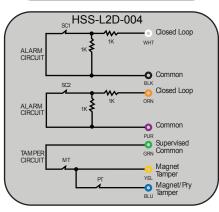
# **Available Part Numbers**

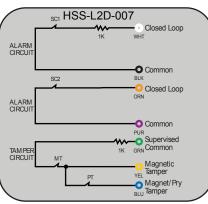


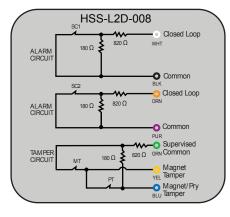


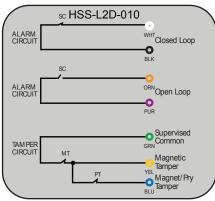












Legend / Notes

SC = Secure Contact
MT = Magnet Tamper
PT = Pry Tamper
##K = Resistor

36" [91cm] Armored Cable (Std.),
(See Page 41 for Custom
Cable Length)

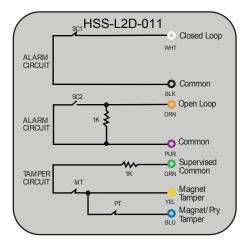


# Magnasphere HSS-L2D (Dual Alarm Contacts) Continued

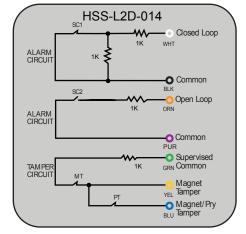
UL 634 Level 2 High Security Contacts (Surface Mount)

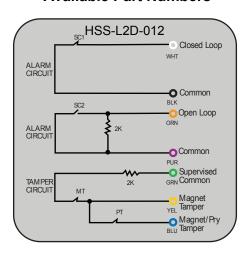
NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

# **Available Part Numbers**

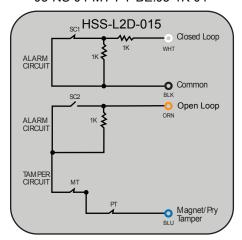


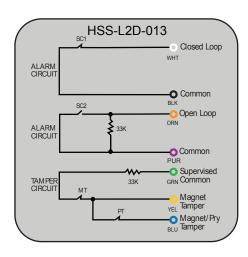
L2D-014-WE-1K-J1-LS-J2-BK:J1-1K-J2:OE-1K-LS-PE:GN-1K-MT-J3-YW:J3-PT-BE





L2D-015 WE-1K-J1-LS-J2-BK:J1-1K-J2:OE-J3-NS-J4-MT-PT-BE:J3-1K-J4





Legend

SC = Secure Contact

MT = Magnet Tamper

PT = Pry Tamper

##K = Resistor

36" [91cm] Armored Cable (Std.), (See Page 41 for Custom Cable Length)



# Magnasphere UL 634 Level 2 High Security Contacts (Surface Mount w/ Conduit Fitting)



Magnasphere General Information
Aluminum Case: Silver-Gray Anodized

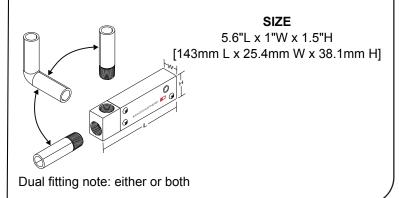
Wire Lead Type: Solid Color-Coded Lead Wires, 22 AWG, 36"

Max Current: 0.25 A Resistive

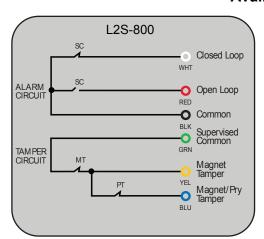
Max Voltage: 30 VDC Max Power: 0.250 W

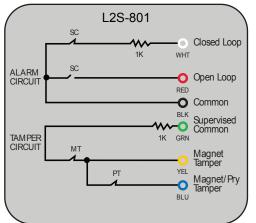
Operating Temperature: -40° C to +80°C

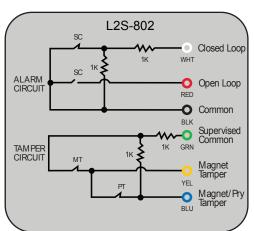
Max Gap: 3/16" (Note: .125" Gap for UL634 Level 2 Installation)

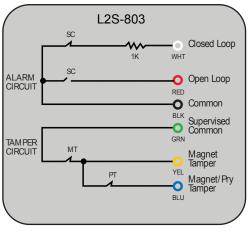


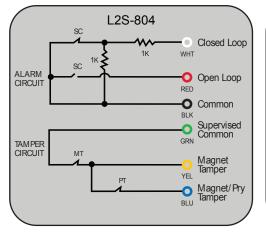
# Available in all L2D / L2S Schematic Variants











Legend / Notes

SC = Secure Contact
MT = Magnet Tamper
PT = Pry Tamper
##K = Resistor

36" [91cm] Leads (Std.)

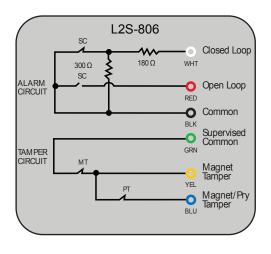


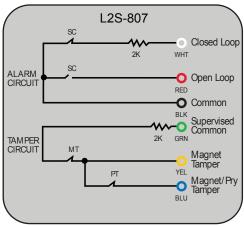
# Magnasphere L2S-800 (Single Alarm Contact) Continued

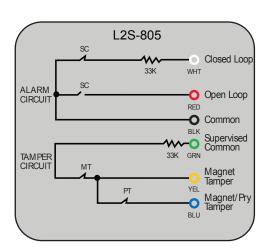
UL 634 Level 2 High Security Contacts (Surface Mount)

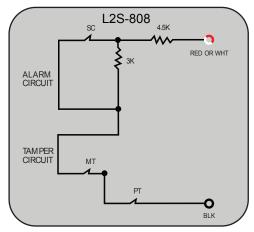
# NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

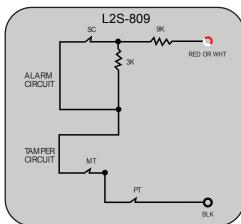
# Available Part Numbers

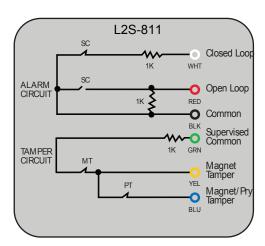


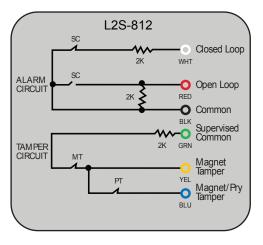


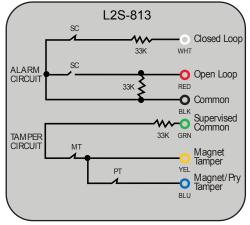












Legend / Notes

SC = Secure Contact
MT = Magnet Tamper
PT = Pry Tamper
##K = Resistor

36" [91cm] Leads (Std.)



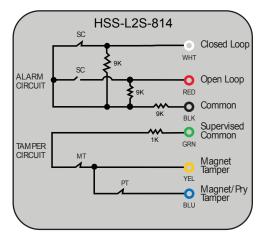
# Magnasphere L2S-800 (Single Alarm Contact) Continued

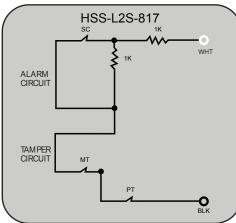
UL 634 Level 2 High Security Contacts (Surface Mount)

# NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

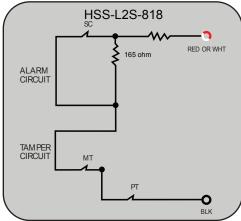
### **Available Part Numbers**

# L2S-817 WE-1K-J1-LS-J2-MT-PT-BK:J1-1K-J2









# Legend

SC = Secure Contact

MT = Magnet Tamper

PT = Pry Tamper

##K= Resistor

36" [91cm] armored cable (Std.), (See Page 41 for Custom Cable Length)

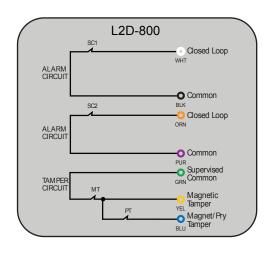


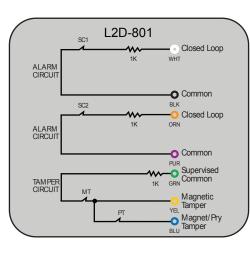
# Magnasphere L2D-800 (Dual Alarm Contacts)

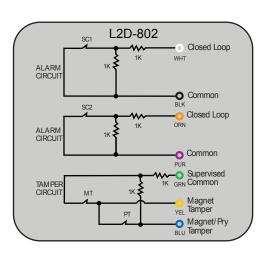
UL 634 Level 2 High Security Contacts (Surface Mount)

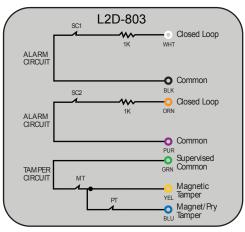
# NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

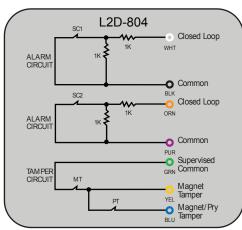
# **Available Part Numbers**

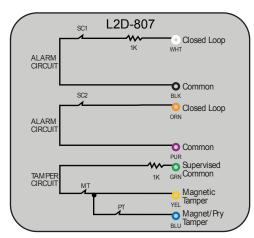


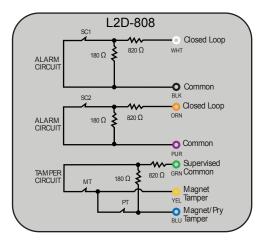


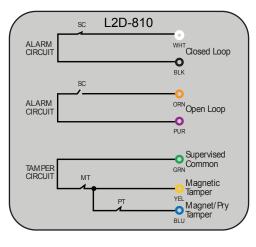












Legend / Notes

SC = Secure Contact
MT = Magnet Tamper
PT = Pry Tamper
##K = Resistor

36" [91cm] Leads (Std.)

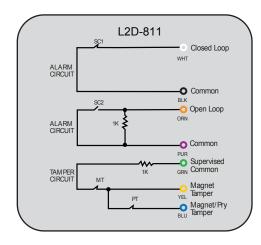


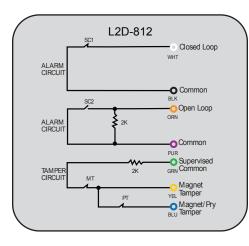
# Magnasphere L2D-800 (Dual Alarm Contacts) Continued

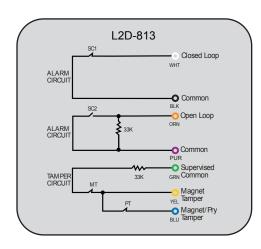
UL 634 Level 2 High Security Contacts (Surface Mount)

# NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

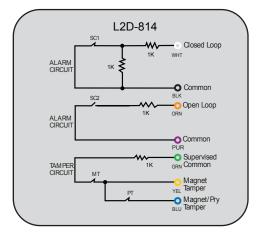
### Available Part Numbers

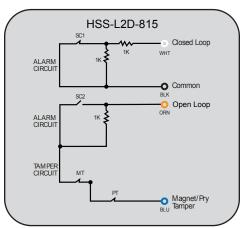






L2D-815 WE-1K-J1-LS-J2-BK:J1-1K-J2:OE-J3-NS-J4-MT-PT-BE:J3-1K-J4





Legend / Notes

SC = Secure Contact
MT = Magnet Tamper
PT = Pry Tamper
##K = Resistor

36" [91cm] Leads (Std.)

# **Accessories**

# **Available Part Numbers**

# HSS

P/N: 1250

KIT: Removal Tamper Magnet

QTY: 3pcs



P/N: 1251

KIT: Removal Tamper Cap

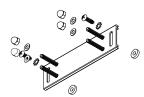
QTY: 5pcs



P/N: 1229

KIT: Adjustable Magnet Bracket

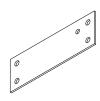
QTY: 1



P/N: SP062

KIT: HSS Plastic Shims

QTY: 10pcs



P/N: HSS-1565

KIT: HSS Series Calibration Magnet Spacer

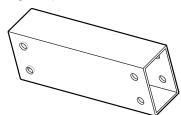
QTY: 10 pcs



P/N: 1102

KIT: HSS Magnet Housing 1" Spacer

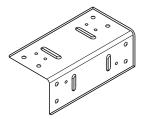
QTY: 1

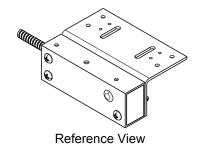


P/N: 1625

KIT: HSS L-Bracket

QTY: 1

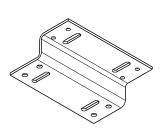


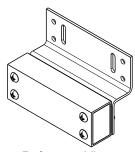


P/N: 1620

KIT: HSS Z-Bracket

QTY: 1





Reference View

Note: Images are **NOT** to scale.

# INSTALLER COMPONENTS FOR HSS L2X-0XX SERIES

REPLACEMENT KIT P/N: 1528

Description (Note: Images are **NOT** to scale)

#10 x 2" Length / Screws / Type F / Qty: 7



#6 x 1" Length / Screws / Type F / Qty: 2



#8-32 x 7/16" Length / SS Set Screw / Qty: 1



Calibration Magnet Spacer (Metal) / Qty: 1



Pry-tamper Plugs (Plastic) / Qty: 2



Pry-tamper Magnet (Dia. 3/8" x 1/2" Length) / Qty: 1



Plastic Spacers (1/16" Thk.) / Qty: 2



Poly Bag / Qty:1

# INSTALLER COMPONENTS FOR HSS L2X-8XX SERIES

REPLACEMENT KIT P/N: HSS-1543

Description (Note: Images are **NOT** to scale)

#10 x 2" Length / Screws / Type F / Qty: 7



#6 x 1" Length / Screws / Type F / Qty: 2



Pry-tamper Plugs (Plastic) / Qty: 2



Pry-tamper Magnet (Dia. 3/8" x 1/2" Length) / Qty: 1



Plastic Spacers (1/16" Thk.) / Qty: 2



1/2" NPT Plug / Qty: 1

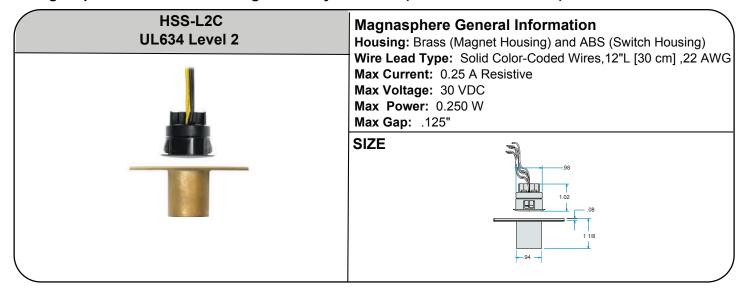


Poly Bag / Qty:1



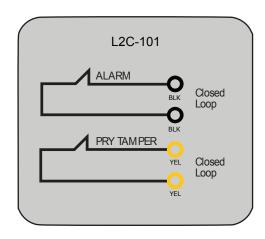


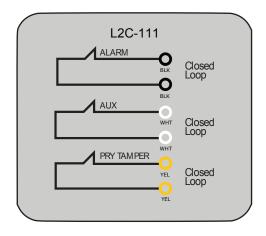
# Magnasphere UL 634 Level 2 High Security Contacts (Recessed/Concealed)



# NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

# **Available Part Numbers**

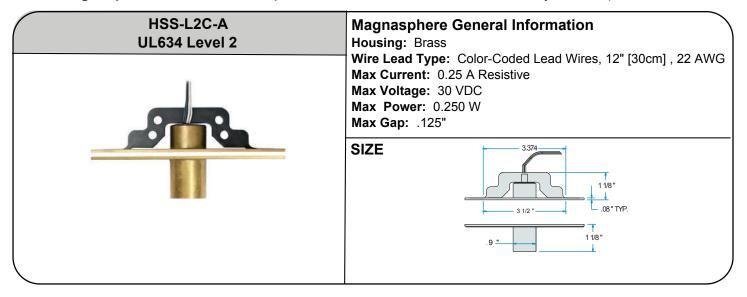






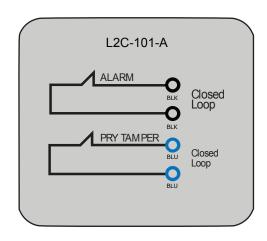


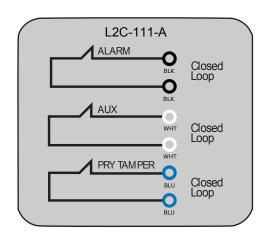
# Magnasphere UL 634 Level 2 (Recessed/Concealed: Fits to an ANSI style cutout)



# NOTE: CONTACT STATE SHOWN WITH TARGET MAGNET IN PLACE

# **Available Part Numbers**







# Accessories

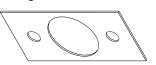
# Available Part Numbers

# L2C-XXX & L2C-ANSI

P/N: 1222

KIT: 1/32" Spacers for L2C-XXX Magnet Module

QTY: 10pcs

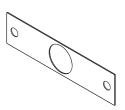


Magnetic South Pole at Face

P/N: 1367

KIT: L2C ANSI 1/32" spacer

QTY: 10pcs

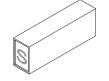


P/N: 1384

KIT: L2C Series Pry

**Tamper Test Magnet** 

QTY: 1

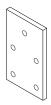


P/N: 1640

KIT: Mounting Tab Kit for one L2C-A Switch

Module - For Retrofit ANSI Cutout

QTY: 2pcs



Note: Images are **NOT** to scale.

# INSTALLER COMPONENTS FOR HSS L2C

REPLACEMENT KIT P/N: HSS-1544

Description (Note: Images are **NOT** to scale)

Tamper Bracket (Plastic) / Qty: 1



Plastic Spacer (1/32" Thk.) / Qty: 3



#10 x 1" Length / Phillips Undercut Flathead Screw / Qty: 2



Poly Bag / Qty:1

# INSTALLER COMPONENTS FOR HSS L2C-A

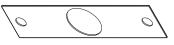
REPLACEMENT KIT P/N: HSS-1545

Description (Note: Images are **NOT** to scale)

#8-32 x 3/8" Length / SS Phillips Undercut Flathead Screws (Tamper Bracket) / **Qty: 2** 



Plastic Spacer (1/32" Thk.) / Qty: 3



#8-32 x 1/2" Length / Brass Slotted Flathead Screw (Switch and Magnet) / **Qty:4** 



Poly Bag / Qty: 1

# **Overhead Door Brackets (OHD)**

**Available Part Numbers** 

Over Head Rail Mount Brackets (OHD) for HSL-1.5 (Level 1)

P/N: HS-OHD-111

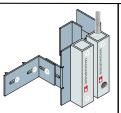
KIT: HS-L1.5-111 mounted on HS-1271

QTY: 1 pc(s)

P/N: HS-OHD-121

KIT: HS-L1.5-121 mounted on HS-1271

QTY: 1 pc(s)



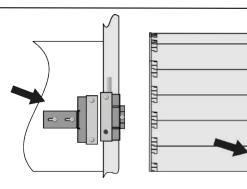
P/N: 1271

KIT: Overhead Door Rail Mount Bracket for HS-L1.5

QTY: 1 pc(s)



Assembled Representation \* for HSL-1.5 Over Head Rail Mount Bracket For reference only, see page 42 for link to HS-L1.5 installation instructions.



# Over Head Rail Mount Brackets (OHD) for HSS (Level 2)

P/N: HSS-1670

KIT: Over Head Rail Mount Bracket Kit

(OHD) for HSS (Level 2) - Right Side

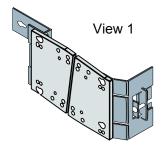
QTY: 1 pc(s)

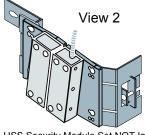
P/N: HSS-1671

KIT: Over Head Rail Mount Bracket Kit

(OHD) for HSS (Level 2) - Left side

QTY: 1 pc(s)





HSS Security Module Set NOT Included

P/N: HSS - 1670 - L2S/D - XXX

KIT: Overhead Door Bracket w/ HSS-L2 - Right Side \*

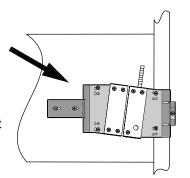
QTY: 1 pc(s)

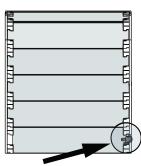
P/N: HSS - 1671 - L2S/D - XXX

KIT: Overhead Door Bracket w/ HSS-L2 - Left Side \*

QTY: 1 pc(s)

Assembled Representation \* for HSS Over Head Rail Mount Bracket Kit For reference only, see page 42 for link to HSS-L2 installation instructions.





Notes: 1. Images are **NOT** to scale.

2. \*Interior Reference Point

# Roll Up Door Bracket Kit

# **Available Part Numbers**

Roll-up Door Contact (HSL-1.5) Level 1 (Brackets w/ contacts pre-mounted)

P/N: HS1452-L1.5-111 & -121

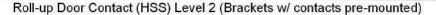
KIT: Roll Up Door Bracket w/HSL1.5 - Right Side\*

QTY: 1 Set

P/N: HS1453-L1.5-111 & -121

KIT: Roll Up Door Bracket w/HSL1.5 - Left Side\*

QTY: 1 Set



P/N: HSS-1450-L2S/D-XXX

KIT: Roll Up Door Bracket w/HSS L2 - Right Side\*

QTY: 1 Set

P/N: HSS-1451-L2S/D-XXX

KIT: Roll Up Door Bracket w/HSS L2 - Left Side\*

QTY: 1 Set

# Roll-up Door Bracket Set for HSL1.5 and HSS (Brackets Only)

P/N: 1450

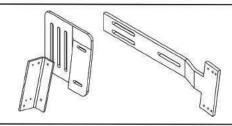
KIT: Roll Up Door Bracket Set for HSS or HSL1.5 - Right Side\*

QTY: 1 Set

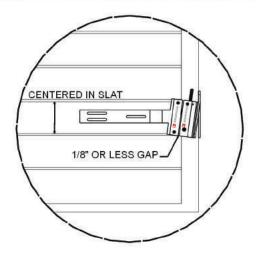
P/N: 1451

KIT: Roll Up Door Bracket Set for HSS or HSL1.5 - Left Side\*

QTY: 1 Set



Assembled Representation \* for Roll-up Door Contact (HSS / HSL-1.5) For reference only, see page 42 for link to HSS-L2 installation instructions.

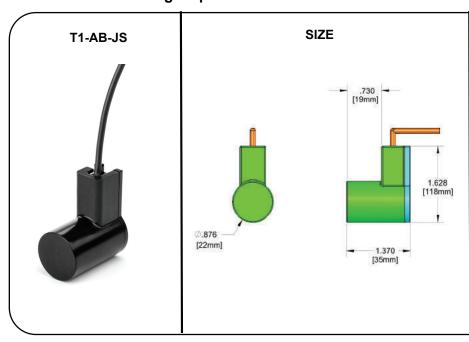


Notes: 1. Images are NOT to scale.

2. \*Interior Reference Point

# Magnasphere T1-AB-JS Unidirectional Tilt / Disturbance Switch

**(**E



# Mechanical and Electrical

**Specifications** 

Poles and Circuits: SPST (ON/OFF)

Max Current: **0.25A** Max Voltage: **30 VDC** Resistive

Max Power: .25 W

Mechanical Life: 1 Million Operations (Typical)

Angles of Operation: ON = 180° (+/- 4°) OFF= 180° (+/- 4°)

# Color(s)

Black ABS

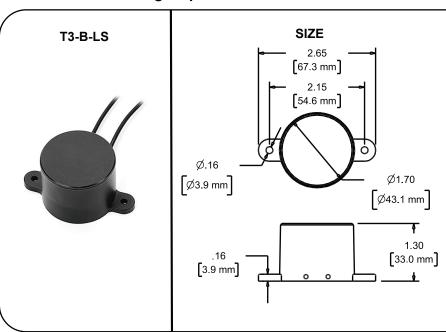
(Flame Rated: 94HB min)

### Wire Leads

JACKETED 22/2 ASG 0.11" OD x12"

# Magnasphere T3-B-LS Omnidirectional Tilt / Disturbance Switch





# Mechanical and Electrical Specifications

Poles and Circuits: SPST (ON/OFF)

Max Current: **0.25A** Max Voltage: **30 VDC** Resistive

Max Power: .24 W

Mechanical Life: 1 Million Operations (Typical)

Angles of Operation:

11° above horizontal typical actuation. 6° above horizontal typical return.

# Color(s)

Black ABS

(Flame Rated: 94HB min)

### Wire Leads

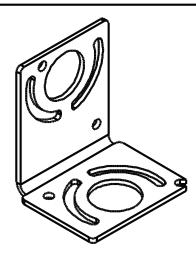
12" [30.5cm] - 2x 20 AWG Stranded,

Black SXL Insulated

# L Bracket for use with T1-AB-JS Unidirectional Tilt Switch and T3-B-LS Omni-Directional Tilt / Disturbance Switch Qty:1

P/N: 1608

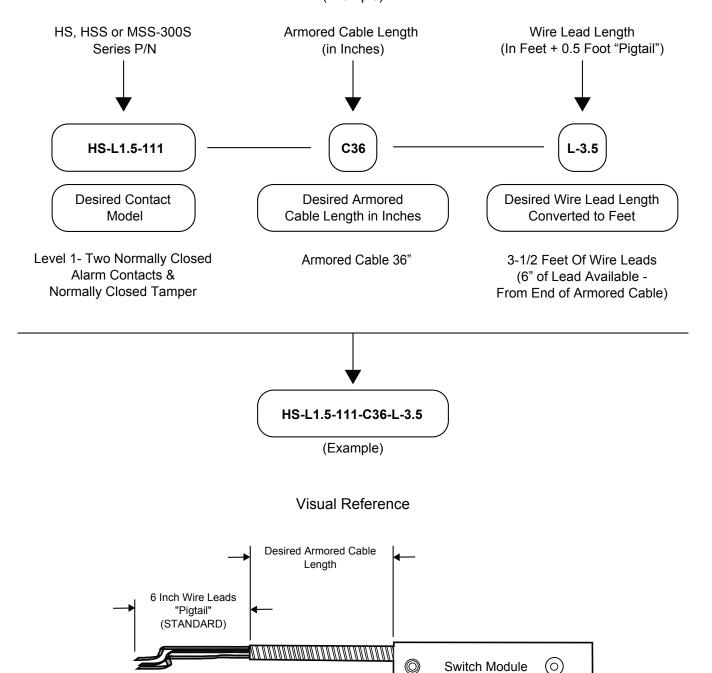
Description (Note: Image(s) are NOT to scale)





# How To Order Magnasphere Contacts With Longer Than Standard Armored Cable/Leads Max Armored Cable Length 10'

(Example)



Note: Same ordering convention applies to HSS, HSL1.5 and MSS-3XXS contacts.





# MSS SERIES CONTACTS, MSS-RFS SERIES CONTACTS

http://magnasphere.com/mss-standard-contacts/mss-standard-downloads/

# MSS-300 SERIES CONTACTS

http://magnasphere.com/mss-multi-switch-products/mss-multi-switch-downloads/

HS-L1.5 SERIES – UL634 LEVEL 1 HIGH SECURITY CONTACTS http://magnasphere.com/hs-series/hs-I1-5-download/

HSS-L2 SERIES – UL634 LEVEL 2 HIGH SECURITY CONTACTS http://magnasphere.com/hss-series/hss-series-downloads/

# T SERIES TILT & DISTURBANCE SENSORS

http://magnasphere.com/sensor-series/magnasphere-sensor-series-downloads/

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