HARCO SECURITY DEVICES

MAGNASPHERE® HSD®

Get More Security.™

MAGNASPHERE'S® patented technology overcomes the easily exploitable weaknesses in reed switch based magnetic contacts.

Get More Secure.™

Virtually **unbeatable** and **unbreakable**, MAGNASPHERE'S® award-winning technology provides the absolute highest level of intrusion detection to ensure high security areas remain secured.

The Most Advanced and Effective High Security Magnetic Sensor

NEW

Meets UL 634 and DCID standards for use in sensitive compartmented information facility (SCIF).

MAGNASPHERE® HSD KEEPS THE INSIDERS OUT

The Insider Threat Is Real

Experts agree that the most devastating threats to corporate and government security have come from employees who were deemed trusted insiders.

Armed with a simple magnet, unscrupulous employees can disable reed switch triple biased BMS magnetic contacts from the inside during the day so that they can enter undetected later that night.

It's no secret that reed switch door and window magnetic contacts are one of the weakest links in any physical perimeter security system . . . especially to the insiders.

Unlike triple biased contacts, the HSD is the only high security sensor that is resistant to external AND internal magnetic defeat tampering.

Establishes "New Industry Standards" for High Security Sensor Performance.

- Resistant to External AND Internal Magnetic Defeat.
- Resists High Voltage Discharge Contact Weld Failure.
- No Minimum Sensor and Actuation Magnet Distance.
- New Features Offer Unparalleled High Security Performance.

Superior Replacement for Triple Biased BMS Contacts in All Security Applications.

- HSD Advancements Overcomes Triple Biased Weaknesses.
- Triple Biased Contacts Can Be Defeated with Simple Magnets.
- High Voltage Can Permanently Weld Triple Biased Shut.
- HSD Was Designed to Be Exact Retro-Fit Replacement.

Highest Level of Intrusion Detection for Government and Commercial Markets.

Federal Buildings, Military Bases, Nuclear Power Plants, Water Treatment Facilities, Prisons, Airports, Research Labs, Data Processing and Storage Centers, Warehouses, Manufacturing Plants, Banks, Museums, Jewelry Stores.

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MAGNASPHERE® HSD®

TECHNICAL SPECIFICATIONS

Sensor Housing: Brushed Anodized Aluminum

Available Colors: Silver (Standard) Black (Optional) Gold (Optional)

Wire Lead Type: 36" Stainless Steel Cable Color Coded Lead Wires.
Dimensions: 4.25" L x 1.5" H x 1.0" D
Gap Distance: Max. Operating Gap Distance 1/4"
Electric Configuration: In Secure Position – Secure Contacts N.C., Magnet Tamper N.C., Pry Tamper N.C., Auxiliary N.O.
Loop Type: Closed
Maximum Current: .25 A
Maximum Voltage: 30 VDC
Maximum Power: 3.0 W (without internal terminating resistors). 1.0 W (with internal terminating resistors).
Operating Temperature: -40 ºC to +80 ºC

INSTALLATION AND CONFIGURATION

- Precision Built to Aerospace Sensor Standards.
- Compatible with Control Panel Models that Accept Contact Inputs.
- Easy Installation Reduces Labor Costs.
- Suitable for Indoor and Outdoor Use.
- Pry Tamper: Sensor is Integrated into the HSD; No Separate Backplate to Install.
- Control Panel Resistor: Integrated into Sensor.

American-Made MAGNASPHERE® Switch Technology

NEW

INDUSTRY AWARDS

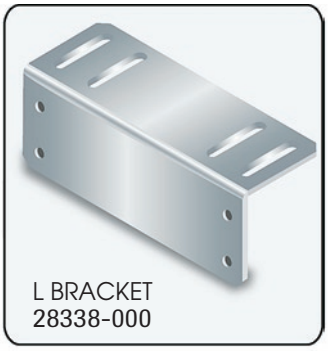
Best of Show Award: ISC Expo
Gold Award Sensor Technology: Sensors Expo
Best Intrusion Detection: ISC Expo

PATENTED DESIGN

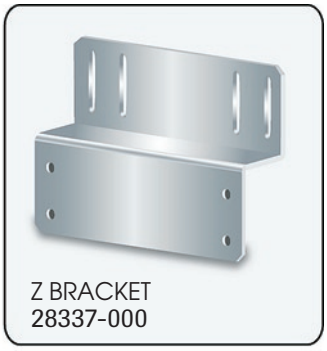
MAGNASPHERE® products are covered by one or more of the following U.S. and international patents:

#5332992 #5530428 #5673021
#5880659 #5977873 #6087936
#6506987 #6603378 #6803845
#7023308 and Patents Pending.

HSD MOUNTING BRACKETS



L BRACKET
28338-000



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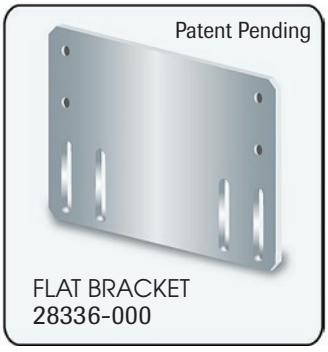
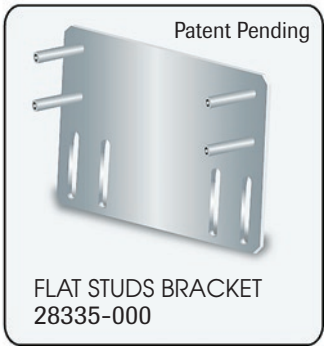


Patent Pending
FLAT BRACKET
28336-000



Patent Pending
FLAT STUDS BRACKET
28335-000

HSD PART NUMBERING SYSTEM

30000 / 30002 - 00 00 2 - 000

Single Zone Sensor
Dual Zone Sensor
Single Zone Resistor
Dual Zone Resistor

Resistor	
OHMS	XX Value
None	0.0
A.BK	AB

Housing Color
0 = Silver
1 = Gold
2 = Black

Label
000 = Standard
001 = Custom

HSD PART NUMBERING EXAMPLE

c UL us

30000-00002-001
30000 Single Zone Sensor
0000 No Internal Resistors
2 Black Housing
000 Label

30002-47220-000
30002 Dual Zone Sensor
4722 Zone 1: 4.7K Resistor Zone 2: 2.2K Resistor
0 Silver Housing
000 Label

MAGNASPHERE® Corp. has teamed with Harco, Inc., a leading aerospace sensor manufacturer, with the purpose of providing superior performing magnetic contact sensor technology to the residential, commercial, and federal government security markets. The HSD's leading-edge technology aims to set new industry standards for high security sensors while providing an affordable and more effective alternative to reed-based security contacts.

To learn more about the MAGNASPHERE® HSD High Security Sensor visit **www.MAGNASPHERE.com** or call 262-347-0711.

HARCO SECURITY DEVICES

MAGNASPHERE® HSD

Models 30000 / 30002

Installation Guide

CAUTION

Units utilize high strength magnetic fields. Keep away from susceptible devices such as pacemakers, CRT screens, etc.

Potential Pinch Points Exist When:

- Attaching Magnet to Mating Surface
- Separating from Switch Assembly
- Several Actuators are brought within Close Proximity

1 All circuits are shown with actuator in secure position.

2 Align the switch and actuator in the proper orientation.

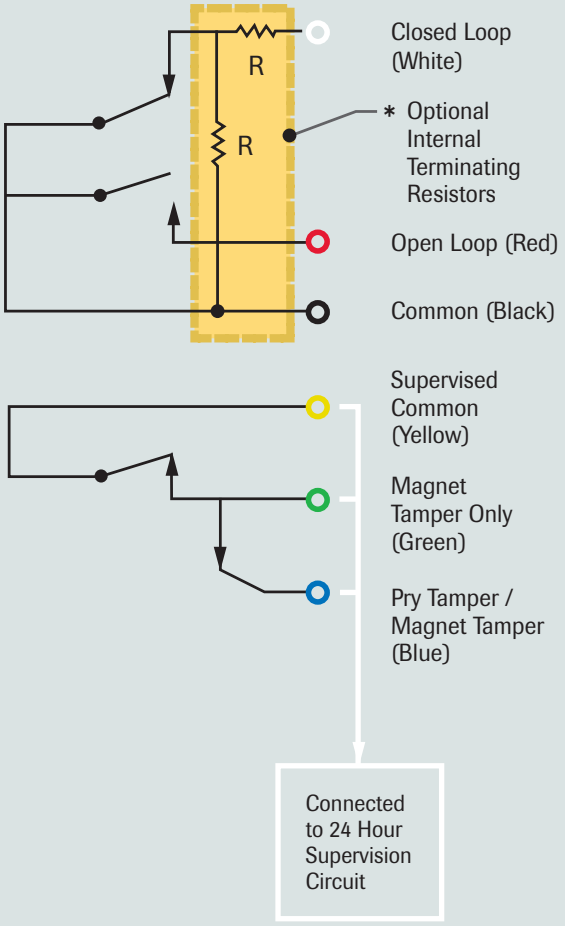
- Amored cable exiting to left.
- Identical switch and actuator labels visible and identical orientation.

3 Operational gap:

- Set operational gap to 1/16” or less.
- Switch will operate from 0.0” up to 1/4” depending on mounting surface but high security designation applies to a limit of 1/8”.
- Minimum pracable gap is recommended.
- Install the switch at the desired location utilizing the template or unit to locate holes.

(continued on back)

Model 30000



HIGH SECURITY DEVICE
Suitable for Outdoor Use

HARCO SECURITY DEVICES

MAGNASPHERE® HSD

4 Pry Tamper:

- If pry tamper is not required, skip to step 5.
- A ferrous base results in increased sensitivity for pry tamper actuation (.1/16") and thus does not meet the current UL 634 requirement for actuation between 1/16" –1/4".
- To meet UL 634 requirements, mount magnet P/N 28351-000 behind the pry tamper switch. Recess magnet flush with mounting surface.
- If mounting base is non-ferrous, utilize the mounting template to locate the position of the pry tamper switch.
- Install a ferrous screw or target with a nominal target size of 1/4" behind the pry tamper actuation (.1/16") and thus does not meet the current UL 634 requirement for actuation between 1/16"-1/4".
- To meet UL 634 requirements, mount magnet P/N 28351-000 behind the pry tamper switch. Utilize the mounting template to locate the position of the pry tamper switch. Recess magnet flush with mounting surface.

5 Auxiliary contact provides an alternative non-secure open loop connection.

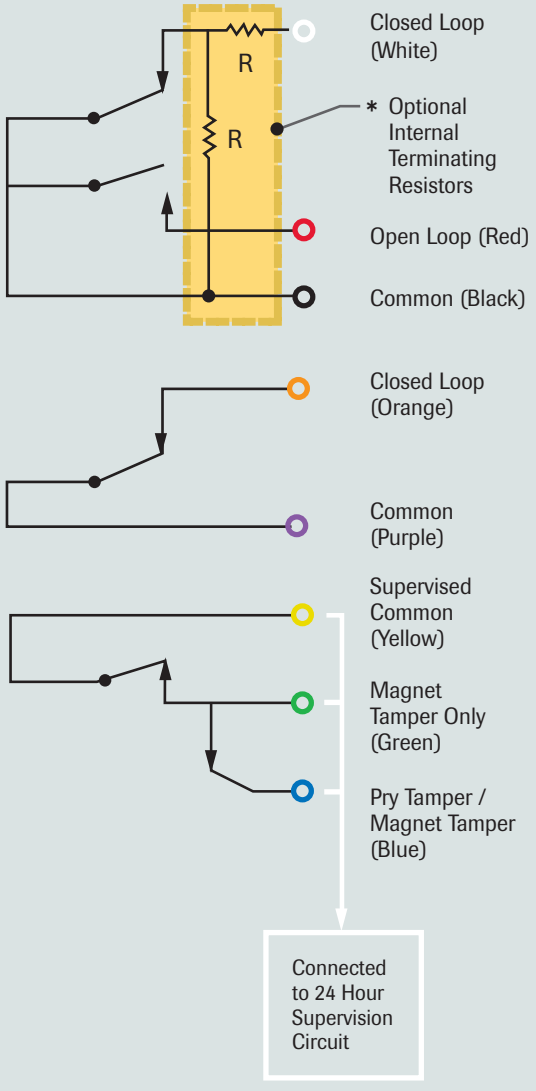
6 Contacts for closed-loop and open-loop switches:

- SPST
- Voltage: 30 VDC Max
- Current: 0.25 A Max
- Power: 3.0 W Max (without terminating resistors)
- Power: 1.0 W Max (with internal terminating resistors)*

7 Wire per diagram:

- Wire conduit: 3 foot stainless steel armored cable
- Conductors: 22 AWG tinned copper leads

Model 30002



HIGH SECURITY DEVICE
Suitable for Outdoor Use

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