





Magnasphere has created L2X-800 'High Security Sensor" - The Next Generation Sensors That Meet UL634 Level 2 High Security Standards for SCIFs. Safes, Vaults and Hazardous **Environment Applications** 

ULI HIGH SECURITY LEVEL 2 CUL HIGH SECURITY BP 10350



## Magnasphere L2X-800 Technology

- INTRINSICALLY SAFE, Simple Apparatus (see page 3)
- Resistant to External and INTERNAL magnetic defeat
- Dual 1/2" NPT conduit ports provide top or side connection options
- Replacement for existing BMS devices
- No adjustment required for installation
- Industry's most secure removal tamper sensor / circuit

- MAGNASPHERE switch technology resists permanent contact welding (lightning, power surges, stun guns)
- Single (L2S) and dual (L2D) alarm contacts available
- American made using award-winning MAGNASPHERE switch technology
- Compatible with control panel models that accept contact inputs
- **Built-in EOL** resistors available
- Competitively priced

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#### L2X-800 SERIES DIMENSIONS



#### CONSTRUCTION AND TECHINICAL SPECIFICATIONS

Aluminum Case: Silver-Gray Anodized

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

Hermetically Sealed Switch Contacts

Fully Epoxy Potted Assembly

Single Alarm Contact Version (L2S): Closed or Open Loop

Dual Alarm Contact Version (L2D): Closed Loop

Removal Tamper Circuit: Closed Loop

Max Current: 0.25 amps Resistive

Max Voltage: 30 VDC

Max Power: 0.250 W

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

Suitable for Indoor and Outdoor Use

Intended for connection to UL Listed Compatible Control Panels

PATENTED DESIGN

#5977873	#6087936
#6506987	#6603378
#6803845	#7023308
#7291794	#RE39731
#7944334	#8228191

& Other Patents Pending

MAGNASPHERE<sup>®</sup> Corp. provides superior performing magnetic contact sensor technology for the residential, commercial, and federal government security markets. The HSS'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® L2 HSS High Security Sensor visit www.MAGNASPHERE.com or call 262-347-0711.

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The MAGNASPHERE HSS High Security Sensor conforms to the requirements of

### UL Standard 913

Standard for Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, III, Division 1, Hazardous (Classified) Locations

for use in Hazardous locations as an INTRINSICALLY SAFE SIMPLE APPARATUS\*.

### INTRINSICALLY SAFE

The Construction of the HSS devices incorporates robust, hermetically sealed MAGNASPHERE switch technology, complete epoxy encapsulation of all electrical, components and magnetic actuation.

The MAGNASPHERE HSS models L2S and L2D used as intrinsically safe simple apparatus in hazardous locations MUST be used in conjunction with a <u>Div. 1 Class 1 Group B Intrinsically</u> <u>Safe Barrier listed by a Nationally</u> <u>Recognized Testing Laboratory (NRTL).</u>↑

The appropriate use of the apparatus in the hazardous locations is addressed in the instructions for the barrier (or device) providing power to this apparatus and to the hazardous location.

\* Reference UL Standard 913 (includes UL 60079-11, the US adoption of the IEC 60079-11 standard for intrinsic safety, taking a national deviation [identified in the standards DV or DR] to correspond to the definition in the national electrical code). Sections: 3.1.1, 5.4 and associated DV and DR deviations.

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f - or suitably - rated and listed
to the according hazardous location.

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## How the HSS Magnet / Removal Tamper Circuit Works

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The MAGNASPHERE HSS Incorporates the Most Secure Anti-Tamper Features of Any Device Available. In addition to the sensors inside that will detect the presence of a stronger defeat magnet placed on any surface of the HSS, the removal tamper circuit will alarm BEFORE the HSS can be removed.

You will notice that the mounting hole on the upper right face of the HSS sensor is larger than the other mounting holes and slightly off set towards the center of the sensor. A tamper proof MAGNASPHERE switch is positioned inside the unit facing the bore of this mounting hole. Once the unit has been mounted, the removal tamper magnet (included) is inserted into this mounting hole. It will be attracted to the mounting screw and will activate the removal tamper switch. The mounting hole cover cap (included) is then inserted and locked into position.

In order to access that mounting screw to remove the sensor, the locking cap must be pried out, and a steel rod or magnet inserted into the hole to extract the tamper magnet. Removal of the tamper magnet will cause the removal tamper switch to alarm.

### **Typical Part Numbers / Wiring Schematics**



All Circuits Shown with Magnet Actuator in Secure Position. For Built-in EOL Resistor Configurations and Values (not shown), Visit WWW.MAGNASPHERE.COM.