



The ShockWatch MAG 2000 is a field-tested solution to your mishandling problems. It provides an indisputable record of how your shipment is handled.

### Save Money. Save Time. Deter Mishandling...

The ShockWatch MAG 2000 impact indicator is a cost-effective, resettable and reusable device designed to monitor the handling of fragile goods and freight containers greater than 500 lbs. The device is also widely used on rail cars and trucking fleets to monitor for excessive impacts during humping or latching.

While MAG 2000 can be used on either a product or the product packaging, it is generally advisable that the MAG 2000 be placed on the product since the impact experienced by the product itself is generally more important than the impact received by the packaging. The placement of the MAG 2000 will affect the selection of the proper sensitivity.

### Benefits:

- Acts as a visual deterrent to improper handling
- Reduces mishandling through awareness
- Provides indisputable evidence of mishandling
- Alerts recipient to inspect contents before acceptance
- Promotes chain of accountability for all product handling
- Confirms effectiveness of packaging
- Helps identify trouble spots in supply chain, from production to transportation and storage
- Helps increase quality of product from dock to dock



# ShockWatch® MAG 2000

## SELECTION GUIDE

There are two things you need to know to begin selecting a MAG 2000 sensitivity: shipment weight and fragility (Low, Average, or High). The selection guide should always be used as a starting point only. The MAG 2000 that will be best suited to your application will also take into account product packaging.

### Low Fragility Zone

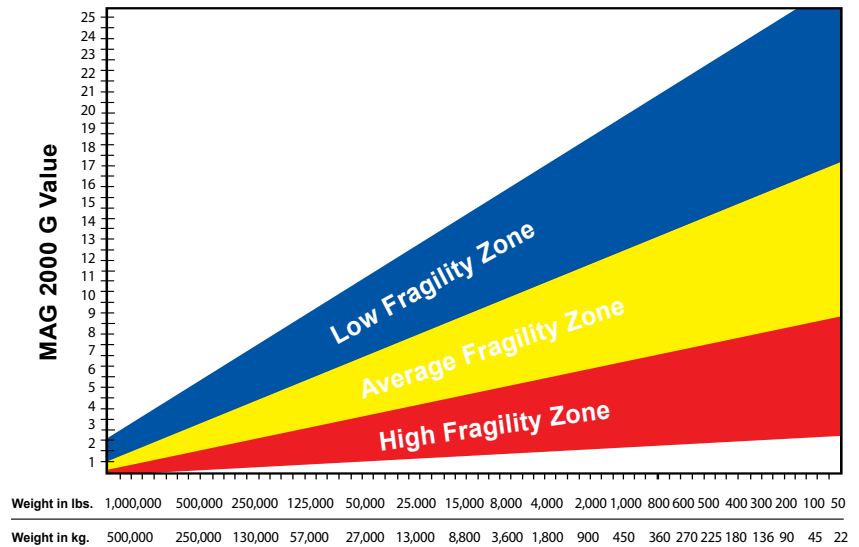
Applicable in situations where both visible and hidden damage is possible and a single extreme impact will cause damage to product.

### Average Fragility Zone

Applicable in situations where there is a moderate degree of stability and survivability built into the product and where a standard mode of transportation is used.

### High Fragility Zone

Applicable in situations where hidden damage is the key concern. Typically, these products will be constructed of low-tolerance components, such as data storage drives, optical lenses, or any other products that require precise alignment.



The MAG 2000 is available in three different response orientations: HH, VV, and VH. HH is used to sense horizontal impacts and is mounted to a horizontal surface. VV is used to sense vertical impacts and is mounted to a vertical surface. VH is used to sense horizontal impacts but is mounted to a vertical surface.

Key Specifications		Product Description	Part Number*
<b>Sensitivity range</b>	0.5 - 20G	MAG 2000 - Single Unit	M21-xG
<b>Impact duration</b>	0.5 - 50ms	MAG 2000 - Single Unit with Adhesive Backing	M21A-xG
<b>Tolerance</b>	±10% at 20°C / 68°F, 1 ATM	MAG 2000 - Single Unit with Bracket	M22-xG
<b>Operating temperature</b>	-20°C to 60°C / -4°F to 140°F	MAG 2000 - Single Unit with Bracket & Adhesive Foam Tape Backing	M22A-xG
<b>Weight (varies by sensitivity)</b>	~31.31g	MAG 2000 - Two Units with Bracket & Adhesive Foam Tape Backing (Specify the G levels at time of order)	M23A
<b>Dimensions</b>	2.5in x 2.4in x 0.79in / 63.50mm x 60.96mm x 20mm	**"x" is the G value desired; 0.5G to 20G <b>Minimum order quantity: 5</b>	
<b>Security</b>	Tamper-resistant, Resettable		
<b>Adhesive</b>	Acrylic		
<b>Adhesive shelf life</b>	2 years when stored at 20°C / 68°F, 1 ATM		
<b>Storage recommendations</b>	20°C / 68°F, 1 ATM, 0 - 99% RH Non-condensing		

ShockWatch can help you set up a damage reduction program tailored to your unique circumstances. For more information, please contact your ShockWatch representative.

**SHOCKWATCH®**  
SMART SOLUTIONS FOR SAFE TRANSIT