

AMS-3000

Kaman's Advanced Magnetic Sensing (AMS, AMS-HP, and AMS-XHP) precision non-contact measuring systems designed to detect magnetic materials through non-magnetic barriers

- Detect target position through non-magnetic, conductive, and non-conductive barriers
- RMS resolution down to 1 micron
- Standard measuring range up to 7 mm
- Designed for operation in environments from 500 psi to over 30,000 psi
- Available in standard sensor configurations or are easily tailored to meet semi-custom and custom OEM integration requirements
- DIN rail configuration ideal for industrial, research, and OEM applications



Specification

The following specifications can be applied to the full range of systems using standard sensor options in the sensors chart. Each sensor has specific performance specifications that can be better than those listed below.

Resolution	1 micron
Frequency response	12.5 kHz (-3dB point)
Output options	0-10 VDC (standard); 0-5 VDC \pm 5 VDC, 4-20 mA
Operating temperature range	Sensor -40°F to +248°F (-40°C to +120°C)
Storage temperature range	Sensor -58°F to +302°F (-50°C to +150°C)
Power supply requirements	Voltage +12 to +28 Vdc
Applications:	Industries:
<ul style="list-style-type: none"> • Condition Monitoring • Non-Contact Speed Sensor • Shaft Runout • Gear Tooth Condition Monitoring • Surface Finish Thickness Inspection • Crack and Defect Detection 	<ul style="list-style-type: none"> • Military/Aerospace • Oil, Gas, and Subsea Condition Monitoring • Industrial Condition Monitoring • Process Control • Thin Film, Coating, and Plating Thickness Inspection • UAV/Drones

Kaman's AMS sensors deliver high reliability and superior performance in high-pressure environments enhancing any condition monitoring systems' ability to measure and monitor runout, speed, and changes in machine vibration profiles to help reduce risk and minimize damage and unplanned downtime due to unanticipated failures in the field.

Designed for operation in environments from 500 psi to over 30,000 psi, Kaman's proprietary AMS, AMS-HP, and AMS-XHP precision sensing systems do not require a magnet and work with any ferromagnetic target. AMS sensors detect target position through non-magnetic, conductive, and non-conductive barriers making leak-proof, penetrator free equipment instrumentation installations possible, and economical without special magnets.

Kaman Precision Products' line of rugged AMS non-contact displacement sensors are IP-67 rated with hermetic options available. For installation versatility, Kaman's AMS sensors come in standard IP-67 rated threaded, flanged, AS4320 pressure port compatible, and bolt head style configurations with hermetic options available. In addition to Kaman's standard sensor configuration options, Kaman's AMS sensors are easily tailored to meet semi-custom and custom OEM integration requirements.

For more information about how Kaman's AMS family of non-contact displacement sensors can help solve your high-pressure displacement sensing problem contact us today!