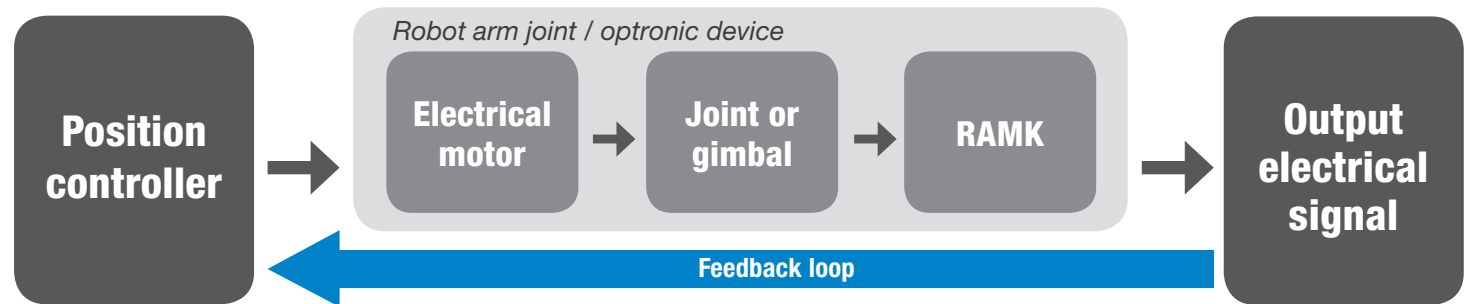
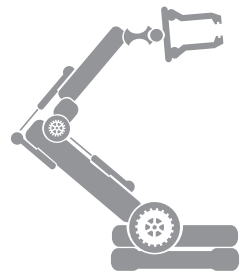
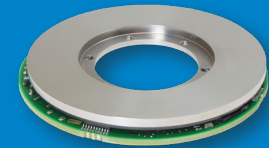




THE VISHAY ADVANTAGE AND WHY IT MATTERS...

ROBOT ARM JOINT OR OPTRONIC DEVICE

RAMK – Rotational Absolute Magnetic Kit Encoder
RAME – Rotational Absolute Magnetic Encoder (body)



Product Family	Advantage	Why it Matters (Benefit to the Engineer)	Where Should it be Considered?	Best Parameter / Example
RAMK RAME	<ul style="list-style-type: none"> • Very high accuracy and real resolution • Plug and play, easy to mount, high customization capability • Not sensitive to moisture, pollution, temperature, or external magnetic fields • Excellent resistance to shock and vibrations 	<p>The high accuracy and resolution make such position sensors ideal for embedded devices that need high precision and repeatability, and which work in harsh environments.</p> <p>Due to the devices' plug and play characteristic, the customer doesn't need any calibration after mounting.</p>	<p>The magnetic encoders are used in:</p> <ul style="list-style-type: none"> • Industrial robots, human/robot collaboration, automated guided vehicles • Gimbals in missiles and optronic devices • Side stick units, incidence probes, actuators for aerospace applications • Windmills and on solar panels 	<p>Accuracy of 13 bits and resolution of 19 bits for the RAMK060</p> <p>Accuracy of 16 bits and resolution of 20 bits for the RAMK090</p> <p>Accuracy of 15 bits and resolution of 21 bits for the RAME033 / RAME037</p>

Other Customer Benefits	How Is This Achieved?	Example Device / Details	Comments
Saves space => smaller thickness and light weight	Design of electronic architecture, choice of magnetic material (patented)	Thickness of 6.5 mm for a kit variant, weight < 55 g (example RAMK060)	Such thickness is especially suitable for the robot arm joint and the gimbal function