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Sensor Package Verification workflow

I formulated seven steps that I am going to use to verify if the sensors we are using are ideal for our application. In this project we incorporated the magnetometer as the primary sensor and the time-of-flight sensor as the secondary sensor but both work in tandem.

Steps:

1. *Determine Type of Sensing*
2. *Composition of Target*
3. *Distance to Target Object*
4. *Sensor Size/Shape*
5. *Control Interface*
6. *Wiring Type*
7. *Special Requirements*

Step1: Determine Type of Sensing *- Does the sensor determine a process parameter (e.g., temperature, pressure, flow, torque . . .), the presence of an object, the distance to a target, or the position of an object or mechanism?*

Step2: Composition of Target *- What is the material composition of the object: metallic, non-metallic, magnetic, solid, liquid, etc.?*

Step3: Distance to Target Object *- How far away from the object can the sensor be mounted?*

Step4: Sensor Size/Shape *- Do you have space limitations? What sort of physical size or shape best fits my application?*

Step5: Control Interface *- What kind of controller interface and switching logic is required?*

Step6: Wiring Type *- How do I want to make the electrical connections?*

Step7: Special Requirements *- Are there any special application requirements such as elevated temperatures, or environmental interference?*