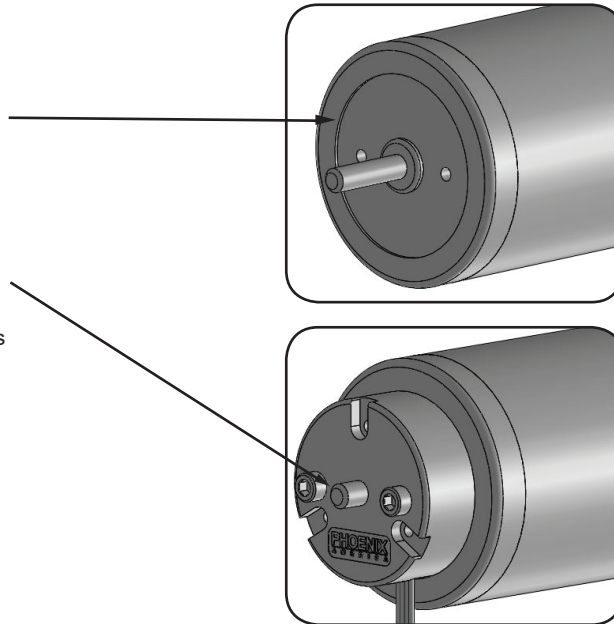


**Sensor Mounting Guidelines**

Concentricity of the sensor housing to the magnet rotor is critical for optimal sensor performance. Considering the following during the design phase will ensure concentricity and ease of assembly.

- Tight molding tolerances allow for the outside diameter of the sensor to be used to locate the sensor housing concentric to the motor shaft and magnet rotor. A machined pocket on the motor endbell works well for alignment. Recommended pocket is 0.015" to 0.020" deep and 2.11" in diameter.
- Extending the shaft through the optional shaft pass through hole is an easy way to align the sensor housing to the motor shaft and magnet rotor. Simply position the sensor so that the shaft is centered concentrically in the shaft pass through hole.
- If previous two methods of alignment are not used it is recommended that the sensor be fastened to the motor using #5-40 or M3 mounting screws. The slightly larger diameter of the #5-40 and M3 screws will compensate for some of the tolerance allowed when using the standard recommended #4-40 or M2.5 mounting screws.



**Target Rotor Mounting Guidelines - Engineered Polymer Hub (Mounting Style H) For Press Fit Application**

- Proper alignment of the target rotor to the sensing element is critical for optimal sensor performance. Insure that the rotor is mounted to the specified height shown below.
- A machined step on the motor shaft provides a quick and repeatable method for positioning the target rotor. Spacers or other fixturing should be used if no mechanical locating features are on the shaft.
- A chamfered lead in on the shaft will aid in aligning the rotor.
- Prior to insertion, the motor shaft should be clean and free of any oils, lubricants, or solvents.
- Proper fixtures and support must be used to ensure the magnet is pressed on straight and aligned with the motor shaft.
- Opposite end of motor shaft should be supported to avoid undue stress on motor bearings during the pressing operation.
- In applications with high torque or environmental extremes, a retaining compound can be used to enhance the strength of the press fit.

