

The AOM **FP3** 6 Degree of Freedom Fine Positioning Mount is used to efficiently mount and adjust AOM CGHs that have been precision bonded into an AOM **C3** CGH cell. C3 cells are available for standard CGH sizes and include hardened steel balls that quickly and accurately lock into magnetic seats in the FP3, providing a stable mounting interface. The steel balls are aligned to the CGH pattern to micron-level accuracy enabling highly repeatable positioning each time a CGH is installed in the FP3.

Standard features include:

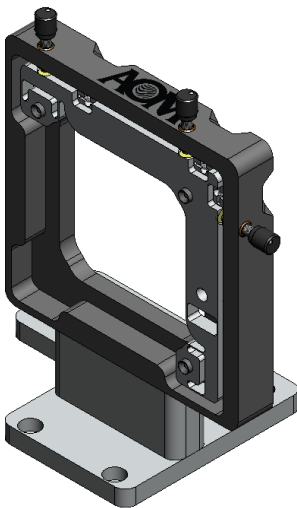
- ✓ *Stable, repeatable magnetic connection using flexures to avoid over-constraint*
- ✓ *6 adjusters used in combinations to align all 6 degrees of freedom:  $x$ ,  $y$ ,  $z$ ,  $\theta_x$ ,  $\theta_y$ ,  $\theta_z$*
- ✓ *Each adjustment has sub-micron resolution and  $\pm 3$  mm range*

The FP3 can be configured to match standard interferometer optical axis heights:

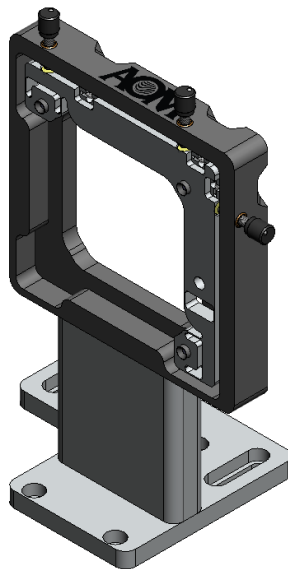
- ▶ **FP3-H425**, for 4.25" height of optical axis above the mounting plane
- ▶ **FP3-H600**, for 6" height of optical axis above the mounting plane

The **FP3** is compatible with the following CGH sizes: **1.5"x1.5"**, **2"x2"**, and **3"x3"**.

**FP3-H425**  
FP3 with 4.25" centerline height



**FP3-H600**  
FP3 with 6" centerline height



**FP3-H425 with C3**  
precision cell for 3"x3" CGH

