

Update



Glasgow S3

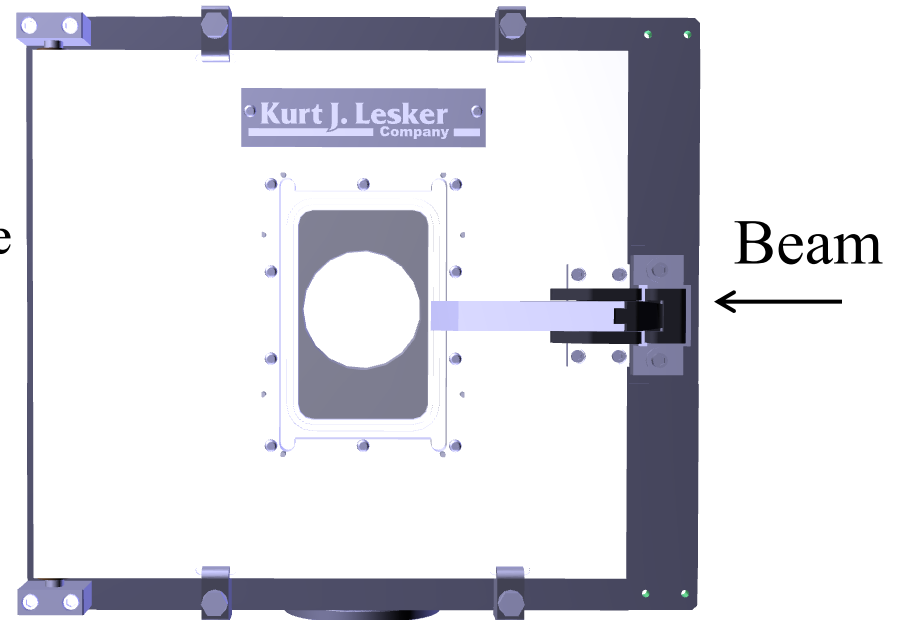
- The Glasgow group has funds available to purchase their own Micron S3 device
- Looks like S3 that Glasgow has purchased is from the same batch as the ASU S3 😊
- Expect that Glasgow will have an S3 soon
- Glasgow is designing custom preamp motherboard

Chamber issue and possible solution

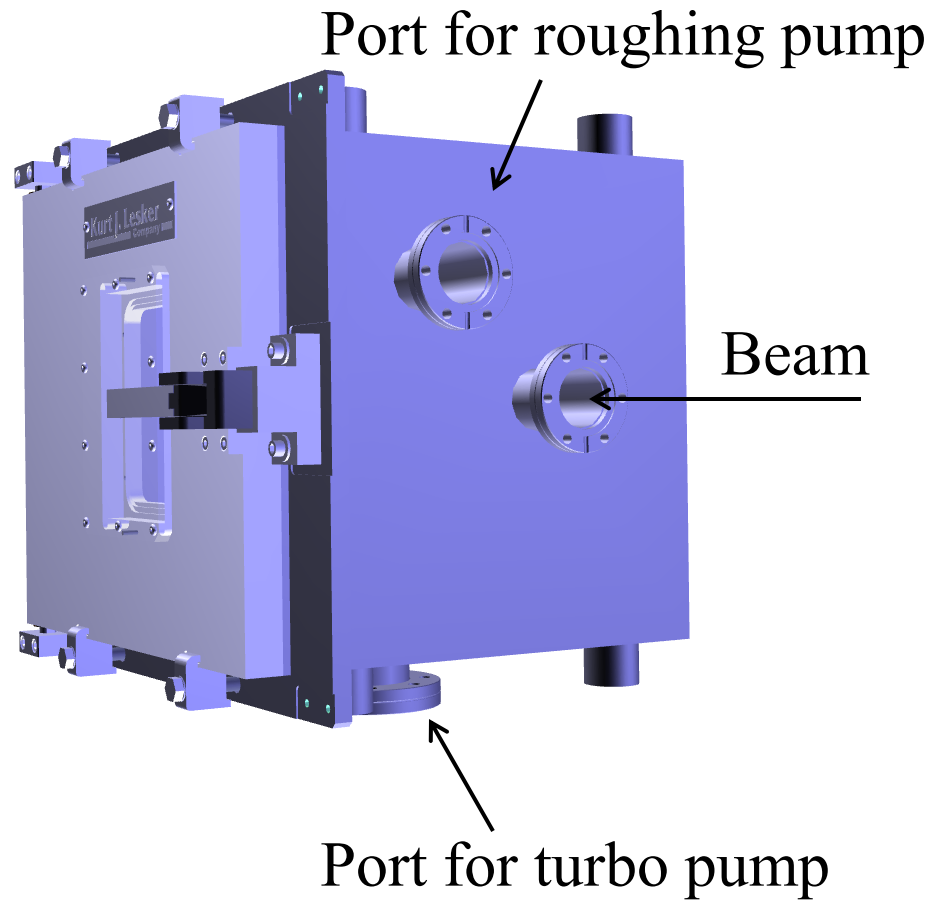
- Had communication problem with the ASU machine shop. It turns out that they do not have an ASME certified the welder ☹️
- In an email (March 10) Tim Whitlatch suggested an alternate approach of using a vendor for the chamber fabrication and gave the name of one such vendor: Lesker
- I looked into Lesker and they have a very nice web-based application that allows modification of standard chamber geometries, with very fast quotes for a modified chamber 😊

New chamber (view 1)

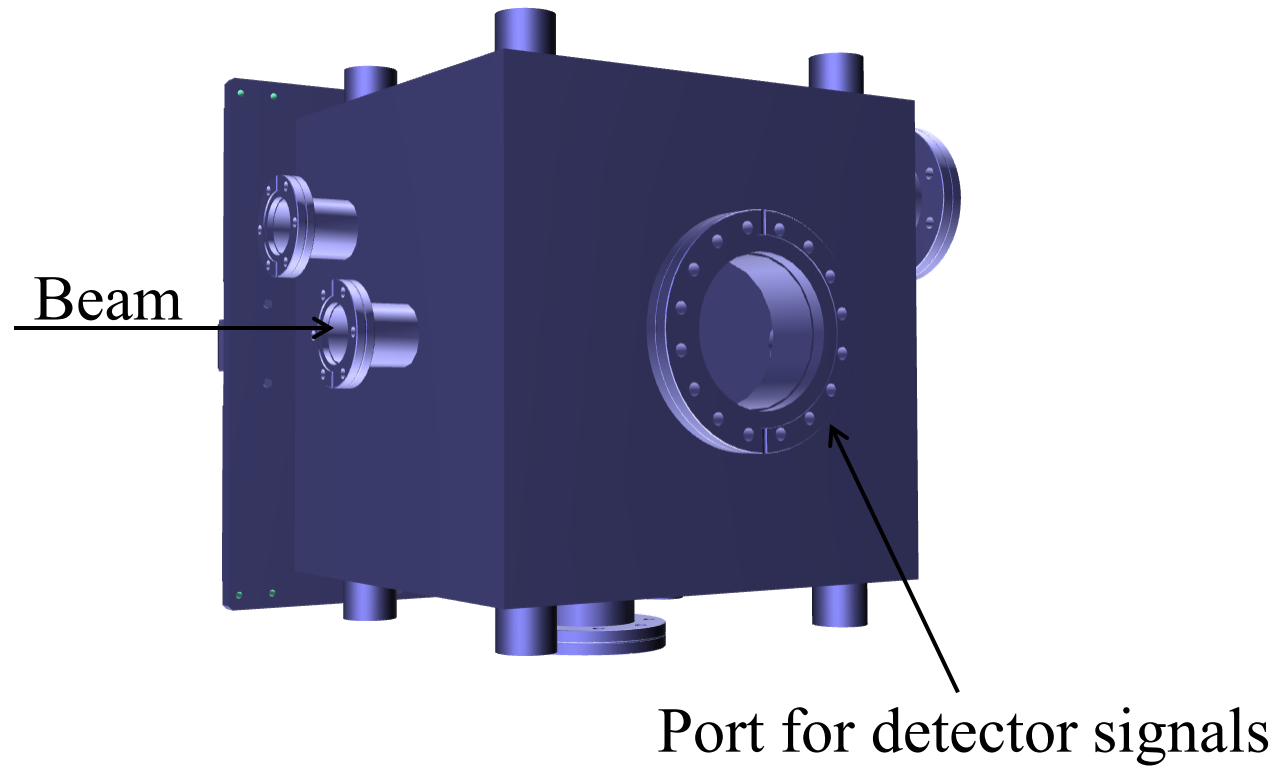
- Lesker chamber modified to suit our needs.
- Geometry: 12 in. x 12 in. x 12 in.
- Walls: ½ inch thick 304 steel plates
- Door: 1 inch thick 6061 aluminum plate
- Have ASME certified welders ☺
- Includes front viewport
- Cost (\$5991) should be within JLab budget ☺



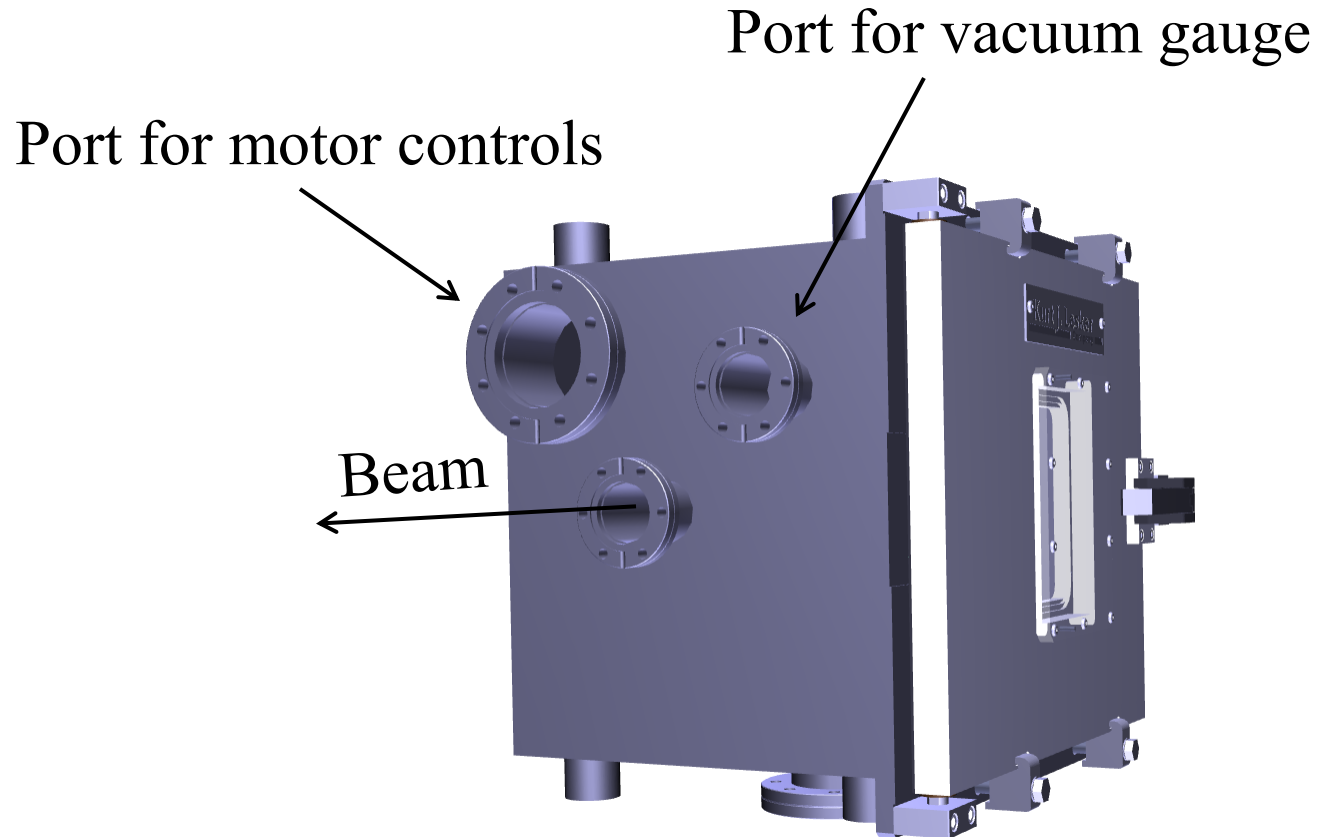
New chamber (view 2)



New chamber (view 3)



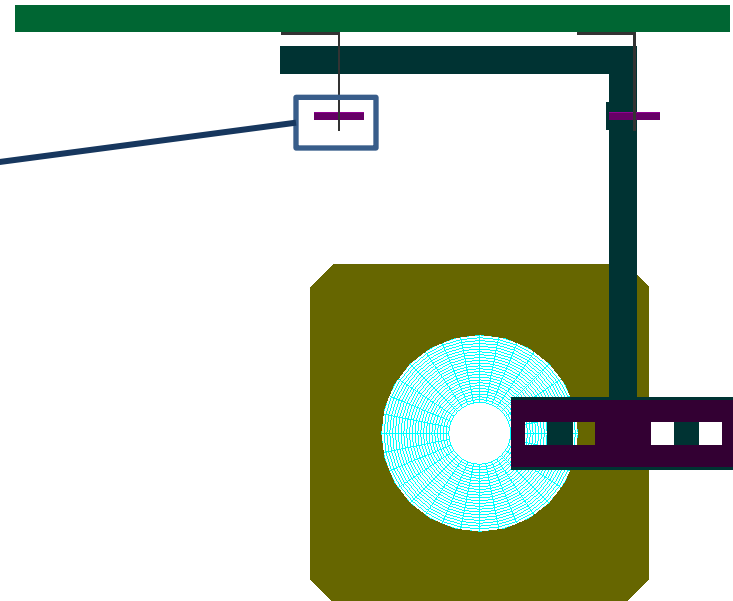
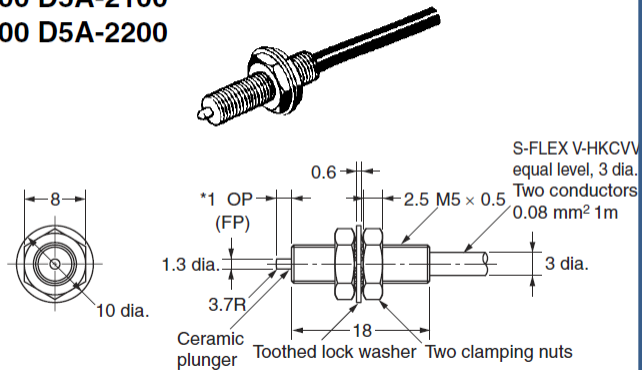
New chamber (view 4)



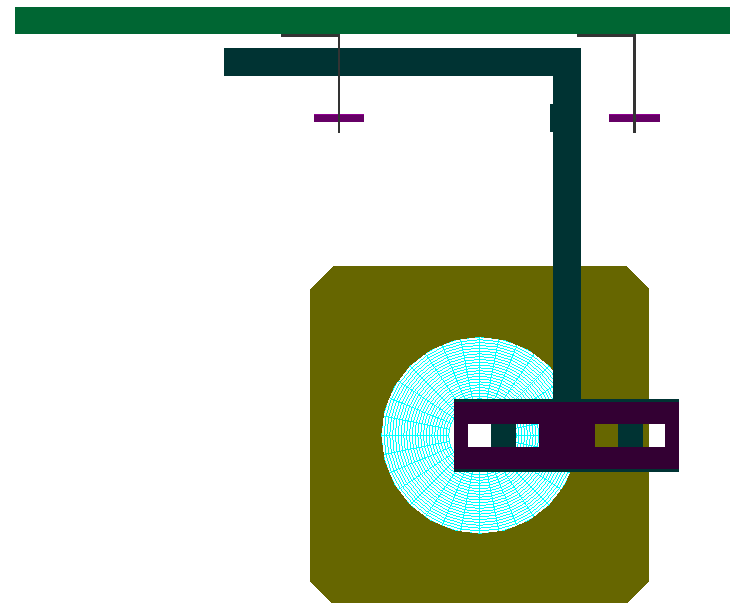
Converter tray with limit switches (position: retracted)

M5 Type (Contact Output)

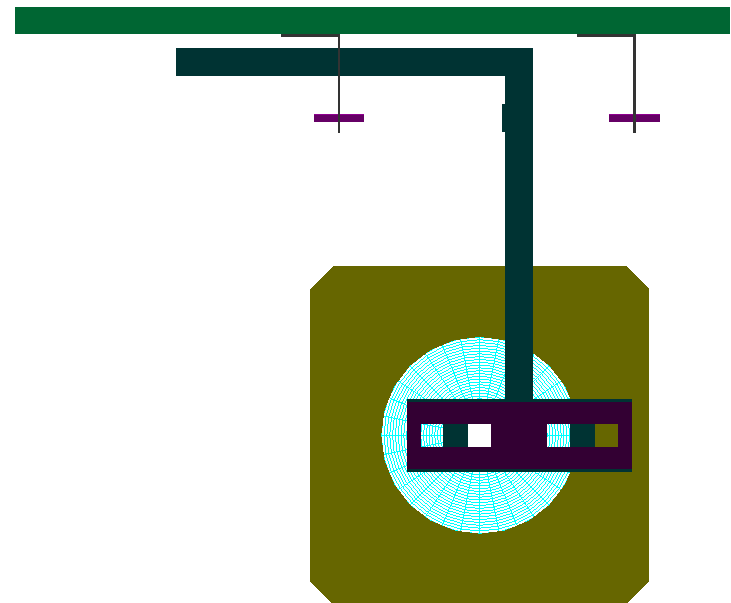
D5A-1100 D5A-2100
D5A-1200 D5A-2200



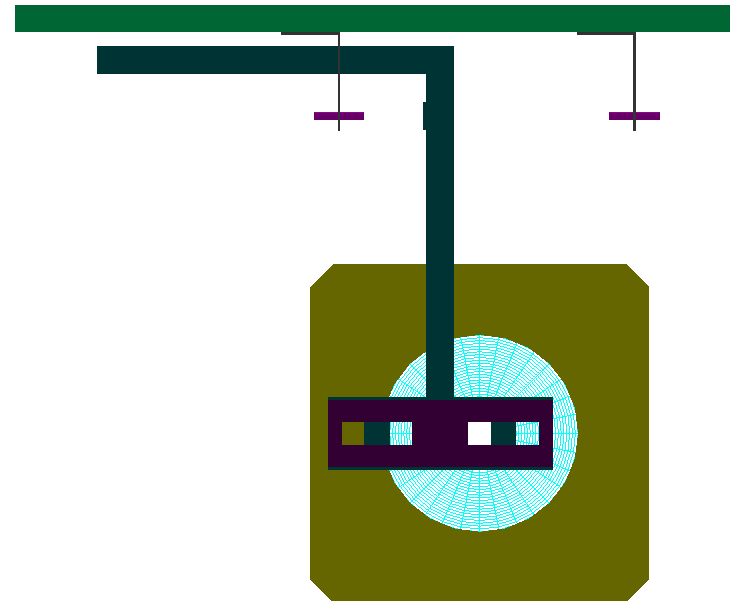
Converter tray with limit switches (position: 1)



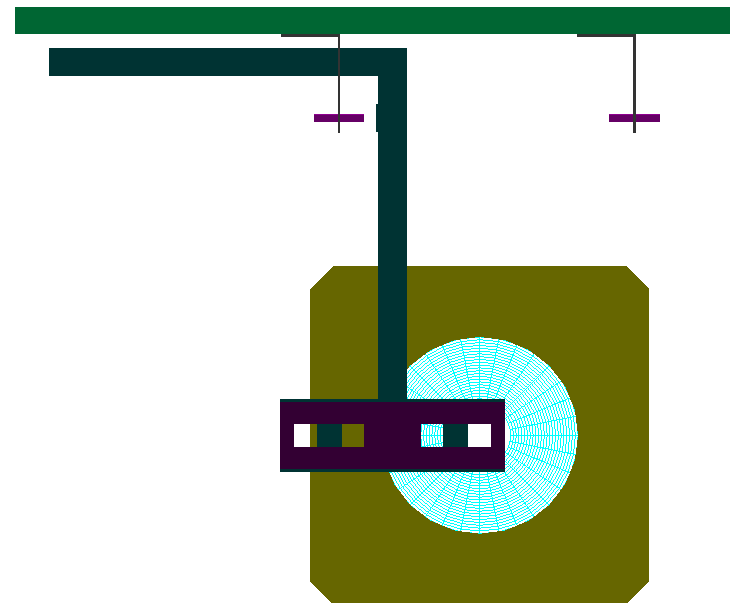
Converter tray with limit switches (position: 2)



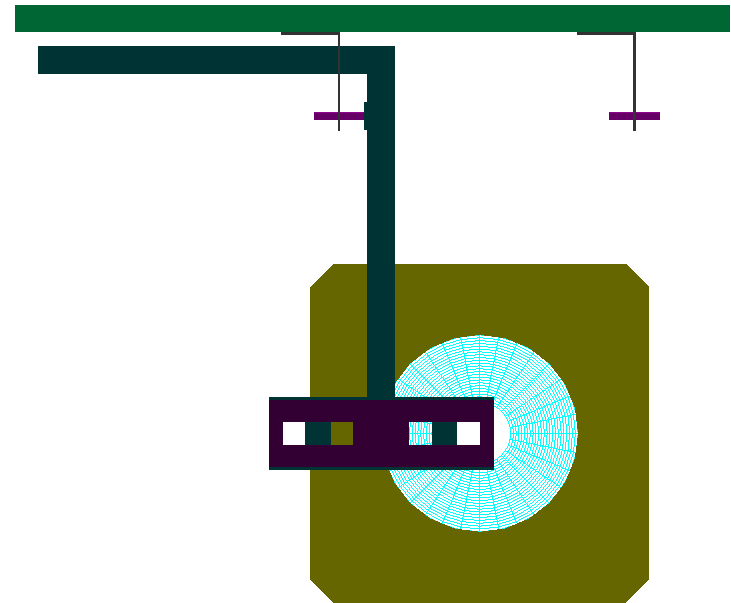
Converter tray with limit switches (position: 3)



Converter tray with limit switches (position: 4)

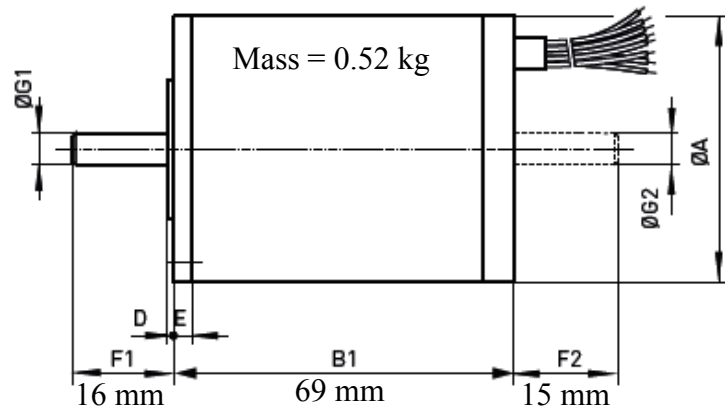
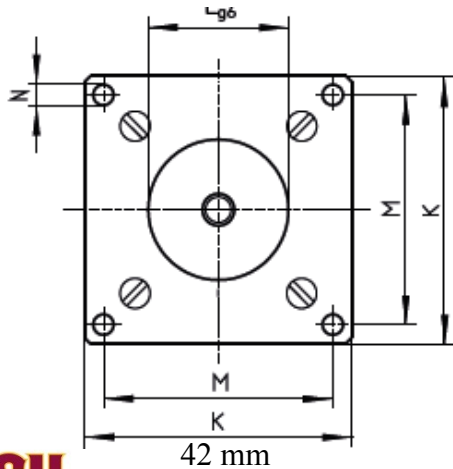


Converter tray with limit switches (position: far limit)

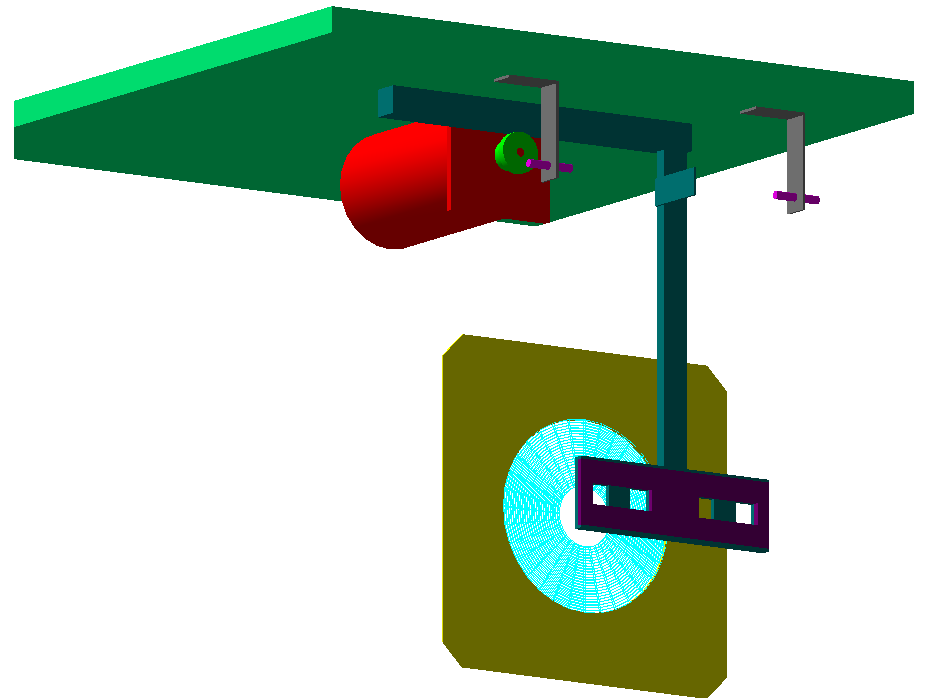


Possible motor

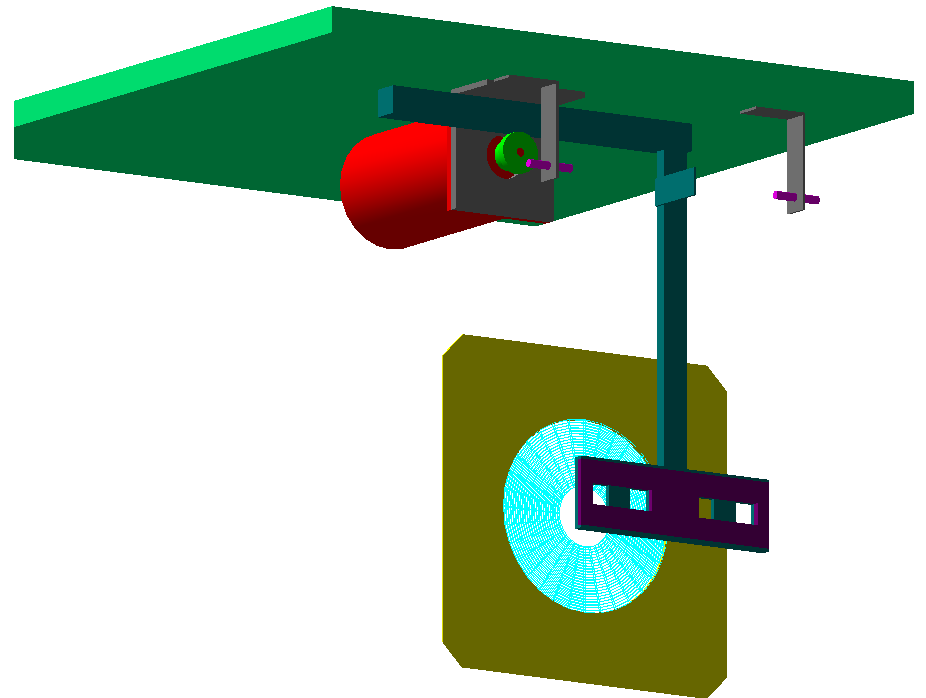
- Manufacturer: Phytron
- Vacuum rated to 7.5×10^{-12} torr
- Radiation resistant to 10^6 J/kg ($\sim 3 \times 10^{18}$ MeV over lifetime of $\frac{1}{2}$ kg motor)
- Holding torque: 33 oz-in
- Can purchase optional vacuum-rated resolver/encoder for this motor ☺



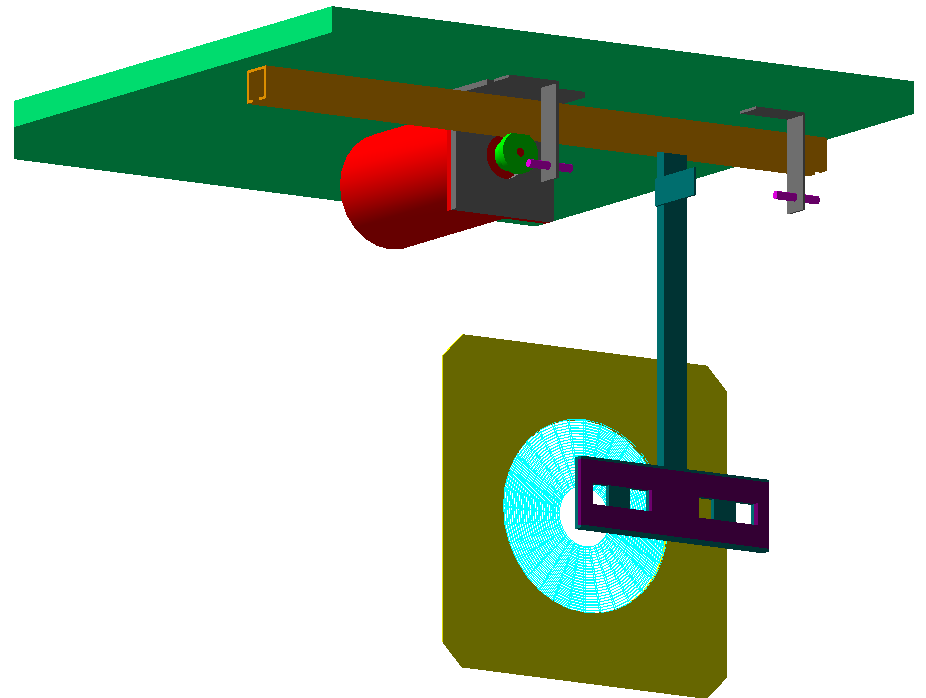
With motor and gear



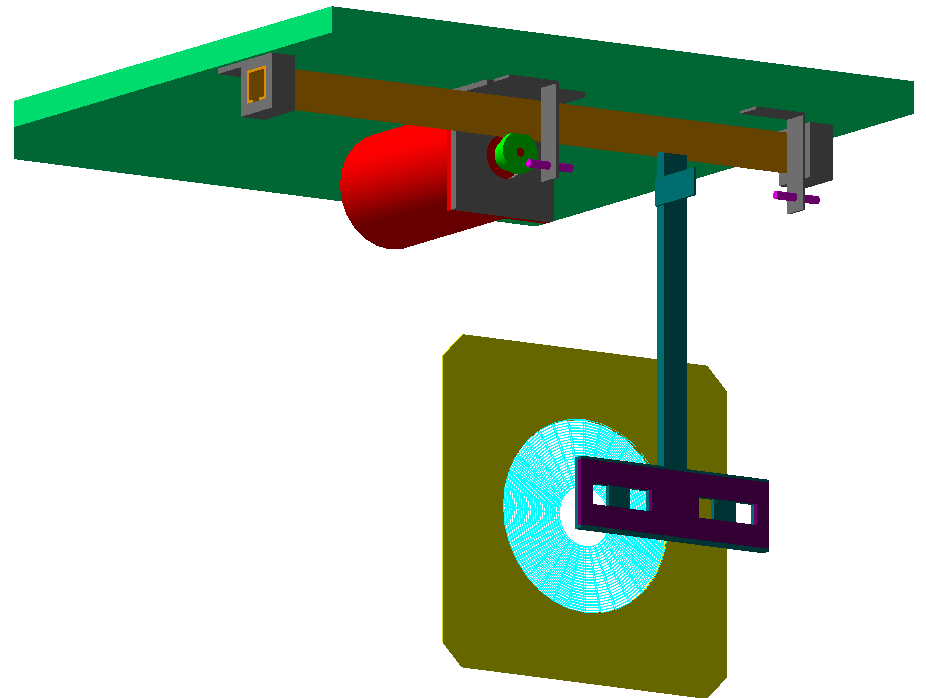
With motor support



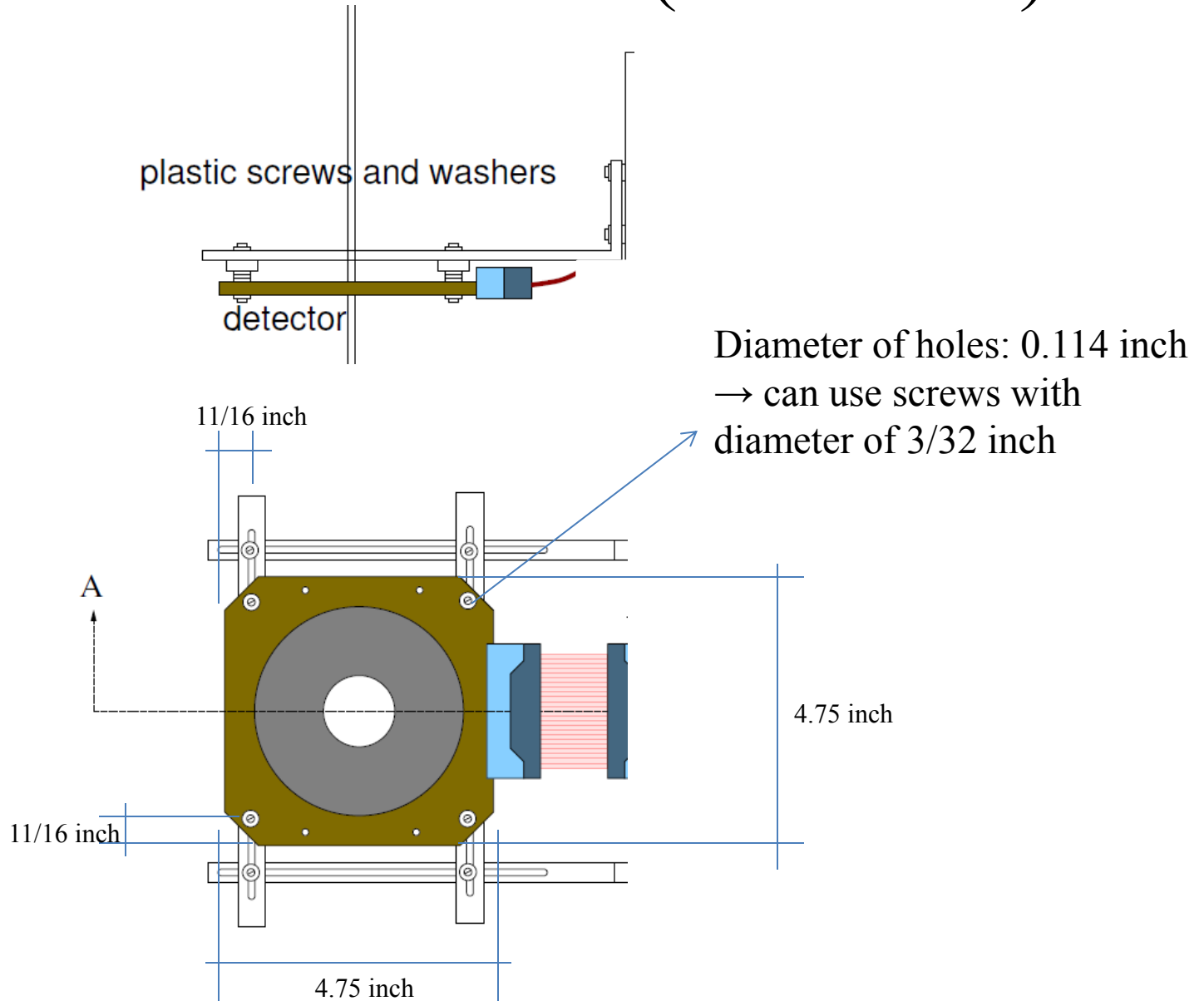
With rack guide



With rack guide supports



Polarimeter brackets (from Ken)



With detector brackets

