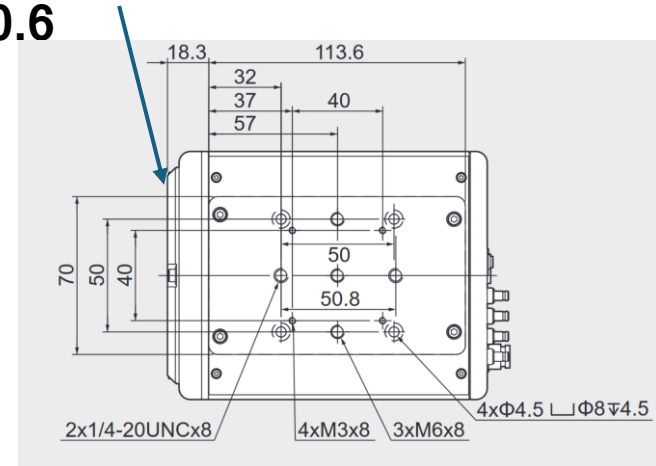
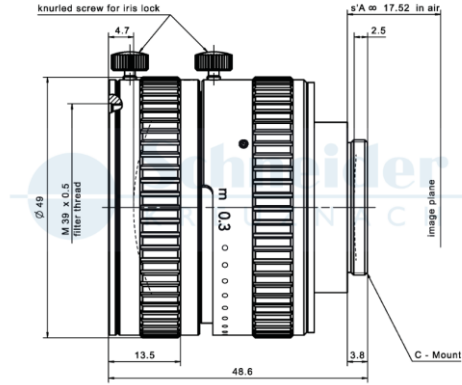


Position of camera

- Goal: image 520mm x 287 mm with Quest camera
- From direct measurements the camera body (considering the outermost piece of the C-mount structure) should be placed at **705-710 mm from GEM3 with a focus of 0.6**
- The theoretical calculation suggests 715 mm, a bit overshooting
- Placing the camera body at 710 mm from GEM3 with the ability to move the camera back and forth of 20 mm should be enough to have the certainty to have it on focus and frame the desired area



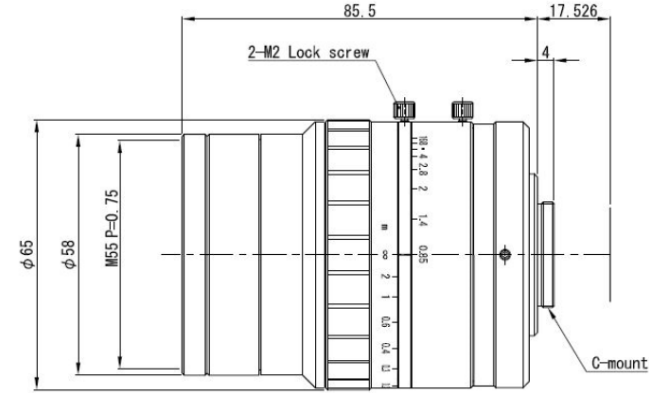
Lens possibilities



- **Schneider ONYX**

- 45mm length (min focus) 49mm diameter
- 240 g
- Pro:
 - Lighter (less material, less radioactivity)
 - It should be extremely similar to Xenon lens
- Con
 - Shorter (requires longer bellow or more shield)
 - 16mm max image size: Type 1": 16mm diameter of light cone (QUEST is 18.8x10.5 mm²)

EHD-25085-C

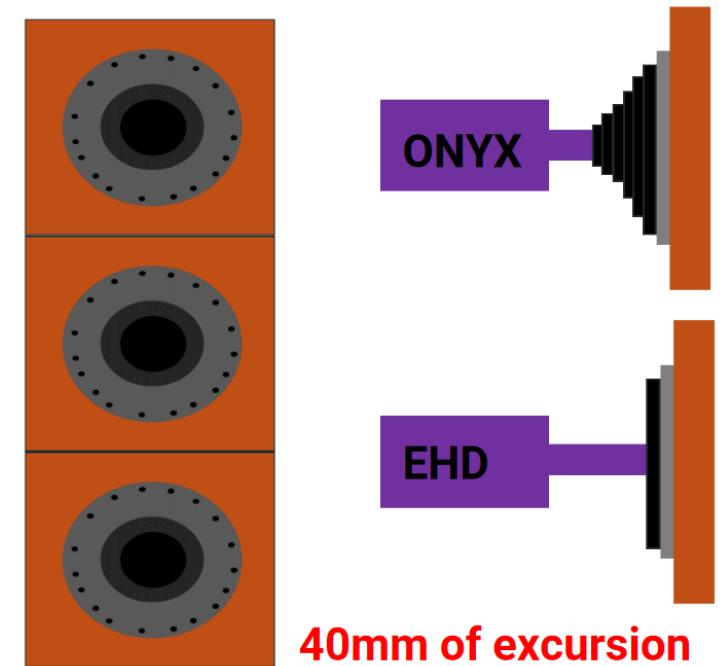


- **EHD 25085**

- 83.5 mm length (min focus) 65mm diameter (58 in the outer part)
- 570 g
- Pro:
 - Larger aperture with same focal length (25% more light)
 - Sensor size match (Migdal collab uses this one): 4/3": 21,6mm diameter light cone
- Con
 - Radioactivity will be measured before finalising the design

Lens possibilities

- Question to designers: **can a bellow be designed to be able to compress 40-50 mm in case we start with ONYX and then upgrade to EHD lens?** (remember the camera position is already fixed)
- A custom bellow can be designed for each lens while keeping the camera position and shielding fixed



By Fiorina