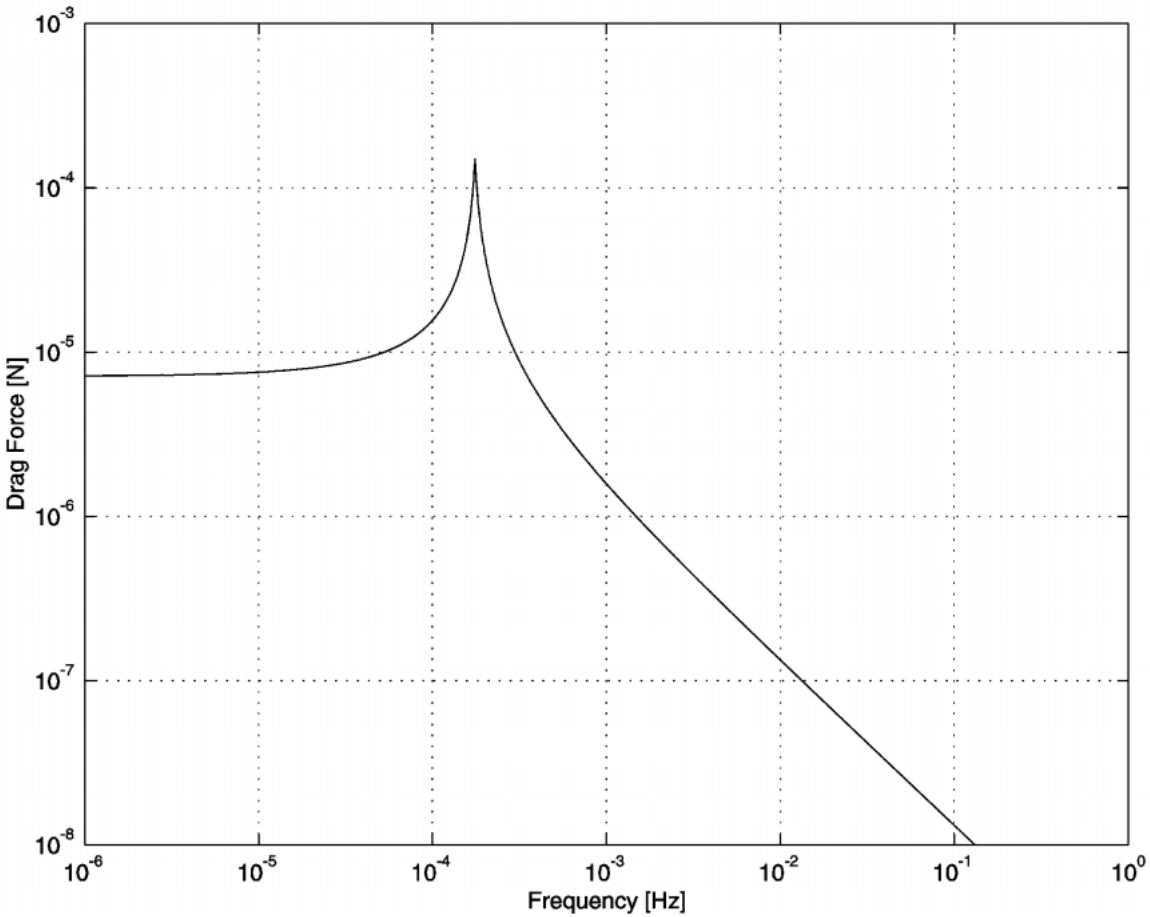
Layout of the pre-operational thrusters

DRAG FREE CONTROL

- The GG Drag Free Control (DFC) has to reduce the common mode drag force acting on the satellite by a factor of about 50,000 in a narrow bandwidth centred at the orbital frequency
- Drag model used in the simulations (in the inertial frame):
  - amplitude $F = 1.5 \cdot 10^{-4}$ N plus noisy force with amplitude equal to 10% of the mean force, at the orbital frequency $f = 1/5701.64s = 1.75388 \cdot 10^{-4}$ Hz
  - no second harmonic component for simplicity (it does not add any more physics)



Simplified model of the drag used in the simulations: