

Image: ATV docking ring

July 27 2016



Credit: ESA–G. Porter

The docking ring used by ESA's Automated Transfer Vehicle cargo spacecraft for five missions to the International Space Station is displayed in the laboratory corridor of ESA's technical heart in the Netherlands.

Supplied by Russia's [space agency](#), and carried by Russia's own ferry craft, it is designed to work with docking ports on the Russian part of the Space Station.

The extended probe made contact with the Station's receptor and then retracted to join the vehicles together.

Sensors on the ring detected that the interface was safely tightened, after which a set of four hooks engaged to strengthen hold of the 20-tonne ATV on the orbital complex. Four further hooks extended from the Station side for a firm grip.

Embedded within the ring are electrical and data connections so that ATV could receive power from the Station and their computers could communicate. Fluid links transferred propellants and air into the Station's tanks.

The ring also includes the hatch for the crew to enter and unload the ferry. At the end of ATV's mission, springs gently pushed it away from the Station without the need for firing any thrusters.

Provided by European Space Agency

Citation: Image: ATV docking ring (2016, July 27) retrieved 28 April 2024 from <https://phys.org/news/2016-07-image-atv-docking.html>

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