



SPACE M6 SEPARATION NUT P/N ME0016

Pyroalliance designs a wide range of separation nuts, used for the in orbit deployment of antenna reflectors and solar generators on satellites or used for the separation of satellites of a constellation, assembled on a dispenser.

With a recorded rate of in-flight success of 100% over more than 6000 separation nuts delivered until today to its customers, Pyroalliance provides with such separation nuts extremely reliable solutions of Hold down and release.

Separation nut

Operation mode

The separation nut is a pyro-mechanism which performs two functions: maintaining a pre-loaded assembly of two sets and releasing the assembly upon an electrical order.

The energy required to achieve the release is provided by gas pressure (pyrotechnic gas generated by the initiator).

Benefits

a) Reliability

High reliability of the product is granted by the implementation of redundant initiators and the systematic in-factory functional testing (100%) of the mechanical part by cold gas actuation (instead of pyrotechnic gas) and reseted after test.

b) Actuation time and synchronicity

By nature, pyrotechnic actuators allow a very low actuation time and associated to a low standard deviation. Consequently high level of synchronicity is granted for several nuts activated simultaneously, as this is the case for holding satellites on dispensers.

Applications

- Antenna or solar panels release

For more information please contact us.
Visit our website: www.pyroalliance.com



*Pyroalliance's equipment on board Spacebus 3000 –
Thales Alenia Space*

Key figures

Operation time (Typical values):	Few ms
Over all dimensions* (Width/Depth/Height):	55mm / 30mm / 60 mm
Bolt dimensions:	M6 x 1
Operating temperature:	-60°C to +80°C
Operating bolt tension:	Up to 6kN
Initiators:	2 NSI**

**Dimensions without initiators*

***NASA Standard Initiators*

Product Classification

- Number UN: UN0173
- Storage class: 1.4S
- Not restricted by ITAR regulation

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