



Łukasiewicz
Institute
of Aviation



Normally open and normally closed
pyrotechnic valves for propellants
and pressurants

HELIUM PYROTECHNIC VALVES

CHARACTERISTICS

The normally open and normally closed pyrotechnic valves were developed by Łukasiewicz – Institute of Aviation for the ILR-33 AMBER 2K rocket feeding system. Both can be offered with variety of different interfaces to fulfil specific customer needs. They are compatible with EGGIU pyrocartridges (developed in-house) and other, commonly used standard initiators.



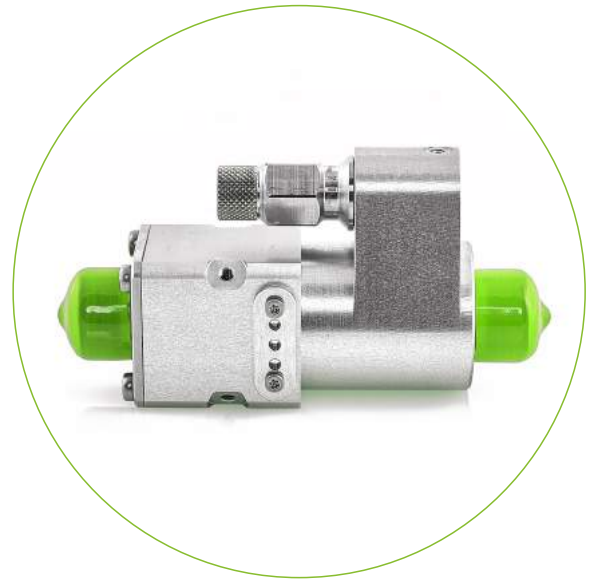
NORMALLY CLOSED

| Parameter | Value |
|------------------|---------------------|
| Working medium | GHe |
| Working pressure | 40 barA |
| Mass | 220 g |
| Dimensions | 79 x 48.5 x 36.6 mm |

Helium Pyrotechnic axisymmetric sliding valve (normally closed)

The valve is responsible for opening the pressurant flow to the oxidant tank and creating a gas cushion therein. It is a normally closed valve that can be opened once.

Although the valves were developed to work with helium, they can easily operate with other gaseous mediums.



TECHNICAL INFORMATION

NORMALLY OPEN

| Parameter | Value |
|------------------|---------------------|
| Working medium | GHe |
| Working pressure | 40 barA |
| Mass | 248 g |
| Dimensions | 87 x 48.5 x 36.6 mm |

Helium Pyrotechnic axisymmetric sliding valve (normally opened)

The valve allows to shut off the flow of pressurant to the oxidizer tank. It is a normally open valve that can be closed once.



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