

Battery Disconnection Switch – PSS-5

Pyro-switch – Automotive Switch – High Current Device

Autoliv

- Typical continuous current 350 A at 105°C
- Suitable for voltage levels up to 1000 VDC
- Current switching capability up to 30000 A
- Non-reversible device

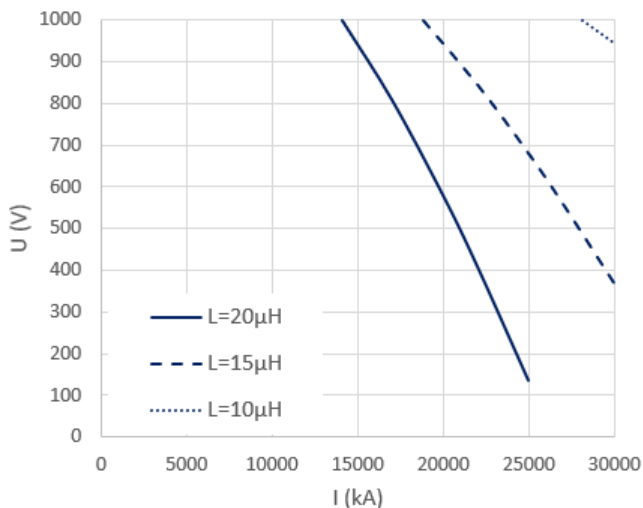
Product description:

A pyrotechnical actuator separates the electric connection irreversibly. Pyrotechnical actuator is to be installed in EV vehicles and hybrid vehicles. It is triggered by the ECU, and is used to separate the motion battery from the electrical system.

Typical applications:

Battery disconnection to prevent fires caused by short circuits:

Switching capacity



Current carrying capacity

Under evaluation

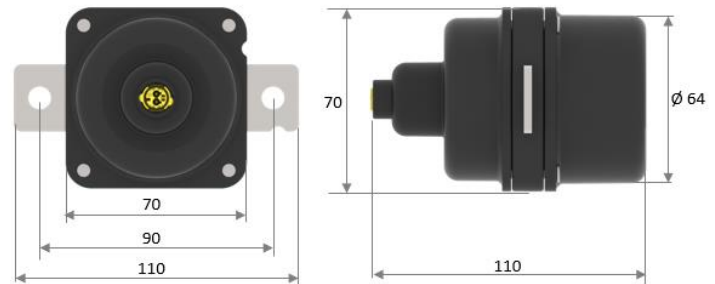
Maximum pulse current 23° 30000 A / TBD ms

Busbar

Contact raw-material (base) CuSn 0,15
Contact plating material (lead-free) Sn/Ni

Busbar resistance (at RT)

before ops. $\leq 0,05 \text{ m}\Omega$
after ops. $\geq 2 \text{ M}\Omega / 1000 \text{ V}$



Operation time

Operating time < 2 ms

Initiator Data

Qualified acc. to AK-LV 16 & USCAR
Initiator resistance $\geq 1,7 \Omega$ and $\leq 2,5 \Omega$
Triggering pulse current $\geq 1,75 \text{ A} / 0,5 \text{ ms}$
Or $\geq 1,20 \text{ A} / 2,0 \text{ ms}$
No-triggering current $\leq 0,4 \text{ A}$
Or $\leq 5,0 \text{ A} / \leq 4 \mu\text{s}$
Diagnostic current: 100 mA

Temperature

Operating temperature $-40 \text{ }^\circ\text{C} \dots + 125 \text{ }^\circ\text{C}$
Environmental temperature $-40 \text{ }^\circ\text{C} \dots + 85 \text{ }^\circ\text{C}$
or higher if operating T° under 125°C at connecting points
Self-ignition $\geq 210 \text{ }^\circ\text{C}$

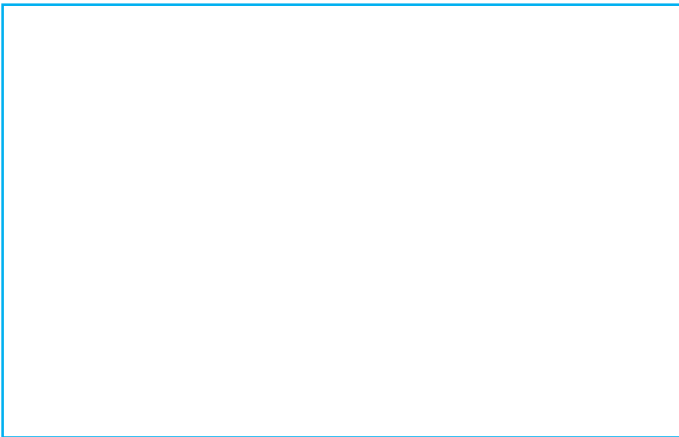
Other Data

Qualification acc. to AK-LV 124
Other Flameless device
Terminal type on bus-bar M8 screw
on initiator ISO 19072-1 compliant (sealed and un-sealed)
Weight 555 g

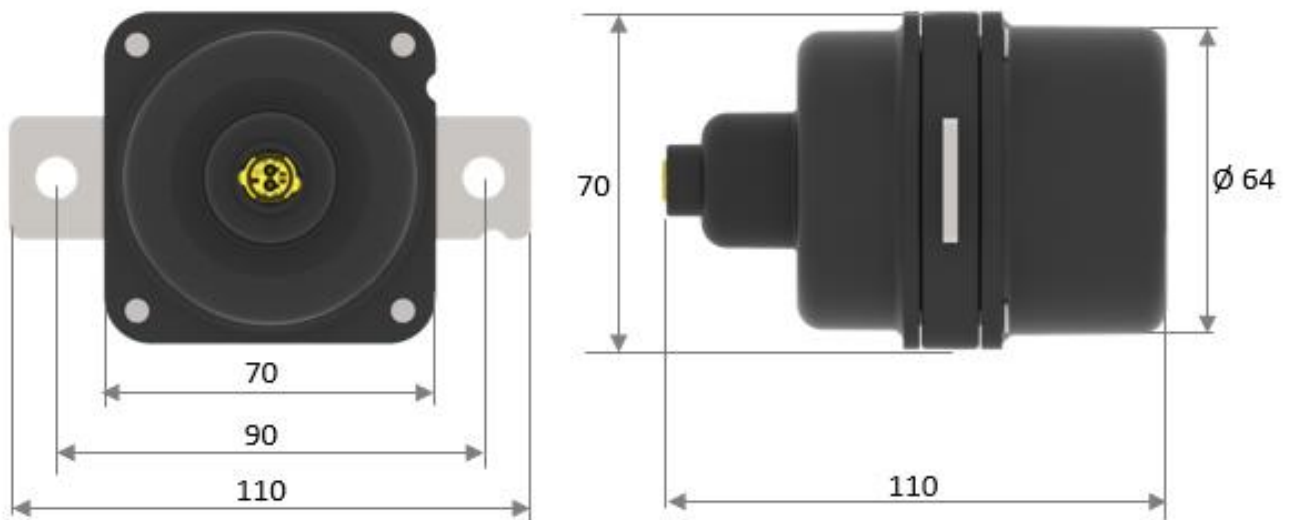
We refer emphatically to the fact, that all details mentioned, especially the application and utilization recommendation for the products and their system accessories, have been developed under normal conditions, and based on our knowledge and experience. Appropriate storage and usage of the products are assumed. A warranty or reliability of a finished project cannot be deduced because of varying materials, substrates and differing work conditions, neither by any indications nor from verbal statements, irrespective of any legal positions. For the possible accusation that FDT acted intentionally or grossly negligent, the user has to supply evidence that they provided Autoliv with all information and details necessary for an appropriate and correct evaluation through Autoliv in written form, immediately available and complete. The user is responsible for ensuring that the products are suitable for the given application. It is Autoliv's right to change product specifications without notice. Property rights of third parties are to be considered. In addition our particular sales and delivery terms are valid. The latest version of our product data sheet is obligatory, which can be requested directly through Autoliv. All information as well as all technical and drawing data comply with current technical standards and are based on our experience. National standards and regulations must be observed. Technical changes reserved. As of January 2016. ©2016



Performance



Dimensions



We refer emphatically to the fact, that all details mentioned, especially the application and utilization recommendation for the products and their system accessories, have been developed under normal conditions, and based on our knowledge and experience. Appropriate storage and usage of the products are assumed. A warranty or reliability of a finished project cannot be deduced because of varying materials, substrates and differing work conditions, neither by any indications nor from verbal statements, irrespective of any legal positions. For the possible accusation that FDT acted intentionally or grossly negligent, the user has to supply evidence that they provided Autoliv with all information and details necessary for an appropriate and correct evaluation through Autoliv in written form, immediately available and complete. The user is responsible for ensuring that the products are suitable for the given application. It is Autoliv's right to change product specifications without notice. Property rights of third parties are to be considered. In addition our particular sales and delivery terms are valid. The latest version of our product data sheet is obligatory, which can be requested directly through Autoliv. All information as well as all technical and drawing data comply with current technical standards and are based on our experience. National standards and regulations must be observed. Technical changes reserved. As of January 2016. © 2016

