### **Functionality**







Pyrotechnic energy released



0.5 ms

Plastic piston hits busbar



Busbar severed and electric arc generated



current interrupted

### Key features

- Fast: Operates in less than a millisecond
- Simple: Mechanical severing of a busbar
- Reliable: Automotive safety technology proven by billions over decades
- Safe: No risk during transport, installation and dismantling
- Certified: All our products are CE and UKCA compliant



## Protection for other applications

Autoliv's pyro fuses are not just for automotive applications.

They can be used to protect all low and high voltage systems that produce, store and convert electricity: Photovoltaic and wind turbine installations, battery energy storage systems, fuel cell technologies, charging stations - and more.

Disconnects the circuit safely, reliably & irreversibly.

Triggered by the airbag control unit in the case of a crash or BMS in the case of a short-circuit, protecting electronic systems and reducing risks of fire. After triggering, disconnection takes place no matter the level of current.

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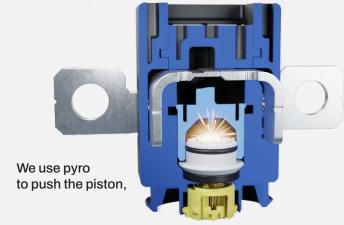


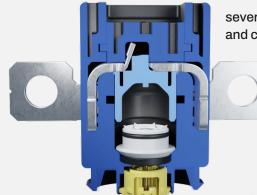
## **Autoliv**

# **Pyro Fuses**

Protection in milliseconds.

Avoid short-circuits, prevent fires, and strategically drain stranded energy with our **Pyro Safety Switches** for low and high voltage vehicles.





sever the busbar and cut the current.



## **Our Pyro Fuses**



Autoliv's industry-standard **Pyro Safety Switches** and disconnection systems comply with the high-quality requirements of the vehicle industry. Our Pyro Safety Switches offer a wide range of technical specifications, including closing time, short circuit resistance, functioning temperature, and maximum current.













Normally Closed NC	PSS-1	PSS-2	PSS-3	PSS-4	PSS-5	Normally open NO PSS-6
Maximum Switching Capacity Inductive Load	150 V / 120 J* 400V contact us	32 V / 120 J* 72 V / 60 J*	150 V / 120 J* 2nd circuit 5 A	500  V / 1800  J* Insulation Resist, after op.: > 10 MΩ	1 000 V / 3 500 J* Insulation Resist, after op.: > 50 MΩ	Maximum short circuit current 5 kA / 5 ms + 600 A / 60 s
Current Carrying Capacity	85 °C / 300 A 105 °C / 250 A 125 °C / 200 A 50 °C / 500 A 85 °C / 420 A 105 °C / 350 A					Rated voltage 450V
Temperature Operating Storage	-40 °C + 105 °C -40 °C + 65 °C					
Operation Time (1.75 A / 2 ms pulse)	<2 ms					<1 ms
Weight	60g	40g	65g	<160g	<320g	80g
Size (excluding busbar)	50x33x26 mm	43x70x21 mm	50x33x38 mm	72x46x42 mm	79x47x47 mm	74x60x19 mm

<sup>\*</sup>Coil Energy (J) =  $1/2 \times I^2$  (kA) x L ( $\mu$ H)

