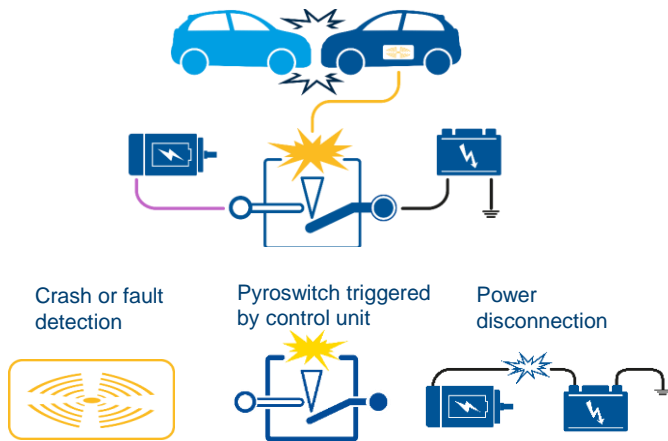


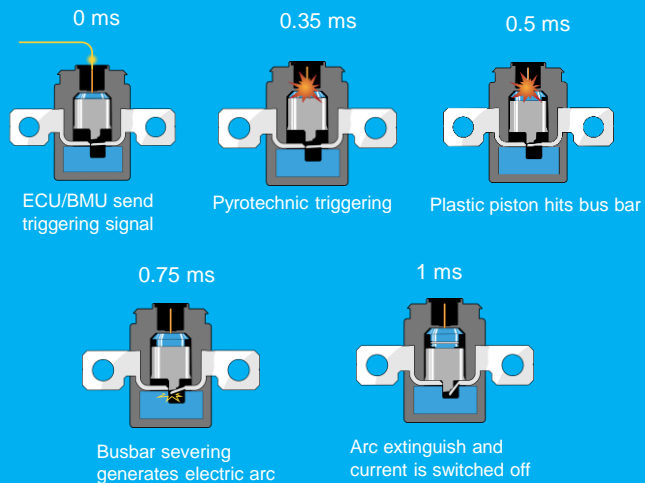
How it works



Pyrotechnic safety switches - PSS disconnect the circuit safely, reliable and irreversibly.

Triggered by the airbag control unit or BMS and before a short-circuit can occur. After the initiation pulse, disconnection takes place without any other external aid.

Life saving in only a few milliseconds



Pyroswitch is a product of:
Autoliv | Rue de la Cartoucherie | 95470 Survilliers, France
For more information see www.pyroswitch.com or sales@pyroswitch.com

Why are Pyroswitches needed ?

Prevention of short-circuits, caused by accidents

- In many wire harness the starter/generator cable remains unprotected.
- In case of a crash, damaged and unprotected cables could lead to a hazardous situations for passengers and/or rescuers.
- Prevention of short-circuits which can lead to thermal event and burn.
- Prevention of battery draining. Power is needed for important functions also after crashes.



Ignition and smoldering fires

In the case of such short-circuits, there can be direct ignition caused by sparks or arcing or, equally hazardous, smoldering fires occur as a result of the enormous heat development. Apart from the hot parts in the engine compartment, the electrical energy stored in the battery forms the primary source of ignition in the car.

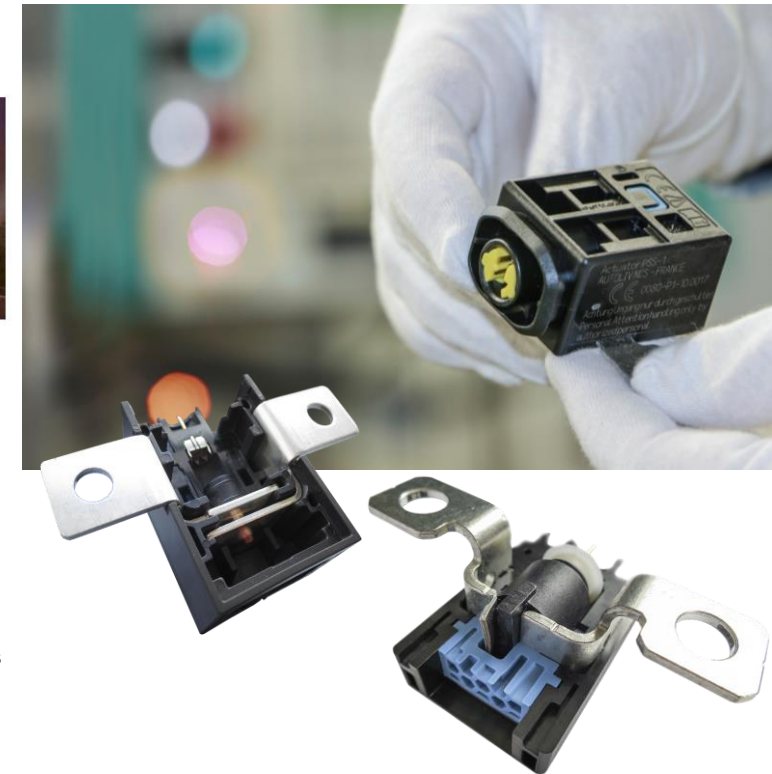
Know-how and experience of the market leader in occupant safety

- More cost-effective and better performance than comparable products
- Pyrotechnic driven, proven billion times over in airbags and seatbelts
- Simple and robust design
- Highly safe handling during transport, installation and dismantling



Pyroswitch

Autoliv pyrotechnical safety switches and closing devices.



Protection in Milliseconds

					
	PSS-1	PSS-2	PSS-3	PSS-4	PSS-6
NO (normally open)					NC (normally closed)
Maximum Switching Capacity	Inductive Load	150 V / 2 000 A / 60 µH 475 V / 600 A / 20 µH	70 V / 1 400 A / 60 µH 32 V / 2 000 A / 60 µH	150 V / 2 000 A / 60 µH	450 V / 300 A / 750 µH 540 V / 8 000 A / 15 µH 540 V / 10 000 A / 10 µH 540 V / 15 000 A / 5 µH 540 V / 25 000 A / < 5 µH
	Ohmic Load	400 V / 1 000 A		200 V / 2 000 A	1000 V / 10 000 A / < 5 µH
	Capacitive Load	> 400 V, Contact us		> 200 V, Contact us	
Current Carrying Capacity	50 mm ²	85 °C / 300 A 105 °C / 250 A 125 °C / 200 A	85 °C / 300 A 105 °C / 250 A 125 °C / 200 A	85 °C / 300 A 105 °C / 250 A 125 °C / 200 A	50 °C / 500 A 85 °C / 420 A 105 °C / 350 A
	70 mm ²				
Maximum Short-time Current	50 mm ²	23 °C / 2 000 A / 10 s 25 000 A / 5 ms	23 °C / 2 000 A / 5 s	23 °C / 2 000 A / 10 s 25 000 A / 5 ms	
Maximum Pulse Current					25 000 A / 5 ms
Temperature	Operating	-40 °C ... + 105 °C	-40 °C ... + 105 °C	-40 °C ... + 105 °C	-40 °C ... + 105 °C
	Environmental	-40 °C ... + 105 °C	-40 °C ... + 105 °C	-40 °C ... + 105 °C	-40 °C ... + 105 °C
	Storage	-40 °C ... + 65 °C	-40 °C ... + 65 °C	-40 °C ... + 65 °C	-40 °C ... + 65 °C
	Self-ignition	≥ 210 °C	≥ 210 °C	≥ 210 °C	≥ 210 °C
Operation Time	< 3 ms	< 3 ms	< 3 ms	< 2 ms 0.8 ms / 450 V / 8 000 A / 15 µH 0.8 ms / 530 V / 24 000 A / 3 µH	< 3 ms
Weight	60 g	40 g	65 g	≤ 160 g	60 g
Size	51 x 72 x 26 mm	42,5 x 70 x 20,5 mm	49,35 x 72 x 37 mm	71 x 90 x 42 mm	74 x 60 x 25,5 mm

