

Pyro Safety Switches

Prevention in milliseconds to avoid short-circuits, fire ignition and battery draining.

Pyro Safety Switch PSS-5 1000V 2500J



Autoliv's industry-standard Pyro Safety Switches comply with the high-quality requirements of the vehicle industry. Our Pyro Safety Switches offer a range of technical specifications, including different voltages, short circuit resistance and maximum current.

- Maximum continuous current 500 A
- Non-reversible device
- Suitable for voltage levels up to 1000 VDC
- High peak current carrying capability up to 25 000 A
- No ionizing gases / No particles exhaust
- Material Flammability : V0



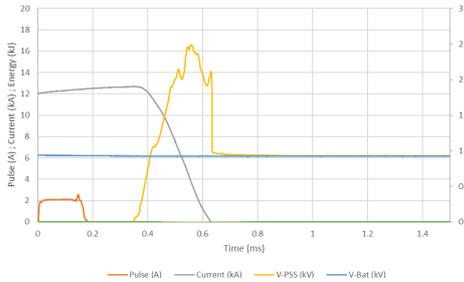
Product specifications

Maximum Switching capacity	Typical 3500J With Cpk 2500J	Triggering conditions	acc. to AK-LV 16 & USCAR
Systems Configurations tested	920 V / 16 000 A / 16 µH 900 V / 15 000 A / 25 µH 900 V / 16 800 A / 25 µH	Ohmic resistance	≥1,7 Ω and ≤ 2,5 Ω
(Other request, contact us)		Current pulse	1,75 A / 0,5 ms Or 1,20 A / 2,0 ms
Current carrying capacity		Pulse slope	> 8 mA / µs
Customer cooling system must guarantee the temperature at terminals' connection point does not exceed +125°C		No-triggering current	≤ 0,4 A Or ≤ 5,0 A / ≤ 4 µs
Customers applications examples (Load cable 70 mm ²)	105°C Max, 350 A DC 85°C Max, 420 A DC 50°C Max, 500 A DC	Diagnostic current	< 100 mA
Maximum pulse current	25 000 A / 5 ms	Temperatures	
Busbar		Operating	-40°C... + 105°C
Raw-material (base)	CuSn 0,15	Environmental	-40°C... + 105°C
Plating material (lead-free)	Sn/Ni	Storage	-40°C... + 65°C
Cross-section	60 mm ²	Validations	
Busbar resistance (at RT) before ops.	≤ 0,055 mΩ	Vibration resistance	AK-LV 124
after ops	≥ 50 MΩ / 500 V	Mech. Shock resistance	AK-LV 124
Operating time (920V / 16kA / 16 µH)	With Cpk 1,67 < 2 ms Typical 1,0 ms	Temperature cycle resistance	AK-LV 124
		Chemical loads resistance	AK-LV 124
		HV-VL resistance before/after ops.	≥ 1 GΩ / 500 V
		Terminal type	
		HV	M6 or M8
		Triggering	ABX-5 or AK-2
		Weight	≤ 320 g

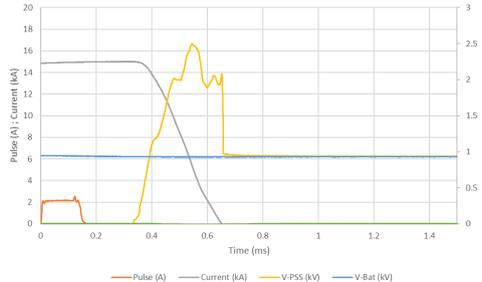
Technical Data and Dimensions

Performance & Dimensions

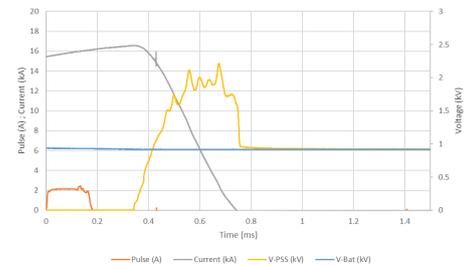
12,5 kA / 900 V / 26 μ H



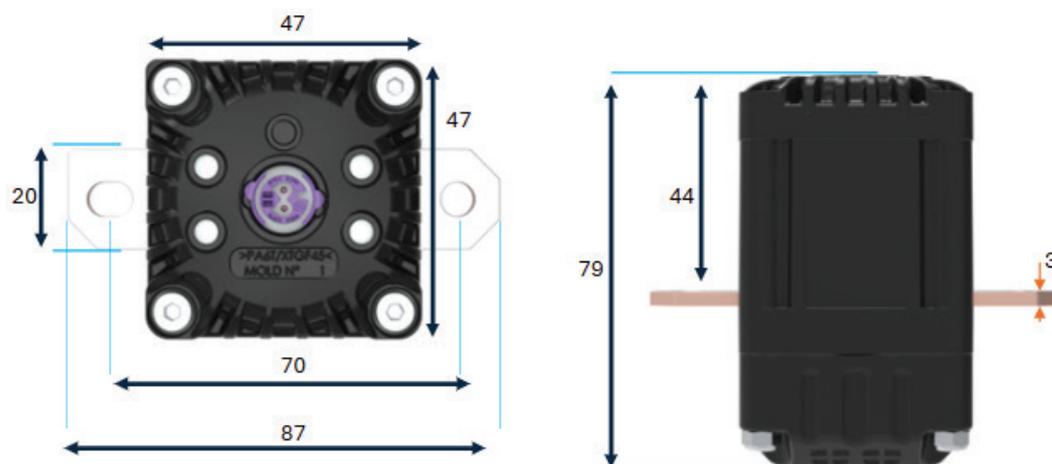
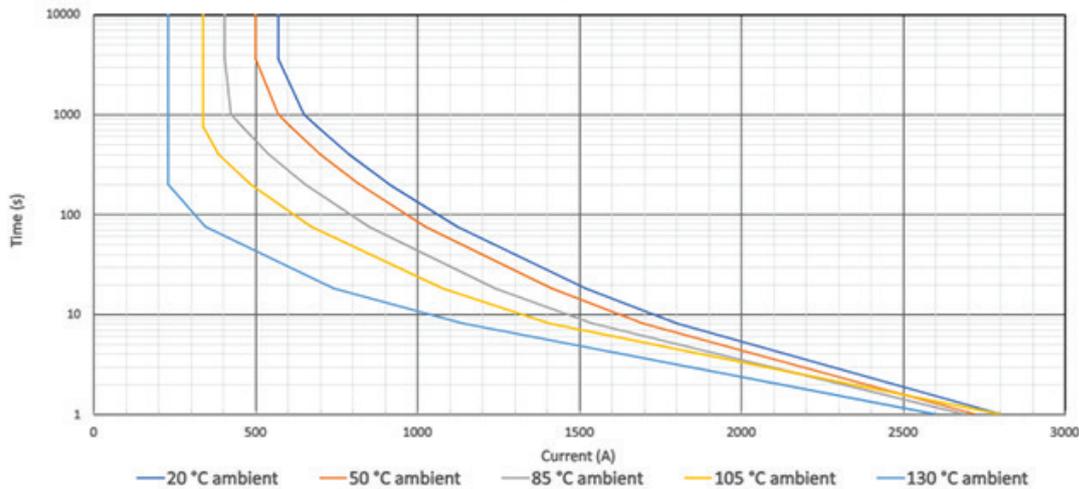
15 kA / 900 V / 26 μ H



16,5 kA / 900 V / 26 μ H



Derating curve



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



Read more