ELECTRICAL SAFETY SOLUTIONS

Pyro Safety Switches

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

Pyro Safety Switch PSS-5 1000V 5500J

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 5800J With Cpk 5500J
Systems Configurations tested	900 V / 10 000 A / 110 µH 1000 V / 15 100 A / 50µH 900 V / 19 600 A / 30 µH 1000 V / 18 000 A / 25 µH

(Other request, contact us)

Current carrying capacity
Customer cooling system must guarantee the temperature at terminals' connection point does not exceed +125°C

Customers applications examples (Load cable 70 mm²)	105°C Max ,350 A DC 85°C Max, 420 A DC 50°C Max, 500 A DC
Maximum pulse current	25 000 A / 5 ms

Busbar

Raw-material (base)	CuSn 0,15
Plating material (lead-free)	(lead-free) Sn/Ni
Busbar resistance (at RT)	
before ops.	≤ 0,055 mΩ
after ops	≥ 50 MΩ / 500 V
Operating time (920V / 16kA/ 16 µH)	With Cpk 1,67< 2 ms Typical 1,2 ms

Triggering conditions	acc. to AK-LV 16 & USCAR
Ohmic resistance	≥1,7 Ω and ≤ 2,5 Ω
Current pulse	1,75 A / 0,5 ms Or 1,20 A / 2,0 ms
Pulse slope	> 8 mA / µs
No-triggering current	≤ 0,4 A Or ≤ 5,0 A / ≤ 4 µs
Diagnostic current	< 100 mA

Temperatures

Operating	-40°C... + 105°C
Environmental	-40°C... + 105°C
Storage	-40°C... + 65°C

Validations

Vibration resistance	AK-LV 124
Mech. Shock resistance	AK-LV 124
Temperature cycle resistance	AK-LV 124
Chemical loads resistance	AK-LV 124
HV-LV resistance before/after ops.	≥ 1 GΩ / 500 V

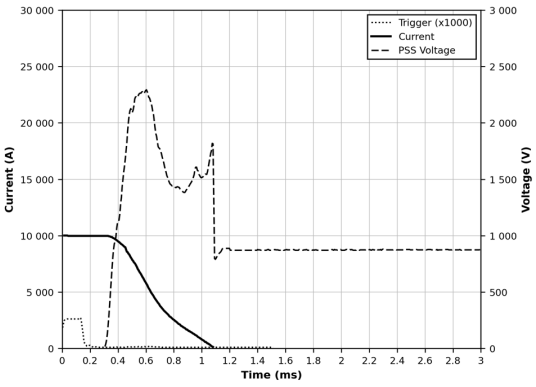
Terminal type

HV	M6 or M8 compliant
Triggering	ABX-5 or AK-2 compliant
Weight	≤ 320 g

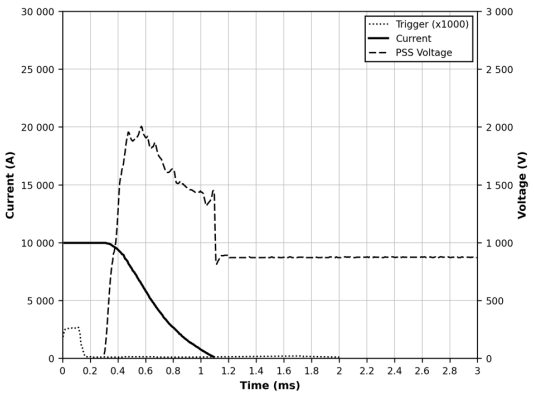
Technical Data and Dimensions

Performance & Dimensions

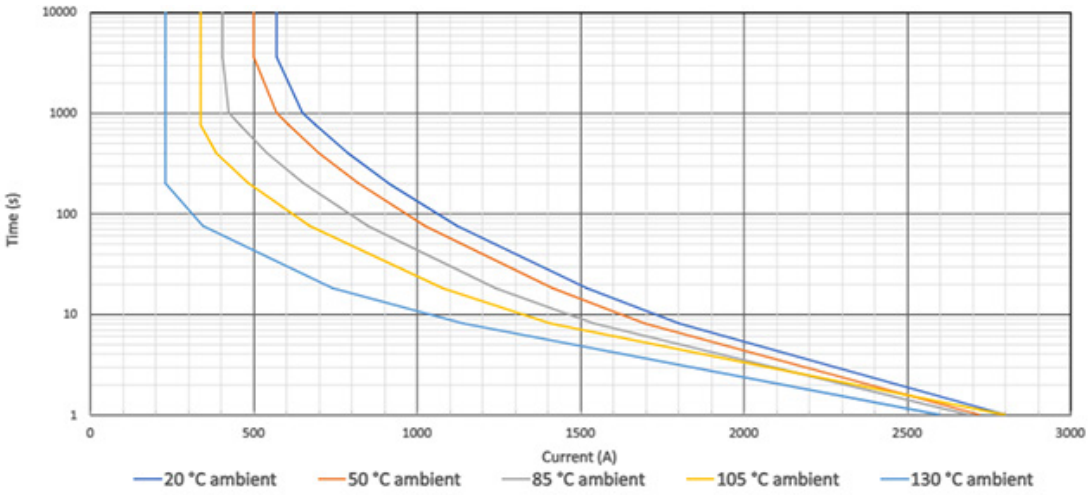
900 V d.c. 10 kA
110 µH LT 5 500 J



900 V d.c. 10 kA
110 µH HT 5 500 J



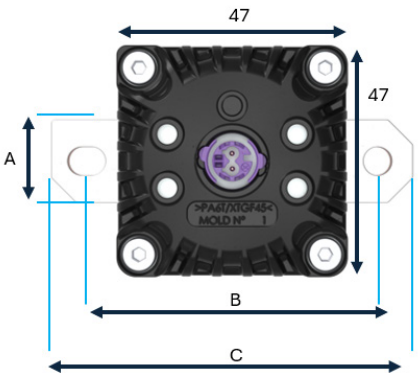
Derating curve

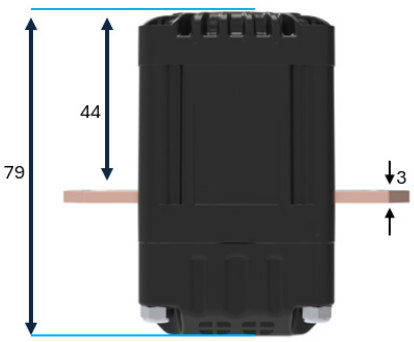


Dimensions

A (mm)	Cross-Section (mm²)	B (mm)	C (mm)
20	60	70	87
30	90	70	87
30	90	78	100

Note: For any other dimensional requirements, please contact us.





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 correctevaluation 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

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