

## Pyro Safety Switches

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

### Pyro Safety Switch PSS-1

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 300 A at 85°C
- Non-reversible device
- Suitable for voltage levels up to 400 VDC
- High peak current carrying capability up to 2 000 A



### Product specifications

#### Switching capacity

Inductive load (5 $\mu$ H max)	200 A / 400 V
Inductive load (60 $\mu$ H)	2000 A / 150 V
Capacitive load	> 400V, contact us

#### Current carrying capacity

85°C, load cable 50 mm <sup>2</sup>	300 A
105°C, load cable 50 mm <sup>2</sup>	250 A
125°C, load cable 50 mm <sup>2</sup>	200 A

#### Maximum short-time current

23°C, load cable 50 mm <sup>2</sup>	2 000 A / 10 s
	25 000 A / 5 ms

#### Triggering conditions

Qualified acc. to	AK-LV 16 & USCAR
Triggering circuit resistance	$\geq 1,7 \Omega$ and $\leq 2,5 \Omega$
Triggering current	1,75 A / 0,5 ms
Or	1,20 A / 2,0 ms
No-triggering current	$\leq 0,4$ A
Or	$\leq 5,0$ A / $\leq 4 \mu$ s
Diagnostic current:	< 100 mA
Triggering pulse slope	> 8 mA / $\mu$ s

#### Busbar

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

#### Busbar profile

Cross-section nominal	32 mm <sup>2</sup>
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#### Operation time

Release time	< 3 ms
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#### Resistance & Insulation data

Busbar resistance (at RT)	
before ops.	$\leq 0,1$ m $\Omega$
after ops	$\geq 10$ M $\Omega$

#### Temperature

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

#### Other Data

Vibration resistance acc. to	ISO 16 750 – 3
Mech. Shock resistance acc. to	ISO 16 750 – 3
Temperature cycle resistance acc. to	ISO 16 750 – 4
Chemical loads resistance acc. to	ISO 16 750 – 5

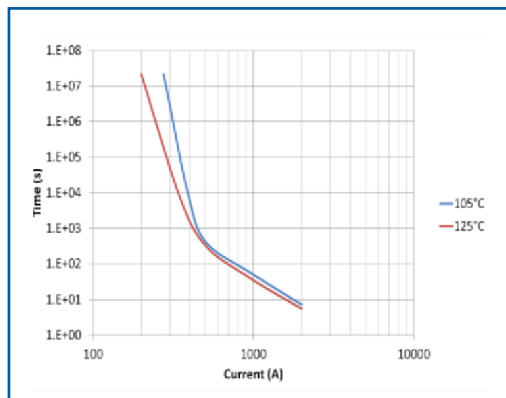
#### Terminal type

on bus-bar	M8 screw
on initiator	AK-1 / AK-2 ABX-3 unsealed ABX-3 sealed

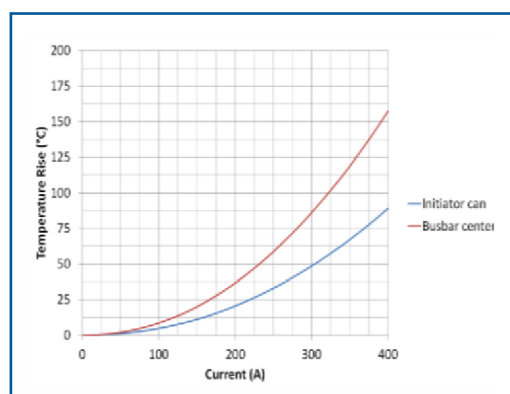
Weight	60 g
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## Technical Data & Dimensions

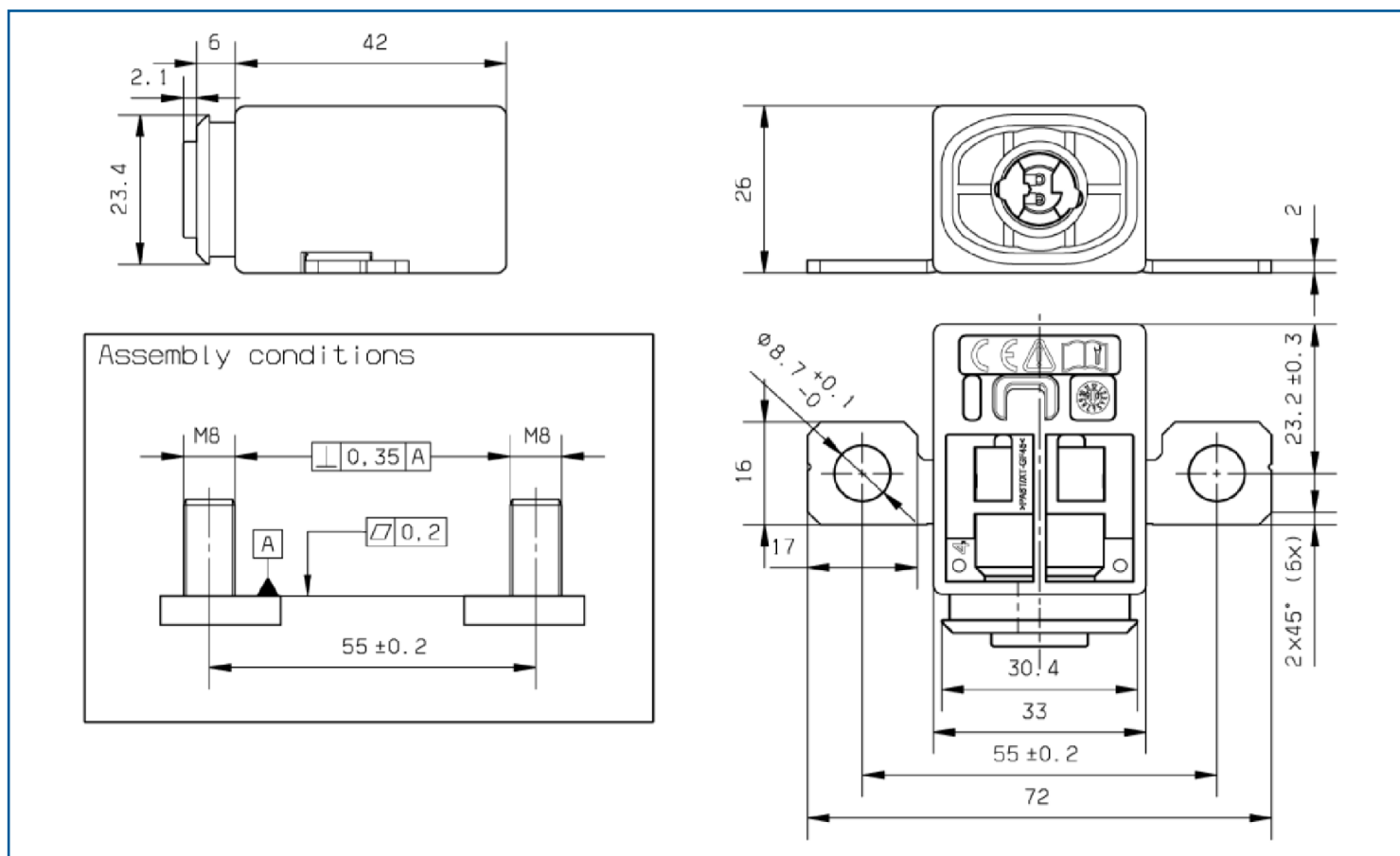
### Derating curve



### Temperature rise curve



## 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

