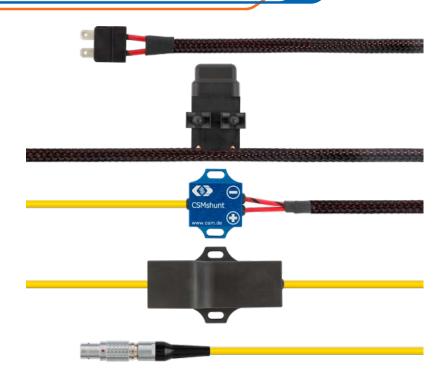


# **CSMshunt Fuse**

# Type 2.5 A | 25 A



## **Product description**

**CSMshunts** provide the means to complement the range of applications for AD measurement modules with current measurements.

The input of the **CSMshunt Fuse** is directly plugged into an ATO fuse holder. The original flat fuse of the vehicle is placed in a fuse holder attached to the cable which is designed for fuses up to 30 A and a permanent current of ±21A.

**CSMshunt Fuse** devices are shipped ready to be installed.

## **Keyfeatures**

- Shunt-based solution for current measurements directly at the vehicle's ATO fuse holder
- Robust housing with external measurement amplifier
- ► For the measurement ranges 2.5 A/25 A (pre-assembled)

## Shipping content

- ► CSMshunt Fuse | Fuse adapter
- Calibration certificate

### **Technical data**

Type designation	CSMshunt 2.5 A Fuse	CSMshunt 25 A Fuse	
	:=		
Continuous current	±2.5 A	±21 A (Shunt: ±25 A)	
Maximum fuse value	5 A	30 A	
Maximum voltage	32 V		
Resistance	10 mΩ	1mΩ	
Threshold frequency	1.4 kHz		
Maximum output voltage	±10V @ ± I <sub>rated</sub>		
Measurement accuracy			
at 25 °C	±0.5% of measured value	±0.5 % of measured value	
	±0.25 mA	±2.5 mA	
Temperature drift	typ. 60 ppm/K		
Galvanic isolation <sup>1</sup>	no safety isolation in terms of high-voltage applications		
Excitation	500 V		
Measurement signal	none <sup>2</sup>		
Power supply			
Minimum	12V DC		
Maximum	15 V DC		
Current consumption	typ. 12.5 mA at 12 V DC		
Housing			
Protection class			
Shunt	IP67		
Amplifier	IP67		
Fuse holder	IP33		
Weight	approx. 120 g		
Dimensions (W × H × D)			
Shunt	41 × 15 × 30 mm		
Amplifier	80 × 30 × 30 mm		

Type designation	CSMshunt 2.5 A Fuse	CSMshunt 25 A Fuse
Connectors		
Input	ATO fuse adapter	
Output		
Fuse Adapter	_	
Shunt	LEMO OB, 6-pole <sup>3</sup>	
Operating and storage conditions		
Operating temperature range	-40 °C to +120 °C	
Relative humidity	5 % to 95 %	
Storage temperature	-40 °C to +120 °C	
Conformity	C€	

<sup>&</sup>lt;sup>1</sup> CSMshunt Fuse devices are designed for measurements in vehicles with 12 V and 24 V on-board power supply systems. Not suitable to be directly connected to systems with operating voltages >32 V, e.g. high-voltage batteries of hybrid or electric vehicles.

 $<sup>^{2}\,\</sup>mathrm{The}$  galvanic isolation of measurement signals has to be effected by the measurement module.

<sup>&</sup>lt;sup>3</sup> Optionally available in other variants.



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