



Shunt Italy Datasheet Shunt 1 - 25 Amp

Datasheet Shunt di Precisione per Misura di
Corrente (1A - 25A) con Caduta di Tensione
Selezionabile

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Datasheet LOW RANGE



SHUNT ITALY DC Current Shunts

SHUNT ITALY DC current shunts are precision devices essential for the accurate measurement of direct current (DC) in various electrical systems.

Operating Principle:

Based on Ohm's Law ($V=IR$), these shunts are low-resistance precision resistors inserted in series within the DC circuit. The current flowing through them generates a small, proportional voltage drop, measurable with a DC power meter. This measured voltage allows for the highly accurate calculation of the current intensity.

Technical Characteristics:

Accuracy Class: Available in classes 0.1%, 0.2%, and 0.5%, ensuring high-accuracy measurements.

Nominal Voltage Drop: Standard at 60 mV, 100 mV, 150 mV with other options available upon request.

Construction Materials: Made from high-quality alloys such as Manganin to guarantee stability and precision over time.

Compact Design: Easy to integrate into various configurations.

Typical Applications:

Renewable Energies: Current monitoring in photovoltaic and wind power systems.

Public Transportation: Current measurement in electric traction systems.

Battery Charging: Precise current control during the charging of accumulators.

Electric Vehicles (Civilian and Military): Monitoring of power supply systems.

Welding: Accurate measurement of welding current for process quality.

Industrial Environments: Current monitoring in various production processes.

Aerospace Sector (Civilian and Military): Monitoring of onboard electrical circuits (motors, lighting, navigation, communication).

Military Land Vehicles: Monitoring of electrical systems in tanks and armored vehicles.

Campers: Efficient energy management and monitoring of electrical systems.

Advantages:

High Accuracy: Reliable and precise measurements.

Ease of Use: Compact design for simple integration.

Versatility: Suitable for a wide range of industrial, civilian, and military applications.

Robustness: Durable materials for long operational life.

SHUNT ITALY DC current shunts represent an optimal solution for those requiring precise and reliable DC current measurement in numerous sectors. Their advanced technical features and versatility contribute to improving the performance and efficiency of electrical systems.

RATED CURRENT	1 (A) for 25 (A)
Current Range	10-120% of rated current
Accuracy	0.5%
Voltage Drop	60mV
MECHANICAL/ENVIRONMENTAL	
Form Factor	Inline installation
Exterior Dimensions	134.0mm x 29.3mm x 17mm 284' x 62' x 35'
Case Material	Manganin Alloy
Operating Temperature	-40°C to 80°C / -40°F to 176°F
Shunt Temperature w/ Load Current	<80% of rated current = 80°C (176°F), >120% = of rated current = 120°C (248°F)
Storage Temperature	-55°C to 85°C / -67°F to 185°F
Operating Humidity	Non-condensing, 0 to 95% RH
Installation Conditions	Indoor Use
ELECTRICAL	
Frequency Range	DC
SAFETY/COMPLIANCE	
Overload	120% of nominal current (2 hours)
Certifications	RoHS

Dimensions 60 mV - 100 mV - 150 mV



