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RU-DA s.r.l. is a company operating in the electromechanical field exclusively aimed at the production of current shunts. We are ready to meet any demand and requirement. We are in the Italy's market and in the foreign market, directly or through some our dealers/customers. RU-DA manufactures shunts for different sectors: Electrical panels, railway, marine, instrumentation, welding machines, power supplies, alternative energy, and more.

We use for our current shunt resistors the highest quality raw materials available, with a significant amount coming from the German market, which in combination with our high standard of quality and competence, permitted us to have had never objections from our customers (we have sold over 500.000 shunts in the past 15 years). The capacity gained in almost 40 years of presence in this sector, combined with our production machinery constantly updated, that also includes 3 milling machining centers with numerical control, one of these brand new, allows us to produce all our products (current shunt resistors - ammeter shunt) entirely in our headquarter.

#### In RU-DA:

- We rely on CAD / CAM systems, to program the five CNC machines which we use during the various stages of production, design our products

(current shunt resistors - ammeter shunt), interact with the technical departments of our clients and give them also designs and mathematical

models in 3D.







CUSTOM SHUNT 515A 1,9 VOLT

- All the main machining activities of drilling, milling and cutting are performed through numerical control machines. This permits us high quality, precision and uniformity of the supplies over the time.



**RU-DA CNC MACHINING CENTERS** 



SHUNTS 15000A MACHINED FROM SOLID BLOCKS WITH

CNC MACHINING CENTER



PRODUCTION SHUNT 6000A WITH CNC MACHINING CENTER



SHUNT 6000A - MANUAL WELDING



PROGRAMMING OF SEMI-AUTOMATIC WELDING

cycle in a special oven before calibration, which stabilizes it, ensuring the accuracy



SHUNT 4000A - HEAT TREATMENT OVEN

- Every product is subjected to a thermal - We use for the calibration of our products exclusively laboratory instrumentation from companies recognized worldwide for their quality.

> - Every year our equipment employed for the calibration of our products is certified by an accredited center, thus ensuring the precision class required by our customers.



SHUNT 4000A - CALIBRATION / SETTING



# **DC CURRENT SHUNTS**

Manufactured according to DIN 43703 regulations and shunts obtained by using shunts bodies DIN 43703

Produced in accordance with REACH and RoHS regulations

Accuracy class 0,5

Brass bodies - resistive elements Manganin welding with Silver alloy (56%) at temperature over 700° C .

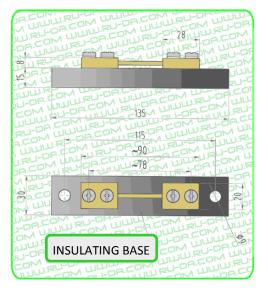
#### Overloads: 1,2 In continuous

- 10 In for 5 seconds up to 250A
- 5 In or 5 seconds from 251A to 2000A
- 2 In or 5 seconds from 2001A to 15000A
- Operating temperature -25 /+60°

## 1-25 amps 60mV shunt - insulating base

Available in ratings from 1 amp to 25 amps Available in Voltage drop: **50mV 60mV 75mV 80mV 100mV 150mV**.

Supplied with screw M5x8 for current and voltage connections.











### 30-150 amps 60mV shunts

Available in ratings from 30 amps to 150 amps Voltage drop: **60mV** 

Supplied with: 2 studs M8x20 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.

If our standard product does not meet your needs, please contact us.

### 30-150 amps 100mV shunts

Available in ratings from 30 amps to 150 amps Voltage drop: **100mV** 

Supplied with: 2 studs M8x20 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



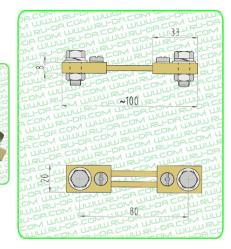
If our standard product does not meet your needs, please contact us.

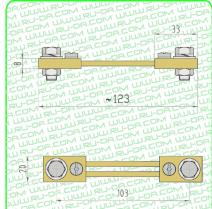
### 30-150 amps 150mV shunts

Available in ratings from 30 amps to 150 amps Voltage drop: **150mV** 

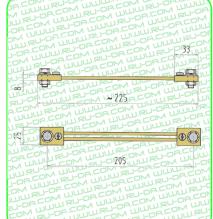
Supplied with: 2 studs M8x20 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.









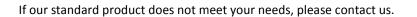




#### 200-350 amps 60mV shunts

Available in ratings from 200 amps to 350 amps Voltage drop: **60mV** 

Supplied with: 2 studs M12x40 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



#### 200-350 amps 100mV shunts

Available in ratings from 200 amps to 350 amps Voltage drop: **100mV** 

Supplied with: 2 studs M12x40 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



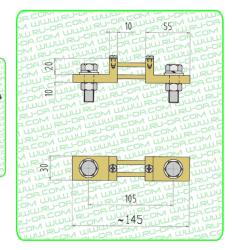
If our standard product does not meet your needs, please contact us.

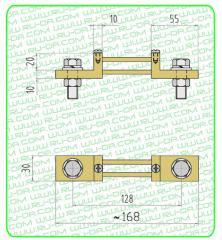
## 200-350 amps 150mV shunts

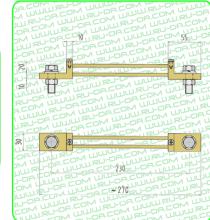
Available in ratings from 200 amps to 350 amps Voltage drop: **150mV** 

Supplied with: 2 studs M12x40 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.







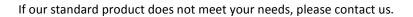




### 400-700 amps 60mV shunts

Available in ratings from 400 amps to 700 amps Voltage drop: **60mV** 

Supplied with: 2 studs M16x45 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



#### 400-700 amps 100mV shunts

Available in ratings from 400 amps to 700 amps Voltage drop: **100mV** 

Supplied with: 2 studs M16x45 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



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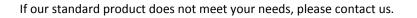
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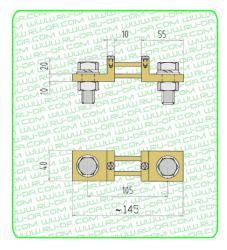
#### 400-700 amps 150mV shunts

Available in ratings from 400 amps to 700 amps Voltage drop: **150mV** 

Supplied with: 2 studs M16x45 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.





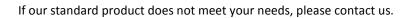




## 750-1000 amps 60mV shunts

Available in ratings from 750 amps to 1000 amps Voltage drop: **60mV** 

Supplied with: 2 studs M20x50 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



### 750-1000 amps 100mV shunts

Available in ratings from 750 amps to 1000 amps Voltage drop: **100mV** 

Supplied with: 2 studs M20x50 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.

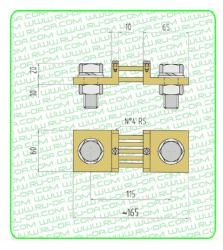
If our standard product does not meet your needs, please contact us.

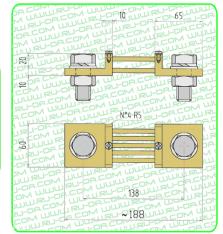
### 750-1000 amps 150mV shunts

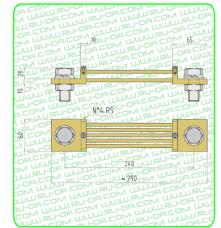
Available in ratings from 750 amps to 1000 amps Voltage drop: **150mV** 

Supplied with: 2 studs M20x50 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.









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https://www.ru-da.com/int/en/index.htm

### 1200-1500 amps 60mV shunts

Available in ratings from 1200 amps to 1500 amps Voltage drop: **60mV** 

Supplied with: 4 studs M16x45 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



### 1200-1500 amps 100mV shunts

Available in ratings from 1200 amps to 1500 amps Voltage drop: **100mV** 

Supplied with: 4 studs M16x45 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



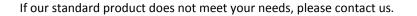
If our standard product does not meet your needs, please contact us.

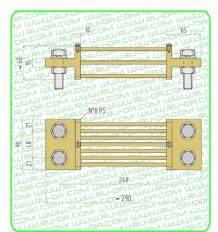
#### 1200-1500 amps 150mV shunts

Available in ratings from 1200 amps to 1500 amps Voltage drop: **150mV** 

Supplied with: 4 studs M16x45 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.







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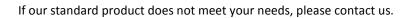


https://www.ru-da.com/int/en/index.htm

### 2000-2500 amps 60mV shunts

Available in ratings from 2000 amps to 2500 amps Voltage drop: **60mV** 

Supplied with: 4 studs M20x50 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



#### 2000-2500 amps 100mV shunts

Available in ratings from 2000 amps to 2500 amps Voltage drop: **100mV** 

Supplied with: 4 studs M20x50 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.

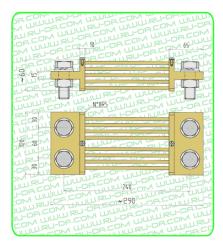


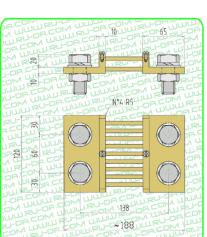
If our standard product does not meet your needs, please contact us.

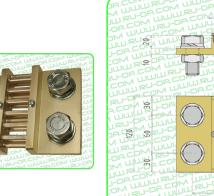
#### 2000-2500 amps 150mV shunts

Available in ratings from 2000 amps to 2500 amps Voltage drop: **150mV** 

Supplied with: 4 studs M20x60 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.







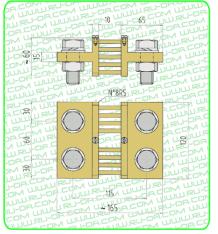


### 3000-4500 amps 60mV shunts

Available in ratings from 3000 amps to 4500 amps Voltage drop: **60mV** 

Supplied with: 4 studs M20x60 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.





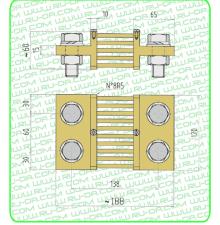
If our standard product does not meet your needs, please contact us.

#### 3000-4500 amps 100mV shunts

Available in ratings from 3000 amps to 4500 amps Voltage drop: **100mV** 

Supplied with: 4 studs M20x60 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



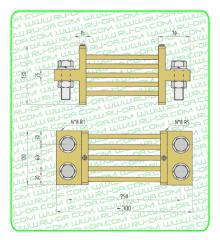


If our standard product does not meet your needs, please contact us.

#### 3000-4500 amps 150mV shunts

Available in ratings from 3000 amps to 4500 amps Voltage drop: **150mV** 

Supplied with: 4 studs M20x75 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.







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## 5000-7000 amps 60mV shunts

Available in ratings from 5000 amps to 7000 amps Voltage drop: **60mV** 

Supplied with: 6 studs M20x75 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



#### 5000-7000 amps 100mV shunts

Available in ratings from 5000 amps to 7000 amps Voltage drop: **100mV** 

Supplied with: 6 studs M20x75 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



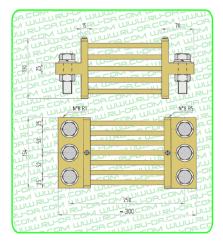
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If our standard product does not meet your needs, please contact us.

#### 5000-7000 amps 150mV shunts

Available in ratings from 5000 amps to 7000 amps Voltage drop: **150mV** 

Supplied with: 6 studs M20x75 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.







## 7500-12000 amps 60mV shunts

Available in ratings from 7500 amps to 12000 amps Voltage drop: **60mV** 

Supplied with: 8 studs M20x85 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



### 7500-12000 amps 100mV shunts

Available in ratings from 7500 amps to 12000 amps Voltage drop: **100mV** 

Supplied with: 8 studs M20x85 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.



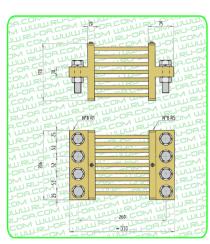
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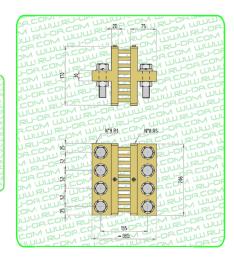
### 7500-12000 amps 150mV shunts

Available in ratings from 7500 amps to 12000 amps Voltage drop: **150mV** 

Supplied with: 8 studs M20x85 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.







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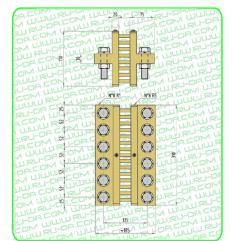


## 15000-25000 amps 60mV shunts

Available in ratings from 15000 amps to 25000 amps Voltage drop: **60mV** 

Supplied with: 12 studs M20x85 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.





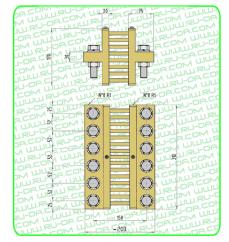
If our standard product does not meet your needs, please contact us.

### 15000-25000 amps 100mV shunts

Available in ratings from 15000 amps to 25000 amps Voltage drop: **100mV** 

Supplied with: 12 studs M20x85 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.

If our standard product does not meet your needs, please contact us.

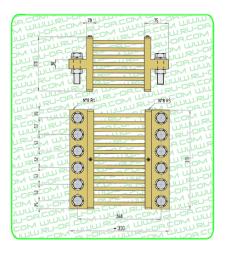


### 15000 amps 150mV shunt

Voltage drop: 150mV

Supplied with: 12 studs M20x85 + washers and nuts for current connections. 2 screw M5x8 for voltage connections.







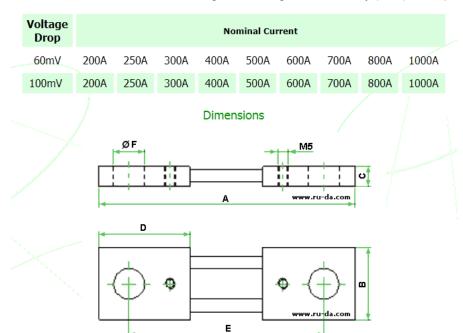
## DC CURRENT SHUNTS — E SERIES

Our low-cost series E offers a cheap alternative for the standard applications that do not require DIN regulations (for example welding machines and battery chargers). Our low-cost series assure compliance with the highest standards at the lowest possible cost.

Produced in accordance with REACH and RoHS regulations

#### Accuracy class 0,5

Brass bodies - resistive elements Manganin welding with Silver alloy (56%) at temperature over 700° C .





Supplied with:

2 screw M5x8 for voltage connections.

Voltage Drop [mV]	Nominal Current [A]	A	в	С	D	E	F
60	200	100	30	8	33	80	8.5
60	250	100	30	8	35	80	8.5
60	300	145	30	8	55	105	12.5
60	400 - 500 - 600	145	40	12	55	105	16.5
60	700 - 800	145	45	12	55	105	16.5
60	1000	145	60	12	55	105	16.5
100	200	124	30	8	33	105	8.5
100	250	120	30	8	35	100	8.5
100	300	168	30	8	55	128	12.5
100	400 - 500 - 600	168	40	12	55	128	16.5
100	700 - 800	168	45	12	55	128	16.5
100	1000	168	60	12	55	128	16.5



## DC CURRENT SHUNTS — SE SERIES

Our low-cost series SE offers a cheap alternative for the standard applications that do not require DIN regulations (for example: Spot welding machines, MIG-MAG inverter welding machines, TIG welding machines, electrode welding machines, battery chargers, inverters, photovoltaic modules )

Produced in accordance with REACH and RoHS regulations

Plate Shunts SE Series 200 amps 60mV shunt—250 amps 60mV shunt

Supplied with: 2 screw M5x8 for voltage connections.

Available accuracy Class: 0,5% - 1% - 2%

Ventilation recommended

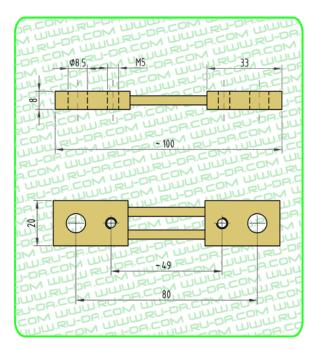
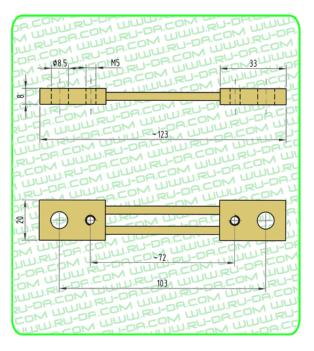


Plate Shunts SE Series 200 amps 100mV shunt —250 amps 100mV shunt

Supplied with: 2 screw M5x8 for voltage connections.

Available accuracy Class: 0,5% - 1% - 2%

Ventilation recommended





## Plate Shunts SE Series 300 amps 60mV shunt

Supplied with: 2 screw M5x8 for voltage connections.

Available accuracy Class: 0,5% - 1% - 2%

Plate Shunts SE Series 300 amps 100mV shunt

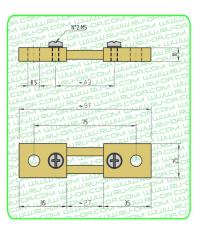
Supplied with: 2 screw M5x8 for voltage connections.

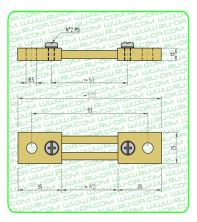
## Plate Shunts SE Series 350 amps 60mV shunt

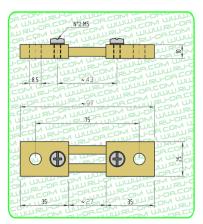
Supplied with: 2 screw M5x8 for voltage connections.

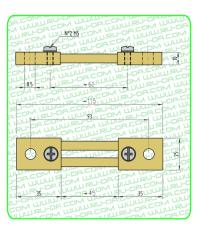
Available accuracy Class: 0,5% - 1% - 2%

Plate Shunts SE Series 350 amps 100mV shunt











## Plate Shunts SE Series 400 amps 60mV shunt

Supplied with: 2 screw M5x8 for voltage connections.

Available accuracy Class: 0,5% - 1% - 2%

Plate Shunts SE Series 400 amps 100mV shunt

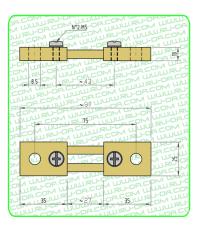
Supplied with: 2 screw M5x8 for voltage connections.

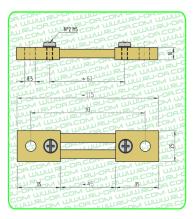
## Plate Shunts SE Series 500 amps 60mV shunt

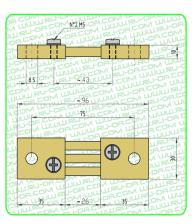
Supplied with: 2 screw M5x8 for voltage connections.

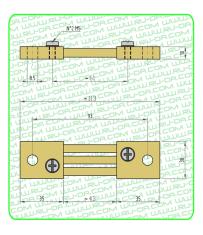
Available accuracy Class: 0,5% - 1% - 2%

Plate Shunts SE Series **500 amps 100mV shunt** 











## Plate Shunts SE Series 600 amps 60mV shunt

Supplied with: 2 screw M5x8 for voltage connections.

Available accuracy Class: 0,5% - 1% - 2%

Plate Shunts SE Series 600 amps 100mV shunt

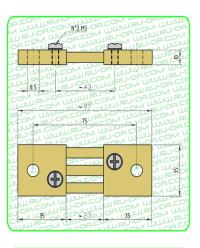
Supplied with: 2 screw M5x8 for voltage connections.

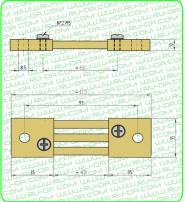
## Plate Shunts SE Series 800 amps 60mV shunt

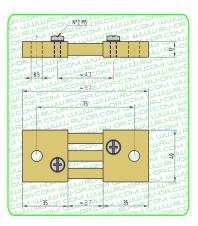
Supplied with: 2 screw M5x8 for voltage connections.

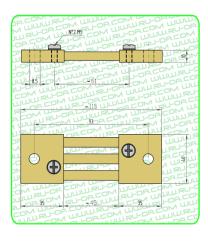
Available accuracy Class: 0,5% - 1% - 2%

Plate Shunts SE Series 800 amps 100mV shunt











## Plate Shunts SE Series 1000 amps 60mV shunt

Supplied with: 2 screw M5x8 for voltage connections.

Available accuracy Class: 0,5% - 1% - 2%

## Plate Shunts SE Series 1000 amps 100mV shunt

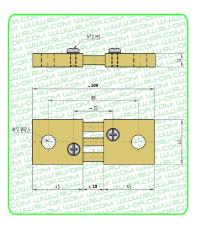
Supplied with: 2 screw M5x8 for voltage connections.

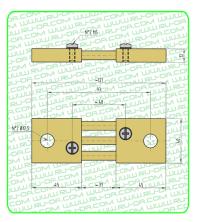
## Plate Shunts SE Series 1500 amps 60mV shunt

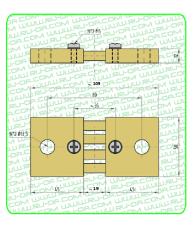
Supplied with: 2 screw M5x8 for voltage connections.

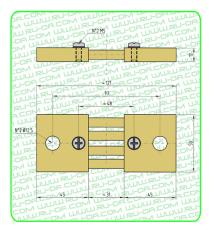
Available accuracy Class: 0,5% - 1% - 2%

Plate Shunts SE Series 1500 amps 100mV shunt











# Plate Shunts SE Series 2000 amps 60mV shunt

Supplied with: 2 screw M5x8 for voltage connections.

Available accuracy Class: 0,5% - 1% - 2%

## Plate Shunts SE Series 2000 amps 100mV shunt

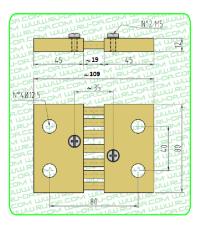
Supplied with: 2 screw M5x8 for voltage connections.

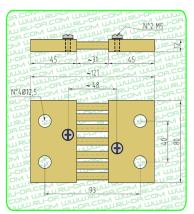
## Plate Shunts SE Series 2500 amps 60mV shunt

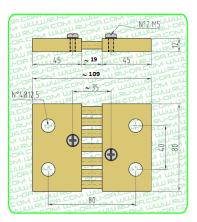
Supplied with: 2 screw M5x8 for voltage connections.

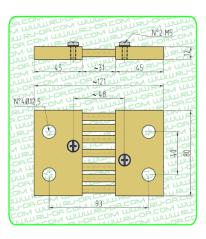
Available accuracy Class: 0,5% - 1% - 2%

Plate Shunts SE Series 2500 amps 100mV shunt











## CUSTOM SHUNTS

Produced in accordance with REACH and RoHS regulations

If our standard products don't meet your requirements, we can redesign or engineer a new shunt!

Our laboratory is equipped with advanced CAD programs and CNC machining centres. We can modify any standard shunt to meet your special requirements. Additionally, we can engineer special designed shunts.

RU-DA s.r.l. is proud to give you an overview of our special designed shunts.

## Custom shunt 5000 amps 100mV

Accuracy Class: 0,5%

## Custom shunt 5000 amps 60mV

Accuracy Class: 0,5%

## Custom shunt 60 amps 60mV

Accuracy Class: 0,5%

Custom shunt 130 amps 60mV

Accuracy Class: 0,5%











## **CUSTOM SHUNTS**

## Custom shunt 120 amps 240mV

Accuracy Class: 0,5%

## Custom shunt 15 amps 150mV

Accuracy Class: 0,5%

Custom shunt 500 amps 60mV

Accuracy Class: 0,5%

Custom shunt 400 amps 60mV

Accuracy Class: 0,5%







## **CUSTOM SHUNTS**

**Custom shunt 30 amps 60mV** Shunt for measuring devices

**Custom shunt 200** amps **Shunt for printed circuit boards** 

**Custom shunt 50 amps 50mV Shunt for printed circuit boards** 

**Custom shunt Shunt for printed circuit boards** 

**Custom shunt Shunt** for printed circuit boards













## **CUSTOM SHUNTS**

**Custom shunt Shunt** for printed circuit boards

Custom shunt Sheared constantan shunt Ideal for measuring devices and welding-machines

Custom shunt 1500 amps 60mV

Accuracy Class: 0,5%

Custom shunt 1000 amps 60mV

Accuracy Class: 0,2 %

Custom shunt 515 amps 1,29V

Accuracy Class: 0,5%

