

RSJ Series

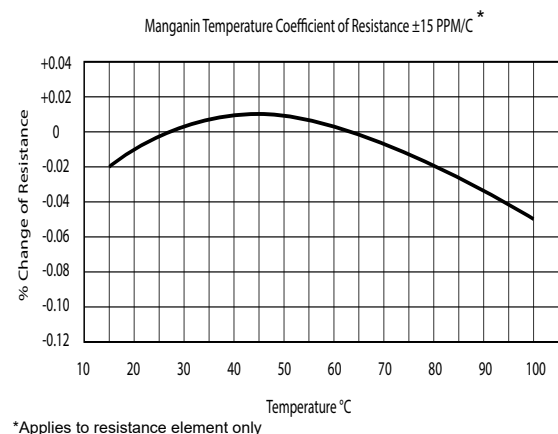
DC Ammeter Shunts / Busbar Shunts
1,500 Amp - 2,000 Amp



- **0.25% Tolerance**
- **1,500 Amp - 2,000 Amp**
- **0.025 mOhm to 0.067 mOhm**
- **Non-inductive Metal Element**
- **50mV & 100mV Outputs**

SPECIFICATIONS				
Type	Rated Current (A)	Operating Current (A)	Resistance (mΩ) 50mV Output	Resistance (mΩ) 100mV Output
RSJ-1500	1500	1000	0.033	0.067
RSJ-2000	2000	1333.33	0.025	0.05

SPECIFICATIONS	
Rated Output	50mV, 100mV, Custom
Voltage Tolerance	±0.25% Standard
Operating Temp.	+30°C to +70°C
Storage Temp.	-55°C to 80°C
Materials	Flame resistant all metal design Resistance Element: Manganin Terminal Block RSJ: Brass



Operating Current Derating: For continuous operation, it is recommended that shunts are not run at more than two thirds (2/3) the rated current under normal conditions per IEEE standards for DC instrument shunts. At ambient temperatures above 40°C, the current must be further derated to prevent damage.

Ordering Information

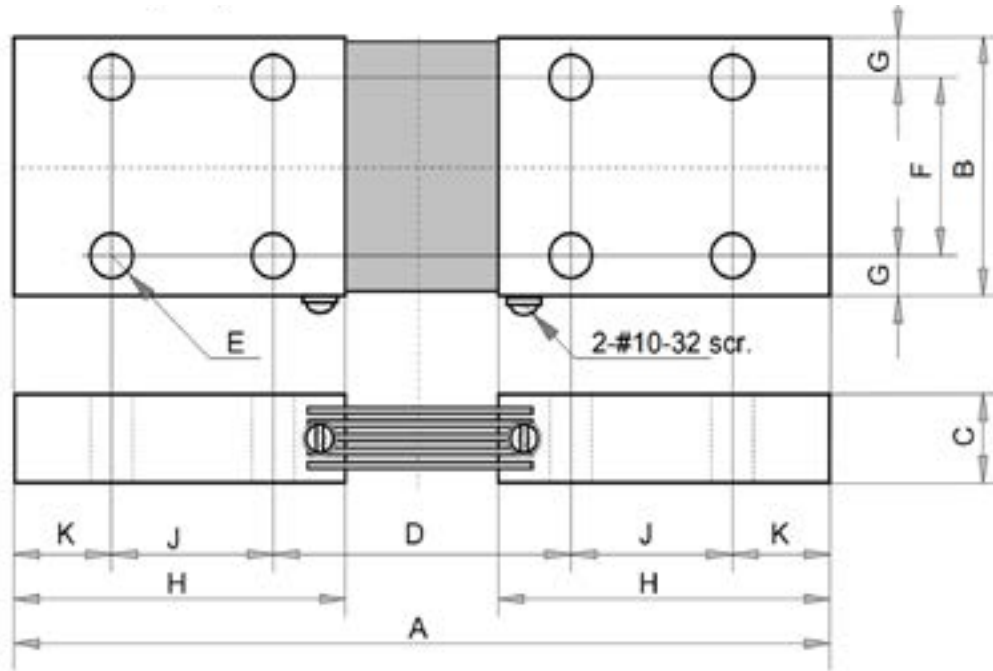
Part Description: Part Type - Voltage Output (mV)

Example: **RSJ-1500-50**

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Dimensions (mm)										
±0.762mm or ±0.381mm for hole diameters										
Rated Current - Out (mV)	A	B	C	D	E	F	G	H	J	K
RSJ-1500-50	244.48	76.2	25.4	92.8	11.11	50.8	12.7	101.6	50.8	25.4
RSJ-2000-50	244.48	101.6	25.4	92.8	11.11	50.8	25.4	101.6	50.8	25.4
RSJ-1500-100	285.75	76.2	25.4	133.35	11.11	50.8	12.7	101.6	50.8	25.4
RSJ-2000-100	285.75	101.6	25.4	133.35	11.11	50.8	25.4	101.6	50.8	25.4

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TECHNICAL NOTES

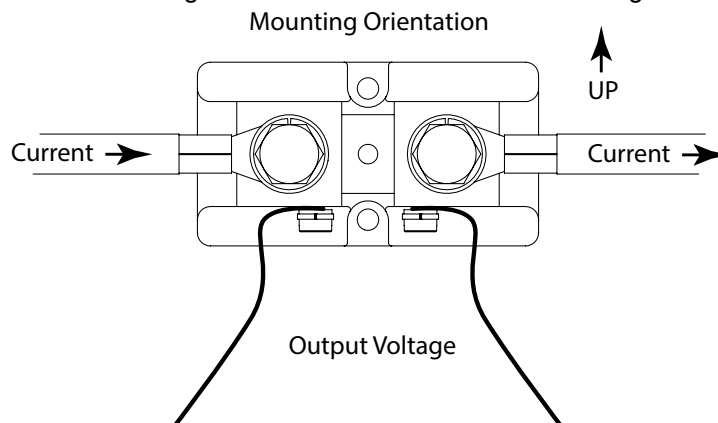
Mounting: Shunts should be mounted with manganin resistive blades in a vertical position in order to promote the free convectional flow of air. If vertical mounting is not practical, forced air cooling or adding heat sinks to the blocks can reduce the operating temperature. The manganin blades must never exceed +145°C, otherwise permanent resistance change may occur.

When current of 100A or greater is passing through the shunt, the major portion of heat generated is dissipated by conduction through the shunt terminal blocks into the connecting buss bar or cable. Therefore it is necessary to insure that good contact is made between the shunt terminal blocks and the conductor terminals and that the conductors have adequate cross section to keep the temperature of the shunt from exceeding 145°C (125°C recommended).

If the shunt is mounted in an enclosure, care must be taken to ensure adequate cooling. If the power density is greater than 1/4 watt per square inch of the enclosure surface for all enclosed devices, additional cooling must be supplied in the form of air vents or fans.

Shunts also must be installed in a way that protects them from thermal expansion forces produced from buss bar or short-circuit forces. Flexible wiring may be required in high pulse current, high vibration, or high temperature applications.

Where possible, all shunts should be mounted on the ground side of the circuit. For circuits above 750VDC, RS shunts **must** be mounted on the ground side due to the dielectric strength of the shunt base.



Operating Current Derating: For continuous operation, it is recommended that shunts are not run at more than two thirds (2/3) the rated current under normal conditions per IEEE standards for DC instrument shunts. At ambient temperatures above 40°C, the current must be further derated to prevent damage.

Pulse Operation: Shunts that do not need continuous operation and are only exposed to intermittent pulses can be operated at levels above their rated current for short periods of times. Pulses are limited to the maximum temperature of the blades not exceeding 145°C (125°C recommended). Many variables such as ambient temperature, cross section of the current carrying conductors, and pulse duration make calculating exact values difficult. Shunt size will need to be validated by customer for pulse current and duty cycle on a case by case basis.