



Materials for Power Devices and Electronic Components

# Current Sensor Core



**NAGASE** | Delivering next.

# Current Sensor Core

Our current sensor cores have a proven track record in the industry, offering versatile solutions that contribute to both enhanced capacity and downsizing in EV applications.

## Applications



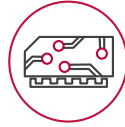
Inverter



Generator



Battery



Power Module

## Sales History

- » European OEM
- » Japanese OEM
- » U.S. OEM
- » Chinese OEM

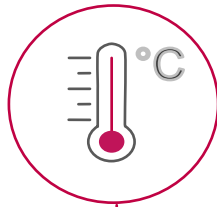
## Product Overview

	Press Laminated Core (Stacking Core)	Dual Orientation Laminated Core	Wound Core	Wound Core with Partial Molding
<b>Accurate for Current up to</b>	800 A	1000 A	1600 A	1600 A
<b>Magnetic Property (Index)</b>	Caused by material magnetic property and structure (0.5)	Better than laminated core, not as good as wound core due to alternate lamination of grain-oriented steel sheets	Best structure for grain-oriented material (1.0).	Same or even better performance than wound core
<b>Core Material</b>	Non-oriented electrical steel sheets	Grain-oriented electrical steel sheets		
<b>Outside Dimension</b>	Can be controlled by punching shape (dimension tolerance +/-0.1 mm)	Can be controlled by punching shape (dimension tolerance +/-0.1 mm)	Need wide tolerance for inside and outside (dimension tolerance 0.5~0.8 mm)	Can be controlled by partially overmolding the core
<b>Varnish Impregnation</b>	Not necessary. Shape is fixed by staking	Not necessary. Shape is fixed by welding.	Necessary. - For fixing the core shape - To prevent disintegration by gap cutting	Not necessary. The overmold fixes the shape and prevents the disintegration of the core.
<b>Metal Burrs at Gap Area</b>	Not necessary. No cutting process	Not necessary. No cutting process.	Necessary to deburr the cutting burr. Deburr by filing and polishing, but it cannot be zero.	Not necessary to deburr the cutting burr. Burr is removed with molding resin in cutting.

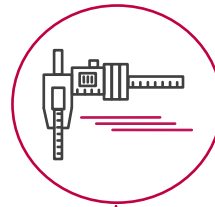
## Quality Control - Guarantee for parts and magnetic performance



Quality Check



Perfect Control



Inspect



Manage



Track record of no claim from customers!

