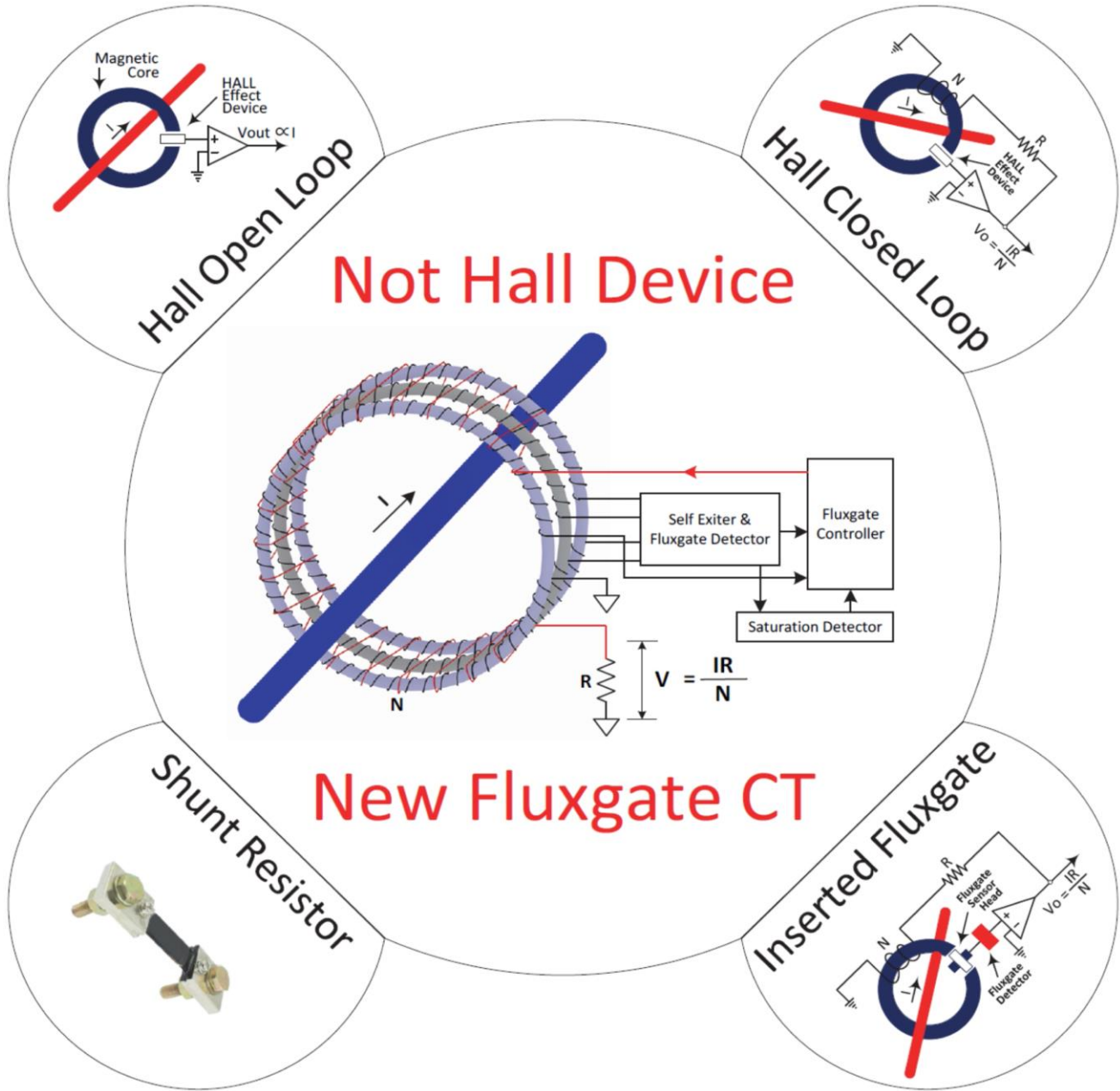


# CB-V▲C Power

## CBCT Series New Fluxgate Current Transducer

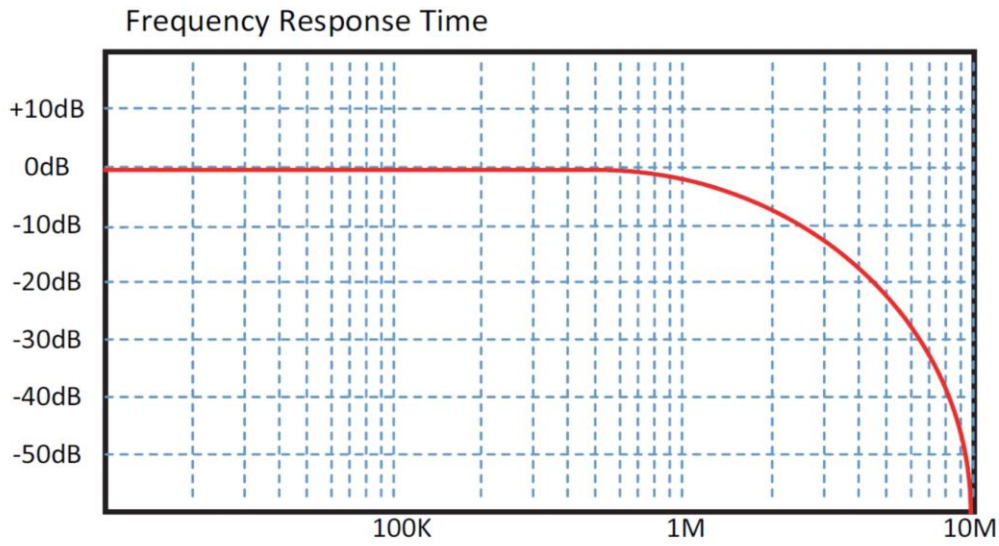
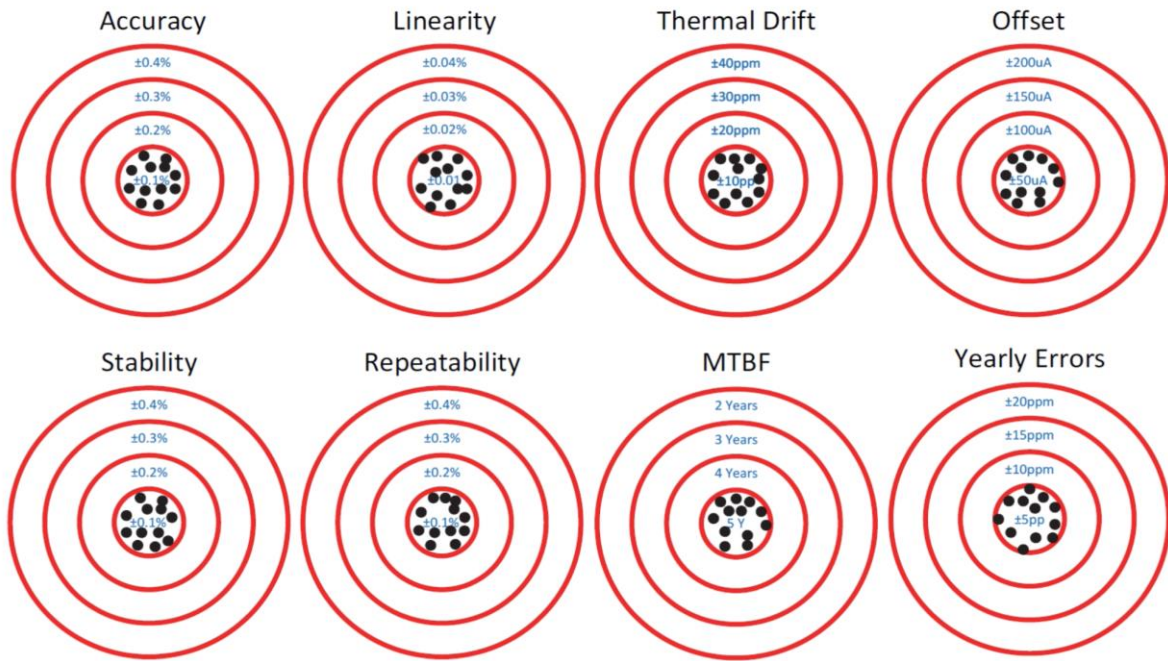


At Component Basics, we understand the critical need for precision and reliability in current sensing. That's why we're proud to introduce the CBVAC Power New Fluxgate Current Transducer – a revolutionary solution designed to outperform traditional current sensors in every aspect. Developed with cutting-edge technology our CBCT series offers unparalleled accuracy, stability, and response for a wide range of applications.

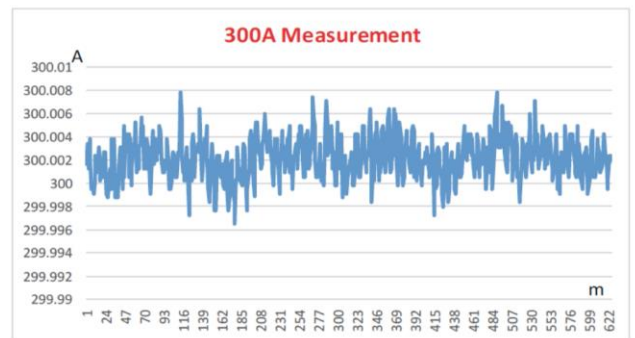
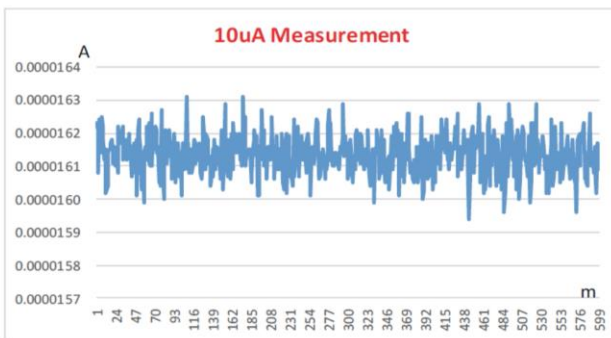


# Diagram

## 1. New Fluxgate



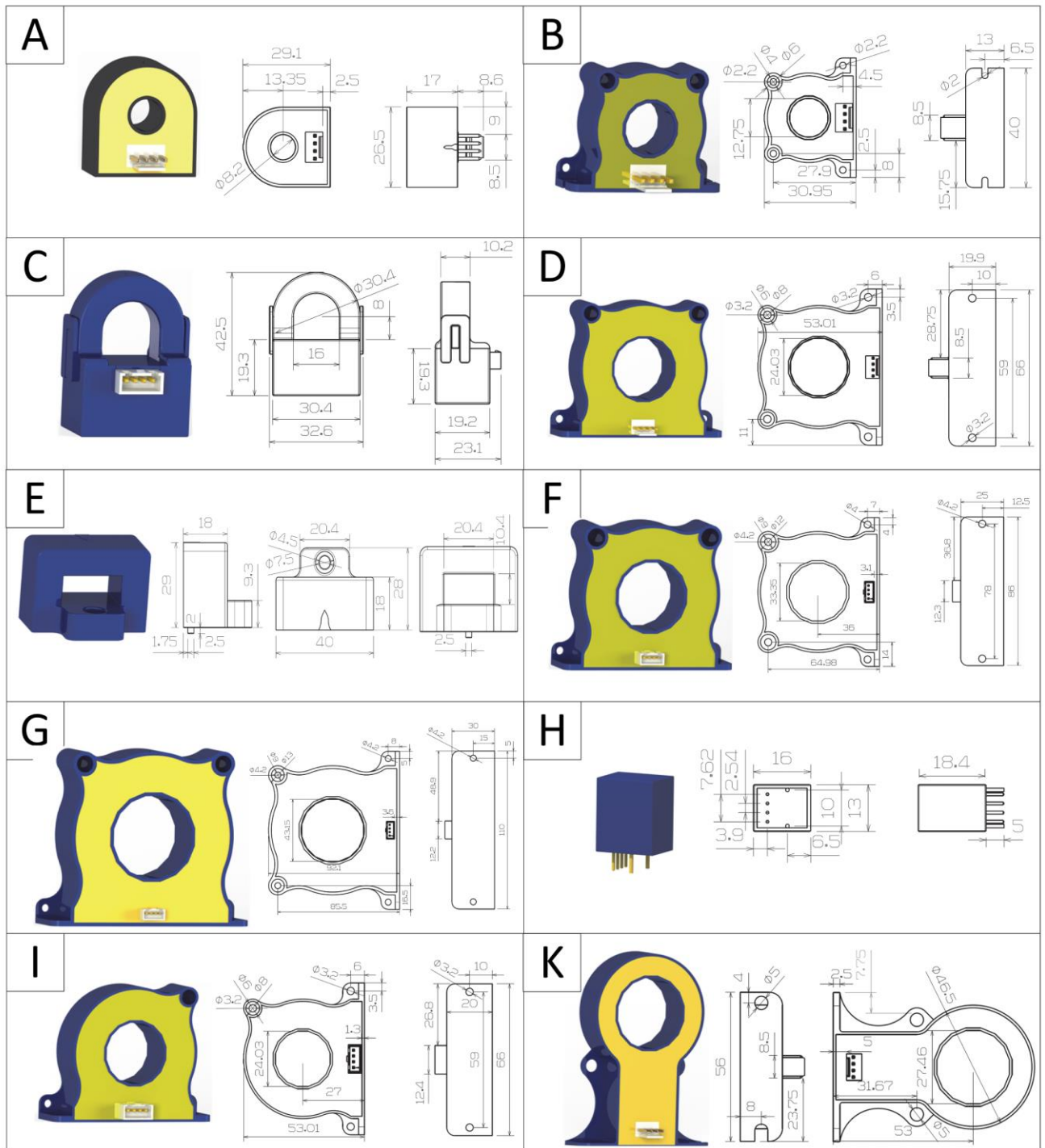
## 2. Real Measurement



### 3. Products Selection Guide

| Nominal Primary Current (A r.m.s) | Power Supply |         | Case Type | Connection Type | Turn Number ( T )  | Measuring range ( A ) | Measuring Resistor ( Ω ) | Secondary current ( A ) | Secondary Resistor ( Ω ) | Offset Current ( A ) | Bandwidth ( KHz ) | Accuracy ( % ) | Linearity ( % ) | Operating Temp ( °C ) |      |  |  |  |  |  |
|-----------------------------------|--------------|---------|-----------|-----------------|--------------------|-----------------------|--------------------------|-------------------------|--------------------------|----------------------|-------------------|----------------|-----------------|-----------------------|------|--|--|--|--|--|
|                                   | +Vdc         | -Vdc    |           |                 |                    |                       |                          |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 0.3                               | +9~+18       | -9~-18  | A         | M               | 250                | 1                     | 2K                       | 0.001                   | ≤25                      | ≤80                  | 100 ~ 500         | F D B A T      | F D B A T       | C I A M               |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 225                      |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 5                                 | +9~+18       | -9~-18  |           |                 | 300                | 10                    | 300                      | 0.017                   | ≤30                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 30                       |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 10                                | +9~+18       | -9~-18  |           |                 | 500                | 20                    | 240                      | 0.02                    | ≤35                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 15                       |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 25                                | +9~+18       | -9~-18  |           | 500             | 40                 | 140                   | 0.05                     | ≤35                     |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    | 5                     |                          |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 55                                | +9~+18       | -9~-18  |           | 1000            | 70                 | 150                   | 0.055                    | ≤45                     |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    | 5                     |                          |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 120                               | +9~+18       | -9~-18  |           | 1500            | 150                | 20                    | 0.08                     | ≤120                    |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    | 3                     |                          |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 150                               | +9~+18       | -9~-18  |           | B               | M                  | 2000                  | 200A                     | 40                      | 0.075                    |                      |                   |                |                 |                       | ≤100 |  |  |  |  |  |
|                                   | +5           | 0       |           | Y               | 5                  |                       |                          |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 300                               | +9~+18       | -9~-18  |           | D               | M                  | 2000                  | 450                      | 30                      | 0.15                     |                      |                   |                |                 |                       | ≤15  |  |  |  |  |  |
|                                   | +5           | 0       |           | Y               | 2.5                |                       |                          |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 300                               | +5           | 0       | I         | M,Y             | 2000               | 450                   | 2.5                      | 0.15                    | ≤15                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 500                               | +15~+18      | -15~-18 | F         | M,Y             | 2000               | 650                   | 5                        | 0.25                    | ≤15                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 1000                              | +15~+18      | -15~-18 | G         | M,Y             | 2000               | 1200                  | 2                        | 0.5                     | ≤21                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 2000                              | +15~+18      | -15~-18 | L         | M,Y             | 4000               | 2400                  | 2                        | 0.5                     | ≤50                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 5000                              | +15~+24      | -15~-24 | M         | N               | Configure to order |                       |                          |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 10000                             | +15~+24      | -15~-24 | N         | N               | Configure to order |                       |                          |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 100                               | +9~+18       | -9~-18  | C         | Y               | 1000               | 150                   | 5                        | 0.1                     | ≤35                      | ≤80                  | 100 ~ 500         | F D B A T      | F D B A T       | C I A M               |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 110                      |                         |                          |                      |                   |                |                 |                       | 1.2  |  |  |  |  |  |
| 300                               | +9~+18       | -9~-18  | E         | M,Y             | 1000               | 450                   | 30                       | 0.3                     | ≤15                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 300                      |                         |                          |                      |                   |                |                 |                       | 2.5  |  |  |  |  |  |
| 300                               | +9~+18       | -9~-18  | K         | M,Y             | 1000               | 400                   | 30                       | 0.3                     | ≤20                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 300                      |                         |                          |                      |                   |                |                 |                       | 2.5  |  |  |  |  |  |
| 0.5                               | +9~+18       | -9~-18  | H         | P               | 250                | 1                     | 2K                       | 0.002                   | ≤25                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 225                      |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 10                                | +9~+18       | -9~-18  |           |                 | 500                | 20                    | 240                      | 0.02                    | ≤35                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 15                       |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 25                                | +9~+18       | -9~-18  |           |                 | 500                | 40                    | 140                      | 0.05                    | ≤35                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 5                        |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |
| 50                                | +9~+18       | -9~-18  |           |                 | 1000               | 70                    | 150                      | 0.05                    | ≤45                      |                      |                   |                |                 |                       |      |  |  |  |  |  |
|                                   | +5           | 0       |           |                 |                    |                       | 5                        |                         |                          |                      |                   |                |                 |                       |      |  |  |  |  |  |

## 4. Case Type



### The CBVAC Power CBCT Advantage: Beyond Hall Effect Technology

Traditional Hall Effect current sensors, whether open-loop or closed-loop, often face limitations in accuracy, linearity, and temperature stability. The CBVAC Power CBCT eliminates these drawbacks by leveraging advanced fluxgate technology, which *does not rely on Hall Effect devices*. This fundamental difference allows our sensors to achieve significantly superior performance.

## Key Differentiators:

- **Exceptional Precision:** Achieves an outstanding accuracy of **0.01%** and linearity of **0.005%**, far surpassing the typical 1% accuracy and 0.5% linearity of Hall Effect devices.
- **Superior Stability & Low Offset:** Offers excellent stability with an incredibly low thermal drift of just **3ppm** and a minimal offset of **10uA**, ensuring consistent performance even in demanding environments.
- **Wide Frequency Response:** Provides an impressive response property of **Under 0 ~ 500kHz**, offering greater bandwidth compared to Hall Effect sensors (typically under 100kHz).
- **High Repeatability:** Boasts a remarkable **99% repeatability**, ensuring reliable and consistent measurements over time.
- **Minimized External Interference:** Exhibits **excellent immunity to external disturbances**, a significant improvement over the "weak" resistance of Hall Effect devices.

**Precise Low Current Measurement:** Capable of measuring currents as low as **10uA**, enabling highly accurate sensing for sensitive applications.

## Product Applications



Automation



Power Supply



Automotive Electronics



Renewable Energy



Digital Amplifier



Medical



Motors



Communication Equipment

[www.componentbasics.com](http://www.componentbasics.com)

[info@componentbasics.com](mailto:info@componentbasics.com)