

# Hall closed loop current sensor

PCB mounting, detect DC, AC and pulse current, high insulation between primary side and the vice side circuit.







Front view

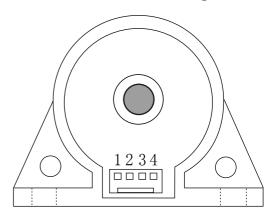
Epoxy view

Fixed hole view

#### Product features

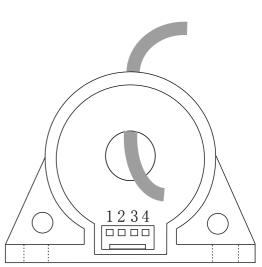
- ·Light weight
- •Low power consumption
- Good linearity
- •No insertion loss
- Fast response time
- Good anti-interference ability

# Installation diagram



# Product application

- Railway
- Metallurgical
- ·Welding machine
- Robot
- Motor
- •Inverter power supply
- Variable frequency governor
- Uninterrupted power supply and communication power supply





# Electrical parameters: (The following parameters are typical values and actual values will be subject to product testing)

## Remarks:

-			1.70		
$I_{PN}$	Rated input	$\pm 20$ A	$\pm50$ A	$\pm 100$ A	Standard input
Ipm	Input measurement range	±30A	±75A	±150A	The default is 1.5 times the rated input
Vout	Rated output	$2.5V \pm 0.625V$			Standard output
X	Accuracy	1 %			$I = I_{PN}$
εL	Linearity	0.1%			$I=0^{\sim} \pm I_{PN}$
Vс	Supply voltage	+5 V			Supply voltage range±5%
Ιc	Current consumption	≤15mA+Is			Reference will be subject to the measured
R1	Load impedance	≥10KΩ			Collection port impedance while lower voltage affect accuracy
Voe	Zero offset voltage	$\leq$ $\pm$ 15mV			TA=25°C
Tr	Response time	<1 μ s			Reference will be subject to the measured
N.w	Weight	34g			Reference will be subject to the measured
Ta	Operation temperature	-25 ∼ + $70$ °C			
Ts	Storage temperature	-25∼+70°C			
Bw	Band width	$\mathtt{DC}^{\sim}\mathtt{150KHz}$			Factory test according to DC
Vd	Delectric strength	3.5KV 50Hz 1min			

### Factory commissioning:

Calculation formula: 2.5V±0.625V 0V datum

1. Debug with 0V as the reference point(acquiescence)

Forward direction: 2.5+  $(I/I_{PN})$  \*0.625

2. Debug with Vref as the reference point(optional)

Reverse direction:  $2.5-(I/I_{PN})*0.625$ 

#### Instructions for use:

- 1. According to the connection mode of correct connection
- 2. The direction shown by the arrow is positive
- 3. With hole measurement, response time and following the speed for the best
- 4. Faulty wiring can lead to product damage and output uncertainty

#### Safe operation:

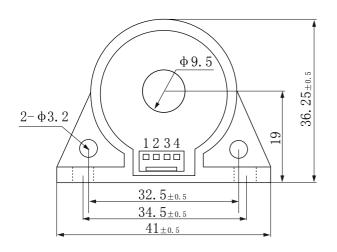
- \*Please read this specification carefully before use.
- \*When you need to move the product, please be sure to disconnect the power and all the connected cables.
- \*If found shell, devices attached to the fixed parts, wire, or have any damaged, please immediately deal with hidden dangers.
- \*If there is any doubt about the safe operation of the equipment, the equipment and the corresponding accessories should be closed immediately, and the fastest time for troubleshooting.

#### Proclamations:

As our products are constantly being improved and updated, we reserve the right to modify the content of this specification at any time without prior notice.

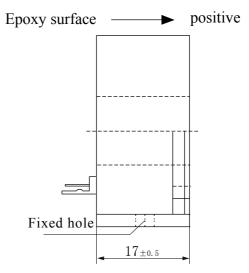


## Dimensions(in mm±0.5):



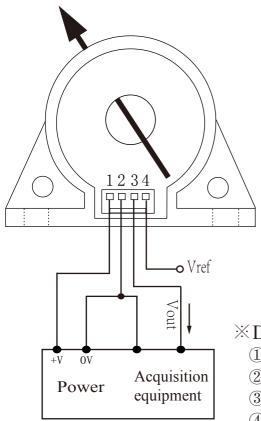
Front view

#### Current direction



Side view

## Wiring diagram (based on 0 V)



## Connector Illustration:



Quick plug which spacing 2.54 mm

# Terminal definition:

1: +V

2: 0V

3: Vout

4: Vref

## **X** Detection:

- ①Choose the auxiliary power supply with small ripple (≤10mV)
- ②Switch on auxiliary power
- 3The auxiliary power is connected to the sensor
- 4)The sensor detects the primary current