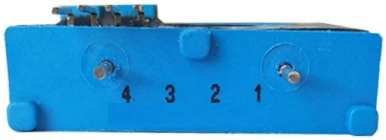
HKS16

Hall open 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

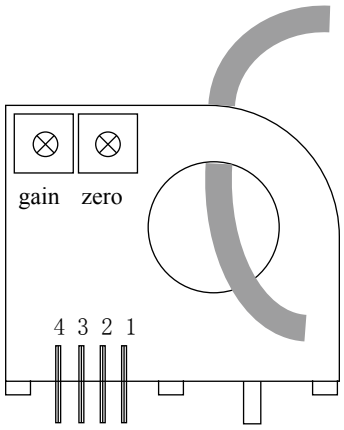


Bottom view

Product features

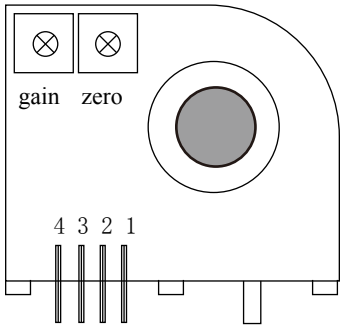
- Light weight
- Low power consumption
- Good linearity
- No insertion loss
- Fast response time
- Good anti-interference ability

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）

I_{PN}	Rated input	±50A	±100A	±200A	±300A	±400A	Standard input
Ipm	Input measurement range	±75A	±150A	±300A	±450A	±600A	Default is 1.5 times of rated input
Vout	Rated output	2.5V±0.625V					Standard output
X	Accuracy	1%					$I=I_{PN}$
εL	Linearity	1%					$I=0\sim\pm I_{PN}$
Vc	Supply voltage	+5V					Supply voltage range±5%
Ic	Current consumption	≤15mA					Reference will be subject to the measured
Rl	Load impedance	≥10KΩ					Collection port impedance while lower voltage affect accuracy
Voe	Zero offset voltage	≤±15mV					TA=25℃
Tr	Response time	≤3μs					Reference will be subject to the measured
N.w	Weight	23g					Reference will be subject to the measured
Ta	Operation temperature	-10～+70℃					
Ts	Storage temperature	-25～+70℃					
Bw	Band width	DC~50KHz					Factory test according to DC
Vd	Delectric strength	2.5KV 50Hz 1min					

Remarks:

Factory commissioning :

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

Calculation formula：2.5V±0.625V 0V datum

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

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.

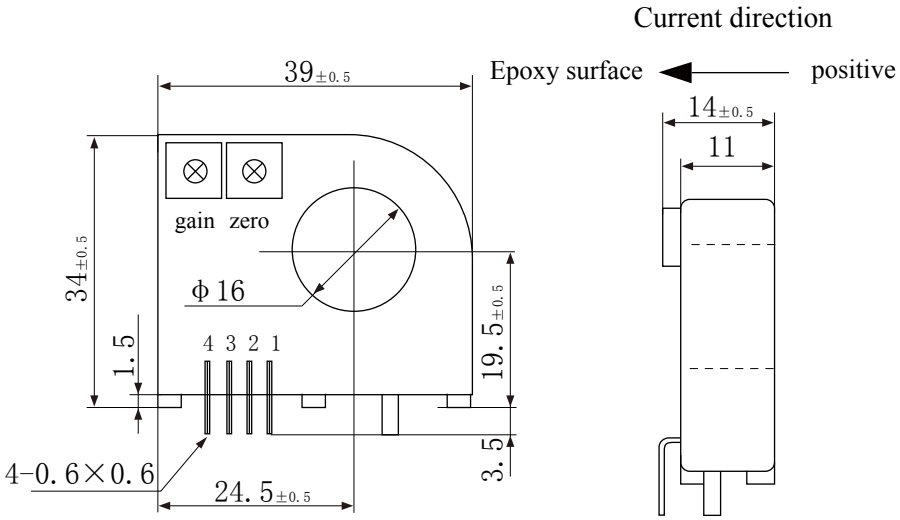
*If found shell, devices attached to the fixed parts, wire, or have any damaged, please immediately deal with hidden dangers.

*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.

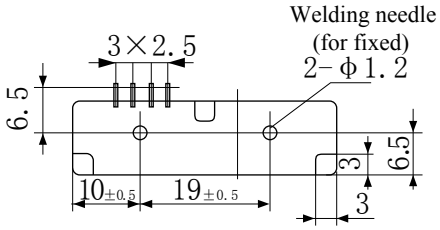
Proclamations:

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）：

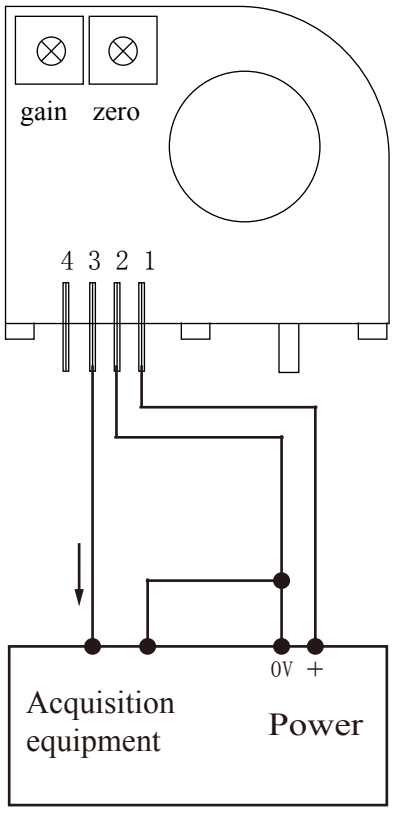


Front view　　Side view



Bottom view

Wiring diagram (based on 0 V)



Pin definition:

1：+V
2：0V
3：Vout
4：Vref

※Detection:

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