

## KS29-A-L Series switch quantity Hall current sensor

### Function description:

This series of sensors uses the Hall effect open-loop current sensor, which can realize the switching output of the DC current signal under the isolated condition and realize the function of overcurrent protection.

### peculiarity

- ◆ Open-loop Hall principle;
- ◆ switching output;
- ◆ Low power consumption;
- ◆ Wide range;
- ◆ No insertion loss
- ◆ Raw material conforms to UL 94-V0

### Application field

- ◆ Inverter
- ◆ Uninterruptible power supply (UPS)
- ◆ Switching Power Supply (SMPS)
- ◆ Power supply for welding machine

### Model list:

Product model	
Model number	Primary side current $I_{PN}$ (A)
KS29-10A-L	10±5% (DC)
KS29-20A-L	20±5% (DC)
KS29-30A-L	30±5% (DC)
KS29-100A-L	100±5% (DC)
KS29-300A-L	300±5% (DC)
KS29-500A-L	500±5% (DC)

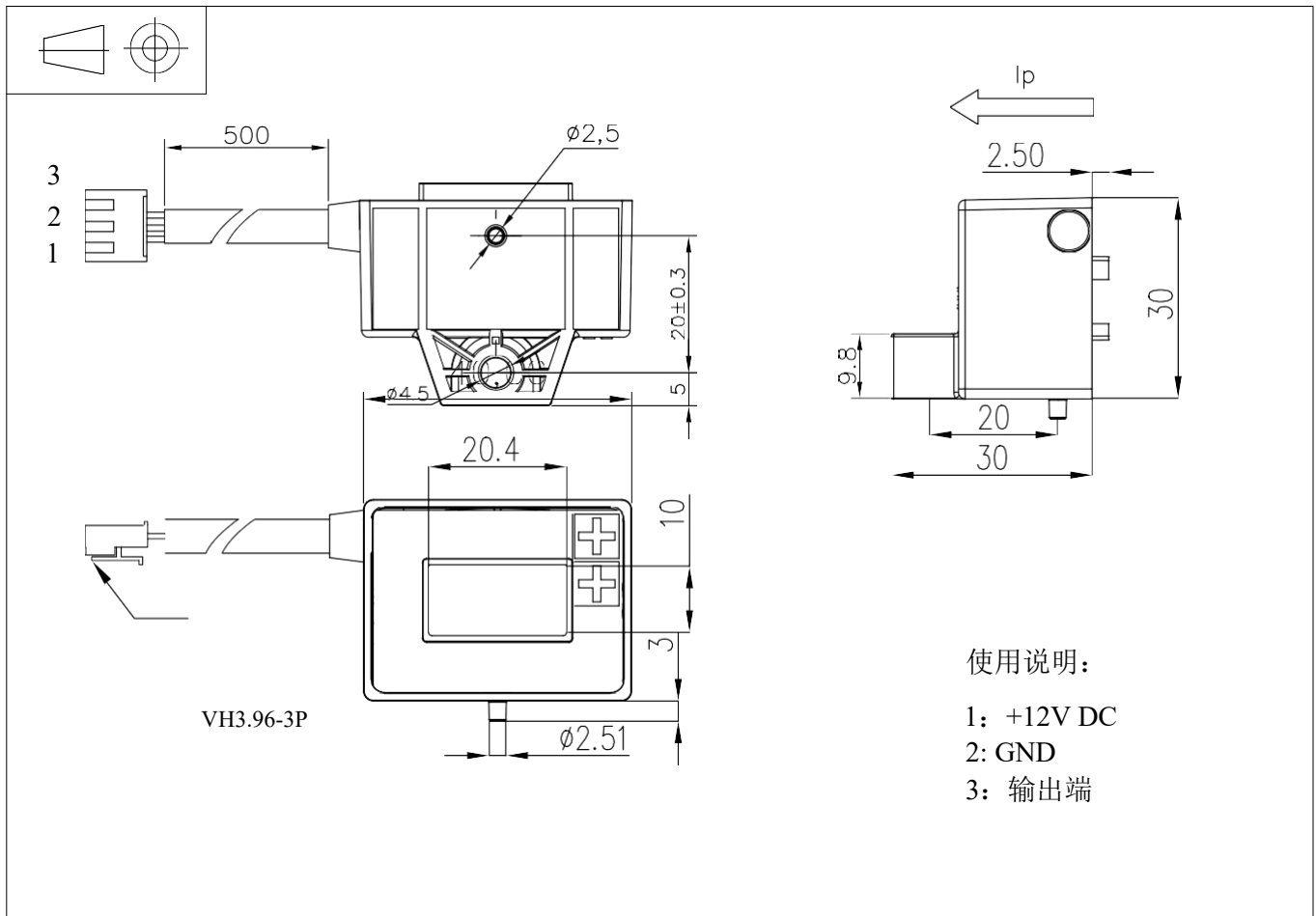
## Parameter list:

argument	symbol	unit	Numerical value	Test condition
Electrical parameter				
Supply voltage (±5%)(1)	V <sub>C</sub>	V	+12~+24	
Current consumption	I <sub>C</sub>	mA	<20	
Output current I <sub>sn</sub>	I <sub>sn</sub>	mA	100(max)	
Output form	-	-	NPN Normal close	
Output low	V <sub>OL</sub>	V	≤0.4(I <sub>sn</sub> =100mA)	
Output high level	V <sub>OH</sub>	V	≥V <sub>C</sub> -0.5	
Performance parameter				
Action return	I <sub>R</sub>	I <sub>PN</sub>	10%	
Temperature effect	I <sub>OT</sub>	I <sub>PN</sub>	<10%	
Response time	t <sub>r</sub>	μS	<10	
Insulation voltage	V <sub>d</sub>	-	Between the primary and secondary side circuits 2.5KV Effective value /50HZ/1 minutes	
Universal parameter				
Operating ambient temperature	T <sub>A</sub>	°C	-25~+85	
Storage ambient temperature	T <sub>S</sub>	°C	-40~+100	
Weight (approx)	m	g	54	

## Instructions for use:

- (1) The arrow direction of the sensor is the positive direction of the current.
- (2) Incorrect wiring may cause sensor damage.
- (3) With transient interference suppression function to prevent misoperation.
- (4) Sensors with different protection currents and output forms can be customized according to user needs.
- (5) Transistor output, fast response, low power consumption, can drive small relays.
- (6) In the absence of special instructions, supply according to NPN normally closed output type, that is, the output level is low when the sensor has no current through.

## Mechanical dimension:



## Look out:

Sensors must comply with IEC61010-1 standards. Sensors must be installed in electronic or electrical equipment that meets application standards and safety requirements in accordance with the instructions for use.

Watch out. Watch out for shocks.



When the sensor is operating, some parts may be subjected to dangerous voltages (e.g. primary busbar, power supply), and neglect of these will result in damage and serious hazards. The sensor is a built-in device, and its conductive part must be guaranteed not to be touched by the outside world after installation. Protective case or shielding cover can be added if necessary. The main power supply must be able to be disconnected.