

FS5000KB 系列霍尔电流传感器

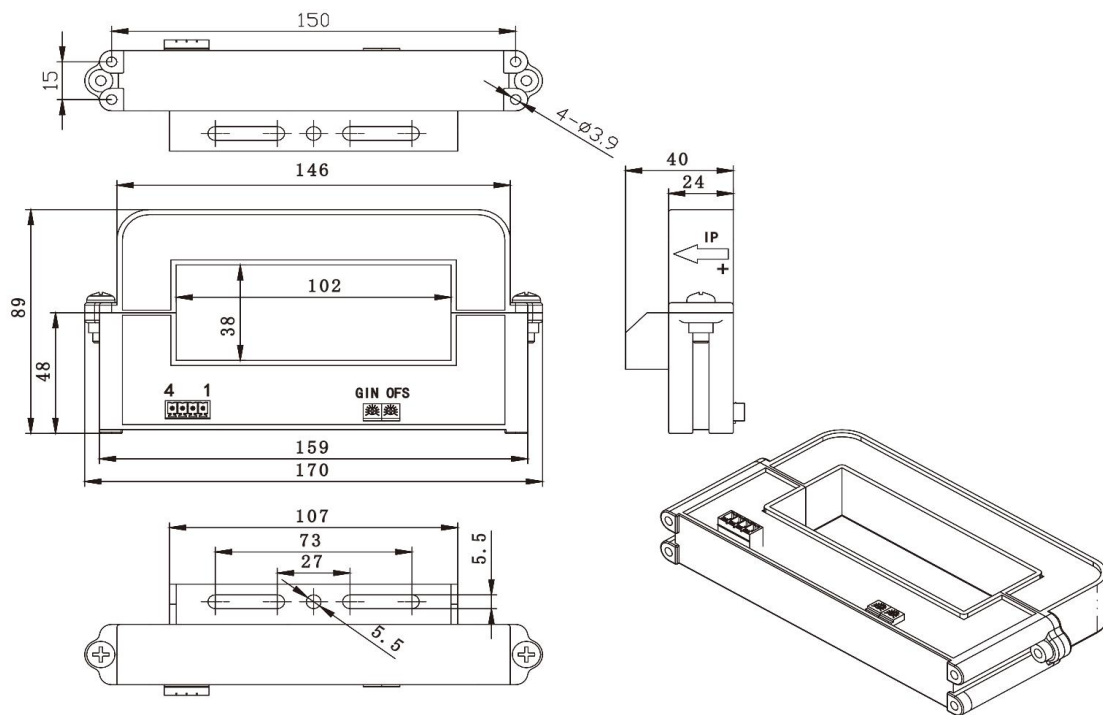
应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

Open loop current sensor based on the principle of Hall-effect It can be used for measuring AC,DC, pulsed and mixed current.



电参数/Electrical characteristics							
	型 号 Type	FS500KB	FS1000KB	FS2000KB	FS3000KB	FS5000KB	
I_{PN}	原边额定输入电流 Primary nominal input current	500	1000	2000	3000	5000	A
I_P	原边电流测量范围 Measuring range of primary current	0~±1000	0~±2000	0~±4000	0~±6000	0~±6000	A
V_{OUT}	副边额定输出电压 Nominal output voltage	5 或 4 (± 1 %)					V
V_C	电源电压 Supply voltage	±12~±15 (±5%)					V
I_C	电流消耗 Current consumption	<30					mA
V_d	绝缘电压 Insulation voltage	在原边与副边电路之间5kV有效值/50Hz/1分钟 5kV RMS /50Hz/1 min between primary and secondary side circuits					
ε_L	线性度 Linearity	<1					%FS
V_0	零点失调电压 Offset voltage	$T_A=25^{\circ}\text{C}$	<±25				mV
V_{OM}	磁失调电压 Residual voltage	$I_{PN}\rightarrow 0$	<±20				mV
V_{OT}	失调电压温漂 Thermal drift of V_0	$I_F=0$ $T_A=-25\sim+85^{\circ}\text{C}$	<±1				mV/℃
T_r	响应时间 Response time	≤7					μs
f	频带宽度 (-3dB) Frequency Bandwidth (-3dB)	DC~20					kHz
T_A	工作环境温度 Ambient operating temperature	-40~+85					℃
T_S	贮存环境温度 Ambient storage temperature	-40~+100					℃
R_L	负载电阻 Load resistance	≥10K					Ω
m	质量 (约) Mass (approx.)	650					g
	标准 Standard	SJ 20790-2000;JB/T 7490-2007					

外形尺寸(mm)/Dimensions of drawing(mm)



引脚输出: 1, +15V 2, -15V 3, Vout 4, 0V(电源地) OFS, 零点调节 GIN, 幅度调节

引线输出: 红, +15V 绿, -15V 黄, Vout 黑, 0V(电源地)

Elucidation: 1: +15V 2: -15V 3: Vout 4: 0V(GND) OFS: Zero adjustment GIN: Gain adjustment (Red: +15V Blue: -15V Yellow: Vout Black: 0V)

使用说明/Remarks

- 错误的接线可能导致传感器损坏。传感器通电后, 当被测电流从传感器箭头方向穿过, 即可在输出端测得同相电压值。
Incorrect wiring may cause damage to the sensor. After the sensor is powered on, when the measured current passes through the arrow direction of the sensor, the in-phase voltage value can be measured at the output end.
- 传感器的输出幅度可根据用户需求进行适当的调节。
The output amplitude of the sensor can be adjusted according to the user's needs.
- 可按用户需求定制不同额定输入电流和输出电压的传感器。
Sensors with different rated input current and output voltage can be customized according to user requirements.