FS1000RST1 系列霍尔电流传感器

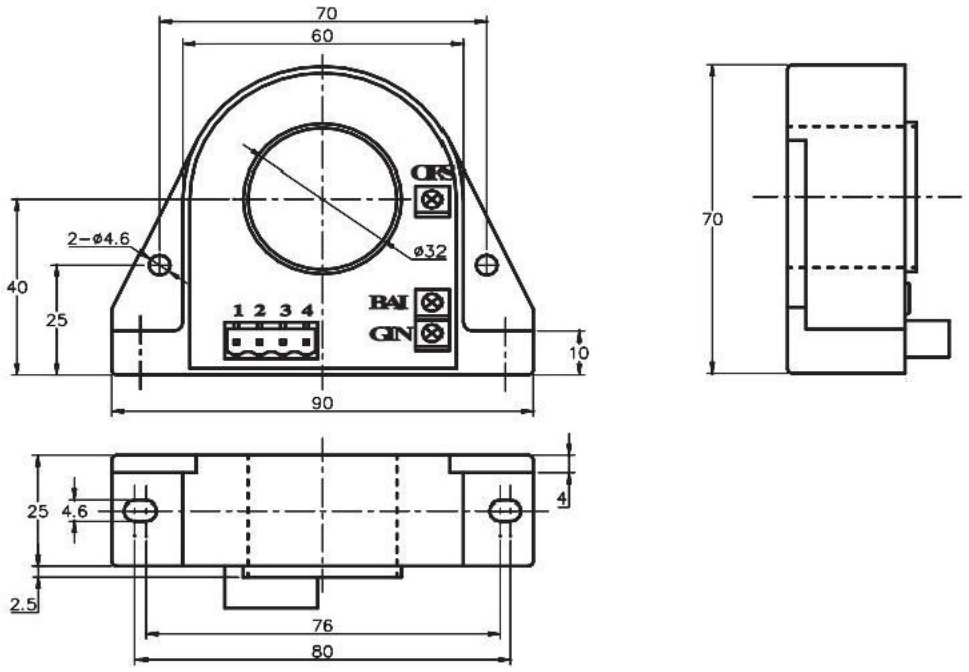
应用霍尔效应、开环测量原理经过TRMS计算后，将被测电流转换成与原边电流成比例输出的 直流电流或电压的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形 的电流。具有高精确度、高线性度、高集成度、体积小结构简单、长期工作稳定的特点。

Using Hall effect and open-loop measurement principle, after TRMS calculation, the measured current is converted into DC current or voltage output proportional to the primary current, and the current sensor can measure DC, AC, pulse and various irregular waveforms of current under the condition of electrical isolation. It has the characteristics of high accuracy, high linearity, high integration, small size, simple structure and long-term stability.

电参数/Electrical characteristics

	型号/Type	FS100 RST1	FS200 RST1	FS300 RST1	FS400 RST1	FS500 RST1	FS600 RST1	FS1000 RST1	
lpN	原边额定输入电流 Primary nominal input current	0～100	0～200	0～300	0～400	0～500	0～600	0～1000	A
lp	原边电流测量范围 Measuring range ofprimary current	0~±150	0~±300	0~±450	0~±600	0~±750	0~±900	0~±1200	A
lout	副边额定输出电流 Rated output voltage	4～20(±1%)							mA
RL	负载电阻 Load resistance	80～650							Ω
Vo	电源电压 Supply voltage	+20～+32(±5%)							V
lo	电流消耗 Current consumption	Ve=+24V 30+Iour							mA
Va	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							
EL	线性度 Linearity	<0.5							%FS
lo	零点失调电流 Zero offset current	TA=25℃ 4±0.1							mA
lom	磁失调电压流 Residual voltage	Ip→0 <0.1							mA
lor	失调电流温漂 Offset current temperature drift	Ip=0 TA=-25～+85℃ <0.005							mA/℃
Tr	响应时间 Response time	<150							ms
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC,20～6000							Hz
TA	工作环境温度 Ambient operating temperature	-25～+85							℃
Ts	贮存环境温度 Ambient storage temperature	-40～+100							℃
RL	负载电阻 Load resistance	≥10K							Ω
m	质量(约) Quality (approx.)	248							g
	标准 Standard	SJ 20790-2000;JB/T 7490-2007							

外形尺寸(㎜)/Dimensions of drawing(mm)



引脚说明：1,Vcc　2,Iout　3,NC　4,0V(电源地)　OFS,零点调节BAI,误差调节GIN,幅度调节

Elucidation:1,Vcc 2,Iou't 3,NC 4,0V(power ground) OFS, zero adjustment BAI, error adjustment GIN, amplitude adjustment

使用说明/Remarks：

1、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窗口穿过，即可在输出端测得比例的电压值。

Incorrect wiring may cause damage to the sensor. After the sensor is powered on, when the measured current passes through the sensor window, the proportional voltage value can be measured at the output end.

2、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.

3、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.