

A-FS500EK1T 系列可拆霍尔交流电流传感器



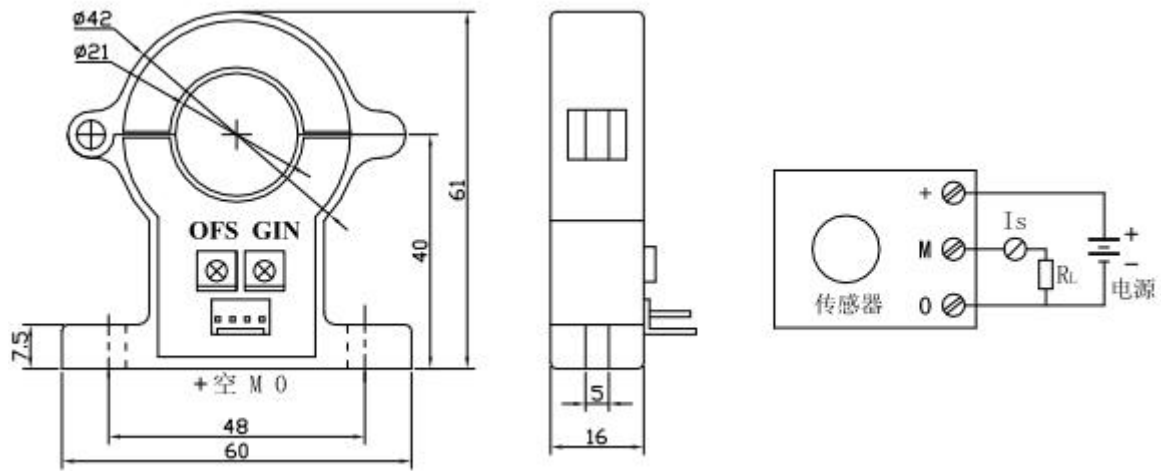
应用霍尔效应的电流传感器,能在电隔离条件下测量交流信号电流,输出和被测电流有效值成比例的4~20mA 直流电流输出。

Open loop current sensor based on the principle of Hall-effect. It can measure the AC signal current under the condition of electrical isolation and convert it into DC signal output.

电参数/Electrical characteristics								
	型号 Type	A-FS030EK1T	A-FS050EK1T	A-FS100EK1T	A-FS200EK1T	A-FS300EK1T	A-FS500EK1T	
I_{PN}	额定输入电流 Nominal input current	0-30 (AC)	0-50 (AC)	0-100 (AC)	0-200 (AC)	0-300 (AC)	0-500 (AC)	A
I_P	测量电流范围 Measuring range of current	0~60 (AC)	0~100 (AC)	0~200 (AC)	0~400 (AC)	0~600 (AC)	0~1000 (AC)	A
I_S	副边输出电流 Secondary output current	4-20 (DC)						mA
R_L	负载电阻 Load resistance	80~450						Ω
V_C	电源电压 Supply voltage	24 \pm 5%						V
ϵ_L	线性度 Linearity	<1						%FS
X_G	精度 Accuracy	TA =25 $^{\circ}$ C \pm 0.5						%FS
I_{OT}	失调电流漂移 Thermal drift of V0	IP=0 TA =-25~+85 $^{\circ}$ C				<0.005		mA/ $^{\circ}$ C
T_r	响应时间 Response time	\leq 20						ms
f	响应频率 Response frequency	20Hz~10kHz						
V_d	绝缘电压 Insulation voltage	在原边与副边电路之间2.5KV 有效值/50Hz/1 分钟						
T_A	工作环境温度 Ambient operating temperature	-25~+85						$^{\circ}$ C
T_S	贮存环境温度 Ambient storage temperature	-40~+100						$^{\circ}$ C
	内部保护 Inner protect	无极性保护						

外形尺寸 (mm) / Dimensions of drawing (mm)

外部接线图 / Connection



引脚说明: +, 正电源M, 电流输出0, 电源地OFS, 零点调节GIN, 幅度调节

Elucidation: +, positive power supply M, current output 0, OFS of power supply, zero 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.

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.