

A-FS2100LT 系列两线交流电流变送器

应用电磁感应原理的电流传感器,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。它们仅需两线制连接,无需单独的回路电源。

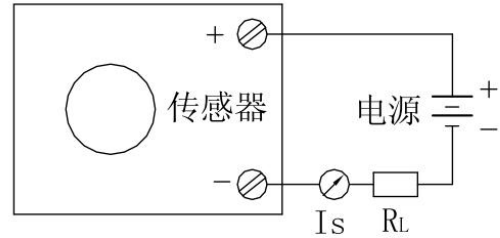
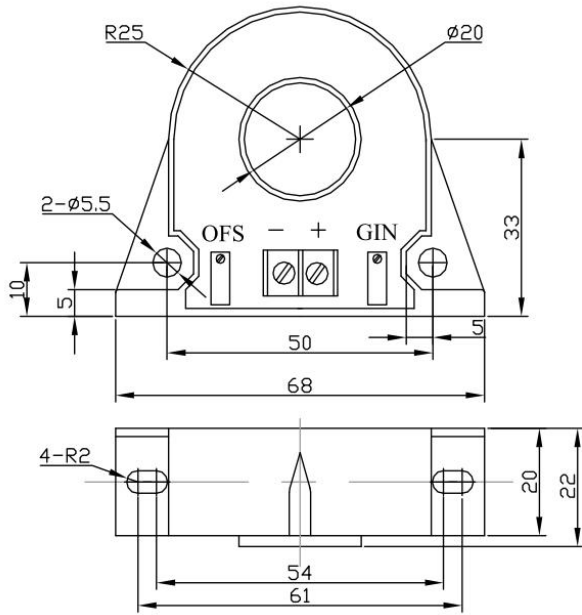
The current sensor using the principle of electromagnetic induction can measure the AC signal current under the condition of electrical isolation, and output 4-20mA DC current output proportional to the effective value of the measured current. They require only a two-wire connection and do not require a separate loop power supply.



电参数/Electrical characteristics						
	型号 Type	A-FS2010LT	A-FS2020LT	A-FS2050LT	A-FS2100LT	
I_{PN}	原边输入电流量程 Primary input current range	0~10 (AC)	0~20 (AC)	0~50 (AC)	0~100 (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	0~250				Ω
I_P	过载 Overload	IPN X120%				A
V_C	电源电压 Supply voltage	负载250 Ω 时	+12~+35			V
ϵ_L	线性度 Linearity	<0.2				%FS
X_G	精度 Accuracy	TA =25 $^{\circ}C$	± 0.5			%FS
I_{OT}	输出电流温度漂移 Output current temperature drift	TA =-25~+85 $^{\circ}C$	<0.005			mA/ $^{\circ}C$
T_r	响应时间 Response time	≤ 300				ms
f	响应频率 Response frequency	40Hz~5kHz				
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	过电压保护, 过大电流保护, 极性保护				

外形尺寸(mm)/Dimensions of drawing (mm)

外部接线图/Connection



端子说明: +, 电源正-, 电源负 OFS, 零点 调节GIN, 幅度调节

Elucidation: +, power supply positive -, power supply negative OFS, zero adjustment GIN, amplitude adjustment

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.