

FS500E2T 新能源电动汽车传感器

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。

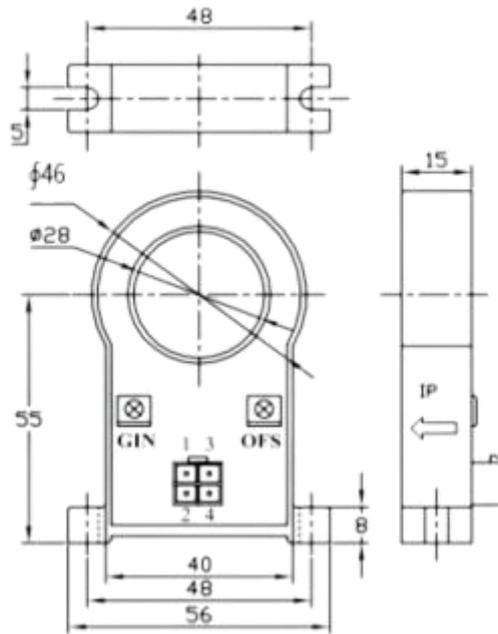
Open loop current sensor based on the principle of Hall-effect It can be used for measuring AC,DC,pulsed and mixed current.



电参数/Electrical characteristics								
	型号 Type	FS100E2T	FS200E2T	FS300E2T	FS400E2T	FS500E2T	FS600E2T	
I_{PN}	原边额定输入电流 Primary nominal input current	100	200	300	400	500	600	A
I_P	原边电流测量范围 Measuring range of primary current	0~±120	0~±240	0~±360	0~±480	0~±600	0~±720	A
V_{SN}	副边额定输出电压 Secondary nominal output voltage	2.5±2						V
V_C	电源电压 Supply voltage	+5(±5%)						V
I_C	电流消耗 Current consumption	<20						mA
V_d	绝缘电压 Insulation voltage	在原边与副边电路之间 2.5 KV 有效值/50Hz/1 分钟						
ϵ_L	线性度 Linearity	<1						%FS
V_0	零点失调电压 Zero offset voltage	$T_A=25^\circ\text{C}$	2.5±0.015					V
V_{OM}	磁失调电压 Residual voltage	$I_{PN} \rightarrow 0$	<±10					mV
V_{OT}	失调电压温漂 Thermal drift of V0	$I_p=0$	$T_A=-25\sim+85^\circ\text{C}$					mV/°C
T_R	响应时间 Response time	≤5						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~+125						°C
T_S	贮存环境温度 Ambient storage temperature	-40~+150						°C

R_L	负载电阻 Load resistance	$\geq 10K$	Ω
	标准 Standard	GI/FS-0105	

外形尺寸 (mm) /Dimensions of drawing(mm)



引脚说明: 1, +5V 2, GND 3, Vout 4, GND, OFS, 零点调节 GIN, 幅度调节

Elucidation: 1:+5V 2:GND 3:VOUT 4:GND, OFS:Zero adjustment GIN:Gain 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.