

FS100ET 系列霍尔电流传感器

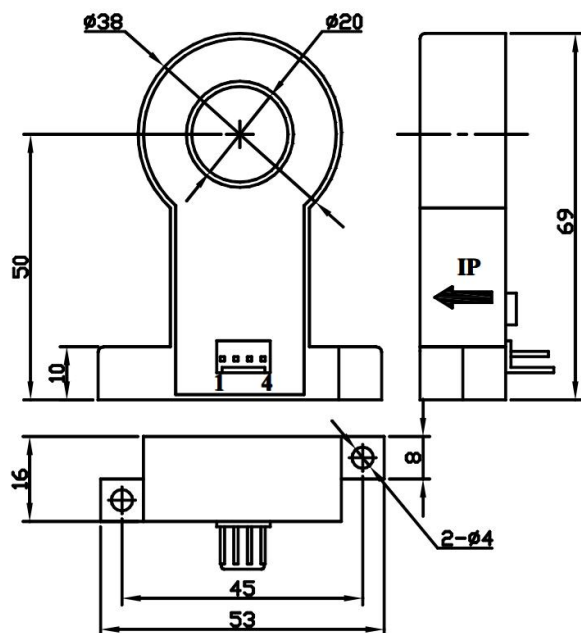
应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

The current sensor using the Hall effect open-loop principle can measure DC, AC, pulse and various irregular waveforms of current under the condition of electrical isolation.



电参数/Electrical characteristics								
	型号 Type	FS050ET	FS100ET	FS200ET	FS300ET	FS500ET	FS800ET	
I_{PN}	原边额定输入电流 Rated input current on primary side	50	100	200	300	500	800	A
I_p	原边电流测量范围 Primary current measurement range	$0 \sim \pm 60$	$0 \sim \pm 120$	$0 \sim \pm 240$	$0 \sim \pm 360$	$0 \sim \pm 580$	$0 \sim \pm 900$	A
V_{OUT}	副边额定输出电压 Rated output voltage of secondary side	2.5 ± 2						V
V_c	电源电压 Supply voltage	$+5 (\pm 5\%)$						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2.5KV有效值/50Hz/1分钟						
e	线性度 linearity	± 0.5						%FS
V_o	零点失调电压 Zero offset voltage	$T_A = 25^\circ\text{C}$ $2.5V \pm 1\%$						mV
V_o	磁失调电压 Magnetic offset voltage	$I_p \rightarrow 0$ $< \pm 20$						mV
V_o	失调电压温漂 Offset voltage temperature drift	$I_{PN}=0$ $T_A = -25 \sim +85^\circ\text{C}$ $< \pm 0.5$						mV/ $^\circ\text{C}$
T_r	响应时间 Response time	≤ 5						μs
f	频带宽度(-3dB) Band width (-3dB)	DC~20						kHz
T	工作环境温度 Operating ambient temperature	$-40 \sim +85$						$^\circ\text{C}$
T_s	贮存环境温度 Storage ambient temperature	$-40 \sim +100$						$^\circ\text{C}$
R	负载电阻 Load resistance	$\geq 10K$						Ω
	标准 Standard	GI/FS-0105						

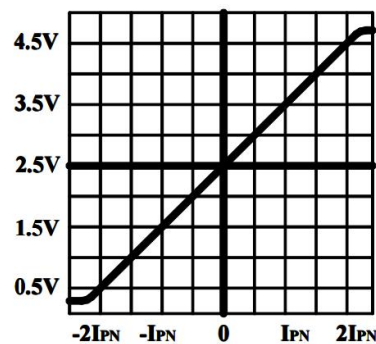
外形尺寸(mm)/Dimensions of drawing(mm)



引脚说明:

- 1: +5V
- 2: GND
- 3: Vout
- 4: GND

输入电流—输出电压



使用说明/Instructions

- 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.