



FSM050SY系列霍尔电流传感器

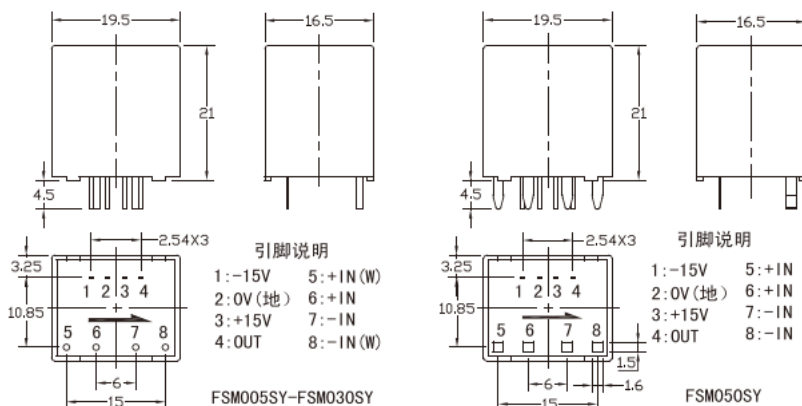
应用霍尔效应开环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

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

电参数 / Electrical characteristics

	型号 Type	FSM005SY	FSM010SY	FSM015SY	FSM020SY	FSM025SY	FSM030SY	FSM050SY	
I_{IN}	原边额定输入电流 Primary nominal input current	5	10	15	20	25	30	50	A
I_p	原边电流测量范围 Measuring range of primary current	$0 \sim \pm 10$	$0 \sim \pm 20$	$0 \sim \pm 30$	$0 \sim \pm 40$	$0 \sim \pm 50$	$0 \sim \pm 60$	$0 \sim \pm 100$	A
	输入引脚尺寸 Dimension of input terminal	D0.8	$\phi 1.0$	$\phi 1.0$	$\phi 1.4$	$\phi 1.4$	$\phi 1.6$	2X1.6X1.5	mm
K_N	匝数比 Conversion ratio	3:1500	2:2000	1:1500	1:2000	1:2500	1:3000	1:3125	
R_{in}	内接测量电阻 Internal measuring resistance	400	400	400	400	400	400	250	Ω
V_{SN}	副边额定输出电压 Secondary nominal output voltage	$4 \pm 0.5\%$							V
V_O	电源电压 Supply voltage	$\pm 15 (\pm 5\%)$							V
I_O	电流消耗 Current consumption	< 25							mA
V_a	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							
ϵ_L	线性度 Linearity	< 0.1							%FS
X	精度 Accuracy	TA=25℃ ± 0.5							%
V_O	零点失调电压 Zero offset current	± 25							mV
V_{OT}	失调电压温漂 Thermal drift of I_O	$I_{pN}=0$ TA=-25~+85℃ $< \pm 0.5$							mV/℃
T_r	响应时间 Response time	< 1							μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC~200							kHz
TA	工作环境温度 Ambient operating temperature	-25~+85							℃
TS	贮存环境温度 Ambient storage temperature	-40~+100							℃
	标准 Standard	GI/FS-0105							

外形尺寸(mm)/Dimensions of drawing (mm)



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.
- 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.