

FSM2005S 系列霍尔电流传感器



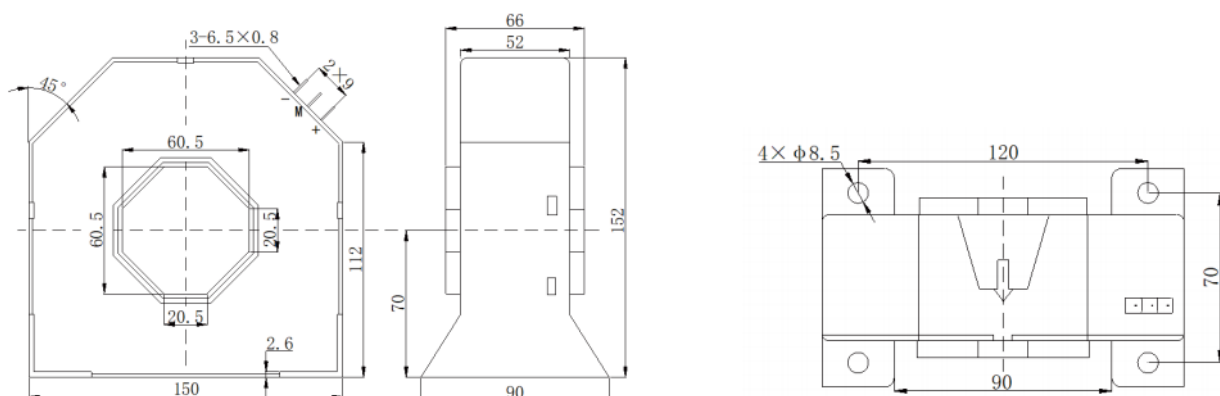
应用霍尔效应闭环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

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

电参数/Electrical characteristics				
	型号 Type	FSM2005S		
I_{pn}	原边额定输入电流 Primary nominal input current	± 2000		A
I_p	原边电流测量范围 Measuring range of primary current	± 3000		A
I_{sN}	副边额定输出电流 Secondary nominal output current	± 400		mA
R_M	测量电阻范围 Measuring resistance	With $\pm 15V$ @ I_p With $\pm 15V$ @ I_{PM}	Max 7Ω max 4Ω	
		With $\pm 24V$ @ I_p With $\pm 24V$ @ I_{PM}	max 28Ω max 13Ω	
V_c	电源电压 Supply voltage	$\pm 15 \sim \pm 24 (\pm 5\%)$		V
I_c	电流消耗 Current consumption	$V_c = \pm 15V$	$45mA \pm 1s$	mA
V_a	绝缘电压 Insulation voltage	在原边与副边电路之间 6KV 有效值/50Hz/1 分钟		
e	线性度 Linearity	< 0.1		%FS
I_o	零点失调电流 Zero offset current	$T_A = 25^\circ C$	$< \pm 0.2$	mA
I_{oT}	零点失调电流温漂 Thermal drift of I_O	$I \rightarrow 0$	$< \pm 0.5$	mA
T_r	响应时间 Response time	≤ 1		μs

f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC~150	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
	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.
- 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.