FSM2000LF 系列霍尔电流传感器

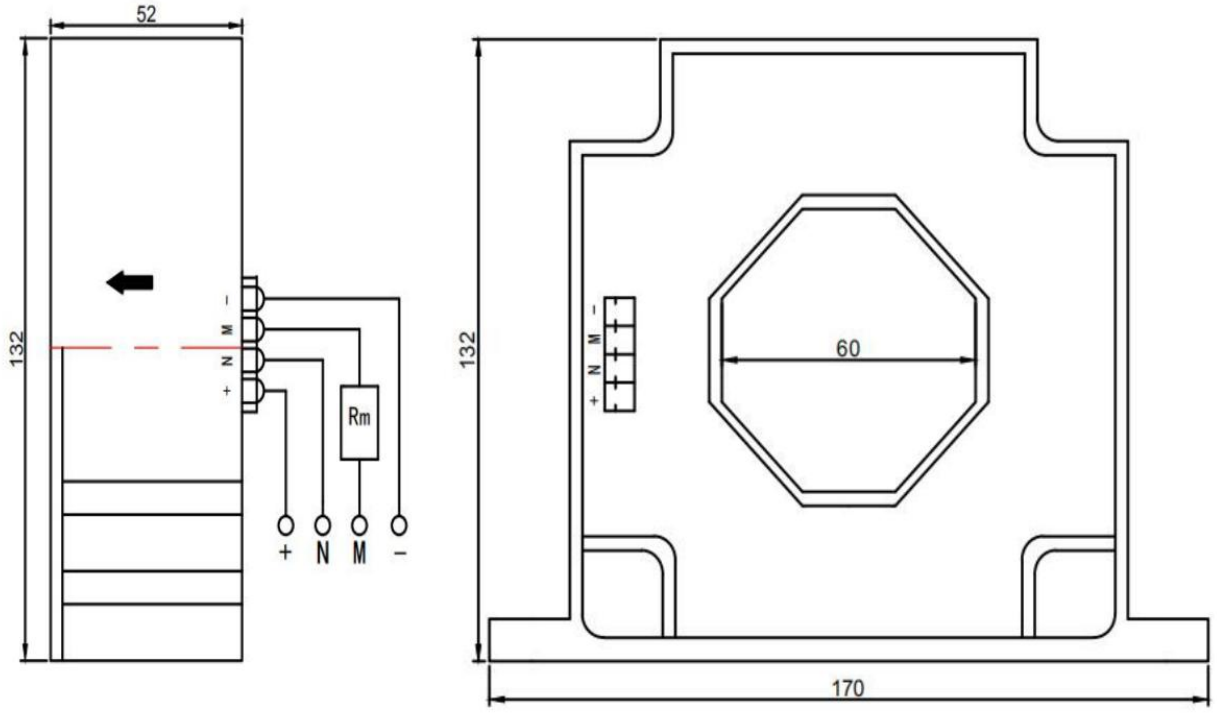
基于闭环磁平衡原理的一款霍尔电流传感器，能够测量直流，交流，脉冲以及各种不规则电流。该款传感器是电流输出模式的，可以根据客户的需求外接电阻转换为电压信号。

A Hall current sensor based on the closed-loop magnetic balance principle can measure DC, AC, pulse and various irregular currents. The sensor is in current output mode and can be converted from external resistance to voltage signal according to customer demand..

	FSM2000LF		
额定电流 I_{PN}(A) Nominal current(A)		2000A	
测量范围 I_P(A) Measuring range(A)		±3800A	±3000A
测量电阻 R_M(Ω) Measuring resistance(Ω)	±15V	@2000Amax 5.0	@2000Amax5.0
		@2500Amax 1.0	@2500Amax 2.0
	±24V	@2000Amax 25	@2000Amax 25
		@3800Amax1.0	@4000Amax 5.0
线匝比 Conversion ratio		1:4000	1:5000
额定输出电流 ISN(mA) Nominal output current ISN(mA)		500	400
次级线圈内阻(Ω) Secondary internal resistance (Ω)		24	32
电源电压 Vc(±5%) Supply voltage	±15V-±24V		
隔离电压 Isolation voltage	50Hz, 1min, 3kV		
电流损耗 Ic (mA) Storage temperature	28+IS		
精度 XG @ I_{PN},T=25° C Accuracy	±0.2		%
零点失调电流 Io @ IP=0,T=25° C Zero offset current	≤±0.2		mA
零点电流温漂 @ -40° C--85° C Zero thermal drift of VO	≤±0.5		mA
线性度 εr Linearity	<0.1		%FS
di/dt 跟随精度 Following temperature	>100		A/μs
响应时间 tr Response time	<1		μs

带宽 (-3db) Bandwidth(-3db)	DC ~ 200	kHz
工作温度 Working temperature	-40 ~ +85	° C
储存温度 Storage temperature	-40 ~ +90	° C

外形尺寸（mm）/Dimensions of drawing(mm)



备注：所有尺寸单位 mm，通用公差±1mm。

使用说明/Remarks

1. 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.

2. 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.

3. 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.