FSM200LP 系列霍尔电流传感器

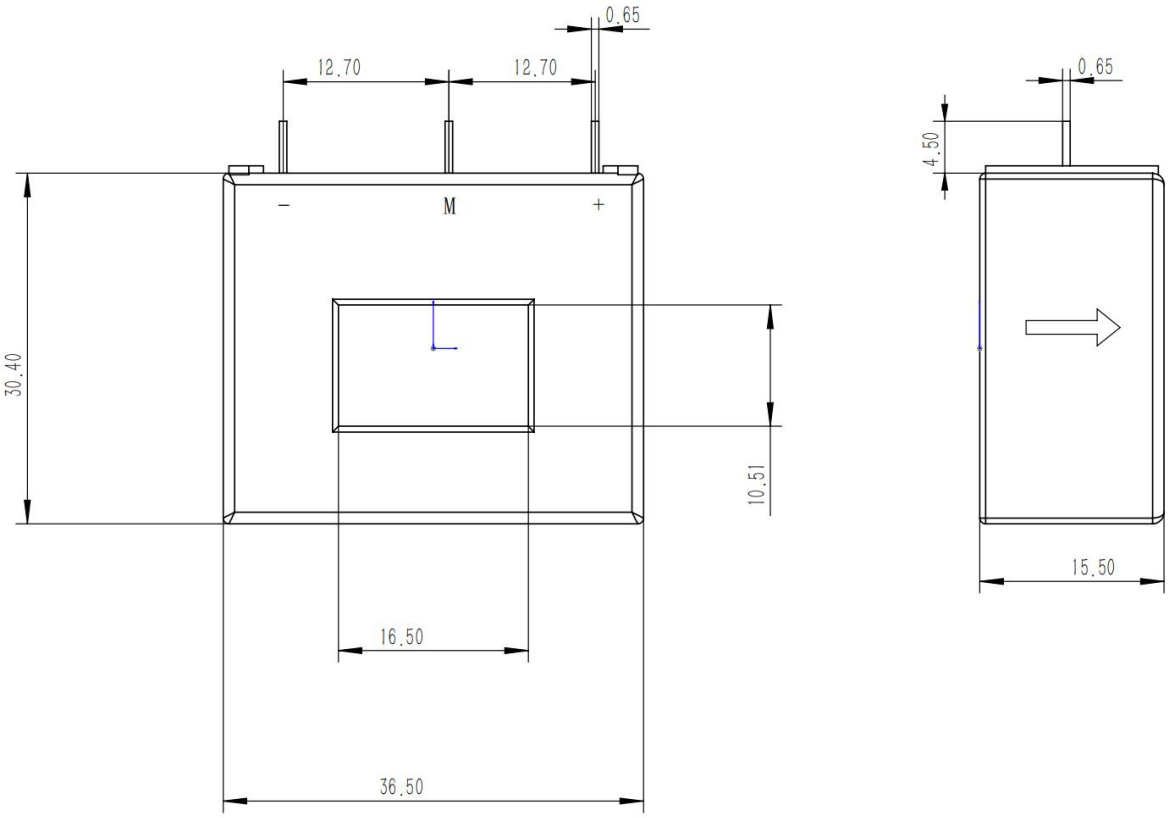


应用霍尔效应闭环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

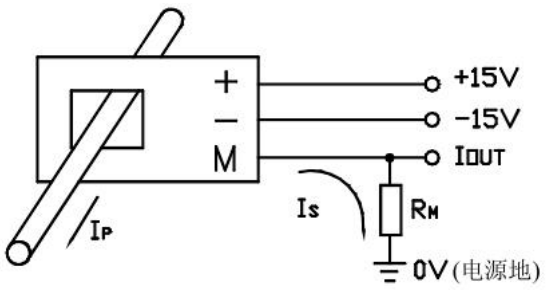
Open loop current sensor based on the principle of Hall-effect. It can be used for measuringAC,DC,pulsedand mixed current.

电参数/Electrical characteristics						
	型号 Type	FSM050LP	FSM100LP	FSM125LP	FSM200LP	
IPN	原边额定输入电流 Primary nominal input current	50	100	125	200	A
IP	原边电流测量范围 Measuring range of primary current	0~±150	0~±300	0~±375	0~±600	A
ISN	副边额定输出电流 Secondary nominal output current	50±0.5%	50±0.5%	125±0.5%	100±0.5%	mA
KN	匝数比 Conversion ratio	1:1000	1:2000	1:1000	1:2000	
RM	测量电阻(VC=±18V/IP) Measuring resistance (VC=±18V/IP)	0~100	0~68	0~15	0~12	Ω
VC	电源电压 Supply voltage	±12~±18 （±5%）				V
IC	电流消耗 Current consumption	VC=±18V 10+Is				mA
Vd	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				
εL	线性度 Linearity	<0.1				%FS
X	精度 Accuracy	±0.5				%
IO	零点失调电流 Zero offset current	TA =25 ℃ <±0.20				mA
IOT	失调电流温漂 Thermal drift of I0	IP=0 TA =-25～+85℃ ≤±0.005				mA/ ℃
Tr	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				℃
RS	副边线圈内阻(TA=25℃) Secondary coil resistance(TA=25℃)	30	45	30	45	Ω
	标准 Standard	GI/FS-0105				

外形尺寸(mm)/Dimensions of drawing (mm)



外部接线图/ Connection



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.当输入电流排完全充满原边穿孔时动态特性最佳(di/dt 和响应时间)。
The dynamic characteristics (di/dt and response time) are best when the input current row completely fills the primary side perforation.
3.测量小于25A 的电流时,可以用多匝线圈,以便得到最好的精度,但考虑到散热问题,传感器的长期工作电流应小于额定输入电流IPN。

When measuring currents less than 25A, multi-turn coils can be used to get the best accuracy, but in consideration of heat dissipation, the long-term operating current of the sensor should be less than the rated input current IPN.