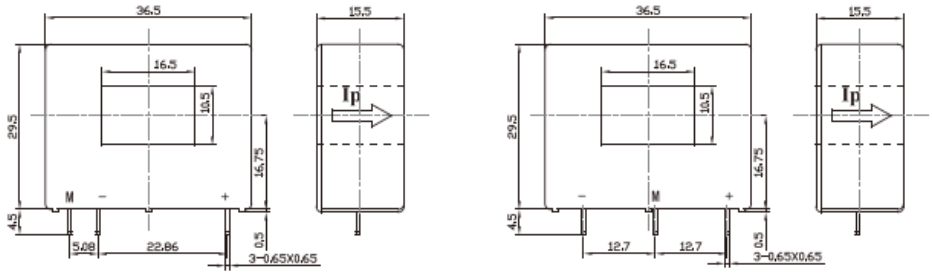
FSM200AP系列霍尔电流传感器

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

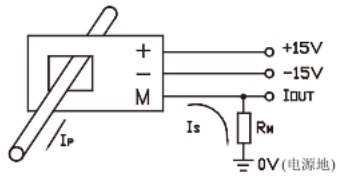
电参数/Electrical characteristics						
	型号 Type	FSM050AP	FSM100AP	FSM125AP	FSM200AP	
I_{PN}	原边额定输入电流 Primary nominal input current	50	100	125	200	A
I_P	原边电流测量范围 Measuring range of primary current	0～±150	0～±300	0～±375	0～±600	A
I_{SN}	副边额定输出电流 Secondary nominal output current	50±0.5%	50±0.5%	125±0.5%	100±0.5%	mA
K_N	匝数比 Conversion ratio	1:100c	1:2000	1:1000	1:2000	
R_M	测量电阻(Vc=±18V/Ip) Measuring resistance(VC=±18V/Ip)	0～100	0～68	0～15	0～12	Ω
V_C	电源电压 Supply voltage	±12～±18(±5%)				V
Ic	电流消耗 Current consumption	Vc=±18V		10+Is		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				
ε L	线性度 Linearity	<0.1				%FS
X	精度 Accuracy	±0.5				%
Io	零点失调电流 Zerooffset current	TA=25℃		<±0.20		mA
I_{OT}	失调电流温漂 Thermal drift of I0	Ip=0 TA=-25～+85℃		≤±0.005		mA/C
Tr	响应时间 Response time	<1				μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC～200				kHz
T_A	工作环境温度 Ambient operating temperature	-25～+85				℃
T_S	贮存环境温度 Ambient storage temperature	-40～+100				℃
R_S	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(㎜)/Dimensions of drawing (mm)



FSM050AP/FSM100AP　　FSM125AP/FSM200AP

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流值。
   Incorrect wiring may cause sensor damage. After the sensor is powered on, when the measured current passes through the arrow direction of the sensor, the in-phase current 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)。
   Dynamic performance is optimal (di/dt and response time) when the input current bar is fully filled with the primary perforation.
3. 当测量小于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 in order to get the best accuracy, but considering the heat dissipation problem, the long-term working current of the sensor should be less than the rated input current IPN.