FSM300LT 系列霍尔电流传感器

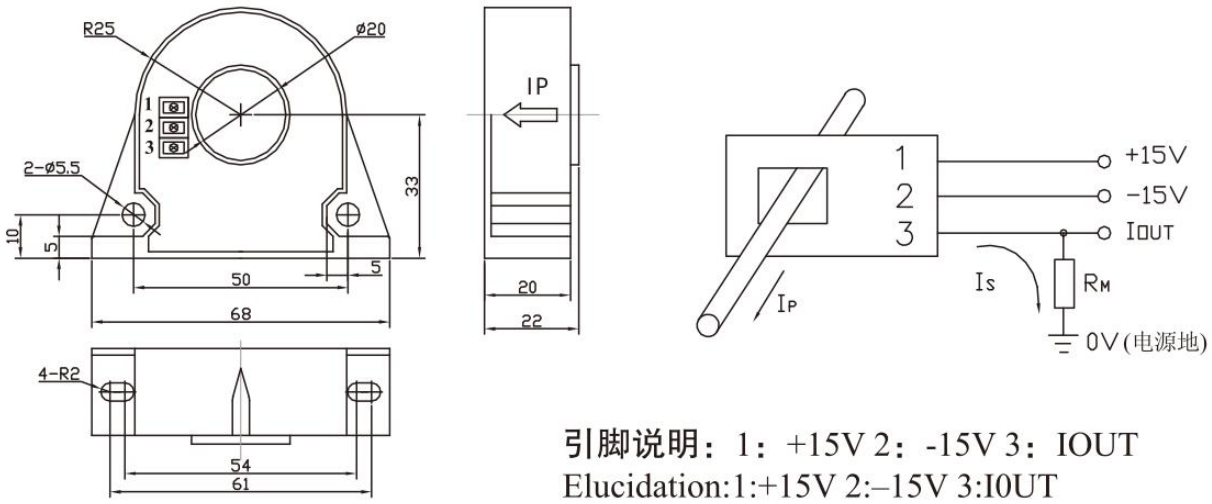
应用霍尔效应闭环原理的电流传感器，能在电隔离条件下测量直流、交流、脉冲以及各种不规则波形的电流。

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

电参数/Electrical characteristics						
	型号 Type	FSM050LT	FSM100LT	FSM200LT	FSM300LT	
IPN	原边额定输入电流 Primary nominal input current	50	100	200	300	A
Ip	原边电流测量范围 Measuring range of primary current	0～±75	0～±150	0～±300	0～±500	A
IsN	副边额定输出电流 Secondary nominal output current	50	50	100	150	mA
KN	匝数比 Conversion ratio	1:1000	1:2000	1:2000	1:2000	
	测量电阻(Vc=±15V/IpM) Measuring resistance(Vc=±15V/IpM)	186(max)	175(max)	100(max)	56(max)	Ω
RM	(Vc=±15V/Ip)	117(max)	106(max)	56(max)	21(max)	Ω
	(Vc=±18V/IPN)	304(max)	293(max)	130(max)	75(max)	Ω
	(Vc=±18V/Ip)	159(max)	148(max)	75(max)	31(max)	Ω
Vo	电源电压 Supply voltage	±12～±18(±5%)				V
Io	电流消耗 Current consumption	Vc=±15V		20+I		mA
Va	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				
EL	线性度 Linearity	<0.1				%FS
X	精度 Accuracy	TA=25C	Vc=±15V	±0.5		%
Io	零点失调电流 Zero offset current	TA=25℃		<±0.25		mA
IoM	磁失调电流 Residual current	Ip=0		<±0.20		mA
Ior	失调电流温漂 Thermal drift of I0	Ip=0	TA=-25～+85℃	<±0.5		mA
Tr	响应时间 Response time	<1				μs
f	频带宽度(-3dB) Frequency bandwidth(-3dB)	DC～100				kHz

TA	工作环境温度 Ambient operating temperature	-40～+100				℃
Ts	贮存环境温度 Ambient storage temperature	-40～+125				℃
Rs	副边线圈内阻 TA=25℃ Secondary coil resistance(TA=25℃)	14	25	25	25	Ω
	标准 Standard	GI/FS-0105				

外形尺寸(㎜)/Dimensions of drawing (mm)



引脚说明：1：+15V 2：-15V 3：IOUT
Elucidation:1:+15V 2:–15V 3:I0UT

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.