

## 产品说明

## Applications

该磁平衡式霍尔电流传感器适用于对交流、直流和脉动电流的隔离精确测量，测量时一次侧与二次侧之间完全绝缘。

For the electronic measurement of currents: AC, DC IMPL.,etc.,with galvanic isolation between the primary (high power) and the secondary (electronic) circuits.

产品优点 Advantages	产品应用 Applications	参照标准 Standards
高精度 Excellent accuracy	交流变频器 AC variable speed drives	EN50178
线性度好 Very good linearity	私服电机驱动 Servo motor drives	EN50155
低温漂 Low temperature drift	电池供电 Battery supplied applications	
宽频带 Wide frequency bandwidth	变流器/逆变器 converter /inverter	
快速响应 Optimized response time	UPS/SVG	

## 主要电气参数 Main electrical data

额定测量电流 $I_{PN}$ (A)	Primary nominal current rms	300
测量范围 $I_P$ (A)	Primary current measuring range	0~±500
匝比	Conversion ratio	1:2000
电源电压 $V_C$ (V)	Supply voltage	DC±(15~18)×(1±5%)V
额定测量输出 $I_{SN}$ (mA)	Secondary nominal current rms	150mA
测量电阻 $R_M$ (Ω)	Measuring resistance	
	@±12V, ±300A: 0Ω~30Ω	
	@±12V, ±500A: 0Ω~7Ω	
	@±18V, ±300A: 8Ω~55Ω	
	@±18V, ±500A: 10Ω~20Ω	
二次侧电流消耗 $I_C$ (@±24V)	Current consumption	≤25mA+ Secondary output current $I_{SN}$
隔离耐压	Isolation test: Between the primary circuit to the secondary circuit	6kVrms/50Hz/1min

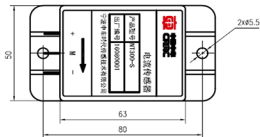
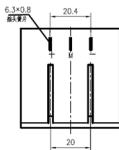
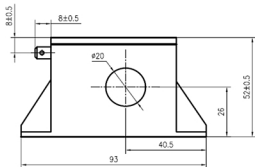
## 精度 - 动态参数 Accuracy - Dynamic performance data

基本误差 $\delta_i$ (@ $I_{PN}$ , $T_A=25^\circ\text{C}$ )	Overall Accuracy	≤±1%
线性度误差 $\delta_L$ (@ $I_{PN}$ , $T_A=25^\circ\text{C}$ )	Linearity error	<0.1%
零点输出电流 $I_0$ (@ $I_P=0$ , $T_A=25^\circ\text{C}$ )	Offset current	≤±2.5mA
零点温漂 $I_{OT}$	Thermal drift	≤±0.4mA (-25°C~+70°C)
响应时间 $t_r$	Response time to 90% of $I_{PN}$ step	≤1μs
di/dt 精确度	di/dt Accurately followed	>100A/μs
频率带宽 BW	Frequency bandwidth(-1dB)	DC..100kHz

## 一般数据 General data

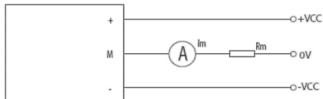
工作温度 Ta	Ambient operating temperature	-25℃~+70℃
储存温度 Ts	Ambient storage temperature	-40℃~+85℃
重量	Mass	≤250g

## 外形图 Dimensions (in mm)



## 电气连接 Connection

Connection of secondary: MOLEX 6410



### 机械特征 Mechanical characteristics

未注公差 General tolerance	±1 mm
传感器安装方式一(推荐) Transducer fastening (Recommended)	2 hole ø5.5mm 2 M5 steel screws

### 备注 Remark

- 当测量电流方向与传感器上标示的 方向一致时, 传感器输出 ISN 为正。
- 产品二次侧连接线优选屏蔽线, 屏蔽层接近产品端连接线可接机壳, 负电源或电源 0V

<p>推荐力矩</p> <p>Recommended fastening torque</p>	<p>3.5 N • m</p>	<p>3. 传感器安装螺钉孔的垂直度要求：要求在国家标准 8 级或以上（或 0.06 以下）。</p> <p>4. 传感器接插件要求：接插件必须选用厂家提供的配件，禁止使用其它同型号类似配件。</p>
<p>母排尺寸(推荐)</p> <p>Bus bar (Recommended)</p>	<p><math>\phi 20\text{mm}</math> or <math>2 \times \phi 8.5\text{mm}</math></p>	
<p>次边电气连接</p> <p>Connection of secondary</p>	<p>6.3×0.8 plug</p>	