

HBA—YP系列霍尔电流传感器

(HBA—YP Hall-effect Current Sensor Series)

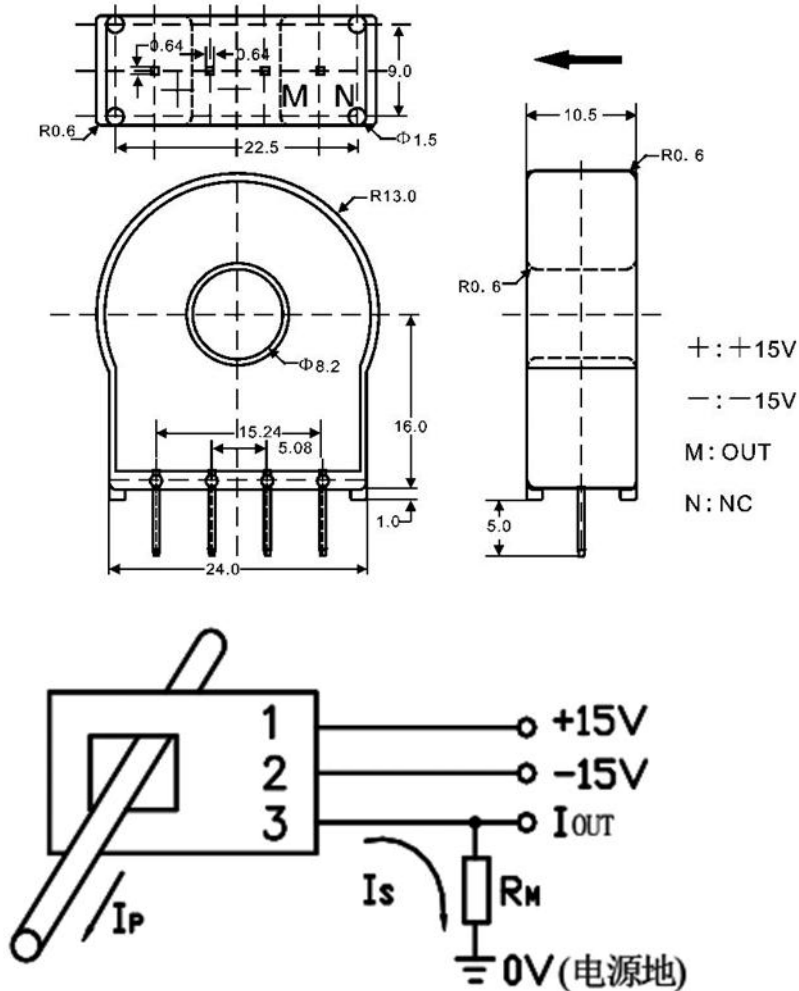
HBA-YP 系列霍尔电流传感器的初、次级之间是绝缘的，可用于测量直流、交流和脉冲电流。

(HBA-YP Series Hall-effect Current Sensor between primary and secondary is insulated, can be used for the measurement of DC, AC and pulse current)

| 电气参数 (Electrical characteristics) | | | | | | |
|-----------------------------------|-------------------------------------|----------------------|----------------------|----------------------|---------------------|----|
| | 型号 Type | HBA50-YP | HBA75-YP | HBA100-YP | HBA200-YP | A |
| I _{pn} | 额定输入电流 Rated input | 50 | 75 | 100 | 200 | A |
| I _{pm} | 测量电流范围 Measuring range | 100 | 150 | 200 | 400 | A |
| R _m | 测量电阻 Measuring resistance | | | | | Ω |
| | @±12V | Max50A (0-165 Ω) | Max75A (0-150 Ω) | Max100A (0-140 Ω) | Max200A (0-40 Ω) | Ω |
| | | Max100A (0-65 Ω) | Max150A (0-50 Ω) | Max200A (0-40 Ω) | Max400A (0-8 Ω) | Ω |
| | @±15V | Max50A (0-225 Ω) | Max100A (0-210 Ω) | Max200A (0-200 Ω) | Max200A (0-70 Ω) | Ω |
| | | Max100A (0-95 Ω) | Max150A (0-80 Ω) | Max200A (0-70 Ω) | Max400A (0-27 Ω) | Ω |
| K _N | 匝比 Turns ratio | 1: 1000 | 1: 1500 | 1: 2000 | 1: 2000 | |
| I _{out} | 输出电流 Rated output current | 50 | 50 | 50 | 100 | mA |
| R _s | 次级线圈内阻 Secondary coil resistance | 30 | 45 | 55 | 55 | Ω |
| I _o | 零电流失调 Zero offset current | <0.25 | | | | mA |
| V _c | 供电电源 Supply voltage | ±15±5% (+5V 供电可选) | | | | V |
| I _c | 静态功耗 Current consumption | ≤25+I _{out} | | | | mA |

| | | | | |
|-----------|---|---------------------------------|------|------|
| Iot | 零点温漂 Thermal drift of I _o | -40~+85℃ | ±0.5 | mA |
| F | 带宽 Frequency bandwidth(-3d B) | DC~100 | | KHz |
| ε G | 精度 Accuracy | ±0.5 | | % |
| ε L | 线性度 Linearity | ±0.1 | | % |
| di/d t | 跟随精度 Accurately followed | >100 | | A/μS |
| Tr | 响应时间 Response time | ≤1 | | μS |
| Vd | 绝缘电压 Insulation voltage | 3.0 | | KV |
| Ta | 工作温度 Ambient operating temperature | -40~+85 | | ℃ |
| Ts | 储存温度 Ambient storage temperature | -40~+125 | | ℃ |
| M | 重量 mass | 21 | | g |
| | 标准 Standards | EN50178\IEC61010-1\UL94-Vo\ROHS | | |

机械参数 Dimensions (mm)



引脚尺寸: 0.65mm*0.64, 4pin

引脚说明: 1, +15V 2, -15V 3, I_{OUT}, 4、空

使用说明 Remarks

- 1、应用: 通讯电源、不间断电源UPS、斩波器、电化学、整流、电源监测、电焊机、变频、开关电源、电池监测、电动机监测等领域。Application: communication power supply, uninterruptible power supply UPS chopper, electrochemical, rectifier, power monitoring, welding machines, inverter, switching power supply, battery monitoring, motor monitoring fields.
- 2、传感器的输出幅度可根据用户需要进行适当调节。The amplitude of the output of the sensor can be appropriately adjusted according to user 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。Custom different rated input current and the output voltage of the sensor.