



# OM800A 系列操纵杆

## OM800A series joystick

### PRODUCT FEATURES

#### 产品特点 »

- 指尖型操作，弹簧自动复位
- 采用非接触霍尔技术，高可靠性，长寿命
- 可选择第三轴霍尔电压输出，并组合不同的按钮开关
- 可根据需要选择不同输出电压范围
- 可选择外接RS232或USB模块输出
- Fingertip operation , Spring automatic return
- Adopt non-contact hall technology , high reliability ,long life
- Third axis hall voltage output option , can assist with different pushbutton
- Can do different output voltage range as requirement
- Can choose external interface RS232 or USB mode output

### MARKET FOCUS

#### 应用范围 »

- 视频网络控制键盘
- 医疗设备控制面板
- 数控机械加工设备操作面板
- 工业机器人操控面板
- Internet video control keyboard .
- Medical device control panel
- CNC machining control panel
- Industrial robot operate panel



三轴指尖操作手柄  
3 axis fingertip operation joystick



## TECHNICAL SPECIFICATIONS

技术参数 » » » » » » » » » »

### Mechanical data 机械参数

摇动角度: 约±28° (X或Y轴) ; 约±40° (Z轴)  
Swing angle: ±28 (X or Y axis); about ±40 (Z axis)

使用寿命: XY轴大于500万次; Z轴大于100万次  
Service life: XY axis more than 5million times, Z axis more than 1 million times

启动力: 2.3N Start force :2.3N

操作力: 6N (最大) Operation force: 6N (biggest)

限位力: 大于300N Limit force: more than 300N

重量: 约160g Weight :about 160g

### Electrical data 电气参数

电源电压: 5.0±0.5Vdc, 或9~32Vdc

Power voltage : 5V±0.5 Vdc or 9~32Vdc

电源电流: <11mA (每通道) Power current: <11mA

中位电压: 2.5±0.1V Center voltage : 2.5±0.1V

最大线性误差: ±3% MAX linear tolerance :±3%

最大过载电压: 20Vdc MAX loading voltage :20Vdc

最大反向电压: -10Vdc MAX reverse voltage: -10Vdc

负载电阻: >10KΩ Load resistance: >10KΩ

绝缘电阻: >1000MΩ Insulation resistance: >1000MΩ

EMC:100V/M

### Environmental data 环境参数

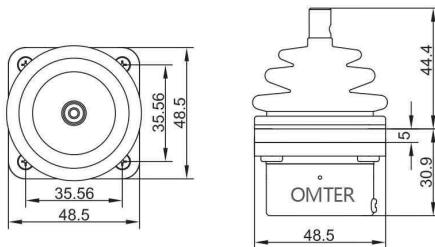
工作温度 Operating temperature -25°C ~ +70°C
存储温度 Store temperature -40°C ~ +85°C

存储温度 Store temperature -40°C ~ +85°C
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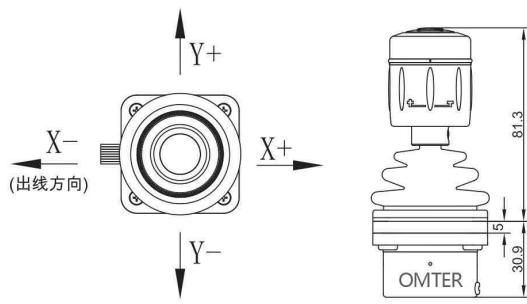
防护等级 Protection rank IP65
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## SHAPE DIMENSIONS

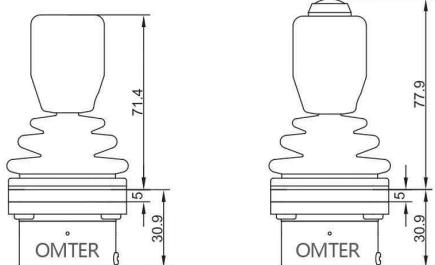
外形尺寸 »



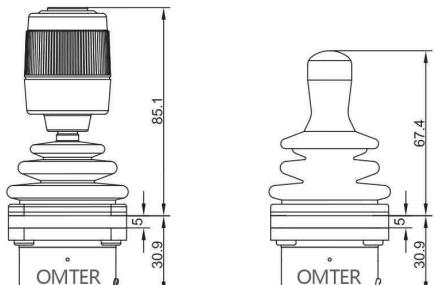
外形尺寸图  
Dimension diagram



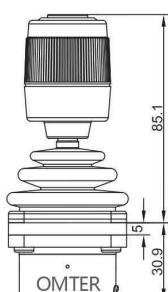
方向标记图  
direction remark graph



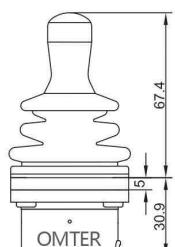
ZG上端  
ZG top parts



ZL0上端  
ZL0 top parts



ZH上端  
ZH top parts



MF上端  
MF top parts



## ORDERING CODES 产品选型 »

### 分项选型说明 Sub-item selection instructions

选型: OM800A - ① - ② - ③ - ④

#### ①操作方式

- 1A 单轴操作，沿Y轴方向
- 2AC 双轴任意方向操作（无XY轴导向）
- 2AP 双轴十字方向操作

#### ① Operation method

- 1A single operation, along Y axis direction
- 2AC double Arbitrary direction operation (no XY axis guide)
- 2AP double cross direction operation

#### ②输出信号

- H11 霍尔型，电源电压为5Vdc, 0.5~4.5V电压输出
- H12 霍尔型，电源电压为5Vdc, 0~5V电压输出
- H21 冗余霍尔型，电源电压为5Vdc, 0.5~4.5V和4.5~0V电压输出
- H22 冗余霍尔型，电源电压为5Vdc, 0~5V和4.5~0V电压输出
- W11 霍尔型，电源电压9~32Vdc, 0.5~4.5V电压输出
- W12 霍尔型，电源电压9~32Vdc, 0~5V电压输出
- W21 冗余霍尔型，电源电压9~32Vdc, 0.5~4.5V和4.5~0V电压输出
- W22 冗余霍尔型，电源电压9~32Vdc, 0~5V和5.0~0V电压输出
- RS232\* RS232串口数字信号输出
- USB\* USB接口数字信号输出

#### ② Out signal

- H11= Hall type DC5V power source, output voltage 0.5V~4.5V
- H12= Hall type DC5V power source, output voltage 0.5V~5V
- H21= Redundancy Hall type DC5V power source, output voltage 0.5V~4.5V and 4.5~0V
- H22= Redundancy Hall type DC5V power source, output voltage 0.5V~5V and 4.5~0V
- W11= Hall type DC9~32V power source, output voltage 0.5V~4.5V
- W12= Hall type DC9~32V power source, output voltage 0.5V~5V
- W21= Redundancy Hall type DC9~32V power source, output voltage 0.5V~4.5V and 4.5~0V
- W22= Redundancy Hall type DC9~32V power source, output voltage 0.5V~5V and 4.5~0V
- RS232\*=RS232 serial digital signal output
- USB\*=USB connection digital signal output

注：\*所标注的选项，为定制选项，需要选配外接模块

NOTE :\* remark option, customized option , need optional external modular

#### ③手柄上端

- ZG0 ZG上端，无按钮开关，无模拟量
- ZG1 ZG上端，有一个轻触按钮开关，有Z轴模拟量
- ZG2 ZG上端，有两个轻触按钮开关，有Z轴模拟量
- ZG3 ZG上端，无按钮开关，有Z轴模拟量
- ZG4 ZG上端，有一个轻触按钮开关，无模拟量
- ZG5 ZG上端，有两个轻触按钮开关，无模拟量
- ZH ZH上端，有一个轻触按钮开关，有Z轴模拟量
- ZL0 ZL上端，无按钮
- ZL1 ZL上端，有一个按钮开关
- MF MF上端

#### ③ Handle top parts

- ZG0 ZG top parts , no pushbutton , no analog data
- ZG1 ZG top parts , 1 pushbutton , Z axis analog data
- ZG2 ZG top parts , 2 pushbutton , Z axis analog data
- ZG3 ZG top parts , no pushbutton , Z axis analog data
- ZG4 ZG top parts , 1 pushbutton , Z axis analog data
- ZG5 ZG top parts , 2 pushbutton , Z axis analog data
- ZH ZH top parts , 1 pushbutton , Z axis analog data
- ZL0, ZL top parts, no button
- ZL1, ZL top parts, 1 pushbutton
- MF MF top parts

注：上述按钮型式，可参考产品外形尺寸图

Note: product drawing can be refer to above button type

#### ④出线方式

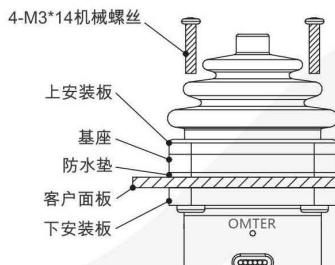
- L 直接出线，线长210mm
- C 接插座输出，仅为OEM客户定制

#### ④ Wiring mode

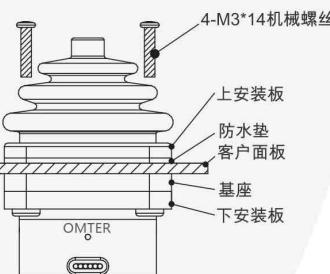
- L Directly wiring , wire length 210mm
- C Connector output , only OEM



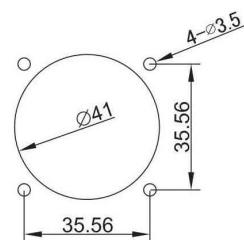
## MECHANICAL INSTALLATIONS 机械安装 »



前装客户面板开孔图



后装客户面板开孔图



螺纹安装客户面板开孔图

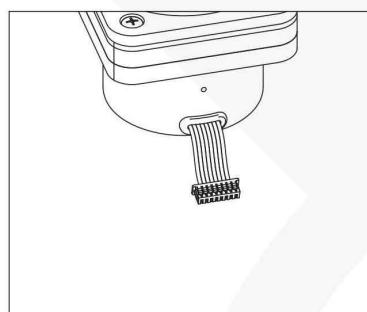
注意：建议客户面板厚度≤4mm

## ELECTRICAL CONNECTIONS 电气安装 »

线序 Line no	线色 wire color	功能(Function)		
		ZG/ZH上端 top parts	ZL上端 top parts	MF上端 top parts
1	红色 Red	5Vdc (电源电压) 或9–32Vdc (power voltage) or	5Vdc (电源电压) 或9–32Vdc (power voltage) or	5Vdc (电源电压) 或9–32Vdc (power voltage) or
2	黑色 Black	接地GND	接地GND	接地GND
3	蓝色 Blue	Xout (X轴输出) (X axis output)	Xout (X轴输出) (X axis output)	Xout (X轴输出) (X axis output)
4	黄色 Yellow	Yout (Y轴输出) (Y axis output)	Yout (Y轴输出) (Y axis output)	Yout (Y轴输出) (Y axis output)
5	绿色 Green	Zout (Z轴输出) (Z axis output)		
6	白色 White	SWcom (开关公共端)	SWcom (开关公共端)(switch common port)	
7	棕色 Brown	SW1 (按钮开关1输出)	SW1 (按钮开关1输出) (pushbutton 1 output)	
8	紫色 Purple	SW2 (按钮开关2输出)(pushbutton 2 output)		

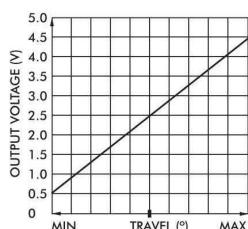


直接出线  
directly wire



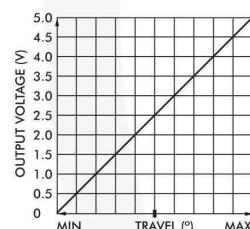
接插件出线  
Connector output

输出信号曲线: Output signal curve:



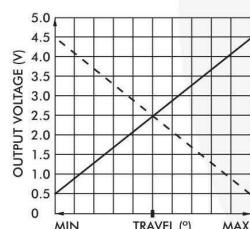
输出信号H11/W11

Output signal H11/W11



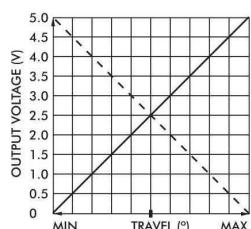
输出信号H12/W12

Output signal H12/W12



输出信号H21/W21

Output signal H21/W21



输出信号H22/W22

Output signal H22/W22