

温州联宝贸易有限公司

Wenzhou Linp Trading co., ltd.

乐清市欧姆特尔电子科技有限公司
Yueqing Omtter electronic & technology co., ltd.

OM1A 系列工业手柄

OM1A series industry handle



产品特点Product characteristic

- ◀ 弹簧自动复位，指尖型操作。
Spring automatic reset, fingertip type operation.
- ◀ 单轴前后方向操作；可带方向开关的电位器方式；可无接触单霍尔或双霍尔方式，无方向开关。
Single axis front and back direction operation; with direction switch's potentiometer mode; could without contact with single or double Hall mode, no direction switch.
- ◀ 可根据需要选择输出电压范围。
Could according to the requirement select the output voltage range.

应用范围Application scope

该系列产品主要应用于工业遥控器、建筑机械、农业机械以及搬运机械。
This series products are mainly used in industrial remote control, construction machinery, agricultural machinery and transportation machinery.

技术参数 Technical parameter

机械参数 Mechanical parameter

摇动角度: $\pm 30^\circ$
Swing angle: $\pm 30^\circ$
使用寿命: 大于500万次(电位器型), 大于1000万次(霍尔型)
Service life: Is bigger than 5,000,000 times (potentiometer type),
Is bigger than 10,000,000 times (Hall type)
操作力: 3.5N (最大)
Operation strength: 3.5N (biggest)
限位力: 50N
Limit strength: 50N
重量: 45g
Weight: 45g

电气参数 Electrical parameter

电位器型 Potentiometer type
电源电压: 小于36Vdc
Power supply voltage: $< 36\text{Vdc}$
总电阻值: 4K Ω ; 5K Ω
Total resistance value: 4K Ω 5K Ω ;
电气角度: $\pm 28^\circ$
Electrical angle: $\pm 28^\circ$
中位电压(相对电源电压): 48% ~ 52%
The median position voltage (relative power supply voltage): 48% ~ 52%
中位死区角度: $\pm 2.5^\circ$
The median position dead zone angle: $\pm 2.5^\circ$
电位器加载最大电压: DC32V
Potentiometer loading maximum voltage: DC32V
电位器允许最大功耗(25 $^\circ\text{C}$): 0.25W
Potentiometer allows the maximum power consumption (25): 0.25W
方向开关: 负载能力: 10mA@30Vdc (阻性负载)
Direction switch: load capacity: 10mA@30Vdc (resistive load)
起始角度: $\pm 3^\circ \sim \pm 5^\circ$
Outset angle: $\pm 3^\circ \sim \pm 5^\circ$

霍尔型 Hall type

电源电压: 5Vdc
Power supply voltage: 5Vdc
总电流: $< 10\text{mA}$
The total current: $< 10\text{mA}$
线性公差: $\pm 3\%$
Linear tolerance: $\pm 3\%$
电源电压: DC5.0V $\pm 10\%$
Power supply voltage: DC5.0V $\pm 10\%$
负载电阻: $> 10\text{K } \Omega$
Load resistance: $> 10\text{K } \Omega$

环境参数 Environmental parameter

工作温度: $-20^\circ\text{C} \sim +70^\circ\text{C}$
Operating temperature: $-20^\circ\text{C} \sim +70^\circ\text{C}$
存储温度: $-40^\circ\text{C} \sim +85^\circ\text{C}$
Storage temperature: $-40^\circ\text{C} \sim +85^\circ\text{C}$

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分项选型说明Sub-item selection instructions

① 产品系列号 Product series number

OM1A系列工业手柄，霍尔或电位器型单轴弹簧自动复位，电位器型带方向开关，安装孔距尺寸24mm*36mm
主要应用于工业遥控器、建筑机械、农业机械以及搬运机械

OM1A series industry handles, Hall or potentiometer type single axis spring automatic reset, potentiometer type with direction switch, the installment pitch of hole size is 24mm*36mm.
Mainly used in industrial remote control, construction machinery, agricultural machinery and transportation machinery

② 输出信号 Output signal

P041= 电位器型，输入电压小于36Vdc，带4K Ω 中心抽头电位器，0% ~100%Vdc 电压输出

P041= potentiometer type, input voltage less than 36Vdc, with 4K Ω center-tapped potentiometer, 0% ~ 100%Vdc voltage output

P052= 电位器型，输入电压小于36Vdc，带5K Ω 中心抽头电位器，10% ~90%Vdc 电压输出

P052= potentiometer type, input voltage less than 36Vdc, with 5K Ω center-tapped potentiometer, 10% ~ 90%Vdc voltage output

P053= 电位器型，输入电压小于36Vdc，带5K Ω 中心抽头电位器，25% ~75%Vdc 电压输出

P053= potentiometer type, input voltage less than 36Vdc, with 5K Ω center-tapped potentiometer, 25% ~ 75%Vdc voltage output

H51= 单霍尔，输入电压5Vdc，10% ~50% ~90%Vdc 电压输出

H51= Single hall type, the input voltage 10% ~ 5Vdc, 50% ~ 90%Vdc voltage output

H52= 单霍尔，输入电压5Vdc，0% ~50% ~100%Vdc 电压输出

H52= Single hall type, the input voltage 0% ~ 5Vdc, 50% ~ 100%Vdc voltage output

H53= 单霍尔，输入电压5Vdc，25% ~50% ~75%Vdc 电压输出

H53= Single hall type, the input voltage 25% ~ 5Vdc, 50% ~ 75%Vdc voltage output

2H51= 双霍尔，输入电压5Vdc，10% ~50% ~90%Vdc 电压输出

2H51= Double hall type, the input voltage 10% ~ 5Vdc, 50% ~ 90%Vdc voltage output

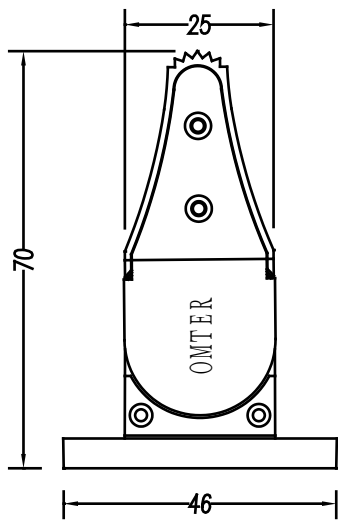
2H52= 双霍尔，输入电压5Vdc，0% ~50% ~100%Vdc 电压输出

2H52= Double hall type, the input voltage 0% ~ 5Vdc, 50% ~ 100%Vdc voltage output

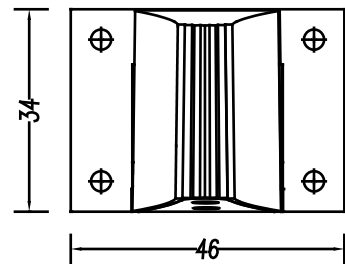
2H53= 双霍尔，输入电压5Vdc，25% ~50% ~75%Vdc 电压输出

2H53= Double hall type, the input voltage 25% ~ 5Vdc, 50% ~ 75%Vdc voltage output

外形尺寸External dimensions

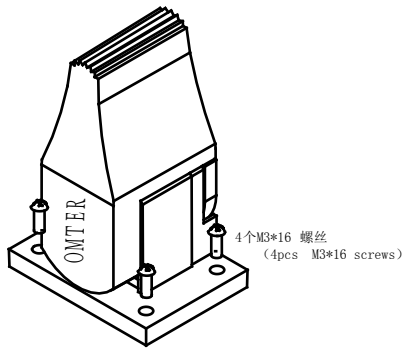


正视图Front view

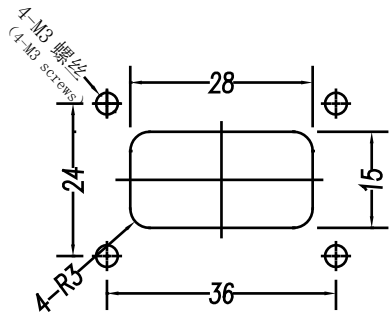


俯视图Vertical view

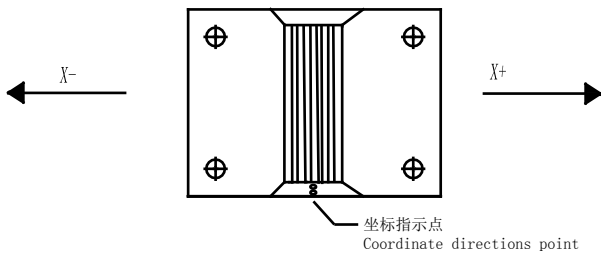
机械安装 Machinery installation



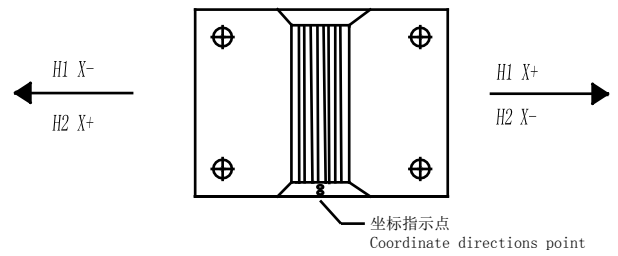
安装示意图 Installation diagram



安装面板开孔示意图 Mounting panel to the open hole schematic drawing



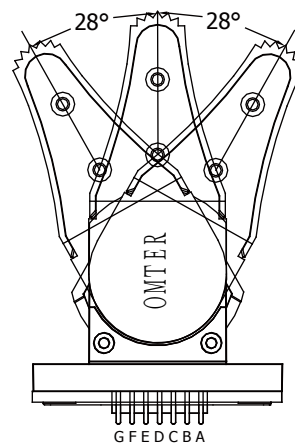
单霍尔、电位器操作方向定义 Single hall type, potentiometer operation direction definition



双霍尔操作方向定义 Double hall type, operation direction definition

电气安装 Electrical installation

接线端	电位器型	霍尔型
A	电位器中位抽头	A OUT
B	电位器前方向 (X+)	+5V
C	电位器电压输出接头	B OUT
D	电位器后方向 (X-)	0V
E	方向开关端 (X+)	
F	方向开关端 (X-)	
G	方向开关公共端	



Wiring port	Potentiometer type	Hall type
A	Potentiometer intermediate tapped	A OUT
B	Potentiometer front direction (X+)	+5V
C	Potentiometer voltage output connector	B OUT
D	Potentiometer back direction (X-)	0V
E	Direction switch port (X+)	
F	Direction switch port (X-)	
G	Direction switch public port	